

Примечания

1. Green A. 2020. Li Wenliang. *Lancet*. 395(10225):682. [https://doi.org/10.1016/S0140-6736\(20\)30382-2](https://doi.org/10.1016/S0140-6736(20)30382-2).
2. World Health Organization. 2020 Feb 7. Novel Coronavirus (2019-nCoV). Situation report—18. Geneva: WHO; [accessed 2020 Mar 23]. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200207-sitrep-18-ncov.pdf?sfvrsn=fa644293_2.
3. Page J, Fan W, Khan N. 2020 Mar 6. How it all started: China's early coronavirus missteps. *Wall Street Journal*. [accessed 2020 Mar 22]; <https://www.wsj.com/articles/how-it-all-started-chinas-early-coronavirus-missteps-11583508932>.
4. McNeil DG. 2003 Apr 8. Disease's pioneer is mourned as a victim. *New York Times*. [accessed 2020 Mar 23]; <https://www.nytimes.com/2003/04/08/science/disease-s-pioneer-is-mourned-as-a-victim.html>.
5. Ashour HM, Elkhatib WF, Rahman MM, Elshabrawy HA. 2020. Insights into the recent 2019 novel coronavirus (SARS-CoV-2) in light of past human coronavirus outbreaks. *Pathogens*. 9(3):186. <https://doi.org/10.3390/pathogens9030186>.
6. Hui DSC, Zumla A. 2019. Severe acute respiratory syndrome: historical, epidemiologic, and clinical features. *Infect Dis Clin North Am*. 33(4):869–889. <https://doi.org/10.1016/j.idc.2019.07.001>.
7. World Health Organization. 2004. Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003. Geneva: WHO; [accessed 2020 Mar 23]. https://www.who.int/csr/sars/country/table2004_04_21/en/.
8. World Health Organization. 2019. Middle East respiratory syndrome coronavirus (MERS-CoV). Geneva: WHO; [updated 2019 Nov; accessed 2020 Mar 23]. <http://origin.who.int/emergencies/mers-cov/en>.
9. Weber J, Alcorn K. 2000. Origins of HIV and the AIDS epidemic. *Med-GenMed*. 2(4):1–6. <http://www.medscape.com/viewarticle/408272>.
10. Corman VM, Muth D, Niemeyer D, Drosten C. 2018. Hosts and sources of endemic human coronaviruses. *Adv Virus Res*. 100:163–188. <https://doi.org/10.1016/bs.aivir.2018.01.001>.
11. Chan JFW, To KKW, Tse H, Jin DY, Yuen KY. 2013. Interspecies transmission and emergence of novel viruses: lessons from bats and birds. *Trends Microbiol*. 21(10):544–555. <https://doi.org/10.1016/j.tim.2013.05.005>.

12. Mandl JN, Schneider C, Schneider DS, Baker ML. 2018. Going to bat(s) for studies of disease tolerance. *Front Immunol.* 9:2112. <https://doi.org/10.3389/fimmu.2018.02112>.
13. Zhang J, Jia W, Zhu J, Li B, Xing J, Liao M, Qi W. 2020. Insights into the cross-species evolution of 2019 novel coronavirus. *J Infect.* Article in press. [accessed 2020 Mar 23]. <https://doi.org/10.1016/j.jinf.2020.02.025>.
14. Corman VM, Muth D, Niemeyer D, Drosten C. 2018. Hosts and sources of endemic human coronaviruses. *Adv Virus Res.* 100:163–188. <https://doi.org/10.1016/bs.aivir.2018.01.001>.
15. Marty AM, Jones MK. 2020. The novel Coronavirus (SARS-CoV-2) is a one health issue. *One Health.* 9:100123. <https://doi.org/10.1016/j.onehlt.2020.100123>.
16. Memish ZA, Mishra N, Olival KJ, Fagbo SE, Kapoor V, Epstein JH, Alhakeem R, Durosinsoun A, Al Asmari M, Islam A, et al. 2013. Middle East respiratory syndrome coronavirus in bats, Saudi Arabia. *Emerg Infect Dis.* 19(11):1819–1823. <https://doi.org/10.3201/eid1911.131172>.
17. Hemida MG, Alnaeem A. 2019. Some One Health based control strategies for the Middle East respiratory syndrome coronavirus. *One Health.* 8:100102. <https://doi.org/10.1016/j.onehlt.2019.100102>.
18. Willman M, Kobasa D, Kindrachuk J. 2019. A comparative analysis of factors influencing two outbreaks of Middle Eastern Respiratory Syndrome (MERS) in Saudi Arabia and South Korea. *Viruses.* 11(12):1119. <https://dx.doi.org/10.3390/v11121119>.
19. Almathen F, Charruau P, Mohandesan E, Mwacharo JM, Orozco-ter Wengel P, Pitt D, Abdussamad AM, Uerpmann M, Uerpmann H-P, De Cupere B, et al. 2016. Ancient and modern DNA reveal dynamics of domestication and cross-continental dispersal of the dromedary. *Proc Natl Acad Sci U S A.* 113(24):6707–6712. <https://doi.org/10.1073/pnas.1519508113>.
20. Müller MA, Corman VM, Jores J, Meyer B, Younan M, Liljander A, Bosch BJ, Lattwein E, Hilali M, Musa BE, et al. 2014. MERS coronavirus neutralizing antibodies in camels, Eastern Africa, 1983–1997. *Emerg Infect Dis.* 20(12):2093–2095. <https://doi.org/10.3201/eid2012.141026>.
21. Farag E, Sikkema RS, Vinks T, Islam MM, Nour M, Al-Romaihi H, Al Thani M, Atta M, Alhajri FH, Al-Marri S, et al. 2019. Drivers of MERS-CoV emergence in Qatar. *Viruses.* 11(1):22. <https://dx.doi.org/10.3390/v11010022>.
22. To KK, Hung IF, Chan JF, Yuen KY. 2013. From SARS coronavirus to novel animal and human coronaviruses. *J Thorac Dis.* 5(Suppl 2):103–108. <https://doi.org/10.3978/j.issn.2072-1439.2013.06.02>.

23. Hui DSC, Zumla A. 2019. Severe acute respiratory syndrome: historical, epidemiologic, and clinical features. *Infect Dis Clin North Am.* 33(4):869–889. <https://doi.org/10.1016/j.idc.2019.07.001>.
24. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, Ren R, Leung KSM, Lau EHY, Wong JY, et al. 2020. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *N Engl J Med.* 382(13):1199–1207. <https://doi.org/10.1056/NEJMoa2001316>.
25. Fan Y, Zhao K, Shi ZL, Zhou P. 2019. Bat coronaviruses in China. *Viruses.* 11(3):210. <https://doi.org/10.3390/v11030210>.
26. Field HE. 2009. Bats and emerging zoonoses: henipaviruses and SARS. *Zoonoses Public Health.* 56(6-7):278–284. <https://doi.org/10.1111/j.1863-2378.2008.01218.x>.
27. Malta M, Rimoin AW, Strathdee SA. 2020. The coronavirus 2019-nCoV epidemic: is hindsight 20/20? *EClinicalMedicine.* 20:100289. <https://doi.org/10.1016/j.eclinm.2020.100289>.
28. Robertson S, Trung TC, Momberg F. 2003. Hunting and trading wildlife: an investigation into the wildlife trade in and around the Pu Mat National Park, Nghe An Province, Vietnam. *Nghe An (Vietnam): SFNC Project Management Unit.*
29. Duckworth JW, Salter RE, Khounboline K. 1999. Wildlife in Lao PDR: 1999 status report. Vientiane: IUCN-The World Conservation Union, Wildlife Conservation Society, Centre for Protected Areas and Watershed Management. <https://portals.iucn.org/library/sites/library/files/documents/2000-050.pdf>.
30. Srikosamata S, Siripholdej B, Suteethorn V. 1992. Wildlife trade in Lao PDR and between Lao PDR and Thailand. *Nat Hist Bull Siam Soc.* 40(1):1–47.
31. Karesh WB, Cook RA. 2005 Jul/Aug. The human-animal link. *Foreign Aff.* 84:38–50. [accessed 2020 Mar 23]. <https://www.foreignaffairs.com/articles/2005-07-01/human-animal-link>.
32. Wang H, Shao J, Luo X, Chuai Z, Xu S, Geng M, Gao Z. 2020 Mar 27. Letter to the editor: wildlife consumption ban is insufficient. *Science.* 367(6485):1435. <https://doi.org/10.1126/science.abb6463>.
33. Fan Y, Zhao K, Shi ZL, Zhou P. 2019. Bat coronaviruses in China. *Viruses.* 11(3):210. <https://doi.org/10.3390/v11030210>.
34. Wong ACP, Li X, Lau SKP, Woo PCY. 2019. Global epidemiology of bat coronaviruses. *Viruses.* 11(2):E174. <https://doi.org/10.3390/v11020174>.
35. Bell D, Robertson S, Hunter PR. 2004. Animal origins of SARS coronavirus: possible links with the international trade in small carnivores. *Philos Trans R Soc Lond B Biol Sci.* 359(1447):1107–1114. <https://doi.org/10.1098/rstb.2004.1492>.

36. Jackson W. 2003. The story of civet. *Pharm J*. 271(7280):859–861. https://www.pharmaceutical-journal.com/pdf/xmas2003/pj_20031220_civet.pdf.
37. Guan Y, Zheng BJ, He YQ, Liu XL, Zhuang ZX, Cheung CL, Luo SW, Li PH, Zhang LJ, Guan YJ, et al. 2003. Isolation and characterization of viruses related to the SARS coronavirus from animals in southern China. *Science*. 302(5643):276–278. <https://doi.org/10.1126/science.1087139>.
38. Tu C, Crameri G, Kong X, Chen J, Sun Y, Yu M, Xiang H, Xia X, Liu S, Ren T, et al. 2004. Antibodies to SARS coronavirus in civets. *Emerg Infect Dis*. 10(12):2244–2248. <https://dx.doi.org/10.3201/eid1012.040520>.
39. Padgett DA, Glaser R. 2003. How stress influences the immune response. *Trends Immunol*. 24(8):444–448. [https://doi.org/10.1016/s1471-4906\(03\)00173-x](https://doi.org/10.1016/s1471-4906(03)00173-x).
40. Zhao GP. 2007. SARS molecular epidemiology: a Chinese fairy tale of controlling an emerging zoonotic disease in the genomics era. *Philos Trans R Soc Lond B Biol Sci*. 362(1482):1063–1081. <https://dx.doi.org/10.1098/rstb.2007.2034>.
41. Wan Y, Shang J, Graham R, Baric RS, Li F. 2020. Receptor recognition by the novel coronavirus from Wuhan: an analysis based on decade-long structural studies of SARS coronavirus. *J Virol*. 94(7):e00127–20. <https://doi.org/10.1128/JVI.00127-20>.
42. Wan Y, Shang J, Graham R, Baric RS, Li F. 2020. Receptor recognition by the novel coronavirus from Wuhan: an analysis based on decade-long structural studies of SARS coronavirus. *J Virol*. 94(7):e00127–20. <https://doi.org/10.1128/JVI.00127-20>.
43. Hu B, Zeng LP, Yang XL, Ge XY, Zhang W, Li B, Xie JZ, Shen XR, Zhang YZ, Wang N, et al. 2017. Discovery of a rich gene pool of bat SARS-related coronaviruses provides new insights into the origin of SARS coronavirus. *PLoS Pathog*. 13(11):e1006698. <https://doi.org/10.1371/journal.ppat.1006698>.
44. Qu XX, Hao P, Song XJ, Jiang SM, Liu YX, Wang PG, Rao X, Song HD, Wang SY, Zuo Y, et al. 2005. Identification of two critical amino acid residues of the severe acute respiratory syndrome coronavirus spike protein for its variation in zoonotic tropism transition via a double substitution strategy. *J Biol Chem*. 280(33):29588–29595. <https://doi.org/10.1074/jbc.M500662200>.
45. Song HD, Tu CC, Zhang GW, Wang SY, Zheng K, Lei LC, Chen QX, Gao YW, Zhou HQ, Xiang H, et al. 2005. Cross-host evolution of severe acute respiratory syndrome coronavirus in palm civet and human. *Proc Natl Acad Sci U S A*. 102(7):2430–2435. <https://doi.org/10.1073/pnas.0409608102>.
46. Nahar N, Asaduzzaman M, Mandal UK, Rimi NA, Gurley ES, Rahman M, Garcia F, Zimicki S, Sultana R, Luby SP. 2020. Hunting bats for human consumption in Bangladesh. *Ecohealth*. 17(1):139–151. <https://doi.org/10.1007/s10393-020-01468-x>.

47. Chan JF, To KK, Tse H, Jin DY, Yuen KY. 2013. Interspecies transmission and emergence of novel viruses: lessons from bats and birds. *Trends Microbiol.* 21(10):544–555. <https://doi.org/10.1016/j.tim.2013.05.005>.
48. Baragon S. 2020 Jan 25. Live animal markets worldwide can spawn diseases, experts say. *Voice of America*. [accessed 2020 Apr 11]; <https://www.voanews.com/science-health/coronavirus-outbreak/live-animal-markets-worldwide-can-spawn-diseases-experts-say>.
49. Zhong NS, Zeng GQ. 2008. Pandemic planning in China: applying lessons from severe acute respiratory syndrome. *Respirology*. 13(Suppl 1):33–35. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1440-1843.2008.01255.x>.
50. Peeri NC, Shrestha N, Rahman MS, Zaki R, Tan Z, Bibi S, Baghbanzadeh M, Aghamohammadi N, Zhang W, Haque U. 2020. The SARS, MERS and novel coronavirus (COVID-19) epidemics, the newest and biggest global health threats: what lessons have we learned? *Int J Epidemiol*. [Epub ahead of print 2020 Feb 22; accessed 2020 Apr 8]. <https://doi.org/10.1093/ije/dyaa033>.
51. Myers SL. 2020 Jan 25. China's omnivorous markets are in the eye of a lethal outbreak once again. *New York Times*. [accessed 2020 Mar 28]; <https://www.nytimes.com/2020/01/25/world/asia/china-markets-coronavirus-sars.html>.
52. Hui DSC, Zumla A. 2019. Severe acute respiratory syndrome: historical, epidemiologic, and clinical features. *Infect Dis Clin North Am*. 33(4):869–889. <https://doi.org/10.1016/j.idc.2019.07.001>.
53. Hemida MG. 2019. Middle East Respiratory Syndrome Coronavirus and the One Health concept. *PeerJ*. 7:e7556. <https://dx.doi.org/10.7717/peerj.7556>.
54. Fan Y, Zhao K, Shi ZL, Zhou P. 2019. Bat coronaviruses in China. *Viruses*. 11(3):210. <https://doi.org/10.3390/v11030210>.
55. Greger M. 2006. Bird flu: a virus of our own hatching. New York: Lantern Books.
56. Cheng VCC, Lau SKP, Woo PCY, Yuen KY. 2007. Severe acute respiratory syndrome coronavirus as an agent of emerging and reemerging infection. *Clin Microbiol Rev*. 20(4):660–694. <https://doi.org/10.1128/CMR.00023-07>.
57. Coronaviridae Study Group of the International Committee on Taxonomy of Viruses. 2020. The species Severe acute respiratory syndrome-related coronavirus: classifying 2019-nCoV and naming it SARS-CoV-2. *Nat Microbiol*. 5(4):536–544. <https://doi.org/10.1038/s41564-020-0695-z>.
58. Murdoch DR, French NP. 2020. COVID-19: another infectious disease emerging at the animal-human interface. *N Z Med J*. 133(1510):12–15.
59. Ting TCC. 2020 Jan 22. China real estate news. China Business Network. [accessed 2020 Mar 28]; <http://www.cb.com.cn/index/show/zj/cv/cv13474141264>.

60. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, Ren R, Leung KSM, Lau EHY, Wong JY, et al. 2020. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *N Engl J Med.* 382(13):1199–1207. <https://doi.org/10.1056/NEJMoa2001316>.
61. Ting TCC. 2020 Jan 22. China real estate news. China Business Network. [accessed 2020 Mar 28]; <http://www.cb.com.cn/index/show/zj/cv/cv13474141264>.
62. Li PJ. 2020 Jan 29. First SARS, now the Wuhan coronavirus. Here's why China should ban its wildlife trade forever. *South China Morning Post*. [updated 2020 Jan 29; accessed 2020 Mar 28]; <https://www.scmp.com/comment/opinion/article/3047828/first-sars-now-wuhan-coronavirus-heres-why-china-should-ban-its>.
63. Zhang J, Ma K, Li H, Liao M, Qi W. 2020. The continuous evolution and dissemination of 2019 novel human coronavirus. *J Infect.* Article in press. [accessed 2020 Mar 28]. <https://doi.org/10.1016/j.jinf.2020.02.001>.
64. Malik YS, Sircar S, Bhat S, Sharun K, Dhama K, Dadar M, Tiwari R, Chai-cumpa W. 2020. Emerging novel coronavirus (2019-nCoV)-current scenario, evolutionary perspective based on genome analysis and recent developments. *Vet Q.* 40(1):68–76. <https://doi.org/10.1080/01652176.2020.1727993>.
65. *South China Morning Post*. 2020 Jan 23. Why wild animals are a key ingredient in China's coronavirus outbreak. *Bangkok Post*. [accessed 2020 Mar 28]; <https://www.bangkokpost.com/world/1842104/why-wild-animals-are-a-key-ingredient-in-chinas-coronavirus-outbreak>.
66. Schnirring L. 2020 Jan 27. Experts: nCoV spread in China's cities could trigger global epidemic. *Minneapolis: Center for Infectious Disease Research and Policy*; [accessed 2020 Mar 28]. <http://www.cidrap.umn.edu/news-perspective/2020/01/experts-ncov-spread-chinas-cities-could-trigger-global-epidemic>.
67. Lu R, Zhao X, Li J, Niu P, Yang B, Wu H, Wang W, Song H, Huang B, Zhu N, et al. 2020. Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *Lancet.* 395(10224):565–574. [https://doi.org/10.1016/S0140-6736\(20\)30251-8](https://doi.org/10.1016/S0140-6736(20)30251-8).
68. Lim PL, Kurup A, Gopalakrishna G, Chan KP, Wong CW, Ng LC, Se-Thoe SY, Oon L, Bai X, Stanton LW, et al. 2004. Laboratory-acquired severe acute respiratory syndrome. *N Engl J Med.* 350(17):1740–1745. <https://doi.org/10.1056/NEJMoa032565>.
69. Andersen KG, Rambaut A, Lipkin WI, Holmes EC, Garry RF. 2020 Mar 17. The proximal origin of SARS-CoV-2. *Nat Med.* <https://doi.org/10.1038/s41591-020-0820-9>.
70. Zhou P, Yang X-L, Wang X-G, Hu B, Zhang L, Zhang W, Si H-R, Zhu Y, Li B, Huang C-L, et al. 2020. A pneumonia outbreak associated with a new coro-

- navirus of probable bat origin. *Nature*. 579(7798):270–273. <https://doi.org/10.1038/s41586-020-2012-7>.
71. Salata C, Calistri A, Parolin C, Palù G. 2019. Coronaviruses: a paradigm of new emerging zoonotic diseases. *Pathog Dis*. 77(9).
72. Lu R, Zhao X, Li J, Niu P, Yang B, Wu H, Wang W, Song H, Huang B, Zhu N, et al. 2020. Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *Lancet*. 395(10224):565–574. [https://doi.org/10.1016/S0140-6736\(20\)30251-8](https://doi.org/10.1016/S0140-6736(20)30251-8).
73. Xiao B, Xiao L. 2020 Feb. The possible origins of 2019-nCoV coronavirus. *ResearchGate.net*. [accessed 2020 Apr 18]. <https://doi.org/10.13140/RG.2.2.21799.29601>.
74. Zhang YZ, Holmes EC. 2020. A genomic perspective on the origin and emergence of SARS-CoV-2. *Cell*. [Epub ahead of print 2020 Mar 26; accessed 2020 Apr 8]. <https://doi.org/10.1016/j.cell.2020.03.035>.
75. Lam TT-Y, Shum MH-H, Zhu H-C, Tong Y-G, Ni X-B, Liao Y-S, Wei W, Cheung WY-M, Li W-J, Li L-F, et al. 2020 Mar 26. Identifying SARS-CoV-2 related coronaviruses in Malayan pangolins. *Nature*. <https://doi.org/10.1038/s41586-020-2169-0>.
76. Zhang T, Wu Q, Zhang Z. 2020 Apr 6. Probable pangolin origin of SARS-CoV-2 associated with the COVID-19 outbreak. *Curr Biol*. 30:1–6. <https://doi.org/10.1016/j.cub.2020.03.022>.
77. Liu P, Chen W, Chen JP. 2019. Viral metagenomics revealed Sendai virus and Coronavirus infection of Malayan pangolins (*Manis javanica*). *Viruses*. 11(11):979. <https://dx.doi.org/10.3390/v11110979>.
78. Ji W, Wang W, Zhao X, Zai J, Li X. 2020. Cross-species transmission of the newly identified coronavirus 2019-nCoV. *J Med Virol*. 92(4):433–440. <https://doi.org/10.1002/jmv.25682>.
79. Liu Z, Xiao X, Wei X, Li J, Yang J, Tan H, Zhu J, Zhang Q, Wu J, Liu L. 2020. Composition and divergence of coronavirus spike proteins and host ACE2 receptors predict potential intermediate hosts of SARS-CoV-2. *J Med Virol*. [Epub ahead of print 2020 Feb 26; accessed 2020 Mar 28]. <https://doi.org/10.1002/jmv.25726>.
80. Xiao K, Zhai J, Feng Y, Zhou N, Zhang X, Zou J-J, Li N, Guo Y, Li X, Shen X, et al. 2020 Feb 20. Isolation and characterization of 2019-nCoV-like coronavirus from Malayan pangolins. <https://doi.org/10.1101/2020.02.17.951335>.
81. Lam TT, Shum MH, Zhu HC, Tong YG, Ni XB, Liao YS, Wei W, Cheung WY, Li WJ, Li LF, et al. 2020. Identifying SARS-CoV-2 related coronaviruses in Malayan pangolins. *Nature*. [Epub ahead of print 2020 Mar 26; accessed 2020 Apr 8]. <https://doi.org/10.1038/s41586-020-2169-0>.

82. Yang Y, Peng F, Wang R, Guan K, Jiang T, Xu G, Sun J, Chang C. 2020 Mar 3. The deadly coronaviruses: the 2003 SARS pandemic and the 2020 novel coronavirus epidemic in China. *J Autoimmun.* [accessed 2020 Mar 28]. <https://doi.org/10.1016/j.jaut.2020.102434>.
83. Peeri NC, Shrestha N, Rahman MS, Zaki R, Tan Z, Bibi S, Baghbanzadeh M, Aghamohammadi N, Zhang W, Haque U. 2020 Feb 22. The SARS, MERS and novel coronavirus (COVID-19) epidemics, the newest and biggest global health threats: what lessons have we learned? *Int J Epidemiol.* [accessed 2020 Mar 28]. <https://doi.org/10.1093/ije/dyaa033>.
84. Guzman J. 2020 Apr 3. Fauci: it's mind-boggling that China's wet markets are still operating during coronavirus pandemic. *The Hill.* [accessed 2020 Apr 11]; <https://thehill.com/changing-america/well-being/prevention-cures/491025-fauci-mind-boggling-that-chinas-wet-markets>.
85. Li J-Y, You Z, Wang Q, Zhou Z-J, Qiu Y, Luo R, Ge X-Y. 2020. The epidemic of 2019-novel-coronavirus (2019-nCoV) pneumonia and insights for emerging infectious diseases in the future. *Microbes Infect.* 22(2):80–85. <https://doi.org/10.1016/j.micinf.2020.02.002>.
86. Harypursat V, Chen Y-K. 2020 Feb 24. Six weeks into the 2019 coronavirus disease (COVID-19) outbreak—it is time to consider strategies to impede the emergence of new zoonotic infections. *Chin Med J (Engl).* [accessed 2020 Mar 28]. <https://doi.org/10.1097/CM9.0000000000000760>.
87. Westcott B, Deng S. 2020 Mar 5. China has made eating wild animals illegal after the coronavirus outbreak. But ending the trade won't be easy. *CNN*; [accessed 2020 Apr 8]. <https://www.cnn.com/2020/03/05/asia/china-coronavirus-wildlife-consumption-ban-intl-hnk/index.html>.
88. Loeb J. 2020. China bans sale of wildlife following coronavirus. *Vet Record.* 186(5):144–145. <http://dx.doi.org/10.1136/vr.m495>.
89. Normile D, Yimin D. 2003. Civets back on China's menu. *Science.* 301(5636):1031. <https://doi.org/10.1126/science.301.5636.1031a>.
90. Zhou Z-M, Buesching CD, Macdonald DW, Newman C. 2020. China: clamp down on violations of wildlife trade ban. *Nature.* 578(7794):217. <https://doi.org/10.1038/d41586-020-00378-w>.
91. Yang Y, Peng F, Wang R, Guan K, Jiang T, Xu G, Sun J, Chang C. 2020. The deadly coronaviruses: the 2003 SARS pandemic and the 2020 novel coronavirus epidemic in China. *J Autoimmun.* [Epub ahead of print 2020 Mar 3; accessed 2020 Mar 28]. <https://doi.org/10.1016/j.jaut.2020.102434>.
92. Challender D, Wu S, Kaspal P, Khatiwada A, Ghose A, Ching-Min Sun N, Mohapatra RK, Laxmi Suwal L T. 2019. *Manis pentadactyla* (errata version published in 2020). The IUCN Red List of threatened species 2019. Cambridge (United Kingdom): International Union for Conservation of Nature and

Natural Resources; [last assessed 2019 May 10; accessed 2020 Mar 28]. <https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T12764A168392151.en>.

93. Harypursat V, Chen Y-K. 2020 Feb 24. Six weeks into the 2019 coronavirus disease (COVID-19) outbreak—it is time to consider strategies to impede the emergence of new zoonotic infections. *Chin Med J (Engl)*. [accessed 2020 Mar 28]. <https://doi.org/10.1097/CM9.0000000000000760>.

94. Zhou Z-M, Buesching CD, Macdonald DW, Newman C. 2020. China: clamp down on violations of wildlife trade ban. *Nature*. 578(7794):217. <https://doi.org/10.1038/d41586-020-00378-w>.

95. Li J, Li J, Xie X, Cai X, Huang J, Tian X, Zhu H. 2020. Game consumption and the 2019 novel coronavirus. *Lancet Infect Dis*. 20(3):275–276. [https://doi.org/10.1016/S1473-3099\(20\)30063-3](https://doi.org/10.1016/S1473-3099(20)30063-3).

96. Peeri NC, Shrestha N, Rahman MS, Zaki R, Tan Z, Bibi S, Baghbanzadeh M, Aghamohammadi N, Zhang W, Haque U. 2020 Feb 22. The SARS, MERS and novel coronavirus (COVID-19) epidemics, the newest and biggest global health threats: what lessons have we learned? *Int J Epidemiol*. [accessed 2020 Mar 28]. <https://doi.org/10.1093/ije/dyaa033>.

97. Wang H, Shao J, Luo X, Chuai Z, Xu S, Geng M, Gao Z. 2020. Wildlife consumption ban is insufficient. *Science*. 367(6485):1435. <https://doi.org/10.1126/science.abb6463>.

98. Li J, Li J, Xie X, Cai X, Huang J, Tian X, Zhu H. 2020. Game consumption and the 2019 novel coronavirus. *Lancet Infect Dis*. 20(3):275–276. [https://doi.org/10.1016/S1473-3099\(20\)30063-3](https://doi.org/10.1016/S1473-3099(20)30063-3).

99. Smith GD, Ng F, Li WHC. 2020 Mar 9. COVID-19: emerging compassion, courage and resilience in the face of misinformation and adversity. *J Clin Nurs*. [accessed 2020 Mar 28]. <https://doi.org/10.1111/jocn.15231>.

100. Ye ming sha, bat feces, bat dung, bat guano. 2020. Xiamen (China): Best Plant; [accessed 2020 Mar 28]. <https://www.bestplant.shop/products/ye-ming-sha-bat-feces-bat-dung-bat-guano>.

101. 48 Wassenaar TM, Zou Y. 2020. 2019_nCoV/SARS-CoV-2: rapid classification of betacoronaviruses and identification of Traditional Chinese Medicine as potential origin of zoonotic coronaviruses. *Lett Appl Microbiol*. 70(5):342–348. <https://doi.org/10.1111/lam.13285>.

102. National Administration of Traditional Chinese Medicine. 2020 Feb 4. Notice on the issuance of a new coronavirus infection pneumonia diagnosis and treatment plan. Beijing: National Health Commission. Report No.: 103. <http://www.gov.cn/zhengce/zhengceku/2020-02/05/5474791/files/de44557832ad-4be1929091dcbcfca891.pdf>.

103. Zhou Z-M, Buesching CD, Macdonald DW, Newman C. 2020. China: clamp down on violations of wildlife trade ban. *Nature*. 578(7794):217. <https://doi.org/10.1038/d41586-020-00378-w>.
104. Li J, Li J, Xie X, Cai X, Huang J, Tian X, Zhu H. 2020. Game consumption and the 2019 novel coronavirus. *Lancet Infect Dis*. 20(3):275–276. [https://doi.org/10.1016/S1473-3099\(20\)30063-3](https://doi.org/10.1016/S1473-3099(20)30063-3).
105. Zhou P, Fan H, Lan T, Yang X-L, Shi W-F, Zhang W, Zhu Y, Zhang Y-W, Xie Q-M, Mani S, et al. 2018. Fatal swine acute diarrhoea syndrome caused by an HKU2-related coronavirus of bat origin. *Nature*. 556(7700):255–258. <https://doi.org/10.1038/s41586-018-0010-9>.
106. Afelt A, Frutos R, Devaux C. 2018. Bats, coronaviruses, and deforestation: toward the emergence of novel infectious diseases? *Front Microbiol*. 9:702. <https://dx.doi.org/10.3389/fmicb.2018.00702>.
107. U.S. Agency for International Development. [date unknown]. Emerging disease insights. USAID. Predict. [accessed 2020 Mar 28]. <https://static1.squarespace.com/static/5c7d60a711f7845f734d4a73/t/5d6038708989fe00015fb309/1566586994570/M%26A-EDI+pigs.pdf>.
108. Cui J, Li F, Shi ZL. 2019. Origin and evolution of pathogenic coronaviruses. *Nat Rev Microbiol*. 17(3):181–192. <https://doi.org/10.1038/s41579-018-0118-9>.
109. Niederwerder MC, Hesse RA. 2018. Swine enteric coronavirus disease: a review of 4 years with porcine epidemic diarrhoea virus and porcine deltacoronavirus in the United States and Canada. *Transbound Emerg Dis*. 65(3):660–675. <https://doi.org/10.1111/tbed.12823>.
110. Wang Q, Vlasova AN, Kenney SP, Saif LJ. 2019. Emerging and re-emerging coronaviruses in pigs. *Curr Opin Virol*. 34:39–49. <https://doi.org/10.1016/j.coviro.2018.12.001>.
111. U.S. Government Accountability Office. 2015 Dec 15. Emerging animal diseases: actions needed to better position USDA to address future risks. Washington: GAO. Report No.: GAO-16-132. <https://www.gao.gov/products/GAO-16-132>.
112. Graham RL, Donaldson EF, Baric RS. 2013. A decade after SARS: strategies for controlling emerging coronaviruses. *Nat Rev Microbiol*. 11(12):836–848. <https://doi.org/10.1038/nrmicro3143>.
113. Wang Q, Vlasova AN, Kenney SP, Saif LJ. 2019. Emerging and re-emerging coronaviruses in pigs. *Curr Opin Virol*. 34:39–49. <https://doi.org/10.1016/j.coviro.2018.12.001>.
114. Vijgen L, Keyaerts E, Moës E, Thoelen I, Wollants E, Lemey P, Vandamme A-M, Van Ranst M. 2005. Complete genomic sequence of human coronavirus OC43: molecular clock analysis suggests a relatively recent zoonotic coronavi-

- rus transmission event. *J Virol.* 79(3):1595–1604. <https://doi.org/10.1128/JVI.79.3.1595-1604.2005>.
115. Corman VM, Muth D, Niemeyer D, Drosten C. 2018. Hosts and sources of endemic human coronaviruses. *Adv Virus Res.* 100:163–188. <https://doi.org/10.1016/bs.aivir.2018.01.001>.
116. Seifried O. 1931. Histopathology of infectious laryngotracheitis in chickens. *J Exp Med.* 54(6):817–826. <https://dx.doi.org/10.1084/jem.54.6.817>.
117. Ignjatović J, Sapats S. 2000. Avian infectious bronchitis virus. *Rev Sci Tech.* 19(2):493–508. <https://doi.org/10.20506/rst.19.2.1228>.
118. Cunningham CH, Spring MP, Nazerian K. 1972. Replication of avian infectious bronchitis virus in African green monkey kidney cell line VERO. *J Gen Virol.* 16(3):423–427.
119. Su S, Wong G, Shi W, Liu J, Lai ACK, Zhou J, Liu W, Bi Y, Gao GF. 2016. Epidemiology, genetic recombination, and pathogenesis of coronaviruses. *Trends Microbiol.* 24(6):490–502. <https://doi.org/10.1016/j.tim.2016.03.003>.
120. Wang B, Liu Y, Ji C-M, Yang Y-L, Liang Q-Z, Zhao P, Xu L-D, Lei X-M, Luo W-T, Qin P, et al. 2018. Porcine deltacoronavirus engages the transmissible gastroenteritis virus functional receptor porcine aminopeptidase N for infectious cellular entry. *J Virol.* 92(12):e00318-18. <https://doi.org/10.1128/JVI.00318-18>.
121. van der Velden VHJ, Wierenga-Wolf AF, Adriaansen-Soeting PWC, Overbeek SE, Möller GM, Hoogsteden HC, Versnel MA. 1998. Expression of aminopeptidase N and dipeptidyl peptidase IV in the healthy and asthmatic bronchus. *Clin Exp Allergy.* 28(1):110–120. <https://doi.org/10.1046/j.1365-2222.1998.00198.x>.
122. Li W, Hulswit RJG, Kenney SP, Widjaja I, Jung K, Alhamo MA, van Dieren B, van Kuppeveld FJM, Saif LJ, Bosch B-J. 2018. Broad receptor engagement of an emerging global coronavirus may potentiate its diverse cross-species transmissibility. *Proc Natl Acad Sci U S A.* 115(22):E5135–E5143. <https://doi.org/10.1073/pnas.1802879115>.
123. Liang Q, Zhang H, Li B, Ding Q, Wang Y, Gao W, Guo D, Wei Z, Hu H. 2019. Susceptibility of chickens to porcine deltacoronavirus infection. *Viruses.* 11(6):573. <https://dx.doi.org/10.3390/v11060573>.
124. Ismail MM, Cho KO, Ward LA, Saif LJ, Saif YM. 2001. Experimental bovine coronavirus in turkey poults and young chickens. *Avian Dis.* 45(1):157–163.
125. Boley PA, Alhamo MA, Lossie G, Yadav KK, Vasquez-Lee M, Saif LJ, Kenney SP. 2020. Porcine deltacoronavirus infection and transmission in poultry, United States. *Emerg Infect Dis.* 26(2):255–265. <https://doi.org/10.3201/eid2602.190346>.

126. Boley PA, Alhamo MA, Lossie G, Yadav KK, Vasquez-Lee M, Saif LJ, Kenney SP. 2020. Porcine deltacoronavirus infection and transmission in poultry, United States. *Emerg Infect Dis.* 26(2):255–265. <https://doi.org/10.3201/eid2602.190346>.
127. Yang Y-L, Qin P, Wang B, Liu Y, Xu G-H, Peng L, Zhou J, Zhu SJ, Huang Y-W. 2019. Broad cross-species infection of cultured cells by bat HKU2-related swine acute diarrhea syndrome coronavirus and identification of its replication in murine dendritic cells in vivo highlight its potential for diverse interspecies transmission. *J Virol.* 93(24):e01448-19. <https://doi.org/10.1128/JVI.01448-19>.
128. Xu Y. 2020. Unveiling the origin and transmission of 2019-nCoV. *Trends Microbiol.* 28(4):239–240. <https://doi.org/10.1016/j.tim.2020.02.001>.
129. Graham RL, Donaldson EF, Baric RS. 2013. A decade after SARS: strategies for controlling emerging coronaviruses. *Nat Rev Microbiol.* 11(12):836–848. <https://doi.org/10.1038/nrmicro3143>.
130. Leopardi S, Terregino C, Paola DB. 2020. Silent circulation of coronaviruses in pigs. *Vet Rec.* 186(10):323. <http://dx.doi.org/10.1136/vr.m932>.
131. Heinrich S, Wittmann TA, Prowse TAA, Ross JV, Delean S, Shepherd CR, Cassey P. 2016. Where did all the pangolins go? International CITES trade in pangolin species. *Glob Ecol Conserv.* 8:241–253. <http://dx.doi.org/10.1016/j.gecco.2016.09.007>.
132. FAOSTAT. 2019. Livestock primary data: producing animals/slaughtered: meat, pig. Rome: Food and Agriculture Organization of the United Nations; [updated 2020 Mar 4; accessed 2020 Apr 8]. <http://www.fao.org/faostat/en/#data/QL>.
133. Kingsley DH. 2016. Emerging foodborne and agriculture-related viruses. *Microbiol Spectr.* 4(4). <https://doi.org/10.1128/microbiolspec.PFS-0007-2014>.
134. Corman VM, Eckerle I, Memish ZA, Liljander AM, Dijkman R, Jonsdottir H, Juma Ngeiywa KJZ, Kamau E, Younan M, Al Masri M, et al. 2016. Link of a ubiquitous human coronavirus to dromedary camels. *Proc Natl Acad Sci U S A.* 113(35):9864–9869. <https://doi.org/10.1073/pnas.1604472113>.
135. Fung S-Y, Yuen K-S, Ye Z-W, Chan C-P, Jin D-Y. 2020. A tug-of-war between severe acute respiratory syndrome coronavirus 2 and host antiviral defence: lessons from other pathogenic viruses. *Emerg Microbes Infect.* 9(1):558–570. <https://doi.org/10.1080/22221751.2020.1736644>.
136. Vijgen L, Keyaerts E, Moës E, Thoelen I, Wollants E, Lemey P, Vandamme A-M, Van Ranst M. 2005. Complete genomic sequence of human coronavirus OC43: molecular clock analysis suggests a relatively recent zoonotic coronavirus transmission event. *J Virol.* 79(3):1595–1604.

137. Walker PGT, Whittaker C, Watson O, Baguelin M, Ainslie KEC, Bhatia S, Bhatt S, Boonyasiri A, Boyd O, Cattarino L, et al. 2020 Mar 26. Report 12. The global impact of COVID-19 and strategies for mitigation and suppression. MRC Centre for Global Infectious Disease Analysis, Imperial College London. [accessed 2020 Apr 8]. <https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/report-12-global-impact-covid-19/>
138. American Hospital Association. 2020 Feb 20. Coronavirus update: register for AHA members-only webinars on Feb. 21 and Feb. 26 related to novel coronavirus (COVID-19). Chicago: AHA; [accessed 2020 Mar 30]. <https://www.aha.org/advisory/2020-02-20-coronavirus-update-register-aha-members-only-webinars-feb-21-and-feb-26-related>.
139. IHME COVID-19 Health Service Utilization Forecasting Team. 2020 Mar 26. Forecasting COVID-19 impact on hospital bed-days, ICU-days, ventilator days and deaths by US state in the next 4 months. medRxiv.org. [updated 2020 Apr 7; accessed 2020 Apr 8]. <https://doi.org/10.1101/2020.03.27.20043752>.
140. Centers for Disease Control and Prevention. 2007 Feb. Interim pre-pandemic planning guidance: community strategy for pandemic influenza mitigation in the United States—early, targeted, layered use of nonpharmaceutical interventions. U.S. Department of Health and Human Services; [accessed 2020 Mar 30]. https://www.cdc.gov/flu/pandemic-resources/pdf/community_mitigation-sm.pdf.
141. Centers for Disease Control and Prevention. 2007 Feb. Interim pre-pandemic planning guidance: community strategy for pandemic influenza mitigation in the United States—early, targeted, layered use of nonpharmaceutical interventions. U.S. Department of Health and Human Services; [accessed 2020 Mar 30]. https://www.cdc.gov/flu/pandemic-resources/pdf/community_mitigation-sm.pdf.
142. Jester B, Uyeki T, Jernigan D. 2018. Readiness for responding to a severe pandemic 100 years after 1918. *Am J Epidemiol.* 187(12):2596–2602. <https://doi.org/10.1093/aje/kwy165>.
143. Taubenberger JK, Morens DM. 2006. 1918 Influenza: the mother of all pandemics. *Emerg Infect Dis.* 12(1):15–22.
144. National Weather Service. [date unknown]. Saffir-Simpson Hurricane Wind Scale. Miami: National Oceanic and Atmospheric Administration. [accessed 2020 Mar 30]. <https://www.weather.gov/mfl/saffirsimpson>.
145. Verity R, Okell LC, Dorigatti I, Winskill P, Whittaker C, Imai N, Cuomo-Dannenburg G, Thompson H, Walker PGT, Fu H, et al. 2020. Estimates of the severity of coronavirus disease 2019: a model-based analysis. *Lancet Infect Dis.* [Epub ahead of print 2020 Mar 30; accessed 2020 Apr 8]. [https://doi.org/10.1016/S1473-3099\(20\)30243-7](https://doi.org/10.1016/S1473-3099(20)30243-7).

146. Russell TW, Hellewell J, Jarvis CI, van Zandvoort K, Abbott S, Ratnayake R, CMMID COVID-19 Working Group, Flasche S, Eggo RM, Edmunds WJ, et al. 2020. Estimating the infection and case fatality ratio for coronavirus disease (COVID-19) using age-adjusted data from the outbreak on the Diamond Princess cruise ship. *Eurosurveillance*. 25(12):2000256. <http://dx.doi.org/10.2807/1560-7917.ES.2020.25.12.2000256>.
147. Gudbjartsson DF, Helgason A, Jonsson H, Magnusson OT, Melsted P, Norddahl GL, Saemundsdottir J, Sigurdsson A, Sulem P, Agustsdottir AB, et al. 2020 Apr 14. Spread of SARS-CoV-2 in the Icelandic population. *N Engl J Med*. [accessed 2020 Apr 18]. <https://doi.org/10.1056/NEJMoa2006100>.
148. Oke J, Heneghan C. 2020 Mar 17. Global Covid-19 case fatality rates. Oxford: Centre for Evidence-Based Medicine; [updated 2020 Apr 7; accessed 2020 Apr 8]. <https://www.cebm.net/covid-19/global-covid-19-case-fatality-rates/>.
149. World Health Organization. 2004 Apr 21. Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003. Geneva: WHO; [accessed 2020 Apr 1]. https://www.who.int/csr/sars/country/table2004_04_21/en/.
150. World Health Organization Regional Office for the Eastern Mediterranean. 2019. MERS situation update, November 2019. World Health Organization. Report No.: WHO-EM/CSR/241/E. <http://www.emro.who.int/pandemic-epidemic-diseases/mers-cov/mers-situation-update-november-2019.html>.
151. Taubenberger JK, Morens DM. 2019. The 1918 influenza pandemic and its legacy. *Cold Spring Harb Perspect Med*. [Epub ahead of print 2019 Dec 30; accessed 2020 Apr 8]. <https://doi.org/10.1101/cshperspect.a038695>.
152. World Health Organization. 2020. Cumulative number of confirmed human cases for avian influenza A(H5N1) reported to WHO, 2003–2020. Geneva: WHO; [updated 2020 Feb 28; accessed 2020 Apr 1]. https://www.who.int/influenza/human_animal_interface/2020_01_20_tableH5N1.pdf.
153. Institute for Health Metrics and Evaluation. 2020. COVID-19 projections. Seattle: IHME; [updated 2020 Apr 17; accessed 2020 Apr 18]. <https://covid19.healthdata.org/united-states-of-america>.
154. Noymer A, Garenne M. 2000. The 1918 influenza epidemic's effects on sex differentials in mortality in the United States. *Popul Dev Rev*. 26(3):565–581.
155. Osler W. 1904. *Science and Immortality* (Boston, MA: Houghton, Mifflin and Company).
156. Crosby A. Alfred Crosby on: a bad rap on Spain. Influenza 1918. Public Broadcasting System American Experience transcript. pbs.org/wgbh/amex/influenza/filmmore/reference/interview/drcrosby1.html.

157. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
158. Greene J with Miline K. 2006. *The Bird Flu Pandemic* (New York, NY: Thomas Dunne Books, p. 16).
159. Editorial. 1918. *Journal of the American Medical Association* 71:2154.
160. Ghendon Y. 1994. Introduction to pandemic influenza through history. *European Journal of Epidemiology* 10:451–3.
161. Ghendon Y. 1994. Introduction to pandemic influenza through history. *European Journal of Epidemiology* 10:451–3.
162. Secretariat of WHO Executive Board. 2004. Avian influenza and human health. World Health Organization Executive Board report 114(6):1–5. www.who.int/gb/ebwha/pdf_files/EB114/B114_6-en.pdf.
163. American Heritage Dictionaries (ed.), 2004. *The American Heritage Dictionary of the English Language, 4th Edition* (Boston, MA: Houghton Mifflin).
164. Mydans S. 2005. Preparations for bird flu are urgent, Asia is warned. *International Herald Tribune*, October 11. www.ihb.com/articles/2005/10/10/news/flu.php.
165. Deagon B. 2005. Avian flu pandemic may have big effect on U.S. businesses. *Investor's Business Daily*, October 12. tinyurl.com/grztq.
166. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
167. Bollet AJ. 2004. *Plagues and Poxes: The Impact of Human History on Epidemic Disease* (New York, NY: Demos Medical Publishing).
168. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
169. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
170. Ireland MW (ed.). 1928. Medical department of the United States Army in the World War. *Communicable Diseases* 9:61.
171. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
172. Ireland MW (ed.). 1928. Medical department of the United States Army in the World War. *Communicable Diseases* 9:61.
173. Laver WG, Bischofberger N, Webster RG. 2000. The origin and control of pandemic influenza. *Perspectives in Biology and Medicine* 43(2):173–92.

174. Brem WV, Bolling GE, Casper EJ. 1918. Pandemic 'influenza' and secondary pneumonia at Camp Fremont, Calif. *Journal of the American Medical Association* 71:2138–44.
175. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
176. Nguyen-Van-Tam JS, Hampson AW. 2003. The epidemiology and clinical impact of pandemic influenza. *Vaccine* 21:1762–8.
177. Ireland MW (ed.). 1928. Medical department of the United States Army in the World War. *Communicable Diseases* 9:61.
178. Grist NR. 1979. Pandemic influenza 1918. *British Medical Journal* 2(6205):1632–3. web.uct.ac.za/depts/mmi/jmoodie/influen2.html.
179. Grist NR. 1979. Pandemic influenza 1918. *British Medical Journal* 2(6205):1632–3. web.uct.ac.za/depts/mmi/jmoodie/influen2.html.
180. Cunha BA. 2004. Influenza: historical aspects of epidemics and pandemics. *Infectious Disease Clinics of North America* 18:141–55.
181. Harbrecht L. 2005. Doctoral student's research brings lessons, insight to a looming pandemic. *AScribe Newswire*, October 25.
182. Quisenberry D. 2005. Remembering the 1918 flu pandemic. *Grand Rapids Press*, October 30. tinyurl.com/qmev4.
183. Brem WV, Bolling GE, Casper EJ. 1918. Pandemic "influenza" and secondary pneumonia at Camp Fremont, Calif. *JAMA*. 71:2138–44.
184. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
185. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
186. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
187. Thayer WS. 1918. Discussion of influenza. *Proceedings of the Royal Society of Medicine*, November, p. 61.
188. Morrissey C. 1997. Transcript of unaired interview for Influenza 1918, American Experience, February 26. Cited in: Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Viking, p. 235).
189. Camus A. 1948. *The Plague*, translated by Stuart Gilbert (New York, NY: A.A. Knopf).
190. Ward P, Small I, Smith J, Suter P, Dutkowski R. 2005. Oseltamivir (Tami-flu) and its potential for use in the event of an influenza pandemic. *J Antimicrob Chemother*. 55(S1):i5–i21.

191. Brainerd E, Siegler MV. 2002. The economic effects of the 1918 influenza epidemic. National Bureau of Economic Research, Inc. (Washington, DC: Summer Institute). williams.edu/Economics/wp/brainerdDP3791.pdf.
192. Taubenberger JK, Reid AH, Fanning TG. 2000. The 1918 influenza virus: a killer comes into view. *Virology* 274:241–5.
193. Nguyen-Van-Tam JS, Hampson AW. 2003. The epidemiology and clinical impact of pandemic influenza. *Vaccine* 21:1762–8.
194. Garrett L. 2005. The next pandemic? Probable cause. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.
195. Johnson NPAS, Mueller J. 2002. Updating the accounts: global mortality of the 1918–1920 “Spanish” influenza pandemic. *Bulletin of the History of Medicine* 76:105–15.
196. Johnson NPAS, Mueller J. 2002. Updating the accounts: global mortality of the 1918–1920 “Spanish” influenza pandemic. *Bulletin of the History of Medicine* 76:105–15.
197. Alexander DJ, Brown IH. 2000. Recent zoonoses caused by influenza A viruses. *Revue Scientifique et Technique Office International des Epizooties* 19:197–225.
198. Ungchusak K, Auewarakul P, Dowell SF, et al. 2005. Probable person-to-person transmission of avian influenza A (H5N1). *New England Journal of Medicine* 352:333–40.
199. Barry JM. 2004. Viruses of mass destruction. *Fortune*, November 1.
200. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London, UK: Routledge, pp. 1–26).
201. Jordan E. 1927. *Epidemic Influenza*, 1st Edition (Chicago, IL: American Medical Association).
202. Crosby AW. 2003. *America’s Forgotten Pandemic: The Influenza of 1918* (Cambridge, UK: Cambridge University Press).
203. Public Broadcasting System. Influenza 1918, Act I. American Experience transcript. pbs.org/wgbh/amex/influenza/filmmore/transcript/transcript1.html.
204. Bollet AJ. 2004. *Plagues and Poxes: The Impact of Human History on Epidemic Disease* (New York, NY: Demos Medical Publishing, Inc., p. 107).
205. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books, p. 187).

206. Public Broadcasting System. American Experience Transcript. 1918 Influenza Timeline. pbs.org/wgbh/amex/influenza/timeline/index.html.
207. Bollet AJ. 2004. Plagues and Poxes: The Impact of Human History on Epidemic Disease (New York, NY: Demos Medical Publishing, Inc., p. 106).
208. Lehrer J. 2005. The avian flu pandemic. PBS Newshour with Jim Lehrer. October 5.
209. Barry JM. 2004. Viruses of mass destruction. *Fortune*, November 1.
210. Jones L. 2005. America under attack. *Men's Health*, November, pp. 154–9.
211. Crosby A. 1999. Influenza 1918. PBS American Experience. www.pbs.org/wgbh/amex/influenza/.
212. Crosby A. 1999. Influenza 1918. PBS American Experience. www.pbs.org/wgbh/amex/influenza/.
213. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company).
214. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
215. Apurchase L. 1982. Charles Hardy oral history tapes. June 24. Cited in: Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Viking, p. 223).
216. Morrissey C. 1997. Transcript of unaired interview for Influenza 1918, American Experience, February 26. Cited in: Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Viking, p. 190).
217. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
218. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
219. Crosby A. 1999. Influenza 1918. PBS American Experience. www.pbs.org/wgbh/amex/influenza/.
220. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
221. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London, UK: Routledge, pp. 1–26).
222. 1918. Tahiti builds pyres of influenza dead. *New York Times*, December 25. [flickr.com/photos/quiplash/34527850/](https://www.flickr.com/photos/quiplash/34527850/).
223. Oldstone MBA. 1998. *Viruses, Plagues and History* (Cambridge, UK: Oxford University Press).

224. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London, UK: Routledge, pp. 1–26).
225. Hudson C. 1999. Something in the air. *Daily Mail*, August 21, pp. 30–31.
226. Crosby A. 1999. Influenza 1918. PBS American Experience. www.pbs.org/wgbh/amex/influenza/.
227. Crosby A. 1999. Influenza 1918. PBS American Experience. www.pbs.org/wgbh/amex/influenza/.
228. Fields BN, Knipe DM, Howley PM, Griffin DE. 1996. *Fields Virology* (Philadelphia, PA: Lippincott Williams and Wilkins). Cited in: Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Viking, p. 102).
229. Karlen A. 1995. *Man and Microbes* (New York, NY: Touchstone, p. 145).
230. Public Broadcasting System. Influenza 1918, Act V. American Experience transcript. pbs.org/wgbh/amex/influenza/filmmore/transcript/transcript1.html.
231. Sacks O, Vilensky JA. 2005. Waking to a new threat. *New York Times*, November 16.
232. Ravenholt RT, Foege WH. 1982. 1918 Influenza, encephalitis lethargica, parkinsonism. *Lancet* 320(8303):860–4.
233. Almond D. 2005. Is the 1918 influenza pandemic over? Long-term effects of in utero influenza exposure in the post-1940 U.S. population. Columbia University and NBER, July. nber.org/~almond/jmp3.pdf.
234. Kolata G. 1999. *Flu: The Story of the Great Influenza Pandemic* (New York, NY: Simon and Schuster, Inc., p. 3).
235. Schoch-Spana M. 2000. Implications of pandemic influenza for bioterrorism response. *Clinical Infectious Diseases* 31:1409–13.
236. Committee on Climate, Ecosystems, Infectious Disease, and Human Health. 2001. *Under the Weather: Climate, Ecosystems, and Infectious Disease* (Washington, DC: National Academies Press).
237. Evans WA, Armstrong DB, Davis WH, Kopf EW, Woodward WC. 1918. Influenza: report of a special committee of the American Public Health Association. *Journal of the American Medical Association* 71:2068–73.
238. Evans WA, Armstrong DB, Davis WH, Kopf EW, Woodward WC. 1918. Influenza: report of a special committee of the American Public Health Association. *Journal of the American Medical Association* 71:2068–73.
239. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press, p. 165).

240. Bakalar N. 2003. *Where the Germs Are: A Scientific Safari* (New York, NY: Wiley).
241. Smith W, Andrews CH, Laidlaw PP. 1933. A virus obtained from influenza patients. *Lancet* 2:66–8.
242. Taubenberger J. 2005. Mission of Armed Forces Institute of Pathology. Public Broadcasting System American Experience. 1918 Influenza. pbs.org/wgbh/amex/influenza/sfeature/drjeffrey1.html.
243. Taubenberger JK, Reid AH. 2003. Archaeovirology: characterization of the 1918 “Spanish” influenza pandemic virus. In: Greenblatt C, Spigelman M (eds.), *Emerging Pathogens: Archaeology, Ecology and Evolution of Infectious Disease* (Oxford, UK: Oxford University Press, pp. 189–202).
244. Brown D. 2005. Back from the dead—the 1918 killer influenza. *Washington Post*, October 16.
245. Brown D. 2005. Back from the dead—the 1918 killer influenza. *Washington Post*, October 16.
246. Brown D. 2005. Back from the dead—the 1918 killer influenza. *Washington Post*, October 16.
247. Lockwood C. 1997. In search of the Spanish flu: scientists hope seven bodies buried in arctic ice will help solve the mystery of the 1918 pandemic. *The Ottawa Citizen*, October 4.
248. Lockwood C. 1997. In search of the Spanish flu: scientists hope seven bodies buried in arctic ice will help solve the mystery of the 1918 pandemic. *The Ottawa Citizen*, October 4.
249. Brown D. 2005. Back from the dead—the 1918 killer influenza. *Washington Post*, October 16.
250. Davies P. 2000. *The Devil’s Flu* (New York, NY: Henry Holt and Company).
251. Davies P. 2000. *The Devil’s Flu* (New York, NY: Henry Holt and Company).
252. Davis JL. 2000. Ground penetrating radar surveys to locate 1918 Spanish flu victims in permafrost. *Journal of Forensic Science* 45(1):68–76.
253. *The Ottawa Citizen*. 1998. Gravediggers begin search for 1918 flu virus in Arctic. August 23.
254. Wilford JN. 1998. Quest for frozen pandemic virus yields mixed results. *New York Times*, September 8.
255. Gladwell M. 1997. The dead zone. *New Yorker*, July 28.
256. Underwood A. 2005. Resurrecting a killer flu. *Newsweek*, Oct. 7.
257. Taubenberger JK, Reid AH. 2003. Archaeovirology: characterization of the 1918 “Spanish” influenza pandemic virus. In: Greenblatt C, Spigelman M (eds.),

- Emerging Pathogens: Archaeology, Ecology and Evolution of Infectious Disease (Oxford, UK: Oxford University Press, pp. 189–202).
258. Drexler M. 2002. Secret Agents: The Menace of Emerging Infections (Washington, DC: Joseph Henry Press).
259. Davies P. 2000. The Devil's Flu (New York, NY: Henry Holt and Company).
260. Fernandez E. 2002. The virus detective. San Francisco Chronicle, February 17.
261. Fernandez E. 2002. The virus detective. San Francisco Chronicle, February 17.
262. Fernandez E. 2002. The virus detective. San Francisco Chronicle, February 17.
263. Kolata G. 1999. Flu: The Story of the Great Influenza Pandemic (New York, NY: Simon and Schuster, Inc., p. 264).
264. Gadsby P. 1999. Fear of flu—pandemic influenza outbreaks. Discover, January.
265. Martindale D. 2000. No mercy. New Scientist, October 14.
266. Koen JS. 1919. A practical method for field diagnosis of swine disease. American Journal of Veterinary Medicine 14:468.
267. Oldstone MBA. 1998. Viruses, Plagues and History (Oxford, UK: Oxford University Press).
268. Taubenberger JK, Reid AH, Lourens RM, Wang R, Jin G, Fanning TG. 2005. Characterization of the 1918 influenza virus polymerase genes. Nature 437:889.
269. Belshe RB. 2005. The origins of pandemic influenza—lessons from the 1918 virus. New England Journal of Medicine 353(21):2209–11.
270. Cohen JC, Powderly WG. 2004. Infectious Diseases, 2nd Edition (London, UK: Mosby).
271. Crawford R. 1995. The Spanish flu. In: Stranger Than Fiction: Vignettes of San Diego History (San Diego, CA: San Diego Historical Society).
272. Tumpey TM, Basler CE, Aguilar PV, et al. 2005. Characterization of the reconstructed 1918 Spanish influenza pandemic virus. Science 310(5745):77–80.
273. Webby RJ, Webster RG. 2003. Are we ready for a pandemic influenza? Science 302:1519–22.
274. Stobbe M. 2005. Researchers reconstruct 1918 flu virus. Associated Press, October 5.
275. von Bubnoff A. 2005. The 1918 flu virus is resurrected. Nature 427:794.

276. Kolata G. 2005. Deadly 1918 epidemic linked to bird flu, scientists say. *New York Times*, October 5.
277. Branswell H. 2005. Spanish flu bug lives again. *Ottawa Sun*, October 5.
278. Kolata G. 2005. Deadly 1918 epidemic linked to bird flu, scientists say. *New York Times*, October 5.
279. Kolata G. 2005. Deadly 1918 epidemic linked to bird flu, scientists say. *New York Times*, October 5.
280. Orent W. 2005. Playing with viruses: replicating this flu strain could get us burned. *Washington Post*, April 17, p. B01. www.washingtonpost.com/wp-dyn/articles/A58300-2005Apr16.html.
281. von Bubnoff A. 2005. The 1918 flu virus is resurrected. *Nature* 427:794.
282. von Bubnoff A. 2005. The 1918 flu virus is resurrected. *Nature* 427:794.
283. von Bubnoff A. 2005. The 1918 flu virus is resurrected. *Nature* 427:794.
284. Benitez MA. 2005. Ahead of the storm. *South China Morning Post*, April 20.
285. Russell S. 2005. Deadliest flu bug given new life in U.S. laboratory. *San Francisco Chronicle*, October 6.
286. Sample I. 2005. Security fears as flu virus that killed 50 million is recreated. *Guardian*, October 6.
287. Frist B. 2005. Manhattan project for the 21st century. Harvard Medical School Health Care Policy Seidman Lecture, June 1. frist.senate.gov/files/060105manhattan.pdf.
288. Dhingra MS, Artois J, Robinson TP, Linard C, Chaiban C, Xenarios I, Engler R, Liechti R, Kuznetsov D, Xiao X, et al. 2016. Global mapping of highly pathogenic avian influenza H5N1 and H5Nx clade 2.3.4.4 viruses with spatial cross-validation. *eLife*. 5:e19571. <https://doi.org/10.7554/eLife.19571>.
289. World Health Organization. 2020. Cumulative number of confirmed human cases for avian influenza A(H5N1) reported to WHO, 2003–2020. Geneva: WHO; [updated 2020 Feb 28; accessed 2020 Apr 8]. https://www.who.int/influenza/human_animal_interface/2020_01_20_tableH5N1.pdf.
290. World Health Organization. 2020 Feb 10. Ebola virus disease. Geneva: WHO; [accessed 2020 Apr 19]. <https://www.who.int/news-room/fact-sheets/detail/ebola-virus-disease>.
291. World Health Organization. 2006. Cumulative number of confirmed human cases of avian influenza A/(H5N1). April 19. www.who.int/csr/disease/avian_influenza/country/cases_table_2006_04_19/en/index.html.
292. Branswell H. 2006. Cambodian study suggests mild bird flu cases aren't going undetected. *Canadian Press*, March 20. mytelus.com/news/article.do?pageID=cp_health_home&articleID=2204288.

293. 2005. U.S. a step behind bird flu. CBS Morning News, October 9.
294. 2004. Russian expert says flu epidemic may kill over one billion this year. Moscow News, October 28. www.mosnews.com/news/2004/10/28/pandemic.shtml.
295. Editorial. 2005. Bird flu outbreak could kill 1.5 billion. New Scientist, February 5. www.newscientist.com/channel/health/bird-flu/mg18524853.100.
296. 2006. Bird flu: the untold story. Oprah Winfrey Show, January 24.
297. Crawford D. 2003. The Invisible Enemy: A Natural History of Viruses (New York, NY: Oxford University Press, pg 2).
298. Greenfield CT. 2004. On high alert. Time International, January 26.
299. Davies P. 2000. The Devil's Flu (New York, NY: Henry Holt and Company, p. 76).
300. Perez DR, Nazarian SH, McFadden G, Gilmore MS. 2005. Miscellaneous threats: highly pathogenic avian influenza, and novel bio-engineered organisms. In: Bronze MS, Greenfield RA (eds.), Biodefense: Principles and Pathogens (Norfolk, UK: Horizon Bioscience).
301. Shortridge KF. 1992. Pandemic influenza: a zoonosis? Seminars in Respiratory Infections 7:11–25.
302. Sompayrac L. 2002. How Pathogenic Viruses Work (Sudbury, MA: Jones and Bartlett Publishers).
303. Ryan F. 1997. Virus X: Tracking the New Killer Plagues—Out of the Present and and Into the Future (Boston, MA: Little, Brown and Company).
304. Berdoy M, Webster JP, Macdonald DW. 2000. Fatal attraction in rats infected with *Toxoplasma gondii*. Proceedings of The Royal Society of Biological Sciences 7:267(1452):1591–4.
305. Revis DR. 2006. Skin, anatomy. Emedicine. February 7. emedicine.com/plastic/topic389.htmemedicine.com/plastic/topic389.htm.
306. Larson E. 2001. Hygiene of the skin: when is clean too clean? Emerging Infectious Diseases 7(2):225–30.
307. Merchant JA, Kline J, Donham KJ, Bundy DS, Hodne CJ. 2002. Human health effects. In: Iowa Concentrated Animal Feeding Operations Air Quality Study (Iowa State University and The University of Iowa Study Group, pp. 121–45).
308. Shaw J. 2005. Clearing the air: how epidemiology, engineering, and experiment finger fine particles as airborne killers. Harvard Magazine, May-June.
309. Houtmeyers E, Gosselink R, Gayan-Ramirez G, Decramer M. 1999. Regulation of mucociliary clearance in health and disease. European Respiratory Journal 13(5):1177–88.

310. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
311. Laver WG, Bischofberger N, Webster RG. 2000. The origin and control of pandemic influenza. *Perspectives in Biology and Medicine* 43(2):173–92.
312. Webster RG. 1998. Influenza: an emerging microbial pathogen. In: Krause RM (ed.), *Emerging Infections* (New York, NY: Academic Press, pp. 275–300).
313. Laver WG, Bischofberger N, Webster RG. 2000. The origin and control of pandemic influenza. *Perspectives in Biology and Medicine* 43(2):173–92.
314. World Health Organization Expert Committee. 1980. A revision of the system of nomenclature for influenza viruses. *Bulletin of the WHO* 58:585–91.
315. Oxford JS, Novelli P, Sefton A, Lambkin R. 2002. New millennium antivirals against pandemic and epidemic influenza: the neuraminidase inhibitors. *Antiviral Chemistry and Chemotherapy* 13(4):205–17.
316. De Jong JC, Rimmelzwaan GF, Fouchier RAM, Osterhaus AD. 2000. Influenza virus: a master of metamorphosis. *Journal of Infection* 40(3):218–28.
317. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
318. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
319. Boone SA, Gerba CP. 2005. The occurrence of influenza A virus on household and day care center fomites. *Journal of Infection* 51(2):103–9.
320. Boone SA, Gerba CP. 2005. The occurrence of influenza A virus on household and day care center fomites. *Journal of Infection* 51(2):103–9.
321. Reiling J. 2000. Dissemination of bacteria from the mouth during speaking, coughing and otherwise. *Journal of the American Medical Association* 284(2):156.
322. Bourouiba L, Dehandschoewercker E, Bush JWM. 2014. Violent expiratory events: on coughing and sneezing. *J Fluid Mech.* 745:537–563. <https://doi.org/10.1017/jfm.2014.88>.
323. De Jong JC, Rimmelzwaan GF, Fouchier RAM, Osterhaus AD. 2000. Influenza virus: a master of metamorphosis. *Journal of Infection* 40(3):218–28.
324. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
325. Chow CB. 2004. Post-SARS infection control in the hospital and clinic. *Paediatric Respiratory Reviews* 5(4):289–295.
326. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).

327. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
328. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
329. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
330. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
331. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
332. Overton ET, Goepfert PA, Cunningham P, Carter WA, Horvath J, Young D, Strayer DR. 2014. Intranasal seasonal influenza vaccine and a TLR-3 agonist, rintatolimod, induced cross-reactive IgA antibody formation against avian H5N1 and H7N9 influenza HA in humans. *Vaccine*. 32(42):5490–5495. <https://doi.org/10.1016/j.vaccine.2014.07.078>.
333. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
334. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
335. Seo SH, Hoffmann E, Webster RG. 2002. Lethal H5N1 influenza viruses escape host anti-viral cytokine responses. *Nature Medicine* 8(9):950–4.
336. Mitchison A. 1993. Will we survive? As host and pathogen evolve together, will the immune system retain the upper hand? *Scientific American*, September, pp. 136–44.
337. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press, p. 12).
338. Kolata G. 1999. *Flu: The Story of the Great Influenza Pandemic* (New York, NY: Simon and Schuster, Inc.).
339. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
340. Fraser L. 2002. Doctors fear deadly flu virus will lead to new pandemic. *Daily Telegraph*, September 22.
341. Taubenberger JK, Reid AH, Fanning TG. 2005. Capturing a killer flu virus. *Scientific American* 292(1):62.
342. 2006. Bird flu: the untold story. *Oprah Winfrey Show*, January 24.
343. Boccaccio G. 1350. Decameron. wsu.edu/~dee/MA/DECINTRO.HTM.

344. Public Broadcasting System. American Experience. Influenza 1918. Victor Vaughan. pbs.org/wgbh/amex/influenza/peopleevents/pandeAMEX90.html.
345. Evans WA, Armstrong DB, Davis WH, Kopf EW, Woodward WC. 1918. Influenza: report of a special committee of the American Public Health Association. *Journal of the American Medical Association* 71:2068–73.
346. Chan MC, Cheung CY, Chui WH, et al. 2005. Proinflammatory cytokine responses induced by influenza A (H5N1) viruses in primary human alveolar and bronchial epithelial cells. *Respiratory Research* 6:135.
347. Appenzeller T. 2005. The next killer flu. *National Geographic*, October, pp. 8–31.
348. Pedersen SF, Ho Y-C. 2020. SARS-CoV-2: a storm is raging. *J Clin Invest*. [Epub ahead of print 2020 Mar 27; accessed 2020 Apr 12]. <https://doi.org/10.1172/JCI1137647>.
349. Brown D. 2005. Scientists race to head off lethal potential of avian flu. *Washington Post*, August 23.
350. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. *Federal News Service*, June 16. cfr.org/publication.html?id=8198.
351. Bor J. 2005. A versatile virus: an expert in infectious diseases explains why avian flu could trigger the next pandemic. *Baltimore Sun*, July 1.
352. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. *Federal News Service*, June 16. cfr.org/publication.html?id=8198.
353. Arnst C. 2005. A hot zone in the heartland. Little could be done to contain a deadly avian flu outbreak. *Business Week*, September 19. businessweek.com/magazine/content/05_38/b3951008.htm.
354. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
355. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, MA: Jones and Bartlett Publishers).
356. De Jong JC, Rimmelzwaan GF, Fouchier RAM, Osterhaus AD. 2000. Influenza virus: a master of metamorphosis. *Journal of Infection* 40(3):218–28.
357. World Health Organization. 2005. Avian influenza: assessing the pandemic threat, January 1. who.int/csr/disease/influenza/H5N1-9reduit.pdf.
358. Beck MA. 1996. The role of nutrition in viral disease. *Journal of Nutritional Biochemistry* 7:683–90.
359. Page RDM, Holmes E. 1998. *Molecular Evolution* (Oxford, UK: Blackwell Publishing).

360. Holland JJ. 1998. The origin and evolution of viruses. *Microbiology and Microbial Infections* 1998:12.
361. Sample I. 2004. Flu's deadly numbers game: a new pandemic looming, says Ian Sample and it's not just humans at risk. *Guardian*, January 29. guardian.co.uk/birdflu/story/0,14207,1133461,00.html.
362. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
363. Dimmock NJ, Easton A, Leppard K. 2001. *Introduction to Modern Virology* (Boston, MA: Blackwell Publishing).
364. Fields BN, Knipe DM, Howley PM, Griffin DE. 1996. *Fields' Virology* (Philadelphia, PA: Lippincott Williams and Wilkins).
365. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
366. Shortridge KF. 1999. Influenza—a continuing detective story. *Lancet* 354:siv29.
367. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company).
368. McNamara TS. 2002. Diagnosis and control of zoonotic infections: pathology and early recognition of zoonotic disease outbreaks. In: *The Emergence of Zoonotic Diseases: Understanding the Impact on Animal and Human Health—Workshop Summary* (Washington, DC: National Academies Press, pp. 64–78).
369. Leitner T (ed.). 2002. *The Molecular Epidemiology of Human Viruses* (Berlin, Germany: Springer Science and Business Media).
370. Laver WG, Bischofberger N, Webster RG. 2000. The origin and control of pandemic influenza. *Perspectives in Biology and Medicine* 43(2):173–92.
371. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
372. Cox NJ, Subbarao K. 2000. Global epidemiology of influenza: past and present. *Annual Review of Medicine* 51:407–21.
373. Center for Infectious Disease Research and Policy. 2006. Pandemic influenza. March 22. www.cidrap.umn.edu/cidrap/content/influenza/panflu/biofacts/panflu.html.
374. Cox NJ, Subbarao K. 2000. Global epidemiology of influenza: past and present. *Annual Review of Medicine* 51:407–21.
375. Uniformed Services University School of Medicine. Class of 2007 USMLE Step 1 Stuff. Bugs (Blitz). [usuhs.mil/2007/USMLE/Bugs%20\(Blitz\).pdf](http://usuhs.mil/2007/USMLE/Bugs%20(Blitz).pdf).
376. Underwood A, Adler J, Rosenberg D, Seno A. 2004. Scary strains. *Newsweek* 114(18):46–9.

377. Fouchier RA, Munster V, Wallensten A, et al. 2005. Characterization of a novel influenza A virus hemagglutinin subtype (H16) obtained from black-headed gulls. *Journal of Virology* 79(5):2814–22.
378. Cimini K, Schwemmler M. 2019. Bat-borne influenza A viruses: an awakening. *Cold Spring Harbor Perspect Med.* [Epub ahead of print 2019 Dec 30; accessed 2020 Apr 8]. <https://doi.org/10.1101/cshperspect.a038612>.
379. Laver WG, Bischofberger N, Webster RG. 2000. The origin and control of pandemic influenza. *Perspectives in Biology and Medicine* 43(2):173–92.
380. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
381. Mondics C. 2005. U.S. prepares for pandemic possibility. *Philadelphia Inquirer*, October 9.
382. von Bubnoff A. 2005. The 1918 flu virus is resurrected. *Nature* 427:794.
383. Kaiser J. 2005. Resurrecting the Spanish flu. *ScienceNOW*, October 5. sciencenow.sciencemag.org/cgi/content/full/2005/1005/2.
384. Garrett L. 2005. The next pandemic? Probable cause. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.
385. World Health Organization. 2020. Cumulative number of confirmed human cases for avian influenza A(H5N1) reported to WHO, 2003–2020. Geneva: WHO; [updated 2020 Feb 28; accessed 2020 Apr 8]. https://www.who.int/influenza/human_animal_interface/2020_01_20_tableH5N1.pdf. www.who.int/csr/disease/avian_influenza/country/cases_table_2006_04_27/en/index.html.
386. Kolata G. 2005. Deadly 1918 epidemic linked to bird flu, scientists say. *New York Times*, October 5.
387. Taubenberger JK, Reid AH, Lourens RM, Wang R, Jin G, Fanning TG. 2005. Characterization of the 1918 influenza virus polymerase genes. *Nature* 437:889–93.
388. Fehr-Snyder K. 2005. Arizona, world may not be ready for flu outbreak. *Arizona Republic*, October 4. www.azcentral.com/health/news/articles/1004birdflu04.html.
389. Holmes EC, Ghedin E, Miller N, et al. 2005. Whole-genome analysis of human influenza A virus reveals multiple persistent lineages and reassortment among recent H3N2 viruses. *Public Library of Science Biology* 3(9):e300. biology.plosjournals.org/perlserv/?request=get-document&doi=10.1371/journal.pbio.0030300.

390. Ludwig S, Stitz L, Planz O, Van H, Fitch WM, Scholtissek C. 1995. European swine virus as a possible source for the next influenza pandemic? *Virology* 212(2):555–61.
391. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
392. Kennedy M. 2005. Bird flu could kill millions: global pandemic warning from WHO. *Gazette* (Montreal), March 9, p. A1.
393. Vong S, Coghlan B, Mardy S, Holl D, Seng H, Ly S, Miller MJ, Buchy P, Froehlich Y, Dufourcq JB, et al. 2006. Low frequency of poultry-to-human H5N1 transmission, southern Cambodia, 2005. *Emerg Infect Dis.* 12(10):1542–1547. <https://dx.doi.org/10.3201/eid1210.060424>.
394. Vong S, Coghlan B, Mardy S, Holl D, Seng H, Ly S, Miller MJ, Buchy P, Froehlich Y, Dufourcq JB, et al. 2006. Low frequency of poultry-to-human H5N1 transmission, southern Cambodia, 2005. *Emerg Infect Dis.* 12(10):1542–1547. <https://dx.doi.org/10.3201/eid1210.060424>.
395. Nasreen S, Uddin Khan S, Azziz-Baumgartner E, Hancock K, Veguilla V, Wang D, Rahman M, Alamgir ASM, Sturm-Ramirez K, Gurley ES, et al. 2013. Seroprevalence of antibodies against highly pathogenic avian influenza A (H5N1) virus among poultry workers in Bangladesh, 2009. *PLoS One.* 8(9):e73200. <https://doi.org/10.1371/journal.pone.0073200>.
396. Monamele CG, Y P, Karlsson EA, Vernet M-A, Wade A, Okomo M-CA, Abah ASA, Yann S, Etoundi GAM, Mohamadou NR, et al. 2019. Evidence of exposure and human seroconversion during an outbreak of avian influenza A(H5N1) among poultry in Cameroon. *Emerg Microbes Infect.* 8(1):186–196. <https://doi.org/10.1080/22221751.2018.1564631>.
397. Wang M, Di B, Zhou DH, Zheng BJ, Jing H, Lin YP, Liu YF, Wu XW, Qin PZ, Wang YL, et al. 2006. Food markets with live birds as source of avian influenza. *Emerg Infect Dis.* 12(11):1773–1775. <https://doi.org/10.3201/eid1211.060675>.
398. Cai W, Schweiger B, Buchholz U, Buda S, Littmann M, Heusler J, Haas W. 2009. Protective measures and H5N1-seroprevalence among personnel tasked with bird collection during an outbreak of avian influenza A/H5N1 in wild birds, Ruegen, Germany, 2006. *BMC Infect Dis.* 9(1):170. <https://doi.org/10.1186/1471-2334-9-170>.
399. Santhia K, Ramy A, Jayaningsih P, Samaan G, Putra AAG, Dibia N, Sulaimin C, Joni G, Leung CYH, Malik Peiris JS, et al. 2009. Avian influenza A H5N1 infections in Bali province, Indonesia: a behavioral, virological and seroepidemiological study. *Influenza Other Respir Viruses.* 3(3):81–89. <https://doi.org/10.1111/j.1750-2659.2009.00069.x>.
400. Ortiz JR, Katz MA, Mahmoud MN, Ahmed S, Bawa SI, Farnon EC, Sarki MB, Nasidi A, Ado MS, Yahaya AH, Joannis TM. 2007. Lack of evidence of

avian-to-human transmission of avian influenza A (H5N1) virus among poultry workers, Kano, Nigeria, 2006. *J Infect Dis.* 196(11):1685–1691. <https://doi.org/10.1086/522158>.

401. Kwon D, Lee JY, Choi W, Choi JH, Chung YS, Lee NJ, Cheong HM, Katz JM, Oh HB, Cho H, et al. 2012. Avian influenza A (H5N1) virus antibodies in poultry cullers, South Korea, 2003–2004. *Emerg Infect Dis.* 18(6):986–988. <https://doi.org/10.3201/eid1806.111631>.

402. Dejpichai R, Laosiritaworn Y, Phuthavathana P, Uyeki TM, O'Reilly M, Yampikulsakul N, Phurahong S, Poorak P, Prasertsopon J, Kularb R, et al. 2009. Seroprevalence of antibodies to avian influenza virus A (H5N1) among residents of villages with human cases, Thailand, 2005. *Emerg Infect Dis.* 15(5):756–760. <https://dx.doi.org/10.3201/eid1505.080316>.

403. Ceyhan M, Yildirim I, Ferraris O, Bouscambert-Duchamp M, Frobert E, Uyar N, Tezer H, Oner AF, Buzgan T, Torunoglu MA, et al. (2010). Serosurveillance study on transmission of H5N1 virus during a 2006 avian influenza epidemic. *Epidemiol Infect.* 138(9):1274–1280. <https://doi.org/10.1017/S095026880999166X>.

404. Schultsz C, Van Dung N, Hai LT, Ha DQ, Peiris JSM, Lim W, Garcia J-M, Tho ND, Lan NTH, Tho HH, et al. 2009. Prevalence of antibodies against avian influenza A (H5N1) virus among cullers and poultry workers in Ho Chi Minh City, 2005. *PLoS One.* 4(11):e7948. <https://doi.org/10.1371/journal.pone.0007948>.

405. Toner ES, Adalja AA, Nuzzo JB, Inglesby TV, Henderson DA, Burke DS. 2013. Assessment of serosurveys for H5N1. *Clin Infect Dis.* 56(9):1206–1212. <https://dx.doi.org/10.1093/cid/cit047>.

406. Jang H, Boltz D, Sturm-Ramirez K, Shepherd KR, Jiao Y, Webster R, Smeyne RJ. 2009. Highly pathogenic H5N1 influenza virus can enter the central nervous system and induce neuroinflammation and neurodegeneration. *Proc Natl Acad Sci U S A.* 106(33):14063–14068. <https://doi.org/10.1073/pnas.0900096106>.

407. Branswell H. 2006. If bird flu virus becomes pandemic, high death rates possible: WHO report. Canadian Press, November 2.

408. Branswell H. 2006. If bird flu virus becomes pandemic, high death rates possible: WHO report. Canadian Press, November 2.

409. Associated Press. 2006 Dec 21. Flu pandemic could kill up to 81 million people. *NBC News*. [accessed 2020 Apr 8]; http://www.nbcnews.com/id/16313464/ns/health-cold_and_flu/t/flu-pandemic-could-kill-million-people/.

410. Davis M. 2005. Avian flu: a state of unreadiness. *The Nation*, July 18–25, pp. 27–30.

411. Wilson Center Global Health Initiative. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak. September 19. wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.
412. Lo A. 2002. Millions dead, Hong Kong in chaos. How close did we come to this nightmare bird-flu scenario? *South China Morning Post*, December 7.
413. Davies P. 1999. The plague in waiting. *Guardian*, August 7. guardian.co.uk/birdflu/story/0,1131473,00.html.
414. Lo A. 2002. Millions dead, Hong Kong in chaos. How close did we come to this nightmare bird-flu scenario? *South China Morning Post*, December 7.
415. Hudson C. 1999. Something in the air. *Daily Mail*, August 21, pp. 30–31.
416. Mestel R. 2004. Bird flu haunts world's health authorities. *Los Angeles Times*, February 21. tinyurl.com/hzm3o.
417. Underwood A, Adler J, Rosenberg D, Seno A. 2004. Scary strains. *Newsweek* 114(18):46–9.
418. Mestel R. 2004. Bird flu haunts world's health authorities. *Los Angeles Times*, February 21. tinyurl.com/hzm3o.
419. Reynolds G. 2004. Our lives in their hands; they scour the earth for clues that could prevent millions of deaths. *Independent*, November 15.
420. Lo A. 2002. Millions dead, Hong Kong in chaos. How close did we come to this nightmare bird-flu scenario? *South China Morning Post*, December 7.
421. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press, p. 174).
422. Asthana A, Revill J, Smith AD, McLaughlan D. 2005. The killer at the door. *Observer*, October 16.
423. Gadsby P. 1999. Fear of flu—pandemic influenza outbreaks. *Discover*, January. looksmartjrhigh.com/p/articles/mi_m1511/is_1_20/ai_53501820.
424. Perez DR, Nazarian SH, McFadden G, Gilmore MS. 2005. Miscellaneous threats: highly pathogenic avian influenza, and novel bio-engineered organisms. In: Bronze MS, Greenfield RA (eds.), *Biodefense: Principles and Pathogens* (Norfolk, UK: Horizon Bioscience).
425. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press, p. 3).
426. Alexander DJ, Brown IH. 2000. Recent zoonoses caused by influenza A viruses. *Revue Scientifique et Technique Office International des Epizooties* 19:197–225.
427. Mayo Clinic staff. 2005. Bird flu (avian influenza). *Infectious Disease Center*, August 10. mayoclinic.com/health/bird-flu/DS00566/DSECTION=7.

428. Davies P. 1999. The plague in waiting. *Guardian*, August 7, Weekend page. guardian.co.uk/birdflu/story/0,1131473,00.html.
429. Brown D. 2005. Scientists race to head off lethal potential of avian flu. *Washington Post*, August 23, page A01.
430. Senne DA, Pearson JE, Panigrahy B. 1997. Live poultry markets: a missing link in the epidemiology of avian influenza. In: *Proceedings of the 3rd International Symposium on Avian Influenza May 27–29* (University of Wisconsin, Madison, pp. 50–8).
431. Ramos SE, MacLachlan M, Melton A. 2017. Impacts of the 2014-2015 highly pathogenic avian influenza outbreak on the U.S. poultry sector. U.S. Department of Agriculture. Report No. LDPM-282-02. [accessed 2020 Apr 8]. <https://www.ers.usda.gov/publications/pub-details/?pubid=86281>.
432. Hofstaad MS, Calnek BW, Helmboldt CF, Reid WM, Yoder, Jr. HW. 1972. *Diseases of Poultry* (Ames, IA: Iowa State University Press).
433. Davies P. 1999. The plague in waiting. *Guardian*, August 7, Weekend page. guardian.co.uk/birdflu/story/0,1131473,00.html.
434. McKie R, Revill J, Aglionby J, Watts J. 2004. Warning as bird flu crossover danger escalates. *Observer*, December 12. observer.guardian.co.uk/international/story/0,6903,1371917,00.html.
435. Capua I, Mutinelli F, Marangon S, Alexander DJ. 2000. H7N1 avian influenza in Italy (1999 to 2000) in intensively reared chickens and turkeys. *Avian Pathology* 29:537–43.
436. Mok D. 2002. Hong Kong's fowl problem. *Time Asia*, February 18.
437. Acha PN. 2003. Influenza. In: *Zoonoses and Communicable Diseases Common to Man and Animals, Volume II, Chlamydioses, Rickettsioses, and Viroses* (Washington, DC: Pan American Health Organization, pp. 155–71).
438. Zitzow LA, Rowe T, Morken T, et al. 2002. Pathogenesis of avian influenza A (H5N1) viruses in ferrets. *Journal of Virology* 76:4420–9.
439. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press).
440. 2005. Strain Spotter. *South China Morning Post*, November 11, p. A17.
441. Gadsby P. 1999. Fear of flu—pandemic influenza outbreaks. *Discover*, January. looksmartjrhigh.com/p/articles/mi_m1511/is_1_20/ai_53501820.
442. Mestel R. 2004. Latching on to a horror. *Los Angeles Times*, February 18. bioexchange.com/editorialNews.cfm?id=19668.
443. Mestel R. 2004. Bird flu haunts world's health authorities. *Los Angeles Times*, February 21. tinyurl.com/hzm3o.

444. Kolata G. 1999. Flu: The Story of the Great Influenza Pandemic (New York, NY: Simon and Schuster, Inc. p. 247).
445. Yuen KY, Chan PKS, Peiris M, et al. 1998. Clinical features and rapid viral diagnosis of human disease associated with avian influenza A H5N1 virus. *Lancet* 351:467–71.
446. Underwood A, Adler J, Rosenberg D, Seno A. 2004. Scary strains. *Newsweek* 114(18):46–9.
447. To K, Chan PKS, Chan K, et al. 2001. Pathology of fatal human infection associated with avian influenza A H5N1 virus. *Journal of Medical Virology* 63:242–6.
448. To K, Chan PKS, Chan K, et al. 2001. Pathology of fatal human infection associated with avian influenza A H5N1 virus. *Journal of Medical Virology* 63:242–6.
449. Davies P. 1999. The plague in waiting. *Guardian*, August 7. guardian.co.uk/birdflu/story/0,1131473,00.html.
450. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press, p. 176).
451. Cowen P. 2005. Avian influenza—Asia (17): Mongolia, migratory birds, H5N1, OIE. International Society for Infectious Diseases ProMED. Archive number 20050902.2597. September 2. promedmail.org/pls/promed/f?p=2400:1001::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:1000%2C30272.
452. Katz JM. 2003. The impact of avian influenza viruses on public health. *Avian Diseases* 47:914–20.
453. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company, p. 18).
454. Mestel R. 2004. Bird flu haunts world's health authorities. *Los Angeles Times*, February 21. tinyurl.com/hzm3o.
455. Kolata G. 1999. Flu: The Story of the Great Influenza Pandemic (New York, NY: Simon and Schuster, Inc., p. 245).
456. Shortridge KF, Gao P, Guan Y, et al. 2000. Interspecies transmission of influenza viruses: H5N1 virus and a Hong Kong SAR perspective. *Veterinary Microbiology* 74:141–7.
457. Altman LK. 2005. Her job: helping save the world from bird flu. *New York Times*, August 9.
458. Ajello R, Shepherd C. 1998. The flu fighters: how the people on the frontlines battled H5N1 to a stalemate. Not that the war is over. *AsiaWeek*, January 30.

459. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press, pp. 180–1).
460. Shortridge KF, Gao P, Guan Y, et al. 2000. Interspecies transmission of influenza viruses: H5N1 virus and a Hong Kong SAR perspective. *Veterinary Microbiology* 74:141–7.
461. Gadsby P. 1999. Fear of flu—pandemic influenza outbreaks. *Discover*, January. looksmartjrhigh.com/p/articles/mi_m1511/is_1_20/ai_53501820.
462. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company, p. 35).
463. Fraser L. 2002. Doctors fear deadly flu virus will lead to new pandemic. *Daily Telegraph*, September 22.
464. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company, pp. 35–36).
465. Benitez MA. 2001. Bird-flu cull “prevented pandemic”; SAR wins belated praise for halting deadly virus with slaughter of 1.6 million chickens. *South China Morning Post*, January 29.
466. Shortridge KF, Gao P, Guan Y, et al. 2000. Interspecies transmission of influenza viruses: H5N1 virus and a Hong Kong SAR perspective. *Veterinary Microbiology* 74:141–7.
467. 1998. Hong Kong's bird flu could return with a vengeance: experts. *Agence France Presse*, April 16.
468. 2004. Flu scientists fear massive outbreak; millions could die; Asian virus eyed. *Ottawa Sun*, November 18, p. 17.
469. Davies P. 1999. The plague in waiting. *Guardian*, August 7.
470. Brown EG, Sattar SA, Tetro J. 2006. Can we predict the nature and evolution of a H5N1 Z pandemic? A review submitted to *Lancet: Infectious Diseases*.
471. Rosenthal E. 2005. UN says avian flu may hit Africa next. *International Herald Tribune*, October 20.
472. Webster RG. 1993. Influenza. In: Morse SS (ed.), *Emerging Viruses* (New York, NY: Oxford University Press, pp. 37–45).
473. Shortridge KF. 2003. Severe acute respiratory syndrome and influenza. *American Journal of Respiratory and Critical Care Medicine* 168:1416–20.
474. Shortridge KF. 2003. Severe acute respiratory syndrome and influenza. *American Journal of Respiratory and Critical Care Medicine* 168:1416–20.
475. Shortridge KF. 2003. Avian influenza viruses in Hong Kong: zoonotic considerations. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis*

Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands, pp. 9–18)

476. Shortridge KF. 2003. Severe acute respiratory syndrome and influenza. *American Journal of Respiratory and Critical Care Medicine* 168:1416–20.

477. Shortridge KF. 1992. Pandemic influenza: a zoonosis? *Seminars in Respiratory Infections* 7:11–25.

478. Tempest R. 1997. Once again, researchers on the trail of a new flu strain. *Morning Star* (Wilmington, NC), December 15.

479. Bradsher K. 2005. China keeps secret its plans to fight bird flu. *New York Times*, October 16.

480. Cox JH. 2000. China livestock report. A report for Compassion in World Farming, October.

481. Cox JH. 2000. China livestock report. A report for Compassion in World Farming, October.

482. Das P. 2002. Interview: Michael Osterholm—medical detective to fighting bioterrorism. *Lancet Infectious Diseases* 2:502–5.

483. Cox JH. 2000. China livestock report. A report for Compassion in World Farming, October.

484. Shortridge KF, Peiris JSM, Guan Y. 2003. The next influenza pandemic: lessons from Hong Kong. *Journal of Applied Microbiology* 94:70–9.

485. Webster RG. 2004. Wet markets—a continuing source of severe acute respiratory syndrome and influenza? *Lancet* 363:234–6.

486. Nature Web. 2005. Web focus—avian flu timeline. *Nature*. www.nature.com/nature/focus/avianflu/timeline.html.

487. Lubroth J. 2005. Regional and global challenges of the avian influenza outbreaks in Asia and FAO's prospective. *World's Poultry Science Journal* 61:55–6.

488. Henley E. 2005. The growing threat of avian influenza. *Journal of Family Practice* 54(5):442–4.

489. Food and Agriculture Organization of the United Nations. Technical Task Force on Avian Influenza. 2005. Update on the avian influenza situation. *Avian Influenza Disease Emergency News*, issue 28. www.fao.org/ag/againfo/subjects/documents/ai/AVIbull028.pdf.

490. Melville DS, Shortridge KF. 2004. Influenza: time to come to grips with the avian dimension. *Lancet Infectious Diseases* 4:261–2.

491. 2004. Timeline: bird flu crisis unfolds. *CNN*, February. cnn.com/2004/WORLD/asiapcf/02/01/bird.flu.timeline/index.html.

492. MacKenzie D. 2004. Bird flu outbreak started a year ago. *New Scientist*, January 28.
493. Hulse-Post DJ, Sturm-Ramirez KM, Humberd J, et al. 2005. Role of domestic ducks in the propagation and biological evolution of highly pathogenic H5N1 influenza viruses in Asia. *Proceedings of the National Academy of Sciences of the United States of America* 102(30):10682–7.
494. Editorial. 2006. Avian influenza goes global, but don't blame the birds. *Lancet Infectious Diseases* 6:185. list.web.net/archives/sludgewatch-1/2006-April/001692.html.
495. 2005. Avian flu news tracker. *Wall Street Journal Online*, December 16. online.wsj.com/article/SB113501058739926456.html?mod=article-outset-box.
496. Butler D, Ruttiman J. 2006. Avian flu and the New World. *Nature* 441:137–9.
497. Horner N. 2006. Genetic diversity keeping the bird flu at bay. *Parksville Qualicum News*, May 9. pqbnews.com/portals-code/list.cgi?paper=50&cat=42&id=644011&more=
498. Henley E. 2005. The growing threat of avian influenza. *Journal of Family Practice* 54(5):442–4.
499. Hookway J. 2004. For rooster breeders, bird flu brings game of cat and mouse. *Wall Street Journal*, February 10, p. 1A.
500. World Society for the Protection of Animals. 2004. Avian influenza and humane slaughter: a dossier prepared for the World Organization for Animal Health (OIE) conference on animal welfare. wspa-international.org/site/data/070404_125858_Avian_flu_dossier.pdf.
501. McCord M. 2004. Grisly images lay bare shortcomings of bird flu culls. *Agence France Presse*, February 1.
502. Fitzsimons E. 2003. Live hens were put into wood chippers. *Union-Tribune*, April 11.
503. Mench JA, Siegel PB. 2004. Poultry. *South Dakota State University Extension and Research*. ars.sdstate.edu/animaliss/poultry.html.
504. 2004. WHO warns unsafe culls increase virus mutation risk, Asia bows to pressure. *Agence France Presse*, January 30.
505. World Organisation for Animal Health. 2006. Update on avian influenza in animals (types H5 and H7). Paris: OIE; [updated 2020 Apr 8; accessed 2020 Apr 8]. <https://www.oie.int/animal-health-in-the-world/update-on-avian-influenza/2011/>.
506. Fasanmi OG, Odetokun IA, Balogun FA, Fasina FO. 2017. Public health concerns of highly pathogenic avian influenza H5N1 endemicity in Africa. *Vet World*. 10(10):1194–1204. <https://doi.org/10.14202/vetworld.2017.1194-1204>.

507. Brown D. 2005. Long-predicted flu finally tops agenda. Washington Post, November 7, p. A01. www.washingtonpost.com/wpdyn/content/article/2005/11/06/AR2005110601282.html?nav=rss_politics.
508. World Health Organization. 2005. Cumulative number of confirmed human cases of avian influenza A/(H5N1). November 24. www.who.int/csr/disease/avian_influenza/country/cases_table_2005_11_24/en/index.html.
509. Stöhr K. 2005. Avian influenza and pandemics—research needs and opportunities. New England Journal of Medicine 352(4):405–7. bioon.com/biology/UploadFiles/200501/20050129225325878.pdf.
510. Li KS, Guan Y, Wang J, et al. 2003. Genesis of a highly pathogenic and potentially pandemic H5N1 influenza virus in Eastern Asia. Nature 430(6996):209–13.
511. Garrett L. 2005. The next pandemic? Probable cause. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.
512. Drexler M. 2002. Secret Agents: The Menace of Emerging Infections (Washington, DC: Joseph Henry Press, p. 180).
513. Stevens J, Blixt O, Tumpey TM, et al. 2006. Structure and receptor specificity of the hemagglutinin from an H5N1 influenza virus. Science 312:404–10.
514. Cyranoski D. 2004. Bird flu data languishing in Chinese journals. Nature 430:995.
515. Ito T, Couceiro JN, Kelm S, et al. 1998. Molecular basis for the generation in pigs of influenza A viruses with pandemic potential. 72(9):7367–73. pubmed-central.gov/articlerender.fcgi?tool=pubmed&pubmedid=9696833.
516. World Health Organization. Avian influenza A(H5N1)—update 28: reports of infection in domestic cats (Thailand), situation (human) in Thailand, situation (poultry) in Japan and China. February 20. who.int/csr/don/2004_02_20/en/.
517. Kuiken T, Rimmelzwaan G, van Riel D, et al. 2004. Avian H5N1 influenza in cats. Science 306:241.
518. Verrengia J. 2005. Bird flu could hit U.S. next year. Associated Press, October 25.
519. Keawcharoen J, Oraveerakul K, Kuiken T, et al. 2004. Avian influenza H5N1 in tigers and leopards. Emerging Infectious Diseases 10:2189–91.
520. Thanawongnuwech R, Amonsin A, Tantilertcharoen R, et al. Probable tiger-to-tiger transmission of avian influenza H5N1. Emerging Infectious Diseases 11:699–701.
521. Kuiken T, Rimmelzwaan G, van Riel D, et al. 2004. Avian H5N1 influenza in cats. Science 306:241.

522. Ang A. 2005. WHO warns bird flu virus unstable and unpredictable, urges vigilance. Associated Press, June 10. sddt.com/News/article.cfm?SourceCode=200506101c.
523. Levy A, Scott-Clark C. 2005. Flu on the wing. Guardian, October 15. www.guardian.co.uk/birdflu/story/0,14207,1591358,00.html.
524. Smith R. 2005. Poultry has two central issues. Feedstuffs, November 14, p. 26.
525. Cookson C. 2005. H5N1 virus is hard for humans to catch. Financial Times, October 26.
526. Sipress A. 2005. Bird flu adds new danger to bloody game; cockfighting among Asian customs that put humans at risk. Washington Post, April 14.
527. United Nations Food and Agriculture Organization. 2005. Prevention and control of avian flu in small scale poultry. www.fao.org/ag/againfo/subjects/documents/ai/AI-paravets-guide.pdf.
528. Tumpey TM, Suarez DL, Perkins LEL, et al. 2002. Characterization of a highly pathogenic H5N1 avian influenza A virus isolated from duck meat. Journal of Virology 76:6344–55.
529. 2006. United States to allow processed poultry from China, despite bird flu fear. Associated Press, April 20. cp.org/english/online/full/agriculture/060420/a042042A.html.
530. 2006. Playing chicken with imports. Effect Measure, April 25. effectmeasure.blogspot.com/2006/04/playing-chicken-with-imports.html.
531. Mase M, Etob M, Tanimuraa N, et al. 2005. Isolation of a genotypically unique H5N1 influenza virus from duck meat imported into Japan from China. Virology 339:101–9. depts.washington.edu/einet/?a=printArticle&print=649.
532. Swayne DE. 2003. Transcript of the question and answer session from the Fifth International Symposium on Avian Influenza. Avian Diseases 47:1219–55.
533. Swayne DE, Beck JR. 2005. Experimental study to determine if low-pathogenicity and high-pathogenicity avian influenza viruses can be present in chicken breast and thigh meat following intranasal virus inoculation. Avian Diseases 49:81–5.
534. Yates VJ, Dawson GJ, Pronovost AD. 1981. Serologic evidence of avian adeno-associated virus infection in an unselected human population and among poultry workers. American Journal of Epidemiology 113:542–5.
535. Stolle A, Sperner B. 1997. Viral infections transmitted by food of animal origin: the present situation in the European Union. Archives of Virology 13:S219–28.

536. Buttner M, Oehmig WF, Rziha HJ, Pfaff E. 1997. Detection of virus or virus specific nucleic acid in foodstuff or bioproducts—hazards and risk assessments. *Archives of Virology* 13:S57–66.
537. Delgado C, Rosegrant M, Steinfeld H, Ehui S, Courbois C. 1999. Livestock to 2020: the next food revolution. Food, Agriculture, and the Environment Discussion Paper 28. For the International Food Policy Research Institute, the Food and Agriculture Organization of the United Nations and the International Livestock Research Institute. ifpri.org/2020/dp/dp28.pdf.
538. Adak GT, Meakins SM, Yip H, Lopman BA, O'Brien SJ. 2005. Disease risks from foods, England and Wales, 1996–2000. *Emerging Infectious Diseases* 11(3):365–72.
539. Adak GT, Meakins SM, Yip H, Lopman BA, O'Brien SJ. 2005. Disease risks from foods, England and Wales, 1996–2000. *Emerging Infectious Diseases* 11(3):365–72.
540. Stehr-Green PA, Hewer P, Meekin GE, Judd LE. 1993. The aetiology and risk factors for warts among poultry processing workers. *International Journal of Epidemiology* 22(2):294–8.
541. Rudlinger R, Bunney MH, Grob R, Hunter JA. 1989. Warts in fish handlers. *British Journal of Dermatology* 120(3):375–81.
542. Benton EC. 1994. Warts in butchers—a cause for concern? *Lancet* 343(8906):1114.
543. Robinson J. 1981. Cancer of the cervix: occupational risks. In: Jordon JA, Sharp F, Singer A (eds.), *Pre-Clinical Neoplasia of the Cervix*. Proceedings of the 9th study group of the Royal College of Obstetricians and Gynaecologists, pp. 11–27.
544. Scheurer ME, Tortolero LG, Adler-Storthz K. 2005. Human papillomavirus infection: biology, epidemiology, and prevention. *International Journal of Gynecological Cancer* 15(5):727–46.
545. Corrya JEL, Hinton MH. 1997. Zoonoses in the meat industry: a review. *Acta Veterinaria Hungarica* 45(4):457–9.
546. Swayne DE. 2005. Asian H5N1 avian influenza outbreaks and implications for food safety. *International Association for Food Protection Proceedings*, July 29.
547. Office of Communications, U.S. Department of Agriculture. 2005. Transcript of technical briefing regarding avian influenza, October 26. Transcript Release No. 0461.05. www.usda.gov/wps/portal/!ut/p/_s.7_0_A/7_0_1OB?contentidonly=tru%C2%AD&contentid=2005/10/0461.xml.
548. Chicken Farmers of Canada. 2005. “It is perfectly safe to eat poultry in Canada.” News Release, October 19. www.chicken.ca/DefaultSite/index_e.aspx?DetailID=1124.

549. U.S. Department of State's Bureau of International Information Programs. 2005. U.N. group warns of poultry bans stemming from bird flu fear. October 28. usinfo.state.gov/gi/Archive/2005/Oct/28-602664.html.
550. Centers for Disease Control and Prevention. 2020. Foodborne germs and illnesses. U.S. Department of Health and Human Services; [last reviewed 2020 Mar 18; accessed 2020 Apr 8]. <https://www.cdc.gov/foodsafety/foodborne-germs.html>.
551. Schlundt J, Toyofuku H, Jansen J, Herbst SA. 2004. Emerging food-borne zoonoses. *Revue Scientifique et Technique (Paris)* 23(2):513–33.
552. Skirrow MB. 1998. *Campylobacteriosis*. In: Palmer SR, Soulsby EJJ, Simpson DIH (eds.), *Zoonoses: Biology, Clinical Practice, and Public Health Control* (Oxford, UK: Oxford University Press, pp. 37–46).
553. Mattick K, Durham K, Hendrix M, et al. 2003. The microbiological quality of washing-up water and the environment in domestic and commercial kitchens. *Journal of Applied Microbiology* 94(5):842–8.
554. Centers for Disease Control and Prevention. 1990. *Yersinia enterocolitica* infections during the holidays in black families—Georgia. *Morbidity and Mortality Weekly Report* 39:45. www.cfsan.fda.gov/~mow/yersin.html.
555. World Health Organization. 2005. WHO inter-country consultation influenza A/H5N1 in humans in Asia, Manila, May 6–7. www.who.int/csr/disease/avian_influenza/H5N1%20Intercountry%20Assessment%20final.pdf.
556. Johnson JR, Kuskowski MA, Smith K, et al. 2005. Antimicrobial-resistant and extraintestinal pathogenic *Escherichia coli* in retail foods. *Journal of Infectious Diseases* 205:1040–9.
557. U.S. Department of Agriculture Food Safety and Inspection Service. 1996. *Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Systems; Final Rule*. Federal Register 61(144):38806–989, www.fsis.usda.gov/OA/fr/rule1.pdf.
558. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press, p. 87).
559. 1998. Industry Forum. Meat and Poultry, March.
560. Schlosser E. 2001. *Fast Food Nation: The Dark Side of the All-American Meal* (New York, NY: Houghton Mifflin Company).
561. Barbut S. 2001. *Poultry Products Processing, An Industry Guide* (Boca Raton, Florida: CRC Press).
562. DeWaal CS. 1996. Playing chicken: the human cost of inadequate regulation of the poultry industry. Center for Science in the Public Interest Food Safety Program, March. cspinet.org/reports/polt.html.

563. World Health Organization Regional Office for the Eastern Mediterranean. Main challenges in the control of zoonotic diseases in the Eastern Mediterranean region. www.emro.who.int/RC50/documents/DOC7.doc.
564. Duncan IJH. 1997. Killing Methods for Poultry (Guelph, Canada: Colonel KL Campbell Centre for the Study of Animal Welfare).
565. Complaint for Declaratory and Injunctive Relief. *Levine v. Johanns*, No. 05–4764 (N.D. Cal. filed Nov. 21, 2005).
566. Berrang ME, Meinersmann RJ, Buhr RJ, Reimer NA, Philips RW, Harrison MA. 2003. Presence of *Campylobacter* in the respiratory tract of broiler carcasses before and after commercial scalding. *Poultry Science* 82:1995–9.
567. Gregory NG, Whittington PE. 1992. Inhalation of water during electrical stunning in chickens. *Research in Veterinary Science* 53:360–2.
568. Raj ABM. 2004. Stunning and slaughter of poultry. In: Mead G (ed.), *Poultry Meat Processing and Quality* (Boca Raton, FL: CRC Press, pp. 65–85).
569. Eisnitz G. 1997. *Slaughterhouse* (New York, NY: Prometheus Books, p. 169).
570. Fox N. 1997. *Spoiled: The Dangerous Truth about a Food Chain Gone Haywire* (New York, NY: Basic Books, pp. 182–3).
571. Rusin P, Orosz-Coughlin P, Gerba C. 1998. Reduction of fecal coliform, and heterotrophic plate count bacteria in the household kitchen and bathroom by disinfection with hypochlorite cleaners. *Journal of Applied Microbiology* 85(5):819–28.
572. Raloff J. 1996. Sponges and sinks and rags, oh my! Where microbes lurk and how to rout them. *Science News*, September 14.
573. Fox N. 1997. *Spoiled: The Dangerous Truth about a Food Chain Gone Haywire* (New York, NY: Basic Books, p. 194).
574. Walton JR, White, EG (eds.), 1981. *Communicable Diseases Resulting from Storage Handling, Transport and Landspreading of Manure* (Luxembourg, Office for Official Publications of the European Communities).
575. International Food Safety Authorities Network. 2004. Highly pathogenic avian influenza H5N1 outbreaks in poultry and humans: food safety implications. *INFOSAN Information Note No. 2/04—Avian Influenza*.
576. U.S. Department of Agriculture. 2005. Questions and answers: avian influenza. Release No. 0458.05, October. usda.gov/2005/10/0458.xml.
577. Fox N. 1997. *Spoiled: The Dangerous Truth about a Food Chain Gone Haywire* (New York, NY: Basic Books, p. 25).

578. National Chicken Council, National Turkey Federation, and the Egg Safety Center. 2006. Avian influenza: protecting flocks, protecting people. avianinfluenza.info.com.
579. Hingley A. 1999. Campylobacter: low-profile bug is food poisoning leader. FDA Consumer, September-October. www.fda.gov/fdac/features/1999/599_bug.html.
580. 2006. WHO concerned over consumption of bird flu-infected poultry. Japan Economic Newswire, May 3. tmcnet.com/usubmit/2006/05/03/1636044.htm.
581. Pinyorat RC. 2005. Thailand confirms 13th bird flu death. Associated Press, October 20. abcnews.go.com/Health/print?id=1232348.
582. Motavalli J. 1998. Nicols Fox: investigating a food supply gone haywire. E: The Environmental Magazine, May–June 1998.
583. Centers for Disease Control and Prevention. 2004. Guidance and recommendations. Interim guidance for protection of persons involved in U.S. avian influenza outbreak disease control and eradication activities. February 17.
584. International Food Safety Authorities Network. 2004. Highly pathogenic avian influenza H5N1 outbreaks in poultry and humans: food safety implications. INFOSAN Information Note No. 2/04—Avian Influenza. www.who.int/entity/foodsafety/fs_management/No_02_Avianinfluenza_Dec04_en.pdf.
585. Van der Sluis W. 2005. Consumers and retailers demand food safety. World Poultry Salmonella and Campylobacter Special, pp. 4–5.
586. 2005. Why not wash meat and poultry before cooking? Tufts University Health and Nutrition Letter 23:7.
587. Burgess F, Little CL, Allen G, Williamson K, Mitchell RT. 2005. Prevalence of Campylobacter, Salmonella, and Escherichia coli on the external packaging of raw meat. Journal of Food Protection 68(3):469–75.
588. Marano N (Moderator). 2004. Avian Influenza Symposium transcript. Centers for Disease Control and Prevention. November 3, p.1.
589. 1998. Chicken: What you don't know can hurt you. Consumer Reports, March, pp. 12–8.
590. Nestor F, Hauter W. 2000. Is America's meat fit to eat? (Washington, DC: Government Accountability Project, Public Citizen).
591. World Health Organization. 2005. Avian influenza: assessing the pandemic threat, January 1. www.who.int/csr/disease/influenza/H5N1-9reduit.pdf.
592. World Health Organization. 2004. Prevention and Control of Influenza Due to Avian Influenza Virus A (H5N1) (New Delhi, India: World Health

Organization Press). w3.whosea.org/en/Section10/Section1027/Section1632.htm.

593. World Health Organization. 2005. Avian influenza: assessing the pandemic threat, January 1. www.who.int/csr/disease/influenza/H5N1-9reduit.pdf.

594. International Food Safety Authorities Network. 2004. Highly pathogenic avian influenza H5N1 outbreaks in poultry and humans: food safety implications. INFOSAN Information Note No. 2/04—Avian Influenza.

595. Cheng A. 2005. EU warns on raw eggs; China has new bird flu outbreak. Bloomberg, October 26. quote.bloomberg.com/apps/news?pid=10000080&sid=a2bThMk31QY4.

596. Swayne DE, Beck JR. 2004. Heat inactivation of avian influenza and Newcastle disease viruses in egg products. *Avian Pathology* 33:512–8.

597. Swayne DE, Beck JR. 2004. Heat inactivation of avian influenza and Newcastle disease viruses in egg products. *Avian Pathology* 33:512–8.

598. Mayo Clinic staff. 2005. Bird flu (avian influenza). Infectious Disease Center, October 27. ads.mayoclinic.com/health/bird-flu/DS00566/DSECTION=8.

599. National Center for Infectious Diseases, Division of Global Migration and Quarantine. 2005. Interim guidance about avian influenza A (H5N1) for U.S. Citizens living abroad. Centers for Disease Control and Prevention, October 28.

600. World Health Organization. 2005. Avian influenza: assessing the pandemic threat, January 1. www.who.int/csr/disease/influenza/H5N1-9reduit.pdf.

601. St. Louis ME, Morse DL, Potter ME, et al. 1988. The emergence of Grade A eggs as a major source of *Salmonella enteritidis* infections. *Journal of the American Medical Association* 259:2103–7.

602. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press, p. 112).

603. Lewis C. 1998. Safety last—the politics of *E. coli* and other food-borne killers. Statement of the Chairman, Center for Public Integrity, February 26.

604. Mexicans are the leading egg eaters. 2006. *Poultry International* 45(2):4–6.

605. Swayne DE, Beck JR. 2004. Heat inactivation of avian influenza and Newcastle disease viruses in egg products. *Avian Pathology* 33:512–8.

606. 2006. No bird flu but don't eat chicken, says health Daily Times, April 29. dailytimes.com.pk/default.asp?page=2006%5C04%5C29%5Cstory_29-4-2006_pg7_36.

607. 2005. Minister warns public to stay alert to bird flu infection. Antara News Agency, July 21. indonesia-1.com/EN/konten.php?nama=News&op=detail_news&id=134.
608. 2004. Timeline: bird flu crisis unfolds. CNN, February. cnn.com/2004/WORLD/asiapcf/02/01/bird.flu.timeline/index.html.
609. 2005. Rome airport takes precautions against bird flu. Agence France Presse, August 20. news24.com/News24/World/News/0,2-10-1462_1757157,00.html.
610. Minder R. 2005. EU bird flu alert as outbreak spreads to Croatia. Financial Times, October 25.
611. Animal Health and Welfare Panel of the European Food Safety Authority. 2005. Animal health and welfare aspects of avian influenza. European Food Safety Authority Journal 266:1–21.
612. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands, pp. 113–30).
613. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands, pp. 113–30).
614. Swayne DE. 2003. Transcript of the question and answer session from the Fifth International Symposium on Avian Influenza. Avian Diseases 47:1219–55.
615. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands, pp. 113–30).
616. Food and Agriculture Organization of the United Nations, World Organization for Animal Health, and World Health Organization, United Nations. 2004. Technical Consultation on the Control of Avian Influenza: Conclusion and Recommendations. www.oie.int/eng/AVIAN_INFLUENZA/avian_rome_feb04_report.pdf.
617. Food and Agriculture Organization of the United Nations and World Organization for Animal Health, United Nations. 2005. Second FAO/OIE Regional Meeting on Avian Influenza Control on Asia (Ho Chi Minh City, Vietnam), www.oie.int/eng/AVIAN_INFLUENZA/HPAI%20HCMC%20Recommendations_March%2005.pdf.
618. Simon S. 2002. Outcry over pets in pet food. Los Angeles Times, January 6.
619. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), Proceedings of the

Frontis Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands, pp. 113–30).

620. Ross B. 2005. Avian flu: is the government ready for an epidemic? Virus poses risk of massive casualties around the world. ABC News Primetime, September 15. abcnews.go.com/Primetime/Investigation/story?id=1130392&page=1.

621. Walsh B, Johnson K. 2005. Emergency measures; avian flu is on the rise in Vietnam and is now endemic in much of Asia. Time International, February 7, p. 22.

622. Alexander DJ, Brown IH. 2000. Recent zoonoses caused by influenza A viruses. Revue Scientifique et Technique 19:197–225.

623. Lee PJ, Krilov LR. 2005. When animal viruses attack: SARS and avian influenza. Pediatric Annals 34(1):43–52.

624. Editorial. 2004. Avian influenza: the threat looms. Lancet 363(9405):257.

625. De Jong MD, Van Cam D, Qui PT, et al. 2005. Fatal avian influenza A (H5N1) in a child presenting with diarrhea followed by coma. New England Journal of Medicine 352:686–91.

626. Chutinimitkul S, Bhattarakosol P, Srisuratanon S, et al. 2006. H5N1 influenza A virus and infected human plasma. Emerging Infectious Diseases 12(6). www.cdc.gov/ncidod/EID/vol12no06/06-0227.htm.

627. Iwasaki T, Itamura S, Nishimura H, et al. 2004. Productive infection in the murine central nervous system with avian influenza virus A (H5N1) after intranasal inoculation. Acta Neuropathologica 108:485–92.

628. Drexler M. 2002. Secret Agents: The Menace of Emerging Infections (Washington, DC: Joseph Henry Press) p 165.

629. Berger S. 2005. I felt as if I was in hell, says bird flu survivor. Daily Telegraph, October 22.

630. 2005. Avian influenza virus: are we prepared? Canadian Medical Association Journal 172:965.

631. Berger S. 2005. I felt as if I was in hell, says bird flu survivor. Daily Telegraph, October 22.

632. Reynolds G. 2004. The flu hunters. New York Times, November 7. tinyurl.com/mqy5u.

633. Mackay N. 2005. Warning: this bird could kill. Sunday Herald, August 28. www.sundayherald.com/51482.

634. Editorial. 2005. Bird flu outbreak could kill 1.5 billion. New Scientist, February 5. www.newscientist.com/channel/health/bird-flu/mg18524853.100.

635. Obama B, Luger R. 2005. Grounding a pandemic. New York Times, June 6.

636. Nelson B. 2005. Bird flu outbreak; global threat; experts say deadly virus presents grave risk if we don't "get our act together." *Newsday*, March 6, p. A03.
637. World Health Organization. 2005. Avian influenza: assessing the pandemic threat, January 1. www.who.int/csr/disease/influenza/H5N1-9reduit.pdf.
638. Katz JM, Lim W, Bridges CB, et al. 1999. Antibody response in individuals infected with avian influenza A (H5N1) viruses and detection of anti-H5 antibody among household and social contacts. *Journal of Infectious Diseases* 180:1763–70.
639. Reeth KV. 2000. Cytokines in the pathogenesis of influenza. *Veterinary Microbiology* 74:109–16.
640. Fox M. 2005. U.S. children's hospital on frontline in bird flu war. *Reuters*, September 16. tinyurl.com/ma8s8.
641. Frist B. 2005. Floor statement—remarks as prepared for delivery, September 28. frist.senate.gov/index.cfm?FuseAction=Speeches.Detail&Speech_id=291&Month=9&Year=2005.
642. Walsh B. 2005. A wing and a prayer. *Times Asia*, September 19. www.time.com/time/europe/magazine/printout/0,13155,901051017-1115613,00.html.
643. Loft K. 2005. Bird of prey. *Tampa Tribune*, March 7.
644. American Experience Transcript. 1918 influenza people and events: Victor Vaughan. Public Broadcasting System. www.pbs.org/wgbh/amex/influenza/peopleevents/pandeAMEX90.html.
645. Public Broadcasting System. American Experience Transcript. 1918 Influenza. pbs.org/wgbh/amex/influenza/filmmore/transcript/transcript1.html.
646. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. *Federal News Service*, June 16. www.cfr.org/publication/8198/threat_of_global_pandemics.html.
647. Antigua KJC, Choi WS, Baek YH, Song MS. 2019. The emergence and decennary distribution of clade 2.3.4.4 HPAI H5Nx. *Microorganisms*. 7(6):e156. <https://doi.org/10.3390/microorganisms7060156>.
648. Weekly Epidemiological Record. 2005. H5N1 avian influenza: first steps towards development of a human vaccine. *Weekly Epidemiological Record* 80:277–8.
649. Walsh B. 2005. A wing and a prayer. *Times Asia*, September 19. www.time.com/time/asia/magazine/printout/0,13675,501050926-1106457,00.html.
650. Frist B. 2005. Floor statement—remarks as prepared for delivery, September 28. frist.senate.gov/index.cfm?FuseAction=Speeches.Detail&Speech_id=291&Month=9&Year=2005.

651. Osterholm MT. 2005. Preparing for the next pandemic. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.
652. World Health Organization, Department of Communicable Disease Surveillance and Response, Global Influenza Programme. 2004. Vaccines for pandemic influenza: informal meeting of WHO, influenza vaccine manufacturers,
653. Centers for Disease Control and Prevention. 2006. Update: influenza vaccine supply and recommendations for prioritization during the 1009–05 influenza season. Morbidity and Mortality Weekly Reports 54(34):850.
654. Trust for America's Health. 2005. A killer flu? healthyamericans.org/reports/flu/Flu2005.pdf.
655. Caplan A. 2006. What's really scary about bird flu. MSNBC, April 21. msnbc.msn.com/id/12411469/.
656. Lederberg J, Shope RE, Oaks SC. 1992. Emerging Infections: Microbial Threats to Health in the United States (Washington, DC: National Academies Press).
657. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. Federal News Service, June 16. www.cfr.org/publication/8198/threat_of_global_pandemics.html.
658. Garrett L. 2005. The next pandemic? Probable cause. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.
659. Lurie N, Saville M, Hatchett R, Halton J. 2020. Developing Covid-19 vaccines at pandemic speed. N Engl J Med. [Epub ahead of print 2020 Mar 30; accessed 2020 Apr 8]. <https://doi.org/10.1056/NEJMp2005630>.
660. Shute N, Querna E, Bainbridge B, Brink S, Ramachandran N. 2005. Of birds and men. U.S. News and World Report 138(12):40–9.
661. Woodrow Wilson International Center for Scholars. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak. September 19. wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.
662. Kennedy M. 2005. Parallels with the 1918 Spanish flu outbreak. National Post, March 9.
663. Garrett L. 2005. The next pandemic? Probable cause. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.

664. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. Federal News Service, June 16. www.cfr.org/publication/8198/threat_of_global_pandemics.html.
665. Guan Y, Chen H. 2005. Resistance to anti-influenza agents. *Lancet* 366:1139–40.
666. Centers for Disease Control and Prevention. 1997. Isolation of avian influenza A(H5N1) viruses from humans—Hong Kong, May–December 1997. *Morbidity and Mortality Weekly Report* 46:1204–7.
667. Sipress A. 2005. Bird flu drug rendered useless; Chinese chickens given medication made for humans. *Washington Post*, June 18. www.washingtonpost.com/wp-dyn/content/article/2005/06/17/AR2005061701214.html.
668. Guan Y, Poon LLM, Cheung CY, et al. 2004. H5N1 influenza: a protean pandemic threat. *Proceedings of the National Academy of Sciences* 101:8156–61.
669. Hayden F. 2004. Pandemic influenza: is an antiviral response realistic? *Pediatric Infectious Disease Journal* 23:S262–9.
670. Webster RG, Kawaoka Y, Bean WJ, Beard CW, Brugh M. 1985. Chemotherapy and vaccination: a possible strategy for the control of highly virulent influenza virus. *Journal of Virology* 55:173–6.
671. Webster RG, Kawaoka Y, Bean WJ, Beard CW, Brugh M. 1985. Chemotherapy and vaccination: a possible strategy for the control of highly virulent influenza virus. *Journal of Virology* 55:173–6.
672. U.S. Food and Drug Administration. 2019 Dec 10. 2018 summary report on antimicrobials sold or distributed for use in food-producing animals. FDA; [accessed 2020 Apr 6]. <https://www.fda.gov/media/133411/download>.
673. Cassell GH, Mekalanos J. 2001. Development of antimicrobial agents in the era of new and reemerging infectious diseases and increasing antibiotic resistance. *Journal of the American Medical Association* 285:601–5.
674. Nierenberg D. 2005. Happier Meals: Rethinking the Global Meat Industry. *Worldwatch Paper* 171, September. www.worldwatch.org/pubs/paper/171/.
675. Nature Web. 2005. Web Focus—avian flu timeline. *Nature*. www.nature.com/nature/focus/avianflu/timeline.html.
676. Kaiser L, Wat C, Mills T, Mahoney P, Ward P, Hayden F. 2003. Impact of oseltamivir treatment on influenza-related lower respiratory tract complications and hospitalizations. *Arch Intern Med*. 163(14):1667–1672. <https://doi.org/10.1001/archinte.163.14.1667>.
677. Dyer O. 2020. What did we learn from Tamiflu? *BMJ*. 368:m626. <https://doi.org/10.1136/bmj.m626>.
678. Abbasi K. 2014. The missing data that cost \$20bn. *BMJ*. 348:g2695. <https://doi.org/10.1136/bmj.g2695>.

679. Gupta YK, Meenu M, Mohan P. 2015. The Tamiflu fiasco and lessons learnt. *Indian J Pharmacol.* 47(1):11–16. <https://dx.doi.org/10.4103/0253-7613.150308>.
680. Normile D, Enserink M. 2005. Infectious diseases: lapses worry bird flu experts. *Science* 308:1849–51.
681. Scholtissek C, Webster RG. 1998. Long-term stability of the anti-influenza A compounds—amantadine and rimantadine. *Antiviral Research* 38:213–5.
682. Scholtissek C, Webster RG. 1998. Long-term stability of the anti-influenza A compounds—amantadine and rimantadine. *Antiviral Research* 38:213–5.
683. Sipress A. 2005. Bird flu drug rendered useless; Chinese chickens given medication made for humans. *Washington Post*, June 18. www.washingtonpost.com/wp-dyn/content/article/2005/06/17/AR2005061701214.html.
684. Abbott A. 2005. Avian flu special: what's in the medicine cabinet? *Nature* 435:407–9. nature.com/news/2005/050523/full/435407a.html.
685. Tooley P. 2002. Drug resistance and influenza pandemics. *Lancet* 360:1703–4.
686. Harbrecht L. 2005. Doctoral student's research brings lessons, insight to a looming pandemic. *AScribe Newswire*, October 25.
687. Bor J. 2005. A versatile virus: an expert in infectious diseases explains why avian flu could trigger the next pandemic. *Baltimore Sun*, July 1. baltimoresun.com/news/health/bal-hs.flu01jul01,1,3742451.story?coll=bal-health-storyutil.
688. Ho S. 2005. Health experts sound alarm over avian flu. *Voice of America News*, September 20. www.voanews.com/english/archive/2005-09/2005-09-20-voa45.cfm?CFID=10139428&CFTOKEN=91980581.
689. Kennedy M. 2005. Bird flu could kill millions: global pandemic warning from WHO. *Gazette (Montreal)*, March 9, p. A1.
690. Healy B. 2005. Unprepared for bird flu. *U.S. News and World Report*, October 24. www.usnews.com/usnews/health/articles/051024/24healy.htm.
691. Robinson L, Vaughn F, Nelson S, Giordano S, Kallstrom T, Buckley T, Burney T, Hupert N, Mutter R, Handrigan M, et al. 2010. Mechanical ventilators in US acute care hospitals. *Disaster Med Public Health Prep.* 4(3):199–206. <https://doi.org/10.1001/dmp.2010.18>.
692. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. *Federal News Service*, June 16. www.cfr.org/publication/8198/threat_of_global_pandemics.html.
693. McNeil DG. 2006. Hospitals short on ventilators if bird flu hits. *New York Times*, March 12. nytimes.com/2006/03/12/national/12vent.html?ex=1143176400&en=2854ac45ce09a66f&ei=5070.

694. Osterholm MT. 2005. Preparing for the next pandemic. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.
695. Santora M. 2005. When a bug becomes a monster; city and state prepare an overburdened system for the threat of avian flu. New York Times, August 21.
696. Institute of Medicine. A Shared Destiny: Community Effects of Uninsurance (Washington, DC: National Academies Press). fermat.nap.edu/books/0309087260/html/R1.html.
697. Hockberger R. 2003. Even without a flu epidemic, ERs are in crisis. Los Angeles Times, December 27.
698. Reynolds G. 2004. The flu hunters. New York Times, November 7. tinyurl.com/mqy5u.
699. Hockberger R. 2003. Even without a flu epidemic, ERs are in crisis. Los Angeles Times, December 27.
700. Lauerman J. 2006. Bird-flu pandemic, even mild one, will overwhelm U.S. hospitals. Bloomberg, March 31. bloomberg.com/apps/news?pid=10000103&sid=a4LQlizkeMqo&refer=us.
701. Augustine JJ. 2019 Oct 20. The latest emergency department utilization numbers are in. ACEP Now. 38(10).
702. American Hospital Association. 2018. Trendwatch chartbook 2018. Appendix 3. Table 3.3. Washington(DC): AHA; [accessed 2020 Apr 6]. <https://www.aha.org/system/files/2018-07/2018-chartbook-table-3-3.pdf>.
703. Goldstein J. 2005. The next flu pandemic: Are we ready? Miami Herald, September 20, p. 10E.
704. Reynolds G. 2004. The flu hunters. New York Times, November 7. tinyurl.com/mqy5u.
705. Hayden F. 2004. Pandemic influenza: Is an antiviral response realistic? Pediatric Infectious Disease Journal 23:S262–9.
706. Democracy Now. 2005. Transcript—Mike Davis on The Monster at Our Door: The Global Threat of Avian Flu. Democracy Now. October 19. democracynow.org/article.pl?sid=05/10/19/1332209.
707. Davis M. 2005. Avian flu: a state of unreadiness. The Nation, July 18–25, pp. 27–30.
708. Schoch-Spana M. 2001. “Hospital’s full-up”: the 1918 influenza pandemic. Public Health Reports 116:S32–3.
709. Fehr-Snyder K. 2005. Arizona, world may not be ready for flu outbreak. Arizona Republic, October 4. www.azcentral.com/health/news/articles/1004birdflu04.html.

710. Woodrow Wilson International Center for Scholars. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak. September 19. wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.
711. Balicer RD, Omer SB, Barnett DJ, Everly Jr GS. 2006. Local public health workers' perceptions toward responding to an influenza pandemic. *BMC Public Health* 6:99.
712. Upshur REG, et al. 2006. Stand on Guard for Thee: Ethical Considerations. In: Preparedness Planning for Pandemic Influenza (Toronto: University of Toronto Joint Centre for Bioethics Pandemic Influenza Working Group, p. 11). utoronto.ca/jcb/home/documents/pandemic.pdf.
713. Choo K. 2005. The avian flu time bomb. *American Bar Association Journal*, November, pp. 36–41.
714. Shute N, Querna E, Bainbridge B, Brink S, Ramachandran N. 2005. Of birds and men. *U.S. News and World Report* 138(12):40–9.
715. Cooper S, Coxe D. 2005. An investor's guide to Avian Flu. BMO Nesbit Burns Research, August. bmonesbitburns.com/economics/reports/20050812/avian_flu.pdf.
716. Grammaticas D. 2005. Bird flu. Is it the new BSE? Independent, August 28.
717. McMichael T. 2001. Transitions in human health: surviving this millennium by learning from the past one hundred millennia. *Global Change and Human Health* 2:76–7.
718. Kaneda T, Haub C. 2020 Jan 23. How many people have ever lived on earth? Washington(DC): Population Reference Bureau; [accessed 2020 Apr 7]. <https://www.prb.org/howmanypeoplehaveeverlivedonearth/>.
719. Garrett L. 2004. How dangerous is the bird flu? *YaleGlobal*, February 6. yaleglobal.yale.edu/display.article?id=3278.
720. Kennedy M. 2005. Flu pandemic would kill millions: warning signal clear that world set to be hit by deadly mutation: Expert. *Ottawa Citizen*, January 25, p. A7.
721. Hoeling AA. 1961. *The Great Epidemic* (Boston, MA: Little, Brown and Company).
722. Crosby AW. 2003. *America's Forgotten Pandemic: The Influenza of 1918* (Cambridge, UK: Cambridge University Press).
723. Johnson RT. 2003. Emerging viral infections of the nervous system. *Journal of NeuroVirology* 9:140–7.
724. Lashley FR. 2004. Emerging infectious diseases: vulnerabilities, contributing factors and approaches. *Expert Review of Anti-infective Therapy* 2(2):299–316.

725. Wilson ME. 1995. Travel and the emergence of infectious diseases. *Epidemiology and Infection* 1(2):39–46.
726. Milbank D. 2005. Capitol Hill flu briefing was no trick, and no treat. *Washington Post*, October 13, p. A02. www.washingtonpost.com/wp-dyn/content/article/2005/10/12/AR2005101202250.html.
727. 2004. Russian expert says flu epidemic may kill over one billion this year. *Moscow News*, October 28. www.mosnews.com/news/2004/10/28/pandemic.shtml.
728. Humphrey HH. 2005. Stave off flu pandemic with concerted action. *Twin-Cities.com Pioneer Press*, August 11. www.twincities.com/mld/twincities/news/editorial/12351138.htm.
729. Taubenberger JK, Reid AH, Lourens RM, Wang R, Jin G, Fanning TG. Taubenberger et al. Reply. *Nature* 440:E9–10.
730. Frist B. 2005. Manhattan project for the 21st century. Harvard Medical School Health Care Policy Seidman Lecture, June 1. frist.senate.gov/files/060105manhattan.pdf.
731. Branswell H. 2005. World as we know it may be at stake: UN pandemic czar. *Canadian Press*, October 2. cnews.canoe.ca/CNEWS/Canada/2005/10/02/1245355-cp.html.
732. Vieth W. 2005. The health secretary is leading a drive to boost federal efforts, and funding, to prepare for a global outbreak if avian flu mutates. *Los Angeles Times*, October 3, p. A9.
733. Mydans S. 2005. Preparations for bird flu are urgent, Asia is warned. *International Herald Tribune*, October 11. www.ihf.com/articles/2005/10/10/news/flu.php.
734. Specter M. 2005. Nature's bioterrorist. *New Yorker*, February 28, pp. 52–61.
735. Carr-Brown J. 2005. Britain prepares for bird flu death toll of thousands. *The Sunday Times*, August 7. timesonline.co.uk/article/0,2087-1724318,00.html.
736. Knox N. 2005. Europe braces for avian flu. *USA Today*, October 9. www.usatoday.com/news/health/2005-10-09-europe-avian-flu_x.htm.
737. MacKenzie D. 2005. U.S scientists resurrect 1918 flu, study deadliness. *New Scientist*, October 5. www.newscientist.com/article.ns?id=dn8103.
738. Arief I. 2005. Flu pandemic could kill 150 million, UN warns. *Reuters*, September 30.
739. Armstrong RE, Prior SD. 2005. Flu year's eve. Center for Technology and National Security Policy. October. www.ndu.edu/ctnsp/life_sci/FluOpEd.pdf.

740. 2005. Flu pandemic could kill half million in U.S. Report: America not prepared for large outbreak of disease. Reuters, June 24.
741. World Health Organization. 2004. World is ill-prepared for “inevitable” flu pandemic. Bulletin of the World Health Organization 82(4). who.int/bulletin/volumes/82/4/who%20news.pdf.
742. Institute of Medicine. 2005. Microbial Threats to Health: The Threat of Pandemic Influenza (Washington, DC: National Academies Press). darwin.nap.edu/books/0309097177/html/R1.html.
743. Bor J. 2005. A versatile virus: an expert in infectious diseases explains why avian flu could trigger the next pandemic. Baltimore Sun, July 1. baltimoresun.com/news/health/bal-hs.flu01jul01,1,3742451.story?coll=bal-health-storyutil.
744. Stöhr K. 2005. Interview with WHO bird flu expert: a ticking time bomb in your backyard. Spiegel, March 7. service.spiegel.de/cache/international/0,1518,345165,00.html.
745. Macmahon E. 2005. Preface. Journal of Antimicrobial Chemotherapy 55:i1.
746. Parry J. 2003. Hong Kong under WHO spotlight after flu outbreak. British Medical Journal 327:308.
747. Snowbeck C. 2005. Officials gather today in New York to discuss how to stave off a potential pandemic flu threatening millions. Worse than hurricanes? Pittsburgh Post-Gazette, September 23.
748. Ward A, Turner M. 2005. World “unprepared” for flu pandemic. Financial Times, September 19.
749. Nakashima E. 2005. Officials urge farm overhauls to avert bird flu pandemic. Washington Post, February 26, p. A16. www.washingtonpost.com/wp-dyn/articles/A54542-2005Feb25.html.
750. Honigsbaum M. 2005. On a wing and a prayer. Observer, March 20, p. 26. observer.guardian.co.uk/magazine/story/0,11913,1440214,00.html.
751. FAOSTAT. 2019. Live animals data. Food and Agriculture Organization of the United Nations; [updated 2020 Mar 4; accessed 2020 Apr 7]. <http://www.fao.org/faostat/en/#data/QA>.
752. Delgado C, Rosegrant M, Steinfeld H, Ehui S, Courbois C. 1999. Livestock to 2020: the next food revolution. Food, Agriculture, and the Environment Discussion Paper 28. For the International Food Policy Research Institute, the Food and Agriculture Organization of the United Nations and the International Livestock Research Institute. ifpri.org/2020/dp/dp28.pdf.
753. Fox M. 2005. Experts call for creating U.S. bird flu czar. Reuters, October 12.
754. Kazmin A. 2005. UN targets farming habits to beat bird flu. Financial Times, July 7, p. 11.

755. Food and Agriculture Organization of the United Nations News Release. 2005. Enemy at the gate: saving farms and people from bird flu. April 11. www.fao.org/newsroom/en/focus/2005/100356/.
756. 2004. Flu scientists fear massive outbreak; millions could die; Asian virus eyed. Ottawa Sun, November 18, p. 17. canoe.ca/NewsStand/OttawaSun/News/2004/11/18/719222.html.
757. Sydney Morning Herald. 2005. Tackle bird flu at its source, vet urges. Fairfax Digital, October 17. www.smh.com.au/news/health/tackle-bird-flu-at-its-source-vet-urges/2005/10/16/1129401145763.html.
758. Wire services. 2004. Flu pandemic plan might shut schools, ration drugs. St. Petersburg Times, August 26, p. 7A.
759. Nelson B. 2005. Bird flu outbreak; global threat; experts say deadly virus presents grave risk if we don't "get our act together." Newsday, March 6, p. A03.
760. 2005. Next flu pandemic due "any time," could kill 150 million. Associated Press, September 29. tinyurl.com/mucjp.
761. 2005. Human-to-human bird flu pandemic expected "in very near future." BBC Monitoring Former Soviet Union, August 3.
762. Underwood A, Adler J, Rosenberg D, Seno A. 2004. Scary strains. Newsweek 114(18):46–9.
763. Doshi P. 2006. Selling "pandemic flu" through a language of fear. Christian Science Monitor, March 21.
764. Shortridge K. 2006. H5N1 "bird flu"—some insight. New Zealand Pharmacy, April, pp. 23–7.
765. Ross E. 2004. Asia is the traditional cradle of influenza, although disease can originate anywhere. Biotech Week, February 25, p. 628.
766. Fox M. 2005. Bird flu poses "ominous" threat. Toronto Star, February 22, p. A01.
767. Potter CW. 2001. A history of influenza. Journal of Applied Microbiology 91:572–9.
768. New Zealand Ministry of Health. 2005. Influenza, avian influenza, pandemic influenza FAQ. Scoop Independent News, September 15. www.scoop.co.nz/stories/GE0509/S00077.htm.
769. Potter CW. 1998. Chronicle of influenza pandemics. In: Nicholson KG, Webster RG, Hay AJ (eds.), Textbook of Influenza (Oxford: Blackwell Science, pp. 3–18).
770. Shortridge KF. 1992. Pandemic influenza: a zoonosis? Seminars in Respiratory Infections 7:11–25.

771. Walsh B, Johnson K. 2005. Emergency measures; avian flu is on the rise in Vietnam and is now endemic in much of Asia. Can heightened vigilance keep it at bay? *Time International*, February 7, p. 22.
772. Chen S, Yang J, Yang W, Wang C, Bärnighausen T. 2020. COVID-19 control in China during mass population movements at New Year. *Lancet*. 395(10226):764–766. [https://doi.org/10.1016/S0140-6736\(20\)30421-9](https://doi.org/10.1016/S0140-6736(20)30421-9).
773. Mittelstadt M. 2005. Experts: Bird flu plan needs work. *The Dallas Morning News*, October 5. dallasnews.com/sharedcontent/dws/news/washington/mmittelstadt/stories/100605dnnatbirdflu.17794709.html.
774. Marx PA, Apetrei C, Drucker E. 2004. AIDS as a zoonosis? Confusion over the origin of the virus and the origin of the epidemics. *Journal of Medical Primatology* 33:220–6.
775. Enserink M. 2004. Tiptoeing around Pandora's box. *Science* 306:594–5.
776. Enserink M. 2004. Tiptoeing around Pandora's box. *Science* 306:594–5.
777. Enserink M. 2004. Tiptoeing around Pandora's box. *Science* 306:594–5.
778. Branswell H. 2005. Entry controls won't stop spread of pandemic flu or SARS, study shows. *Canadian Press*, September 24.
779. Sample I. 2005. How much notice will we get of a flu pandemic? *Guardian*, January 27, *Science Pages*, p. 3.
780. Ross B. 2005. Avian flu: is the government ready for an epidemic? Virus poses risk of massive casualties around the world. *ABC News Primetime*, September 15. abcnews.go.com/Primetime/Investigation/story?id=1130392&page=1.
781. 2005. Scientists stockpile bird flu drugs. *The Age*, September 23. theage.com.au/news/National/Scientists-stockpile-bird-flu-drugs/2005/09/23/1126982206794.html.
782. McKie R, Revill J, Aglionby J, Watts J. 2004. Warning as bird flu crossover danger escalates. *Observer*, December 12. observer.guardian.co.uk/international/story/0,6903,1371917,00.html.
783. Goetz T. 2006. The battle to stop bird flu. *Wired*, January, p. 111–5.
784. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London, UK: Routledge, pp. 1–26).
785. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
786. World Health Organization. 2020 Mar 31. Coronavirus disease 2019 (COVID-19) situation report—71. Geneva: WHO; [accessed 2020 Apr 6].

<https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200331-sitrep-71-covid-19.pdf>.

787. Kennedy M. 2005. No way of knowing effectiveness of pandemic plan until outbreak hits. Vancouver Sun, March 11, p. A4.

788. Reid AH, Taubenberger JK, Fanning TG. 2001. The 1918 Spanish influenza: Integrating history and biology. *Microbes and Infection* 3:81–87.

789. Lee PJ, Krilov LR. 2005. When animal viruses attack: SARS and avian influenza. *Pediatric Annals* 34(1):43–52.

790. Lee PJ, Krilov LR. 2005. When animal viruses attack: SARS and avian influenza. *Pediatric Annals* 34(1):43–52.

791. Osterholm MT. 2005. Preparing for the next pandemic. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.

792. MacKenzie JS, Drury P, Ellis A., et al. 2004. The WHO Response to SARS and preparations for the future. In: Knobler S, Mahmoud A, Lemon S, Mack A, Sivitz L, Oberholtzer K (eds.), *Learning from SARS, Preparing for the Next Disease Outbreak, Workshop Summary* (Washington, DC: National Academies Press, pp. 42–9).

793. Osterholm MT. 2005. Preparing for the next pandemic. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.

794. Oxford JS. 2005. Preparing for the first influenza pandemic of the 21st century. *Lancet Infectious Diseases* 5:129–31.

795. 2005. Massive flu outbreak could happen at any moment, WHO warns. Today online, July 23. todayonline.com/articles/62928.asp.

796. Garrett L. 2005. The next pandemic? Probable cause. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.

797. Ross B. 2005. Avian flu: is the government ready for an epidemic? Virus poses risk of massive casualties around the world. ABC News Primetime, September 15. abcnews.go.com/Primetime/Investigation/story?id=1130392&page=1.

798. World Health Organization. 2005. WHO global influenza preparedness plan. The role of WHO and recommendations for national measures before and during pandemics. www.who.int/csr/resources/publications/influenza/GIP_2005_5Eweb.pdf.

799. Sternberg S. 2005. Imagine what would happen if a Category 5 viral storm hit every state. USA Today, November 10, p. 1A. www.usatoday.com/printedition/news/20051011/1a_cover11.art.htm.

800. Mena K. 2020 Mar 28. Cuomo on possible New York quarantine: 'I don't think it's legal' and it would be a 'federal declaration of war.' CNN. [accessed 2020 Apr 12]. <https://www.cnn.com/2020/03/28/politics/cuomo-ny-quarantine-cnntv/index.html>.
801. Emerson. 1917 Some practical considerations. *American Journal of Medical Sciences* 153: 170 as cited in Fee E, Fox DM (eds.), 1988. *AIDS: The Burdens of History* (Berkeley: University of California Press) ark.cdlib.org/ark:/13030/ft7t1nb59n/.
802. Risse GB. 1988. Epidemics and history: ecological perspectives and social responses. In: Fee E, Fox DM (eds.), *AIDS: The Burdens of History* (Berkeley, CA: University of California Press, pp. 33–66).
803. Sternberg S. 2005. Imagine what would happen if a Category 5 viral storm hit every state. *USA Today*, November 10, p. 1A. www.usatoday.com/printedition/news/20051011/1a_cover11.art.htm.
804. CBC News. 2005. Bush wants military to keep order in bird flu pandemic scenario. October 4. cbc.ca/story/world/national/2005/10/04/Bush-Pandemic1004.html.
805. Orent W. 2005. The fear contagion: a flu quarantine? No, sir. *Washington Post*, October 16, p. B01. washingtonpost.com/wp-dyn/content/article/2005/10/15/AR2005101500102_pf.html.
806. Laver WG, Garman E. 2001. The origin and control of pandemic influenza. *Science* 293:1776–7.
807. Orent W. 2005. The fear contagion: a flu quarantine? No, sir. *Washington Post*, October 16, p. B01. washingtonpost.com/wp-dyn/content/article/2005/10/15/AR2005101500102_pf.html.
808. Fox M. 2005. Experts call for creating U.S. bird flu czar. *Boston Globe*. October 12. tinyurl.com/roy8g.
809. Orent W. 2005. The fear contagion: a flu quarantine? No, sir. *Washington Post*, October 16, p. B01. washingtonpost.com/wp-dyn/content/article/2005/10/15/AR2005101500102_pf.html.
810. Reynolds J. 2005. Bird flu: 20% of globe may be hit. *Scotsman*, May 26, p. 31. news.scotsman.com/international.cfm?id=573902005.
811. Garrett L. 2005. The next pandemic? Probable cause. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.
812. Oxford J, Balasingam S, Lambkin R. 2004. A new millennium conundrum: How to use a powerful class of influenza anti-neuraminidase drugs (NAIs) in the community. *Journal of Antimicrobial Chemotherapy* 53:133–6.

813. Bhattacharya S. 2003. Airports scan for SARS victims' flushed faces. *New Scientists*, April 24. www.newscientist.com/article/dn3656.html.
814. Bridges CB, Kuehnert MJ, Hall CB. Transmission of influenza: implications for control in health care settings. *Clinical Infectious Diseases* 37:1094–101.
815. De Gennaro N. 2005. Avian flu pandemic real threat, says national expert. *Daily News Journal*, October 8. dnj.midsouthnews.com/apps/pbcs.dll/article?AID=/20051008/LIFESTYLE/510080316/1024.
816. Bridges CB, Kuehnert MJ, Hall CB. Transmission of influenza: implications for control in health care settings. *Clinical Infectious Diseases* 37:1094–101.
817. 2006. Bird flu: the untold story. *Oprah Winfrey Show*, January 24.
818. Goldmann DA. 2001. Epidemiology and prevention of pediatric viral respiratory infections in health-care institutions. *Emerging Infectious Diseases* 7:249–53.
819. Hammond GW, Raddatz RL, Gelskey DE. 1989. Impact of atmospheric dispersion and transport of viral aerosols on the epidemiology of influenza. *Reviews of Infectious Diseases* 11:494–7.
820. Annas GJ. 2005. Bush's risky flu pandemic plan. *Boston Globe*, October 8. boston.com/news/globe/editorial_opinion/oped/articles/2005/10/08/bushs_risky_flu_pandemic_plan/.
821. Lederberg J, Shope RE, Oaks SC. 1992. *Emerging Infections: Microbial Threats to Health in the United States* (Washington, DC: National Academies Press).
822. Loven J. 2005. Bush considers military role in flu fight. *Associated Press*, October 4.
823. Cowen T. 2005. Avian flu: what should be done. *Mercatus Center at George Mason University: Working Paper Series*, November 11.
824. 2005. Bush: military may have to help if bird flu breaks out. *CNN*, October 5. cnn.com/2005/POLITICS/10/04/bush.avianflu/index.html.
825. 2005. Bush military bird flu role slammed. *CNN*, October 5. edition.cnn.com/2005/POLITICS/10/05/bush.reax/.
826. 2005. They knew what to expect. *Reuters*, September 2.
827. Editorial. 2005. What will happen if the flu comes to a bird near you? *USA Today*, November 1. www.usatoday.com/news/opinion/editorials/2005-11-01-bird-flu-edit_x.htm.
828. Arnst C. 2005. A hot zone in the heartland. Little could be done to contain a deadly avian flu outbreak. *Business Week*, September 19. businessweek.com/magazine/content/05_38/b3951008.htm.

829. Milbank D. 2005. Colonel finally saw whites of their eyes. Washington Post, October 20, p. A04. [washingtonpost.com/wp-dyn/content/article/2005/10/19/AR2005101902246.html](http://www.washingtonpost.com/wp-dyn/content/article/2005/10/19/AR2005101902246.html).
830. Najera JA. 1989. Malaria and the work of the WHO. Bulletin of the World Health Organization 67:229–43.
831. Crawford D. 2000. The Invisible Enemy: A Natural History of Viruses (New York, NY: Oxford University Press).
832. Davis RJ, Lederberg J (eds.), 2001. Emerging Infectious Diseases from the Global to the Local Perspective: A Summary of a Workshop of the Forum of Emerging Infections (Washington, DC: National Academies Press). darwin.nap.edu/books/0309071844/html/.
833. Selgelid MJ. 2005. Ethics and infectious disease. Bioethics 19(3):272–89. www.blackwell-synergy.com/doi/abs/10.1111/j.1467-8519.2005.00441.x.
834. Burnet M, White DO. 1962. Natural History of Infectious Disease, 4th Edition (Cambridge, UK: Cambridge University Press).
835. Davis RJ, Lederberg J (eds.), 2001. Emerging Infectious Diseases from the Global to the Local Perspective: A Summary of a Workshop of the Forum of Emerging Infections (Washington, DC: National Academies Press). darwin.nap.edu/books/0309071844/html/.
836. Davis RJ, Lederberg J (eds.), 2001. Emerging Infectious Diseases from the Global to the Local Perspective: A Summary of a Workshop of the Forum of Emerging Infections (Washington, DC: National Academies Press). darwin.nap.edu/books/0309071844/html/.
837. Selgelid MJ. 2005. Ethics and infectious disease. Bioethics 19(3):272–89. www.blackwell-synergy.com/doi/abs/10.1111/j.1467-8519.2005.00441.x.
838. Davis RJ, Lederberg J (eds.), 2001. Emerging Infectious Diseases from the Global to the Local Perspective: A Summary of a Workshop of the Forum of Emerging Infections (Washington, DC: National Academies Press). darwin.nap.edu/books/0309071844/html/.
839. World Health Organization. 1996. The World Health Report 1996: Fighting disease, Fostering development (Geneva, Switzerland: WHO). www.who.int/whr/1996/en/.
840. Liu L, Oza S, Hogan D, Chu Y, Perin J, Zhu J, Lawn JE, Cousens S, Mathers C, Black RE. 2016. Global, regional, and national causes of under-5 mortality in 2000–15: an updated systematic analysis with implications for the Sustainable Development Goals. Lancet. 388(10063):3027–3035. [https://doi.org/10.1016/S0140-6736\(16\)31593-8](https://doi.org/10.1016/S0140-6736(16)31593-8).
841. Laurance J. 2004. New diseases pose threat to world health. Independent, January 14. www.findarticles.com/p/articles/mi_qn4158/is_20040114/ai_n9687521.

842. Cookson C. 1993. Bugs that come to plague us: the renewed war against disease. *Financial Times* (London, UK), August 21.
843. Gill JM, Rechtschaffen JA, Rubenstein LR. 2000. Expect the unexpected: the West Nile virus wake up call. Report of the Minority Staff, Senate Governmental Affairs Committee, July 24. www.senate.gov/~gov_affairs/wnvfinalreport.pdf.
844. Cohen FL, Larson E. 1996. Emerging infectious diseases: nursing responses. *Nursing Outlook* 44:164–8.
845. Crosby AW. 2003. *America's Forgotten Pandemic: The Influenza of 1918* (Cambridge, UK: Cambridge University Press).
846. Hayes R. 1992. The modern plagues. *Palm Beach Post*, October 23, p. 1D.
847. Brown C. 2000. Emerging infectious diseases of animals: an overview. In: Brown C, Bolin C (eds.), *Emerging Diseases of Animals* (Washington, DC: ASM Press, pp. 1–12).
848. Pubmed keyword search for Communicable Diseases, Emerging/ limited to prior to 2012 compared to 2012–2020. Accessed April 1, 2020.
849. Brown C. 2000. Emerging infectious diseases of animals: an overview. In: Brown C, Bolin C (eds.), *Emerging Diseases of Animals* (Washington, DC: ASM Press, pp. 1–12)
850. National Agricultural Research, Extension, Education, and Economics. 2004. Protecting Our Food System from Current and Emerging Animal and Plant Diseases and Pathogens: Implications for Research, Education, Extension, and Economics. NAREEE Advisory Board Meeting and Focus Session, Washington Court Hotel, 525 New Jersey Ave., N.W., Washington, DC, October 27–29.
851. Epstein PR, Chivian E, Frith K. 2003. Emerging diseases threaten conservation. *Environmental Health Perspectives* 111(10):A506.
852. Woolhouse MEJ. 2002. Population biology of emerging and re-emerging pathogens. *Trends in Microbiology* 10:S3–7.
853. Murphy FA. 1999. Emerging zoonoses. *Emerging Infectious Diseases* 4(3):429–35.
854. Wain-Hobson S, Meyerhans A. 1999. On viral epidemics, zoonoses and memory. *Trends in Microbiology* 7:389–91.
855. Mantovani A. 2001. Notes on the development of the concept of zoonoses. WHO Mediterranean Zoonoses Control Centre Information Circular 51. www.mzcp-zoonoses.gr/pdf/en/circ_51.pdf.
856. Taylor LH, Latham SM, Woolhouse MEJ. 2001. Risk factors for human disease emergence. *Philosophical Transactions of the Royal Society of London, Series B* 356:983–9.

857. Wolfe DN, Eitel MN, Gockowski J, et al. 2000. Deforestation, hunting and the ecology of microbial emergence. *Global Change and Human Health* 1:10–25.
858. Clough JD. 2004. Birds, viruses, and history: the current “genuine adventure.” *Cleveland Clinical Journal of Medicine* 71:270.
859. Mayo Clinic staff. 2005. Bird flu (avian influenza). Infectious Disease Center, August 10. ads.mayoclinic.com/health/bird-flu/DS00566/DSECTION=7.
860. Torrey EF, Yolken RH. 2005. Their bugs are worse than their bite. *Washington Post*, April 3, p. B01.
861. Editorial. 2004. Avian influenza: the threat looms. *Lancet* 363(9405):257.
862. 2005. Frequently Asked Questions about Med-Vet-Net. Network for the Prevention and Control of Zoonoses, March 23. edvetnet.org/cms/templates/doc.php?id=18.
863. McKenna MAJ. 2004. Animal diseases threaten humans. *Cox News Service*, March 2.
864. Lederberg J, Shope RE, Oaks SC. 1992. *Emerging Infections: Microbial Threats to Health in the United States* (Washington, DC: National Academies Press).
865. World Health Organization, Food and Agricultural Organization of the United Nations, and World Organization for Animal Health. 2004. Report of the WHO/FAO/OIE joint consultation on emerging zoonotic diseases. At whqlibdoc.who.int/hq/2004/WHO_CDS_CPE_ZFK_2004.9.pdf.
866. Morse SS. 1997. The public health threat of emerging viral disease. *Journal of Nutrition* 127:951S–56S.
867. Voigt K. 2005. What ails Asia. *Wall Street Journal*, April 22.
868. Beran GW, Steele JH. 1994. *Handbook of Zoonoses* (London, UK: CRC Press).
869. Calvert S, Kohn D. 2005. Out of Africa: a baffling variety of diseases. *Baltimore Sun*, May 15, p. 4A.
870. Calvert S, Kohn D. 2005. Out of Africa: a baffling variety of diseases. *Baltimore Sun*, May 15, p. 4A.
871. Benenson AS (ed.), 1990. *Control of Communicable Diseases in Man*, 15th Edition (Washington, DC: American Public Health Association).
872. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
873. Fox N. 1997. *Spoiled: The Dangerous Truth about a Food Chain Gone Haywire* (New York, NY: Basic Books).

874. Lubroth J. 2005. Regional and global challenges of the avian influenza outbreaks in Asia and FAO's prospective. *World's Poultry Science Journal* 61:55–6.
875. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
876. Weber DJ, Rutala WA. 1999. Zoonotic infections. *Occupational Medicine: State of the Art Reviews* 14(2):247–84.
877. Epstein PR, Chivian E, Frith K. 2003. Emerging diseases threaten conservation. *Environmental Health Perspectives* 111(10):A506–7.
878. Ritvo H. 2004. Animal planet. *Environmental History* 9(2):204. www.historycooperative.org/journals/eh/9.2/index.html.
879. Torrey EF, Yolken RH. 2005. Their bugs are worse than their bite. *Washington Post*, April 3, p. B01.
880. Dubos R, Dubos J. 1952. *The White Plague: Tuberculosis, Man and Society* (Boston, MA: Little, Brown, p. 8).
881. Espinosa de los Monteros LE, Galán JC, Gutierrez M, et al. 1998. Allele-specific PCR method based on *pncA* and *oxyR* sequences for distinguishing *Mycobacterium bovis* from *Mycobacterium tuberculosis*: Intraspecific *M. bovis pncA* sequence polymorphism. *Journal of Clinical Microbiology* 36:239–42.
882. Torrey EF, Yolken RH. 2005. Their bugs are worse than their bite. *Washington Post*, April 3, p. B01.
883. World Health Organization. 2019. Global Health Observatory data. How many TB cases and deaths are there? Geneva: WHO; [accessed 2020 Apr 6]. https://www.who.int/gho/tb/epidemic/cases_deaths/en/.
884. World Health Organization. 2000. Tuberculosis, fact sheet 104, April. www.who.int/mediacentre/factsheets/fs104/en/.
885. Waddington K. 2002. Safe meat and healthy animals: BSE and bovine TB. History and Policy, Cambridge University. www.historyandpolicy.org/archive/policy-paper-04.html.
886. Collins CH. 2000. The bovine tubercle bacillus. *British Journal of Biomedical Science* 57:234–40.
887. Scott C, Cavanaugh JS, Pratt R, Silk BJ, LoBue P, Moonan PK. 2016. Human tuberculosis caused by *Mycobacterium bovis* in the United States, 2006–2013. *Clin Infect Dis.* 63(5):594–601. <https://doi.org/10.1093/cid/ciw371>.
888. Dankner WM, Davis CE. 2000. *Mycobacterium bovis* as a significant cause of tuberculosis in children residing along the United States–Mexico border in the Baja California region. *Pediatrics* 105:E79–83.

889. Weiss RA. 2001. The Leeuwenhoek Lecture 2001. Animal origins of human infectious disease. *Philos Trans R Soc Lond B Biol Sci.* 356(1410):957–977. <https://dx.doi.org/10.1098%2Frstb.2001.0838>.
890. Daszak P, Cunningham AA. 2002. Emerging infectious diseases: a key role for conservation medicine. In: Aguirre AA, Ostfeld RS, Tabor GM, House C, Pearl MC (eds.), *Conservation Medicine: Ecological Health in Practice* (New York, NY: Oxford University Press, pp. 40–61).
891. Torrey EF, Yolken RH. 2005. Their bugs are worse than their bite. *Washington Post*, April 3, p. B01.
892. Diamond J. 1992. The arrow of disease. *Discover*, October 13(10):64–73.
893. Gubser C, Hué S, Kellam P, Smith GL. 2004. Poxvirus genomes: a phylogenetic analysis. *J Gen Virol.* 85(Pt 1):105–117. <https://doi.org/10.1099/vir.0.19565-0>.
894. Torrey EF, Yolken RH. 2005 Apr 3. Their bugs are worse than their bite. *Washington Post*. p. B01.
895. Shortridge KF. 2003. Severe acute respiratory syndrome and influenza: virus incursions from southern China. *Am J Respir Crit Care Med.* 168(12):1416–1420. <https://doi.org/10.1164/rccm.2310005>.
896. McMichael T. 2001. *Human Frontiers, Environments and Disease* (Cambridge, UK: Cambridge University Press).
897. McMichael T. 2001. *Human Frontiers, Environments and Disease* (Cambridge, UK: Cambridge University Press).
898. Rodrigo MJ, Dopazo J. 1995. Evolutionary analysis of the Picornavirus family. *Journal of Molecular Evolution* 40:362–71 as cited in Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press, p. 50).
899. McMichael T. 2001. *Human Frontiers, Environments and Disease* (Cambridge, UK: Cambridge University Press).
900. De Groote D, Ducatelle R, Haesebrouck F. 2000. Helicobacters of possible zoonotic origin: a review. *Acta Gastro-Enterologica Belgica* 63:380–7.
901. Suerbaum S, Michetti P. 2002. Helicobacter pylori infection. *New England Journal of Medicine* 347:1175–86 as cited in Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press, p. 40).
902. Centers for Disease Control and Prevention National Center for Infectious Diseases/Division of Bacterial and Mycotic Diseases. 2005. Helicobacter pylori Infections (H. pylori). October 12. www.cdc.gov/ncidod/dbmd/diseaseinfo/hpylori_t.htm.

903. Dore MP, Sepulveda AR, El-Zimaity H., et al. 2001. Isolation of *Helicobacter pylori* from sheep-implications for transmission to humans. *American Journal of Gastroenterology* 96(5):1396–401.
904. American Heritage Dictionaries (ed.), 2004. *The American Heritage Dictionary of the English Language*, 4th Edition (Boston, MA: Houghton Mifflin).
905. De Groote D, Ducatelle R, Haesebrouck F. 2000. Helicobacters of possible zoonotic origin: a review. *Acta Gastro-Enterologica Belgica* 63:380–7.
906. Yoo D, Willson P, Pei Y, et al. 2001. Prevalence of hepatitis E virus antibodies in Canadian swine herds and identification of a novel variant of swine hepatitis E virus. *Clinical and Diagnostic Laboratory Immunology* 8:1213–9.
907. Sooryanarain H, Heffron CL, Hill DE, Fredericks J, Rosenthal BM, Werre SR, Opriessnig T, Meng XJ. 2020. Hepatitis E virus in pigs from slaughterhouses, United States, 2017–2019. *Emerg Infect Dis.* 26(2):354–357. <https://doi.org/10.3201/eid2602.191348>.
908. Tei S, Kitajima N, Takahashi K, Mishiro S. 2003. Zoonotic transmission of hepatitis E virus from deer to human beings. *Lancet* 362:371–3.
909. Yoo D, Willson P, Pei Y, et al. 2001. Prevalence of hepatitis E virus antibodies in Canadian swine herds and identification of a novel variant of swine hepatitis E virus. *Clinical and Diagnostic Laboratory Immunology* 8:1213–9.
910. Darwin C. 1839. Chapter XIX: Australia. *The Voyage of the Beagle*. darwin.thefreelibrary.com/The-Voyage-of-the-Beagle/19-1.
911. Diamond J. 1997. *Guns, Germs and Steel: The Fates of Human Societies* (New York, NY: Norton and Company).
912. Diamond J. 1997. *Guns, Germs and Steel: The Fates of Human Societies* (New York, NY: Norton and Company).
913. Diamond J. 1992. The arrow of disease. *Discover*, October 13(10):64–73.
914. Armelagos GJ, Barnes KC, Lin J. 1996. Disease in human evolution: the re-emergence of infectious disease in the third epidemiological transition. *National Museum of Natural History Bulletin for Teachers* 18(3).
915. National Agricultural Research, Extension, Education, and Economics. 2004. *Protecting Our Food System from Current and Emerging Animal and Plant Diseases and Pathogens: Implications for Research, Education, Extension, and Economics*. NAREEE Advisory Board Meeting and Focus Session, Washington Court Hotel, 525 New Jersey Ave., N.W., Washington, DC, October 27–29.
916. Centers for Disease Control and Prevention. 2006. National Center for Chronic Disease Prevention and Health Promotion. Chronic disease prevention. March 17. www.cdc.gov/nccdphp/.

917. World Health Organization. Facts related to chronic diseases. who.int/dietphysicalactivity/publications/facts/chronic/en/index.html.
918. World Health Organization. 2003. Diet, Nutrition and The Prevention of Chronic Diseases (Geneva: World Health Organization). www.who.int/hpr/NPH/docs/who_fao_expert_report.pdf.
919. Armelagos GJ, Barnes KC, Lin J. 1996. Disease in human evolution: the re-emergence of infectious disease in the third epidemiological transition. *National Museum of Natural History Bulletin for Teachers* 18(3).
920. Glasser RJ. 2004. We are not immune: influenza, SARS, and the collapse of public health. *Harper's Magazine*, July. www.harpers.org/WeAreNotImmune.html.
921. Weinhold B. 2004. Infectious disease: the human costs of our environmental errors *Environmental Health Perspectives* 112(1).
922. 2004. Animal diseases "threaten humans." *BBC News*, January 13.
923. Walters MJ. 2003. *Six Modern Plagues and How We are Causing Them* (Washington, DC: Island Press).
924. Kelly W. 1987. *Pogo: We Have Met the Enemy and He Is Us* (New York, NY: Simon and Schuster).
925. McMichael AJ. 2004. Environmental and social influences on emerging infectious diseases: past, present, and future. *Philosophical Transactions of the Royal Society of London* 359:1049–58.
926. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
927. Cooper S. 2006 (How to stop) The next killer flu. *Seed Magazine*, February–March.
928. Fleck F. 2004. Experts urge action to stop animal diseases infecting humans. *British Medical Journal* 328(7449):1158.
929. World Health Organization Department of Communicable Disease Surveillance. 1999. Future trends in veterinary public health. *Weekly Epidemiological Record* 74(19):154–6. www.who.int/docstore/wer/pdf/1999/wer7419.pdf.
930. Rohr JR, Barrett CB, Civitello DJ, Craft ME, Delius B, DeLeo GA, Hudson PJ, Jouanard N, Nguyen KH, Ostfeld RS, et al. 2019. Emerging human infectious diseases and the links to global food production. *Nat Sustain.* 2(6):445–456. <https://doi.org/10.1038/s41893-019-0293-3>.
931. Schrag S, Wiener P. 1995. Emerging infectious disease: What are the relative roles of ecology and evolution? *Trends in Ecology and Evolution* 10(8):319–324.

932. Aldo Leopold Nature Center. Who was Aldo Leopold. naturenet.com/alnc/aldo.html.
933. Friend M, McLean RG, Dein FJ. 2001. Disease emergence in birds: Challenges for the twenty-first century. *The Auk* 118:290–303.
934. Pimm SL, Ayres M, Balmford A, et al. 2001. Can we defy nature's end? *Science* 293(5538):2207–8. www.sciencemag.org/cgi/content/summary/293/5538/2207?ck=nck.
935. FAO Newsroom. 2005. Cattle ranching is encroaching on forests in Latin America. Food and Agriculture Organization of the United Nations. June 8. fao.org/newsroom/en/news/2005/102924/.
936. World Resources Institute. 1998–99. Land conversion. Environmental Change and Human Health. population.wri.org/pubs_content_text.cfm?ContentID=1322.
937. Patz JA, Wolfe ND. 2002. Global ecological change and human health. In: Aguirre AA, Ostfeld RS, Tabor GM, House C, Pearl MC (eds.), *Conservation Medicine: Ecological Health in Practice* (New York, NY: Oxford University Press, pp. 167–181).
938. Arzt J, White WR, Thomsen BV, Brown CC. 2010. Agricultural diseases on the move early in the third millennium. *Vet Pathol.* 47(1):15–27. <https://doi.org/10.1177/0300985809354350>.
939. Taylor D. 1997. Seeing the forests for more than the trees. *Environ Health Perspect.* 105(11):1186–1191.
940. Chakraborty S, Andrade FCD, Ghosh S, Uelmen J, Ruiz MO. 2019. Historical expansion of Kyasanur forest disease in India from 1957 to 2017: a retrospective analysis. *GeoHealth.* 3(2):44–55. <https://doi.org/10.1029/2018GH000164>.
941. Hoff B, Smith C III. 2000. *Mapping Epidemics: a Historical Atlas of Disease* (New York, NY: Grolier Publishing).
942. Wattam R. 2004. Junin virus. Pathogen Portal Web Project. May 11. pathport.vbi.vt.edu/pathinfo/pathogens/Junin_virus.html.
943. Guenno BL. 1997. Haemorrhagic fevers and ecological perturbations. *Archives of Virology* 13:A191–9.
944. Cohen FL, Larson E. 1996. Emerging infectious diseases: nursing responses. *Nursing Outlook* 44:164–8.
945. Guenno BL. 1997. Haemorrhagic fevers and ecological perturbations. *Archives of Virology* 13:A191–9.
946. Cullington BJ. 1990. Emerging viruses, emerging threat. *Science* 247:279–80.
947. Cullington BJ. 1990. Emerging viruses, emerging threat. *Science* 247:279–80.

948. 2005. Dryden's Grant Information. Washington and Jefferson College. Tick-borne disease research. www.washjeff.edu/tickresearch/.
949. National Institute of Allergy and Infectious Diseases. 2000. Lyme disease vaccine: preventing an emerging disease January 13. niaid.nih.gov/publications/discovery/lyme.htm.
950. Cowley G, Underwood A. 2003. How progress makes us sick. *Newsweek*, May 5, p. 33.
951. Walters MJ. 2003. *Six Modern Plagues and How We Are Causing Them* (Washington, DC: Island Press).
952. Avasthi A. 2004. Bush-meat trade breeds new HIV. *New Scientist*, August. www.newscientist.com/article.ns?id=dn6239.
953. Rose AL. 1996. The African great ape bushmeat crisis. *Pan Africa News* 3(2):1–6.
954. Rose, AL. 1998. Growing commerce in bushmeat destroys great apes and threatens humanity. *African Primates* 3:6–10.
955. Walsh PD, Abernethy KA, Bermejo M, et al. 2003. Catastrophic ape decline in western equatorial Africa. *Nature* 422:611–614.
956. Fox M. 2000. The killer out of Africa. *Hobart Mercury* (Australia), February 9.
957. Karpowicz P, Cohen CB, van der Kooy D. 2004. Is it ethical to transplant human stem cells into nonhuman embryos? *Nature Medicine* 10(4):331–5.
958. Gunter C, Dhand R. 2005. The chimpanzee genome. *Nature* 437(7055):47.
959. Lovgren S. 2005. Chimps, humans 96 percent the same, gene study finds. *National Geographic News*, August 31. news.nationalgeographic.com/news/2005/08/0831_050831_chimp_genes.html.
960. Karesh WB, Cook RA, Bennett EL, Newcomb J. 2005. Wildlife trade and global disease emergence. *Emerging Infectious Diseases* 11(7). cdc.gov/ncidod/EID/vol11no07/05-0194.htm.
961. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
962. National AIDS Trust. 2005. Global statistics. Fact sheet. www.worldaid-sday.org/files/stats_global_2005.doc.
963. Hahn BH, Shaw GM, De Cock KM, Sharp PM. 2000. AIDS as a zoonosis: scientific and public health implications. *Science* 287:607–14.
964. Laurance J. 2004. New diseases pose threat to world health. *Independent*, January 14. www.findarticles.com/p/articles/mi_qn4158/is_20040114/ai_n9687521.

965. World Health Organization. 2020. Global Health Observatory (GHO) data. Geneva: WHO; [accessed 2020 Apr 7]. <https://www.who.int/gho/hiv/en/>.
966. Wolfe ND, Switzer WM, Carr JK, et al. 2004. Naturally acquired simian retrovirus infections in central African hunters. *Lancet* 363(9413):932–7.
967. Hawkes N. 2004. Monkey virus found in man “may lead to new epidemic.” *Times Online*, March 19. www.timesonline.co.uk/article/0,8122-1043946,00.html.
968. Wolfe ND, Switzer WM, Carr JK, et al. 2004. Naturally acquired simian retrovirus infections in central African hunters. *Lancet* 363(9413):932–7. jhsph.edu/cameroon/documents/Papers/Wolfe2.pdf.
969. Peeters M. 2004. Cross-species transmissions of simian retroviruses in Africa and risk for human health. *Lancet* 363(9413):911–2.
970. Meslin FX, Stöhr K, Heymann D. 2000. Public health implications of emerging zoonoses. *Revue Scientifique et Technique Office International des Epizooties* 19(1):310–7.
971. Preston R. 1994. *The Hot Zone: A Terrifying True Story* (New York, NY: Random House).
972. 2004. *The American Heritage Dictionary of the English Language*, 4th Edition (Boston, MA: Houghton Mifflin).
973. Van Loon J. 2000. Parasite politics: on the significance of symbiosis and assemblage in theorizing community formations. In: Pierson C, Tormey S (eds.), *Politics at the Edge* (London, UK: Political Studies Association).
974. Ryan F. 1997. *Virus X: Tracking the New Killer Plagues—Out of the Present and and Into the Future* (Boston, MA: Little, Brown and Company).
975. Ryan F. 1997. *Virus X: Tracking the New Killer Plagues—Out of the Present and and Into the Future* (Boston, MA: Little, Brown and Company).
976. Villarreal LP, Defilippis VR, Gottlieb KA. 2000. Acute and persistent viral life strategies and their relationship to emerging diseases. *Virology* 272:1–6.
977. Merriam-Webster Inc. 2006. Simian. Merriam-Webster Online Dictionary. www.m-w.com/dictionary/simian.
978. Peeters M, Courgnaud V, Abela B, et al. 2002. Risk to human health from a plethora of simian immunodeficiency viruses in primate bushmeat. *Emerging Infectious Diseases* 8(5) cdc.gov/ncidod/eid/vol8no5/01-0522.htm.
979. O’Rourke LG. 2000. Xenotransplantation. In: Brown C, Bolin C (eds.), *Emerging Diseases of Animals* (Washington, DC: ASM Press, pp. 59–84).
980. Hahn BH, Shaw GM, De Cock KM, Sharp PM. 2000. AIDS as a zoonosis: scientific and public health implications. *Science* 287:607–14.

981. Kida H. Hokkaido University Research Center for Zoonosis Control. Director's Message. hokudai.ac.jp/czc/message/index-e.html.
982. Fa JE, Peres CA, Meeuwig JJ. 2002. Bushmeat exploitation in tropical forests: an intercontinental comparison. *Conserv Biol.* 16(1):232–237.
983. Karesh W, Cook RA. 2005. The human-animal link. *Foreign Affairs* 84(4):38–50.
984. Bell D, Robertson S, Hunter PR. 2004. Animal origins of SARS coronavirus: Possible links with the international trade in small carnivores. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences* 359(1447):1107–14.
985. Chen H, Deng G, Li Z, et al. 2004. The evolution of H5N1 influenza viruses in ducks in southern China. *Proceedings of the National Academy of Sciences of the United States of America* 101(28):10452–7.
986. Jun Y. 2004. Are wild animals safe? *China Daily*, November 12. www.china.org.cn/english/environment/111979.htm.
987. Bray M. 2005. Unhealthy mix of animals, humans. *CNN.com International*. May 9. edition.cnn.com/2005/WORLD/asiapcf/05/03/eyeonchina.virus/.
988. Lynch DJ. 2003. Wild animal markets in China may be breeding SARS. *USA Today*, October 28.
989. Lawrie M. 2004. Animal welfare gains from avian influenza? *Australian Veterinary Journal* 82:135.
990. Brummitt C. 2004. Indonesians enjoy civet-dropping coffee. *USA Today*, January 20. www.usatoday.com/news/offbeat/2004-01-20-civet-coffee_x.htm.
991. Bell D, Robertson S, Hunter PR. 2004. Animal origins of SARS coronavirus: possible links with the international trade in small carnivores. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences* 359(1447):1107–14.
992. Kasper LR. A recipe for shower flower cake. *Scripps Howard News Service*. www.diynetwork.com/diy/lc_beverages/article/0,2041,D1Y_13997_2278719,00.html.
993. Marshall S. 1999. Coffee that satisfies a discerning civet cat is excellent indeed. *Wall Street Journal*, March 17.
994. William J. 2003 The story of civet. *The Pharmaceutical Journal* 271(7280):859–861.
995. Lee PJ, Krilov LR. 2005. When animal viruses attack: SARS and avian influenza. *Pediatric Annals* 34(1):43–52.
996. Mack TM. 2005. The ghost of pandemics past. *Lancet* 365(9468):1370–2.

997. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press).
998. Ming Z. 2004. Humans should shoulder blame for SARS. *China Daily*, October 14. english.people.com.cn/200410/12/eng20041012_159879.html.
999. Bell D, Robertson S, Hunter PR. 2004. Animal origins of SARS coronavirus: possible links with the international trade in small carnivores. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences* 359(1447):1107–14.
1000. Karesh WB, Cook RA, Bennett EL, Newcomb J. 2005. Wildlife trade and global disease. *Emerging Infectious Diseases* 11(7). www.cdc.gov/ncidod/EID/vol11no07/05-0194.htm.
1001. Gilbert M, Wint W, Slingenbergh J. 2004. The ecology of highly pathogenic avian influenza in East and South-east Asia: outbreaks distribution, risk factors and policy implications. Consultancy report for the Animal Health Service of the Animal Production and Health Division of the Food and Agriculture Organization of the United Nations, Rome, Italy, August.
1002. Nuwer R. 2020 Feb 19. To prevent next coronavirus, stop the wildlife trade, conservationists say. *New York Times*. [accessed 2020 Apr 18]; <https://www.nytimes.com/2020/02/19/health/coronavirus-animals-markets.html>.
1003. Cook RA. 2005. Emerging diseases at the interface of people, domestic animals, and wildlife. The role of wildlife in our understanding of highly pathogenic avian influenza. *Yale J Biol Med*. 78(5):339–349.
1004. Brown C. 2004. Emerging zoonoses and pathogens of public health significance—an overview. *Revue Scientifique et Technique* 23:435–42.
1005. Lee PJ, Krilov LR. 2005. When animal viruses attack: SARS and avian influenza. *Pediatric Annals* 34(1):43–52.
1006. Shields DA, Mathews KH Jr. 2003. Interstate livestock movements. USDA Economic Research Service: Electronic Outlook Report from the Economic Research Service, June. usda.mannlib.cornell.edu/reports/erssor/livestock/ldp-mbb/2003/ldp-m108-01.pdf.
1007. Wilson TM, Gregg DA, King DJ, et al. 2001. Agroterrorism, biological crimes, and biowarfare targeting animal agriculture: the clinical, pathological, diagnostic, and epidemiologic features of some important animal diseases. *Clinics in Laboratory Medicine* 21:549–91.
1008. Transport of Livestock. 2001. In: Chambers PG, Grandin T, Guidelines for Humane Handling, Transport and Slaughter of Livestock (Bangkok, Thailand: Food and Agriculture Organization of the United Nations). www.fao.org/DOCREP/003/X6909E/x6909e08.htm.
1009. Scientific Committee on Animal Health and Animal Welfare. 2004. The welfare of animals during transport (details for horses, pigs, sheep and cattle).

For the European Commission. europa.eu.int/comm/food/fs/sc/scah/out71_en.pdf.

1010. Storz J, Lin X, Purdy CW, et al. 2000. Coronavirus and pasteurilla infections in bovine shipping fever pneumonia and Evans' criteria for causation. *Journal of Clinical Microbiology* 38(9):3291–8. jcm.asm.org/cgi/content/full/38/9/3291.

1011. Pfizer, Inc. 2004. Bovine respiratory disease. Pharmacia Animal Health, Beef Health Management. www.excel.com/Health.asp?country=UK&lang=EN&species=BF&drug=EP&index=601&view=print.

1012. Scientific Committee on Animal Health and Animal Welfare. 2004. The welfare of animals during transport (details for horses, pigs, sheep and cattle). For the European Commission. europa.eu.int/comm/food/fs/sc/scah/out71_en.pdf.

1013. Scientific Committee on Animal Health and Animal Welfare. 2004. The welfare of animals during transport (details for horses, pigs, sheep and cattle). For the European Commission. europa.eu.int/comm/food/fs/sc/scah/out71_en.pdf.

1014. Barham AR, Barham BL, Johnson AK, Allen DM, Blanton JR, Miller MF. 2002. Effects of the transportation of beef cattle from the feedyard to the packing plant on prevalence levels of *Escherichia coli* O157 and *Salmonella* ssp. *Journal of Food Protection* 65:280–3.

1015. Marg H, Scholz HC, Arnold T, Rosler U, Hensel A. 2001. Influence of long-time transportation stress on reactivation of *Salmonella typhimurium* DT104 in experimentally infected pigs. *Berliner und Münchener tierärztliche Wochenschrift* 114(9–10):385–8.

1016. European Commission Health and Consumer Protection Directorate General. 2002. The Welfare of Animals During Transport, 14–19 (adopted March 11).

1017. Marg H, Scholz HC, Arnold T, Rosler U, Hensel A. 2001. Influence of long-time transportation stress on reactivation of *Salmonella Typhimurium* DT 104 in experimentally infected pigs. *Berliner und Münchener tierärztliche Wochenschrift*. 114:385–8.

1018. Food and Agriculture Organization of the United Nations. 1998. Europe vulnerable to livestock epidemics, warning delivered at FAO press conference. FAO News and Highlights, February 17. www.fao.org/news/1998/980204-e.htm.

1019. U.S. Department of Agriculture, Animal and Plant Health Inspection Service Centers for Epidemiology and Animal Health. 1994. Foot and Mouth Disease: sources of outbreaks and hazard categorization of modes of virus transmission. December.

1020. World Organization for Animal Health. 2001. OIE/FAO International Scientific Conference on foot and mouth disease. April 17–18. www.oie.int/eng/press/a_010418.htm.

1021. Food and Agriculture Organization of the United Nations. 2002. Improved animal health for poverty reduction and sustainable livelihoods. FAO Animal Production and Health Paper. www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/Y3542E/Y3542E00.HTM.

1022. Federation of Veterinarians of Europe. 2001. Transport of live animals: FVE Position Paper. May 18. www.fve.org/papers/pdf./aw/position_papers/01_043.pdf.

1023. Kohnen A. 2000. Responding to the threat of agroterrorism: specific recommendations for the U.S. Department of Agriculture. BCSIA Discussion Paper 2000-29, ESDP Discussion Paper ESDP-2000-04 (John F. Kennedy School of Government, Harvard University).

1024. United States Government Accountability Office. 2005. Homeland Security: Much is being done to protect agriculture from a terrorist attack, but important challenges remain. Report to Congressional Requesters. March. www.gao.gov/new.items/d05214.pdf.

1025. Chalk P. 2004. Hitting America's soft underbelly: the potential threat of deliberate biological attacks against the U.S. agricultural and food industry. Prepared for the Office of the Secretary of Defense. National Defense Research Institute, RAND Corporation. www.rand.org/pubs/monographs/2004/RAND_MG135.pdf.

1026. Ishmael W. 2003. A soft underbelly. Beef, July 1, p. 11. beef-mag.com/mag/beef_soft_underbelly/index.html.

1027. Chalk P. 2004. Hitting America's soft underbelly: the potential threat of deliberate biological attacks against the U.S. agricultural and food industry. Prepared for the Office of the Secretary of Defense. National Defense Research Institute, RAND Corporation. www.rand.org/pubs/monographs/2004/RAND_MG135.pdf.

1028. National Agricultural Statistics Service, USDA. 2017. Table 18. Cattle and calves—number sold per farm by sales: 2017. 2017 Census of Agriculture—United States Data. [accessed 2020 Apr 6]; https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/st99_1_0017_0019.pdf.

1029. National Agricultural Statistics Service, USDA. 2017. Table 30. Poultry—inventory and number sold: 2017 and 2012. 2017 Census of Agriculture—United States Data. [accessed 2020 Apr 6]; https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/st99_1_0030_0031.pdf.

1030. Chalk P. 2004. Hitting America's soft underbelly: the potential threat of deliberate biological attacks against the U.S. agricultural and food industry. Prepared for the Office of the Secretary of Defense. National Defense Research Institute, RAND Corporation. www.rand.org/pubs/monographs/2004/RAND_MG135.pdf.

1031. Chalk P. 2004. Hitting America's soft underbelly: the potential threat of deliberate biological attacks against the U.S. agricultural and food industry. Prepared for the Office of the Secretary of Defense. National Defense Research Institute, RAND Corporation. www.rand.org/pubs/monographs/2004/RAND_MG135.pdf.

1032. Chalk P. 2004. Hitting America's soft underbelly: the potential threat of deliberate biological attacks against the U.S. agricultural and food industry. Prepared for the Office of the Secretary of Defense. National Defense Research Institute, RAND Corporation. www.rand.org/pubs/monographs/2004/RAND_MG135.pdf.

1033. Watts G. 2005. Harnessing Mother Nature against your fellow humans. *British Medical Journal* 331:1228.

1034. Avasthi A. 2004. Bush-meat trade breeds new HIV. *New Scientist*, August. www.newscientist.com/article.ns?id=dn6239.

1035. Wyler LS, Sheikh PA. 2013. International illegal trade in wildlife: threats and U.S. policy. Congressional Research Service. July 23. [accessed 2020 Apr 14]; <https://fas.org/sgp/crs/misc/RL34395.pdf>.

1036. Weinhold B. 2004. Infectious disease: the human costs of out environmental errors. *Environmental Health Perspectives* 112(1):A32–9. www.ehponline.org/docs/2004/112-1/focus-abs.html.

1037. Marchione M. 2003. Globetrotting boosts exotic diseases. *Milwaukee Journal Sentinel*, June 15, p. 1. www.findarticles.com/p/articles/mi_qn4196/is_20030615/ai_n10879847.

1038. Marchione M. 2003. Tighter rules sought on exotic pets after trade, risks increase. *Milwaukee Journal Sentinel*, August 6.

1039. Marchione M. 2003. Globetrotting boosts exotic diseases. *Milwaukee Journal Sentinel*, June 15, p. 1. www.findarticles.com/p/articles/mi_qn4196/is_20030615/ai_n10879847.

1040. Lashley FR. 2004. Emerging infectious diseases: vulnerabilities, contributing factors and approaches. *Expert Review of Anti-infective Therapy* 2(2):299–316.

1041. Marchione M. 2003. Globetrotting boosts exotic diseases. *Milwaukee Journal Sentinel*, June 15, p. 1. www.findarticles.com/p/articles/mi_qn4196/is_20030615/ai_n10879847.

1042. Avasthi A. 2004. Bush-meat trade breeds new HIV. *New Scientist*, August. www.newscientist.com/article.ns?id=dn6239.
1043. Marchione M. 2003. Globetrotting boosts exotic diseases. *Milwaukee Journal Sentinel*, June 15, p. 1. www.findarticles.com/p/articles/mi_qn4196/is_20030615/ai_n10879847.
1044. Centers for Disease Control and Prevention. 2003. What you should know about monkeypox. June 12. cdc.gov/ncidod/monkeypox/factsheet2.htm.
1045. Antia R, Regoes RR, Koella JC, Bergstrom CT. 2003. The role of evolution in the emergence of infectious diseases. *Nature* 426(6967):658–61.
1046. Centers for Disease Control and Prevention. 2003. Update: multistate outbreak of monkeypox—Illinois, Indiana, Kansas, Missouri, Ohio, and Wisconsin. *Morbidity and Mortality Weekly Report* 52(27):642–46. cdc.gov/mmwr/preview/mmwrhtml/mm5227a5.htm.
1047. Shoichet CE. 2003. Global travel fans disease. *Atlanta Journal and Constitution*, July 21, p. 1A.
1048. Fritsch P. 2003. Containing the outbreak: scientists search for human hand behind outbreak of jungle virus. *Wall Street Journal*, June 19.
1049. Johnson RT. 2003. Emerging viral infections of the nervous system. *Journal of NeuroVirology* 9:140–7.
1050. McCormack JG. 2005. Hendra and Nipah viruses: New zoonotically-acquired human pathogens. *Respiratory Care Clinics of North America* 11(1):59–66.
1051. Cowley G, Underwood A. 2003. How progress makes us sick. *Newsweek*, May 5, p. 33.
1052. Mohd Nor MN, Gan CH, Ong BL. 2000. Nipah virus infection of pigs in peninsular Malaysia. *Revue scientifique et technique* 19(1):160–5.
1053. Ng FKS. 1999. Hendra-like (NIPAH) virus: Malaysia epidemic. Pighealth.com. Pighealth.com/News99/NIPAH.HTM.
1054. Uppal PK. 2000. Emergence of Nipah virus in Malaysia. *Annals of the New York Academy of Sciences* 916:354–7. www.blackwell-synergy.com/doi/abs/10.1111/j.1749-6632.2000.tb05312.x.
1055. Uppal PK. 2000. Emergence of Nipah virus in Malaysia. *Annals of the New York Academy of Sciences* 916:354–7. www.blackwell-synergy.com/doi/abs/10.1111/j.1749-6632.2000.tb05312.x.
1056. Mohd Nor MN, Gan CH, Ong BL. 2000. Nipah virus infection of pigs in peninsular Malaysia. *Revue scientifique et technique* 19(1):160–5.

1057. Smith S. 2003. Crossing the species barrier from AIDS to Ebola: Our most deadly diseases have made the leap from animals to humans. *Boston Globe*, April 29, p. C1.
1058. Specter M. 2005. Nature's bioterrorist. *New Yorker*, February 28, pp. 52–61.
1059. Central Intelligence Agency. 2006. World Factbook. Malaysia. cia.gov/cia/publications/factbook/geos/my.html.
1060. Smith S. 2003. Crossing the species barrier from AIDS to Ebola: Our most deadly diseases have made the leap from animals to humans. *Boston Globe*, April 29, p. C1.
1061. Lam S-K. 2003. Nipah virus—a potential agent of bioterrorism? *Antiviral Research* 57(1–2):113–9.
1062. Fritsch P. 2003. Containing the outbreak: scientists search for human hand behind outbreak of jungle virus. *Wall Street Journal*, June 19.
1063. Wong KT, Shieh WJ, Zaki SR, Tan CT. 2002. Nipah virus infection, an emerging paramyxoviral zoonosis. *Springer Seminars in Immunopathology* 24:215–28.
1064. Wong SC, Ooi MH, Wong MNL, Tio PH, Solomon T, Cardoso MJ. 2001. Late presentation of Nipah virus encephalitis and kinetics of the humoral immune response. *Journal of Neurology, Neurosurgery and Psychiatry* 71:552–4.
1065. Harcourt BH, Lowe L, Tamin A, et al. 2004. Genetic characterization of Nipah virus, Bangladesh, 2004. Centers for Disease Control and Prevention, *Emerging Infectious Diseases* 11(10). www.cdc.gov/ncidod/EID/vol11no10/05-0513.htm.
1066. Afelt A, Frutos R, Devaux C. 2018. Bats, coronaviruses, and deforestation: toward the emergence of novel infectious diseases? *Front Microbiol.* 9:702. <https://doi.org/10.3389/fmicb.2018.00702>.
1067. Fritsch P. 2003. Containing the outbreak: scientists search for human hand behind outbreak of jungle virus. *Wall Street Journal*, June 19.
1068. Ludwig B, Kraus FB, Allwinn R, Doerr HW, Preiser W. 2003. Viral zoonoses—a threat under control? *Intervirology* 46:71–8.
1069. U.S. Central Intelligence Agency. 2006. Malaysia. *CIA World Fact Book*. March 29. cia.gov/cia/publications/factbook/geos/my.html.
1070. Newman SH, Epstein JH, Schloegel LM. 2005. The nature of emerging zoonotic diseases: Ecology, prediction, and prevention. *Medical Laboratory Observer*. 37(7):10(9).

1071. Ai SY. 2000. Profile of a virus. Jabatan Perkhidmatan Haiwan, Department of Veterinary Services. agrolink.moa.my/jph/dvs/nipah/star000410/nipah-profile.html.
1072. Nierenberg D. 2005. Happier Meals: Rethinking the Global Meat Industry. Worldwatch Paper 171, September. www.worldwatch.org/pubs/paper/171/.
1073. RaboBank International 2003. China's meat industry overview. Food and Agribusiness Research. May. www.rabobank.com/Images/rabobank_publication_china_meat_2003_tcm25-139.pdf.
1074. Gosline A. 2005. Mysterious disease outbreak in China baffles WHO. Newscientist.com. July. www.newscientist.com/article.ns?id=dn7740.
1075. Streptococcus suis infection. Merk Veterinary Manual. merckvetmanual.com/mvm/index.jsp?cfile=htm/bc/54302.htm&word=Strep%2csuis.
1076. Huang YT, Teng LJ, Ho SW, Hsueh PR. 2005. Streptococcus suis infection. Journal of Microbiology, Immunology and Infection 38:306–13. jmii.org/content/abstracts/v38n5p306.php.
1077. Gosline A. 2005. Mysterious disease outbreak in China baffles WHO. Newscientist.com. July. www.newscientist.com/article.ns?id=dn7740.
1078. Altman LK. 2005. Pig disease in China worries UN. New York Times, August 5. iht.com/bin/print_ipub.php?file=/articles/2005/08/05/news/pig.php.
1079. Nolan T. 2005. 40 people die from pig-borne bacteria. AM radio transcript. www.abc.net.au/am/content/2005/s1441324.htm.
1080. World Health Organization. 2005. Streptococcus suis fact sheet. wpro.who.int/media_centre/fact_sheets/fs_20050802.htm.
1081. U.S. Department of Agriculture, Veterinary Services, Center for Emerging Issues. 2005. Streptococcus suis outbreak, swine and human, China: Emerging disease notice. www.aphis.usda.gov/vs/ceah/cei/taf/emergingdiseasenotice_files/strep_suis_china.htm.
1082. 2005. China drafts, revises laws to safeguard animal welfare. China View, November 4. news.xinhuanet.com/english/2005-11/04/content_3729580.htm.
1083. Du W. 2005. Streptococcus suis, (S. suis) pork production and safety. Ontario Ministry of Agriculture, Food and Rural Affairs. www.omafr.gov.on.ca/english/livestock/swine/news/novdec05a5.htm.
1084. Nierenberg D. 2005. Happier Meals: Rethinking the Global Meat Industry. Worldwatch Paper 171, September. www.worldwatch.org/pubs/paper/171/.
1085. Arends JP, Hartwig N, Rudolphy M, Zanen HC. 1984. Carrier rate of Streptococcus suis capsular type 2 in palatine tonsils of slaughtered pigs. Journal of Clinical Microbiology 20(5):945–947.

1086. FAOSTAT Database. 2005. Agricultural data. faostat.fao.org/faostat/collections?version=ext&hasbulk=0&subset=agriculture.
1087. Du W. 2005. Streptococcus suis, (S. suis) pork production and safety. Ontario Ministry of Agriculture, Food and Rural Affairs. www.omafra.gov.on.ca/english/livestock/swine/news/novdec05a5.htm.
1088. Gottschalk M. 2004. Porcine Streptococcus suis strains as potential sources of infections in humans: an underdiagnosed problem in North America? Journal of Swine Health and Production 12(4):197–9.
1089. Cole D, Todd L, Wing S. 2000. Concentrated swine feeding operations and public health: a review of occupational and community health effects. Environmental Health Perspectives 108:685–99.
1090. World Health Organization. 2005. Streptococcus suis fact sheet. www.pro.who.int/media_centre/fact_sheets/fs_20050802.htm.
1091. Du W. 2005. Streptococcus suis, (S. suis) pork production and safety. Ontario Ministry of Agriculture, Food and Rural Affairs. www.omafra.gov.on.ca/english/livestock/swine/news/novdec05a5.htm.
1092. MacKenzie D. 1998. This little piggy fell ill. New Scientist, September 12, p. 1818.
1093. Meredith M. 2004. Zoonotic disease risks—2004 update. American Association of Swine Veterinarians. October 1. www.aasv.org/news/story.php?id=1221.
1094. McMichael AJ. 2004. Environmental and social influences on emerging infectious diseases: Past, present, and future. Philosophical Transactions of the Royal Society of London 359:1049–58.
1095. World Health Organization, Food and Agricultural Organization of the United Nations, and World Organization for Animal Health. 2004. Report of the WHO/FAO/OIE joint consultation on emerging zoonotic diseases. At whqlibdoc.who.int/hq/2004/WHO_CDS_CPE_ZFK_2004.9.pdf.
1096. Pappaioanou M. 2004. Veterinary medicine protecting and promoting the public's health and well-being. Preventive Veterinary Medicine 62:153–63.
1097. Krushinskie EA. 2006. Preparedness for an HPAI outbreak. Avian Influenza: dealing with the challenge. Watt, January 10. bulldogsolutions.net/WattPublishing/WPC01102006/frnEventDescription.aspx.
1098. 2005. Top U.S. broiler producing companies mid-2005. Feedstuffs, September 14, p. 5.
1099. United Egg Producers Certified. 2004. Industry history. www.uepcertified.com/industryhistory.html.

1100. Lymbery P. 2002. Laid Bare: The Case Against Enriched Cages in Europe (Hampshire, UK: Compassion in World Farming Trust). www.ciwf.org.uk/publications/reports/laid_bare_2002.pdf.

1101. United Egg Producers. 2017. Animal husbandry guidelines for U.S. egg-laying flocks. United Egg Producers. [accessed 2020 Apr 14];Error! Hyperlink reference not valid. https://uepcertified.com/wp-content/uploads/2020/02/Caged-UEP-Guidelines_17.pdf.

1102. Mench JA. 2002. Consumer voices, dollars are changing animal welfare standards. UC Davis Sustainable Agriculture Newsletter 14(2). sarep.ucdavis.edu/newsltr/v14n2/sa-1.htm

1103. Nierenberg D. 2005. Happier Meals: Rethinking the Global Meat Industry. Worldwatch Paper 171, September. www.worldwatch.org/pubs/paper/171/.

1104. Torrey EF, Yolken RH. 2005. Beasts of the Earth: Animals, Humans, and Disease (New Brunswick, NJ: Rutgers University Press).

1105. Photo credit: Compassion Over Killing.

1106. Brown C. 2000. Emerging infectious diseases of animals: an overview. In: Brown C, Bolin C (eds.), Emerging Diseases of Animals (Washington, DC: ASM Press, pp. 1–12).

1107. Kazmin A. 2004. Greater livestock density blamed for disease rise. Financial Times, January 28, p. 12.

1108. Delgado CL, Narrod CA, Tiongco MM. 2003. Policy, technical, and environmental determinants and implications of the scaling-up of livestock production in four fast-growing developing countries: a synthesis. Submitted to the Food and Agricultural Organization of the United Nations by the International Food Policy Research Institute. July 24. www.fao.org/WAIRDOCS/LEAD/x6170e/x6170e00.htm.

1109. Food and Agriculture Organization of the United Nations. 2006. FAO-STAT data. faostat.fao.org/faostat/collections?version=ext&hasbulk=0&subset=agriculture.

1110. Industry-funded organizations. Sourcewatch.org. www.sourcewatch.org/index.php?title=Industry-funded_organizations.

1111. Council for Agricultural Science and Technology 2005. Global risks of infectious animal diseases. Issue Paper no. 28. www.cvmbs.colostate.edu/aphi/aphiweb/PDFs/Global%20Risks%20of%20Infectious%20Animal%20Diseases%20FINAL.pdf.

1112. Tilman D, Cassman KG, Matson PA, Naylor R, Polasky S. 2002. Agricultural sustainability and intensive production practices. *Nature* 418:671–7.

1113. Delgado CL, Narrod CA. 2003. Policy, technical, and environmental determinants and implications of the scaling-up of livestock production in four

fast-growing developing countries: a synthesis. International Food Policy Research Institute report. fao.org/WAIRDOCS/LEAD/X6170E/x6170e00.htm#Contents.

1114. Ferrari J. 1997. Fierce creatures. *The Australian*, December 10, p. 19.

1115. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1116. Tauxe RV. 2002. Emerging foodborne pathogens. *International Journal of Food Microbiology* 78:31–41.

1117. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1118. Galvin J. 2005. The worst jobs in science—manure inspector. *Popular Science*, February 27. www.popsci.com/popsci/science/806ffb24a5f27010vgnvcm1000004eeebccdrd/9.html.

1119. Purdue Research Foundation. 2001. Beef and dairy cows. *Livestock Manure Handling on the Farm*. danpatch.ecn.purdue.edu/~epados/farmstead/yards/src/cattle.htm.

1120. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1121. Potter ME, Tauxe RV. 1997. Epidemiology of foodborne disease: tools and applications. *World Health Organization Mediterranean Zoonoses Control, Information Circular* (48):8. www.mzcp-zoonoses.gr/pdf/en/circ_48.pdf.

1122. Ministry of Agriculture, Fisheries, and Food. 1998. A review of antimicrobial resistance in the food chain. A technical report for the UK Ministry of Agriculture, Fisheries, and Food, July.

1123. Muir WM, Aggrey SE. 2003. Introductory editorial: Breeding for disease resistance in its evolutionary context in *Poultry Genetics, Breeding and Biotechnology* (Oxfordshire, UK: CAB International, pp. ix–xiv).

1124. Riemenschneider CH. 2005. Avian influenza and other transboundary animal diseases. *Health in Foreign Policy Forum 2005*, Academy Health, Washington, DC, February 4. www.academyhealth.org/NHPC/foreignpolicy/2005/agenda.htm.

1125. Tilman D, Cassman KG, Matson PA, Naylor R, Polasky S. 2002. Agricultural sustainability and intensive production practices. *Nature* 418:671–7.

1126. Agricultural Research Service. 2002. *USDA Stakeholder Workshop for Animal Agriculture. Goal 3: Protect Animal Health* (Washington, DC: U.S. Department of Agriculture). www.ars.usda.gov/docs.htm?docid=1083&page=6.

1127. Murphy FA. 1999. Emerging zoonoses. *Emerging Infectious Diseases* 4(3):429–35.

1128. Franco DA. 2003. Livestock development in developing countries. *Render Magazine*, December.
1129. Das P. 2002. Interview: Michael Osterholm—medical detective to fighting bioterrorism. *Lancet Infectious Diseases* 2:502–5.
1130. Delgado CL, Narrod CA, Tionoco MM. 2003. Policy, technical, and environmental determinants and implications of the scaling-up of livestock production in four fast-growing developing countries: a synthesis. Submitted to the Food and Agricultural Organization of the United Nations by the International Food Policy Research Institute. July 24. www.fao.org/WAIRDOCS/LEAD/x6170e/x6170e00.htm.
1131. Agricultural Research Service. 2006. Animal health national action plan (Washington, DC: U.S. Department of Agriculture). February 6. www.ars.usda.gov/research/programs/programs.htm?np_code=103&docid=820.
1132. Peters CJ. 2002. Hurrying toward disaster? Perspectives in Health: Magazine of the Pan American Health Organization 7(1).
1133. Puvadolpirod S, Thaxton JP. 2000. Model of physiological stress in chickens 1. Response parameters. *Poultry Science* 79:363–9.
1134. Battaglia RA. 2001. Handbook of Livestock Management, 3rd Edition (Weimar, Texas: Culinary and Hospitality Industry Publications Services).
1135. Cameron RDA. 2000. Food and Agricultural Organization of the United Nations, Animal Production and Health Commission for Asia and the Pacific. A review of the industrialization of pig production worldwide with particular reference to the Asian region. May. aphca.org/publications/files/pig_awi_oz/pig_awi_oz.pdf.
1136. Liang AP. 2002. Current state of foodborne illness. Conference for Food Safety Education. Orlando, FL, September 27. fsis.usda.gov/Orlando2002/presentations/aliang/aliang.pdf.
1137. Liang AP. 2002. Current state of foodborne illness. Conference for Food Safety Education. Orlando, FL, September 27. fsis.usda.gov/Orlando2002/presentations/aliang/aliang.pdf.
1138. Cookson C. 1993. Bugs that come to plague us: the renewed war against disease. *Financial Times* (London, UK), August 21.
1139. Galvin J. 2005. The worst jobs in science—manure inspector. *Popular Science*, February 27. www.popsci.com/popsci/science/806ffb24a5f27010vgnvcm1000004eebcccdrd/9.html.
1140. Cole D, Todd L, Wing S. 2000. Concentrated swine feeding operations and public health: a review of occupational and community health effects. *Environmental Health Perspectives* 108:685–99.

1141. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1142. Glasgow HB, Burkholder JM, Morton SL, Springer J. 2001. A second species of Ichthyotoxic pfiesteria (dinamoebales, dinophyceae). *Phycologia* 40(3):234–45.
1143. Center for Mathematics and Science Education. 1998. The fuss over pfiesteria. University of North Carolina, Chapel Hill. June 5. unc.edu/depts/cmse/science/pfiesteria.html.
1144. Burkholder JM, Glasgow HB. 1995. Insidious effects of toxic estuarine dinoflagellate on fish survival and human health. *Journal of Toxicology and Environmental Health* 46(4):501–22.
1145. Mahy BWJ, Brown CC. 2000. Emerging zoonoses: crossing the species barrier. *Revue Scientifique et Technique Office International des Epizooties* 19(1):33–40.
1146. Goodman PS. 1999. Who pays for what is thrown away? *Washington Post*, August 3, p.A1. www.washingtonpost.com/wp-srv/local/daily/aug99/chicken3.htm.
1147. Lederberg J, Shope RE, Oaks SC. 1992. *Emerging Infections: Microbial Threats to Health in the United States* (Washington, DC: National Academies Press).
1148. Avens JS. 1987. Overview: Salmonella—what's the problem? Third Poultry Symposium Proceedings: Managing for Profit (Fort Collins, CO: Colorado State University, pp. 119–123).
1149. Delgado C, Rosegrant M, Steinfeld H, Ehui S, Courbois C. 1999. Livestock to 2020: the next food revolution. Food, Agriculture, and the Environment Discussion Paper 28. For the International Food Policy Research Institute, the Food and Agriculture Organization of the United Nations and the International Livestock Research Institute. ifpri.org/2020/dp/dp28.pdf.
1150. Adams M, Motarjemi Y. 1999. *Basic Food Safety for Health Workers* (Geneva, Switzerland: World Health Organization Press).
1151. Tauxe RV. 2002. Emerging foodborne pathogens. *International Journal of Food Microbiology* 78:31–41.
1152. Waltner-Toews D, Lang T. 2000. A new conceptual base for food and agricultural policy: the emerging model of links between agriculture, food, health, environment and society. *Global Change and Human Health* 1:116–30.
1153. Division of Environmental Health, State of Alaska. Food Safety and Sanitation Program: Food Myths. dec.state.ak.us/eh/fss/consumers/food_myths.htm.

1154. Centers for Disease Control and Prevention. 2020. Foodborne germs and illnesses. U.S. Department of Health and Human Services; [last reviewed 2020 Mar 18; accessed 2020 Apr 7]. <https://www.cdc.gov/foodsafety/foodborne-germs.html>.
1155. Tauxe RV. 2002. Emerging foodborne pathogens. *International Journal of Food Microbiology* 78:31–41.
1156. Bjerklie S. 1999. Starting over. *Meat Processing*, March, p. 90.
1157. Adak GT, Meakins SM, Yip H, Lopman BA, O'Brien SJ. 2005. Disease risks from foods, England and Wales, 1996–2000. *Emerging Infectious Diseases* 11(3):365–72.
1158. Adak GT, Meakins SM, Yip H, Lopman BA, O'Brien SJ. 2005. Disease risks from foods, England and Wales, 1996–2000. *Emerging Infectious Diseases* 11(3):365–72.
1159. Ernst RA. 1995. University of California Cooperative Extension, Poultry fact sheet No. 20, June. animalscience.ucdavis.edu/Avian/pfs20.htm.
1160. United Egg Producers. 2002. *Animal Husbandry Guidelines for U.S. Egg Laying Flocks 2002 Edition* (Alpharetta, GA: United Egg Producers).
1161. Dawkins MS, Hardie S. 1989. Space needs of laying hens. *British Poultry Science* 30:413–6.
1162. Fox N. 1997. *Spoiled: The Dangerous Truth about a Food Chain Gone Haywire* (New York, NY: Basic Books, pp. 196–7).
1163. Kite-Powell H. 2004. Down on the farm. raising fish. *Oceanus*, September 21. whoi.edu/oceanus/viewArticle.do?id=2468.
1164. Chapman FA. 1992. Farm-raised channel catfish. Circular 1052, Department of Fisheries and Aquatic Sciences, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. www.edis.ifas.ufl.edu/FA010.
1165. Smith GL, Irving WL, McCauley JW, Rowlands DJ (eds.) 2001. *New Challenges to Health: The Threat of Virus Infection* (Cambridge, UK: Cambridge University Press).
1166. Fisheries Department, FAO. 2000. *The State of the World Fisheries and Aquaculture* (Rome, Italy: Food and Agriculture Organization of the United Nations).
1167. Brown C. 2000. Emerging infectious diseases of animals: an overview. In: Brown C, Bolin C (eds.), *Emerging Diseases of Animals* (Washington, DC: ASM Press, pp. 1–12).
1168. Massicot P. 2005. Boto (Amazon River dolphin). *Animal Info—Information on endangered mammals*. November 2. www.animalinfo.org/species/cetacean/iniageof.htm.

1169. Goh SH, Driedger D, Gillett S, et al. 1998. *Streptococcus iniae*, a human and animal pathogen: Specific identification by the chaperonin 60 gene identification method. *Journal of Clinical Microbiology* 36(7):2164–66.
1170. Weinstein MR, Litt M, Kertesz DA, et al. Invasive infections due to a fish pathogen, *Streptococcus iniae*. *New England Journal of Medicine* 337:589–94.
1171. Weinstein MR, Litt M, Kertesz DA, et al. Invasive infections due to a fish pathogen, *Streptococcus iniae*. *New England Journal of Medicine* 337:589–94.
1172. Lederberg J, Shope RE, Oaks SC. 1992. *Emerging Infections: Microbial Threats to Health in the United States* (Washington, DC: National Academies Press).
1173. Brown C. 2000. Emerging infectious diseases of animals: an overview. In: Brown C, Bolin C (eds.), *Emerging Diseases of Animals* (Washington, DC: ASM Press, pp. 1–12).
1174. Beers MH, Berkow R (eds.), 2005. *Bacterial infections*, *The Merck Manual*, 17th Edition (Rahway, NJ: The Merck Publishing Group). www.merck.com/mrkshared/mmanual/section17/chapter227/227a.jsp.
1175. Centers for Disease Control and Prevention. 2005. Urinary tract infections. National Center for Infectious Diseases/Division of Bacterial and Mycotic Diseases. October 25. www.cdc.gov/ncidod/dbmd/diseaseinfo/urinarytractinfections_t.htm.
1176. Meslin FX, Stöhr K, Heymann D. 2000. Public health implications of emerging zoonoses. *Revue Scientifique et Technique Office International des Epizooties* 19(1):310–7.
1177. National Institutes of Health. 2005. Foodborne diseases. National Institute of Allergy and Infectious Disease fact sheet. February. www.niaid.nih.gov/factsheets/foodbornedis.htm.
1178. Centers for Disease Control and Prevention. 2005. *Escherichia coli* O157:H7. National Center for Infectious Diseases/Division of Bacterial and Mycotic Diseases. October 6. www.cdc.gov/ncidod/dbmd/diseaseinfo/escherichiacoli_g.htm.
1179. Phillips ML. 2005. ExPECTing the worst. *Environmental Health Perspectives* 113(6). <http://www.ehponline.org/docs/2005/113-6/forum.html>.
1180. Schoenl JL, Doyle MP. 1994. Variable colonization of chickens perorally inoculated with *Escherichia coli* O157:H7 and subsequent contamination of eggs. *Applied Environmental Microbiology* 60(8):2958–62.
1181. Jones TF, Schaffner W. 2005. Perspectives on the persistent scourge of foodborne disease. *Journal of Infectious Disease* 205:1029–31.
1182. Liu CM, Stegger M, Aziz M, Johnson TJ, Waits K, Nordstrom L, Gauld L, Weaver B, Rolland D, Statham S, et al. 2018. *Escherichia coli* ST131-H22

as a foodborne uropathogen. *mBio*. 9(4):e00470-18. <https://doi.org/10.1128/mBio.00470-18>.

1183. Brownlee C. 2005. Beef about UTIs. *Science News*, January 15.

1184. Slifko TR, Smith HV, Rose JB. 2000. Emerging parasite zoonoses associated with water and food. *International Journal for Parasitology* 30:1379–93.

1185. Mayer JD. 2000. Geography, ecology and emerging infectious diseases. *Social Science and Medicine* 50:937–52.

1186. Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. 2002. Alfalfa sprouts—Arizona, California, Colorado, and New Mexico, February–April 2001. *Journal of the American Medical Association* 287(5):581–2. jama.ama-assn.org/cgi/content/full/287/5/581.

1187. U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition. 2005. Public Meeting: 2005 Sprout safety. May 17. www.cfsan.fda.gov/~dms/sprotran.html.

1188. Taormina PJ, Beuchat LR, Slutsker L. Infections associated with eating seed sprouts: an international concern. *Emerging Infectious Diseases* 5(5). www.cdc.gov/ncidod/eid/vol5no5/taormina.htm.

1189. Taormina PJ, Beuchat LR, Slutsker L. Infections associated with eating seed sprouts: an international concern. *Emerging Infectious Diseases* 5(5). www.cdc.gov/ncidod/eid/vol5no5/taormina.htm.

1190. Beuchat LR, Ryu J-H. 1997. Produce handling and processing practices. *Emerging Infectious Diseases* 3(4). www.cdc.gov/ncidod/eid/vol3no4/beuchat.htm.

1191. Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. 2002. Alfalfa sprouts—Arizona, California, Colorado, and New Mexico, February–April 2001. *Journal of the American Medical Association* 287(5):581–2. jama.ama-assn.org/cgi/content/full/287/5/581.

1192. U.S. Food and Drug Administration. 2018. What you need to know about egg safety. Washington(DC): FDA; [last reviewed 2018 Mar 28; accessed 2020 Apr 6]. <https://www.fda.gov/food/buy-store-serve-safe-food/what-you-need-know-about-egg-safety>.

1193. McDowell RM, McElvaine MD. 1997. Long-term sequelae to foodborne disease. *Revue Scientifique et Technique* 16(2):337–41.

1194. U.S. Food and Drug Administration. 2017. 2015 NARMS integrated report. FDA, CDC, USDA; [accessed 2020 Apr 8]. <https://www.fda.gov/media/108304/download>.

1195. McDowell RM, McElvaine MD. 1997. Long-term sequelae to foodborne disease. *Revue Scientifique et Technique* 16(2):337–41.

1196. Tauxe RV. 2002. Emerging foodborne pathogens. *International Journal of Food Microbiology* 78:31–41.
1197. Liang AP. 2002. Current state of foodborne illness. Conference for Food Safety Education. Orlando, FL, September 27. fsis.usda.gov/Orlando2002/presentations/aliang/aliang.pdf.
1198. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
1199. Lecuit M, Abachin R, Martin A, et al. 2004. Immunoproliferative small intestinal disease associated with campylobacter jejuni. *New England Journal of Medicine* 350:239–48.
1200. U.S. Department of Agriculture. 1991. Campylobacter questions and answers. Food Safety and Inspection Service Background Document. www.fsis.usda.gov/Frame/FrameRedirect.asp?main=www.fsis.usda.gov/OA/background/campy_qa.htm.
1201. Linden J. 2005. Campylobacter gradually reveals its secrets. *Poultry International*, December.
1202. Hingley A. 1999. Campylobacter: low-profile bug is food poisoning leader. FDA Consumer, September-October. www.fda.gov/fdac/features/1999/599_bug.html.
1203. McNamara TS. 2002. Diagnosis and control of zoonotic infections: pathology and early recognition of zoonotic disease outbreaks. In: *The Emergence of Zoonotic Diseases: Understanding the Impact on Animal and Human Health—Workshop Summary* (Washington, DC: National Academies Press, p. 126).
1204. Cools I, Uyttendaele M, Cerpentier J, D'Haese E, Nelis HJ, Debevere J. 2005. Persistence of Campylobacter jejuni on surfaces in a processing environment and on cutting boards. *Letters in Applied Microbiology* 40:418–23.
1205. Frontline. Modern meat: what is HACCP? WGBH Educational Foundation. www.pbs.org/wgbh/pages/frontline/shows/meat/evaluating/haccp.html.
1206. Mattera P. 2004. USDA Inc.: How agribusiness has hijacked regulatory policy at the U.S. Department of Agriculture. Corporate Research Project of Good Jobs First. July 23. www.agribusinessaccountability.org/pdf.s//289_USDA%20Inc.pdf.
1207. 1998. Industry Forum. Meat and Poultry, March.
1208. Moore T. 2002. Largest meat recall in USDA history: Wampler Foods recall expands to 27 million pounds. Associated Press, October 12.
1209. United States Government Accountability Office. 2004. Food safety: USDA and FDA need to better ensure prompt and complete recalls of potentially unsafe food. Report to Congressional Requesters. www.gao.gov/new.items/d0551.pdf.

1210. Leonard R. 1999. Food Safety mismanagement puts consumer health at risk. *Nutrition Week*, April 16, pp. 4–5.
1211. Linden J. 2005. *Campylobacter* gradually reveal its secrets. *Poultry International*, December.
1212. Center for Science in the Public interest. 1999. Regulatory Comments and Petitions. Re: Docket No. 97P-076P. April 26. cspinet.org/foodsafety/ir-radiation_usda.html.
1213. 1995. Superglue advocated for preventing fecal leakage in poultry. *Food Chemical News*, April 24, p. 12.
1214. DeWaal CS. 1996. Playing chicken: the human cost of inadequate regulation of the poultry industry. March. cspinet.org/reports/polit.html.
1215. Drummer R. 1995. Pacer backing new use for glue. *Inland Valley Daily Bulletin*, May 16.
1216. Phua K, Lee LK. 2005. Meeting the challenges of epidemic infectious disease outbreaks: an agenda for research. *Journal of Public Health Policy* 26:122–32.
1217. Stapp K. 2004. Scientists warn of fast-spreading global viruses. *IPS-Inter Press Service*, February 23.
1218. Lawrence J, Otto D. 2006. Economic importance of Montana's cattle industry. Cattleman's Beef Board and National Cattleman's Beef Association. www.beef.org/NEWSECONOMICIMPORTANCEOFMONTANASCATTLE-INDUSTRY2711.aspx.
1219. Rampton S, Stauber J. 1997. *Mad Cow USA* (Monroe, ME: Common Courage Press).
1220. Satchell M, Hedges SJ. 1997. The next bad beef scandal? Cattle feed now contains things like manure and dead cats. *U.S. News and World Report*, September 1.
1221. Animal Industry Foundation. 1989. *Animal Agriculture: Myths and Facts* (Arlington, VA: Animal Industry Foundation).
1222. Kimberlin RH. 1992. Human spongiform encephalopathies and BSE. *Medical Laboratory Sciences* 49:216–17.
1223. Ensminger ME. 1990. *Feeds and Nutrition*. (Clovis, CA: Ensminger Publishing Co.).
1224. Flaherty M. 1993. Mad Cow disease dispute U.W. conference poses frightening questions. *Wisconsin State Journal*, September 26, p. 1C.
1225. 1990 Mad, bad and dangerous to eat? *Economist*. February, pp. 89–90.
1226. World Health Organization and Office International des Epizooties. 1999. *WHO Consultation on Public Health and Animal Transmissible Spongiform*

Encephalopathies: Epidemiology, Risk and Research Requirements. December 1–31.

1227. Collee G. 1993. BSE stocktaking 1993. *Lancet* 342(8874):790–3. www.cyber-dyne.com/~tom/essay_collee.html.

1228. U.S. Department of Agriculture and Animal and Plant Health Inspection Service. 2005. List of USDA-Recognized Animal Health Status of Countries/ Areas Regarding Specific Livestock or Poultry Diseases, April, 12. oars.aphis.usda.gov/NCIE/country.html.

1229. Albert D. 2000. EU meat meal industry wants handout to survive ban. *Reuters World Report*, December 5.

1230. Harrison PJ, Roberts GW. 1992. How now mad cow. *British Medical Journal* 304(6832):929–30.

1231. Harrison PJ, Roberts GW. 1992. How now mad cow. *British Medical Journal* 304(6832):929–30.

1232. Brown P, Liberski PP, Wolff A, Gajdusek DC. 1990. Resistance of scrapie infectivity to steam autoclaving after formaldehyde fixation and limited survival after ashing at 360 degrees C: Practical and theoretical implications. *Journal of Infectious Diseases* 161(3):467–72.

1233. Bentor Y. 2003. Lead. *Chemical Element.com*. www.chemicalelements.com/elements/pb.html.

1234. Harrison PJ, Roberts GW. 1991. “Life, Jim, but not as we know it”: Transmissible dementias and the prion protein. *British Journal of Psychiatry* 158:457–70.

1235. Glanze WD, Anderson KN, Anderson LE (eds.), 1992. *The Mosby Medical Encyclopedia* (New York, NY: C.V. Mosby Company).

1236. Dealler SF, Lacey RW. 1990. Transmissible spongiform encephalopathies. *Food Microbiology* 7:253–79.

1237. Gibbs CJ. 1994. BSE and other spongiform encephalopathies in humans and animals: causative agent, pathogenesis and transmission. *Food Science Seminar Series*, Department of Food Science, Cornell University, December 1.

1238. Smith PG. 2003. The epidemics of bovine spongiform encephalopathy and variant Creutzfeldt-Jakob Disease: current status and future prospects. *Bulletin of the World Health Organization* 81(2):123–30. www.who.int/bulletin/volumes/81/2/en/PHR0203.pdf.

1239. Oxford University Press. 1996. *Oxford Textbook of Medicine* 2:3981.

1240. Ricketts MN. 2004. Public health and the BSE epidemic. *Current Topics in Microbiology and Immunology* 284:49–119.

1241. Brown P, Preece M, Brandel JP, et al. 2000. Iatrogenic Creutzfeldt-Jakob disease at the millennium. *Neurology* 55(8):1075.

1242. Diack AB, Will RG, Manson JC. 2017. Public health risks from sub-clinical variant CJD. *PLoS Pathog.* 13(11):e1006642. <https://dx.doi.org/10.1371/journal.ppat.1006642>.
1243. Pearson J. 1998. CJD is “worst form of death”—Dorrell tells BSE probe. *PA News*, November 30.
1244. Northoff E. 2004. BSE controls in many countries are still not sufficient. Food and Agriculture Organization of the United Nations, FAO Newsroom, January 12. www.fao.org/english/newsroom/news/2003/26999-en.html.
1245. Department of Health and Human Services, Food and Drug Administration. 2005. Substances Prohibited from Use in Animal Food or Feed. Proposed Rules, *Federal Register* 70(193):58570-58601, October 6.
1246. Public Citizen. 2001. Letter to the FDA and USDA RE: BSE. April 21. www.citizen.org/print_article.cfm?ID=1562.
1247. Mississippi State University Cooperative Extension Service. 1998. Broiler litter as a feed or fertilizer in livestock operations. msstate.edu/dept/poultry/pub1998.htm.
1248. Food and Drug Administration Sec. 685.100 Recycled Animal Waste (CPG 7126.34). www.fda.gov/ora/compliance_ref/cpg/cpgvet/cpg685-100.html.
1249. Tilman D, Cassman KG, Matson PA, Naylor R, Polasky S. 2002. Agricultural sustainability and intensive production practices. *Nature* 418:671–7.
1250. Fontenot JP, Webb KE Jr., Harmon BW, Tucker RE, Moore WEC. 1971. Studies of processing, nutritional value and palatability of broiler litter for ruminants. In: *Proceedings of the International Symposium on Livestock Wastes* (St. Joseph, Michigan: American Society of Agricultural Engineers, pp. 271–301).
1251. Satchell M, Hedges SJ. 1997. The next bad beef scandal? Cattle feed now contains things like manure and dead cats. *U.S. News and World Report*, September 1.
1252. Fontenot JP. 2001. Utilization of poultry litter as feed for beef cattle. Food and Drug Administration Public Hearing on Animal Feeding Regulation, October 30. www.fda.gov/ohrms/dockets/dailys/01/Nov01/110501/ts00014.doc.
1253. Fontenot JP. 1996. Feeding poultry wastes to cattle. Department of Animal and Poultry Sciences. Virginia Polytechnic Institute. September 18. www.rem.sfu.ca/FRAP/9809.pdf.
1254. McKinley B, Broome M, Oldham L. 2000. Poultry nutrient management through livestock feedstuffs. Mississippi State University Extension Service. msucare.com/pubs/misc/m1146.htm.

1255. Fontenot JP. 1996. Feeding poultry wastes to cattle. Department of Animal and Poultry Sciences. Virginia Polytechnic Institute. September 18. www.rem.sfu.ca/FRAP/9809.pdf.
1256. Fontenot JP, Webb KE Jr., Harmon BW, Tucker RE, Moore WEC. 1971. Studies of processing, nutritional value and palatability of broiler litter for ruminants. In: Proceedings of the International Symposium on Livestock Wastes (St. Joseph, Michigan: American Society of Agricultural Engineers, pp. 271–301).
1257. Kunkle WE, Jacob JP, Tervola RS, Miles RD, Mather FB. 1997. Broiler litter, part 2: feeding to ruminants. Dairy and Poultry Sciences Department, University of Florida Cooperative Extension, fact sheet PS-14. edis.ifas.ufl.edu/pdf/ps/ps00200.pdf.
1258. Fontenot JP. 1996. Feeding poultry wastes to cattle. Department of Animal and Poultry Sciences. Virginia Polytechnic Institute. September 18. www.rem.sfu.ca/FRAP/9809.pdf.
1259. University of Missouri Agriculture Extension. 2001. Feeding poultry litter to beef cattle. Publication G2077, February 15.
1260. University of Missouri Agriculture Extension. 2001. Feeding poultry litter to beef cattle. Publication G2077, February 15.
1261. Mississippi State University Cooperative Extension Service. 1998. Broiler litter as a feed or fertilizer in livestock operations. msstate.edu/dept/poultry/pub1998.htm.
1262. Alabama Cooperative Extension Service. 2001. U.S. policy of feeding “broiler litter” (chicken sh**) to beef cattle. February 19.
1263. Mills B. 1998. Alabama cries “foul.” Beef, January 1. beef-mag.com/mag/beef_alabama_cries_foul/index.html.
1264. Roybal J. 1997. The public sees it as “manure.” Beef, December 1. beef-mag.com/mag/beef_litter_feeding_isnt/index.html.
1265. Price DP. 1998. More on poultry litter. Beef, March 1. beef-mag.com/mag/beef_poultry_litter/.
1266. Mills B. 1998. Alabama cries “foul.” Beef, January 1. beef-mag.com/mag/beef_alabama_cries_foul/index.html.
1267. European Commission. Chronological list of Community legislation. europa.eu.int/comm/food/fs/bse/legislation_en.html.
1268. Evans E. 1996. Agency to ban some feeds to block mad-cow disease. Reuters World Report, May 13.
1269. 1994. AVMA casts doubt on spread of BSE through sheep offal. Food Chemical News, November 28, pp. 42–45.

1270. 1993. BSE/scrapie group share research, debate feed bans. Food Chemical News, July 5 July, pp. 57–59.
1271. Rampton S, Stauber J. 1997. Mad Cow USA (Monroe, ME: Common Courage Press).
1272. 1996. Dangerous food. Burrelle's Information Services, Oprah Winfrey Show, April 16.
1273. 1996. Dangerous food. Burrelle's Information Services, Oprah Winfrey Show, April 16.
1274. U.S. Department of Agriculture, Animal and Plant Health Inspection Service, and Veterinary Services. 1993. Dairy herd management practices focusing on preweaned heifers: April 1991–July 1992. National Dairy Heifer Evaluation Project. nahms.aphis.usda.gov/dairy/ndhep/dr91des1.pdf.
1275. U.S. Department of Agriculture, Animal and Plant Health Inspection Service, and Veterinary Services. 1993. Dairy herd management practices focusing on preweaned heifers: April 1991–July 1992. National Dairy Heifer Evaluation Project. nahms.aphis.usda.gov/dairy/ndhep/dr91des1.pdf.
1276. U.S. Department of Agriculture, Animal and Plant Health Inspection Service, and Veterinary Services. 1993. Dairy herd management practices focusing on preweaned heifers: April 1991–July 1992. National Dairy Heifer Evaluation Project. nahms.aphis.usda.gov/dairy/ndhep/dr91des1.pdf.
1277. Quigley J. 2001. Red blood cell protein in calf milk replacers. Calf Notes 49. calfnotes.com/pdf.files/CN049.pdf.
1278. Quigley J. 2001. Red blood cell protein in calf milk replacers. Calf Notes 49. calfnotes.com/pdf.files/CN049.pdf.
1279. Schlosser E. 2004. The cow jumped over the USDA. New York Times, January 2. organicconsumers.org/madcow/usda1204.cfm.
1280. European Commission Health and Consumer Protection Directorate. 2002. General scientific steering committee opinion on the implications of the recent papers on transmission of BSE by blood. European Commission, September 13. europa.eu.int/comm/food/fs/bse/scientificadvice08en.html.
1281. European Commission Health and Consumer Protection Directorate. 2002. General scientific steering committee opinion on the implications of the recent papers on transmission of BSE by blood. European Commission, September 13. europa.eu.int/comm/food/fs/bse/scientificadvice08en.html.
1282. European Commission Health and Consumer Protection Directorate. 2002. General scientific steering committee opinion on the implications of the recent papers on transmission of BSE by blood. European Commission, September 13. europa.eu.int/comm/food/fs/bse/scientificadvice08en.html.

1283. Milk replacer is up to 15 percent red blood cell protein (Quigley J. Red blood cell protein in calf milk replacers. calfnotes.com/pdf.files/CN049.pdf) and calves drink up to five quarts per day (U.S. Department of Agriculture. 1993. Dairy Herd Management Practices Focusing on Preweaned Heifers, N129.0793. July). cofcs66.aphis.usda.gov/vs/ceah/cahm/DairyCattle/ndhep/dr91des1.pdf.
1284. American Protein Corporation, Inc. 2002. Overview. functionalproteins.com/overview/index.html.
1285. American Protein Corporation, Inc. The basic science behind spray-dried plasma and serum proteins. Series on Plasma and Serum Proteins, Discoveries. www.functionalproteins.com/functional_protos/images/thebasicscience.pdf.
1286. American Protein Corporation, Inc. The basic science behind spray-dried plasma and serum proteins. Series on Plasma and Serum Proteins, Discoveries. www.functionalproteins.com/functional_protos/images/thebasicscience.pdf.
1287. National Renderers Association. Rendered animal products for swine. www.renderers.org/links/swine.htm.
1288. Nobel Foundation. 1976. The 1976 Nobel Prize in Physiology or Medicine. News release, October 14. nobelprize.org/medicine/laureates/1976/press.html.
1289. Gajdusek DC. 1997. NBC Dateline, March 14.
1290. Pearce F. 1996. BSE may lurk in pigs and chickens. New Scientist, April 6, p. 5. www.newscientist.com/article/mg15020240.300.html.
1291. Centers for Epidemiology and Animal Health, USDA: APHIS Based on average 7.9 week weaning period USDA Dairy Herd Management Practices Focusing on Preweaned Heifers N129.0793. July 1993. nahms.aphis.usda.gov/dairy/ndhep/dr91des1.pdf.
1292. American Feed Industry Association. 2001. Testimony of Richard Sellers. In: Government and Industry Programs to Prevent BSE from Entering the U.S. U.S. Senate Subcommittee on Consumer Affairs, April 4. commerce.senate.gov/hearings/0404sel.PDF.
1293. Piper E. 2000. Stop factory farming and end BSE, UK scientists say. Reuters, December 4.
1294. National Cattlemen's Beef Association. 2005. NCBA statement regarding today's USDA announcement. Member eUpdate, June 10. beefusa.org/NEWS-MembereUpdate-June10200522511.aspx.
1295. Drury A. 2003 Critics say U.S. needs to do more to protect against mad cow. Journal News (New York), May 29. tinyurl.com/pclw2.
1296. Coiro A. 2003. Mad cow disease in Canada. Forum. KQED, May 23. www.kqed.org/programs/programarchive.jsp?progID=RD19&ResultStart=1&ResultCount=10&type=radio.

1297. World Health Organization, Food and Agricultural Organization of the United Nations, and World Organization for Animal Health. 2001. Joint WHO/FAO/OIE Technical Consultation on BSE: Public health, animal health and trade. oie.int/eng/publicat/rapports/en_BSE%20WHO-FAO-OIE.htm.

1298. Murphy D. 2003. FDA changes in feed restriction won't reduce BSE risk, industry groups say. Meatingplace.com, January 15.

1299. Matravvers P, Bridgeman J, Ferguson-Smith M. 2000. Report of the BSE Inquiry. www.bseinquiry.gov.uk/report/volume1/execsum2.htm.

1300. Waltner-Toews D. 2002. Veterinary public health. In: Breslow L (ed.), *Encyclopedia of Public Health* (New York, NY: Macmillan Reference, New York). www.idmed.slu.se/VPH/VPH-Waltner-Toews.pdf.

1301. Murphy D. 2003. FDA changes in feed restriction won't reduce BSE risk, industry groups say. Meatingplace.com, January 15.

1302. Walters MJ. 2003. *Six Modern Plagues and How We Are Causing Them* (Washington, DC: Island Press).

1303. Meslin FX, Stöhr K, Heymann D. 2000. Public health implications of emerging zoonoses. *Revue Scientifique et Technique Office International des Epizooties* 19(1):310–7.

1304. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1305. Eisnitz G. 1997. *Slaughterhouse* (New York, NY: Prometheus).

1306. Eisnitz G. 1997. *Slaughterhouse* (New York, NY: Prometheus).

1307. Bjerklie S. 1995. Who really has the world's safest meat supply? *Meat and Poultry*, August.

1308. Bjerklie S. 1995. Who really has the world's safest meat supply? *Meat and Poultry*, August.

1309. U.S. Food and Drug Administration. [date unknown]. What you need to know about egg safety. Washington(DC): FDA; [last reviewed 2018 Mar 28; accessed 2020 Apr 6]. <https://www.fda.gov/food/buy-store-serve-safe-food/what-you-need-know-about-egg-safety>.

1310. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1311. Nestle M. 2003. *Safe Food: Bacteria, Biotechnology, and Bioterrorism* (Berkeley and Los Angeles, California: University of California Press, p. 1).

1312. U.S. Food and Drug Administration. 2017. 2015 NARMS integrated report. FDA, CDC, USDA; [accessed 2020 Apr 8]. <https://www.fda.gov/media/108304/download>.

1313. Burrows M. 2006. More Salmonella is reported in chickens. New York Times, March 8. nytimes.com/2006/03/08/dining/08well.html.
1314. Bjerklie S. 1995. Who really has the world's safest meat supply? Meat and Poultry, August.
1315. Food and Nutrition Board, Institute of Medicine, and Board on Agriculture, National Research Council. 1988. Ensuring Safe Food: From Production to Consumption (Washington, DC: National Academies Press).
1316. United States Government Accountability Office. 2001. Weaknesses in meat and poultry inspection pilot should be addressed before implementation. Report to the Committee on Agriculture, Nutrition, and Forestry, U.S. Senate. December. www.gao.gov/cgi-bin/getrpt?GAO-02-59.
1317. Food and Nutrition Board, Institute of Medicine, and Board on Agriculture, National Research Council. 1988. Ensuring Safe Food: From Production to Consumption (Washington, DC: National Academies Press).
1318. Food Marketing Institute Board of Directors. 1988. Long-Range Priorities for Food Safety (Washington, DC: Food Marketing Institute).
1319. Nestle M. 2003. Safe Food: Bacteria, Biotechnology, and Bioterrorism (Berkeley and Los Angeles, California: University of California Press).
1320. Food Safety and Inspection Service. 2002. Colorado firm recalls beef trim and ground beef products for possible E. coli O157:H7. Recall Release: FSIS-RC-055-2002, July 19. www.fsis.usda.gov/OA/recalls/prelease/pr055-2002.htm.
1321. Carman D. 2002. Just cook the crud out of it. Denver Post, July 25.
1322. Nestle M. 2003. Safe Food: Bacteria, Biotechnology, and Bioterrorism (Berkeley and Los Angeles, California: University of California Press).
1323. Fox N. 1997. Spoiled: The Dangerous Truth about a Food Chain Gone Haywire (New York, NY: Basic Books, p. 344).
1324. Crump JA, Sulka AC, Langer AJ, et al. 2002. An outbreak of Escherichia coli O157:H7 infections among visitors to a dairy farm. New England Journal of Medicine 347:555–60.
1325. Torrey EF, Yolken RH. 2005. Their bugs are worse than their bite. Washington Post, April 3, p. B01.
1326. Raloff J. 1998. Hay! What a way to fight E. coli. Science News Online, September 19. www.sciencenews.org/pages/sn_arc98/9_19_98/food.htm.
1327. Nou X, Rivera-Betancourt M, Bosilevac JM, et al. 2003. Effect of chemical dehairing on the prevalence of Escherichia coli O157:H7 and the levels of aerobic bacteria and Enterobacteriaceae on carcasses in a commercial beef processing plant. Journal of Food Protection 66(11):2005–9. www.ingentaconnect.com/content/iafp/jfp/2003/00000066/00000011/art00006.

1328. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1329. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1330. Office of Technology Assessment. 1979. Drugs in livestock feed: Volume 1 Technical Report (Washington, DC: U.S. Government Printing Office). www.govinfo.library.unt.edu/ota/Ota_5/DATA/1979/7905.PDF.
1331. Office of Technology Assessment. 1979. Drugs in livestock feed: Volume 1 Technical Report (Washington, DC: U.S. Government Printing Office). www.govinfo.library.unt.edu/ota/Ota_5/DATA/1979/7905.PDF.
1332. Cole D, Todd L, Wing S. 2000. Concentrated swine feeding operations and public health: a review of occupational and community health effects. *Environmental Health Perspectives* 108:685–99.
1333. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1334. Wallner-Pendleton E, Dunn P. 2004. Sulfonamide toxicity in poultry. In: 76th Northeastern Conference on Avian Diseases: June 9–11 (State College, Pennsylvania: Department of Veterinary Science, College of Agricultural Sciences, Pennsylvania State University, p. 38). www.vetsci.psu.edu/NECAD/NECADProceedings.pdf.
1335. Anderson AD, McClellan J, Rossiter S, Angulo FJ. 2003. Public health consequences of use of antimicrobial agents in agriculture. In: *The Resistance Phenomenon in Microbes and Infectious Disease Vectors: Implications for Human Health and Strategies for Containment: Workshop Summary* (Washington, DC: National Academies Press, pp. 231–43).
1336. Tilman D, Cassman KG, Matson PA, Naylor R, Polasky S. 2002. Agricultural sustainability and intensive production practices. *Nature* 418:671–7.
1337. Lees W. 2004. Section 5: Disease control actions taken. In: *Comprehensive report on the 2004 outbreak of high pathogenicity avian influenza (H7N3) in the Fraser Valley of British Columbia, Canada, June 30* (Canadian Food Inspection Agency). www.inspection.gc.ca/english/anima/heasan/disemala/avflu/2004rep/5e.shtml.
1338. Tilman D, Cassman KG, Matson PA, Naylor R, Polasky S. 2002. Agricultural sustainability and intensive production practices. *Nature* 418:671–7.
1339. Anderson AD, McClellan J, Rossiter S, Angulo FJ. 2003. Public health consequences of use of antimicrobial agents in agriculture. In: *The Resistance Phenomenon in Microbes and Infectious Disease Vectors: Implications for Human Health and Strategies for Containment: Workshop Summary* (Washington, DC: National Academies Press, pp. 231–43).

1340. Mellon MG, Benbrook C, Benbrook KL. 2001. *Hogging It! Estimates of Antimicrobial Abuse in Livestock* (Cambridge, MA: Union of Concerned Scientists).
1341. U.S. Food and Drug Administration. 2016 Dec. 2015 summary report on antimicrobials sold or distributed for use in food-producing animals. FDA; [accessed 2020 Apr 6]. https://www.fda.gov/files/about_fda/published/2015-Summary-Report-on-Antimicrobials-Sold-or-Distributed-for-Use-in-Food-Producing-Animals.pdf.
1342. U.S. Food and Drug Administration. 2019 Nov 22. NARMS now: integrated data. Rockville(MD): U.S. Department of Health and Human Services; [accessed 2020 Apr 9]. <https://www-aws.fda.gov/animal-veterinary/national-antimicrobial-resistance-monitoring-system/narms-now-integrated-data>.
1343. U.S. Food and Drug Administration. 2017. 2015 NARMS integrated report. FDA, CDC, USDA; [accessed 2020 Apr 8]. <https://www.fda.gov/media/108304/download>.
1344. Thaxton YV. 2006 Mar 16. Chicken industry needs the power of positive PR. Meatingplace.com. meatingplace.com/MembersOnly/webNews/details.aspx?item=15666.
1345. Aitken SL, Dilworth TJ, Heil EL, Nailor MD. 2016. Agricultural applications for antimicrobials. A danger to human health: an official position statement of the Society of Infectious Diseases Pharmacists. *Pharmacotherapy*. 36(4):422–432. <https://doi.org/10.1002/phar.1737>.
1346. U.S. Food and Drug Administration. 2016 Dec. 2015 summary report on antimicrobials sold or distributed for use in food-producing animals. FDA; [accessed 2020 Apr 6]. https://www.fda.gov/files/about_fda/published/2015-Summary-Report-on-Antimicrobials-Sold-or-Distributed-for-Use-in-Food-Producing-Animals.pdf.
1347. Cima G. 2015. Antimicrobial sales outpace meat production: regulators, industry caution that sales may differ from use. *JAVMA*. 246(12):1279–1280.
1348. Watkins RR, Smith TC, Bonomo RA. 2016. On the path to untreatable infections: colistin use in agriculture and the end of 'last resort' antibiotics. *Expert Rev Anti Infect Ther*. 14(9):785–788. <https://doi.org/10.1080/14787210.2016.1216314>.
1349. 1968. A bitter reckoning. *New Scientist*, January 4, pp. 14–5.
1350. Alanis AJ. 2005. Resistance to antibiotics: Are we in the post-antibiotic era? *Archives of Medical Research* 36:697–705.
1351. 1998. EU bans farm antibiotics. BBC News, December 14. news.bbc.co.uk/2/hi/europe/234566.stm.
1352. World Health Organization. 2006. Zoonoses and veterinary public health. www.who.int/emc/diseases/zoo/zoo97_4.html.

1353. American Medical Association House of Delegates Annual Meeting. 2001. Resolution 508: Antimicrobial use and resistance. www.keepantibioticsworking.com/new/resources_library.cfm?refID=36325.

1354. American Public Health Association. 2003. Precautionary Moratorium on new concentrated animal feed operations. apha.org/legislative/policy/policysearch/index.cfm?fuseaction=view&id=1243.

1355. Animal Health Institute. 2004. Does the use of antibiotics in food animals pose a risk to human health? A critical review of published data. ahi.org/antibioticsDebate/documents/Factsheet-JAC1-15.pdf.

1356. United States Government Accountability Office. 2004. Antibiotic resistance: Federal agencies need to better focus efforts to address risk to humans from antibiotic use in animals. Report to Congressional Requesters. www.gao.gov/new.items/d04490.pdf.

1357. National Research Council. 1999. Costs of eliminating subtherapeutic use of antibiotics, chapter 7. In: Committee on Drug Use in Food Animals, Panel on Animal Health, Food Safety, and Public Health, Board on Agriculture, and National Research Council, *The Use of Drugs in Food Animals: Benefits and Risk* (Washington, DC: National Academies Press, p. 179). newton.nap.edu/html/foodanim/.

1358. American College of Physicians. Facts and figures. Emerging antibiotic resistance. acponline.org/ear/factsfigs.htm.

1359. Office of Communications and Public Liaison. 2004. The problem of antibiotic resistance. National Institute of Allergy and Infectious Diseases, National Institutes of Health fact sheet, April. www.niaid.nih.gov/factsheets/antimicro.htm.

1360. Jukes TH. 1973. Public health significance of feeding low levels of antibiotics to animals. *Advances in Applied Microbiology* 16:1–29.

1361. Jukes TH. 1973. Public health significance of feeding low levels of antibiotics to animals. *Advances in Applied Microbiology* 16:1–29.

1362. Public Broadcasting Service. 2002. Antibiotic debate overview. Is your meat safe? Modern meat. Frontline. pbs.org/wgbh/pages/frontline/shows/meat/safe/overview.html.

1363. Anderson AD, McClellan J, Rossiter S, Angulo FJ. 2003. Public health consequences of use of antimicrobial agents in agriculture. In: *The Resistance Phenomenon in Microbes and Infectious Disease Vectors: Implications for Human Health and Strategies for Containment: Workshop Summary* (Washington, DC: National Academies Press, pp. 231–43).

1364. Keep Antibiotics Working. 2005. Bayer commended for ending 5-year opposition to FDA ban on use of Cipro-like antibiotics in poultry. News Release,

September 7. www.keepantibioticsworking.com/new/resources_library.cfm?refID=76541.

1365. Price LB, Johnson E, Vailes R, Silbergeld E. 2005. Fluoroquinolone-resistant *Campylobacter* isolates from conventional and antibiotic-free chicken products. *Environmental Health Perspectives* 113(5):557–60. www.ehponline.org/members/2005/7647/7647.html.

1366. Anderson AD, McClellan J, Rossiter S, Angulo FJ. 2003. Public health consequences of use of antimicrobial agents in agriculture. In: *The Resistance Phenomenon in Microbes and Infectious Disease Vectors: Implications for Human Health and Strategies for Containment: Workshop Summary* (Washington, DC: National Academies Press, pp. 231–43). fermat.nap.edu/open-book/0309088542/html/231.html.

1367. Helms M, Simonsen J, Olsen KE, Molbak K. 2005. Adverse health events associated with antimicrobial drug resistance in *Campylobacter* species: a registry-based cohort study. *Journal of Infectious Disease* 191:1051.

1368. Palmer E. 2002. Bayer urged to eliminate animal version of Cipro. *Kansas City Star*, February 20. keepantibioticsworking.com/news/news.cfm?News_ID=176.

1369. 2005. Bayer pulls Baytril. *Journal of the American Veterinary Medical Association News*, October 15. avma.org/onlnews/javma/oct05/051015e.asp.

1370. Price LB, Johnson E, Vailes R, Silbergeld E. 2005. Fluoroquinolone-resistant *Campylobacter* isolates from conventional and antibiotic-free chicken products. *Environmental Health Perspectives* 113(5):557–60. www.ehponline.org/members/2005/7647/7647.html.

1371. Henig RM. 1997. *The People's Health: A Memoir of Public Health and Its Evolution at Harvard* (Washington, DC: Joseph Henry Press, p. 88).

1372. Epstein S. 1989. U.S. policy turns blind side to dangers of meat additives. *Austin American-Statesman*, March 8, p. A15.

1373. Dutton D. 1988. *Worse Than the Disease: The Pitfalls of Medical Progress*, (Cambridge, UK: Cambridge University Press).

1374. Lerner S. 2001. Risky chickens. *Village Voice*, November 28–December 4. villagevoice.com/news/0148,lerner,30287,1.html.

1375. Kestin SC, Knowles TG, Tinch AE, Gregory NG. 1992. Prevalence of leg weakness in broiler chickens and its relationship with genotype. *Veterinary Record* 131 (9):190–4. veterinaryrecord.bvapublications.com/cgi/content/abstract/131/9/190.

1376. Martin D. 1997. Researcher studying growth-induced diseases in broilers. *Feedstuffs*, May 26.

1377. Office of Technology Assessment. 1979. Drugs in livestock feed: Volume 1 Technical Report (Washington, DC: U.S. Government Printing Office). www.govinfo.library.unt.edu/ota/Ota_5/DATA/1979/7905.PDF.

1378. Varma JK, Greene KD, Ovitt J, Barrett TJ, Medalla F, Angulo FJ. 2005. Hospitalization and antimicrobial resistance in *Salmonella* outbreaks, United States, 1984–2002. *Emerging Infectious Diseases* 11(6):943–6. www.cdc.gov/ncidod/EID/vol11no06/pdf.s/04-1231.pdf.

1379. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1380. Angulo F. 1999. Use of antimicrobial agents in aquaculture: potential for public health impact. Centers for Disease Control Memo to the Record, National Aquaculture Association Release, October 18. www.nationalaquaculture.org/pdf./CDC%20Memo%20to%20the%20Record.pdf.

1381. Centers for Disease Control and Prevention. Outbreak of multidrug-resistant *Salmonella* Newport—United States, January–April 2002. *Morbidity and Mortality Weekly Report* 51(25):545–8. cdc.gov/mmwr/preview/mmwrhtml/mm5125a1.htm.

1382. Schroeder CM, Naugle AL, Schlosser WD, et al. 2005. Estimate of illnesses from *Salmonella* enteritidis in eggs, United States, 2000. *Emerging Infectious Diseases* 11(1):113–5. www.cdc.gov/foodnet/pub/publications/2005/040401_schroeder.pdf.

1383. Burrows M. 2006. More *Salmonella* is reported in chickens. *New York Times*, March 8. nytimes.com/2006/03/08/dining/08well.html.

1384. World Health Organization. 2000. Drug resistance threatens to reverse medical progress. Press Release, June 12.

1385. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1386. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1387. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).

1388. National Cattlemen's Beef Association. 2006. Antibiotic resistant bacteria found in U.S. poultry. Food Safety and Health. www.beefusa.org/NEWS-AntibioticResistantBacteriaFoundinUSPoultry14111.aspx.

1389. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.

1390. Worldwatch Institute. 2004. Meat: now, it's not personal! But like it or not, meat-eating is becoming a problem for everyone on the planet. *World Watch* magazine, July/August, pp. 12–20.

1391. Torres-Vélez F, Brown C. 2004. Emerging infections in animals—potential new zoonoses. *Clinics in Laboratory Medicine* 24:825–38.
1392. Kaplan MM, Webster RG. 1977. The epidemiology of influenza. *Scientific American* 237:88–106.
1393. Silverstein AM. 1981. *Pure Politics and Impure Science, the Swine Flu Affair* (Baltimore, Maryland: Johns Hopkins University Press, pp. 129–31).
1394. Davies P. 1999. The plague in waiting. *Guardian*, August 7. www.guardian.co.uk/birdflu/story/0,14207,1131477,00.html.
1395. Davis M. 2005. Has time run out? Commentary: on The Monster at Our Door—the coming flu pandemic. *Mother Jones*, August 17. motherjones.com/commentary/columns/2005/08/has_time_run_out.html.
1396. Taylor M. 2005. Is there a plague on the way? *Farm Journal*, March 10. www.agweb.com/get_article.asp?pageid=116037.
1397. Lee M. 2005. Panel: plan for flu crisis now; world isn't prepared to combat pandemic, health experts say. *Star Tribune* (Minneapolis, MN) June 17, p. 8A.
1398. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
1399. Laver G. 2002. Influenza virus surface glycoproteins, haemagglutinin and neuraminidase: a personal account. *Perspectives in Medical Virology* 7:31.
1400. Kaplan MM. 1982. The epidemiology of influenza as a zoonosis. *Veterinary Record* 110:395–9.
1401. Webby RJ, Webster RG. 2001. Emergence of influenza A viruses. *Philosophical Transactions of the Royal Society of London* 356:1817–28.
1402. 2001. The virus hunters. *South China Morning Post*, May 25, p. 15.
1403. World Health Organization. 2005. H5N1 avian influenza: Timeline. October 28. www.who.int/csr/disease/avian_influenza/Timeline_28_10a.pdf.
1404. Gadsby P. 1999. Fear of flu—pandemic influenza outbreaks. *Discover*, January.
1405. Webster RG. 1997. Influenza virus: Transmission between species and relevance to emergence of the next human pandemic. *Archives of Virology* 13:S105–13.
1406. Naegel LCA. 1990. A review of public health problems associated with the integration of animal husbandry and aquaculture, with a special emphasis on Southeast Asia. *Biological Wastes* 31:69–83.
1407. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).

1408. Matsui S. 2005. Protecting human and ecological health under viral threats in Asia. *Water Science and Technology* 51(8):91–7.
1409. Normile D. 2004. Asia struggles to keep humans and chickens apart. *Science* 306:399.
1410. Scholtissek C, Naylor E. 1988. Fish farming and influenza pandemics. *Nature* 331:215.
1411. Scholtissek C, Naylor E. 1988. Fish farming and influenza pandemics. *Nature* 331:215.
1412. Matsui S. 2005. Protecting human and ecological health under viral threats in Asia. *Water Science and Technology* 51(8):91–7.
1413. United States Food and Drug Administration. 1992. *Vibrio cholerae* Serogroup Non-O1. Foodborne pathogenic microorganisms and natural toxins handbook. www.cfsan.fda.gov/~mow/chap8.html.
1414. Lederberg J, Shope RE, Oaks SC. 1992. *Emerging Infections: Microbial Threats to Health in the United States* (Washington, DC: National Academies Press).
1415. Bondad-Reantaso MG, Subasinghe RP, Arthur JR. 2005. Disease and health management in Asian aquaculture. *Veterinary Parasitology* 132(3–4):249–72.
1416. Naegel LCA. 1990. A review of public health problems associated with the integration of animal husbandry and aquaculture, with a special emphasis on Southeast Asia. *Biological Wastes* 31:69–83.
1417. Naylor E, Scholtissek C. 1989. A potential human health hazard in integrated aquaculture-agriculture systems which include both pigs and poultry. *Pig News and Information*, March 1989, Volume 10, No. 1, pp. 17–8.
1418. Nelson B. 2005. Bird flu outbreak; global threat; experts say deadly virus presents grave risk if we don't "get our act together." *Newsday*, March 6, p. A03.
1419. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. *Federal News Service*, June 16. www.cfr.org/publication/8198/threat_of_global_pandemics.html.
1420. McDonald H. 2003. China's unsafe farming practices may be breeding more than pigs, *Sydney Morning Herald*, April 7.
1421. Webster RG. 1997. Influenza virus: transmission between species and relevance to emergence of the next human pandemic. *Archives of Virology* 13:S105–13.
1422. Buras N, Duek L, Niv S, Hepher B, Sandbank E. 1987. Microbiological aspects of fish grown in treated wastewater. *Water Research* 21(1):1–10.
1423. Scholtissek C. 1992. Cultivating a killer virus. *Natural History* 1(92):2–6.

1424. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
1425. Mathias, JA. 1995. Aquaculture: The Blue Revolution. *Canadian Business and Current Affairs Ecodecision*, September, pp. 66–70.
1426. Bailey C, Jentoft S, Sinclair P. 1996. *Aquaculture Development: Social Dimensions of an Emerging Industry* (Boulder, CO: Westview Press).
1427. Edwards P. 1991. Fish-fowl-pig farming uncommon. *World Aquaculture* 22(3):2–3.
1428. Osterholm MT. 2005. Preparing for the next pandemic. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.
1429. Mancini WE. 1991. Let's promote discussion. *World Aquaculture* 22(3):6.
1430. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
1431. Cullington BJ. 1990. Emerging viruses, emerging threat. *Science* 247:279–80.
1432. Naeve CW, Hinshaw VS, Webster RG. 1984. Mutations in the hemagglutinin receptor-binding site can change the biological properties of an influenza virus. *Journal of Virology* 51:567–9.
1433. Osterhaus ADME, de Jong JC, Rimmelzwaan GF, Class ECJ. 2002. H5N1 influenza in Hong Kong: virus characterizations. *Vaccine* 20:S82–3.
1434. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company).
1435. Taubenberger JK, Kash JC, Morens DM. 2019. The 1918 influenza pandemic: 100 years of questions answered and unanswered. *Sci Transl Med*. 11(502):eaau5485. <https://doi.org/10.1126/scitranslmed.aau5485>.
1436. Smith GJ, Bahl J, Vijaykrishna D, Zhang J, Poon LL, Chen H, Webster RG, Peiris JS, Guan Y. 2009. Dating the emergence of pandemic influenza viruses. *Proc Natl Acad Sci U S A*. 106(28):11709–11712. <https://doi.org/10.1073/pnas.0904991106>.
1437. Zhou NN, Senne DA, Landgraf JS, Swenson SL, Erickson G, Rossow K, Liu L, Yoon KJ, Krauss S, Webster RG. 1999. Genetic reassortment of avian, swine, and human influenza A viruses in American pigs. *J Virol*. 73(10):8851–8856.
1438. dos Reis M, Hay AJ, Goldstein RA. 2009. Using non-homogeneous models of nucleotide substitution to identify host shift events: application to the origin of the 1918 'Spanish' influenza pandemic virus. *J Mol Evol*. 69(4):333–345. <https://doi.org/10.1007/s00239-009-9282-x>.

1439. Guan Y, Vijaykrishna D, Bahl J, Zhu H, Wang J, Smith GJ. 2010. The emergence of pandemic influenza viruses. *Protein Cell*. 1(1):9–13. <https://doi.org/10.1007/s13238-010-0008-z>.
1440. Guan Y, Vijaykrishna D, Bahl J, Zhu H, Wang J, Smith GJ. 2010. The emergence of pandemic influenza viruses. *Protein Cell*. 1(1):9–13. <https://doi.org/10.1007/s13238-010-0008-z>.
1441. Brockwell-Staats C, Webster RG, Webby RJ. Diversity of influenza viruses in swine and the emergence of a novel human pandemic influenza A (H1N1). *Influenza Other Respir Viruses*. 3(5):207–213. <https://doi.org/10.1111/j.1750-2659.2009.00096.x>.
1442. Wuethrich B. 2003. Infectious disease. Chasing the fickle swine flu. *Science*. 299(5612):1502–1505. <https://doi.org/10.1126/science.299.5612.1502>.
1443. Sturgis S. 2009 May 5. Swine flu genes traced to North Carolina factory farm. Durham: Facing South; [accessed 2020 Apr 18]. <https://www.facingsouth.org/2009/05/swine-flu-genes-traced-to-north-carolina-hog-farm.html>.
1444. Zhou NN, Senne DA, Landgraf JS, et al. 1999. Genetic reassortment of avian, swine, and human influenza A viruses in American pigs. *Journal of Virology* 73:8851–6.
1445. Webby RJ, Swenson SL, Krauss SL, Gerrish PJ, Goyal SM, Webster RG. 2000. Evolution of swine H3N2 influenza viruses in the United States. *Journal of Virology* 74:8243–51.
1446. Wuethrich B. 2003. Infectious disease. Chasing the fickle swine flu. *Science*. 299(5612):1502–1505. <https://doi.org/10.1126/science.299.5612.1502>.
1447. Wilson TM, Logan-Henfrey L, Weller R, Kellman B. 2000. Agroterrorism, biological crimes, and biological warfare targeting animal agriculture. In: Brown C, Bolin C, editors. *Emerging diseases of animals*. Washington (DC): ASM Press. p. 23–57. <https://doi.org/10.1128/9781555818050.ch3>.
1448. Shields DA, Mathews KH. 2003. Interstate livestock movements. USDA Economic Research Service. Report No.: LDP-M-108-01; [updated 2003 June 5; accessed 2020 Apr 2]. https://www.ers.usda.gov/webdocs/publications/37685/15376_ldpm10801_1_.pdf.
1449. Burrell A. 2002. Animal disease epidemics: implications for production, policy and trade. *Outlook Agric*. 31(3):151–160. <https://doi.org/10.5367/000000002101294001>.
1450. Strelioff CC, Vijaykrishna D, Riley S, Guan Y, Peiris JSM, Lloyd-Smith JO. 2013. Inferring patterns of influenza transmission in swine from multiple streams of surveillance data. *Proc Biol Sci*. 280(1762):20130872. <https://dx.doi.org/10.1098/rspb.2013.0872>.
1451. Wallace RG. 2009. Breeding influenza: the political virology of offshore farming. *Antipode*. 41(5):916–951.

1452. Mena I, Nelson MI, Quezada-Monroy F, Dutta J, Cortes-Fernández R, Lara-Puente JH, Castro-Peralta F, Cunha LF, Trovão NS, Lozano-Dubernard B, et al. 2016. Origins of the 2009 H1N1 influenza pandemic in swine in Mexico. *eLife*. 5:e16777. <https://dx.doi.org/10.7554/eLife.16777>.
1453. Suriya R, Hassan L, Omar AR, Aini I, Tan CG, Lim YS, Kamaruddin MI. 2008. Seroprevalence and risk factors for influenza A viruses in pigs in Peninsular Malaysia. *Zoonoses Public Health*. 55(7):342–351. <https://doi.org/10.1111/j.1863-2378.2008.01138.x>.
1454. Beltran-Alcrudo D, Falco JR, Raizman E, Dietze K. 2019. Transboundary spread of pig diseases: the role of international trade and travel. *BMC Vet Res*. 15(1):64. <https://doi.org/10.1186/s12917-019-1800-5>.
1455. Webby RJ, Swenson SL, Krauss SL, Gerrish PJ, Goyal SM, Webster RG. 2000. Evolution of swine H3N2 influenza viruses in the United States. *J Virol*. 74(18):8243–8251. <https://doi.org/10.1128/jvi.74.18.8243-8251.2000>.
1456. Environmental Defense. 2000 Nov. Factory hog farming: the big picture. New York: Environmental Defense Fund; [accessed 2020 Apr 9]. https://web.archive.org/web/20081102210913/http://www.edf.org/documents/2563_FactoryHogFarmingBigPicture.pdf.
1457. Center on Globalization, Governance & Competitiveness. 2006. Hog farming: overview. Durham(NC): Duke University; [updated 2006 Feb 23; accessed 2020 Apr 9]. https://web.archive.org/web/20061013165542/http://www.soc.duke.edu/NC_GlobalEconomy/hog/overview.php.
1458. North Carolina Department of Agriculture and Consumer Services. 2001. North Carolina agriculture overview: livestock. [updated 2001 Feb 23; accessed 2020 Apr 9]. <https://web.archive.org/web/20040810163842/http://www.ncagr.com:80/stats/general/livestoc.htm>.
1459. Byerly CR. 2005. Fever of war: the influenza epidemic in the U.S. Army during World War I. New York: New York University Press. p. 160.
1460. Maes D, Deluyker H, Verdonck M, Castryck F, Miry C, Vrijens B, de Kruif A. 2000. Herd factors associated with the seroprevalences of four major respiratory pathogens in slaughter pigs from farrow-to-finish pig herds. *Vet Res*. 31(3):313–327. <https://doi.org/10.1051/vetres:2000122>.
1461. Madec F, Rose N. 2003. How husbandry practices may contribute to the course of infectious diseases in pigs. In: 4th International Symposium on Emerging and Re-emerging Pig Diseases; 2003 June 29–July 2; Rome. Ploufragan (France): French Agency for Food Safety. p. 9–18.
1462. Enøe C, Mousing J, Schirmer AL, Willeberg P. 2002. Infectious and rearing-system related risk factors for chronic pleuritis in slaughter pigs. *Prev Vet Med*. 54(4):337–349. [https://doi.org/10.1016/S0167-5877\(02\)00029-6](https://doi.org/10.1016/S0167-5877(02)00029-6).

1463. Maes D, Deluyker H, Verdonck M, Castryck F, Miry C, Vrijens B, de Kruif A. 2000. Herd factors associated with the seroprevalences of four major respiratory pathogens in slaughter pigs from farrow-to-finish pig herds. *Vet Res.* 31(3):313–327. <https://doi.org/10.1051/vetres:2000122>.
1464. Poljak Z, Carman S, McEwen B. Assessment of seasonality of influenza in swine using field submissions to a diagnostic laboratory in Ontario between 2007 and 2012. *Influenza Other Respir Viruses.* 8(4):482–492.
1465. Crawford D. 2000. *The invisible enemy: a natural history of viruses.* Oxford: Oxford University Press.
1466. Baudon E, Peyre M, Peiris M, Cowling BJ. 2017. Epidemiological features of influenza circulation in swine populations: a systematic review and meta-analysis. *PLoS ONE.* 12(6):e0179044. <https://doi.org/10.1371/journal.pone.0179044>.
1467. Takemae N, Shobugawa Y, Nguyen PT, Nguyen T, Nguyen TN, To TL, Thai PD, Nguyen TD, Nguyen DT, Nguyen DK, et al. 2016. Effect of herd size on subclinical infection of swine in Vietnam with influenza A viruses. *BMC Vet Res.* 12(1):227. <https://doi.org/10.1186/s12917-016-0844-z>.
1468. Poljak Z, Dewey CE, Martin SW, Christensen J, Carman S, Friendship RM. 2008. Prevalence of and risk factors for influenza in southern Ontario swine herds in 2001 and 2003. *Can J Vet Res.* 72(1):7–17.
1469. Maes D, Deluyker H, Verdonck M, Castryck F, Miry C, Vrijens B, de Kruif A. 2000. Herd factors associated with the seroprevalences of four major respiratory pathogens in slaughter pigs from farrow-to-finish pig herds. *Vet Res.* 31(3):313–327. <https://doi.org/10.1051/vetres:2000122>.
1470. de Souza Almeida HM, Storino GY, Pereira DA, Gatto IRH, Mathias LA, Montassier HJ, de Oliveira LG. 2017. A cross-sectional study of swine influenza in intensive and extensive farms in the northeastern region of the state of São Paulo, Brazil. *Trop Anim Health Prod.* 49(1):25–30. <https://doi.org/10.1007/s11250-016-1153-z>.
1471. Wuethrich B. 2003. Infectious disease. Chasing the fickle swine flu. *Science.* 299(5612):1502–1505. <https://doi.org/10.1126/science.299.5612.1502>.
1472. 1993. Overcrowding pigs pays—if it's managed properly. *National Hog Farmer*, November 15.
1473. Wuethrich B. 2003. Infectious disease. Chasing the fickle swine flu. *Science.* 299(5612):1502–1505. <https://doi.org/10.1126/science.299.5612.1502>.
1474. Yan JZ, Morrison B, Meyer T, Deen J. 2003. Inside China. *Pig Progress.* 19(1):9–14. [updated 2006 Aug 17; accessed 2020 Apr 3]. <https://www.pig-progress.net/Home/General/2003/1/Inside-China-PP005236W/>.

1475. Gardner IA, Willeberg P, Mousing J. 2002. Empirical and theoretical evidence for herd size as a risk factor for swine diseases. *Anim Health Res Rev.* 3(1):43–55.
1476. Ludwig S, Stitz L, Planz O, Van H, Fitch WM, Scholtissek C. 1995. European swine virus as a possible source for the next influenza pandemic? *Virology* 212:555–61.
1477. SmithField Foods. 2005. Thirty years of progress 1975–2005. smithfieldfoods.com/Investor/Pdf/AnnualReports/SmithfieldFoods_05AR_LoRes.pdf.
1478. Kettlewell J. 2004. Polish factory farms cause a stink. BBC News, November 24. news.bbc.co.uk/2/hi/science/nature/4035081.stm.
1479. MacKenzie D. 1998. This little piggy fell ill. *New Scientist*, September 12.
1480. Webster RG, Sharp GB, Claas CJ. 1995. Interspecies transmission of influenza viruses. *American Journal of Respiratory and Critical Care Medicine* 152:525–30.
1481. Agriculture and Agri-Food Canada. 1997. The hog and pork industries of Denmark and the Netherlands: a competitiveness analysis. March. agr.gc.ca:8081/spb/rad-dra/publications/hognprk/hognprk_e.pdf.
1482. 2003. Too many, too smelly. *Economist*, August 7. economist.com/displayStory.cfm?story_id=1979752.
1483. Decision News Media SAS 2004. Danish pork industry on the rise. October 24. foodproductiondaily.com/news/ng.asp?id=49755-danish-pork-industry.
1484. MacKenzie D. 1998. This little piggy fell ill. *New Scientist*, September 12.
1485. MacKenzie D. 1998. This little piggy fell ill. *New Scientist*, September 12.
1486. Delgado C, Rosegrant M, Steinfeld H, Ehui S, Courbois C. 1999. Livestock to 2020: the next food revolution. Food, Agriculture, and the Environment Discussion Paper 28. For the International Food Policy Research Institute, the Food and Agriculture Organization of the United Nations and the International Livestock Research Institute. ifpri.org/2020/dp/dp28.pdf.
1487. MacKenzie D. 1998. This little piggy fell ill. *New Scientist*, September 12, p. 1818.
1488. MacKenzie D. 1998. This little piggy fell ill. *New Scientist*, September 12, p. 1818.
1489. Choi YK, Lee JH, Erickson G, et al. 2004. H3N2 influenza virus transmission from swine to turkeys, United States. *Emerging Infectious Diseases.* 10:2156–60.
1490. Webster RG, Hulse DJ. 2004. Microbial adaptation and change: avian influenza. *Rev Sci Tech.* 23(2):453–465. <https://doi.org/10.20506/rst.23.2.1493>.

1491. U.S. Department of Agriculture. 2009 Feb 25. Poultry slaughter 2008 annual summary. Ithaca: USDA Economics, Statistics and Market Information System; [accessed 2020 Apr 2]. <https://downloads.usda.library.cornell.edu/usda-esmis/files/pg15bd88s/kd17cw364/qn59q6557/PoulSlauSu-02-25-2009.pdf>.
1492. U.S. Department of Agriculture. 2009 Feb 26. Chickens and eggs 2008 summary. Ithaca: USDA Economics, Statistics and Market Information System; [accessed 2020 Apr 2]. <https://downloads.usda.library.cornell.edu/usda-esmis/files/1v53jw96n/7h149s210/p5547v38d/ChickEgg-02-26-2009.pdf>.
1493. Graham JP, Leibler JH, Price LB, Otte JM, Pfeiffer DU, Tiensin T, Silbergeld EK. 2008. The animal-human interface and infectious disease in industrial food animal production: rethinking biosecurity and biocontainment. *Public Health Rep.* 123(3):282–299. <https://doi.org/10.1177/003335490812300309>.
1494. Dawood FS, Iuliano AD, Reed C, Meltzer MI, Shay DK, Cheng P-Y, Bandaranayake D, Breiman RF, Brooks WA, Buchy P, et al. 2012. Estimated global mortality associated with the first 12 months of 2009 pandemic influenza A H1N1 virus circulation: a modelling study. *Lancet Infect Dis.* 12(9):687–695. [https://doi.org/10.1016/S1473-3099\(12\)70121-4](https://doi.org/10.1016/S1473-3099(12)70121-4).
1495. Myers KP, Olsen CW, Gray GC. 2007. Cases of swine influenza in humans: a review of the literature. *Clin Infect Dis.* 44(8):1084–1088. <https://doi.org/10.1086/512813>.
1496. Wells DL, Hopfensperger DJ, Arden NH, et al. 1991. Swine influenza virus infections: transmission from ill pigs to humans at a Wisconsin agricultural fair and subsequent probable person-to-person transmission. *Journal of the American Medical Association* 265(4):478–81.
1497. Claas ECJ, de Jong JC, van Beek R, Rimmelzwaan GF, Osterhaus ADME. 1998. Human influenza virus A/HongKong/156/97 (H5N1) infection. *Vaccine* 16:977–8.
1498. Matrosovich MN, Matrosovich TY, Gray T, Roberts NA, Klenk HD. 2004. Human and avian influenza viruses target different cell types in cultures of human airway epithelium. *Proceedings of the National Academy of Sciences of the United States of America* 101(13):4620–4.
1499. Arnst C. 2005. A hot zone in the heartland. Little could be done to contain a deadly avian flu outbreak. *Business Week*, September 19. businessweek.com/magazine/content/05_38/b3951008.htm.
1500. Taubenberger JK, Morens DM. 2006. 1918 influenza: the mother of all pandemics. *Emerging Infectious Diseases* 12(1):15–22.
1501. Shortridge KF, Gao P, Guan Y, et al. 2000. Interspecies transmission of influenza viruses: H5N1 virus and a Hong Kong SAR perspective. *Veterinary Microbiology* 74:141–7.

1502. Arnst C. 2005. A hot zone in the heartland. Little could be done to contain a deadly avian flu outbreak. *Business Week*, September 19. businessweek.com/magazine/content/05_38/b3951008.htm.
1503. Gargan EA. 1997. As avian flu spreads, China is seen as its epicenter. *New York Times*, December 21, p. 10. query.nytimes.com/gst/fullpage.html?res=9803E6DF173EF932A15751C1A961958260&sec=health&pagewanted=print.
1504. Food and Agriculture Organization of the United Nations. 2020. Sources of meat. Rome: FAO; [updated 2014 Nov 25; accessed 2020 Apr 8].
1505. Environmental Defense. 2000. Factory hog farming: the big picture. November. environmentaldefense.org/documents/2563_FactoryHogFarming-BigPicture.pdf.
1506. Iowa Egg Council. 2002. Production. iowaegg.org/allabouteggs/production.html.
1507. Food and Agriculture Organization of the United Nations. 2006. FAO-STAT database. Livestock primary, January 24. faostat.fao.org/faostat/collections?subset=agriculture.
1508. Webby RJ, Swenson SL, Krauss SL, Gerrish PJ, Goyal SM, Webster RG. 2000. Evolution of swine H3N2 influenza viruses in the United States. *J Virol*. 74(18):8243–8251. <https://doi.org/10.1128/jvi.74.18.8243-8251.2000>.
1509. Karasin AI, Carman S, Olsen CW. 2006. Identification of human H1N2 and human-swine reassortant H1N2 and H1N1 influenza A viruses among pigs in Ontario, Canada (2003 to 2005). *J Clin Microbiol*. 44(3):1123–1126. <https://doi.org/10.1128/JCM.44.3.1123-1126.2006>.
1510. Fleites MÁ, Buenfil JCR, Carrasco AC, Guzmán LR, Tavera GA, Correa JCS. 2004. Serological profile of porcine influenza virus, *Mycoplasma hyopneumoniae* and *Actinobacillus pleuropneumoniae*, in farms of Yucatan, Mexico. *Vet Méx*. 35(4):295–305.
1511. Lee CS, Kang BK, Kim HK, Park SJ, Park BK, Jung K, Song DS. 2008. Phylogenetic analysis of swine influenza viruses recently isolated in Korea. *Virus Genes*. 37(2):168–176. <https://doi.org/10.1007/s11262-008-0251-z>.
1512. Smith GJ, Vijaykrishna D, Bahl J, Lycett SJ, Worobey M, Pybus OG, Ma SK, Cheung CL, Raghvani J, Bhatt S, et al. 2009. Origins and evolutionary genomics of the 2009 swine-origin H1N1 influenza A epidemic. *Nature*. 459(7250):1122–1125. <https://doi.org/10.1038/nature08182>.
1513. Trovão NS, Nelson MI. 2020. When pigs fly: pandemic influenza enters the 21st century. *PLoS Pathog*. 16(3):e1008259. <https://doi.org/10.1371/journal.ppat.1008259>.
1514. Ma W, Liu Q, Qiao C, del Real G, García-Sastre A, Webby RJ, Richt JA. 2014. North American triple reassortant and Eurasian H1N1 swine influenza

viruses do not readily reassort to generate a 2009 pandemic H1N1-like virus. *mBio*. 5(2):e00919–13. <https://dx.doi.org/10.1128/mBio.00919-13>.

1515. Drew TW. 2011. The emergence and evolution of swine viral diseases: to what extent have husbandry systems and global trade contributed to their distribution and diversity? *Rev Sci Tech*. 30(1):95–106. <https://doi.org/10.20506/rst.30.1.2020>.

1516. Rajao DS, Anderson TK, Kitikoon P, Stratton J, Lewis NS, Vincent AL. 2018. Antigenic and genetic evolution of contemporary swine H1 influenza viruses in the United States. *Virology*. 518:45–54. <https://doi.org/10.1016/j.virol.2018.02.006>.

1517. Fabrizio TP, Sun Y, Yoon SW, Jeevan T, Dlugolenski D, Tripp RA, Tang L, Webby RJ. 2016. Virologic differences do not fully explain the diversification of swine influenza viruses in the United States. *J Virol*. 90(22):10074–10082. <https://doi.org/10.1128/JVI.01218-16>.

1518. Hari J. 2009 May 1. Life-threatening disease is the price we pay for cheap meat. *Independent* (London, United Kingdom). [accessed 2020 Apr 2]; <https://www.independent.co.uk/voices/commentators/johann-hari/johann-hari-life-threatening-disease-is-the-price-we-pay-for-cheap-meat-1677067.html>.

1519. Fablet C, Simon G, Dorenlor V, Eono F, Eveno E, Gorin S, Quéguiner S, Madec F, Rose N. 2013. Different herd level factors associated with H1N1 or H1N2 influenza virus infections in fattening pigs. *Prev Vet Med*. 112(3-4):257–265. <https://doi.org/10.1016/j.prevetmed.2013.07.006>.

1520. Lawrence AB, Petherick JC, McLean KA, Deans LA, Chirnside J, Gaughan A, Clutton E, Terlouw EMC. 1994. The effect of environment on behaviour, plasma cortisol and prolactin in parturient sows. *Appl Anim Behav Sci*. 39(3-4):313–330. [https://doi.org/10.1016/0168-1591\(94\)90165-1](https://doi.org/10.1016/0168-1591(94)90165-1).

1521. Siegel HS. 1983. Effects of intensive production methods on livestock health. *Agro-Ecosystems*. 8(3-4):215–230. [https://doi.org/10.1016/0304-3746\(83\)90005-7](https://doi.org/10.1016/0304-3746(83)90005-7).

1522. André F, Tuytens M. 2005. The importance of straw for pig and cattle welfare: a review. *Appl Anim Behav Sci*. 92(3):261–282. <https://doi.org/10.1016/j.applanim.2005.05.007>.

1523. Ewald C, Heer A, Havenith U. 1994. Factors associated with the occurrence of influenza A virus infections in fattening swine. *Berl Munch Tierarztl Wochenschr*. 107(8):256–262.

1524. Crowding pigs pays—if it's managed properly. *National Hog Farmer*. November 15, 1993;62.

1525. Kennedy RF Jr. 1999. I don't like green eggs and ham! *Newsweek*, April 26.

1526. Corzo CA, Culhane M, Dee S, Morrison RB, Torremorell M. 2013. Airborne detection and quantification of swine influenza A virus in air samples

collected inside, outside and downwind from swine barns. PLoS ONE. 8(8):e71444. <https://doi.org/10.1371/journal.pone.0071444>.

1527. Torremorell M, Alonso C, Davies PR, Raynor PC, Patnayak D, Torchetti M, McCluskey B. 2016. Investigation into the airborne dissemination of H5N2 highly pathogenic avian influenza virus during the 2015 spring outbreaks in the Midwestern United States. Avian Dis. 60(3):637–643. <https://doi.org/10.1637/11395-021816-Reg.1>.

1528. Zhao Y, Richardson B, Takle E, Chai L, Schmitt D, Xin H. 2019. Airborne transmission may have played a role in the spread of 2015 highly pathogenic avian influenza outbreaks in the United States. Sci Rep. 9(1):11755. <https://doi.org/10.1038/s41598-019-47788-z>.

1529. Graham JP, Leibler JH, Price LB, Otte JM, Pfeiffer DU, Tiensin T, Silbergeld EK. 2008. The animal-human interface and infectious disease in industrial food animal production: rethinking biosecurity and biocontainment. Public Health Rep. 123(3):282–299. <https://doi.org/10.1177/003335490812300309>.

1530. Saenz RA, Hethcote HW, Gray GC. 2006. Confined animal feeding operations as amplifiers of influenza. Vector Borne Zoonotic Dis. 6(4):338–346. <https://doi.org/10.1089/vbz.2006.6.338>.

1531. Fragaszy E, Ishola DA, Brown IH, Enstone J, Nguyen-Van-Tam JS, Simons R, Tucker AW, Wieland B, Williamson SM, Hayward AC, et al. 2016. Increased risk of A(H1N1)pdm09 influenza infection in UK pig industry workers compared to a general population cohort. Influenza Other Respir Viruses. 10(4):291–300. <https://dx.doi.org/10.1111/irv.12364>.

1532. Lantos PM, Hoffman K, Höhle M, Anderson B, Gray GC. 2016. Are people living near modern swine production facilities at increased risk of influenza virus infection? Clin Infect Dis. 63(12):1558–1563. <https://doi.org/10.1093/cid/ciw646>.

1533. Koçer ZA, Obenauer J, Zaraket H, Zhang J, Rehg JE, Russell CJ, Webster RG. 2013. Fecal influenza in mammals: selection of novel variants. J Virol. 87(21):11476–11486. <https://dx.doi.org/10.1128/JVI.01544-13>.

1534. Haas B, Ahl R, Böhm R, Strauch D. 1995. Inactivation of viruses in liquid manure. Rev Sci Tech. 14(2):435–445. <https://doi.org/10.20506/rst.14.2.844>.

1535. Michiels A, Piepers S, Ulens T, Van Ransbeeck N, Del Pozo Sacristán R, Sierens A, Haesebrouck F, Demeyer P, Maes D. 2015. Impact of particulate matter and ammonia on average daily weight gain, mortality and lung lesions in pigs. Prev Vet Med. 121(1-2):99–107. <https://doi.org/10.1016/j.prevetmed.2015.06.011>.

1536. Desrosiers R, Boutin R, Broes A. 2004. Persistence of antibodies after natural infection with swine influenza virus and epidemiology of the infection

in a herd previously considered influenza-negative. *J Swine Health Prod.* 12(2):78–81.

1537. Sawabe K, Hoshino K, Isawa H, Sasaki T, Hayashi T, Tsuda Y, Kurahashi H, Tanabayashi K, Hotta A, Saito T, et al. 2006. Detection and isolation of highly pathogenic H5N1 avian influenza A viruses from blow flies collected in the vicinity of an infected poultry farm in Kyoto, Japan, 2004. *Am J Trop Med Hyg.* 75(2):327–332.

1538. Centers for Disease Control and Prevention. [date unknown]. 2009 H1N1 pandemic. U.S. Department of Health and Human Services; [last reviewed 2019 June 11; accessed 2020 Apr 2]. <https://www.cdc.gov/flu/pandemic-resources/2009-h1n1-pandemic.html>.

1539. Centers for Disease Control and Prevention. 2009. Outbreak of swine-origin influenza A (H1N1) virus infection—Mexico, March–April 2009. U.S. Department of Health and Human Services. *MMWR.* 58(Dispatch):1-3; [last reviewed 2009 Apr 30; accessed 2020 Apr 2]. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm58d0430a2.htm>.

1540. Shapiro P. 2020 Mar 24. One root cause of pandemics few people think about. *Sci Am.* [accessed 2020 Apr 6]. <https://blogs.scientificamerican.com/observations/one-root-cause-of-pandemics-few-people-think-about/>.

1541. Maillard P. 2006. Adaptation rapide du virus influenza aviaire H5N1 au mammifère: la pandémie de grippe aviaire tiendrait-elle à un acide aminé? *Virologie.* 10(6):458–460.

1542. Wertheim HFL, Nghia HDT, Taylor W, Schultsz C. 2009. *Streptococcus suis*: an emerging human pathogen. *Clin Infect Dis.* 48(5):617–625. <https://doi.org/10.1086/596763>.

1543. U.S. Department of Agriculture. 2005 Aug. *Streptococcus suis* outbreak, swine and human, China. Riverdale(MD): USDA, APHIS; [accessed 2020 Apr 9]. https://web.archive.org/web/20090815051837/http://www.aphis.usda.gov/vs/ceah/cei/taf/emergingdiseasenotice_files/strep_suis_china.htm.

1544. World Health Organization Regional Office for the Western Pacific. 2005 Aug 2. *Streptococcus suis*. Manila(Philippines): WPRO; [accessed 2020 Apr 9]. https://web.archive.org/web/20091210033358/http://www.wpro.who.int/media_centre/fact_sheets/fs_20050802.htm.

1545. Pulliam JR, Epstein JH, Dushoff J, Rahman SA, Bunning M, Jamaluddin AA, Hyatt AD, Field HE, Dobson AP, Daszak P, et al. 2012. Agricultural intensification, priming for persistence and the emergence of Nipah virus: a lethal bat-borne zoonosis. *J R Soc Interface.* 9(66):89–101. <https://doi.org/10.1098/rsif.2011.0223>.

1546. Benfield C. 2009 Mar 24. Antibiotics in livestock ‘threatens humans.’ *Yorkshire Post*.

1547. Pew Commission on Industrial Farm Animal Production. 2008. Expert panel highlights serious public health threats from industrial animal agriculture. Press release issued April 11. www.pewtrusts.org/news_room_detail.aspx?id=37968. Accessed August 26, 2008.

1548. Pew Commission on Industrial Farm Animal Production. 2008 Apr 29. Putting meat on the table: industrial farm animal production in America. Executive summary. Philadelphia: PEW Charitable Trusts. p. 13. http://www.pewtrusts.org/~media/Assets/2008/PCIFAP_Exec-Summary.pdf.

1549. American Public Health Association. 2019 Nov 5. Precautionary moratorium on new and expanding concentrated animal feeding operations. Washington: APHA; [accessed 2020 Apr 2]. <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2020/01/13/precautionary-moratorium-on-new-and-expanding-concentrated-animal-feeding-operations>.

1550. Arizona State Legislature. 2007. 13–2910.07. Cruel and inhumane confinement of a pig during pregnancy or of a calf raised for veal. State of Arizona; [accessed 2020 Apr 9]. <https://web.archive.org/web/20090321091854/https://www.azleg.gov/FormatDocument.asp?inDoc=/ars/13/02910-07.htm&Title=13&DocType=ARS>.

1551. California Legislative Information. 2008. Chapter 13.8. Farm animal cruelty. 25991. Definitions. State of California; [amended 2018 Nov 6; accessed 2020 Apr 6]. https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum=25991.

1552. Colorado General Assembly. 2008 May 14. Chapter 228. Agriculture. An act concerning requirements for confinement of specified livestock. State of Colorado; [accessed 2020 Apr 6]. https://leg.colorado.gov/sites/default/files/images/olls/2008a_sl_228.pdf.

1553. Florida Legislature. [date unknown]. Article X. Section 21. Limiting cruel and inhumane confinement of pigs during pregnancy. State of Florida; [accessed 2020 Apr 6]. <http://www.leg.state.fl.us/Statutes/index.cfm?Mode=Constitution&Submenu=3&Tab=statutes#A10S21>.

1554. Maine Legislature. 2020. Section 4020. Cruel confinement of calves raised for veal and sows during gestation. State of Maine; [accessed 2020 Apr 6]. <http://www.mainelegislature.org/legis/statutes/7/title7sec4020.html>.

1555. Ballotpedia. 2016. Massachusetts minimum size requirements for farm animal containment, question 3 (2016). Ballotpedia; [accessed 2020 Apr 6]. [https://ballotpedia.org/Massachusetts_Minimum_Size_Requirements_for_Farm_Animal_Containment,_Question_3_\(2016\)](https://ballotpedia.org/Massachusetts_Minimum_Size_Requirements_for_Farm_Animal_Containment,_Question_3_(2016)).

1556. Michigan Legislature. 2020. Enrolled senate bill no. 174. Animal industry act. State of Michigan; [accessed 2020 Apr 6]. www.legislature.mi.gov/documents/2019-2020/publicact/pdf/2019-PA-0132.pdf.

1557. LAWriter. 2016. Ohio administrative code. Chapter 901:12-8 swine. Lawriter LLC; [accessed 2020 Apr 6]. <http://codes.ohio.gov/oac/901:12-8>.
1558. OregonLaws.org. 2017. ORS 600.150 Prohibition against restrictive confinement. Public Technology Ltd; [accessed 2020 Apr 6]. <https://www.oregonlaws.org/ors/600.150>.
1559. Rhode Island General Assembly. [date unknown]. Section 4-1.1-3. Unlawful confinement. State of Rhode Island; [accessed 2020 Apr 6]. <http://web-server.rilin.state.ri.us/Statutes/TITLE4/4-1.1/4-1.1-3.HTM>.
1560. Wuethrich B. 2003. Infectious disease. Chasing the fickle swine flu. *Science*. 299(5612):1502–1505. <https://doi.org/10.1126/science.299.5612.1502>.
1561. Webby RJ, Rossow K, Erickson G, Sims Y, Webster R. 2004. Multiple lineages of antigenically and genetically diverse influenza A virus co-circulate in the United States swine population. *Virus Res*. 103(1-2):67–73. <https://doi.org/10.1016/j.virusres.2004.02.015>.
1562. Chen H, Cheung CL, Tai H, Zhao P, Chan JFW, Cheng VCC, Chan KH, Yuen KY. 2009. Oseltamivir-resistant influenza A pandemic (H1N1) 2009 virus, Hong Kong, China. *Emerg infect Dis*. 15(12):1970–1972. <https://dx.doi.org/10.3201/eid1512.091057>.
1563. Wei K, Sun H, Sun Z, Sun Y, Kong W, Pu J, Ma G, Yin Y, Yang H, Guo X, et al. 2014. Influenza A virus acquires enhanced pathogenicity and transmissibility after serial passages in swine. *J Virol*. 88(20):11981–11994. <https://doi.org/10.1128/JVI.01679-14>.
1564. Taubenberger JK, Morens DM. 2013. Influenza viruses: breaking all the rules. *mBio*. 4(4):e00365–13. <https://doi.org/10.1128/mBio.00365-13>.
1565. Keim B. 2009 May 1. Swine flu ancestor born on U.S. factory farms. *Wired.com*; [accessed 2020 Apr 9]. <https://web.archive.org/web/20140706145323/http://www.wired.com/2009/05/swineflufarm/>.
1566. Wuethrich B. 2003. Infectious disease. Chasing the fickle swine flu. *Science*. 299(5612):1502–1505. <https://doi.org/10.1126/science.299.5612.1502>.
1567. De Jong JC, de Ronde-Verloop JM, Bangma PJ, Van Kregten E, Kerckhaert J, Paccaud MF, Wicki F, Wunderli W. 1986. Isolation of swine-influenza-like A (H1N1) viruses from man in Europe, 1986. *Lancet*. 328(8519):1329–1330. [https://doi.org/10.1016/S0140-6736\(86\)91450-9](https://doi.org/10.1016/S0140-6736(86)91450-9).
1568. De Jong JC, de Ronde-Verloop JM, Bangma PJ, Van Kregten E, Kerckhaert J, Paccaud MF, Wicki F, Wunderli W. 1986. Isolation of swine-influenza-like A (H1N1) viruses from man in Europe, 1986. *Lancet*. 328(8519):1329–1330. [https://doi.org/10.1016/S0140-6736\(86\)91450-9](https://doi.org/10.1016/S0140-6736(86)91450-9).
1569. Wiley S. 2020. The 2009 influenza pandemic: 10 years later. *Nursing* 2020. 50(1):17–20. https://journals.lww.com/nursing/Fulltext/2020/01000/The_2009_influenza_pandemic__10_years_later.6.aspx.

1570. Wong JY, Kelly H, Ip DKM, Wu JT, Leung GM, Cowling BJ. 2013 Nov. Case fatality risk of influenza A (H1N1pdm09): a systematic review. *Epidemiology*. 24(6). <https://dx.doi.org/10.1097/EDE.0b013e3182a67448>.
1571. Dawood FS, Iuliano AD, Reed C, Meltzer MI, Shay DK, Cheng P-Y, Bandaranayake D, Breiman RF, Brooks WA, Buchy P, et al. 2012. Estimated global mortality associated with the first 12 months of 2009 pandemic influenza A H1N1 virus circulation: a modelling study. *Lancet Infect Dis*. 12(9):687–695. [https://doi.org/10.1016/S1473-3099\(12\)70121-4](https://doi.org/10.1016/S1473-3099(12)70121-4).
1572. 2001. The virus hunters. *South China Morning Post*, May 25, p. 15.
1573. Shortridge KF. 1992. Pandemic influenza: a zoonosis? *Seminars in Respiratory Infections* 7:11–25.
1574. Shortridge KF. 1982. Avian influenza A viruses of southern China and Hong Kong: ecological aspects and implications for man. *Bulletin of the World Health Organization* 60:129–35.
1575. Elegant S. 2003. The breeding grounds: what other bugs are out there? *Time*, April 7. time.com/time/asia/magazine/printout/0,13675,501030407-438944,00.html/.
1576. Shortridge KF. 2003. Severe Acute Respiratory Syndrome and influenza virus incursions from Southern China. *American Journal of Respiratory and Critical Care Medicine* 168:1416–20.
1577. U.S. State Department Bureau of East Asian and Pacific Affairs. 2006. Hong Kong Special Administrative Region. January. state.gov/r/pa/ei/bgn/2747.htm.
1578. *Travelsmart.com*. Hong Kong. Population and people. travelsmart.net/hk/hotels/.
1579. Fielding R, Lam WW, Ho EY, Lam TH, Hedley AJ, Leung GM. 2005. Avian influenza risk perception, Hong Kong. *Emerging Infectious Diseases* 11(5):677–82.
1580. FAO/OIE/WHO. 2005. Consultation on avian influenza and human health: risk reduction measures in producing, marketing, and living with animals in Asia. Renaissance Hotel, Kuala Lumpur, Malaysia 4–6 July.
1581. Ellis MT, Bousfield RB, Bissett LA, et al. 2004. Investigation of outbreaks of highly pathogenic H5N1 avian influenza in waterfowl and wild birds in Hong Kong in late 2002. *Avian Pathology* 33:492–505.
1582. Sims LD, Ellis TM, Liu KK, et al. 2003. Avian influenza in Hong Kong 1997–2002. *Avian Diseases* 47:832–8.
1583. Marwick C. 1998. Could virulent virus be harbinger of “new flu”? *Journal of the American Medical Association* 279:259–60.

1584. Shortridge KF, Peiris JS, Guan Y. 2003. The next influenza pandemic: lessons from Hong Kong *Journal of Applied Microbiology* 94(1):70.
1585. Fielding R, Lam WT, Ho EYY, Lam TH, Hedley AJ, Leung GM. 2005. Avian influenza risk perception, Hong Kong. *Emerging Infectious Diseases* 11(5):677–82.
1586. Parry J. 2003. Hong Kong under WHO spotlight after flu outbreak. *British Medical Journal* 327:308.
1587. Fong J. 2004. Beating “bird flu” against the odds. *Greatreporter.com*, March 3. greatreporter.com/mambo/content/view/227/2/.
1588. Macan-Markar M. 2005. Bird flu pandemic may hang on for years. *Inter Press Service*, February 26.
1589. Dronamraju K (ed.), 2004. *Infectious Disease and Host-Pathogen Evolution* (Cambridge, UK: Cambridge University Press).
1590. Fielding R, Lam WT, Ho EYY, Lam TH, Hedley AJ, Leung GM. 2005. Avian influenza risk perception, Hong Kong. *Emerging Infectious Diseases* 11(5):677–82.
1591. Hedley AJ, Leung GM, Fielding R, Lam TH. 2004. The prevention of avian influenza in Hong Kong: observations on the HKSAR government’s consultation document. Department of Community Medicine and Unit for Behavioural Sciences, School of Public Health, The University of Hong Kong. legco.gov.hk/yr03-04/english/panels/fseh/papers/fe0604cb2-2583-03-e.pdf.
1592. Choi MJ, Torremorell M, Bender JB, Smith K, Boxrud D, Ertl JR, Yang M, Suwannakarn K, Her D, Nguyen J, et al. 2015. Live animal markets in Minnesota: a potential source for emergence of novel influenza A viruses and inter-species transmission. *Clin Infect Dis.* 61(9):1355–1362. <https://doi.org/10.1093/cid/civ618>.
1593. Wu Y, Shi W, Lin J, Wang M, Chen X, Liu K, Xie Y, Luo L, Anderson BD, Lednicky JA, et al. 2017. Aerosolized avian influenza A (H5N6) virus isolated from a live poultry market, China. *J Infect.* 74(1):89–91. <https://doi.org/10.1016/j.jinf.2016.08.002>.
1594. Bertran K, Balzli C, Kwon Y-K, Tumpey TM, Clark A, Swayne DE. 2017. Airborne transmission of highly pathogenic influenza virus during processing of infected poultry. *Emerg Infect Dis.* 23(11):1806–1814. <https://doi.org/10.3201/eid2311.170672>.
1595. Chen H, Deng G, Li Z, et al. 2004. The evolution of H5N1 influenza viruses in ducks in southern China. *Proceedings of the National Academy of Sciences of the United States of America* 101(28):10452–7.
1596. Appenzeller T. 2005. Tracking the next killer flu. *National Geographic*, October. www7.nationalgeographic.com/ngm/0510/feature1/.

1597. Webster RG, Hulse DJ. 2004. Microbial adaptation and change: avian influenza. *Revue Scientifique et Technique* 23(2):453–65.
1598. Hedley AJ, Leung GM, Fielding R, Lam TH. 2004. The prevention of avian influenza in Hong Kong: observations on the HKSAR government's consultation document. Department of Community Medicine and Unit for Behavioural Sciences, School of Public Health, The University of Hong Kong. legco.gov.hk/yr03-04/english/panels/fseh/papers/fe0604cb2-2583-03-e.pdf.
1599. FAO/WHO global forum of food safety regulators in Marrekech, Morocco, January 28–30. www.fao.org/DOCREP/MEETING/004/AB427E.HTM.
1600. Webster RG, Hulse DJ. 2004. Microbial adaptation and change: avian influenza. *Revue Scientifique et Technique* 23(2):453–65.
1601. Lam A. 2004. China's dangerous wild tastes. *Pacific News Service*, January 1.
1602. Fielding R, Lam WT, Ho EYY, Lam TH, Hedley AJ, Leung GM. 2005. Avian influenza risk perception, Hong Kong. *Emerging Infectious Diseases* 11(5):677–82.
1603. 2006. Live birds back on sale despite ban. *Shanghai Daily News*, March 2. english.eastday.com/eastday/englishedition/node20665/node20669/node22813/node95960/node95963/node95964/node95966/userobject-1ai1885583.html.
1604. Hoo S. 2005. China closes all Beijing poultry markets. *Associated Press*, November 7. katv.com/news/stories/1105/275446.html.
1605. 2006. Hong Kong to ban live poultry sales in three years. *Agence France Presse*. news.yahoo.com/s/afp/healthfluhongkong;_ylt=Ak6dh2DxZxiPZHNHKChGjwiTyIi;_ylu=X3oDMTBiMW04NW9mBHNlywMlJVRPUCU1.
1606. Webby RJ, Webster RG. 2001. Emergence of influenza A viruses. *Philosophical Transactions of the Royal Society of London* 356:1817–28.
1607. Perez DR, Nazarian SH, McFadden G, Gilmore MS. 2005. Miscellaneous threats: Highly pathogenic avian influenza, and novel bio-engineered organisms. In: Bronze MS, Greenfield RA (eds.), *Biodefense: Principles and Pathogens* (Norfolk, UK: Horizon Bioscience).
1608. Brown C. 1999. Economic considerations of agricultural diseases. *Annals New York Academy of Sciences* 894:92–94.
1609. Alexander DJ. 2000. A review of avian influenza in different bird species. *Veterinary Microbiology* 74:3–13.
1610. Stubbs EL. 1925. Fowl pest. Sixty-Second Annual Meeting of the American Veterinary Medical Association, Portland, Oregon, July 21–24.
1611. Linares JA, Gayle L, Sneed L, Wigle W. 2004. H5N2 avian influenza outbreak in Texas. In: 76th Northeastern Conference on Avian Diseases: June

9–11 (State College, Pennsylvania: Department of Veterinary Science, College of Agricultural Sciences, Pennsylvania State University, p. 14). www.vetsci.psu.edu/NECAD/NECADProceedings.pdf.

1612. Suarez DL, Spackman E, Senne DA. 2003. Update on molecular epidemiology of H1, H5, and H7 influenza virus infections in poultry in North America. *Avian Diseases* 47:888–97.

1613. Shane S. 2004. Live-bird markets are under the microscope: as the United States battles new outbreaks of bird flu, the role and necessity of live-bird markets must be examined. *National Provisioner* 218(4):38. www.findarticles.com/p/articles/mi_hb314/is_200404/ai_hibm1G1117180028.

1614. Suarez DL, Spackman E, Senne DA. 2003. Update on molecular epidemiology of H1, H5, and H7 influenza virus infections in poultry in North America. *Avian Diseases* 47:888–97.

1615. Senne DA, Pederson JC, Panigrahy B. 2003. Live-bird markets in the Northeastern United States: a source of avian influenza in commercial poultry. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 19–24).

1616. Kingsbury K. 2004. Animal markets are alive with controversy. *Columbia News Service*. February 16. www.jrn.columbia.edu/studentwork/cns/2004-02-16/455.asp.

1617. Choi YK, Seo SH, Kim JA, Webby RJ, Webster RG. 2005. Avian influenza viruses in Korean live poultry markets and their pathogenic potential. *Virology* 332:529–537.

1618. Lashley FR. 2004. Emerging infectious diseases: vulnerabilities, contributing factors and approaches. *Expert Review of Anti-infective Therapy* 2(2):299–316.

1619. Shane S. 2004. Live-bird markets are under the microscope: as the United States battles new outbreaks of bird flu, the role and necessity of live-bird markets must be examined. *National Provisioner* 218(4):38. findarticles.com/p/articles/mi_hb314/is_200404/ai_hibm1G1117180028.

1620. Shane S. 2004. Live-bird markets are under the microscope: as the United States battles new outbreaks of bird flu, the role and necessity of live-bird markets must be examined. *National Provisioner* 218(4):38. findarticles.com/p/articles/mi_hb314/is_200404/ai_hibm1G1117180028.

1621. Suarez DL, Spackman E, Senne DA. 2003. Update on molecular epidemiology of H1, H5, and H7 influenza virus infections in poultry in North America. *Avian Diseases* 47:888–97.

1622. Suarez DL, Spackman E, Senne DA. 2003. Update on molecular epidemiology of H1, H5, and H7 influenza virus infections in poultry in North America. *Avian Diseases* 47:888–97.
1623. Shane S. 2004. Live-bird markets are under the microscope: as the United States battles new outbreaks of bird flu, the role and necessity of live-bird markets must be examined. *National Provisioner* 218(4):38. findarticles.com/p/articles/mi_hb314/is_200404/ai_hibm1G1117180028.
1624. Webster RG. 2004. Wet markets—a continuing source of severe acute respiratory syndrome and influenza? *Lancet* 363:234–6.
1625. Swayne DE. 2003. Transcript of the question and answer session from the Fifth International Symposium on Avian Influenza. *Avian Diseases* 47:1219–55.
1626. Suarez DL, Spackman E, Senne DA. 2003. Update on molecular epidemiology of H1, H5, and H7 influenza virus infections in poultry in North America. *Avian Diseases* 47:888–97.
1627. Mullaney R. 2003. Live-bird market closure activities in the northeastern United States. *Avian Diseases* 47:1096–8.
1628. 2004. Bird flu found at four New Jersey live chicken markets. *USA Today*, February 12. usatoday.com/news/nation/2004-02-12-bird-flu_x.htm.
1629. Kingsbury K. 2004. Animal markets are alive with controversy. *Columbia News Service*. February 16. www.jrn.columbia.edu/studentwork/cns/2004-02-16/455.asp.
1630. Shane S. 2004. Live-bird markets are under the microscope: as the United States battles new outbreaks of bird flu, the role and necessity of live-bird markets must be examined. *National Provisioner* 218(4):38. findarticles.com/p/articles/mi_hb314/is_200404/ai_hibm1G1117180028.
1631. Bulaga LL, Garber L, Senne D, et al. 2003. Descriptive and surveillance studies of suppliers to New York and New Jersey retail live-bird markets. *Avian Diseases* 47:1169–76.
1632. U.S. Department of Agriculture. Agriculture Research Service. 2005. Science Hall of Fame. December 16. www.ars.usda.gov/careers/hof/browse.htm.
1633. Thacker C. 2006. Live markets: a risk for entry of bird flu into US. *Dow Jones Newswires*, March 31. cattlenetwork.com/content.asp?contentid=26782.
1634. U.S. Department of Agriculture Food Safety Inspection Service. 2005. Guidance for determining whether a poultry slaughter or processing operation is exempt from inspection requirements of the Poultry Products Inspection Act. June. www.fsis.usda.gov/OPPDE/rdad/FSISNotices/Poultry_Slaughter_Exemption_0605.pdf.

1635. Iowa Department of Agriculture and Land Stewardship Meat and Poultry Inspection Bureau. Slaughter-processing-labeling-marketing: the basics. www.agriculture.state.ia.us/thebasics.htm.

1636. Shane S. 2004. Live-bird markets are under the microscope: as the United States battles new outbreaks of bird flu, the role and necessity of live-bird markets must be examined. *National Provisioner* 218(4):38. www.findarticles.com/p/articles/mi_hb314/is_200404/ai_hibm1G1117180028.

1637. Hedley AJ, Leung GM, Fielding R, Lam TH. 2004. The prevention of avian influenza in Hong Kong: observations on the HKSAR government's consultation document. Department of Community Medicine and Unit for Behavioural Sciences, School of Public Health, The University of Hong Kong. legco.gov.hk/yr03-04/english/panels/fseh/papers/fe0604cb2-2583-03-e.pdf.

1638. Webby RJ, Webster RG. 2001. Emergence of influenza A viruses. *Philosophical Transactions of the Royal Society of London* 356:1817–28.

1639. Food and Agriculture Organization of the United Nations. Technical Task Force on Avian Influenza. 2005. Update on the avian influenza situation. *Avian Influenza Disease Emergency News*, issue 28. www.fao.org/ag/againfo/subjects/documents/ai/AVIbull028.pdf.

1640. BirdLife International. 2005. Waterbird culls and wetland drainage could worsen spread of Avian Influenza, BirdLife warns. News release, October 20. birdlife.org/news/pr/2005/10/bird_flu_measures.html.

1641. Boon D. 2006. Wild birds, poultry, and avian influenza. *Lancet Infectious Diseases* 6:262.

1642. Melville DS, Shortridge KF. 2004. Influenza: time to come to grips with the avian dimension. *Lancet Infectious Diseases* 4:261–2.

1643. Food and Agriculture Organization of the United Nations. 2005. Army of volunteers helps detect flu early. fao.org/newsroom/en/focus/2005/100356/article_100556en.html.

1644. 2004. Bird flu death toll rises to 18 in Asia. Associated Press, February 5.

1645. Sipress A. 2005. Bird flu adds new danger to bloody game; cockfighting among Asian customs that put humans at risk. *Washington Post*, April 14.

1646. Reynolds G. 2004. Our lives in their hands; they scour the earth for clues that could prevent millions of deaths. *Independent*, November 15. findarticles.com/p/articles/mi_qn4158/is_20041115/ai_n12822423.

1647. 2004. Cock-fighters the culprits. September 16. e.sinchew-i.com/content.phtml?sec=2&artid=200409160005.

1648. Taipei Times. 2005. Cockfighting to resume in Thailand. December 6. taipeitimes.com/News/world/archives/2005/12/06/2003283202.

1649. 2004. Fighting cocks fan Thai flu fears. *The Australian*, February 4.

1650. Food and Agriculture Organization of the United Nations. Army of volunteers helps detect flu early. 2005. fao.org/newsroom/en/focus/2005/100356/article_100556en.html.
1651. Gilbert M, Chitaweesub P, Parakamawongsa T, et al. 2006. Free-grazing ducks and highly pathogenic avian influenza, Thailand. *Emerging Infectious Diseases* 12(2):227–34.
1652. Delgado CL, Narrod CA, Tiongco MM. 2003. Policy, Technical, and Environmental Determinants and Implications of the Scaling-Up of Livestock Production in Four Fast-Growing Developing Countries: A Synthesis. Submitted to the Food and Agricultural Organization of the United Nations by the International Food Policy Research Institute. July 24. www.fao.org/WAIR-DOCS/LEAD/x6170e/x6170e00.htm.
1653. Shane S. 2004. The Asian AI outbreak and what it means to the U.S. poultry industry. *Meating Place*, February, 2.
1654. 2005. Fatal flu. *The NewsHour with Jim Lehrer* transcript #8201. April 7.
1655. Sipress A. 2005. Bird flu adds new danger to bloody game; cockfighting among Asian customs that put humans at risk. *Washington Post*, April 14. washingtonpost.com/wp-dyn/articles/A51593-2005Apr13.html.
1656. Clifton M. 2004. Cockfighters spread Asian killer flu. *Animal People*, March.
1657. Piller C. 2005. Squawking at bird flu warning. *Los Angeles Times*, September 1. latimes.com/news/science/la-sci-cockfighting1sep01,0,1160398.story?coll=la-home-science.
1658. Griffin J. 2014 Jan. Cockfighting laws. Washington(DC): National Conference of State Legislatures; [accessed 2020 Apr 18]. <https://www.ncsl.org/research/agriculture-and-rural-development/cockfighting-laws.aspx>.
1659. Pagan G. 2005. SB 156 bill analysis. January 28. info.sen.ca.gov/pub/bill/sen/sb_0151-0200/sb_156_cfa_20060109_123745_asm_comm.html.
1660. Veneman AM. 2004. Letter from U.S. Department of Agriculture Secretary to U.S. Senator Robert Bennet. May 24.
1661. Frabotta D. 2005. Bird flu's U.S. flyby? *DVM Newsmagazine*, December 1. www.dvmnewsmagazine.com/dvm/article/articleDetail.jsp?id=274373.
1662. Gallegly E. 2005. Smuggling cockfighting roosters a conduit to bird flu. *Santa Barbara News-Press*, December 11. tinyurl.com/m4369.
1663. Blumenauer E. 2003. USDA needs funding to fight animal abuse. *Agriculture and Animal Welfare. Floor Speeches*, July 14. www.blumenauer.house.gov/issues/FloorSpeechSummary.aspx?NewsID=71&IssueID=3.
1664. Estrada RT. 2003. Fighting roosters spreading disease? *Modesto Bee*, February 9. modbee.com/local/story/6130728p-7083314c.html.

1665. Estrada RT. 2003. Fighting roosters spreading disease? Modesto Bee, February 9. modbee.com/local/story/6130728p-7083314c.html.

1666. U.S. Department of Transportation. 1998. USDA, APHIS, PPQ—Agricultural quarantine inspections database; the potential for international travelers to transmit foreign animal diseases to U.S. livestock or poultry. August, as cited in U.S. Department of Agriculture APHIS. Newcastle Disease in Luxembourg, December 1999 Impact Worksheet. www.aphis.usda.gov/vs/ceah/cei/taf/iw_1999_files/foreign/newcastle_lux1.htm.

1667. Aviagen. Welcome to Aviagen. www.aviagen.com/output.asp?sec=10&con=334&siteId=1.

1668. Fernández-Gutiérrez A. Controlling highly pathogenic avian influenza. ThePoultrySite. thepoultrysite.com/FeaturedArticle/FAType.asp?AREA=game&Display=414.

1669. Carolina on the West Coast. 2005. Avian flu and our game birds. The Gamecock, December, p. 96.

1670. Gallegly E. 2005. Smuggling cockfighting roosters a conduit to bird flu. Santa Barbara News-Press, December 11. tinyurl.com/m4369.

1671. Blumenauer E. 2003. Cockfighting. U.S. Department of Agriculture Animal Welfare Information Center. March 31. www.nal.usda.gov/awic/cockfighting.htm.

1672. Public Health-Disease Control Programs, Department of Health Services, County of Los Angeles. 2003. Veterinary public health and rabies control: Cockfighting. www.lapublichealth.org/vet/docs/cockfight.pdf.

1673. Piller C. 2005. A virus stalks the henhouse. Los Angeles Times, December 13. www.latimes.com/news/print/edition/front/la-sci-poultry13dec13,1,6174614,full.story?coll=la-headlines-frontpage.

1674. Estrada RT. 2003. Fighting roosters spreading disease? Modesto Bee, February 9. modbee.com/local/story/6130728p-7083314c.html.

1675. Frommer FJ. 2001. Senate passes anti-cockfighting bill. Associated Press, July 31. speakout.com/activism/apstories/10005-1.html.

1676. 2003. Project pork. ABC 7, May 13. [abclocal.go.com/kgo/news/iteam/051303_iteam_project_pork_chickens.html#](http://abclocal.go.com/kgo/news/iteam/051303_iteam_project_pork_chickens.html#.).

1677. Saville A (ed.), 2006. The American Game Fowl Standards (Belton, SC: The American Game Fowl Society).

1678. Slasherfowl. 2006. World Slasher Derby 2006. January 18, 2:05 AM. Game Rooster Public Forums Gamefowl Board. Accessed January 18, 2006. www.gamerooster.com.

1679. Murillo MAS. 2004. Weekender. Business World (Philippines) Financial Times Information Limited—Asia Intelligence Wire, January 30.

1680. Gay L. 2005. With threat of avian flu, bird smuggling becomes issue. Scripps Howard News Service, October 26. www.knoxstudio.com/shns/story.cfm?pk=AVIANFLU-10-26-05&cat=AN.
1681. National Chicken Council. 2004. NCC backs increased penalties for cockfighting. April 12. www.poultryandeggnews.com/poultrytimes/news/April2004/210283.html.
1682. Powelson R. 2005. Should the feds regulate cock fighting? Capitol Hill Blue, August 23. www.capitolhillblue.com/artman/publish/article_7259.shtml.
1683. Hearn J. 2004. Chicken lobby: curb cockfights. The Hill, April 7. www.hillnews.com/business/040704_chicken.aspx.
1684. Food and Agriculture Organization of the United Nations. 2004. Animal health special report: avian influenza questions and answers. www.fao.org/ag/againfo/subjects/en/health/diseases-cards/avian_qa.html.
1685. Chen H. 2009. Avian influenza vaccination: the experience in China. *Rev Sci Tech*. 28(1):267–274. <https://doi.org/10.20506/rst.28.1.1860>.
1686. Specter M. 2005. Nature's bioterrorist. *New Yorker*, February 28, pp. 52–61.
1687. Rosenthal E. 2006. A scientific puzzle: some Turks have bird flu virus but aren't sick. *New York Times*, January 11, p. A10. nytimes.com/2006/01/11/international/europe/11flu.html?ex=1294635600&en=7a724fa647544955&ei=5090&partner=rssuserland&emc=rss.
1688. Gilbert M, Wint W, Slingenbergh J. 2004. The ecology of highly pathogenic avian influenza in East and South-east Asia: outbreaks distribution, risk factors and policy implications. Consultancy report for the Animal Health Service of the Animal Production and Health Division of the Food and Agriculture Organization of the United Nations, Rome, Italy, August.
1689. 2005. Bird Shippers of America Answers HSUS Charges. November 5. birdshippers.org/archives/2005/11/bird_shippers_o_1.html.
1690. Clifton M. 2005. Flu threat spreads opposition to cockfighting. *Animal People*, September, p. 1.
1691. Who's Who in the Egg and Poultry Industries in the USA and Canada—2005/2006 (Mt. Morris, IL: Watt Publishing Company).
1692. Clifton M. 2005. Flu threat spreads opposition to cockfighting. *Animal People*, September, p. 1.
1693. Webster A. 1993. Thermal stress on chickens in transit. *British Poultry Science* 34(2):267–77.
1694. Whyte P, Collins JD, McGill K, Monahan C, O'Mahony H. 2001. The effect of transportation stress on excretion rates of campylobacters in market-age broilers. *Poultry Science* 80(6):817–20.

1695. Wildlife Conservation Society. 2004. Avian flu: Wildlife experts say that closing overseas wild bird markets would help prevent spread of disease. Science Daily, February 4. www.sciencedaily.com/releases/2004/02/040203225930.htm.

1696. Weinhold B. 2004. Infectious disease: the human costs of our environmental errors. Environmental Health Perspectives 112(1):A32–9. ehponline.org/members/2004/112-1/EHP112pa32PDF.PDF.

1697. Weinhold B. 2004. Infectious disease: the human costs of our environmental errors. Environmental Health Perspectives 112(1):A32–9. ehponline.org/members/2004/112-1/EHP112pa32PDF.PDF.

1698. Gerberding JL. Order of the Centers for Disease Control and Prevention, Department of Health and Human Services, March 10. www.cdc.gov/flu/avian/pdf/malaysia.pdf.

1699. Gay L. 2005. With threat of avian flu, bird smuggling becomes issue. Scripps Howard News Service, October 26. www.knoxstudio.com/shns/story.cfm?pk=AVIANFLU-10-26-05&cat=AN.

1700. Wildlife Conservation Society. 2004. Avian flu: wildlife experts say that closing overseas wild bird markets would help prevent spread of disease. Science Daily, February 4. www.sciencedaily.com/releases/2004/02/040203225930.htm.

1701. Chong J. 2006. Bird flu defies control efforts. Los Angeles Times, March 27. latimes.com/news/printedition/la-sci-birdflu27mar27,0,2708107,full.story?coll=la-home-headlines.

1702. Gay L. 2005. With threat of avian flu, bird smuggling becomes issue. Scripps Howard News Service, October 26. www.knoxstudio.com/shns/story.cfm?pk=AVIANFLU-10-26-05&cat=AN.

1703. U.S. Department of State. 2005. United States announces global coalition against wildlife trafficking. September 23. state.gov/r/pa/prs/ps/2005/53926.htm.

1704. Gay L. 2005. With threat of avian flu, bird smuggling becomes issue. Scripps Howard News Service, October 26. www.knoxstudio.com/shns/story.cfm?pk=AVIANFLU-10-26-05&cat=AN.

1705. Gay L. 2005. With threat of avian flu, bird smuggling becomes issue. Scripps Howard News Service, October 26. www.knoxstudio.com/shns/story.cfm?pk=AVIANFLU-10-26-05&cat=AN.

1706. MacKenzie D. 2004. Europe has close call with deadly bird flu. New Scientist, October 26. www.newscientist.com/article.ns?id=dn6575.

1707. Borm S, Thomas I, Hanquet G, et al. 2005. Highly pathogenic H5N1 influenza virus in smuggled Thai eagles, Belgium. Emerging Infectious Diseases 11(5):702–5. www.cdc.gov/ncidod/eid/vol11no05/05-0211.htm.

1708. Borm S, Thomas I, Hanquet G, et al. 2005. Highly pathogenic H5N1 influenza virus in smuggled Thai eagles, Belgium. *Emerging Infectious Diseases* 11(5):702–5. www.cdc.gov/ncidod/eid/vol11no05/05-0211.htm.
1709. MacKenzie D. 2004. Europe has close call with deadly bird flu. *New Scientist*, October 26. www.newscientist.com/article.ns?id=dn6575.
1710. Johnson RT. 2003. Emerging viral infections of the nervous system. *Journal of NeuroVirology* 9:140–7.
1711. Stapp K. 2004. Scientists warn of fast-spreading global viruses. IPS-Inter Press Service, February 23.
1712. Ronca SE, Murray KO, Nolan MS. 2019. Cumulative incidence of West Nile virus infection, continental United States, 1999–2016. *Emerg Infect Dis*. 25(2):325–327. <https://doi.org/10.3201/eid2502.180765>.
1713. Ludwig B, Kraus FB, Allwinn R, Doerr HW, Preiser W. 2003. Viral zoonoses—a threat under control? *Intervirology* 46:71–8.
1714. Food and Agriculture Organization of the United Nations. Technical Task Force on Avian Influenza. 2005. Update on the avian influenza situation. *Avian Influenza Disease Emergency News*, issue 28. www.fao.org/ag/againfo/subjects/documents/ai/AVIbull028.pdf.
1715. Gardiner B. 2005. Global bird trade raises bird flu concerns. Associated Press, October 24. abcnews.go.com/Business/print?id=1247482.
1716. ProMED-mail. 2004. Avian influenza, human—East Asia. January 29. www.promedmail.org/pls/promed/f?p=2400:1202:11412984429089452986::NO::F2400_P1202_CHECK_DISPLAY,F2400_P1202_PUB_MAIL_ID:X,24295.
1717. Office of Communications, U.S. Department of Agriculture. 2005. Transcript of technical briefing regarding avian influenza, October 26. Transcript Release No. 0461.05. www.usda.gov/wps/portal/!ut/p/_s.7_0_A/7_0_1OB?contentidonly=tru%C2%AD&contentid=2005/10/0461.xml.
1718. Department for Environment, Food and Rural Affairs. 2005. Epidemiology report published on H5N1 in Essex quarantine. DEFRA News Release, November 15. www.defra.gov.uk/news/2005/051115b.htm.
1719. Bureau of Animal and Plant Health Inspection and Quarantine Council of COA, Executive Yuan. H5N1 Avian influenza virus detected in smuggled birds from China. Government Information Office, Republic of China (Taiwan), October 26. english.www.gov.tw/e-Gov/index.jsp?catid=217&recordid=87565.
1720. Department for Environment, Food and Rural Affairs. 2005. Epidemiology report published on H5N1 in Essex quarantine. DEFRA News Release, November 15. www.defra.gov.uk/news/2005/051115b.htm.

1721. Schmit J. 2005. Pet bird buyers asking sellers about avian flu. USA Today, November 11. www.usatoday.com/money/industries/health/2005-11-27-bird-questions-usat_x.htm?csp=N009.

1722. Watts G. 2006. An old problem finds a new role. *Watt PoultryUSA* 7:82–3.

1723. Europa Press Release. 2005. Avian influenza: EU bans imports of captive live birds from third countries. October 26. europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/1351&format=HTML.&aged=0&language=EN&guiLanguage=en.

1724. Centers for Disease Control and Prevention. 2006. Embargoed African rodents and monkeypox virus. January 26. www.cdc.gov/ncidod/monkeypox/animals.htm.

1725. Centers for Disease Control and Prevention. 2003. Update: multistate outbreak of monkeypox—Illinois, Indiana, Kansas, Missouri, Ohio, and Wisconsin. *Morbidity and Mortality Weekly Report* 52(27):642–46. cdc.gov/mmwr/preview/mmwrhtml/mm5227a5.htm.

1726. McKenna MAJ. 2004. Smuggled birds may harbor avian flu; AMA to hear experts warn how Southeast Asian virus could become a global threat. *Atlanta Journal-Constitution*, December 6, p. 1A. www.cste.org/PS/2003pdf.s/03-ID-13%20-%20FINAL.pdf.

1727. Gay L. 2005. With threat of avian flu, bird smuggling becomes issue. *Scripps Howard News Service*, October 26. www.knoxstudio.com/shns/story.cfm?pk=AVIANFLU-10-26-05&cat=AN.

1728. Frabotta D. 2005. Bird flu's U.S. flyby? *DVM Newsmagazine*, December 1. www.dvmnewsmagazine.com/dvm/article/articleDetail.jsp?id=274373.

1729. McKenna MAJ. 2004. Smuggled birds may harbor avian flu; AMA to hear experts warn how Southeast Asian virus could become a global threat. *Atlanta Journal-Constitution*, December 6, p. 1A. wildaid.org/index.asp?CID=8&PID=331&SUBID=&TERID=86.

1730. McKenna MAJ. 2004. Smuggled birds may harbor avian flu; AMA to hear experts warn how Southeast Asian virus could become a global threat. *Atlanta Journal-Constitution*, December 6, p. 1A. wildaid.org/index.asp?CID=8&PID=331&SUBID=&TERID=86.

1731. American Bird Conservancy, Defenders of Wildlife, Eurogroup for Animal Welfare, et al. An NGO call to halt wild bird imports into the European Union. *European Union Wild Bird Declaration*. birdsareforwatching.org/WBDecFinal.pdf.

1732. Gay L. 2005. With threat of avian flu, bird smuggling becomes issue. *Scripps Howard News Service*, October 26. www.knoxstudio.com/shns/story.cfm?pk=AVIANFLU-10-26-05&cat=AN.

1733. Bradshaw B. 2006. United Kingdom Parliament House of Commons. Wild birds. April 25. www.publications.parliament.uk/pa/cm200506/cmhansrd/cm060425/text/60425w05.htm.
1734. Wright TF, Toft CA, Enkerlin-Hoeflich E, et al. 2001. Nest poaching in neotropical parrots. *Conservation Biology* 15(3):710–20.
1735. Born Free Foundation. Groups urge EU to end wild bird imports. born-free.org.uk/birds.shtml.
1736. Editorial. 2003. Trade in wild animals: a disaster ignored *Lancet Infectious Diseases* 2(7):391.
1737. Bhattacharya S. 2005. Bird flu outbreaks expected in more countries. *New Scientist*, October 17. www.newscientist.com/article.ns?id=dn8140.
1738. 2005. Scientists say migratory birds may carry H5N1 avian flu virus to U.S. next year. *People's Daily Online*, October 29. english.people.com.cn/200510/29/eng20051029_217622.html.
1739. Shortridge KF. 1999. Influenza—a continuing detective story. *Lancet* 354:siv29.
1740. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
1741. Webster RG. 1997. Influenza virus: transmission between species and relevance to emergence of the next human pandemic. *Archives of Virology* 13:S105–13.
1742. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiol Rev.* 56(1):152–179.
1743. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
1744. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
1745. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
1746. Laver WG, Bischofberger N, Webster RG. 2000. The origin and control of pandemic influenza. *Perspectives in Biology and Medicine* 43(2):173–92.
1747. Wobeser GA. 1997. *Diseases of Wild Waterfowl* (New York, NY: Plenum Press).

1748. Webster RG, Shortridge KF, Kawaoka Y. 1997. Influenza: Interspecies transmission and emergence of new pandemics. *Federation of European Microbiological Societies Immunology and Medical Microbiology* 18:275–9.
1749. Murphy B. 1993. Factors restraining emergence of new influenza viruses. In: Morse SS (ed.), *Emerging Viruses* (New York, NY: Oxford University Press, pp. 234–40).
1750. Webster RG, Wright SM, Castrucci MR, Bean WJ, Kawaoka Y. 1993. Influenza—a model of an emerging virus disease. *Intervirology* 35:16–25.
1751. Shortridge KF. 1992. Pandemic influenza: a zoonosis? *Seminars in Respiratory Infections* 7:11–25.
1752. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
1753. Webby RJ, Webster RG. 2001. Emergence of influenza A viruses. *Philosophical Transactions of the Royal Society of London* 356:1817–28.
1754. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
1755. Handwerk B. 2002. Sharks falling prey to humans' appetites. *National Geographic News*, June 3. news.nationalgeographic.com/news/2002/06/0603_020603_shark1.html.
1756. Sharp GB, Kawaoka Y, Jones DJ, et al. 1997. Coinfection of wild ducks by influenza A viruses: distribution patterns and biological significance. *Journal of Virology* 71:6128–35. jvi.asm.org/cgi/reprint/71/8/6128.pdf.
1757. Kurtz J, Manvell RJ, Banks J. 1996. Avian influenza virus isolated from a woman with conjunctivitis. *Lancet*. 348(9031):901–2.
1758. Webster RG, Geraci J, Petursson G, Skirnisson K. 1981. Conjunctivitis in human beings caused by influenza A virus of seals. *New England Journal of Medicine* 304(15):911.
1759. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press).
1760. Horimoto T, Kawaoka Y. 2001. Pandemic threat posed by Avian Influenza A viruses. *Clinical Microbiology Reviews* 14:129–49.
1761. Subbarao K, Katz J. 2000. Avian influenza viruses infecting humans. *Cellular and Molecular Life Sciences* 57:1770–84.
1762. Webby RJ, Webster RG. 2001. Emergence of influenza A viruses. *Philosophical Transactions of the Royal Society of London* 356:1817–28.

1763. Whitney D. 2005. Bird flu battle on horizon: scientists fear the deadly virus is adapting and will hit the U.S. hard. *Sacramento Bee*, August 13, p. A3.
1764. Honigsbaum M. 2005. Flying Dutchman to the rescue: "virus hunter" sees bird flu as greatest threat. *Guardian*, June 3, p. 23. www.guardian.co.uk/life/feature/story/0,13026,1491811,00.html.
1765. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
1766. Shortridge KF. 1997. Is China an influenza epicentre? *Chinese Medical Journal* 110(8):637–41.
1767. Shortridge KF. 1992. Pandemic influenza: a zoonosis? *Seminars in Respiratory Infections* 7:11–25.
1768. Steneroden K, Roth R, Ramirez A, Spickler AR. Avian influenza (highly pathogenic): fowl plague, fowl pest, Brunswick bird plague, fowl disease, fowl or bird grippé. www.cfsph.iastate.edu/DiseaseInfo/notes/AvianInfluenza.pdf.
1769. Daszak P, Cunningham AA. 2002. Emerging infectious diseases: a key role for conservation medicine. In: Aguirre AA, Ostfeld RS, Tabor GM, House C, Pearl MC (eds.), *Conservation Medicine: Ecological Health in Practice* (New York, NY: Oxford University Press, pp. 40–61).
1770. Suarez DL, Garcia M, Latimer J, Senne D, Perdue M. 1999. Phylogenetic analysis of H7 avian influenza viruses isolated from the live bird markets of the northeastern United States. *Journal of Virology* 73:3567–73.
1771. Dronamraju K (ed.), 2004. *Infectious Disease and Host-Pathogen Evolution* (Cambridge, UK: Cambridge University Press).
1772. Hollenbeck JE. 2005. An avian connection as a catalyst to the 1918–1919 influenza pandemic. *International Journal of Medical Sciences* 2(2):87–90. pubmedcentral.nih.gov/articlerender.fcgi?artid=1145139.
1773. Webster RG. 1998. Influenza: an emerging microbial pathogen. In: *Emerging Infections* (San Diego, CA: Academic Press, pp. 275–300).
1774. Suarez DL, Perdue ML, Cox N, et al. 1998. Comparisons of highly virulent H5N1 influenza A viruses isolated from humans and chickens from Hong Kong. *Journal of Virology* 72:6678–88.
1775. Shortridge KF. 1992. Pandemic influenza: a zoonosis? *Seminars in Respiratory Infections* 7:11–25.
1776. Suarez DL. 2000. Evolution of avian influenza viruses. *Veterinary Microbiology* 74:15–27.
1777. Capua I, Alexander DJ. 2004. Avian influenza: recent developments. *Avian Pathology* 33:393–404.

1778. Sturm-Ramirez KM, Hulse-Post DJ, Govorkova EA. 2005. Are ducks contributing to the endemicity of highly pathogenic H5N1 influenza virus in Asia?
1779. Marwick C. 1998. Investigators present latest findings on Hong Kong “bird flu” to the FDA. *Journal of the American Medical Association* 279(9):643–44.
1780. Van Blerkom LM. 2003. Role of viruses in human evolution. *Yearbook of Physical Anthropology* 46:14–46. tinyurl.com/ksh92.
1781. Hayden D. 2003. *Pox: Genius, Madness, and the Mysteries of Syphilis* (New York, NY: Basic Books).
1782. Knell RJ. 2004. Syphilis in Renaissance Europe: rapid evolution of an introduced sexually transmitted disease? *Proceedings of the Royal Society of London. Series B: Biological Sciences* 7:271(Suppl 4):S174–6. www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15252975&itool=iconabstr&query_hl=12&itool=pubmed_docsum.
1783. Flint SJ, Enquist LW, Ranciello VR, Skalka AM. 2004. *Principles of Virology: Molecular Biology, Pathogenesis and Control of Animal Viruses* (Washington, DC: American Society of Microbiology Press).
1784. Ryan F. 1997. *Virus X: Tracking the New Killer Plagues—Out of the Present and Into the Future* (Boston, MA: Little, Brown and Company).
1785. Dieckmann U, Metz JAJ, Sabelis MW, Sigmund K. 2002. *Adaptive dynamics of infectious diseases: In: Pursuit of Virulence Management* (Cambridge, UK: Cambridge University Press).
1786. Diamond J. 1992. The arrow of disease. *Discover*, October 13(10):64–73.
1787. Truyen U, Parrish CR, Harder TC, Kaaden O. 1995. There is nothing permanent except change. The emergence of new virus diseases. *Veterinary Microbiology* 43:103–22.
1788. Dimmock NJ, Easton A, Leppard K. 2001. *Introduction to Modern Virology* (Blackwell Publishing).
1789. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press).
1790. Suarez DL. 2000. Evolution of avian influenza viruses. *Veterinary Microbiology* 74:15–27.
1791. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
1792. World Health Organization. 2005. Avian influenza: assessing the pandemic threat, January 1. www.who.int/csr/disease/influenza/H5N1-9reduit.pdf.

1793. Ito T, Goto H, Yamamoto E, et al. Generation of a highly pathogenic avian influenza A virus from an avirulent field isolate by passaging in chickens. *Journal of Virology* 75(9):4439–43. pubmedcentral.com/articlerender.fcgi?artid=114193.
1794. Capua I, Marangon S. 2003. The use of vaccination as an option for the control of avian influenza. In: 71st General Session International Committee of the World Organization for Animal Health (Paris, France, May 18–23).
1795. Morris RS, Jackson R. 2005. Epidemiology of H5N1 avian influenza in Asia and implications for regional control. Food and Agriculture Organization of the United Nations. January–February 11. thepoultrysite.com/FeaturedArticle/FAType.asp?AREA=turkeys&Display=121.
1796. Suarez DL, Spackman E, Senne DA. 2003. Update on molecular epidemiology of H1, H5, and H7 influenza virus infections in poultry in North America. *Avian Diseases* 47:888–97.
1797. U.S. Department of Agriculture, Agriculture Research Service. 2006. People and places. www.ars.usda.gov/pandp/people/people.htm?personid=5507.
1798. Ito T, Goto H, Yamamoto E, et al. Generation of a highly pathogenic avian influenza A virus from an avirulent field isolate by passaging in chickens. *Journal of Virology* 75(9):4439–43. pubmedcentral.com/articlerender.fcgi?artid=114193.
1799. Becker WB. 1966. The isolation and classification of tern virus: influenza A/tern/South Africa/1961. *Journal of Hygiene* 64(3):309–20.
1800. Sabirovic M. 2004. Qualitative risk analysis: HPAI in ostriches in South Africa. United Kingdom Department of Environment, Food and Rural Affairs. Error! Hyperlink reference not valid..
1801. Alexander DJ. 1986. Avian influenza—historical aspects. Proceedings of the Second International Symposium on Avian Influenza (University of Wisconsin: U.S. Animal Health Association, pp. 4–13).
1802. Dhingra MS, Artois J, Dellicour S, Lemey P, Dauphin G, Von Dobschuetz S, Van Boeckel TP, Castellan DM, Morzaria S, Gilbert M. 2018. Geographical and historical patterns in the emergences of novel highly pathogenic avian influenza (HPAI) H5 and H7 viruses in poultry. *Front Vet Sci*. 5:84. <https://doi.org/10.3389/fvets.2018.00084>.
1803. Stegeman A (Chairman). 2003. Workshop 1: Introduction and spread of avian influenza. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control. library.wur.nl/frontis/avian_influenza/workshop1.pdf.
1804. Brown EG, Liu H, Kit LC, Baird S, Nesrallah M. 2001. Pattern of mutation in the genome of influenza A virus on adaptation to increased virulence in

the mouse lung: identification of functional themes. *Proceedings of the National Academy of Sciences of the United States of America* 98(12):6883–8.

1805. Brown EG, Liu H, Kit LC, Baird S, Nesrallah M. 2001. Pattern of mutation in the genome of influenza A virus on adaptation to increased virulence in the mouse lung: identification of functional themes. *Proceedings of the National Academy of Sciences of the United States of America* 98(12):6883–8.

1806. Domingo E, Menendez-Arias L, Holland JJ. 1997. RNA virus fitness. *Reviews in Medical Virology* 7:87–96.

1807. Brown E. 2006. Personal communication. May 4.

1808. Horimoto T, Kawaoka Y. 2001. Pandemic threat posed by Avian Influenza A viruses. *Clinical Microbiology Reviews* 14:129–49.

1809. Rhorer AR. 2005. Controlling avian flu: the case for a low-path control program. *Watt PoultryUSA*, July, pp. 28–35.

1810. Hall C. 2004. Impact of avian influenza on U.S. poultry trade relations—2002: H5 or H7 low pathogenic avian influenza. *Annals of the New York Academy of Science* 1026:47–53. www.blackwell-synergy.com/doi/abs/10.1196/annals.1307.006.

1811. Rhorer AR. 2005. Controlling avian flu: the case for a low-path control program. *Watt PoultryUSA*, July, pp. 28–35.

1812. Rojas H, Moreira R, Avalos P, Capua I, Marangon S. 2002. Avian influenza in poultry in Chile. *Vet Rec.* 151:188.

1813. Naeem K, Siddique N, Ayaz M, Jalalee MA. 2007. Avian influenza in Pakistan: outbreaks of low-and high-pathogenicity avian influenza in Pakistan during 2003–2006. *Avian Dis.* 51:189–193.

1814. Centers for Disease Control and Prevention. 2006. Guidance and recommendations. Interim guidance for protection of persons involved in U.S. avian influenza outbreak disease control and eradication activities. January 14. www.cdc.gov/flu/avian/professional/protect-guid.htm.

1815. Pringle CR. 2005. Avian influenza, human—East Asia (121): migratory birds. *ProMED-mail*, September 1. promedmail.org/pls/promed/f?p=2400:1001::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:1000%2C30265.

1816. Tam JS. 2002. Influenza A (H5N1) in Hong Kong: an overview. *Vaccine* 20:S77–81.

1817. Kristensson K. 2006. Avian influenza and the brain—comments on the occasion of resurrection of the Spanish flu virus. *Brain Research Bulletin* 68:406–13.

1818. Shortridge KF. 1999. Influenza—a continuing detective story. *Lancet* 354:siv29.

1819. Webby RJ, Webster RG. 2001. Emergence of Influenza A Viruses. *Philosophical Transactions of the Royal Society of London* 356:1817–28.
1820. Campitelli L, Mogavero E, Alessandra M, et al. 2004. Interspecies transmission of an H7N3 influenza virus from wild birds to intensively reared domestic poultry in Italy. *Virology* 323:24–36.
1821. Reid AH, Taubenberger JK, Fanning TG. 2001. The 1918 Spanish influenza: integrating history and biology. *Microbes and Infection* 3:81–87.
1822. Gambaryan A, Webster R, Matrosovich M. 2002. Differences between influenza virus receptors on target cells of duck and chicken. *Archives of Virology* 147:1197–208.
1823. Matrosovich MN, Krauss S, Webster RG. 2001. Rapid communication: H9N2 influenza A viruses from poultry in Asia have human virus-like receptor specificity. *Virology* 281:156–62.
1824. Gambaryan A, Webster R, Matrosovich M. 2002. Differences between influenza virus receptors on target cells of duck and chicken. *Archives of Virology* 147:1197–208.
1825. Gambaryan A, Webster R, Matrosovich M. 2002. Differences between influenza virus receptors on target cells of duck and chicken. *Archives of Virology* 147:1197–208.
1826. Gambaryan A, Yamnikova S, Lvov D, et al. 2005. Receptor specificity of influenza viruses from birds and mammals: new data on involvement of the inner fragments of the carbohydrate chain. *Virology* 334(2):276–83.
1827. Olofsson S, Kumlin U, Dimock K, Amberg N. 2005. Avian influenza and sialic acid receptors: more than meets the eye. *Lancet Infectious Diseases* 5:184–8.
1828. Wolfe DN, Eitel MN, Gockowski J, et al. 2000. Deforestation, hunting and the ecology of microbial emergence. *Global Change and Human Health* 1:10–25.
1829. Garrett L. 1994. *The Coming Plague: Newly Emerging Diseases in a World Out of Balance* (New York, NY: Farrar, Straus, Giroux).
1830. Campitelli L, Mogavero E, Alessandra M, et al. 2004. Interspecies transmission of an H7N3 influenza virus from wild birds to intensively reared domestic poultry in Italy. *Virology* 323:24–36.
1831. Perez DR, Lim W, Seiler JP, et al. 2003. Role of quail in the interspecies transmission of H9 influenza A viruses: molecular changes on HA that correspond to adaptations from ducks to chickens. *Journal of Virology* 77:3148–56. jvi.asm.org/cgi/content/full/77/5/3148?view=full&pmid=12584339.
1832. University of Georgia Southeastern Cooperative Wildlife Disease Study. 1986. July. Avian influenza in live poultry markets. SCWDS Briefs, July.

1833. Centers for Disease Control and Prevention. 2005. Transmission of influenza A viruses between animals and people. October 17. www.cdc.gov/flu/avian/gen-info/transmission.htm.
1834. Orent W. 2005. Playing with viruses. *Washington Post*, April 17, p. B01. www.washingtonpost.com/wp-dyn/articles/A58300-2005Apr16.html.
1835. Oxford JS, Sefton A, Jackson R, Innes W, Daniels RS, Johnson NPAS. 2002. World War I may have allowed the emergence of “Spanish” influenza. *Lancet Infectious Diseases* 2:111–4.
1836. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London, UK: Routledge, pp. 1–26).
1837. Byerly CR. 2005. *Fever of War: The Influenza Epidemic in the U.S. Army during World War I* (New York, NY: New York University Press, p. 94).
1838. McGirk T, Adiga A, Glacier S. 2005. Will the next pandemic rival 1918? *Times Asia*, July 4. time.com/time/asia/magazine/printout/0,13675,501050711-1079528,00.html.
1839. Barry JM. 2004. The site of origin of the 1918 influenza pandemic and its public health implications. *Journal of Translational Medicine* 2:3–7.
1840. Kolata G. 1999. *Flu: The Story of the Great Influenza Pandemic* (New York, NY: Simon and Schuster, Inc.).
1841. Elegant S. 2003. The breeding grounds: what other bugs are out there? *Time*, April 7. time.com/time/asia/magazine/printout/0,13675,501030407-438944,00.html.
1842. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
1843. Shortridge KF. 1999. The 1918 “Spanish” flu: pearls from swine? *Nature Medicine* 5:384–5.
1844. Oxford JS. 2001. The so-called Great Spanish Influenza Pandemic of 1918 may have originated in France in 1916. *Philosophical Transactions of the Royal Society of London* 356:1857–9.
1845. Webster RG. 2001. A molecular whodunit. *Science* 293:1773–5.
1846. Oxford JS, Novelli P, Sefton A, Lambkin R. 2002. New millennium antivirals against pandemic and epidemic influenza: the neuraminidase inhibitors. *Antiviral Chemistry and Chemotherapy* 13:205–17.
1847. Ross E. 2004. Asia is the traditional cradle of influenza, although disease can originate anywhere. *Biotech Week*, February 25, p. 628.

1848. Oxford JS. 2001. The so-called Great Spanish Influenza Pandemic of 1918 may have originated in France in 1916. *Philosophical Transactions of the Royal Society of London* 356:1857–9.
1849. Jordan E. 1927. *Epidemic Influenza*, 1st Edition (Chicago, Illinois: American Medical Association).
1850. Hollenbeck JE. 2005. An avian connection as a catalyst to the 1918–9 influenza pandemic. *International Journal of Medical Sciences* 2(2):87–90. medsci.org/v02p0087.htm.
1851. Gladwell M. 1997. The dead zone. *New Yorker*, July 28. gladwell.com/1997/1997_09_29_a_flu.htm.
1852. Hollenbeck JE. 2005. An avian connection as a catalyst to the 1918–9 influenza pandemic. *International Journal of Medical Sciences* 2(2):87–90. medsci.org/v02p0087.htm.
1853. Hollenbeck JE. 2005. An avian connection as a catalyst to the 1918–9 influenza pandemic. *International Journal of Medical Sciences* 2(2):87–90. medsci.org/v02p0087.htm.
1854. Barry JM. 2004. The site of origin of the 1918 influenza pandemic and its public health implications. *Journal of Translational Medicine* 2:3–7.
1855. Thomson D, Thomson R. 1934. *Influenza: Annals of the Pickett-Thomson Research Laboratory*, 1st Edition (Baltimore, MD: Williams and Wilkens).
1856. Burnet FM, Clark E. 1942. *Influenza: a survey of the last fifty years* (Melbourne, Australia: Macmillan Co).
1857. Gladwell M. 1997. The dead zone. *New Yorker*, July 28. gladwell.com/1997/1997_09_29_a_flu.htm.
1858. Ewald P. 1994. *Evolution of Infectious Disease* (Oxford: Oxford University Press, p. 117).
1859. Rennie J. 2005. Bird reaper, pt. III: Paul Ewald replies. *SciAm Observations*, November 2. blog.sciam.com/index.php?title=bird_reaper_pt_iii_paul_ewald_replies&more=1&c=1&tb=1&pb=1.
1860. Rennie J. 2005. Bird reaper, pt. III: Paul Ewald replies. *SciAm Observations*, November 2. blog.sciam.com/index.php?title=bird_reaper_pt_iii_paul_ewald_replies&more=1&c=1&tb=1&pb=1.
1861. Rennie J. 2005. Bird reaper, pt. III: Paul Ewald replies. *SciAm Observations*, November 2. blog.sciam.com/index.php?title=bird_reaper_pt_iii_paul_ewald_replies&more=1&c=1&tb=1&pb=1.
1862. Orent W. 2005. Playing with viruses. *Washington Post*, April 17, p. B01. washingtonpost.com/wp-dyn/articles/A58300-2005Apr16.html.

1863. Normile D. 2005. Avian Influenza: pandemic skeptics warn against crying wolf. *Science* 310(5751):1112–3.
1864. Ewald PW. 1996. Guarding against the most dangerous emerging pathogens: Insights from evolutionary biology. *Emerging Infectious Diseases* 2(4). www.cdc.gov/ncidod/eid/vol2no4/ewald.htm.
1865. Wilson WO. 1966. Poultry production. *Scientific American* 215(1):56–64.
1866. Boyd W, Watts M. 1997. Agro-industrial just-in-time: the chicken industry and postwar American capitalism. In: Goodman D, Watts M (eds.), *Globalising Food: Agrarian Questions and Global Restructuring* (London, UK: Routledge, pp. 192–224).
1867. Tracy M. 1982. Agriculture in Western Europe—Challenge and Response 1880–1980 (London, UK: Granada).
1868. National Chicken Council. [date unknown]. Per capita consumption of poultry and livestock, 1960 to forecast 2020, in pounds. Washington: NCC; [updated 2020 Mar; accessed 2020 Apr 8]. <https://www.nationalchickencouncil.org/about-the-industry/statistics/per-capita-consumption-of-poultry-and-livestock-1965-to-estimated-2012-in-pounds>.
1869. Smil V. Worldwide transformation of diets, burdens of meat production and opportunities for novel food proteins. *Enzyme and Medical Technology* 30 (2002) 305–11.
1870. Boyd W, Watts M. 1997. Agro-industrial just-in-time: the chicken industry and postwar American capitalism. In: Goodman D, Watts M (eds.), *Globalising Food: Agrarian Questions and Global Restructuring* (London, UK: Routledge, pp. 192–224).
1871. Boyd W, Watts M. 1997. Agro-industrial just-in-time: the chicken industry and postwar American capitalism. In: Goodman D, Watts M (eds.), *Globalising Food: Agrarian Questions and Global Restructuring* (London, UK: Routledge, pp. 192–224).
1872. Dekich MA. 1998. Broiler industry strategies for control of respiratory and enteric diseases. *Poultry Science* 77:1176–80.
1873. Dekich MA. 1998. Broiler industry strategies for control of respiratory and enteric diseases. *Poultry Science* 77:1176–80.
1874. Boyd W, Watts M. 1997. Agro-industrial just-in-time: the chicken industry and postwar American capitalism. In: Goodman D, Watts M (eds.), *Globalising Food: Agrarian Questions and Global Restructuring* (London, UK: Routledge, pp. 192–224).
1875. Bellis M. The history of the vitamins. Vitamins—production methods. Inventors. About.com. inventors.about.com/library/inventors/bl_vitamins.htm.

1876. Novus International Incorporated. Alimet® and Novus tradition of excellence vision of the future. novusint.com/Public/About/HistoryComplete.asp.
1877. Jacob JP, Mather FB. 1998. The home broiler chicken flock. University of Florida, Institute of Food and Agricultural Sciences. edis.ifas.ufl.edu/PS035.
1878. Cheng HH. 2003. Industrial selection for disease resistance: molecular genetic techniques. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 385–98).
1879. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1880. Wilson WO. 1966. Poultry production. *Scientific American* 215(1):56–64.
1881. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
1882. Walters MJ. 2003. *Six Modern Plagues and How We Are Causing Them* (Washington, DC: Island Press).
1883. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1884. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1885. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1886. U.S. Department of Agriculture Animal and Plant Health Inspection Service. 1995. APHIS history: a chronology of significant events, milestones and accomplishments of APHIS and its predecessor organizations. Sept. 13. permanent.access.gpo.gov/lps3025/history.html.
1887. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technol Cult.* 42(4):631–664.
1888. Ramos SE, MacLachlan M, Melton A. 2017. Impacts of the 2014-2015 highly pathogenic avian influenza outbreak on the U.S. poultry sector. A report from the Economic Research Service. U.S. Department of Agriculture. Report No.: LDPM-282-02. [updated 2017 Dec 20; accessed 2020 Apr 7]. <https://www.ers.usda.gov/publications/pub-details/?pubid=86281>.
1889. Hafez HM. 2003. Emerging and re-emerging diseases in poultry. *World Poultry* 19(7):23–7.
1890. Price LB, Johnson E, Vailes R, Silbergeld E. 2005. Fluoroquinolone-resistant *Campylobacter* isolates from conventional and antibiotic-free chicken products. *Environmental Health Perspectives* 113(5):557–60. www.ehponline.org/members/2005/7647/7647.html.

1891. Shane SM. 2003. Disease continues to impact the world's poultry industries. *World Poultry* 19(7):22–7.
1892. GRAIN. 2006. Fowl play: the poultry industry's central role in the bird flu crisis. grain.org/briefings/?id=194.
1893. ProMed-mail. 1998. Newcastle disease virus, mutation—Australia. December 11. promedmail.org/pls/promed/f?p=2400:1202:11447257451621287002::NO::F2400_P1202_CHECK_DISPLAY,F2400_P1202_PUB_MAIL_ID:X,4299.
1894. Tasmania Department of Primary Industries, Water and Environment. Newcastle Disease in poultry. [www.dpiwe.tas.gov.au/inter.nsf/Attachments/CART-6FQ8LZ/\\$FILE/backyarders.pdf](http://www.dpiwe.tas.gov.au/inter.nsf/Attachments/CART-6FQ8LZ/$FILE/backyarders.pdf).
1895. Shane SM. 2003. Disease continues to impact the world's poultry industries. *World Poultry* 19(7):22–7.
1896. Madec F, Rose N. 2003. How husbandry practices may contribute to the course of infectious diseases in pigs. In: 4th International Symposium on Emerging and Re-emerging Pig Diseases, June 29–July 2 (Rome, Italy). unipr.it/arpa/facvet/dip/dipsa/ric/prrs2003/9-18.pdf.
1897. Ritchie BW. 1995. *Avian Viruses: Function and Control* (Lake Worth, FL: Wingers Publishing).
1898. Bueckert D. 2004. Avian flu outbreak raises concerns about factory farms. *Daily Herald-Tribune* (Grande Prairie, Alberta), April 8, p. 6. cp.org/english/online/full/agriculture/040407/a040730A.html.
1899. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
1900. Davis M. 2005. Has time run out? Commentary: On the Monster at Our Door—the coming flu pandemic. *Mother Jones*, August 17.
1901. Girard D. 2004. Coping with the flu virus. *Toronto Star*, April 10, p. F1.
1902. Brady M. 2004. The comeback kids: Just when you thought it was safe to go back outside, along comes another pestilence from the past. *Ottawa Citizen*, May 23.
1903. Manavalan T. 2004. From fowl to pigs to humans? *New Straits Times*, February 8.
1904. Mackenzie D. 2004. Review 2004: Bird flu threatens the world. *New Scientist* issue 2479, December 25.
1905. Stöhr K, Meslin FX. 1997. The role of veterinary public health in the prevention of zoonoses. *Archives Virology* 13:S207–18.
1906. Pheasant B. 2004. A virus of our hatching. *The Financial Review* (Australia), January 30.

1907. Capua I, Marangon S. 2003. The use of vaccination as an option for the control of avian influenza. World Organization for Animal Health 71st General Session in Paris, France, May 18–23. www.oie.int/eng/AVIAN_INFLUENZA/A_71%20SG_12_CS3E.pdf.
1908. Vidal J. 2006. Flying in the face of nature. Guardian, February 22. society.guardian.co.uk/health/story/0,1714703,00.html.
1909. Zhihong H, Shuyi Z, Zhu C. 2005. Zoonoses: the deadly diseases that animals pass on to us. Global Agenda: Magazine of World Economic Forum Annual Meeting. globalagendamagazine.com/2005/huzhihongzhangshuyichen-zhu.asp.
1910. Pheasant B. 2004. A virus of our hatching. The Financial Review (Australia), January 30.
1911. Chastel C. 2004. Emergence of new viruses in Asia: is climate change involved? Médecine et maladies infectieuses 34:499–505.
1912. Prowse S. 2005. Biosecurity and emerging infectious diseases. Australia Academy of Technological Sciences and Engineering Focus No 136, March/April.
1913. Boyd W. 2001. Making meat: science, technology, and American poultry production. Technology and Culture 42:631–64.
1914. United Nations. 2005. UN task forces battle misconceptions of avian flu, mount Indonesian campaign. UN News Centre, October 24. un.org/apps/news/story.asp?NewsID=16342&Cr=bird&Cr1=flu.
1915. United Nations. 2005. UN task forces battle misconceptions of avian flu, mount Indonesian campaign. UN News Centre, October 24. un.org/apps/news/story.asp?NewsID=16342&Cr=bird&Cr1=flu.
1916. 2005. Preeminent vaccinologist led eradication of world's deadliest childhood diseases, saving and protecting millions. American Association of Immunologists Newsletter, June/July, p. 8. aai.org/newsletter/PDFs/2005/JunJulPDF.pdf.
1917. Prince Mahidol Award Foundation. 1998. Professor Kennedy F Shortridge, PhD. kanchanapisek.or.th/kp10/awardees/bio.en.html?type=ind&id=2005-12-26%2008:58:08.
1918. 2004. Avian influenza researcher to receive UQ honorary doctorate. University of Queensland. September 8. uq.edu.au/news/?article=5877.
1919. Cooper S. 2006 (How to stop) The next killer flu. Seed Magazine, February–March.
1920. Vidal J. 2006. Flying in the face of nature. Guardian, February 22. society.guardian.co.uk/health/story/0,1714703,00.html.

1921. Ritchie BW. 1995. Avian Viruses: Function and Control (Lake Worth, FL: Wingers Publishing).
1922. Delgado C, Rosegrant M, Steinfeld H, Ehui S, Courbois C. 1999. Livestock to 2020: the next food revolution. Food, Agriculture, and the Environment Discussion Paper 28. For the International Food Policy Research Institute, the Food and Agriculture Organization of the United Nations and the International Livestock Research Institute. ifpri.org/2020/dp/dp28.pdf.
1923. Hafez HM. 2003. Emerging and re-emerging diseases in poultry. *World Poultry* 19(7):23–7.
1924. Tsukamoto K, Imada T, Tanimura N, Okamatsu M, Mase M, Mizuhara T, Swayne D, Yamaguchi S. 2007. Impact of different husbandry conditions on contact and airborne transmission of H5N1 highly pathogenic avian influenza virus to chickens. *Avian Dis.* 51(1):129–132.
1925. Narayan O, Lang G, Rouse BT. 1969. A new influenza A virus infection in turkeys. IV. Experimental susceptibility of domestic birds to virus strain turkey/Ontario 7732/1966. *Archiv Gesamte Virusforsch.* 26:149–165. <https://doi.org/10.1007/BF01241184>.
1926. Hugh-Jones ME, Hubbert WT, Hagsad HV. 1995. Zoonoses: Recognition, Control, and Prevention (Ames, IA: Iowa State University Press).
1927. North MO, Bell DD. 1990. Commercial Chicken Production Manual, 4th Edition (New York, NY: Van Nostrand Reinhold).
1928. Edwards K. 1996. Short, but not sweet: the life of the meat chicken. *Animals Today*, February–April, pp. 29–31.
1929. Hugh-Jones ME, Hubbert WT, Hagsad HV. 1995. Zoonoses: Recognition, Control, and Prevention (Ames, IA: Iowa State University Press).
1930. Photo credit: Compassion Over Killing.
1931. United Egg Producers Certified. 2004. Industry history. United Egg Producers. uepcertified.com/industryhistory.html.
1932. United Egg Producers. 2002. Animal Husbandry Guidelines for U.S. Egg Laying Flocks 2002 Edition (Alpharetta, GA: United Egg Producers).
1933. Dawkins MS, Hardie S. 1989. Space needs of laying hens. *British Poultry Science* 30:413–6.
1934. United Egg Producers. 2005. United Egg Producers Animal Husbandry Guidelines for U.S. Egg Laying Flocks (Alpharetta, GA: United Egg Producers). www.animalcarecertified.com/docs/2005_UEPAnimal_welfare_guidelines.pdf.
1935. University of California, Davis. 1998. Egg-type Layer Flock Care Practices. www.vetmed.ucdavis.edu/vetext/INF-PO_EggCarePrax.pdf.

1936. Royal Geographical Society. 2004. Bird flu across Asia. Geography in the News, February 23. www.geographyinthenews.rgs.org/news/article/?id=270.
1937. European Commission. [date unknown]. Broilers. Belgium: European Commission; [accessed 2020 Apr 18]. https://ec.europa.eu/food/animals/welfare/practice/farm/broilers_en.
1938. Fanatico A. 2002. Sustainable poultry: production overview—Part II. National Center for Appropriate Technology. thepoultrysite.com/FeaturedArticle/FATopic.asp?AREA=ProductionMgmt&Display=113.
1939. 1999. Battery hen cages to be outlawed. BBC News, June 15. news.bbc.co.uk/1/hi/world/europe/369555.stm.
1940. California Legislative Information. 2008. Chapter 13.8. Farm animal cruelty. 25991. Definitions. State of California; [amended 2018 Nov 6; accessed 2020 Apr 6]. https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum=25991.
1941. Ballotpedia. 2016. Massachusetts minimum size requirements for farm animal containment, question 3 (2016). Ballotpedia; [accessed 2020 Apr 6]. [https://ballotpedia.org/Massachusetts_Minimum_Size_Requirements_for_Farm_Animal_Containment,_Question_3_\(2016\)](https://ballotpedia.org/Massachusetts_Minimum_Size_Requirements_for_Farm_Animal_Containment,_Question_3_(2016)).
1942. Michigan Legislature. 2020. Enrolled senate bill no. 174. Animal industry act. State of Michigan; [accessed 2020 Apr 6]. www.legislature.mi.gov/documents/2019-2020/publicact/pdf/2019-PA-0132.pdf.
1943. Oregon Legislative Assembly. 2019. Enrolled Senate Bill 1019. State of Oregon; [accessed 2020 Apr 7]. <https://olis.leg.state.or.us/liz/2019R1/Downloads/MeasureDocument/SB1019/Enrolled>.
1944. Rhode Island General Assembly. 2018. H 7456 Substitute A. An act relating to animals and animal husbandry—unlawful confinement of a covered animal. State of Rhode Island; [accessed 2020 Apr 7]. <http://webserver.rilin.state.ri.us/BillText/BillText18/HouseText18/H7456A.pdf>.
1945. Washington State Legislature. 2019. HB 2049-2019-20. Concerning commercial egg layer operations. State of Washington; [accessed 2020 Apr 7]. <https://app.leg.wa.gov/billsummary/?billNumber=2049&year=2019&initiative=False>.
1946. LAWriter. 2016. Ohio administrative code. Chapter 901:12-9 poultry layers. Lawriter LLC; [accessed 2020 Apr 7]. <http://codes.ohio.gov/oac/901:12-9>.
1947. World Health Organization, Food and Agricultural Organization of the United Nations, and World Organization for Animal Health. 2004. Report of the WHO/FAO/OIE joint consultation on emerging zoonotic diseases. At whqlibdoc.who.int/hq/2004/WHO_CDS_CPE_ZFK_2004.9.pdf.

1948. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.

1949. Sanchez M. 2005. Influenza pandemic, could something have been done? Washington Post, October 6. [washingtonpost.com/wp-dyn/content/article/2005/10/06/AR2005100601186_pf.html](http://www.washingtonpost.com/wp-dyn/content/article/2005/10/06/AR2005100601186_pf.html).

1950. Moore JE, et al. 1996. Erythromycin-resistant thermophilic *Campylobacter* species isolated from pigs. *Veterinary Record* 138:306–7.

1951. Orent W. 2005. Chicken flu is no big peril: fear sick people, not poultry. *Los Angeles Times*, February 28, p. 9.

1952. Bulloch W. 1979. *The History of Bacteriology* (New York, NY: Oxford University Press).

1953. Lim TT, Heber AJ, Ni J-Q. 2005. Air quality measurements at a laying hen house: ammonia concentrations and emissions. *Purdue Agricultural Air Quality Laboratory*.

1954. Scientific Panel on Animal Health and Welfare. 2005. Scientific report on the animal health and welfare aspects of avian influenza. Annex to European Food Safety Authority Journal 266:1–21. 64.233.179.104/search?q=cache:bShJ5Q424WgJ:www.offlu.net/LinkClick.aspx%3Flink%3Dpdf.%252Fahaw_op_ej266_Avian%2BInfluenza_annex_en.pdf.%26tabid%3D54%26mid%3D426+survival+influenza+virus+wet+manure&hl=en&gl=us&ct=clnk&cd=17&lr=lang_en.

1955. Webster RG, Sharp GB, Claas CJ. 1995. Interspecies transmission of influenza viruses. *American Journal of Respiratory and Critical Care Medicine* 152:525–30.

1956. Food and Agriculture Organization of the United Nations. 2004. Emergency prevention system transboundary animal diseases, Bulletin No. 25 January–June. [ftp://ftp.fao.org/docrep/fao/007/y5537e/y5537e00.pdf](http://ftp.fao.org/docrep/fao/007/y5537e/y5537e00.pdf).

1957. Perry M. 2005. Asia must change age-old farming to stop disease. *Reuters*, September 22.

1958. Villarreal LP, Defilippis VR, Gottlieb KA. 2000. Acute and persistent viral life strategies and their relationship to emerging diseases. *Virology* 272:1–6.

1959. Shortridge KF. 1992. Pandemic influenza: a zoonosis? *Seminars in Respiratory Infections* 7:11–25.

1960. Afelt A, Frutos R, Devaux C. 2018. Bats, coronaviruses, and deforestation: toward the emergence of novel infectious diseases? *Front Microbiol.* 9:702. <https://dx.doi.org/10.3389/fmicb.2018.00702>.

1961. Webster RG, Sharp GB, Claas CJ. 1995. Interspecies transmission of influenza viruses. *American Journal of Respiratory and Critical Care Medicine* 152:525–30.
1962. Webster RG. 1998. Influenza: an emerging microbial pathogen. In: *Emerging Infections* (San Diego, CA: Academic Press, pp. 275–300).
1963. Laver WG, Garman E. 2001. The origin and control of pandemic influenza. *Science* 293:1776–7.
1964. Frederick MA. 1999. The threat posed by the global emergence of livestock, food-borne, and zoonotic pathogens. *Annals of the New York Academy of Sciences* 894:20–7.
1965. André F, Tuytens M. 2005. The importance of straw for pig and cattle welfare: a review. *Applied Animal Behavior Science*, 92(3)261.
1966. Maes D, Deluyker H, Verdonck M, et al. 2000. Herd factors associated with the seroprevalences of four major respiratory pathogens in slaughter pigs from farrow-to-finish pig herds. *Veterinary Research* 31:313–27.
1967. Quattro JD. 1999. Three scientists introduced into ARS hall of fame. ARS/USDA News and Events, September 17. ars.usda.gov/is/pr/1999/990917.htm.
1968. Witter RL. 1998. Control strategies for Marek's Disease: a perspective for the future. *Poultry Science* 77:1197–203.
1969. El-Lethey H, Huber-Eicher B, Jungi TW. 2003. Exploration of stress-induced immunosuppression in chickens reveals both stress-resistant and stress-susceptible antigen responses. *Veterinary Immunology and Immunopathology* 95:91–101.
1970. Craig JV. 1978. Aggressive behavior of chickens: some effects of social and physical environments. 27th Annual National Breeder's Roundtable; 1978 May 11; Kansas City. Department of Animal Sciences and Industry, Kansas State University.
1971. Siegel HS. 1983. Effects of intensive production methods on livestock health. *Agro-Ecosystems* 8:215–30.
1972. André F, Tuytens M. 2005. The importance of straw for pig and cattle welfare: a review. *Applied Animal Behavior Science*, 92(3)261.
1973. Puvadolpirod S, Thaxton JP. 2000. Model of physiological stress in chickens. 1. Response parameters. *Poultry Science* 79:363–9.
1974. European Commission. Scientific Veterinary Committee. 1996. Report on the Welfare of Laying Hens (Brussels, Belgium: Scientific Veterinary Committee).
1975. Grandin T. 2001. Corporations can be agents of great improvements in animal welfare and food safety and the need for minimum decent standards.

National Institute of Animal Agriculture, April 4. grandin.com/welfare/corporation.agents.html.

1976. MacArthur M. 2002. Analyst says poultry growers oblivious to poor conditions. *Western Producer*, December 12.

1977. Dawkins MS, Hardie S. 1989. Space needs of laying hens. *British Poultry Science* 30:413–6.

1978. Craig JV. 1978. Aggressive behavior of chickens: some effects of social and physical environments. 27th Annual National Breeder's Roundtable; 1978 May 11; Kansas City. Department of Animal Sciences and Industry, Kansas State University. www.poultryscience.org/pba/1952-2003/1978/1978%20Craig.pdf.

1979. Siegel HS. 1983. Effects of intensive production methods on livestock health. *Agro-Ecosystems* 8:215–30.

1980. Urrutia S. 1997. Broilers for next decade: what hurdles must commercial broiler breeders overcome? *World Poultry* 13(7):28–30.

1981. J. Byrnes. 1976. Raising pigs by the calendar at Maplewood Farms. *Hog Farm Management*, September, p. 30.

1982. Siegel HS. 1983. Effects of intensive production methods on livestock health. *Agro-Ecosystems* 8:215–30.

1983. André F, Tuytens M. 2005. The importance of straw for pig and cattle welfare: a review. *Applied Animal Behavior Science*, 92(3):261.

1984. Ewald C, Heer A, Havenith U. 1994. Factors associated with the occurrence of influenza A virus infections in fattening swine. *Berliner und Munchener Tierarztliche Wochenschrift*. 107:256–62.

1985. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.

1986. Webster B. 2002. American Meat Institute Stunning Conference, Feb. 21–22 as cited in Davis K. The need for legislation and elimination of electrical immobilization. United Poultry Concerns. www.upc-online.org/slaughter/report.html.

1987. Duncan IJH. 2001. Animal welfare issues in the poultry industry: is there a lesson to be learned? *Journal Applied Animal Welfare Science* 4(3):207–21.

1988. Duncan IJH. 2001. Animal welfare issues in the poultry industry: is there a lesson to be learned? *Journal Applied Animal Welfare Science* 4(3):207–21.

1989. Mench JA. 1992. The welfare of poultry in modern production systems. *Poultry Science* 4:108–9.

1990. Duncan IJ. 2003. Letter to Nancy Halpern, New Jersey Department of Agriculture. June 25.
1991. Fraser D, Mench J, Millman S. 2001. Farm Animals and Their Welfare in 2000: State of the Animals (Washington, DC: Humane Society Press, p. 90).
1992. Parker HS. 2002. Agricultural Bioterrorism: A Federal Strategy to Meet the Threat. McNair Paper 65 (Washington, DC: National Defense University Institute for National Strategic Studies).
1993. Duncan IJH. 2001. Welfare problems of meat-type chickens. Farmed Animal Well-Being Conference at the University of California-Davis, June 28–29.
1994. Donaldson, WE. 1995. Early poult mortality: the role of stressors and diet. Turkey World, January–February, p. 27.
1995. O'Keefe T. 2005. Starting on the farm. Watt PoultryUSA, June, pp. 12–16.
1996. Kuhlein U, Aggrey SE, Zadworny A. 2003. Progress and prospects in resistance to disease. In: Muir WM, Aggrey SE (eds.), Poultry Genetics, Breeding and Biotechnology (Oxfordshire, UK: CAB International).
1997. Thorp BH, Luiting E. 2000. Breeding for resistance to production diseases in poultry. In: Axford RFE, Bishop SC, Nicholas FW, Owen JB (eds.), Breeding for Disease Resistance in Farm Animals (Wallingford, UK: CABI Publishing, pp. 357–77).
1998. North MO, Bell DD. 1990. Commercial Chicken Production Manual, 4th Edition (New York, NY: Van Nostrand Reinhold).
1999. U.S. Department of Agriculture, APHIS. 2004. Highly pathogenic avian influenza: a threat to U.S. poultry. Program Aid No. 1704. March.
2000. Wilson WO. 1966. Poultry production. Scientific American 215(1):56–64.
2001. Shacklesford AD. 1988. Modifications of processing methods to control Salmonella in poultry. Poultry Science 67:933–5.
2002. Weeks CA, Danbury TD, Davies HC, Hunt P, Kestin SC. 2000. The behaviour of broiler chickens and its modification by lameness. Applied Animal Behavior Science 67:111–25.
2003. Grandin T, Johnson C. 2005. Animals in Translation (New York, NY: Scribner, p. 270).
2004. Shacklesford AD. 1988. Modifications of processing methods to control Salmonella in poultry. Poultry Science 67:933–5.
2005. Gregory E, Barnhart H, Dreesen DW, Stern NJ, Corn JL. 1997. Epidemiological study of *Campylobacter* spp. In: Broilers: source, time of colonization, and prevalence. Avian Diseases 41:890–8.

2006. Horowitz R. 2006. Putting Meat on the American Table: Taste, Technology and Transformation (Baltimore, MD: Johns Hopkins University Press, p. 125.
2007. Cole DJ, Hill VR, Humenik FJ, Sobsey MD. 1999. Health, safety, and environmental concerns of farm animal waste. *Occupational Medicine: State of the Art Reviews* 14(2):423–48.
2008. North MO, Bell DD. 1990. Commercial Chicken Production Manual, 4th Edition (New York, NY: Van Nostrand Reinhold).
2009. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.
2010. Madec F, Rose N. 2003. How husbandry practices may contribute to the course of infectious diseases in pigs. In: 4th International Symposium on Emerging and Re-emerging Pig Diseases (Rome, Italy June 29–July 2, pp. 9–18).
2011. Cooper GL, Venables LM, Lever MS. 1996. Airborne challenge of chickens vaccinated orally with the genetically-defined *Salmonella enteritidis* aroA strain CVL30. *Veterinary Record* 139(18):447–8.
2012. Van der Sluis W. 2005. Housing conditions affect broiler welfare more than stocking density. *World Poultry* 21(8):22–3.
2013. Van der Sluis W. 2005. Housing conditions affect broiler welfare more than stocking density. *World Poultry*. 21:22–23.
2014. National Turkey Federation. Meat bird production/growout. Food safety best management practices for the production of turkeys, Dec. 1995.
2015. Sims LD, Ellis TM, Liu KK, et al. 2003. Avian Influenza in Hong Kong 1997–2002. *Avian Diseases* 47:832–8.
2016. Hafez HM. 2000. Factors influencing turkey diseases. *World Poultry Turkey Health Special*, pp. 6–8.
2017. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.
2018. Cole DJ, Hill VR, Humenik FJ, Sobsey MD. 1999. Health, safety, and environmental concerns of farm animal waste. *Occupational Medicine: State of the Art Reviews* 14(2):423–48.
2019. Cole DJ, Hill VR, Humenik FJ, Sobsey MD. 1999. Health, safety, and environmental concerns of farm animal waste. *Occupational Medicine: State of the Art Reviews* 14(2):423–48.
2020. Madelin TM, Wathes CM. 1989. Air hygiene in a broiler house: Comparison of deep litter with raised netting floors. *British Poultry Science* 30:23–37.

2021. Collins JD, Wall PG. 2004. Food safety and animal production systems: controlling zoonoses at farm level. *Revue Scientifique et Technique Office International des Epizooties* 23(2):680–700. oie.int/eng/publicat/rt/2302/PDF/685-700collins.pdf.
2022. Zavala G. 1998. An overview of myeloid leukosis in meat-type chickens. *Technical News, Special Technical Bulletin*, January 1998:S1–4.
2023. Gregory EH, Dreesen DW, Stern NJ, Corn JL. 1997. Epidemiological study of *Campylobacter* spp. In: *Broilers: source, time of colonisation, and prevalence*. *Avian Diseases* 41:890–8.
2024. Advisory Committee on the Microbiological Safety of Food. 1996. Report on Poultry Meat (London, UK: HSMO, p 92).
2025. Linden J. 2005. *Campylobacter* gradually reveal its secrets. *Poultry International*, December.
2026. Vaillancourt JP. 2002. Biosecurity now. *Poultry International*. 411:12–8.
2027. Vaillancourt JP. 2002. Biosecurity now. *Poultry International*. 411:12–8.
2028. Fontenot JP. 2001. Utilization of poultry litter as feed for beef cattle. Food and Drug Administration Public Hearing on Animal Feeding Regulation, October 30. www.fda.gov/ohrms/dockets/dailys/01/Nov01/110501/ts00014.doc.
2029. Cole DJ, Hill VR, Humenik FJ, Sobsey MD. 1999. Health, safety, and environmental concerns of farm animal waste. *Occupational Medicine: State of the Art Reviews* 14(2):423–48.
2030. 2000. Humidity and litter moisture important factors in *Salmonella* and *E.coli* multiplication. *World Poultry* 16(10).
2031. Shane SM. 1997. *Campylobacteriosis*. In: Calnek BW (ed.), *Diseases of Poultry*, 10th Edition (Ames, IA: Iowa State University Press, pp. 235–245).
2032. Shortridge KF, Zhou NN, Guan Y, et al. 1998. Characterization of avian H5N1 influenza viruses from poultry in Hong Kong. *Virology* 252:331–42.
2033. Delgado CL, Narrod CA 2002. Impact of the changing market forces and policies on structural change in the livestock industries of selected fast-growing developing countries. Final Research Report of Phase I, International Food Policy Research Institute.
2034. Food and Agriculture Organization of the United Nations. Technical Task Force on Avian Influenza. 2005. Update on the avian influenza situation. *Avian Influenza Disease Emergency News*, issue 28. www.fao.org/ag/againfo/subjects/documents/ai/AVIbull028.pdf.
2035. Taubenberger JK, Morens DM. 2006. 1918 influenza: the mother of all pandemics. *Emerging Infectious Diseases* 12(1):15–22.

2036. Halvorson DA, Kelleher CJ, Senne DA. 1985. Epizootiology of avian influenza: effect of seasonal incidence in sentinel ducks and domestic turkey in Minnesota. *Applied and Environmental Microbiology* 49:914–9.
2037. Ritchie BW. 1995. *Avian Viruses: Function and Control* (Lake Worth, FL: Wingers Publishing).
2038. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
2039. Bridges CB, Kuehnert MJ, Hall CB. 2003. Transmission of influenza: implications for control in health care settings. *Clinical Infectious Diseases* 37:1094–101.
2040. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
2041. Naylor MF, Farmer KC. Sun damage and prevention. [health.howstuffworks.com/framed.htm?parent=sunscreen.htm&url= www.telemedicine.org/sundam2.4.1.html](http://health.howstuffworks.com/framed.htm?parent=sunscreen.htm&url=www.telemedicine.org/sundam2.4.1.html).
2042. Bridges CB, Kuehnert MJ, Hall CB. 2003. Transmission of influenza: implications for control in health care settings. *Clinical Infectious Diseases* 37:1094–101.
2043. Food and Agriculture Organization of the United Nations. 2004. FAO recommendations on the prevention, control and eradication of highly pathogenic avian influenza (HPAI) in Asia. www.fao.org/ag/againfo/subjects/en/health/diseases-cards/27septrecomm.pdf.
2044. Russell SM, Fairchild BD. 2005. Poultry production China's way. *Watt Poultry USA*, February, Volume 6, No. 2, pp. 26–30.
2045. Mason J, Singer P. 1990. *Animal Factories* (New York, NY: Crown Publishers).
2046. Macgrath D. 2004. When fear takes flight. *Weekend Australian*, January 31, p. C13.
2047. Arthur JA, Albers GAA. 2003. Industrial perspective on problems and issues associated with poultry breeding. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 1–12).
2048. Arthur JA, Albers GAA. 2003. Industrial perspective on problems and issues associated with poultry breeding. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 1–12).
2049. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.

2050. Arthur JA, Albers GAA. 2003. Industrial perspective on problems and issues associated with poultry breeding. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 1–12).
2051. Fraser D, Mench J, Millman S. 2001. *Farm Animals and Their Welfare in 2000: State of the Animals* (Washington, DC: Humane Society Press, p. 90).
2052. MacArthur M. 2002. Analyst says poultry growers oblivious to poor conditions. *Western Producer*, December 12; and Fraser D, Mench J, Millman S. 2001. *Farm Animals and Their Welfare in 2000: State of the Animals* (Washington, DC: Humane Society Press, p. 90).
2053. Arthur JA, Albers GAA. 2003. Industrial perspective on problems and issues associated with poultry breeding. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 1–12).
2054. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
2055. Arshad M. 1999. An ecological study of red junglefowl (*Gallus gallus spadiceus*) in agricultural areas. *Universiti Putri Malasia*.
2056. Canadian Egg Marketing Agency. 2002. Egg facts. eggs.ca/eggfacts/eggdown.asp.
2057. Clubb S. 2001. Stop the practice of starving birds for egg production. *Association of Avian Veterinarians Newsletter*, June–August.
2058. Parkinson G. 1993. Osteoporosis and bone fractures in the laying hen. *Progress Report of Work at the Victorian Institute of Animal Science*, Attwood.
2059. Dekich MA. 1998. Broiler industry strategies for control of respiratory and enteric diseases. *Poultry Science* 77:1176–80.
2060. Hafez HM. 2000. Enteric diseases. *World Poultry (Elsevier Special 2000)* p. 6.
2061. McCarthy M. 2001. Animal welfare: the growing pains of a selectively bred chicken; a plan to accelerate further the unnatural growth rate of broiler birds is condemned by campaign groups. *Independent*, December 10, p. 7.
2062. Duncan IJH. 2001. Welfare problems of meat-type chickens. *Farmed Animal Well-Being Conference at the University of California-Davis*, June 28–29.
2063. University of Arkansas Division of Agriculture Cooperative Extension Service. kidsarus.org/kids_go4it/growit/raiseit/chickens.htm.
2064. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.

2065. Warren DC. 1958. A half century of advances in the genetics and breeding improvement of poultry. *Poultry Science* 37:5–6.
2066. Davenport CB. 1910. Eugenics, a subject for investigation rather than instruction. *American Breeders Magazine* 1:68.
2067. Quigley M. 1995. The roots of the I.Q. debate: eugenics and social control. *The Public Eye*, March. publiceye.org/magazine/v09n1/eugenics.html.
2068. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
2069. Davenport CB. 1907. Inheritance in pedigree breeding of poultry. In: *Proceedings of the American Breeders' Association*, volume 3 (Washington, DC).
2070. Patterson C. 2005. Animals, slavery, and the holocaust. *Logos* 4(2). logos-journal.com/issue_4.2/patterson.htm.
2071. Lindhe B, Philipsson J. 1998. Conventional breeding programmes and genetic resistance to animal diseases. *International Office of Epizootics* 17(1):291–301.
2072. Thornton G. 1996. High yielding broiler production: the big trade-off. *Broiler Industry* 59:18–22.
2073. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.
2074. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.
2075. Martin D. 1997. Researcher studying growth-induced diseases in broilers. *Feedstuffs*, May 26.
2076. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.
2077. U.S. Department of Agriculture National Agricultural Statistics Service. 2005. Poultry Slaughter: 2004 Annual Summary. usda.mannlib.cornell.edu/reports/nassr/poultry/ppy-bban/pslaan05.txt.
2078. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.
2079. Rauw WM, Kanis E, Noordhuizen-Stassen EN, Grommers FJ. 1998. Undesirable side effects of selection for high production efficiency in farm animals: a review. *Livestock Production Science* 56:15–33.

2080. Yunis R, Ben-David A, Heller ED, Cahaner A. 2000. Immunocompetence and viability under commercial conditions of broiler groups differing in growth rates and in antibody response to *Escherichia coli* vaccine. *Poultry Science* 79:810–6.
2081. Han PFS, Smyth JR. 1972. The influence of growth rate on the development of Marek's Disease in chickens. *Poultry Science* 51:975–85.
2082. Nestor KE, Saif YM, Zhu J, Noble DO. 1996. Influence of growth selection in turkeys on resistance to *Pasteurella multocida*. *Poultry Science* 75(10):1161–3.
2083. Yunis R, Ben-David A, Heller ED, Cahaner A. 2002. Antibody responses and morbidity following infection with infectious bronchitis virus and challenge with *Escherichia coli*, in lines divergently selected on antibody response. *Poultry Science* 81:149–59.
2084. Johnson AL. 2005. Avian influenza: Complicated issue with a simple message. *Watt PoultryUSA*, December, p. 16–7.
2085. Hawken RJ, Beattie CW, Schook LB. 1998. Resolving the genetics of resistance to infectious diseases. *International Office of Epizootics Scientific and Technical Review* 17(1):17–25.
2086. Huff GR, Huff WE, Balog JM, Rath NC, Anthony NB, Nestor KE. 2005. Stress response differences and disease susceptibility reflected by heterophil ratio in turkeys selected for increased body weight. *Poultry Science* 84:709–17.
2087. Bayyari GR, Huff WE, Rath NC, et al. 1997. Effect of the genetic selection of turkeys for increased body weight and egg production on immune and physiological responses. *Poultry Science* 76:289–96.
2088. Tsai HJ, Saif YM, Nestor KE, Emmerson DA, Patterson RA. 1992. Genetic Variation in Resistance of Turkeys to Experimental Infection with Newcastle Disease Virus. *Avian Diseases* 36:561–5.
2089. Saif YM, Nestor KE, Dearth RN, Renner PA. 1984. Case report: Possible genetic variation in resistance of turkeys to *Erysipelas* and fowl cholera. *Avian Diseases* 28:770–3.
2090. Kowalski, A, Mormede P, Jakubowski K, Jedlinska-Krakowska M. 2002. Comparison of susceptibility to stress in two genetic lines of turkey broilers BUT-9 and Big-6. *Polish Journal of Veterinary Science* 5:145–150.
2091. Huff GR, Huff WE, Balog JM, Rath NC, Anthony NB, Nestor KE. 2005. Stress response differences and disease susceptibility reflected by heterophil ratio in turkeys selected for increased body weight. *Poultry Science* 84:709–17.
2092. Rauw WM, Kanis E, Noordhuizen-Stassen EN, Grommers FJ. 1998. Undesirable side effects of selection for high production efficiency in farm animals: a review. *Livestock Production Science* 56:15–33.

2093. Rauw WM, Kanis E, Noordhuizen-Stassen EN, Grommers FJ. 1998. Undesirable side effects of selection for high production efficiency in farm animals: a review. *Livestock Production Science* 56:15–33.
2094. Rauw WM, Kanis E, Noordhuizen-Stassen EN, Grommers FJ. 1998. Undesirable side effects of selection for high production efficiency in farm animals: a review. *Livestock Production Science* 56:15–33.
2095. Smith R. 1991. Cutting edge poultry researchers doing what birds tell them to do. *Feedstuffs*. September 9, p. 22.
2096. Wise D, Jennings A. 1972. Dyschondroplasia in domestic poultry. *Veterinary Record*. 91:285–6.
2097. Kamyab A. 2001. Enlarged sternal bursa and focal ulcerative dermatitis in male turkeys. *World's Poultry Science Journal* 57:5–12.
2098. Ekstrand C, Algers B. 1997 Rearing conditions and foot-pad dermatitis in Swedish turkey poult. *Acta-Veterinaria-Scandinavica* 38(2):167–174.
2099. Bayyari GR, Huff WE, Rath NC, et al. 1997. Effect of the genetic selection of turkeys for increased body weight and egg production on immune and physiological responses. *Poultry Science* 76:289–96.
2100. Beaumont C, Dambrine G, Chaussé AM, Flock D. 2003. Selection for disease resistance: conventional breeding for resistance to bacteria and viruses. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 357–84).
2101. Beaumont C, Dambrine G, Chaussé AM, Flock D. 2003. Selection for disease resistance: conventional breeding for resistance to bacteria and viruses. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 357–84).
2102. Beaumont C, Dambrine G, Chaussé AM, Flock D. 2003. Selection for disease resistance: conventional breeding for resistance to bacteria and viruses. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 357–84).
2103. Knap PW, Bishop SC. 2000. Relationships between genetic change and infectious disease in domestic livestock. In: Hill WG, Bishop SC, McGuirk B, McKay JC, Simm G, Webb AJ (eds.), *The challenge of genetic change in animal production, Proceedings of an Occasional Meeting Organized by the British Society of Animal Science* (Edinburgh, Scotland: BSAS Occasional Publication, pp. 65–80).
2104. Boa-Amponsem K, Dunnington EA, Baker KS, Siegel PB. 1999. Diet and immunological memory of lines of white leghorn chickens divergently selected for antibody response to sheep red blood cells. *Poultry Science* 78:165–70.
2105. Van der Zijpp AJ. 1983. Breeding for immune responsiveness and disease resistance. *World's Poultry Science Journal* 39(2):118–31.

2106. Huff GR, Huff WE, Balog JM, Rath NC, Anthony NB, Nestor KE. 2005. Stress response differences and disease susceptibility reflected by heterophil ratio in turkeys selected for increased body weight. *Poultry Science* 84:709–17.
2107. Hawken RJ, Beattie CW, Schook LB. 1998. Resolving the genetics of resistance to infectious diseases. *International Office of Epizootics Scientific and Technical Review* 17(1):17–25.
2108. Mangel M, Stamps J. 2001. Trade-offs between growth and mortality and the maintenance of individual variation in growth. *Evolutionary Ecology Research* 3:583–93.
2109. Lindhe B, Philipsson J. 1998. Conventional breeding programmes and genetic resistance to animal diseases. *International Office of Epizootics* 17(1):291–301.
2110. Sinclair MC, Nielsen BL, Oldham JD, Reid HW. 1999. Consequences for immune function of metabolic adaptations to load. In: Oldham JD, Simm G, Groen AF, Nielsen BL, Pryce JF, Lawrence TLJ (eds.), *Metabolic Stress in Dairy Cows* (Edinburgh: British Society of Animal Science, pp. 113–118).
2111. Lindhe B, Philipsson J. 1998. Conventional breeding programmes and genetic resistance to animal diseases. *International Office of Epizootics* 17(1):291–301.
2112. Sinclair MC, Nielsen BL, Oldham JD, Reid HW. 1999. Consequences for immune function of metabolic adaptations to load. In: Oldham JD, Simm G, Groen AF, Nielsen BL, Pryce JF, Lawrence TLJ (eds.), *Metabolic Stress in Dairy Cows* (Edinburgh: British Society of Animal Science, pp. 113–118).
2113. Norris K, Evans MR. 2000. Ecological immunology: life history trade-offs and immune defense in birds. *Behavioral Ecology* 11:19–26.
2114. Cheema MA, Qureshi MA, Havenstein GB. 2003. A comparison of the immune response of a 2001 commercial broiler with a 1957 randombred broiler strain when fed representative 1957 and 2001 broiler diets. *Poultry Science* 82:1519–29.
2115. Koenen ME, Boonstra-Blom AG, Jeurissen SHM. 2002. Immunological differences between layer-and broiler-type chickens. *Veterinary Immunology and Immunopathology* 89:47–56.
2116. Cheema MA, Qureshi MA, Havenstein GB. 2003. A comparison of the immune response of a 2001 commercial broiler with a 1957 randombred broiler strain when fed representative 1957 and 2001 broiler diets. *Poultry Science* 82:1519–29.
2117. Madden RH. 1994. Microbial hazards in animal products. *Proceedings of the Nutrition Society* 53:209–16.

2118. Riddell C, Springer R. 1984. An epizootiological study of acute death syndrome and leg weakness in broiler chickens in western Canada. *Avian Diseases* 29:90–102.
2119. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/sciah/out39_en.pdf.
2120. Mangel M, Stamps J. 2001. Trade-offs between growth and mortality and the maintenance of individual variation in growth. *Evolutionary Ecology Research* 3:583–93.
2121. Lochmiller RL, Deerenberg C. 2000. Trade-offs in evolutionary immunology: just what is the cost of immunity? *Oikos* 88:87–98.
2122. Gross WB, Siegel PB. 1988. Environment-genetic influences on immunocompetence. *Journal of Animal Science* 66:2091–2094.
2123. Klasing KC, Laurin DE, Peng RK, Fry DM. 1987. Immunologically mediated growth depression in chicks: influence of feed intake, Corticosterone and Interleukin-1. *Journal of Nutrition* 117(9):1629–37.
2124. Mangel M, Stamps J. 2001. Trade-offs between growth and mortality and the maintenance of individual variation in growth. *Evolutionary Ecology Research* 3:583–93.
2125. Klasing KC, Laurin DE, Peng RK, Fry DM. 1987. Immunologically mediated growth depression in chicks: influence of feed intake, corticosterone and interleukin-1. *Journal of Nutrition* 117(9):1629–37.
2126. Freeman BM, Manning ACC, Harrison GF, Coates ME. 1975. Dietary aureomycin and the response of the fowl to stressors. *British Poultry Science* 16:395–404.
2127. Johnson RW. 1999. Stress and disease: resetting the biological machinery of growth. Illini PorkNet, October 21. www.traill.uiuc.edu/porknet/paperDisplay.cfm?Type=paper&ContentID=83.
2128. Lochmiller RL, Deerenberg C. 2000. Trade-offs in evolutionary immunology: just what is the cost of immunity? *Oikos* 88:87–98.
2129. Lochmiller RL, Deerenberg C. 2000. Trade-offs in evolutionary immunology: just what is the cost of immunity? *Oikos* 88:87–98.
2130. Thorp BH, Luiting E. 2000. Breeding for resistance to production diseases in poultry. In: Axford RFE, Bishop SC, Nicholas FW, Owen JB (eds.), *Breeding for Disease Resistance in Farm Animals* (Wallingford, UK: CABI Publishing, pp. 357–77).
2131. Gavora JS. 1990. Disease genetics. In: Crawford RD (ed.), *Poultry Breeding and Genetics* (Amsterdam, The Netherlands: Elsevier Publishing Co., pp. 805–46).

2132. Boa-Amponsem K, O'Sullivan NP, Gross WB, Dunnington EA, Siegel PB. 1991. Genotype, feeding regimen, and diet interactions in meat chickens. *Poultry Science* 70:697–701.
2133. Kolok A, Oris JT. 1995. The relationship between specific growth rate and swimming performance in male fathead minnows (*Pimephales promelas*). *Canadian Journal of Zoology* 73:2165–7.
2134. Gregory TR, Wood CM. 1998. Individual variation and interrelationships between swimming performance, growth rate, and feeding in juvenile rainbow trout (*Oncorhynchus mykiss*). *Canadian Journal of Fisheries and Aquatic Sciences* 55:1583–90.
2135. Farrell AP, Bennett W, Devlin RH. 1997. Growth-enhanced transgenic salmon can be inferior swimmers. *Canadian Journal of Zoology* 75:335–7.
2136. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
2137. Huff GR, Huff WE, Balog JM, Rath NC, Anthony NB, Nestor KE. 2005. Stress response differences and disease susceptibility reflected by heterophil ratio in turkeys selected for increased body weight. *Poultry Science* 84:709–17.
2138. Van der Zijpp AJ. 1983. Breeding for immune responsiveness and disease resistance. *World's Poultry Science Journal* 39(2):118–31.
2139. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
2140. Thornton G. 1996. High yielding broiler production: the big trade-off. *Broiler Industry* 59:18–22.
2141. Carson R. 1962. *Silent Spring* (New York, NY: Mariner Books), chap. 15.
2142. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.
2143. Urrutia S. 1997. Broilers for next decade: what hurdles must commercial broiler breeders overcome? *World Poultry* 13(7):28–30.
2144. Baskin C. 1978. Confessions of a chicken farmer. *Country Journal*, April, p. 38.
2145. Albers GAA. 1993. Breeding for disease resistance: fact and fiction. *Archiv für Geflügelkunde* 57(2):56–8.
2146. Arthur JA, Albers GAA. 2003. Industrial perspective on problems and issues associated with poultry breeding. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 1–12).
2147. Thorp BH, Luiting E. 2000. Breeding for resistance to production diseases in poultry. In: Axford RFE, Bishop SC, Nicholas FW, Owen JB (eds.),

Breeding for Disease Resistance in Farm Animals (Wallingford, UK: CABI Publishing, pp. 357–77).

2148. Tabler GT, Mendenhall AM. 2003. Broiler nutrition, feed intake and grower economics. *Avian Advice* 5(4):8–10.

2149. Bayyari GR, Huff WE, Rath NC, et al. 1997. Effect of the genetic selection of turkeys for increased body weight and egg production on immune and physiological responses. *Poultry Science* 76:289–96.

2150. Thorp BH, Luiting E. 2000. Breeding for resistance to production diseases in poultry. In: Axford RFE, Bishop SC, Nicholas FW, Owen JB (eds.), *Breeding for Disease Resistance in Farm Animals* (Wallingford, UK: CABI Publishing, pp. 357–77).

2151. U.S. Food and Drug Administration. 2017. 2015 NARMS integrated report. FDA, CDC, USDA; [accessed 2020 Apr 8]. <https://www.fda.gov/media/108304/download>.

2152. Schroeder CM, Naugle AL, Schlosser WD, et al. 2005. Estimate of illnesses from *Salmonella enteritidis* in eggs, United States, 2000. *Emerging Infectious Diseases* 11(1):113–5. www.cdc.gov/foodnet/pub/publications/2005/040401_schroeder.pdf.

2153. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.

2154. Walker A, MacLeod M. 2004. Limits to the performance of poultry. In: Wiseman J, Sylvester-Bradley R. 2005. *Yields of Farmed Species: Constraints and Opportunities in the 21st Century* (Nottingham: Nottingham University Press).

2155. Urrutia S. 1997. Broilers for next decade: what hurdles must commercial broiler breeders overcome? *World Poultry* 13(7):28–30.

2156. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.

2157. Koenen ME, Boonstra-Blom AG, Jeurissen SHM. 2002. Immunological differences between layer-and broiler-type chickens. *Veterinary Immunology and Immunopathology* 89:47–56.

2158. Thorp BH, Luiting E. 2000. Breeding for resistance to production diseases in poultry. In: Axford RFE, Bishop SC, Nicholas FW, Owen JB (eds.), *Breeding for Disease Resistance in Farm Animals* (Wallingford, UK: CABI Publishing, pp. 357–77).

2159. Decuypere E, Bruggeman V, Barbato GF, Buyse J. 2003. Growth and reproductive problems associated with selection for increased broiler meat production. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Wallingford, UK: CABI Publishing, pp. 13–28).

2160. Thorp BH, Luiting E. 2000. Breeding for resistance to production diseases in poultry. In: Axford RFE, Bishop SC, Nicholas FW, Owen JB (eds.), *Breeding for Disease Resistance in Farm Animals* (Wallingford, UK: CABI Publishing, pp. 357–77).
2161. Thorp BH, Luiting E. 2000. Breeding for resistance to production diseases in poultry. In: Axford RFE, Bishop SC, Nicholas FW, Owen JB (eds.), *Breeding for Disease Resistance in Farm Animals* (Wallingford, UK: CABI Publishing, pp. 357–77).
2162. Parker HS. 2002. *Agricultural Bioterrorism: A Federal Strategy to Meet the Threat*. McNair Paper 65 (Washington, DC: National Defense University Institute for National Strategic Studies).
2163. Food and Agriculture Organization of the United Nations. 2004. Loss of domestic animal breeds alarming. Press release, March 31.
2164. 2001. Biodiversity shrinks as farm breeds die out, Reuters, September 18. lists.iatp.org/listarchive/archive.cfm?id=36947.
2165. Food and Agriculture Organization of the United Nations. 2004. Loss of domestic animal breeds alarming. Press release, March 31.
2166. Meredith M. 2004. Zoonotic disease risks—2004 update. American Association of Swine Veterinarians. aasv.org/news/story.php?id=1221&lang=en.
2167. Schrag S, Wiener P. 1995. Emerging infectious disease: what are the relative roles of ecology and evolution? *Trends in Ecology and Evolution* 10(8):319–324.
2168. Huff GR, Huff WE, Balog JM, Rath NC, Anthony NB, Nestor KE. 2005. Stress response differences and disease susceptibility reflected by heterophil ratio in turkeys selected for increased body weight. *Poultry Science* 84:709–17.
2169. Holland F. 1998. Search for the superchicken. *South China Morning Post*, February 25, p. 17.
2170. 2000. R&D agreement to develop disease resistant poultry. *World Poultry* 16(3):50.
2171. Van Blerkom LM. 2003. Role of viruses in human evolution. *Yearbook of Physical Anthropology* 46:14–46.
2172. Simianer H. 2005. Decision making in livestock conservation. *Ecological Economics* 53:559–572.
2173. 2005. Bird flu and bird farms. Effect Measure, February 5. effectmeasure.blogspot.com/2005/02/bird-flu-and-bird-farms.html.
2174. Wong M. 2004. Virus hitting chicken immunity may be cause of bird flu. Associated Press, January 28. thepoultrysite.com/LatestNews/Default.asp?AREA=LatestNews&Display=6223.

2175. Cereno TN. Infectious bursal disease: causative agent, diagnosis and prevention. Canadian Poultry Consultants. canadianpoultry.ca/new_page_2.htm.
2176. 2006. Adaptive immunity. Microbiology and Bacteriology, March 5. www.bact.wisc.edu/Microtextbook/index.php?name=Sections&req=viewarticle&artid=292&page=1.
2177. Schat KA, Davies CJ. 2000. Viral diseases. In: (eds.) Axford RFE, Bishop SC, Nicholas FW, Owen JB. *Breeding for Disease Resistance in Farm Animals* (Wallingford: CAB International, pp. 271–300).
2178. Bumstead N. 2003. Genetic resistance and transmission of avian bacteria and viruses. In: Muir WM, Aggrey SE (eds.), *Poultry Genetics, Breeding and Biotechnology* (Oxfordshire, UK: CAB International, pp. 311–28).
2179. European Commission Scientific Committee on Animal Health and Animal Welfare. 2000. The Welfare of Chickens Kept for Meat Production (Broilers). March 21. europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf.
2180. Saif YM. 1998. Infectious bursal disease and hemorrhagic enteritis. *Poultry Science* 77:1186–9.
2181. Saif YM. 1998. Infectious bursal disease and hemorrhagic enteritis. *Poultry Science* 77:1186–9.
2182. Cereno TN. Infectious bursal disease: causative agent, diagnosis and prevention. Canadian Poultry Consultants. canadianpoultry.ca/new_page_2.htm.
2183. Silbergeld E. 2006. Avian influenza risks and the animal-human interface. Avian Flu: The Pandemic Threat and the Global Strategy at the Johns Hopkins Bloomberg School of Public Health, January 30. commprojects.jhsph.edu/_media/009_avian_flu.ram.
2184. Fussell L. 1998. Poultry industry strategies for control of immunosuppressive diseases. *Poultry Science* 77:1193–6.
2185. Shane SM. 2005. Global disease update—AI overshadowing erosive diseases. *World Poultry* 21(7):22–3.
2186. Shane SM. 2003. Disease continues to impact the world's poultry industries. *World Poultry* 19(7):22–7.
2187. Daszak P, Cunningham AA, Hyatt AD. 2000. Emerging infectious diseases of wildlife—threats to biodiversity and human health. *Science* 287:443–9.
2188. Marek J. 1907. Multiple nervenentzündung (polyneuritis) bei Hubern. *Deutsche Tierärztliche Wochenschrift* 15:417–21.
2189. Boyd W. 2001. Making meat: science, technology, and American poultry production. *Technology and Culture* 42:631–64.

2190. Schat KA, Davies CJ. 2000. Viral diseases. In: Axford RFE, Bishop SC, Nicholas FW, Owen JB. (eds.), *Breeding for Disease Resistance in Farm Animals* (Wallingford: CAB International, pp. 271–300).
2191. Nair V. 2005. Evolution of Marek's disease—a paradigm for incessant race between the pathogen and the host. *Veterinary Journal* 170:175–83.
2192. Nair V. 2005. Evolution of Marek's disease—a paradigm for incessant race between the pathogen and the host. *Veterinary Journal* 170:175–83.
2193. Saif YM. 1998. Infectious bursal disease and hemorrhagic enteritis. *Poultry Science* 77:1186–9.
2194. Rosenberger JK and Cloud SS. 1998. Chicken anemia virus. *Poultry Science* 77:1190–2.
2195. Rosenberger JK and Cloud SS. 1998. Chicken anemia virus. *Poultry Science* 77:1190–2.
2196. Schat KA. 2005. Chicken infectious anemia virus infection: it is a serious problem. In: *Proceedings of the 77th Northeastern Conference on Avian Diseases*, June 15–17 (Cornell, NY, pp. 4–6). diaglab.vet.cornell.edu/avian/Proc-77NECAD.pdf.
2197. Miller MM, Schat KA. 2004. Chicken infectious anemia virus: an example of the ultimate host-parasite relationship. *Avian Diseases* 48(4):734–45.
2198. Rosenberger JK, Cloud SS. 1998. Chicken anemia virus. *Poultry Science* 77:1190–2.
2199. Rosenberger JK, Cloud SS. 1998. Chicken anemia virus. *Poultry Science* 77:1190–2.
2200. Fussell L. 1998. Poultry industry strategies for control of immunosuppressive diseases. *Poultry Science* 77:1193–6.
2201. Nair V. 2005. Evolution of Marek's disease—a paradigm for incessant race between the pathogen and the host. *Veterinary Journal* 170:175–83.
2202. Cereno TN. Infectious bursal disease: causative agent, diagnosis and prevention. Canadian Poultry Consultants. canadianpoultry.ca/new_page_2.htm.
2203. Fussell L. 1998. Poultry industry strategies for control of immunosuppressive diseases. *Poultry Science* 77:1193–6.
2204. Nair V. 2005. Evolution of Marek's disease—a paradigm for incessant race between the pathogen and the host. *Veterinary Journal* 170:175–83.
2205. Pond J, Pond W. 2000. *Introduction to Animal Science* (New York, NY: John Wiley and Sons, Inc.).

2206. Democracy Now. 2005. Transcript—Mike Davis on The Monster at Our Door: The Global Threat of Avian Flu. Democracy Now. October 19. democracynow.org/article.pl?sid=05/10/19/1332209
2207. Food and Agriculture Organization of the United Nations. 2004. Questions and answers on avian influenza; briefing paper prepared by AI Task Force, Internal FAO Document, January 30. animal-health-online.de/drms/faoinfluenza.pdf.
2208. Lindlaw S. 2006. “Biosecurity” is buzzword vs. bird flu. Associated Press, April 22. seattlepi.nwsource.com/business/1310AP_Bird_Flu_Poultry.html.
2209. Jack A, Cookson C, Kazmin A. 2005. Preparing for a pandemic. Financial Times, March 1, p. 19. sci.tech-archive.net/pdf/Archive/sci.med/2005-03/0134.pdf.
2210. Wuethrich B. 2003. Chasing the fickle swine flu. *Science* 299:1502–5.
2211. Webster RG. 1997. Influenza virus: transmission between species and relevance to emergence of the next human pandemic. *Archives of Virology* 13:S105–13.
2212. Horn R. 2004. Families under fire: Chearavanont. *Time Asia*, February 23. time.com/time/asia/covers/501040223/chearavanont.html.
2213. Neuykhiew N. 2004. Bird-flu aftermath: loans, free land for chicken farms. *The Nation*, March 15. tinyurl.com/nwuz5.
2214. Delforge I. 2004. The flu that made agribusiness stronger. Focus on the Global South, July 5. focusweb.org/content/view/363/28/.
2215. Delforge I. 2004. The flu. *Vietnam News*, February 4 as cited in Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press, pp. 108–9).
2216. Moore M. 2006. Flu fears are sidelining French poultry. *Washington Post*, March 2, p. A14. washingtonpost.com/wp-dyn/content/article/2006/03/01/AR2006030102150.html.
2217. Food and Agriculture Organization of the United Nations. 2006. Update on the avian influenza situation. *Avian Influenza Disease Emergency News*, issue 39.
2218. 2006. France confirms bird flu on poultry farm. Associated Press, February 25. www.guardian.co.uk/print/0,329420997-112338,00.html.
2219. Butler D. 2006. Doubts hang over source of bird flu spread. *Nature* 439:772.
2220. Delforge I. 2004. Thailand: the world’s kitchen. *Le Monde Diplomatique*, July. mondediplo.com/2004/07/05thailand.

2221. United Nations Food and Agriculture Organization Technical Task Force on Avian Influenza. 2004. Update on the avian influenza situation. Avian Influenza Disease Emergency News, issue 13.
2222. U.S. Department of Agriculture Global Agriculture Information Network. 2005. Laos: poultry and products; avian influenza. GAIN Report, March 16. 2005.www.fas.usda.gov/gainfiles/200503/146119131.pdf.
2223. Steckle MP. 2005. From a management crisis, to becoming better crisis managers: the 2004 avian influenza outbreak in British Columbia. Report of the Standing Committee on Agriculture and Agri-Food. April. parl.gc.ca/committee/CommitteePublication.aspx?SourceId=111249.
2224. Davis M. 2005. The Monster at Our Door: The Global Threat of Avian Flu (New York, NY: The New Press).
2225. Tweed SA, Skowronski DM, David ST, et al. 2004. Human illness from avian influenza H7N3, British Columbia. Emerging Infectious Diseases 10(12):2196–9. cdc.gov/ncidod/EID/vol10no12/pdf.s/04-0961.pdf.
2226. Bhattacharya S. 2004. Bird flu prompts mass cull in Canada. New Scientist, April, p. 22.
2227. 2004. Canadian Broadcasting Corporation, November 8 as cited in Davis M. 2005. The Monster at Our Door: The Global Threat of Avian Flu (New York, NY: The New Press).
2228. Tweed SA, Skowronski DM, David ST, et al. Human illness from avian influenza H7N3, British Columbia. Emerging Infectious Diseases 10(12):2196–9. www.cdc.gov/ncidod/EID/vol10no12/04-0961.htm.
2229. Steckle MP. 2005. From a management crisis, to becoming better crisis managers: the 2004 avian influenza outbreak in British Columbia. Report of the Standing Committee on Agriculture and Agri-Food. April. parl.gc.ca/committee/CommitteePublication.aspx?SourceId=111249.
2230. Bueckert D. 2004. Avian flu outbreak raises concerns about factory farms. Daily Herald-Tribune (Grande Prairie, Alberta), April 8, p. 6. cp.org/english/online/full/agriculture/040407/a040730A.html.
2231. Bueckert D. 2004. Avian flu outbreak raises concerns about factory farms. Daily Herald-Tribune (Grande Prairie, Alberta), April 8, p. 6. cp.org/english/online/full/agriculture/040407/a040730A.html.
2232. Mench JA. 1992. The welfare of poultry in modern production systems. Poultry Science 4:108–9.
2233. Broom DM. 2000. Does present legislation help animal welfare? Sustainable Animal Production: Workshops, Discussion, Online Resources. June–October. agriculture.de/acms1/conf6/ws5alegisl.htm.
2234. Vaillancourt JP. 2002. Biosecurity now. Poultry International. 411:12–8.

2235. Shane SM. 2005. Global disease update—AI overshadowing erosive diseases. *World Poultry* 21(7):22–3.
2236. Mabbett T. 2005. People, poultry and avian influenza. *Poultry International*, Volume 44, Number 9 pp.34–39.
2237. Bueckert D. 2004. Avian flu outbreak raises concerns about factory farms. *Daily Herald-Tribune* (Grande Prairie, Alberta), April 8, p. 6. cp.org/english/online/full/agriculture/040407/a040730A.html.
2238. Leahy S. 2004. Bird flu defeated—at high cost. IPS-Inter Press Service, August 27. ipsnews.net/interna.asp?idnews=25254.
2239. Bueckert D. 2004. Avian flu outbreak raises concerns about factory farms. *Daily Herald-Tribune* (Grande Prairie, Alberta), April 8, p. 6. cp.org/english/online/full/agriculture/040407/a040730A.html.
2240. CBC News. 2004. Scientist probe mystery surrounding avian flu. March 26. cbc.ca/bc/story/mar26avianmystery226032004.html.
2241. 2005. A few facts about avian influenza. www.avian-influenza.com. January. thepoultrysite.com/FeaturedArticle/FAType.asp?AREA=broilers&Display=275.
2242. 2005. A few facts about avian influenza. www.avian-influenza.com. January. thepoultrysite.com/FeaturedArticle/FAType.asp?AREA=broilers&Display=275.
2243. Lees W. 2004. Overview: the avian influenza outbreak in BC. Presentation to the Canadian Poultry Industry Forum, Animal Disease Surveillance Unit, CFIA. bcac.bc.ca/documents/C%20CFIA%20Overview%20-%20Dr.%20Wayne%20Lees.pdf.
2244. Johnson E. 2004. The ducks in the henhouse: wild birds are being blamed for the death of 19 million chickens. Yet factory farms are the real problem. *The Tyee*, April 13. thetyee.ca/Views/2004/04/13/The_Ducks_in_the_Henhouse/.
2245. Capua I, Alexander DJ. 2004. Avian influenza: recent developments. *Avian Pathol.* 33:393–404.
2246. Bosman A, Meijer A, Koopmans M. 2005. Final analysis of Netherlands avian influenza outbreaks reveals much higher levels of transmission to humans than previously thought. *Eurosurveill.* 10:E050106.2.
2247. World Health Organization. 2003. Avian influenza in the Netherlands: disease outbreak reported. Epidemic and Pandemic Alert and Response. April 24. www.who.int/csr/don/2003_04_24/en/.
2248. de Jong MCM, Stegeman A, van der Goot J, Koch G. 2009. Intra- and interspecies transmission of H7N7 highly pathogenic avian influenza virus during the avian influenza epidemic in the Netherlands in 2003. *Rev Sci Tech.* 28(1):333–340. <https://doi.org/10.20506/rst.28.1.1859>.

2249. Lawrence F. 2004. Why factory farms and mass trade make for a world where disease travels far and fast. Experts fear flu virus may spread to other countries and mutate, threatening a human pandemic. *Guardian*, January 24. www.guardian.co.uk/food/Story/0,2763,1130271,00.html.
2250. de Jong MCM, Stegeman A, van der Goot J, Koch G. 2009. Intra- and interspecies transmission of H7N7 highly pathogenic avian influenza virus during the avian influenza epidemic in the Netherlands in 2003. *Rev Sci Tech*. 28(1):333–340. <https://doi.org/10.20506/rst.28.1.1859>.
2251. Kuiken T, Fouchier R, Rimmelzwaan G, Osterhaus A. 2003. Emerging viral infections in a rapidly changing world. *Current Opinion in Biotechnology* 14:641–6.
2252. Thomas ME, Bouma A, Ekker HM, Fonken AJM, Stegeman JA, Nielen M. 2005. Risk factors for the introduction of high pathogenicity avian influenza virus into poultry farms during the epidemic in the Netherlands in 2003. *Preventive Veterinary Medicine* 69:1–11.
2253. Meredith M. 2004. Bird flu epidemics—what more can be done. *World Poultry* 20(2):28–9.
2254. de Wit E, Munster VJ, van Riel D, Beyer WE, Rimmelzwaan GF, Kuiken T, Osterhaus AD, Fouchier RA. 2010. Molecular determinants of adaptation of highly pathogenic avian influenza H7N7 viruses to efficient replication in the human host. *J Virol*. 84(3):1597–1606. <https://doi.org/10.1128/JVI.01783-09>.
2255. Ward P, Small I, Smith J, Suter P, Dutkowski R. 2005. Oseltamivir (Tami-flu) and its potential for use in the event of an influenza pandemic. *Journal of Antimicrobial Chemotherapy* 55(S1):i5–i21.
2256. Shortridge KF, Peiris JSM, Guan Y. 2003. The next influenza pandemic: lessons from Hong Kong. *Journal of Applied Microbiology* 94:70–9.
2257. Suarez DL, Senne DA, Banks J, et al. 2004. Recombination resulting in virulence shift in avian influenza outbreak, Chile. *Emerging Infectious Diseases* 10:693–99.
2258. Capua I, Mutinelli F, Marangon S, Alexander DJ. 2000. H7N1 avian influenza in Italy (1999 to 2000) in intensively reared chickens and turkeys. *Avian Pathology* 29:537–43.
2259. Webster RG, Shortridge KF, Kawaoka Y. 1997. Influenza: interspecies transmission and emergence of new pandemics. *Federation of European Microbiological Societies Immunology and Medical Microbiology* 18:275–9.
2260. Infectious Disease Society of America. 2006. Avian influenza (bird flu): agricultural and wildlife considerations. April 4. www.cidrap.umn.edu/idsa/influenza/avianflu/biofacts/avflu.html.

2261. Webster RG, Shortridge KF, Kawaoka Y. 1997. Influenza: interspecies transmission and emergence of new pandemics. *Federation of European Microbiological Societies Immunology and Medical Microbiology* 18:275–9.
2262. Webster RG. 1997. Predictions for future human influenza pandemics. *The Journal of Infectious Diseases* 176:S14–9.
2263. Webster RG. 1998. Influenza: an emerging microbial pathogen. In: *Emerging Infections* (San Diego, CA: Academic Press, pp. 275–300).
2264. Capua I, Marangon S, Selli L, et al. 1999. Outbreaks of highly pathogenic avian influenza (H5N2) in Italy during October 1997 to January 1998. *Avian Pathology* 28:455–60.
2265. Capua I, Marangon S. 2000. The avian influenza epidemic in Italy, 1999–2000: a review. *Avian Pathology* 29:289–94.
2266. Capua I, Marangon S. 2000. The avian influenza epidemic in Italy, 1999–2000: a review. *Avian Pathology* 29:289–94.
2267. Capua I, Mutinelli F, Marangon S, Alexander DJ. 2000. H7N1 avian influenza in Italy (1999 to 2000) in intensively reared chickens and turkeys. *Avian Pathology* 29:537–43.
2268. Shortridge KF, Zhou NN, Guan Y, et al. 1998. Characterization of avian H5N1 influenza viruses from poultry in Hong Kong. *Virology* 252:331–42.
2269. Gladwell M. 1997. The dead zone. *New Yorker*, July 28. gladwell.com/1997/1997_09_29_a_flu.htm.
2270. Straight Dope Science Advisory Board. 2001. How high can birds and bees fly? *The Straight Dope*, December 11. straightdope.com/mailbag/mbird-bees.html.
2271. Webster RG, Yakhno M, Hinshaw VS, Bean WJ, Murti KG. 1978. Intestinal influenza: replication and characterization of influenza viruses in ducks. *Virology* 84:268–78.
2272. Hinshaw VS, Webster RG, Turner B. 1980. The perpetuation of orthomyxoviruses and paramyxoviruses in Canadian waterfowl. *Canadian Journal of Microbiology* 26:622–9.
2273. Pharo HJ. 2003. The impact of new epidemiological information on a risk analysis for the introduction of avian influenza viruses in imported poultry meat. *Avian Diseases* 47:988–95.
2274. Marshall B. 2006. You call this a wetland? *Field and Stream*, March 30. fieldandstream.com/fieldstream/columnists/conservation/article/0,13199,1179434,00.html.
2275. Gumuchian M. 2006. Restoring wetlands key to curbing bird flu—report. *Reuters*, April 11.

2276. Brown C. 2000. Emerging infectious diseases of animals: an overview. In: Brown C, Bolin C (eds.), *Emerging Diseases of Animals* (Washington, DC: ASM Press, pp. 1–12).
2277. Alexander DJ. 2000. A review of avian influenza in different bird species. *Veterinary Microbiology* 74:3–13.
2278. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
2279. Hafez HM. 2000. Factors influencing turkey diseases. *World Poultry Turkey Health Special*, pp. 6–8.
2280. Surgeoner GA. 1996. Rodent control in livestock facilities. Ontario Ministry of Agriculture, Food and Rural Affairs. September. www.omafra.gov.on.ca/english/livestock/dairy/facts/86-036.htm.
2281. Shortridge KF, Zhou NN, Guan Y, et al. 1998. Characterization of avian H5N1 influenza viruses from poultry in Hong Kong. *Virology* 252:331–42.
2282. Nestorowicz A, Kawaoka Y, Bean WJ, Webster RG. 1987. Molecular analysis of the hemagglutinin genes of Australian H7N7 influenza viruses: role of passerine birds in maintenance or transmission? *Virology* 160:411–18.
2283. Halvorson DA, Kelleher CJ, Senne DA. 1985. Epizootiology of avian influenza: effect of seasonal incidence in sentinel ducks and domestic turkey in Minnesota. *Applied and Environmental Microbiology* 49:914–9.
2284. Petersen L, Nielsen EM, Engberg J, On SL, Dietz HH. 2001. Comparison of genotypes and serotypes of *Campylobacter jejuni* isolated from Danish wild mammals and birds and from broiler flocks and humans. *Applied and Environmental Microbiology* 67(7):3115–21.
2285. Silbergeld E. 2006. Avian influenza risks and the animal-human Interface. Avian flu: the pandemic threat and the global strategy at the Johns Hopkins Bloomberg School of Public Health, January 30. commprojects.jhsph.edu/_media/009_avian_flu.ram.
2286. Axtell RC, Arends JJ. 1990. Ecology and management of arthropod pests of poultry. *Annual Review of Entomology* 35:101–126.
2287. Rosef O, Kapperud G. 1983. House flies (*Musca domestica*) as possible vectors of *Campylobacter fetus* subsp. *Applied and Environmental Microbiology* 45(2):3811–3.
2288. Iowa State University Center for Food Security and Public Health. 2005. Avian influenza (highly pathogenic). October. www.cfsph.iastate.edu/DiseaseInfo/notes/AvianInfluenza.pdf.
2289. Ito T, Kawaoka Y. 1998. Avian influenza. In: Nicholson KG, Webster RG, Hay AJ (eds.), *Textbook of Influenza* (Oxford: Blackwell Science, pp. 126–36).

2290. Halvorson DA, Kelleher CJ, Senne DA. 1985. Epizootiology of avian influenza: effect of seasonal incidence in sentinel ducks and domestic turkey in Minnesota. *Applied and Environmental Microbiology* 49:914–9.
2291. Vaillancourt JP. 2002. Biosecurity now. *Poultry International*. 411:12–8.
2292. Capua I, Marangon S. 2003. The use of vaccination as an option for the control of avian influenza. In: 71st General Session International Committee of the World Organization for Animal Health (Paris, France, May 18–23).
2293. Capua I, Marangon S. 2003. The use of vaccination as an option for the control of avian influenza. In: 71st General Session International Committee of the World Organization for Animal Health (Paris, France, May 18–23).
2294. Capua I, Marangon S. 2003. Currently available tools and strategies for emergency vaccination in case of avian influenza. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 59–74).
2295. Perdue ML, Suarez DL, Swayne DE. 2000. Avian influenza in the 1990s. *Avian and Poultry Biology Reviews* 11:11–20.
2296. Krushinskie EA. 2006. U.S. poultry industry preparedness for an HPAI outbreak. Avian influenza: Dealing with the challenge. bulldogsolutions.net/WattPublishing/WPC01102006/frmEventDescription.aspx.
2297. Cutler GJ. 1986. The nature and impact of layer industry changes. United States Animal Health Association. Second International Symposia on Avian Influenza, pp. 423–6.
2298. Alexander DJ. 1993. Orthomyxovirus infection. In: McFerran JB, McNulty MS (eds.), *Virus Infections of Birds* (Amsterdam, The Netherlands: Elsevier Science Publishers, pp. 287–316).
2299. U.S. Department of Agriculture APHIS. Backyard biosecurity: practices to keep your birds healthy. September 2004
2300. Canning K. 2005. A matter of pride. www.refrigeratedfrozenfood.com/content.php?s=RF/2005/12&p=8.
2301. Schmit J. 2005. Poultry farm tactics may thwart bird flu. USA Today, November 14. usatoday.com/news/nation/2005-11-13-farmers-birdflu_x.htm?csp=N009.
2302. Tablante NL, San Myint M, Johnson YJ, Rhodes K, Colby M, Hohenhaus G. 2002. A survey of biosecurity practices as risk factors affecting broiler performance on the Delmarva Peninsula. *Avian Diseases* 46:730–4.
2303. Beard CW. 2003. Minimizing the vulnerability of poultry production chains for avian influenza. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 133–7).

2304. 2003. Dirty money: corporate criminal donations to the two major parties. Corporate Crime Reporter, July 3. www.corporatecrimereporter.com/ccrreport.pdf.
2305. Tyson Foods. 2005. Tyson provides \$26 million to fuel family farmers: supplemental energy allowance addresses rising fuel costs. Tyson Press Room. October 3. tysonfoodsinc.com/PressRoom/ViewArticle.aspx?id=1925.
2306. 2005. IBP, Inc. v. Alvarez (03-1238); Tum v. Barber Foods, Inc (04-66) Supreme Court collection. www.law.cornell.edu/supct/cert/03-1238.html.
2307. Schmit J. 2005. Poultry farm tactics may thwart bird flu. USA Today, November 14. usatoday.com/news/nation/2005-11-13-farmers-birdflu_x.htm?csp=N009.
2308. Animal Health and Welfare Panel of the European Food Safety Authority. 2005. Animal health and welfare aspects of avian influenza. European Food Safety Authority Journal 266:1–21.
2309. Beard CW. 2003. Minimizing the vulnerability of poultry production chains for avian influenza. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands, pp. 133–7).
2310. Stegeman A (Chairman). 2003. Workshop 1: Introduction and spread of avian influenza. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control. library.wur.nl/frontis/avian_influenza/workshop1.pdf.
2311. Shane SM. 2003. Disease continues to impact the world's poultry industries. World Poultry 19(7):22–7.
2312. Rudd K. 1995. Poultry reality check needed. Poultry Digest, December 1995, pp. 12–20.
2313. Rudd K. 1995. Poultry reality check needed. Poultry Digest, December 1995, pp. 12–20.
2314. Anderson I. 2002. Foot and Mouth Disease 2001: Lessons to Be Learned Inquiry Report (London, UK: The Stationery Office). archive.cabinetoffice.gov.uk/fmd/fmd_report/report/.
2315. Shane SM. 2003. Disease continues to impact the world's poultry industries. World Poultry 19(7):22–7.
2316. Pluimers F (Chairman). 2003. Workshop 4: Control measures and legislation. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands) at library.wur.nl/frontis/avian_influenza/workshop4.pdf.

2317. Halvorson D. 2005. Overview of avian influenza. University of Minnesota University of Minnesota Extension Service. December 9. www.cvm.umn.edu/ai/home.html.
2318. Olsen SJ, Rooney JA, Blanton L, Rolfes MA, Nelson DI, Gomez TM, Karli SA, Trock SC, Fry AM. 2019. Estimating risk to responders exposed to avian influenza A H5 and H7 viruses in poultry, United States, 2014–2017. *Emerg Infect Dis.* 25(5):1011–1014. <https://dx.doi.org/10.3201/eid2505.181253>.
2319. Bevins SN, Dusek RJ, White CL, Gidlewski T, Bodenstein B, Mansfield KG, DeBruyn P, Kraege D, Rowan E, Gillin C, et al. 2016. Widespread detection of highly pathogenic H5 influenza viruses in wild birds from the Pacific Flyway of the United States. *Sci Rep.* 6(1):28980. <https://dx.doi.org/10.1038/srep28980>.
2320. Lee DH, Bertran K, Kwon JH, Swayne DE. 2017. Evolution, global spread, and pathogenicity of highly pathogenic avian influenza H5Nx clade 2.3.4.4. *J Vet Sci.* 18(S1):269–280. <https://doi.org/10.4142/jvs.2017.18.S1.269>.
2321. Lee DH, Bahl J, Torchetti MK, Killian ML, Ip HS, DeLiberto TJ, Swayne DE. 2016. Highly pathogenic avian influenza viruses and generation of novel reassortants, United States, 2014–2015. *Emerg Infect Dis.* 22(7):1283–1285. <https://doi.org/10.3201/eid2207.160048>.
2322. U.S. Government Accountability Office. 2017 Apr 13. Avian influenza: USDA has taken actions to reduce risks but needs a plan to evaluate its efforts. Washington: GAO. Report No.: GAO-17-360. [accessed 2020 Apr 7]. <https://www.gao.gov/assets/690/684086.pdf>.
2323. U.S. Department of Agriculture. 2015 Dec. High pathogenicity avian influenza control in commercial poultry operations—a national approach. USDA. [accessed 2020 Apr 18]. https://www.aphis.usda.gov/stakeholders/downloads/2015/hpai_ea.pdf.
2324. Humane Society of the United States v. U.S. Department of Agriculture, Animal & Plant Health Inspection Service, Veterinary Services, Kevin Shea, Burke Healy, Mark Davidson. 2020 Apr 8. Case 2:20-cv-03258.
2325. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 113–30).
2326. Gladwell M. 1995. *The plague year*. New Republic, July 24.
2327. Brown C. 1999. Economic considerations of agricultural diseases. *Annals of the New York Academy of Sciences* 894:92–94.

2328. Greene JL. 2015 Jul 20. Update on the highly-pathogenic avian influenza outbreak of 2014-2015. Congressional Research Service; [accessed 2020 Apr 7]. <https://fas.org/sgp/crs/misc/R44114.pdf>.
2329. Senne DA, Pearson JE, Panigrahy B. 1997. Live poultry markets: a missing link in the epidemiology of avian influenza. In: Proceedings of the 3rd International Symposium on Avian Influenza May 27–29 (University of Wisconsin, Madison, pp. 50–8).
2330. Gladwell M. 1995. The plague year. New Republic, July 24.
2331. Laver WG, Bischofberger N, Webster RG. 2000. The origin and control of pandemic influenza. Perspectives in Biology and Medicine 43(2):173–92.
2332. Gladwell M. 1997. The dead zone. New Yorker, July 28. gladwell.com/1997/1997_09_29_a_flu.htm.
2333. Branden C, John T. 1991. Introduction to Protein Structure (New York, NY: Garland Publishing, Inc., pp. 72–75). www.chem.uwec.edu/Chem406/Webpages97/heidi/INTRO.HTM.
2334. Kawaoka Y, Webster RG. 1988. Molecular mechanism of acquisition of virulence in influenza virus in nature. Microbial Pathogenesis 5:311–18.
2335. Laver WG, Bischofberger N, Webster RG. 2000. The origin and control of pandemic influenza. Perspectives in Biology and Medicine 43(2):173–92.
2336. Dierauf L. Avian influenza in wild birds. U.S. Department of the Interior, U.S. Geological Survey. Wildlife Health Bulletin 04-01. www.nwhc.usgs.gov/publications/wildlife_health_bulletins/WHB_04_01.jsp.
2337. Dierauf L. Avian influenza in wild birds. U.S. Department of the Interior, U.S. Geological Survey. Wildlife Health Bulletin 04-01. www.nwhc.usgs.gov/publications/wildlife_health_bulletins/WHB_04_01.jsp.
2338. Senne DA, Pearson JE, Panigrahy B. 1997. Live poultry markets: a missing link in the epidemiology of avian influenza. In: Proceedings of the 3rd International Symposium on Avian Influenza May 27–29 (University of Wisconsin, Madison, pp. 50–8).
2339. Senne DA, Pearson JE, Panigrahy B. 1997. Live poultry markets: a missing link in the epidemiology of avian influenza. In: Proceedings of the 3rd International Symposium on Avian Influenza May 27–29 (University of Wisconsin, Madison, pp. 50–8).
2340. Perez DR, Nazarian SH, McFadden G, Gilmore MS. 2005. Miscellaneous threats: highly pathogenic avian influenza, and novel bio-engineered organisms. In: Bronze MS, Greenfield RA (eds.), Biodefense: Principles and Pathogens (Norfolk, UK: Horizon Bioscience).
2341. Lee C, Senne DA, Linares JA, et al. 2004. Characterization of recent H5 subtype avian influenza viruses from U.S. poultry. Avian Pathology 33:288–97.

2342. 2004. USDA confirms highly pathogenic Avian Influenza in Texas. West Texas County Courier, February 26. www.wtccourier.com/flats_pdf/2004/02-26-04.pdf.
2343. Stubbs EL. 1948. Fowl pest. In: Biester HE, Schwarte LH (eds.), *Diseases of Poultry*, 2nd ed (Ames, IA: Iowa State University Press, pp. 603–614).
2344. Perez DR, Nazarian SH, McFadden G, Gilmore MS. 2005. Miscellaneous threats: highly pathogenic avian influenza, and novel bio-engineered organisms. In: Bronze MS, Greenfield RA (eds.), *Biodefense: Principles and Pathogens* (Norfolk, UK: Horizon Bioscience).
2345. Senne DA, Pearson JE, Panigrahy B. 1997. Live poultry markets: a missing link in the epidemiology of avian influenza. In: *Proceedings of the 3rd International Symposium on Avian Influenza May 27–29* (University of Wisconsin, Madison, pp. 50–8).
2346. Senne DA, Holt TJ, Akey BL. 2003. An overview of the 2002 outbreak of low-pathogenic H7N2 avian influenza in Virginia, West Virginia and North Carolina. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 41–7).
2347. Centers for Disease Control and Prevention. 2005. Outbreaks in North America with transmission to humans. tinyurl.com/n7eu2.
2348. Spackman E, Suarez DL. 2003. Evaluation of molecular markers for pathogenicity in recent H7N2 avian influenza isolates from the northeastern United States. In: *Proceedings of the 52nd Western Poultry Disease Conference*, pp. 21–3. Sacramento, CA, USA.
2349. Centers for Disease Control and Prevention. 2005. Outbreaks in North America with transmission to humans. tinyurl.com/n7eu2.
2350. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 113–30).
2351. Shane SM. 2003. Disease continues to impact the world's poultry industries. *World Poultry* 19(7):22–7.
2352. Swayne DE. 2003. Transcript of the question and answer session from the Fifth International Symposium on Avian Influenza. *Avian Diseases* 47:1219–55.
2353. Senne DA, Pederson JC, Panigrahy B. 2003. Live-bird markets in the northeastern United States: a source of avian influenza in commercial poultry. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 19–24).

2354. Spackman E, Senne DA, Davison S, Suarez DL. 2003. Sequence analysis of recent H7 avian influenza viruses associated with three different outbreaks in commercial poultry in the United States. *Journal of Virology* 77:13399–402.
2355. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 113–30).
2356. Centers for Disease Control and Prevention. 2005. Outbreaks in North America with transmission to humans. tinyurl.com/n7eu2.
2357. Capua I, Alexander DJ. 2004. Avian influenza: recent developments. *Avian Pathology* 33:393–404.
2358. Senne DA, Pederson JC, Panigrahy B. 2003. Live-bird markets in the northeastern United States: a source of avian influenza in commercial poultry. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 19–24).
2359. Swayne DE. 2003. Transcript of the question and answer session from the Fifth International Symposium on Avian Influenza. *Avian Diseases* 47:1219–55.
2360. University of Georgia Southeastern Cooperative Wildlife Disease Study. 1986. July. Avian influenza in live poultry markets. SCWDS Briefs, July.
2361. Spackman E, Senne DA, Davison S, Suarez DL. 2003. Sequence analysis of recent H7 avian influenza viruses associated with three different outbreaks in commercial poultry in the United States. *Journal of Virology* 77:13399–402.
2362. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 113–30).
2363. Mullaney R. 2003. Live-bird market closure activities in the northeastern United States. *Avian Diseases* 47:1096–8.
2364. Senne DA, Pederson JC, Panigrahy B. 2003. Live-bird markets in the northeastern United States: a source of avian influenza in commercial poultry. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 19–24).
2365. Suarez DL, Garcia M, Latimer J, Senne D, Perdue M. 1999. Phylogenetic analysis of H7 avian influenza viruses isolated from the live bird markets of the northeastern United States. *Journal of Virology* 73:3567–73.
2366. Trock SC, Huntley JP. 2010. Surveillance and control of avian influenza in the New York live bird markets. *Avian Dis.* 54(s1):340–344. <https://doi.org/10.1637/8728-032409-ResNote.1>.

2367. Newbury SP, Cigel F, Killian ML, Leutenegger CM, Seguin MA, Crossley B, Brennen R, Suarez DL, Torchetti M, Toohey-Kurth K. 2017. First detection of avian lineage H7N2 in *Felis catus*. *Genome Announc.* 5(23):e00457-17. <https://dx.doi.org/10.1128/genomeA.00457-17>.
2368. Poirot E, Levine MZ, Russell K, Stewart RJ, Pompey JM, Chiu S, Fry AM, Gross L, Havers FP, Li ZN, et al. 2019. Detection of avian influenza A(H7N2) virus infection among animal shelter workers using a novel serological approach—New York City, 2016–2017. *J Infect Dis.* 219(11):1688–1696. <https://doi.org/10.1093/infdis/jiy595>.
2369. Belser JA, Pulit-Penaloza JA, Sun X, Brock N, Pappas C, Creager HM, Zeng H, Tumpey TM, Maines TR. A novel A(H7N2) influenza virus isolated from a veterinarian caring for cats in a New York City animal shelter causes mild disease and transmits poorly in the ferret model. *J Virol.* 91(15):e00672-17. <https://doi.org/10.1128/JVI.00672-17>.
2370. Senne DA, Pederson JC, Panigrahy B. 2003. Live-bird markets in the northeastern United States: a source of avian influenza in commercial poultry. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 19–24).
2371. 2005. Cornell checking for avian flu in NYC. *Ithaca Journal*, October 15.
2372. Belser JA, Blixt O, Chen L-M, Pappas C, Maines TR, Van Hoeven N, Donis R, Busch J, McBride R, Paulson JC, et al. 2008. Contemporary North American influenza H7 viruses possess human receptor specificity: implications for virus transmissibility. *Proc Natl Acad Sci U S A.* 105(21):7558–7563. <https://doi.org/10.1073/pnas.0801259105>.
2373. Chander Y, Jindal N, Sreevatsan S, Stallknecht DE, Goyal SM. 2013. Molecular and phylogenetic analysis of matrix gene of avian influenza viruses isolated from wild birds and live bird markets in the USA. *Influenza Other Respir Viruses.* 7(4):513–520. <https://doi.org/10.1111/irv.12003>.
2374. Belser JA, Blixt O, Chen L-M, Pappas C, Maines TR, Van Hoeven N, Donis R, Busch J, McBride R, Paulson JC, et al. 2008. Contemporary North American influenza H7 viruses possess human receptor specificity: implications for virus transmissibility. *Proc Natl Acad Sci U S A.* 105(21):7558–7563. <https://doi.org/10.1073/pnas.0801259105>.
2375. Yen HL, Lipatov AS, Ilyushina NA, Govorkova EA, Franks J, Yilmaz N, Douglas A, Hay A, Krauss S, Rehg JE, Hoffmann E, et al. 2007. Inefficient transmission of H5N1 influenza viruses in a ferret contact model. *J Virol.* 81(13):6890–6898. <https://doi.org/10.1128/JVI.00170-07>.
2376. U.S. Department of Agriculture, Agricultural Research Service. Action plan. tinyurl.com/k56zb.

2377. Graham JP, Leibler JH, Price LB, Otte JM, Pfeiffer DU, Tiensin T, Silbergeld EK. 2008. The animal-human interface and infectious disease in industrial food animal production: rethinking biosecurity and biocontainment. *Public Health Rep.* 123(3):282–299. <https://doi.org/10.1177/003335490812300309>.
2378. Suarez DL, Spackman E, Senne DA. 2003. Update on molecular epidemiology of H1, H5, and H7 influenza virus infections in poultry in North America. *Avian Diseases* 47:888–97.
2379. Veterinary Services; Surveillance, Preparedness, and Response Services; Animal and Plant Health Inspection Service. 2016. Final report for the 2014–2015 outbreak of highly pathogenic avian influenza (HPAI) in the United States. U.S. Department of Agriculture; [revised 2016 Aug 11; accessed 2020 Apr 7]. https://www.aphis.usda.gov/animal_health/emergency_management/downloads/hpai/2015-hpai-final-report.pdf.
2380. Thaxton YV. 2005. Are you prepared for AI? *Poultry*, April/May, p. 5.
2381. 2005. Flu “would spread to UK in weeks.” BBC News, September 14. news.bbc.co.uk/1/hi/health/4245004.stm.
2382. Specter M. 2005. Nature’s bioterrorist. *New Yorker*, February 28, pp. 52–61.
2383. Ferguson NM, Cummings DA, Cauchemez S, Fraser C, Riley S, Meeyai A, Lamsirithaworn S, Burke DS. 2005. Strategies for containing an emerging influenza pandemic in Southeast Asia. *Nature* 437(7056):209–14.
2384. Longini IM Jr, Nizam A, Xu S, Ungchusak K, Hanshaoworakul W, Cummings DA, Halloran ME. 2005. Containing pandemic influenza at the source. *Science*. 309(5737):1083–7.
2385. Ferguson NM, Cummings DA, Cauchemez S, Fraser C, Riley S, Meeyai A, Lamsirithaworn S, Burke DS. 2005. Strategies for containing an emerging influenza pandemic in Southeast Asia. *Nature* 437(7056):209–14.
2386. Ruef C. 2004. A new influenza pandemic-unprepared for a big threat? *Infection* 32(6):313–4.
2387. Weiss R. 2005. Bird flu could be stopped—if everything is aligned right. *Washington Post*, August 4, p. A16. www.washingtonpost.com/wp-dyn/content/article/2005/08/03/AR2005080301806.html.
2388. Center for Infectious Disease and Research Policy. 2005. Roche to give flu drug to WHO to fight pandemic. August 24. cidrap.umn.edu/cidrap/content/influenza/panflu/news/aug2405who.html.
2389. Center for Infectious Disease and Research Policy. 2005. Roche to give flu drug to WHO to fight pandemic. August 24. cidrap.umn.edu/cidrap/content/influenza/panflu/news/aug2405who.html.

2390. New Scientist. 2005. Editorial: bird flu—ready or not? New Scientist, August 6, p. 3.
2391. Fox M. 2005. No quick fix for bird flu, experts caution. Reuters, October 11.
2392. Editorial. 2003. We have been warned. Nature 424(6945):113. www.nature.com/nature/journal/v424/n6945/full/424113a.html.
2393. 2005. Weak-link Laos gets U.S. funds for bird flu fight. Reuters, October 13. signonsandiego.com/news/world/20051013-0824-birdflu-laos.html.
2394. Mason M. 2005. Official: preventing pandemic impossible. ABC News, October 15. abcnews.go.com/Health/wireStory?id=1216962&CMP=OTCRSSFeeds0312.
2395. Institute of Medicine and National Research Council. 2009 Sep. Report brief: sustaining global surveillance and response to emerging zoonotic diseases. Washington(DC): National Academies Press; [accessed 2020 Apr 9].
2396. Weiss R. 2005. Bird flu could be stopped—if everything is aligned right. Washington Post, August 4, p. A16. www.washingtonpost.com/wp-dyn/content/article/2005/08/03/AR2005080301806.html.
2397. Levy A, Scott-Clark C. 2005. Flu on the wing. Guardian, October 15. www.guardian.co.uk/birdflu/story/0,14207,1591358,00.html.
2398. Stone R. 2006. Combating the bird flu menace, down on the farm. Science 311:944–46.
2399. Bradsher K. 2005. Gaps in affluence strain worldwide bird flu response. New York Times, October 9.
2400. United Nations Food and Agriculture Organization News Release. 2005. Global strategy to fight bird flu in animals faces serious funding gap. September 26. www.fao.org/newsroom/en/news/2005/107804/.
2401. Oxford JS. 2005. Preparing for the first influenza pandemic of the 21st century. Lancet Infectious Diseases 5:129–31.
2402. United Nations. 2005. Fighting bird flu at origin will help prevent human flu pandemic says UN Food and Agriculture Organization. UN Press Release SAG/334, February 23. www.un.org/News/Press/docs/2005/sag334.doc.htm.
2403. Stapp K. 2004. Scientists warn of fast-spreading global viruses. IPS-Inter Press Service, February 23.
2404. Aglionby J. 2004. The politics of poultry. Guardian, January 29. guardian.co.uk/elsewhere/journalist/story/0,7792,1134341,00.html.
2405. Lawrence F. 2004. Why factory farms and mass trade make for a world where disease travels far and fast. Experts fear flu virus may spread to other

countries and mutate, threatening a human pandemic. *Guardian*, January 24. www.guardian.co.uk/food/Story/0,2763,1130271,00.html.

2406. Hookway J. 2005. In the battle against avian flu, rural Asia is seen as vanguard. *Wall Street Journal*, October 14.

2407. Delforge I. 2004. Thailand: the world's kitchen. *Le Monde Diplomatique*, July. mondediplo.com/2004/07/05thailand.

2408. Delgado CL, Narrod CA. 2002. Impact of Changing Market Forces and Policies on Structural Change in the Livestock Industries of Selected Fast-Growing Developing Countries Final Research Report of Phase I—Project on Livestock Industrialization, Trade and Social-Health-Environment Impacts in Developing Countries (Washington, DC: International Food Policy Research Institute). fao.org/WAIRDOCS/LEAD/X6115E/X6115E00.HTM.

2409. Horn R. 2004. The families that own Asia—Chearavanont. *Time Asia*, February 16. www.time.com/time/asia/covers/501040223/chearavanont.html.

2410. Becker J. 2004. Bird flu panic hits China amid fears of global pandemic. *Independent*, January 31.

2411. Horn R. 2004. The families that own Asia—Chearavanont. *Time Asia*, February 16. www.time.com/time/asia/covers/501040223/chearavanont.html.

2412. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press, pp. 100–1).

2413. Elegant S. 2004. Gauging the threat: Is a human pandemic next? *Time International*, February 9, p. 14.

2414. Elegant S. 2004. Gauging the threat: Is a human pandemic next? *Time International*, February 9, p. 14.

2415. Delforge I. 2004. Thailand: the world's kitchen. *Le Monde Diplomatique*, July. mondediplo.com/2004/07/05thailand.

2416. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press, p. 102).

2417. Hermawan A. 2003. No News Is Bad News. Southeast Asian Press Alliance. www.seapabkk.org/newdesign/fellowshipsdetail.php?No=241.

2418. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press, p. 105).

2419. Hermawan A. 2003. No News Is Bad News. Southeast Asian Press Alliance. www.seapabkk.org/newdesign/fellowshipsdetail.php?No=241.

2420. Channel News Asia. 2004. WHO raps Asia over handling of bird flu crisis. February 10. www.channelnewsasia.com/stories/afp_world/view/70444/1/.html.

2421. Watts J. 2004. Asian nations step up action to curb spread of avian influenza. *Lancet* 363:373.
2422. McCurry J. 2004. Bird flu suicides in Japan. *Guardian*, March 9.
2423. Editorial. Lapses in halting avian flu. *Japan Times*, March 3. www.japan-times.co.jp/shukan-st/jteds/ed20040319.htm.
2424. Sipress A. 2005. Indonesia neglected bird flu until too late, experts say. *Washington Post*, October 20, p. A01. www.washingtonpost.com/wp-dyn/content/article/2005/10/19/AR2005101902147.html.
2425. Aglionby J. 2004. The politics of poultry. *Guardian*, January 29. guardian.co.uk/elsewhere/journalist/story/0,7792,1134341,00.html.
2426. Chanyapate C, Delforge I. 2004. The politics of bird flu in Thailand. *Focus on Trade*, April, No.98. focusweb.org/publications/FOT%20pdf./fot98.pdf.
2427. Wongchanglaw S. 2004. Thaksin's cover-up: can we trust our leader? *Think Centre (ASIA)*, February 13. www.thinkcentreasia.org/opinions/Thaksincoverup.html.
2428. Avian Influenza Information Centre. 2004. Chicken eating festival. *Thai Government fact sheet*, February 8. www.thaigov.go.th/avian/index-e.html.
2429. Watt Poultry USA. 2004. KFC gives away free chicken in Thailand to restore consumer confidence. *Watt Poultry USA, Industry News Briefs*, February 9. www.wattnet.com/Newsroom/ViewNews.cfm?PG=1&nwsNum=14288.
2430. Anthony T. 2004. Eating poultry in China a political act. *Associated Press*, February 10.
2431. Warden J. 1998. Beef Was Not Perfectly Safe. *British Medical Journal* 317:1273.
2432. Khalik A. 2005. Anxious minister alone in facing bird flu threat. *Jakarta Post*, July 30.
2433. Knobler S, Mahmoud A, Lemon S, Mack A, Sivitz L, Oberholtzer K (eds.), 2001. *Learning from SARS: Preparing for the Next Disease Outbreak*. Workshop Summary (Washington, DC: National Academies Press).
2434. Lee PJ, Krilov LR. 2005. When animal viruses attack: SARS and avian influenza. *Pediatric Annals* 34(1):43–52.
2435. Channel News Asia. 2004. WHO raps Asia over handling of bird flu crisis. February 10.
2436. Ma J. 2020 Mar 13. Coronavirus: China's first confirmed Covid-19 case traced back to November 17. *South China Morning Post*. [accessed 2020 Apr 7]; <https://www.scmp.com/news/china/society/article/3074991/coronavirus-chinas-first-confirmed-covid-19-case-traced-back>.

2437. Yang DL. 2020 Mar 10. Wuhan officials tried to cover up covid-19—and sent it careening outward. *Washington Post*. [accessed 2020 Apr 7]; <https://www.washingtonpost.com/politics/2020/03/10/wuhan-officials-tried-cover-up-covid-19-sent-it-careening-outward/>.
2438. Lai S, Ruktanonchai NW, Zhou L, Prosper O, Luo W, Floyd JR, We-solowski A, Santillana M, Zhang C, Du X, et al. 2020 Mar 13. Effect of non-pharmaceutical interventions for containing the COVID-19 outbreak in China. *medRxiv.org*. [accessed 2020 Apr 18]. <https://doi.org/10.1101/2020.03.03.20029843>.
2439. Wong J. 2003. How it began—in case you missed it. *Globe and Mail*, April 5.
2440. Cropley E. 2005. Myanmar—the world’s bird flu black hole? *Reuters*, October 9.
2441. Butler D. 2005. Flu researchers slam U.S. agency for hoarding data. *Nature* 437:458–9.
2442. Carr R. 2005. CDC locks up flu data: critics call policy too restrictive. *The Atlanta Journal-Constitution*, October 3.
2443. Vaillancourt JP. 2002. Biosecurity now. *Poultry International*. 411:12–8.
2444. Montgomery J. 2005. Public in dark about avian flu cases on farms. *News Journal*, October 24. www.delawareonline.com/apps/pbcs.dll/article?AID=/20051024/NEWS/510240344.
2445. Rainsford S. 2005. Resentment grows in bird flu town. *BBC News*, October 11. news.bbc.co.uk/1/hi/world/europe/4329712.stm.
2446. Nordland R. 2005. To stop a virus. *Newsweek*, October 14. msnbc.msn.com/id/9698067/site/newsweek/.
2447. 2005. Life as we know it. *Effect Measure*, October 3. effectmeasure.blogspot.com/2005/10/life-as-we-know-it.html.
2448. 2005. After SARS, health experts ponder the next global epidemic. *Terra Daily*, January 27. terradaily.com/2005/050127124144.c0rr22pn.html.
2449. Nikiforuk A. 2003. Nature always strikes back in global village. *Times Colonist*, April 6, p. D7.
2450. Weintraub A. 2005. The “horrific” economics of avian flu. *Business Week*, September 19. www.businessweek.com/magazine/content/05_38/b3951011.htm.
2451. Knobler S, Mahmoud A, Lemon S, Mack A, Sivitz L, Oberholtzer K (eds.), 2004. *Learning from SARS, Preparing for the Next Disease Outbreak*, Workshop Summary (Washington, DC: National Academies Press, p. 123). nap.edu/catalog/10915.html.

2452. 2005. Life as we know it. Effect Measure, October 3. effectmeasure.blogspot.com/2005/10/life-as-we-know-it.html.
2453. Fidler DP. 1997. The role of international law in the control of emerging infectious diseases. *Bulletin de l'Institut Pasteur* 95:57–72.
2454. Walsh B. 2005. A wing and a prayer. *Time Asia*, September 19. www.time.com/time/asia/magazine/printout/0,13675,501050926-1106457,00.html.
2455. Knox R. 2005. New strategy for pandemic flu. *NPR Health News*, January 24. npr.org/templates/story/story.php?storyId=4466883.
2456. Wiseman P. 2005. Quick action may stop global bird flu epidemic. *USA Today*, June 6, p.1A. www.usatoday.com/news/health/2005-06-05-bird-flu-cover_x.htm.
2457. Donnan S, Hidayat T. 2005. Jakarta bird flu vaccine stockpile still low. *Financial Times*, September 17.
2458. Nissanka JS. 2005. No drugs now if avian flu breaks out. *Sunday Observer*, October 30. sundayobserver.lk/2005/10/30/new14.html.
2459. Butler D. 2005. Drugs could head off a flu pandemic—but only if we respond fast enough. *Nature* 436:614–5.
2460. Editorial. 2005. Avian influenza virus: are we prepared? *Canadian Medical Association Journal* 172:965. cmaj.ca/cgi/content/full/172/8/965.
2461. Lett D. 2005. WHO's call for international pandemic action unheeded. *Canadian Medical Association Journal* 172:1429. www.cmaj.ca/cgi/reprint/172/11/1429.
2462. Vesely R. 2005. State tries to save bird flu drug for those most vulnerable to illness. *Oakland Tribune*, November 30.
2463. Lett D. 2005. WHO's call for international pandemic action unheeded. *Canadian Medical Association Journal* 172:1429. www.cmaj.ca/cgi/reprint/172/11/1429.
2464. Specter M. 2005. Nature's bioterrorist. *New Yorker*, February 28, pp. 52–61.
2465. 2005. On the mirage of stopping bird flu. *Effect Measure*, August 4. effectmeasure.blogspot.com/2005/08/on-mirage-of-stopping-bird-flu.html.
2466. Council on Foreign Relations. 2005. Conference on the Global Threat of Pandemic Influenza, Session 2: Containment and Control November 16. cfr.org/publication/9244/council_on_foreign_relations_conference_on_the_global_threat_of_pandemic_influenza_session_2.html.
2467. Fox M. 2005. No quick fix for bird flu, experts caution. *Reuters*, October 11. www.alertnet.org/thenews/newsdesk/N11489775.htm.

2468. Heiberg M. 2005. Two studies model containment strategies for pandemic flu. CIDRAP News, August 3. www.cidrap.umn.edu/cidrap/content/influenza/panflu/news/aug0305panflu.html.
2469. Lyn TE. 2005. South China: Perfect incubator for bird flu pandemic? The Star, September 13. jphpk.gov.my/English/Sept05%2013a.htm.
2470. Osterholm MT. 2005. Preparing for the next pandemic. *New England Journal of Medicine* 352(18):1839–42. content.nejm.org/cgi/content/full/352/18/1839.
2471. Editorial. 2005. Avian influenza: Perfect storm now gathering? *Lancet* 365(9462):820.
2472. Gibbs WW, Soares C. 2005. Preparing for a pandemic. *Scientific American*, October 24.
2473. Tangwisutijit N, Kwankom A. 2005. Not enough drugs to fight a new pandemic. *The Nation (Thailand)*, August 23.
2474. Council on Foreign Relations. 2005. Q&A with Laurie Garrett. *Foreign Affairs*, May 25. www.foreignaffairs.org/background/pandemic/Garrett2.
2475. Abbott A. 2005. Avian flu special: what's in the medicine cabinet? *Nature* 435:407–9. nature.com/news/2005/050523/full/435407a.html.
2476. Tangwisutijit N, Kwankom A. 2005. Not enough drugs to fight a new pandemic. *The Nation (Thailand)*, August 23.
2477. Abbott A. 2005. Avian flu special: what's in the medicine cabinet? *Nature* 435:407–9. nature.com/news/2005/050523/full/435407a.html.
2478. Nebehay S. 2005. WHO's Chan aims to prepare world for bird flu outbreak. *Reuters*, September 13. msnbc.msn.com/id/9312931/.
2479. Evans B. 2002. Emergency preparedness: a veterinary and animal health community challenge and obligation. *Canadian Veterinary Journal* 43:797.
2480. Tangwisutijit N, Kwankom A. 2005. Not enough drugs to fight a new pandemic. *The Nation (Thailand)*, August 23.
2481. Nesmith J. 2005. U.S. “woefully unprepared” for bird flu pandemic. *Cox News Service*, May 26.
2482. Nesmith J. 2005. Flu outbreak could wreak global havoc; scientists warn against complacency. *Atlanta Journal-Constitution*, June 17, p. 5C.
2483. 2005. Battling bird flu. *NewsHour with Jim Lehrer*, November 1.
2484. 2005. Vaccines, drugs offer little help in bird flu fight. Governments should instead focus on controlling pandemic, expert cautions. *Reuters*, October 10.

2485. Marwick C. 1996. Readiness is all: public health experts draft plan outlining pandemic influenza response. *Journal of the American Medical Association* 275:179–80.
2486. Davis M. 2005. Avian flu: a state of unreadiness. *The Nation*, July 18–25, pp. 27–30.
2487. Harris G. 2005. Bush plan shows U.S. not ready for deadly flu. *New York Times*, October 8.
2488. Kennedy EM. 2005. America's response to avian flu. *The Boston Globe*, October 16.
2489. Neergaard L. 2005. U.S. could restrict travel to prevent flu. *Herald News Daily*, November 2. heraldnewsdaily.com/stories/news-0094307.html.
2490. Motavalli J. 2005. Laurie Garrett: are we prepared for avian flu? Interviewed by Jim Motavalli. *E Magazine*, July/August 2005, www.emagazine.com/view/?2826.
2491. Miller S. 2005. Epidemic proportions. *Top Producer*, February 11.
2492. U.S. Department of Health and Human Services. 2005. Pandemic Influenza Plan. November, p. B7. hhs.gov/pandemicflu/plan/pdf/HHSPandemicInfluenzaPlan.pdf.
2493. Editorial. 2005. The perplexing pandemic flu plan. *New York Times*, November 20. nytimes.com/2005/11/20/opinion/20sun1.html?ex=1143090000&en=8d71a46c25138208&ei=5070.
2494. Harris G. 2006. States welcome flu plan but say they need federal money. *New York Times*, May 4. select.nytimes.com/gst/abstract.html?res=F50F12FA355B0C778CDDAC0894DE404482.
2495. Garrett L. *Betrayal of Trust: The Collapse of Global Public Health* (New York, NY: Hyperion; 2000).
2496. Osterholm M, Branswell H. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak (webcast). Woodrow Wilson International Center for Scholars, September 19. www.wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.
2497. Isikoff M, Hosenball M. 2005. Bio-Katrina. *Newsweek Web Exclusive*, October 12. msnbc.msn.com/id/9675585/site/newsweek/.
2498. Naughton P. 2005. Don't panic over bird flu, say EU ministers. *Times Online*, October 18. timesonline.co.uk/article/0,13509-1831022,00.html.
2499. 2005. "Don't panic." *Effect Measure*, October 18. effectmeasure.blogspot.com/2005/10/dont-panic.html.
2500. Institute of Medicine Board of Health. *The Threat of Pandemic Influenza: Are We Ready?* (Washington, DC: National Academies Press).

2501. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
2502. Colihan K. 2005. Witness to 1918 flu: "Death was there all the time." CNN, November 14. cnn.com/2005/HEALTH/conditions/10/07/1918.flu.witness/index.html.
2503. Public Broadcasting System. American Experience Transcript. 1918 Influenza. pbs.org/wgbh/amex/influenza/filmmore/transcript/transcript1.html.
2504. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company).
2505. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company).
2506. Public Broadcasting System. American Experience Transcript. 1918 Influenza Timeline. pbs.org/wgbh/amex/influenza/timeline/index.html.
2507. Colihan K. 2005. Witness to 1918 flu: "Death was there all the time." CNN, November 14. cnn.com/2005/HEALTH/conditions/10/07/1918.flu.witness/index.html.
2508. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
2509. Silverstein AM. 1981. Pure Politics and Impure Science: The Swine Flu Affair (Baltimore, Maryland: Johns Hopkins University Press, pp. 129–31).
2510. Schonberger LB, Bregman DJ, Sullivan-Bolyai JZ, et al. 1979. Guillain-Barré syndrome following vaccination in the national influenza immunization program, United States, 1976–1977. *American Journal of Epidemiology* 110(2):105–23.
2511. Hilleman M. 1996. Cooperation between government and industry in combating a perceived emerging pandemic: the 1967 swine influenza vaccination program. *Journal of the American Medical Association* 275:241–3.
2512. Bollet AJ. 2004. *Plagues and Poxes: The Impact of Human History on Epidemic Disease* (New York, NY: Demos).
2513. Bollet AJ. 2004. *Plagues and Poxes: The Impact of Human History on Epidemic Disease* (New York, NY: Demos).
2514. Nesmith J. 2005. Experts fret over flu pandemic; U.S. plan for avian threat incomplete. *Atlanta Journal-Constitution*, May 27, p. 10A. tinyurl.com/joods.
2515. Kennedy M. 2005. Bird flu could kill millions: global pandemic warning from WHO. *Gazette (Montreal)*, March 9, p. A1.
2516. Branswell H. 2006. Health officials worry over flu risk. *Canadian Press*, March 19. cnews.canoe.ca/CNEWS/Canada/2006/03/19/1495802-cp.html.

2517. Pan American Health Organization. Influenza Pandemic a Brewing Storm, WHO Director-General Says. PAHO news release, September 27. paho.org/English/DD/PIN/pr050927.htm.
2518. Manning A. Big screen horror. USA Today, September 18, p. 6D. usatoday.com/life/2003-09-17-microbes_x.htm.
2519. Peter D. Hart Research Associates. 2006 Apr 26. Gauging the threat: media coverage of pandemic and avian flu. <http://healthyamericans.org/reports/flumedia/GaugingReport.pdf>
2520. Editorial. 2006 Nov 5. Shrugging at a pandemic. Boston Globe.
2521. Southwell BG, Hwang Y, Torres A. 2006. Avian influenza and US TV news. *Emerg Infect Dis*. 12(11):1797–1798. <http://www.cdc.gov/ncidod/EID/vol12no11/06-0672.htm>.
2522. Peter D. Hart Research Associates. 2006 Apr 26. Gauging the threat: media coverage of pandemic and avian flu. <http://healthyamericans.org/reports/flumedia/GaugingReport.pdf>
2523. 2005. World Reassurance Organization (aka WHO). Effect Measure, September 22. effectmeasure.blogspot.com/2005/09/world-reassurance-organization-aka-who.html.
2524. Nowak G. 2004. Planning for the 2004–05 influenza vaccination season: a communication situation analysis. Centers for Disease Control and Prevention National Immunization Program. urban-renaissance.org/urbanren/images/2004_flu_nowak.pdf.
2525. Sandman PM, Lanard J. 2005. Bird flu: communicating the risks. *Perspectives in Health* 10(2):2–9.
2526. 2005. Outbreak of bird flu in Asia hits 3 nations. *International Herald Tribune*, November 4. iht.com/articles/2005/11/04/news/flu.php.
2527. 2005. French ignorant about bird flu but unworried—poll. Reuters, October 15.
2528. 2005. French ignorant about bird flu but unworried—poll. Reuters, October 15.
2529. Sandman PM, Lanard J. 2005. Bird flu: communicating the risks. *Perspectives in Health* 10(2):2–9.
2530. 2005. Vaccines, drugs offer little help in bird flu fight. Governments should instead focus on controlling pandemic, expert cautions. Reuters, October 10.
2531. 2005. In depth bird flu: the next pandemic? CBC News Online, July 27. cbc.ca/news/background/avianflu/.
2532. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).

2533. Osterholm M, Branswell H. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak (webcast). Woodrow Wilson International Center for Scholars, September 19. www.wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.
2534. Editorial. 2005. Avian flu: the U.S. must be more prepared. Philadelphia Inquirer August 14. www.philly.com/mld/inquirer/news/editorial/12376798.htm.
2535. Schwartz R, Bicks M, Chapman S, et al. 2005. Avian flu: is the government ready for an epidemic? ABC News. www.wirednewyork.com/forum/archive/index.php/t-7324.html.
2536. 2005. No local threat from avian flu. KDKA Pittsburg, October 12.
2537. Dillon A. 2005. October 4. Bird flu not expected to affect Arkansas. Daily Citizen thedailycitizen.com/articles/2005/10/05/news/local_news/news02.prt.
2538. Johnson T. Inaction in Indonesia stirs fears it may become pandemic's cradle. Mercury News, October 13.
2539. Kazmin A. 2005. UN targets farming habits to beat bird flu. Financial Times, July 7, p. 11.
2540. Walsh B. 2005. A wing and a prayer. Times Asia, September 19. www.time.com/time/asia/magazine/printout/0,13675,501050926-1106457,00.html.
2541. Branswell. H. 2004. Looming pandemic that could kill tens of millions causing sleepless nights. Canadian Press, November 20. cp.org/awards/view_story.asp?ID=117.
2542. Branswell H. 2006. Health officials worry over flu risk. Canadian Press, March 19. cnews.canoe.ca/CNEWS/Canada/2006/03/19/1495802-cp.html.
2543. Uhlman M. 2005. U.S. unprepared for new flu. Norther Iowan, October 7. fp.uni.edu/northia/archives3.asp?ID=3878.
2544. Lueck S, Mathews AW. 2005. Bush proposes \$7.1 billion outlay to fight pandemic-flu threat. Wall Street Journal, November 2, p. A6.
2545. Milbank D. 2005. Capitol Hill flu briefing was no trick, and no treat. Washington Post, October 13, p. A02. www.washingtonpost.com/wp-dyn/content/article/2005/10/12/AR2005101202250.html.
2546. Editorial. 2004. Fowl flu fuels fears. Nature Medicine 10:211–211.
2547. Clayton J. 2003. Looming flu pandemic has experts crying fowl, Nature Medicine 9(4):375. nature.com/nm/journal/v9/n4/full/nm0403-275.html.
2548. Stein R. 2005. Vaccine appears to ward off bird flu. Washington Post, August 7, p. A01. washingtonpost.com/wp-dyn/content/article/2005/08/06/AR2005080600849.html.

2549. 2005. The Karl Rove bird flu strategy. Effect Measure, August 9. effect-measure.blogspot.com/2005/08/karl-rove-bird-flu-strategy.html.
2550. Altman LK, Bradsher K. 2005. A successful vaccine alone is not enough to prevent avian flu epidemic. *New York Times*, August 8.
2551. Heinen PP, Rijsewijk FA, de Boer-Luijze EA, Bianchi AT. 2002. Vaccination of pigs with a DNA construct expressing an influenza virus M2-nucleoprotein fusion protein exacerbates disease after challenge with influenza A virus. *Journal of General Virology* 83(Pt 8):1851–9.
2552. Branswell H. Bird flu vaccine requires huge doses; stretching strategies critical: experts. Canadian Press, August 9. www.freerepublic.com/focus/f-news/1459633/posts.
2553. Branswell H. Bird flu vaccine requires huge doses; stretching strategies critical: experts. Canadian Press, August 9. www.freerepublic.com/focus/f-news/1459633/posts.
2554. Perry S. 2006. Bird flu: "This thing just continues to march." *City Pages*, March 22. citypages.com/databank/27/1320/article14219.asp.
2555. Butler D. 2005. Bird flu vaccine not up to scratch: positive results of little practical use, experts warn. *Nature News*, August 10. bioedonline.org/news/news.cfm?art=1964.
2556. Butler D. 2005. Bird flu vaccine not up to scratch: positive results of little practical use, experts warn. *Nature News*, August 10. bioedonline.org/news/news.cfm?art=1964.
2557. Butler D. 2005. Bird flu vaccine not up to scratch: positive results of little practical use, experts warn. *Nature News*, August 10. bioedonline.org/news/news.cfm?art=1964.
2558. Butler D. 2005. Bird flu vaccine not up to scratch: positive results of little practical use, experts warn. *Nature News*, August 10. bioedonline.org/news/news.cfm?art=1964.
2559. McKie R. 2005. Vaccine failure could lead to flu pandemic. *Observer*, October 9. observer.guardian.co.uk/uk_news/story/0,6903,1588106,00.html.
2560. Branswell H. Bird flu vaccine requires huge doses; stretching strategies critical: experts. Canadian Press, August 9. www.freerepublic.com/focus/f-news/1459633/posts.
2561. 2005. "No one" ready for bird flu. CBS/AP, October 6. cbsnews.com/stories/2005/10/06/health/main918141.shtml.
2562. 2005. Vaccines, drugs offer little help in bird flu fight. Governments should instead focus on controlling pandemic, expert cautions. *Reuters*, October 10.

2563. 2005. Race against a lethal virus. Sydney Morning Herald. October 25. smh.com.au/news/world/race-against-a-lethal-virus/2005/10/24/1130006061717.html.
2564. Altman LK, Bradsher K. 2005. Vaccine for bird flu tests well, but making enough may be problem. New York Times, August 8. iht.com/articles/2005/08/07/news/vaccine.php.
2565. 2005. Some quotes about the state of the world's readiness to face a flu pandemic. Canadian Press NewsWire, May 25.
2566. Hawkes N. 2005. Flu pandemic "could kill 360 million worldwide." The Times, May 6.
2567. 2005. Race against a lethal virus. Sydney Morning Herald. October 25. smh.com.au/news/world/race-against-a-lethal-virus/2005/10/24/1130006061717.html.
2568. Barlett DL, Steele JB. About us. barlettandsteele.com/about.html.
2569. Barlett DL, Steele JB. 2004 The health of nations. New York Times, October 24. www.anabaptistethics.org/HAS/News/The%20Health%20of%20Nations.htm.
2570. Revill J. 2005. A tragic, wasted opportunity to avert disaster. Observer, October 16. observer.guardian.co.uk/focus/story/0,6903,1593220,00.html.
2571. Barlett DL, Steele JB. 2004 The health of nations. New York Times, October 24. www.anabaptistethics.org/HAS/News/The%20Health%20of%20Nations.htm.
2572. Berkley S. 2006. We're running out of time. Newsweek International, January 30. msnbc.msn.com/id/10965125/site/newsweek/.
2573. Pollack A. 2005. Talk of bird flu pandemic revives interest in passed-over drugs. New York Times, October 7.
2574. Drexler M. 2005. Bird flu blues. October 18. tompaine.com/print/bird_flu_blues.php.
2575. Japsen B. 2005. Bird-flu vaccine: we may be last in line. Chicago Tribune, October 19 seattletimes.nwsources.com/html./health/2002569783_flufactory19.html.
2576. Japsen B. 2005. Bird-flu vaccine: we may be last in line. Chicago Tribune, October 19 seattletimes.nwsources.com/html./health/2002569783_flufactory19.html.
2577. Osterholm MT. 2005. Preparing for the next pandemic. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.

2578. McManus K. 2004. Asian avian influenza—a call to action. *Australian Veterinary Journal* 82:135.
2579. Weekly Epidemiological Record. 2005. H5N1 avian influenza: first steps towards development of a human vaccine. *Weekly Epidemiological Record* 80:277–8.
2580. Japsen B. 2005. Bird-flu vaccine: we may be last in line. *Chicago Tribune*, October 19 seattletimes.nwsources.com/html/health/2002569783_flufactory19.html.
2581. Gibbs WW, Soares C. 2005. Preparing for a pandemic. *Scientific American*, October 24. www.sciam.com/print_version.cfm?articleID=000DCB5A-9CC7-134E-9CC783414B7F0000.
2582. Butler D. 2005. Avian flu special. The flu pandemic: were we ready? *Nature* 425:400. nature.com/nature/journal/v435/n7041/full/435400a.html.
2583. Mackenzie D, Choo K. 2005. Bird flu: kick-start vaccination or face the consequences. *New Scientist*, October 14. www.newscientist.com/channel/health/mg18825215.900.html.
2584. Bush RM. 2004. Influenza as a model system for studying the cross-species transfer and evolution of the SARS coronavirus. *Philosophical Transactions of the Royal Society of London B* 359:1067–73.
2585. Goodman J. 2005. Meeting the challenge of pandemic vaccine preparedness: an FDA perspective. In: *Institute of Medicine of the National Academies, John R. La Montagne Memorial Symposium on Pandemic Influenza Research: Meeting Proceedings* (Washington, DC: National Academies Press, pp. 19–28).
2586. United States Conference of Catholic Bishops Secretariat for Pro-Life Activities. Fact sheet: Embryonic stem cell research and vaccines using fetal tissue. usccb.org/prolife/issues/bioethic/vaccfac2.htm.
2587. Sanghavi D. 2003. Flu: a shot worth taking. *Boston Globe*, December 9. boston.com/news/globe/health_science/articles/2003/12/09/flu_a_shot_worth_taking?mode=PF.
2588. Gibbs WW, Soares C. 2005. Preparing for a pandemic. *Scientific American*, October 24.
2589. Centers for Disease Control and Prevention. [date unknown]. How flu vaccines are made. U.S. Department of Health and Human Services; [last reviewed 2019 Dec 12; accessed 2020 Apr 7]. <https://www.cdc.gov/flu/prevent/how-fluvaccine-made.htm>.
2590. Drexler M. 2005. Bird flu blues. October 18. tompaine.com/print/bird_flu_blues.php.

2591. Board on Health Promotion and Disease Prevention. Institute of Medicine. 2002. *The Future of the Public's Health in the 21st Century* (Washington, DC: National Academies Press, p. 96).
2592. Branswell H. 2005. Pandemic planning shouldn't overlook need to fix source agricultural. Canadian Press, October 24. www.cp.org/premium/ONLINE/member/National/051024/n1024135A.html.
2593. Lett D. 2005. Feds to stockpile antivirals as pandemic "speed bump." Canadian Medical Association Journal 172(9):1167. www.cmaj.ca/cgi/reprint/172/9/1167.
2594. Uhlman M. 2005. In a flu pandemic, hygiene is a lifesaver. Philadelphia Inquirer, October 11.
2595. Institute of Medicine Board on Health Promotion and Disease Prevention. 2002. *The Future of the Public's Health in the 21st Century* (Washington, DC: National Academies Press, p. 96).
2596. Legters LJ, Brink LH, Takafuji ET. 1993. Are we prepared for a viral epidemic emergency? In: Morse SS, editor. *Emerging Viruses* (New York, NY: Oxford University Press, p. 272).
2597. Institute of Medicine. 1988. *The Future of Public Health* (Washington, DC: National Academies Press, p. 19). fermat.nap.edu/books/0309038308/html/19.html.
2598. Institute of Medicine Board on Health Promotion and Disease Prevention. 2002. *The Future of the Public's Health in the 21st Century* (Washington, DC: National Academies Press, p. 100).
2599. Cowen T. 2005. Avian flu: what should be done. Mercatus Center at George Mason University: Working Paper Series. November 11.
2600. VandHei J, Baker P. 2005. Critics say Bush undercut New Orleans flood control. Washington Post, September 2, p. A16. www.washingtonpost.com/wp-dyn/content/article/2005/09/01/AR2005090102261.html.
2601. Oritz P. 2005. Credentials questioned: another Bush crony is point man on avian flu. Diversity Inc. Magazine, November 1.
2602. Brewin B. 2005. Health directors say HHS flu cuts are for the birds. Government Health IT, October 18. www.govhealthit.com/article91152-10-18-05-Web.
2603. Pelosi N. 2005. Statement on President's avian flu pandemic preparedness strategy. Press Release, November 1. democraticleader.house.gov/press/releases.cfm?pressReleaseID=1255.
2604. 2005. Proposed reductions in preparedness funds would leave USA vulnerable to public health emergencies warn public health officials. Medical News Today, July 16. medicalnewstoday.com/medicalnews.php?newsid=27505.

2605. Sandalow M. 2005. In Hurricane Katrina's wake, some question whether battle against terrorism is the right fight. *San Francisco Chronicle*, September 11. sfgate.com/cgi-bin/article.cgi?file=/c/a/2005/09/11/MNG40EM00T1.DTL&type=printable.
2606. 2005. They knew what to expect. *Reuters*, September 2. wired.com/news/planet/0,2782,68738,00.html.
2607. Shute N, Querna E, Bainbridge B, Brink S, Ramachandran N. 2005. Of birds and men. *U.S. News and World Report* 138(12):40–9. tinyurl.com/jkacf.
2608. Palma B. 2020 Feb 26. Did Trump administration fire the US pandemic response team? *Snopes*; [updated 2020 Mar 13; accessed 2020 Apr 7]. <https://www.snopes.com/fact-check/trump-fire-pandemic-team/>.
2609. Sun LH. 2018 May 10. Top White House official in charge of pandemic response exits abruptly. *Washington Post*; [accessed 2020 Apr 7]. <https://www.washingtonpost.com/news/to-your-health/wp/2018/05/10/top-white-house-official-in-charge-of-pandemic-response-exits-abruptly/>.
2610. Transcript of President Bush's October 4, 2005. Press Conference. Courtesy of FDCH/e-Media, October 4.
2611. Harris G. 2005. Fear of flu outbreak rattles Washington. *New York Times*, October 7. query.nytimes.com/gst/fullpage.html?sec=health&res=9B05EEDA1130F936A35753C1A9639C8B63.
2612. Sternberg S. 2005. Imagine what would happen if a Category 5 viral storm hit every state. *USA Today*, November 10, p. 1A. www.usatoday.com/printedition/news/20051011/1a_cover11.art.htm.
2613. Knobler SL, Mack A, Mahmoud A, Lemon SL (eds.), 2005. *The Threat of pandemic influenza: are we ready?* Workshop Summary (Washington, DC: National Academies Press). p. 64.
2614. Harris G. 2005. Fear of flu outbreak rattles Washington. *New York Times*, October 7. query.nytimes.com/gst/fullpage.html?sec=health&res=9B05EEDA1130F936A35753C1A9639C8B63.
2615. Sternberg S. 2005. Officials race to head off a bird flu pandemic. *USA Today*, October 10. www.usatoday.com/news/health/2005-10-10-avian-flu-cover_x.htm.
2616. Rosenthal E. 2005. Nations redouble their efforts against bird flu. *International Herald Tribune*, September 17. iht.com/bin/print_ipub.php?file=/articles/2005/09/16/news/flu.php.
2617. Sandman PM. Katrina: hurricanes, catastrophes, and risk communication. September 8. psandman.com/col/katrina.htm.
2618. 2005. U.S. lawmakers call for creation of "bird flu czar." Democrats say nation unprepared for outbreak of deadly avian influenza. *Reuters*, October 7.

2619. 2005. Thai newspaper: pandemic phase 4? Effect Measure, September 05. effectmeasure.blogspot.com/2005/09/thai-newspaper-pandemic-phase-4.html.
2620. Boyd RS. H5N1: a killer strain of flu. Knight Ridder Newspapers, October 16.
2621. Goldstein J. 2005. The next flu pandemic: are we ready? (You don't want to know). Miami Herald.com, September 20. tinyurl.com/efnl3.
2622. Rovera R. 2006. Prepare for pandemic, localities are warned. Washington Post, February 25, p. B04. washingtonpost.com/wp-dyn/content/article/2006/02/24/AR2006022401802.html.
2623. Democracy Now. 2005. Transcript—Mike Davis on The Monster at Our Door: The Global Threat of Avian Flu. Democracy Now. October 19. democracynow.org/article.pl?sid=05/10/19/1332209.
2624. Wilson A. 2006. Officials discuss reaction to influenza. The Olympian, April 15. 159.54.227.3/apps/pbcs.dll/article?AID=/20060415/NEWS01/60415007.
2625. Heslam J. 2005. Can flu guru do the job? Critics question his credentials. The Boston Herald, October 7.
2626. Sternberg S. 2005. Imagine what would happen if a Category 5 viral storm hit every state. USA Today, November 10, p. 1A.
2627. Cowen T. 2005. Avian flu: what should be done. Mercatus Center at George Mason University: Working Paper Series, November 11.
2628. Osterholm MT. 2005. Preparing for the next pandemic. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.
2629. Cowen T. 2005. Avian flu: what should be done. Mercatus Center at George Mason University: Working Paper Series, November 11.
2630. Heiberg M. 2005. Asian nations plan for pandemic flu, another treatment is suggested. Center for Infectious Disease Research and Policy News. August 12.
2631. Guarner J. 2020. Three emerging coronaviruses in two decades. Am J Clin Pathol. 153(4):420–421. <https://doi.org/10.1093/ajcp/aqaa029>.
2632. He J, Tao H, Yan Y, Huang S-Y, Xiao Y. 2020 Feb 21. Molecular mechanism of evolution and human infection with the novel coronavirus (2019-nCoV). bioRxiv.org. [accessed 2020 Mar 30]. <https://doi.org/10.1101/2020.02.17.952903>.
2633. Wölfel R, Corman VM, Guggemos W, Seilmaier M, Zange S, Müller MA, Niemeyer D, Jones TC, Vollmar P, Rothe C, et al. 2020. Virological assessment of hospitalized patients with COVID-2019. Nature. [Epub ahead of print 2020 Apr 1; accessed 2020 Apr 18]. <https://doi.org/10.1038/s41586-020-2196-x>.

2634. Liu Z, Magal P, Seydi O, Webb G. 2020. Understanding unreported cases in the COVID-19 epidemic outbreak in Wuhan, China, and the importance of major public health interventions. *Biology*. 9(3):50. <https://doi.org/10.3390/biology9030050>.
2635. Marty AM, Jones MK. 2020. The novel Coronavirus (SARS-CoV-2) is a one health issue. *One Health*. 9:100123. <https://doi.org/10.1016/j.onehlt.2020.100123>.
2636. Park M, Thwaites RS, Openshaw PJM. 2020. COVID-19: lessons from SARS and MERS. *Eur J Immunol*. 50(3):308–311. <https://doi.org/10.1002/eji.202070035>.
2637. Adalja AA, Watson M, Toner ES, Cicero A, Inglesby TV. 2019. Characteristics of microbes most likely to cause pandemics and global catastrophes. In: Inglesby TV, Adalja AA, editors. *Global Catastrophic Biological Risks. Current Topics in Microbiology and Immunology*, vol 424. Switzerland: Springer. p. 1–20. https://doi.org/10.1007/82_2019_176.
2638. Hui DSC, Zumla A. 2019. Severe acute respiratory syndrome: historical, epidemiologic, and clinical features. *Infect Dis Clin North Am*. 33(4):869–889. <https://doi.org/10.1016/j.idc.2019.07.001>.
2639. Hui DSC, Zumla A. 2019. Severe acute respiratory syndrome: historical, epidemiologic, and clinical features. *Infect Dis Clin North Am*. 33(4):869–889. <https://doi.org/10.1016/j.idc.2019.07.001>.
2640. Wilder-Smith A, Chiew CJ, Lee VJ. 2020 Mar 5. Can we contain the COVID-19 outbreak with the same measures as for SARS? *Lancet Infect Dis*. [accessed 2020 Mar 30]. [https://doi.org/10.1016/s1473-3099\(20\)30129-8](https://doi.org/10.1016/s1473-3099(20)30129-8).
2641. Li J-Y, You Z, Wang Q, Zhou Z-J, Qiu Y, Luo R, Ge X-Y. 2020. The epidemic of 2019-novel-coronavirus (2019-nCoV) pneumonia and insights for emerging infectious diseases in the future. *Microbes Infect*. 22(2):80–85. <https://doi.org/10.1016/j.micinf.2020.02.002>.
2642. Hui DSC, Zumla A. 2019. Severe acute respiratory syndrome: historical, epidemiologic, and clinical features. *Infect Dis Clin N Am*. 33(4):869–889. <https://doi.org/10.1016/j.idc.2019.07.001>.
2643. Wilder-Smith A, Chiew CJ, Lee VJ. 2020 Mar 5. Can we contain the COVID-19 outbreak with the same measures as for SARS? *Lancet Infect Dis*. [accessed 2020 Mar 30]. [https://doi.org/10.1016/s1473-3099\(20\)30129-8](https://doi.org/10.1016/s1473-3099(20)30129-8).
2644. Marty AM, Jones MK. 2020. The novel coronavirus (SARS-CoV-2) is a one health issue. *One Health*. 9:100123. <https://doi.org/10.1016/j.onehlt.2020.100123>.
2645. Fraser C, Riley S, Anderson RM, Ferguson NM. 2004. Factors that make an infectious disease outbreak controllable. *Proc Natl Acad Sci U S A*. 101(16):6146–6151. <https://doi.org/10.1073/pnas.0307506101>.

2646. Lee N, Hui D, Wu A, Chan P, Cameron P, Joynt GM, Ahuja A, Yung MY, Leung CB, To KF, et al. 2003. A major outbreak of severe acute respiratory syndrome in Hong Kong. *N Engl J Med.* 348(20):1986–1994. <https://doi.org/10.1056/NEJMoa030685>.
2647. Assiri A, Al-Tawfiq JA, Al-Rabeeh AA, Al-Rabiah FA, Al-Hajjar S, Al-Barrak A, Flemban H, Al-Nassir WN, Balkhy HH, Al-Hakeem RF, et al. 2013. Epidemiological, demographic, and clinical characteristics of 47 cases of Middle East respiratory syndrome coronavirus disease from Saudi Arabia: a descriptive study. *Lancet Infect Dis.* 13(9):752–761. [https://doi.org/10.1016/S1473-3099\(13\)70204-4](https://doi.org/10.1016/S1473-3099(13)70204-4).
2648. Fang Z, Yi F, Wu K, Lai K, Sun X, Zhong N, Liu Z. 2020 Mar 12. Clinical characteristics of coronavirus pneumonia 2019 (COVID-19): an updated systematic review. *medRxiv.org*. [accessed 2020 Mar 30]. <https://doi.org/10.1101/2020.03.07.20032573>.
2649. Zou L, Ruan F, Huang M, Liang L, Huang H, Hong Z, Yu J, Kang M, Song Y, Xia J, et al. 2020. SARS-CoV-2 viral load in upper respiratory specimens of infected patients. *N Engl J Med.* 382(12):1177–1179. <https://doi.org/10.1056/NEJMc2001737>.
2650. He X, Lau EHY, Wu P, Deng X, Wang J, Hao X, Lau YC, Wong JY, Guan Y, Tan X, et al. 2020 Apr 15. Temporal dynamics in viral shedding and transmissibility of COVID-19. *Nat Med.* <https://doi.org/10.1038/s41591-020-0869-5>.
2651. Luo S-H, Liu W, Liu Z-J, Zheng X-Y, Hong C-X, Liu Z-R, Liu J, Weng J-P. 2020 Mar 6. A confirmed asymptomatic carrier of 2019 novel coronavirus (SARS-CoV-2). *Chin Med J (Engl)*. [accessed 2020 Mar 30]. <https://doi.org/10.1097/cm9.0000000000000798>.
2652. Cheng H-Y, Jian S-W, Liu D-P, Ng T-C, Huang W-T, Lin H-H. 2020 Mar 19. High transmissibility of COVID-19 near symptom onset. *medRxiv.org*. [accessed 2020 Mar 30]. <https://doi.org/10.1101/2020.03.18.20034561>.
2653. The Lancet. 2020. COVID-19: fighting panic with information. *Lancet.* 395(10224):537. [accessed 2020 Mar 30]. [https://doi.org/10.1016/S0140-6736\(20\)30379-2](https://doi.org/10.1016/S0140-6736(20)30379-2).
2654. Malta M, Rimoim AW, Strathdee SA. 2020. The coronavirus 2019-nCoV epidemic: is hindsight 20/20? *EclinicalMedicine.* 20:100289. <https://doi.org/10.1016/j.eclinm.2020.100289>.
2655. Peckham R. 2020. COVID-19 and the anti-lessons of history. *Lancet.* 395(10227):850–852. [accessed 2020 Mar 30]. [https://doi.org/10.1016/s0140-6736\(20\)30468-2](https://doi.org/10.1016/s0140-6736(20)30468-2).
2656. Yang Y, Peng F, Wang R, Guan K, Jiang T, Xu G, Sun J, Chang C. 2020 Mar 3. The deadly coronaviruses: the 2003 SARS pandemic and the 2020 novel coronavirus epidemic in China. *J Autoimmun.* [accessed 2020 Mar 30]. <https://doi.org/10.1016/j.jaut.2020.102434>.

2657. Carbone M, Green JB, Bucci EM, Lednický JA. 2020. Coronaviruses: facts, myths, and hypotheses. *J Thorac Oncol*. Article in press. [accessed 2020 Mar 30]. <https://doi.org/10.1016/j.jtho.2020.02.024>.
2658. Garrett L. 2020. COVID-19: the medium is the message. *Lancet*. 395(10228):942–943. [accessed 2020 Mar 30]. [https://doi.org/10.1016/S0140-6736\(20\)30600-0](https://doi.org/10.1016/S0140-6736(20)30600-0).
2659. Jones DS. 2020 Mar 12. History in a crisis—lessons for Covid-19. *N Engl J Med*. [accessed 2020 Mar 30]. <https://doi.org/10.1056/NEJMp2004361>.
2660. The Lancet. 2020. COVID-19: fighting panic with information. *Lancet*. 395(10224):537. [accessed 2020 Mar 30]. [https://doi.org/10.1016/S0140-6736\(20\)30379-2](https://doi.org/10.1016/S0140-6736(20)30379-2).
2661. Lee VJ, Chiew CJ, Khong WX. 2020 Mar 13. Interrupting transmission of COVID-19: lessons from containment efforts in Singapore. *J Travel Med*. [accessed 2020 Mar 30]. <https://doi.org/10.1093/jtm/taaa039>.
2662. The Lancet. 2020. COVID-19: fighting panic with information. *Lancet*. 395(10224):537. [accessed 2020 Mar 30]. [https://doi.org/10.1016/S0140-6736\(20\)30379-2](https://doi.org/10.1016/S0140-6736(20)30379-2).
2663. Lau H, Khosrawipour V, Kocbach P, Mikołajczyk A, Schubert J, Bania J, Khosrawipour T. 2020 Mar 27. The positive impact of lockdown in Wuhan on containing the COVID-19 outbreak in China. *J Travel Med*. [accessed 2020 Mar 30]. <https://doi.org/10.1093/jtm/taaa037>.
2664. Eve F. 2020 Feb 2. China's reaction to the coronavirus outbreak violates human rights. *Guardian*. [accessed 2020 Apr 18]; <https://www.theguardian.com/world/2020/feb/02/chinas-reaction-to-the-coronavirus-outbreak-violates-human-rights>.
2665. Chen X, Yu B. 2020 Mar 2. First two months of the 2019 Coronavirus Disease (COVID-19) epidemic in China: real-time surveillance and evaluation with a second derivative model. *Glob Health Res Policy*. 5:7. [accessed 2020 Mar 30]. <https://doi.org/10.1186/s41256-020-00137-4>.
2666. Kupferschmidt K, Cohen J. 2020 Mar 6. Can China's COVID-19 strategy work elsewhere? *Science*. 367(6482):1061–1062. <https://doi.org/10.1126/science.367.6482.1061>.
2667. Health Commission of Hubei Province. 2020 Mar 19. Epidemic situation of new crown pneumonia in Hubei province on March 18, 2020. [accessed 2020 Mar 31]. http://wjw.hubei.gov.cn/fbjd/dtyw/202003/t20200319_2185058.shtml.
2668. Jasarevic T, Ryan M, van Kerkhove M, Ghebreyesus TA. 2020 Jan 29. Novel coronavirus press conference at United Nations of Geneva. World Health Organization. [accessed 2020 Mar 31]. <https://www.who.int/docs/default->

source/coronaviruse/transcripts/who-audio-script-ncov-rresser-unog-29jan2020.pdf.

2669. Tedros AG. 2020 Jan 30. WHO Director-General's statement on IHR Emergency Committee on Novel Coronavirus (2019-nCoV). World Health Organization. [accessed 2020 Mar 31]. [https://www.who.int/dg/speeches/detail/who-director-general-s-statement-on-ihf-emergency-committee-on-novel-coronavirus-\(2019-ncov\)](https://www.who.int/dg/speeches/detail/who-director-general-s-statement-on-ihf-emergency-committee-on-novel-coronavirus-(2019-ncov)).

2670. World Health Organization. 2020 Mar 19. Coronavirus disease 2019 (COVID-19) situation report—59. Geneva: WHO; [accessed 2020 Apr 1]. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200319-sitrep-59-covid-19.pdf?sfvrsn=c3dcdef9_2.

2671. Cohen J, Kupferschmidt K. 2020 Feb 28. Strategies shift as coronavirus pandemic looms. *Science*. 367(6481):962–963. <https://doi.org/10.1126/science.367.6481.962>.

2672. Kupferschmidt K, Cohen J. 2020 Mar 6. Can China's COVID-19 strategy work elsewhere? *Science*. 367(6482):1061–1062. <https://doi.org/10.1126/science.367.6482.1061>.

2673. Cohen J, Kupferschmidt K. 2020 Mar 20. Countries test tactics in 'war' against COVID-19. *Science*. 367(6484):1287–1288. <https://doi.org/10.1126/science.367.6484.1287>.

2674. Normile D. 2020 Mar 17. Coronavirus cases have dropped sharply in South Korea. What's the secret to its success? *Science*. [accessed 2020 Mar 31]. <https://doi.org/10.1126/science.abb7566>.

2675. Tanne JH, Hayasaki E, Zastrow M, Pulla P, Smith P, Rada AG. 2020 Mar 18. Covid-19: how doctors and healthcare systems are tackling coronavirus worldwide. *BMJ*. 368:m1090. <https://doi.org/10.1136/bmj.m1090>.

2676. Tanne JH, Hayasaki E, Zastrow M, Pulla P, Smith P, Rada AG. 2020 Mar 18. Covid-19: how doctors and healthcare systems are tackling coronavirus worldwide. *BMJ*. 368:m1090. <https://doi.org/10.1136/bmj.m1090>.

2677. Tedros AG. 2020 Mar 16. WHO Director-General's opening remarks at the media briefing on COVID-19—16 March 2020. World Health Organization. [accessed 2020 Mar 31]. <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-16-march-2020>.

2678. Normile D. 2020 Mar 17. Coronavirus cases have dropped sharply in South Korea. What's the secret to its success? *Science*. [accessed 2020 Mar 31]. <https://doi.org/10.1126/science.abb7566>.

2679. Khazan O. 2020 Mar 13. The 4 key reasons the U.S. is so behind on coronavirus testing. *The Atlantic*. [accessed 2020 Mar 31]; <https://www.theatlantic.com>.

tic.com/health/archive/2020/03/why-coronavirus-testing-us-so-delayed/607954/.

2680. Meyer R, Madrigal AC. 2020 Mar 6. Exclusive: the strongest evidence yet that America is botching coronavirus testing. *The Atlantic*. [accessed 2020 Mar 31]; <https://www.theatlantic.com/health/archive/2020/03/how-many-americans-have-been-tested-coronavirus/607597/>.

2681. Branswell H. 2020 Mar 20. Understanding what works: how some countries are beating back the coronavirus. *STAT*. [accessed 2020 Mar 31]. <https://www.statnews.com/2020/03/20/understanding-what-works-how-some-countries-are-beating-back-the-coronavirus/>.

2682. Holshue ML, DeBolt C, Lindquist S, Lofy KH, Wiesman J, Bruce H, Spitters C, Ericson K, Wilkerson S, Tural A, et al. 2020. First case of 2019 novel coronavirus in the United States. *N Engl J Med*. 382(10):929–936. <https://doi.org/10.1056/NEJMoa2001191>.

2683. World Health Organization. 2020 Jan 21. Novel coronavirus (2019-nCoV) situation report—1. Geneva: WHO; [accessed 2020 Apr 6]. <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200121-sitrep-1-2019-ncov.pdf>.

2684. New York Times. 2020 Mar 21. Pence's test negative; states warn that supplies are dwindling. *NYT*. [updated 2020 Mar 27; accessed 2020 Mar 31]; <https://www.nytimes.com/2020/03/21/world/coronavirus-updates-usa-world.html>.

2685. Tanne JH, Hayasaki E, Zastrow M, Pulla P, Smith P, Rada AG. 2020 Mar 18. Covid-19: how doctors and healthcare systems are tackling coronavirus worldwide. *BMJ*. 368:m1090. <https://doi.org/10.1136/bmj.m1090>.

2686. Anderson RM, Heesterbeek H, Klinkenberg D, Hollingsworth TD. 2020. How will country-based mitigation measures influence the course of the COVID-19 epidemic? *Lancet*. 395(10228):931–934. [https://doi.org/10.1016/S0140-6736\(20\)30567-5](https://doi.org/10.1016/S0140-6736(20)30567-5).

2687. Wilder-Smith A, Chiew CJ, Lee VJ. 2020 Mar 5. Can we contain the COVID-19 outbreak with the same measures as for SARS? *Lancet Infect Dis*. [accessed 2020 Mar 30]. [https://doi.org/10.1016/s1473-3099\(20\)30129-8](https://doi.org/10.1016/s1473-3099(20)30129-8).

2688. Anderson RM, Heesterbeek H, Klinkenberg D, Hollingsworth TD. 2020. How will country-based mitigation measures influence the course of the COVID-19 epidemic? *Lancet*. 395(10228):931–934. [https://doi.org/10.1016/S0140-6736\(20\)30567-5](https://doi.org/10.1016/S0140-6736(20)30567-5).

2689. Bayham J, Fenichel EP. 2020 Mar 17. The impact of school closure for COVID-19 on the US healthcare workforce and the net mortality effects. *medRxiv.org*. [accessed 2020 Mar 31]. <https://doi.org/10.1101/2020.03.09.20033415>.

2690. Kawano S, Kakehashi M. 2015. Substantial impact of school closure on the transmission dynamics during the pandemic flu H1N1–2009 in Oita, Japan. *PLoS ONE*. 10(12):e0144839. [accessed 2020 Mar 31]. <https://doi.org/10.1371/journal.pone.0144839>.
2691. Petrie JG, Ohmit SE, Cowling BJ, Johnson E, Cross RT, Malosh RE, Thompson MG, Monto AS. 2013. Influenza transmission in a cohort of households with children: 2010–2011. *PLoS ONE*. 8(9):e75339. <https://doi.org/10.1371/journal.pone.0075339>.
2692. Zhu Y, Bloxham CJ, Hulme KD, Sinclair JE, Tong ZWM, Steele LE, Noye EC, Lu J, Chew KY, Pickering J, et al. 2020 Mar 30. Children are unlikely to have been the primary source of household SARS-CoV-2 infections. *medRxiv.org*. [accessed 2020 Apr 6]. <https://doi.org/10.1101/2020.03.26.20044826>.
2693. Pang J, Wang MX, Ang IYH, Tan SHX, Lewis RF, Chen JI-P, Gutierrez RA, Gwee SXW, Chua PEY, Yang Q, et al. 2020. Potential rapid diagnostics, vaccine and therapeutics for 2019 novel coronavirus (2019-nCoV): a systematic review. *J Clin Med*. 9(3):623. <http://doi.org/10.3390/jcm9030623>.
2694. Kupferschmidt K, Cohen J. 2020. Can China's COVID-19 strategy work elsewhere? *Science*. 367(6482):1061–1062. <https://doi.org/10.1126/science.367.6482.1061>.
2695. Hollingsworth TD, Klinkenberg D, Heesterbeek H, Anderson RM. 2011. Mitigation strategies for pandemic influenza A: balancing conflicting policy objectives. *PLoS Comput Biol*. 7(2):e1001076. <http://doi.org/10.1371/journal.pcbi.1001076>.
2696. Ferguson N, Laydon D, Nedjati Gilani G, Imai N, Ainslie K, Baguelin M, Bhatia S, Boonyasiri A, Cucunubá Perez Z, Cuomo-Dannenburg G, et al. 2020 Mar 16. Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. London: Imperial College COVID-19 Response Team. Report No.: 9. <http://doi.org/10.25561/77482>.
2697. Grasselli G, Pesenti A, Cecconi M. 2020 Mar 13. Critical care utilization for the COVID-19 outbreak in Lombardy, Italy: early experience and forecast during an emergency response. *JAMA*. [accessed 2020 Mar 31]. <https://doi.org/10.1001/jama.2020.4031>.
2698. Daugherty Biddison EL, Faden R, Gwon HS, Mareiniss DP, Regenbreg AC, Schoch-Spana M, Schwartz J, Toner ES. 2019. Too many patients . . . a framework to guide statewide allocation of scarce mechanical ventilation during disasters. *CHEST*. 155(4):848–854. <https://doi.org/10.1016/j.chest.2018.09.025>.
2699. Emanuel EJ, Persad G, Upshur R, Thome B, Parker M, Glickman A, Zhang C, Boyle C, Smith M, Phillips JP. 2020 Mar 23. Fair allocation of scarce medical resources in the time of Covid-19. *N Engl J Med*. [accessed 2020 Apr 2]. <https://doi.org/10.1056/NEJMs02005114>.

2700. Cowling BJ, Lim WW. 2020 Mar 13. They've contained the coronavirus. Here's how. New York Times. [accessed 2020 Mar 31]; <https://www.nytimes.com/2020/03/13/opinion/coronavirus-best-response.html>.
2701. Yang CH, Jung H. 2020. Topological dynamics of the 2015 South Korea MERS-CoV spread-on-contact networks. *Sci Rep*. 10:4327. <https://doi.org/10.1038/s41598-020-61133-9>.
2702. Wilder-Smith A, Chiew CJ, Lee VJ. 2020 Mar 5. Can we contain the COVID-19 outbreak with the same measures as for SARS? *Lancet Infect Dis*. [accessed 2020 Mar 30]. [https://doi.org/10.1016/s1473-3099\(20\)30129-8](https://doi.org/10.1016/s1473-3099(20)30129-8).
2703. Lauer SA, Grantz KH, Bi Q, Jones FK, Zheng Q, Meredith HR, Azman AS, Reich NG, Lessler J. 2020. The incubation period of coronavirus disease 2019 (COVID-19) from publicly reported confirmed cases: estimation and application. *Ann Intern Med*. [Epub ahead of print 2020 Mar 10; accessed 2020 Mar 31]. <https://doi.org/10.7326/M20-0504>.
2704. Centers for Disease Control and Prevention. 2020. Coronavirus disease 2019 (COVID-19): travel-associated exposures. U.S. Department of Health and Human Services; [last reviewed 2020 Mar 30; accessed 2020 Mar 31]. <https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html>.
2705. Tan L, Kang X, Zhang B, Zheng S, Liu B, Yu T, Yang F, Wang Q, Miao H. 2020 Mar 27. A special case of COVID-19 with long duration of viral shedding for 49 days. *medRxiv.org*. [accessed 2020 Mar 31]. <https://doi.org/10.1101/2020.03.22.20040071>.
2706. Zhou F, Yu T, Du R, Fan G, Liu Y, Liu Z, Xiang J, Wang Y, Song B, Gu X, et al. 2020. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *Lancet*. 395(10229):1054–1062. [corrected 2020 Mar 12; accessed 2020 Mar 31]. [https://doi.org/10.1016/S0140-6736\(20\)30566-3](https://doi.org/10.1016/S0140-6736(20)30566-3).
2707. Sun P, Qie S, Liu Z, Ren J, Li K, Xi J. 2020 Feb 28. Clinical characteristics of hospitalized patients with SARS-CoV-2 infection: a single arm meta-analysis. *J Med Virol*. [corrected 2020 Mar 17; accessed 2020 Mar 31]. <https://doi.org/10.1002/jmv.25735>.
2708. Fang Z, Yi F, Wu K, Lai K, Sun X, Zhong N, Liu Z. 2020 Mar 12. Clinical characteristics of coronavirus pneumonia 2019 (COVID-19): an updated systematic review. *medRxiv.org*. [accessed 2020 Mar 30]. <https://doi.org/10.1101/2020.03.07.20032573>.
2709. Zou X, Chen K, Zou J, Han P, Hao J, Han Z. 2020 Mar 12. Single-cell RNA-seq data analysis on the receptor ACE2 expression reveals the potential risk of different human organs vulnerable to 2019-nCoV infection. *Front Med*. [accessed 2020 Mar 31]. <https://doi.org/10.1007/s11684-020-0754-0>.

2710. Sun K, Gu L, Ma L, Duan Y. 2020 Mar 31. Atlas of ACE2 gene expression in mammals reveals novel insights in transmission of SARS-Cov-2. *bioRxiv.org*. [accessed 2020 Apr 6]. <https://doi.org/10.1101/2020.03.30.015644>.
2711. Jain V, Yuan J-M. 2020 Mar 16. Systematic review and meta-analysis of predictive symptoms and comorbidities for severe COVID-19 infection. *medRxiv.org*. [accessed 2020 Mar 31]. <https://doi.org/10.1101/2020.03.15.20035360>.
2712. Zhang Y. 2020 Feb 17. The epidemiological characteristics of an outbreak of 2019 novel coronavirus diseases (COVID-19)—China, 2020. Chinese Center for Disease Control and Prevention. *CCDC Weekly*. [accessed 2020 Mar 31]. <http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8d-b1a8f51>.
2713. Yang J, Zheng Y, Gou X, Pu K, Chen Z, Guo Q, Ji R, Wang H, Wang Y, Zhou Y. 2020. Prevalence of comorbidities in the novel Wuhan coronavirus (COVID-19) infection: a systematic review and meta-analysis. *Int J Infect Dis*. [Epub ahead of print 2020 Mar 12; accessed 2020 Mar 31]. <https://doi.org/10.1016/j.ijid.2020.03.017>.
2714. Jain V, Yuan J-M. 2020 Mar 16. Systematic review and meta-analysis of predictive symptoms and comorbidities for severe COVID-19 infection. *medRxiv.org*. [accessed 2020 Mar 31]. <https://doi.org/10.1101/2020.03.15.20035360>.
2715. Jain V, Yuan J-M. 2020 Mar 16. Systematic review and meta-analysis of predictive symptoms and comorbidities for severe COVID-19 infection. *medRxiv.org*. [accessed 2020 Mar 31]. <https://doi.org/10.1101/2020.03.15.20035360>.
2716. Schlanger Z. 2020 Mar 27. Now is the time to take care of your lungs. Here's how. *New York Times*. [accessed 2020 Mar 31]; <https://www.nytimes.com/2020/03/27/climate/climate-pollution-coronavirus-lungs.html>.
2717. Chen K, Wang M, Huang C, Kinney PL, Anastas PT. 2020 Mar 27. Air pollution reduction and mortality benefit during the COVID-19 outbreak in China. *medRxiv.org*. [accessed 2020 Mar 31]. <https://doi.org/10.1101/2020.03.23.20039842>.
2718. He G, Pan Y, Tanaka T. 2020 Apr 1. COVID-19, city lockdown, and air pollution: evidence from China. *medRxiv.org*. [accessed 2020 Apr 6]. <https://doi.org/10.1101/2020.03.29.20046649>.
2719. Booth CM, Matukas LM, Tomlinson GA, Rachlis AR, Rose DB, Dwosh HA, Walmsley SL, Mazzulli T, Avendano M, Derkach P, et al. 2003. Clinical features and short-term outcomes of 144 patients with SARS in the greater Toronto area. *JAMA*. 289(21):2801–2809. <https://doi.org/10.1001/jama.289.21.JOC30885>.

2720. Garbati MA, Fagbo SF, Fang VJ, Skakni L, Joseph M, Wani TA, Cowling BJ, Peiris M, Hakawi A. 2016. A comparative study of clinical presentation and risk factors for adverse outcome in patients hospitalised with acute respiratory disease due to MERS coronavirus or other causes. PLoS ONE. 11(11):e0165978. <https://doi.org/10.1371/journal.pone.0165978>.
2721. Li B, Yang J, Zhao F, Zhi L, Wang X, Liu L, Bi Z, Zhao Y. 2020 Mar 11. Prevalence and impact of cardiovascular metabolic diseases on COVID-19 in China. Clin Res Cardiol. [accessed 2020 Mar 31]. <https://doi.org/10.1007/s00392-020-01626-9>.
2722. Yang JK, Feng Y, Yuan MY, Yuan SY, Fu HJ, Wu BY, Sun GZ, Yang GR, Zhang XL, Wang L, et al. 2006. Plasma glucose levels and diabetes are independent predictors for mortality and morbidity in patients with SARS. Diabet Med. 23(6):623–628. <https://doi.org/10.1111/j.1464-5491.2006.01861.x>.
2723. Huang R, Zhu L, Xue L, Liu L, Yan X, Wang J, Zhang B, Xu T, Ji F, Zhao Y, et al. 2020 Feb 28. Clinical findings of patients with coronavirus disease 2019 in Jiangsu province, China: a retrospective, multi-center study. SSRN: Preprints with The Lancet; [accessed 2020 Apr 6]. <https://dx.doi.org/10.2139/ssrn.3548785>.
2724. Simonnet A, Chetboun M, Poissy J, Raverdy V, Noulette J, Duhamel A, Labreuche J, Mathieu D, Pattou F, Jourdain M, et al. 2020. High prevalence of obesity in severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) requiring invasive mechanical ventilation. Obesity. Accepted articles. [accessed 2020 Apr 11]. <https://doi.org/10.1002/oby.22831>.
2725. Huang R, Zhu L, Xue L, Liu L, Yan X, Wang J, Zhang B, Xu T, Ji F, Zhao Y, et al. 2020 Feb 28. Clinical findings of patients with coronavirus disease 2019 in Jiangsu province, China: a retrospective, multi-center study. SSRN: Preprints with The Lancet; [accessed 2020 Apr 6]. <https://dx.doi.org/10.2139/ssrn.3548785>.
2726. Fryar CD, Kruszon-Moran D, Gu Q, Ogden CL. 2018 Dec 20. Mean body weight, height, waist circumference, and body mass index among adults: United States, 1999–2000 through 2015–2016. Natl Health Stat Report. 122:1–16.
2727. Adams ML, Katz DL, Grandpre J. 2020 Apr 2. Population based estimates of comorbidities affecting risk for complications from COVID-19 in the US. medRxiv.org. [accessed 2020 Apr 6]. <https://doi.org/10.1101/2020.03.30.20043919>.
2728. Liu W, Tao ZW, Lei W, Ming-Li Y, Kui L, Ling Z, Shuang W, Yan D, Jing L, Liu HG, et al. 2020. Analysis of factors associated with disease outcomes in hospitalized patients with 2019 novel coronavirus disease. Chin Med J (Engl). [Epub ahead of print 2020 Feb 28; accessed 2020 Mar 31]. <https://doi.org/10.1097/CM9.0000000000000775>.

2729. Alqahtani JS, Oyelade T, Aldhahir AM, Alghamdi SM, Almeahmadi M, Alqahtani AS, Quaderi S, Mandal S, Hurst J. 2020 Mar 27. Prevalence, severity and mortality associated with COPD and smoking in patients with COVID-19: a rapid systematic review and meta-analysis. medRxiv.org. [accessed 2020 Apr 6]. <https://doi.org/10.1101/2020.03.25.20043745>.
2730. Lippi G, Henry BM. 2020. Active smoking is not associated with severity of coronavirus disease 2019 (COVID-19). Eur J Intern Med. Article in press. [accessed 2020 Mar 31]. <https://doi.org/10.1016/j.ejim.2020.03.014>.
2731. Corrales-Medina VF, Musher DM, Wells GA, Chirinos JA, Chen L, Fine MJ. 2012. Cardiac complications in patients with community-acquired pneumonia: incidence, timing, risk factors, and association with short-term mortality. Circulation. 125(6):773–781. <https://doi.org/10.1161/CIRCULATIONAHA.111.040766>.
2732. Marrie TJ, Shariatzadeh MR. 2007. Community-acquired pneumonia requiring admission to an intensive care unit: a descriptive study. Medicine (Baltimore). 86(2):103–111. <https://doi.org/10.1097/MD.0b013e3180421c16>.
2733. Corrales-Medina VF, Alvarez KN, Weissfeld LA, Angus DC, Chirinos JA, Chang CC, Newman A, Loehr L, Folsom AR, Elkind MS, et al. 2015. Association between hospitalization for pneumonia and subsequent risk of cardiovascular disease. JAMA. 313(3):264–274. <https://doi.org/10.1001/jama.2014.18229>.
2734. Cilli A, Erdem H, Karakurt Z, Turkan H, Yazicioglu-Mocin O, Adiguzel N, Gungor G, Bilge U, Tasci C, Yilmaz G, et al. 2013. Community-acquired pneumonia in patients with chronic obstructive pulmonary disease requiring admission to the intensive care unit: risk factors for mortality. J Crit Care. 28(6):975–979. <https://doi.org/10.1016/j.jcrc.2013.08.004>.
2735. Aitken M, Kleinrock M. 2018 Apr 19. Medicine use and spending in the U.S.: a review of 2017 and outlook to 2022. Parsippany (NJ): IQVIA Institute for Human Data Science; [accessed 2020 Mar 31]. <https://www.iqvia.com/insights/the-iqvia-institute/reports/medicine-use-and-spending-in-the-us-review-of-2017-outlook-to-2022>.
2736. Caldeira D, Alarcão J, Vaz-Carneiro A, Costa J. 2012. Risk of pneumonia associated with use of angiotensin converting enzyme inhibitors and angiotensin receptor blockers: systematic review and meta-analysis. BMJ. 345:e4260. <https://doi.org/10.1136/bmj.e4260>.
2737. Pinto BGG, Oliveira AER, Singh Y, Jimenez L, Goncalves ANA, Ogawa RLT, Creighton R, Peron JPS, Nakaya HI. 2020 Mar 27. ACE2 expression is increased in the lungs of patients with comorbidities associated with severe COVID-19. medRxiv.org. [accessed 2020 Mar 31]. <https://doi.org/10.1101/2020.03.21.20040261>.
2738. Kuster GM, Pfister O, Burkard T, Zhou Q, Twerenbold R, Haaf P, Widmer AF, Osswald S. 2020 Mar 20. SARS-CoV2: should inhibitors of the renin–an-

- giotensin system be withdrawn in patients with COVID-19? *Eur Heart J*. [accessed 2020 Mar 31]. <https://doi.org/10.1093/eurheartj/ehaa235>.
2739. Aronson JK, Ferner RE. 2020 Apr 2. Drugs and the renin-angiotensin system in covid-19. *BMJ*. 369:m1313. [accessed 2020 Apr 6]. <https://doi.org/10.1136/bmj.m1313>.
2740. Ibuprofen pack with pull-quote [infographic]. 2020 Mar 17. NutritionFacts.org. [accessed 2020 Mar 31]. <https://www.facebook.com/NutritionFacts.org/photos/a.505323302817517/3398378763511942/>.
2741. Fang L, Karakiulakis G, Roth M. 2020 Mar 11. Are patients with hypertension and diabetes mellitus at increased risk for COVID-19 infection? *Lancet*. [accessed 2020 Mar 31]. [https://doi.org/10.1016/S2213-2600\(20\)30116-8](https://doi.org/10.1016/S2213-2600(20)30116-8).
2742. Bhatt AP, Gunasekara DB, Speer J, Reed MI, Peña AN, Midkiff BR, Magness ST, Bultman SJ, Allbritton NL, Redinbo MR. 2018. Nonsteroidal anti-inflammatory drug-induced leaky gut modeled using polarized monolayers of primary human intestinal epithelial cells. *ACS Infect Dis*. 4(1):46–52. <https://doi.org/10.1021/acsinfectdis.7b00139>.
2743. Voiriot G, Philippot Q, Elabbadi A, Elbim C, Chalumeau M, Fartoukh M. 2019. Risks related to the use of non-steroidal anti-inflammatory drugs in community-acquired pneumonia in adult and pediatric patients. *J Clin Med*. 8(6):786. <https://doi.org/10.3390/jcm8060786>.
2744. Park S, Brassey J, Heneghan C, Mahtani K. 2020 Mar 19. Managing fever in adults with possible or confirmed COVID-19 in primary care. Oxford: Centre for Evidence-Based Medicine; [accessed 2020 Mar 31]. <https://www.cebm.net/covid-19/managing-fever-in-adults-with-possible-or-confirmed-covid-19-in-primary-care/>.
2745. Little P. 2020 Mar 27. Non-steroidal anti-inflammatory drugs and covid-19. *BMJ*. 368:m1185. [accessed 2020 Apr 6]. <https://doi.org/10.1136/bmj.m1185>.
2746. Oakes JM, Fuchs RM, Gardner JD, Lazartigues E, Yue X. 2018. Nicotine and the renin-angiotensin system. *Am J Physiol Regul Integr Comp Physiol*. 315(5):R895–R906. <https://doi.org/10.1152/ajpregu.00099.2018>.
2747. Lippi G, Henry BM. 2020. Active smoking is not associated with severity of coronavirus disease 2019 (COVID-19). *Eur J Intern Med*. Article in press. [accessed 2020 Mar 31]. <https://doi.org/10.1016/j.ejim.2020.03.014>.
2748. Liu W, Tao ZW, Wang L, Yuan M-L, Liu K, Zhou L, Wei S, Deng Y, Liu J, Liu HG, et al. 2020. Analysis of factors associated with disease outcomes in hospitalized patients with 2019 novel coronavirus disease. *Chin Med J (Engl)*. [Epub ahead of print 2020 Feb 28; accessed 2020 Mar 31]. <https://doi.org/10.1097/CM9.0000000000000775>.

2749. Fang Z, Yi F, Wu K, Lai K, Sun X, Zhong N, Liu Z. 2020 Mar 10. Clinical characteristics of coronavirus pneumonia 2019 (COVID-19): an updated systematic review. medRxiv.org. [accessed 2020 Mar 30]. <https://doi.org/10.1101/2020.03.07.20032573>.
2750. Jain V, Yuan J-M. 2020 Mar 16. Systematic review and meta-analysis of predictive symptoms and comorbidities for severe COVID-19 infection. medRxiv.org. [accessed 2020 Mar 31]. <https://doi.org/10.1101/2020.03.15.20035360>.
2751. Chow N, Fleming-Dutra K, Gierke R, Hall A, Hughes M, Pilishvili T, Ritchey M, Roguski K, Skoff T, Ussery E. 2020. Preliminary estimates of the prevalence of selected underlying health conditions among patients with coronavirus disease 2019—United States, February 12–March 28, 2020. Morb Mortal Wkly Rep. 69(13):382–386. <http://dx.doi.org/10.15585/mmwr.mm6913e2>.
2752. Ioannidis JPA, Axfors C, Contopoulos-Ioannidis DG. 2020 Apr 8. Population-level COVID-19 mortality risk for non-elderly individuals overall and for non-elderly individuals without underlying diseases in pandemic epicenters. medRxiv.org. [accessed 2020 Apr 11]. <https://doi.org/10.1101/2020.04.05.20054361>.
2753. Korea Centers for Disease Control and Prevention. 2020 Apr 10. 27 additional cases have been confirmed. Case distribution by gender and age group. Korea: KCDC; [accessed 2020 Apr 10]. https://www.cdc.go.kr/board/board.es?mid=a30402000000&bid=0030&act=view&list_no=366801&tag=&nPage=1.
2754. Bialek S, Boundy E, Bowen V, Chow N, Cohn A, Dowling N, Ellington S, Gierke R, Hall A, MacNeil J, et al. 2020. Severe outcomes among patients with coronavirus disease 2019 (COVID-19)—United States, February 12–March 16, 2020. Morb Mortal Wkly Rep. 69(12):343–346. [corrected 2020 Mar 18; accessed 2020 Apr 6]. <http://dx.doi.org/10.15585/mmwr.mm6912e2>.
2755. McMichael TM, Currie DW, Clark S, Pogosjans S, Kay M, Schwartz NG, Lewis J, Baer A, Kawakami V, Lukoff MD, et al. 2020. Epidemiology of Covid-19 in a long-term care facility in King County, Washington. N Engl J Med. [Epub ahead of print 2020 Mar 27; accessed 2020 Apr 6]. <https://doi.org/10.1056/NEJMoa2005412>.
2756. Carbone M, Green JB, Bucci EM, Lednický JJ. 2020. Editorial: coronaviruses: facts, myths and hypotheses. J Thorac Oncol. Article in press. [accessed 2020 Mar 30]. <https://doi.org/10.1016/j.jtho.2020.02.024>.
2757. Sun P, Qie S, Liu Z, Ren J, Li K, Xi J. 2020 Feb 28. Clinical characteristics of hospitalized patients with SARS-CoV-2 infection: a single arm meta-analysis. J Med Virol. [accessed 2020 Mar 31]. <https://doi.org/10.1002/jmv.25735>.

2758. Hui DS, Joynt GM, Wong KT, Gomersall CD, Li TS, Antonio G, Ko FW, Chan MC, Chan DP, Tong MW, et al. 2005. Impact of severe acute respiratory syndrome (SARS) on pulmonary function, functional capacity and quality of life in a cohort of survivors. *Thorax*. 60(5):401–409. <https://doi.org/10.1136/thx.2004.030205>.

2759. Shi Y, Wang Y, Shao C, Huang J, Gan J, Huang X, Bucci E, Piacentini M, Ippolito G, Melino G. 2020 Mar 23. COVID-19 infection: the perspectives on immune responses. *Cell Death Differ*. [accessed 2020 Mar 31]. <https://doi.org/10.1038/s41418-020-0530-3>.

2760. Leng Z, Yin D, Zhao Z, Yan M, Yang Y, He X, Zhao RC, Liu H. 2020. A survey of 434 clinical trials about coronavirus disease 2019 in China. *J Med Virol*. [Epub ahead of print 2020 Mar 27; accessed 2020 Apr 6]. <https://doi.org/10.1002/jmv.25779>.

2761. Anderson RM, Heesterbeek H, Klinkenberg D, Hollingsworth TD. 2020. How will country-based mitigation measures influence the course of the COVID-19 epidemic? *Lancet*. 395(10228):931–934. [https://doi.org/10.1016/S0140-6736\(20\)30567-5](https://doi.org/10.1016/S0140-6736(20)30567-5).

2762. Greger M. 2015. How not to die. New York: Flatiron Books.

2763. Greger M. 2020. Immune function. *NutritionFacts.org*; [updated 2020 Mar 4; accessed 2020 Mar 31]. <https://nutritionfacts.org/topics/immune-function/>.

2764. Noah TL, Zhang H, Zhou H, Glista-Baker E, Müller L, Bauer RN, Meyer M, Murphy PC, Jones S, Letang B, et al. 2014. Effect of broccoli sprouts on nasal response to live attenuated influenza virus in smokers: a randomized, double-blind study. *PLoS ONE*. 9(6):e98671. <https://doi.org/10.1371/journal.pone.0098671>.

2765. Müller L, Meyer M, Bauer RN, Zhou H, Zhang H, Jones S, Robinette C, Noah TL, Jaspers I. 2016. Effect of broccoli sprouts and live attenuated influenza virus on peripheral blood natural killer cells: a randomized, double-blind study. *PLoS One*. 11(1):e0147742. <https://doi.org/10.1371/journal.pone.0147742>.

2766. American College of Lifestyle Medicine. 2020 Mar 23. Lifestyle choices to boost immunity. Chesterfield (MO): ACLM; [accessed 2020 Mar 31]. <https://files.constantcontact.com/abfbc81b001/4e7c0973-293d-4cd1-89c7-796d86808393.pdf>.

2767. World Health Organization. 2020. Stay physically active during self-quarantine. Copenhagen: WHO Regional Office for Europe; [accessed 2020 Mar 31]. <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov-technical-guidance/stay-physically-active-during-self-quarantine>.

2768. World Health Organization. 2018 Oct 23. Healthy diet. Geneva: WHO; [accessed 2020 Mar 31]. <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>.
2769. Coates BM, Staricha KL, Wiese KM, Ridge KM. 2015. Influenza A virus infection, innate immunity, and childhood. *JAMA Pediatr*. 169(10):956–963. <https://doi.org/10.1001/jamapediatrics.2015.1387>.
2770. Zimmermann P, Curtis N. 2020. Coronavirus infections in children including COVID-19: an overview of the epidemiology, clinical features, diagnosis, treatment and prevention options in children. *Pediatr Infect Dis J*. [Epub ahead of print 2020 Mar 25; accessed 2020 Mar 31]. <https://doi.org/10.1097/INF.0000000000002660>.
2771. D'Antiga L. 2020. Coronaviruses and immunosuppressed patients. The facts during the third epidemic. *Liver Transpl*. [Epub ahead of print 2020 Mar 20; accessed 2020 Apr 1]. <https://doi.org/10.1002/lt.25756>.
2772. Nickbakhsh S, Ho A, Marques DFP, McMenamin J, Gunson RR, Murcia P. 2020 Mar 20. Epidemiology of seasonal coronaviruses: establishing the context for COVID-19 emergence. *medRxiv.org*. [accessed 2020 Apr 1]. <https://doi.org/10.1101/2020.03.18.20037101>.
2773. Mizumoto K, Omori R, Nishiura H. 2020 Mar 13. Age specificity of cases and attack rate of novel coronavirus disease (COVID-19). *medRxiv.org*. [accessed 2020 Apr 1]. <https://doi.org/10.1101/2020.03.09.20033142>.
2774. Wang SF, Tseng SP, Yen CH, Yang JY, Tsao CH, Shen CW, Chen KH, Liu FT, Liu WT, Chen YMA, et al. 2014. Antibody-dependent SARS coronavirus infection is mediated by antibodies against spike proteins. *Biochem Biophys Res Commun*. 451(2):208–214. <https://doi.org/10.1016/j.bbrc.2014.07.090>.
2775. Fu Y, Cheng Y, Wu Y. 2020. Understanding SARS-CoV-2-mediated inflammatory responses: from mechanisms to potential therapeutic tools. *Virology*. [Epub ahead of print 2020 Mar 3; accessed 2020 Apr 1]. <https://doi.org/10.1007/s12250-020-00207-4>.
2776. Wang YB, Wang LP, Li P. 2018. Perspectives on novel vaccine development. *Pol J Vet Sci*. 21(3):643–649. <https://doi.org/10.24425/124302>.
2777. Mizumoto K, Omori R, Nishiura H. 2020 Mar 13. Age specificity of cases and attack rate of novel coronavirus disease (COVID-19). *medRxiv.org*. [accessed 2020 Apr 1]. <https://doi.org/10.1101/2020.03.09.20033142>.
2778. Kasprak A. 2020 Mar 2. Did a noted pathologist write this viral coronavirus advice letter? *Snopes.com*; [updated 2020 Mar 13; accessed 2020 Apr 1]. <https://www.snopes.com/fact-check/zinc-lozenges-coronavirus/>.
2779. Monto AS. 1974. Medical reviews. Coronaviruses. *Yale J Biol Med*. 47(4):234–251.

2780. Valadbeigi S, Javadian S, Ebrahimi-Rad M, Khatami S, Saghiri R. 2019. Assessment of trace elements in serum of acute lymphoblastic and myeloid leukemia patients. *Exp Oncol*. 41(1):69–71.
2781. Eby GA, Davis DR, Halcomb WW. 1984. Reduction in duration of common colds by zinc gluconate lozenges in a double-blind study. *Antimicrob Agents Chemother*. 25(1):20–24. <https://doi.org/10.1128/aac.25.1.20>.
2782. Hemilä H. 2017. Zinc lozenges and the common cold: a meta-analysis comparing zinc acetate and zinc gluconate, and the role of zinc dosage. *JRSM Open*. 8(5):2054270417694291. <https://doi.org/10.1177/2054270417694291>.
2783. Singh M, Das RR. 2011. Zinc for the common cold. *Cochrane Database Syst Rev*. 2:CD001364. <https://doi.org/10.1002/14651858.CD001364.pub3>.
2784. Hemilä H, Petrus EJ, Fitzgerald JT, Prasad A. 2016. Zinc acetate lozenges for treating the common cold: an individual patient data meta-analysis. *Br J Clin Pharmacol*. 82(5):1393–1398. <https://doi.org/10.1111/bcp.13057>.
2785. Hemilä H, Chalker E. 2015. The effectiveness of high dose zinc acetate lozenges on various common cold symptoms: a meta-analysis. *BMC Fam Pract*. 16:24. <https://doi.org/10.1186/s12875-015-0237-6>.
2786. Hemilä H. 2017. Zinc lozenges and the common cold: a meta-analysis comparing zinc acetate and zinc gluconate, and the role of zinc dosage. *JRSM Open*. 8(5):2054270417694291. <https://doi.org/10.1177/2054270417694291>.
2787. Singh M, Das RR. 2011. Zinc for the common cold. *Cochrane Database Syst Rev*. 2:CD001364. <https://doi.org/10.1002/14651858.CD001364.pub3>.
2788. Hemilä H. 2017. Zinc lozenges and the common cold: a meta-analysis comparing zinc acetate and zinc gluconate, and the role of zinc dosage. *JRSM Open*. 8(5):2054270417694291. <https://doi.org/10.1177/2054270417694291>.
2789. Singh M, Das RR. 2011. Zinc for the common cold. *Cochrane Database Syst Rev*. 2:CD001364. <https://doi.org/10.1002/14651858.CD001364.pub3>.
2790. Novick SG, Godfrey JC, Godfrey NJ, Wilder HR. 1996. How does zinc modify the common cold? Clinical observations and implications regarding mechanisms of action. *Med Hypotheses*. 46(3):295–302. [https://doi.org/10.1016/s0306-9877\(96\)90259-5](https://doi.org/10.1016/s0306-9877(96)90259-5).
2791. Korant BD, Kauer JC, Butterworth BE. 1974. Zinc ions inhibit replication of rhinoviruses. *Nature*. 248(449):588–590. <https://doi.org/10.1038/248588a0>.
2792. te Velthuis AJW, van den Worm SHE, Sims AC, Baric RS, Snijder EJ, van Hemert MJ. 2010. Zn(2+) inhibits coronavirus and arterivirus RNA polymerase activity in vitro and zinc ionophores block the replication of these viruses in cell culture. *PLoS Pathog*. 6(11):e1001176. <https://doi.org/10.1371/journal.ppat.1001176>.

2793. Dabbagh-Bazarbachi H, Clergeaud G, Quesada IM, Ortiz M, O'Sullivan CK, Fernández-Larrea JB. 2014. Zinc ionophore activity of quercetin and epigallocatechin-gallate: from Hepa 1-6 cells to a liposome model. *J Agric Food Chem.* 62(32):8085–8093. <https://doi.org/10.1021/jf5014633>.
2794. Zou X, Chen K, Zou J, Han P, Hao J, Han Z. 2020 Mar 12. Single-cell RNA-seq data analysis on the receptor ACE2 expression reveals the potential risk of different human organs vulnerable to 2019-nCoV infection. *Front Med.* [accessed 2020 Mar 31]. <https://doi.org/10.1007/s11684-020-0754-0>.
2795. Wang L, Song Y. 2018. Efficacy of zinc given as an adjunct to the treatment of severe pneumonia: a meta-analysis of randomized, double-blind and placebo-controlled trials. *Clin Respir J.* 12(3):857–864. <https://doi.org/10.1111/crj.12646>.
2796. Srinivasan MG, Ndeezi G, Mboijana CK, Kiguli S, Bimenya GS, Nankabirwa V, Tumwine JK. 2012. Zinc adjunct therapy reduces case fatality in severe childhood pneumonia: a randomized double blind placebo-controlled trial. *BMC Med.* 10:14. <https://doi.org/10.1186/1741-7015-10-14>.
2797. Wadhwa N, Chandran A, Aneja S, Lodha R, Kabra SK, Chaturvedi MK, Sodhi J, Fitzwater SP, Chandra J, Rath B, et al. 2013. Efficacy of zinc given as an adjunct in the treatment of severe and very severe pneumonia in hospitalized children 2-24 mo of age: a randomized, double-blind, placebo-controlled trial. *Am J Clin Nutr.* 97(6):1387–1394. <https://doi.org/10.3945/ajcn.112.052951>.
2798. Sempértégui F, Estrella B, Rodríguez O, Gómez D, Cabezas M, Salgado G, Sabin LL, Hamer DH. 2014. Zinc as an adjunct to the treatment of severe pneumonia in Ecuadorian children: a randomized controlled trial. *Am J Clin Nutr.* 99(3):497–505. <https://doi.org/10.3945/ajcn.113.067892>.
2799. Shah D, Sachdev HS, Gera T, De-Regil LM, Peña-Rosas JP. 2016. Fortification of staple foods with zinc for improving zinc status and other health outcomes in the general population. *Cochrane Database Syst Rev.* 6:CD010697. <https://doi.org/10.1002/14651858.CD010697.pub2>.
2800. Singh M, Das RR. 2011. Zinc for the common cold. *Cochrane Database Syst Rev.* 2:CD001364. <https://doi.org/10.1002/14651858.CD001364.pub3>.
2801. Davidson TM, Smith WM. 2010. The Bradford Hill criteria and zinc-induced anosmia: a causality analysis. *Arch Otolaryngol Head Neck Surg.* 136(7):673–676. <https://doi.org/10.1001/archoto.2010.111>.
2802. Eby GA. 2005. Treatment of acute lymphocytic leukemia using zinc adjuvant with chemotherapy and radiation—a case history and hypothesis. *Med Hypotheses.* 64(6):1124–1126. <https://doi.org/10.1016/j.mehy.2004.12.019>.
2803. Sugishita Y, Kurita J, Sugawara T, Ohkusa Y. 2020 Mar 16. Preliminary evaluation of voluntary event cancellation as a countermeasure against the COVID-19 outbreak in Japan as of 11 March, 2020. *medRxiv.org.* [accessed 2020 Apr 1]. <https://doi.org/10.1101/2020.03.12.20035220>.

2804. Anderson RM, Heesterbeek H, Klinkenberg D, Hollingsworth TD. 2020. How will country-based mitigation measures influence the course of the COVID-19 epidemic? *Lancet*. 395(10228):931–934. [https://doi.org/10.1016/S0140-6736\(20\)30567-5](https://doi.org/10.1016/S0140-6736(20)30567-5).
2805. Jombart T, van Zandvoort K, Russell TW, Jarvis CI, Gimma A, Abbott S, Clifford S, Funk S, Gibbs H, Liu Y, et al. 2020 Mar 13. Inferring the number of COVID-19 cases from recently reported deaths. *medRxiv.org*. [accessed 2020 Apr 1]. <https://doi.org/10.1101/2020.03.10.20033761>.
2806. Stein R. 2020. COVID-19 and rationally layered social distancing. *Int J Clin Pract*. 14:e13501. [Epub ahead of print 2020 Mar 14; accessed 2020 Apr 1]. <https://doi.org/10.1111/ijcp.13501>.
2807. Yang Y, Peng F, Wang R, Guan K, Jiang T, Xu G, Sun J, Chang C. 2020 Mar 3. The deadly coronaviruses: the 2003 SARS pandemic and the 2020 novel coronavirus epidemic in China. *J Autoimmun*. [accessed 2020 Mar 30]. <https://doi.org/10.1016/j.jaut.2020.102434>.
2808. Zou L, Ruan F, Huang M, Liang L, Huang H, Hong Z, Yu J, Kang M, Song Y, Xia J, et al. 2020. SARS-CoV-2 viral load in upper respiratory specimens of infected patients. *N Engl J Med*. 382(12):1177–1179.
2809. Yeo C, Kaushal S, Yeo D. 2020. Enteric involvement of coronaviruses: is faecal–oral transmission of SARS-CoV-2 possible? *Lancet Gastroenterol Hepatol*. 5(4):335–337. [https://doi.org/10.1016/S2468-1253\(20\)30048-0](https://doi.org/10.1016/S2468-1253(20)30048-0).
2810. Johnson D, Lynch R, Marshall C, Mead K, Hirst D. 2013. Aerosol generation by modern flush toilets. *Aerosol Sci Technol*. 47(9):1047–1057. <https://doi.org/10.1080/02786826.2013.814911>.
2811. Knowlton SD, Boles CL, Perencevich EN, Diekema DJ, Nonnenmann MW, CDC Epicenters Program. 2018. Bioaerosol concentrations generated from toilet flushing in a hospital-based patient care setting. *Antimicrob Resist Infect Control*. 7:16. <https://doi.org/10.1186/s13756-018-0301-9>.
2812. Wallis C, Melnick JL, Rao VC, Sox TE. 1985. Method for detecting viruses in aerosols. *Appl Environ Microbiol*. 50(5):1181–1186.
2813. Booth TF, Kournikakis B, Bastien N, Ho J, Kobasa D, Stadnyk L, Li Y, Spence M, Paton S, Henry B, et al. 2005. Detection of airborne severe acute respiratory syndrome (SARS) coronavirus and environmental contamination in SARS outbreak units. *J Infect Dis*. 191(9):1472–1477. <https://doi.org/10.1086/429634>.
2814. Ong SWX, Tan YK, Chia PY, Lee TH, Ng OT, Wong MSY, Marimuthu K. 2020. Air, surface environmental, and personal protective equipment contamination by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) from a symptomatic patient. *JAMA*. [Epub ahead of print 2020 Mar 4; accessed 2020 Apr 1]. <https://doi.org/10.1001/jama.2020.3227>.

2815. van Doremalen N, Bushmaker T, Morris DH, Holbrook MG, Gamble A, Williamson BN, Tamin A, Harcourt JL, Thornburg NJ, Gerber SI, et al. 2020. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. *N Engl J Med*. [Epub ahead of print 2020 Mar 17; accessed 2020 Apr 1]. <https://doi.org/10.1056/NEJMc2004973>.
2816. Firquet S, Beaujard S, Lobert P-E, Sané F, Caloone D, Izard D, Hober D. 2015. Survival of enveloped and non-enveloped viruses on inanimate surfaces. *Microbes Environ*. 30(2):140–144. <https://doi.org/10.1264/jsm2.ME14145>.
2817. Geller C, Varbanov M, Duval RE. 2012. Human coronaviruses: insights into environmental resistance and its influence on the development of new antiseptic strategies. *Viruses*. 4(11):3044–3068. <https://doi.org/10.3390/v4113044>.
2818. Casanova LM, Jeon S, Rutala WA, Weber DJ, Sobsey MD. 2010. Effects of air temperature and relative humidity on coronavirus survival on surfaces. *Appl Environ Microbiol*. 76(9):2712–2717. <https://doi.org/10.1128/AEM.02291-09>.
2819. Kampf G, Todt D, Pfaender S, Steinmann E. 2020. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J Hosp Infect*. 104(3):246–251. <https://doi.org/10.1016/j.jhin.2020.01.022>.
2820. Warnes SL, Little ZR, Keevil CW. 2015. Human coronavirus 229E remains infectious on common touch surface materials. *mBio*. 6(6):e01697–15. <https://doi.org/10.1128/mBio.01697-15>.
2821. van Doremalen N, Bushmaker T, Morris DH, Holbrook MG, Gamble A, Williamson BN, Tamin A, Harcourt JL, Thornburg NJ, Gerber SI, et al. 2020. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. *N Engl J Med*. [Epub ahead of print 2020 Mar 17; accessed 2020 Apr 1]. <https://doi.org/10.1056/NEJMc2004973>.
2822. Otter JA, Donskey C, Yezli S, Douthwaite S, Goldenberg SD, Weber DJ. 2016. Transmission of SARS and MERS coronaviruses and influenza virus in healthcare settings: the possible role of dry surface contamination. *J Hosp Infect*. 92(3):235–250. <https://doi.org/10.1016/j.jhin.2015.08.027>.
2823. Duan SM, Zhao XS, Wen RF, Huang JJ, Pi GH, Zhang SX, Han J, Bi SL, Ruan L, Dong XP, et al. 2003. Stability of SARS coronavirus in human specimens and environment and its sensitivity to heating and UV irradiation. *Biomed Environ Sci*. 16(3):246–255.
2824. Lai MY, Cheng PK, Lim WW. 2005. Survival of severe acute respiratory syndrome coronavirus. *Clin Infect Dis*. 41(7):e67–71. <https://doi.org/10.1086/433186>.
2825. van Doremalen N, Bushmaker T, Morris DH, Holbrook MG, Gamble A, Williamson BN, Tamin A, Harcourt JL, Thornburg NJ, Gerber SI, et al. 2020. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1.

N Engl J Med. [Epub ahead of print 2020 Mar 17; accessed 2020 Apr 1]. <https://doi.org/10.1056/NEJMc2004973>.

2826. Chin A, Chu J, Perera M, Hui K, Yen HL, Chan M, Peiris M, Poon L. 2020 Jan 1. Stability of SARS-CoV-2 in different environmental conditions. medRxiv.org. [accessed 2020 Apr 1]. <https://doi.org/10.1101/2020.03.15.20036673>.

2827. van Doremalen N, Bushmaker T, Morris DH, Holbrook MG, Gamble A, Williamson BN, Tamin A, Harcourt JL, Thornburg NJ, Gerber SI, et al. 2020. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. N Engl J Med. [Epub ahead of print 2020 Mar 17; accessed 2020 Apr 1]. <https://doi.org/10.1056/NEJMc2004973>.

2828. Chin A, Chu J, Perera M, Hui K, Yen HL, Chan M, Peiris M, Poon L. 2020 Jan 1. Stability of SARS-CoV-2 in different environmental conditions. medRxiv.org. [accessed 2020 Apr 1]. <https://doi.org/10.1101/2020.03.15.20036673>.

2829. Winther B, Gwaltney JM, Mygind N, Turner RB, Hendley JO. 1986. Sites of rhinovirus recovery after point inoculation of the upper airway. JAMA. 256(13):1763–1767.

2830. Kwok YLA, Gralton J, McLaws M-L. 2015. Face touching: a frequent habit that has implications for hand hygiene. Am J Infect Control. 43(2):112–114. <https://doi.org/10.1016/j.ajic.2014.10.015>.

2831. Nicas M, Best D. 2008. A study quantifying the hand-to-face contact rate and its potential application to predicting respiratory tract infection. J Occup Environ Hyg. 5(6):347–352. <https://doi.org/10.1080/15459620802003896>.

2832. Hendley JO, Wenzel RP, Gwaltney JM. 1973. Transmission of rhinovirus colds by self-inoculation. N Engl J Med. 288(26):1361–1364. <https://doi.org/10.1056/NEJM197306282882601>.

2833. Elder NC, Sawyer W, Pallerla H, Khaja S, Blacker M. 2014. Hand hygiene and face touching in family medicine offices: a Cincinnati Area Research and Improvement Group (CARInG) network study. J Am Board Fam Med. 27(3):339–346.

2834. Erasmus V, Daha TJ, Brug H, Richardus JH, Behrendt MD, Vos MC, van Beeck EF. 2010. Systematic review of studies on compliance with hand hygiene guidelines in hospital care. Infect Control Hosp Epidemiol. 31(3):283–294. <https://doi.org/10.1086/650451>.

2835. Quraishi ZA, McGuckin M, Blals FX. 1984. Duration of handwashing in intensive care units: a descriptive study. Am J Infect Control. 12(2):83–87. [https://doi.org/10.1016/0196-6553\(84\)90021-x](https://doi.org/10.1016/0196-6553(84)90021-x).

2836. Centers for Disease Control and Prevention. 2020 Mar 18. How to protect yourself. U.S. Department of Health and Human Services; [accessed 2020 Apr 1]. <https://www.cdc.gov/coronavirus/2019-ncov/prepare/prevention.html>.
2837. Centers for Disease Control and Prevention. 2020 Mar 4. Show me the science—how to wash your hands. U.S. Department of Health and Human Services; [accessed 2020 Apr 1]. <https://www.cdc.gov/handwashing/show-me-the-science-handwashing.html>.
2838. Jensen DA, Danyluk MD, Harris LJ, Schaffner DW. 2015. Quantifying the effect of hand wash duration, soap use, ground beef debris, and drying methods on the removal of *Enterobacter aerogenes* on hands. *J Food Prot.* 78(4):685–690. <https://doi.org/10.4315/0362-028X.JFP-14-245>.
2839. Todd EC, Michaels BS, Smith D, Greig JD, Bartleson CA. 2010. Outbreaks where food workers have been implicated in the spread of foodborne disease. Part 9. Washing and drying of hands to reduce microbial contamination. *J Food Prot.* 73(10):1937–1955. <https://doi.org/10.4315/0362-028x-73.10.1937>.
2840. Wong JSW, Lee JKF. 2019. The common missed handwashing instances and areas after 15 years of hand-hygiene education. *J Environ Public Health.* 2019:5928924. <https://doi.org/10.1155/2019/5928924>.
2841. McNeil SA, Foster CL, Hedderwick SA, Kauffman CA. 2001. Effect of hand cleansing with antimicrobial soap or alcohol-based gel on microbial colonization of artificial fingernails worn by health care workers. *Clin Infect Dis.* 32(3):367–372. <https://doi.org/10.1086/318488>.
2842. Carrico AR, Spoden M, Wallston KA, Vandenberg MP. 2013. The environmental cost of misinformation: why the recommendation to use elevated temperatures for handwashing is problematic. *Int J Consum Stud.* 37(4):433–441. <https://doi.org/10.1111/ijcs.12012>.
2843. Price PB. 1938. The bacteriology of normal skin; a new quantitative test applied to a study of the bacterial flora and the disinfectant action of mechanical cleansing. *J Infect Dis.* 63(3):301–318. <https://doi.org/10.1093/infdis/63.3.301>.
2844. Michaels B, Gangar V, Schultz A, Arenas M, Curiale M, Ayers T, Paulson D. 2002. Water temperature as a factor in handwashing efficacy. *Food Serv Technol.* 2(3):139–149. <https://doi.org/10.1046/j.1471-5740.2002.00043.x>.
2845. Carrico AR, Spoden M, Wallston KA, Vandenberg MP. 2013. The environmental cost of misinformation: why the recommendation to use elevated temperatures for handwashing is problematic. *Int J Consum Stud.* 37(4):433–441. <https://doi.org/10.1111/ijcs.12012>.
2846. McCormick RD, Buchman TL, Maki DG. 2000. Double-blind, randomized trial of scheduled use of a novel barrier cream and an oil-containing lotion for protecting the hands of health care workers. *Am J Infect Control.* 28(4):302–310. <https://doi.org/10.1067/mic.2000.107425>.

2847. World Health Organization. 2009. WHO guidelines on hand hygiene in health care: a summary. Geneva: WHO. Report No.: WHO/IER/PSP/2009.07. https://www.who.int/gpsc/information_centre/hand-hygiene-summary/en/.

2848. Centers for Disease Control and Prevention. 2020 Mar 18. Frequently asked questions about hand hygiene for healthcare personnel responding to COVID-2019. U.S. Department of Health and Human Services; [accessed 2020 Apr 1]. <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/hcp-hand-hygiene-faq.html>.

2849. Elder NC, Sawyer W, Pallerla H, Khaja S, Blacker M. 2014. Hand hygiene and face touching in family medicine offices: a Cincinnati Area Research and Improvement Group (CARInG) network study. *J Am Board Fam Med*. 27(3):339–346. <https://doi.org/10.3122/jabfm.2014.03.130242>.

2850. Siddharta A, Pfaender S, Vielle NJ, Dijkman R, Friesland M, Becker B, Yang J, Engelmann M, Todt D, Windisch MP, et al. Virucidal activity of World Health Organization-recommended formulations against enveloped viruses, including Zika, Ebola, and emerging coronaviruses. *J Infect Dis*. 215(6):902–906. <https://doi.org/10.1093/infdis/jix046>.

2851. Boyce JM, Pittet D. 2002. Guideline for hand hygiene in health-care settings. Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR Recomm Rep*. 51(RR-16):1–45. <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5116a1.htm>.

2852. World Health Organization. [date unknown]. Guide to local production: WHO-recommended handrub formulations. Geneva: WHO; [revised 2010 Apr; accessed 2020 Apr 1]. https://www.who.int/gpsc/information_centre/handrub-formulations/en/.

2853. Evon D. 2020 Mar 5. Can a homemade Tito's Vodka hand sanitizer help stem coronavirus? Snopes.com; [accessed 2020 Apr 1]. <https://www.snopes.com/fact-check/hand-sanitizer-titos-vodka/>.

2854. Kratzel A, Todt D, V'kovski P, Steiner S, Gultom M, Thao TTN, Ebert N, Holwerda M, Steinmann J, Niemeyer D, et al. 2020. Inactivation of severe acute respiratory syndrome coronavirus 2 by WHO-recommended hand rub formulations and alcohols. *Emerg Infect Dis*. [Epub ahead of print 2020 Apr 13; accessed 2020 Apr 18]. <https://doi.org/10.3201/eid260>.

2855. World Health Organization. [date unknown]. Guide to local production: WHO-recommended handrub formulations. Geneva: WHO; [revised 2010 Apr; accessed 2020 Apr 1]. https://www.who.int/gpsc/information_centre/handrub-formulations/en/.

2856. Food and Drug Administration. 2020. Policy for temporary compounding of certain alcohol-based hand sanitizer products during the public health emergency. FDA. Report No.: FDA-2020-D-1106. <https://www.fda.gov/regulatory->

information/search-fda-guidance-documents/policy-temporary-compounding-certain-alcohol-based-hand-sanitizer-products-during-public-health.

2857. U.S. Pharmacopeia. 2020. Compounding alcohol-based hand sanitizer during COVID-19 pandemic. USP; [updated 2020 Mar 25; accessed 2020 Apr 1]. <https://www.usp.org/sites/default/files/usp/document/about/public-policy/usp-covid19-handrub.pdf>.

2858. National Environmental Agency. 2020 Jan 25. Interim guidelines for environmental cleaning and disinfection of areas exposed to confirmed case(s) of COVID-19 non-healthcare premises. Singapore: NEA; [revised 2020 Mar 16; accessed 2020 Apr 1]. <https://www.nea.gov.sg/our-services/public-cleanliness/environmental-cleaning-guidelines/guidelines-for-environmental-cleaning-and-disinfection>.

2859. Kampf G, Todt D, Pfaender S, Steinmann E. 2020. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J Hosp Infect.* 104(3):246–251. <https://doi.org/10.1016/j.jhin.2020.01.022>.

2860. Patel P, Sanghvi S, Malik K, Khachemoune A. 2020. Back to the basics: diluted bleach for COVID-19. *J Am Acad Dermatol.* [Epub ahead of print 2020 Apr 10; accessed 2020 Apr 18]. <https://doi.org/10.1016/j.jaad.2020.04.033>.

2861. National Environmental Agency. 2020 Jan 25. Interim guidelines for environmental cleaning and disinfection of areas exposed to confirmed case(s) of COVID-19 non-healthcare premises. Singapore: NEA; [revised 2020 Mar 16; accessed 2020 Apr 1]. <https://www.nea.gov.sg/our-services/public-cleanliness/environmental-cleaning-guidelines/guidelines-for-environmental-cleaning-and-disinfection>.

2862. Chin AWH, Chu JTS, Perera MRA, Hui KPY, Yen HL, Chan MCW, Peiris M, Poon LLM. 2020 Mar 27. Stability of SARS-CoV-2 in different environmental conditions. *medRxiv.org.* [accessed 2020 Apr 1]. <https://www.medrxiv.org/content/10.1101/2020.03.15.20036673v2>.

2863. Wu YC, Chen CS, Chan YJ. 2020. The outbreak of COVID-19: an overview. *J Chin Med Assoc.* 83(3):217–220. <https://doi.org/10.1097/JCMA.0000000000000270>.

2864. Centers for Disease Control and Prevention. 1991. Epidemiologic notes and reports chlorine gas toxicity from mixture of bleach with other cleaning products—California. *Morb Mortal Wkly Rep.* 40(36):619–621,627–629. [last reviewed 2001 May 2; accessed 2020 Apr 6]. <https://www.cdc.gov/mmwr/preview/mmwrhtml/00015111.htm>.

2865. National Environmental Agency. 2020 Jan 25. Interim guidelines for environmental cleaning and disinfection of areas exposed to confirmed case(s) of COVID-19 non-healthcare premises. Singapore: NEA; [revised 2020 Mar 16; accessed 2020 Apr 1]. <https://www.nea.gov.sg/our-services/public-cleanliness/>

environmental-cleaning-guidelines/guidelines-for-environmental-cleaning-and-disinfection.

2866. Chin AWH, Chu JTS, Perera MRA, Hui KPY, Yen HL, Chan MCW, Peiris M, Poon LLM. 2020 Mar 27. Stability of SARS-CoV-2 in different environmental conditions. medRxiv.org. [accessed 2020 Apr 1]. <https://www.medrxiv.org/content/10.1101/2020.03.15.20036673v2>.

2867. Lai MY, Cheng PK, Lim WW. 2005. Survival of severe acute respiratory syndrome coronavirus. *Clin Infect Dis.* 41(7):e67–71. <https://doi.org/10.1086/433186>.

2868. Dellanno C, Vega Q, Boesenberg D. 2009. The antiviral action of common household disinfectants and antiseptics against murine hepatitis virus, a potential surrogate for SARS coronavirus. *Am J Infect Control.* 37(8):649–652. <https://doi.org/10.1016/j.ajic.2009.03.012>.

2869. Rabenau HF, Cinatl J, Morgenstern B, Bauer G, Preiser W, Doerr HW. 2005. Stability and inactivation of SARS coronavirus. *Med Microbiol Immunol.* 194(1-2):1–6. <https://doi.org/10.1007/s00430-004-0219-0>.

2870. U.S. Environmental Protection Agency. [date unknown]. List N: disinfectants for use against SARS-CoV-2. U.S. EPA; [updated 2020 Mar 26; accessed 2020 Apr 1]. <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>.

2871. Sattar SA, Springthorpe VS, Karim Y, Loro P. 1989. Chemical disinfection of non-porous inanimate surfaces experimentally contaminated with four human pathogenic viruses. *Epidemiol Infect.* 102(3):493–505. <https://doi.org/10.1017/s0950268800030211>.

2872. Desai AN, Aronoff DM. 2020 Apr 9. Food safety and COVID-19. *JAMA.* [accessed 2020 Apr 11]. <https://doi.org/10.1001/jama.2020.5877>.

2873. Chin AWH, Chu JTS, Perera MRA, Hui KPY, Yen HL, Chan MCW, Peiris M, Poon LLM. 2020. Stability of SARS-CoV-2 in different environmental conditions. *Lancet Microbe.* [Epub ahead of print 2020 Apr 2; accessed 2020 Apr 11]. [https://doi.org/10.1016/S2666-5247\(20\)30003-3](https://doi.org/10.1016/S2666-5247(20)30003-3).

2874. Desai AN, Aronoff DM. 2020 Apr 9. Food safety and COVID-19. *JAMA.* [accessed 2020 Apr 11]. <https://doi.org/10.1001/jama.2020.5877>.

2875. Wu YC, Chen CS, Chan YJ. 2020. The outbreak of COVID-19: an overview. *J Chin Med Assoc.* 83(3):217–220. <https://doi.org/10.1097/JCMA.0000000000000270>.

2876. Zhang J, Zhou L, Yang Y, Peng W, Wang W, Chen X. 2020. Therapeutic and triage strategies for 2019 novel coronavirus disease in fever clinics. *Lancet Respir Med.* 8(3):e11–e12. [https://doi.org/10.1016/S2213-2600\(20\)30071-0](https://doi.org/10.1016/S2213-2600(20)30071-0).

2877. Centers for Disease Control and Prevention. 2020 Mar 25. What to do if you are sick: steps to help prevent the spread of COVID-19 if you are sick.

U.S. Department of Health and Human Services; [last reviewed 2020 Mar 25; accessed 2020 Mar 31]. <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html>.

2878. Loeb J. 2020. Pet dog confirmed to have coronavirus. *Vet Rec.* 186(9):265. <https://doi.org/10.1136/vr.m892>.

2879. Cheng L. 2020 Mar 19. Coronavirus: Hong Kong confirms a second dog is infected. *South China Morning Post*. [accessed 2020 Apr 6]; <https://www.scmp.com/news/hong-kong/health-environment/article/3075993/coronavirus-hong-kong-confirms-second-dog>.

2880. Shi J, Wen Z, Zhong G, Yang H, Wang C, Liu R, He X, Shuai L, Sun Z, Zhao Y, et al. 2020 Mar 31. Susceptibility of ferrets, cats, dogs, and different domestic animals to SARS-coronavirus-2. *bioRxiv.org*. [accessed 2020 Apr 6]. <https://doi.org/10.1101/2020.03.30.015347>.

2881. Huang Q, Zhan X, Zeng XT. 2020. COVID-19 pandemic: stop panic abandonment of household pets. *J Travel Med.* [Epub ahead of print 2020 Apr 9; accessed 2020 Apr 11]. <https://doi.org/10.1093/jtm/taaa046>.

2882. Shi J, Wen Z, Zhong G, Yang H, Wang C, Liu R, He X, Shuai L, Sun Z, Zhao Y, et al. 2020 Mar 31. Susceptibility of ferrets, cats, dogs, and different domestic animals to SARS-coronavirus-2. *bioRxiv.org*. [accessed 2020 Apr 6]. <https://doi.org/10.1101/2020.03.30.015347>.

2883. Zhang Q, Zhang H, Huang K, Yang Y, Hui X, Gao J, He X, Li C, Gong W, Zhang Y, et al. 2020 Apr 3. SARS-CoV-2 neutralizing serum antibodies in cats: a serological investigation. *bioRxiv.org*. [accessed 2020 Apr 6]. <https://doi.org/10.1101/2020.04.01.021196>.

2884. U.S. Department of Agriculture. 2020 Apr 5. USDA statement on the confirmation of COVID-19 in a tiger in New York. USDA; [modified 2020 Apr 6; accessed 2020 Apr 6]. https://www.aphis.usda.gov/aphis/newsroom/news/sa_by_date/sa-2020/ny-zoo-covid-19.

2885. Centers for Disease Control and Prevention. 2020 Mar 25. What to do if you are sick: steps to help prevent the spread of COVID-19 if you are sick. U.S. Department of Health and Human Services; [last reviewed 2020 Mar 25; accessed 2020 Mar 31]. <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html>.

2886. Allen J, Lipsitch M. 2020 Mar 24. 6 things to know if you're living with someone who has coronavirus, or think you might be. *USA Today* (McLean, VA). [accessed 2020 Apr 1]; <https://www.usatoday.com/story/opinion/2020/03/24/coronavirus-testing-shortage-take-precautions-just-in-case-column/2899989001/>.

2887. Qian H, Zheng X. 2018. Ventilation control for airborne transmission of human exhaled bio-aerosols in buildings. *J Thorac Dis.* 10(Suppl 19):S2295–S2304. <https://dx.doi.org/10.21037/jtd.2018.01.24>.

2888. Casanova LM, Jeon S, Rutala WA, Weber DJ, Sobsey MD. 2010. Effects of air temperature and relative humidity on coronavirus survival on surfaces. *Appl Environ Microbiol.* 76(9):2712–2717. <https://dx.doi.org/10.1128/AEM.02291-09>.

2889. Centers for Disease Control and Prevention. 2020 Mar 25. What to do if you are sick: steps to help prevent the spread of COVID-19 if you are sick. U.S. Department of Health and Human Services; [last reviewed 2020 Mar 25; accessed 2020 Mar 31]. <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html>.

2890. Chughtai AA, Seale H, Islam MS, Owais M, Macintyre CR. 2020. Policies on the use of respiratory protection for hospital health workers to protect from coronavirus disease (COVID-19). *Int J Nurs Stud.* [Epub ahead of print 2020 May; accessed 2020 Apr 1]. <https://doi.org/10.1016/j.ijnurstu.2020.103567>.

2891. Leung NHL, Chu DKW, Shiu EYC, Chan K-H, McDevitt JJ, Hau BJP, Yen H-L, Li Y, Ip DKM, Peiris JSM, et al. 2020 Apr 3. Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nat Med.* [accessed 2020 Apr 6]. <https://doi.org/10.1038/s41591-020-0843-2>.

2892. National Research Council. 2020. Rapid expert consultation on the possibility of bioaerosol spread of SARS-CoV-2 for the COVID-19 pandemic (April 1, 2020). Washington(DC): National Academies Press. <https://doi.org/10.17226/25769>.

2893. Cohen J. 2020 Mar 27. Not wearing masks to protect against coronavirus is a 'big mistake,' top Chinese scientist says. *Science.* [accessed 2020 Apr 6]. <https://doi.org/10.1126/science.abb9368>.

2894. Centers for Disease Control and Prevention. 2020. Coronavirus disease 2019 (COVID-19): recommendations for cloth face covers. U.S. Department of Health and Human Services; [last reviewed 2020 Apr 3; accessed 2020 Apr 6]. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html>.

2895. U.S. Surgeon General. 2020 Feb 29. Seriously people—STOP BUYING MASKS! Twitter.com; [accessed 2020 Apr 6]. https://twitter.com/surgeon_general/status/1233725785283932160.

2896. Centers for Disease Control and Prevention. 2020. Coronavirus disease 2019 (COVID-19): recommendations for cloth face covers. U.S. Department of Health and Human Services; [last reviewed 2020 Apr 3; accessed 2020 Apr 6]. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html>.

2897. Centers for Disease Control and Prevention. 2009 Sep 24. Interim recommendations for facemask and respirator use to reduce 2009 influenza A (H1N1) virus transmission. Atlanta: CDC; [accessed 2020 Apr 1]. <https://www.cdc.gov/h1n1flu/masks.htm>.

2898. Jefferson T, Foxlee R, Del Mar C, Dooley L, Ferroni E, Hewak B, Prabhala A, Nair S, Rivetti A. 2008. Physical interventions to interrupt or reduce the spread of respiratory viruses: systematic review. *BMJ*. 336(7635):77–80. <https://doi.org/10.1136/bmj.39393.510347.BE>.
2899. Jung H, Kim J, Lee S, Lee J, Kim J, Tsai P, Yoon C. 2014. Comparison of filtration efficiency and pressure drop in anti-yellow sand masks, quarantine masks, medical masks, general masks, and handkerchiefs. *Aerosol Air Qual Res*. 14(3):991–1002. <https://doi.org/10.4209/aaqr.2013.06.0201>.
2900. Kellogg WH, MacMillan G. 1920. An experimental study of the efficacy of gauze face masks. *Am J Public Health (N Y)*. 10(1):34–42. <https://dx.doi.org/10.2105/ajph.10.1.34>.
2901. World Health Organization. 2020. Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus (2019-nCoV) outbreak: interim guidance, 29 January 2020. Geneva: WHO; [accessed 2020 Apr 1]. <https://apps.who.int/iris/handle/10665/330987>.
2902. Leung CC, Lam TH, Cheng KK. 2020. Mass masking in the COVID-19 epidemic: people need guidance. *Lancet*. 395(10228):945. [https://doi.org/10.1016/S0140-6736\(20\)30520-1](https://doi.org/10.1016/S0140-6736(20)30520-1).
2903. Feng S, Shen C, Xia N, Song W, Fan M, Cowling BJ. 2020. Rational use of face masks in the COVID-19 pandemic. *Lancet Respir Med*. [Epub ahead of print 2020 Mar 20; accessed 2020 Apr 1]. [https://doi.org/10.1016/S2213-2600\(20\)30134-X](https://doi.org/10.1016/S2213-2600(20)30134-X).
2904. Centers for Disease Control and Prevention. 2020. Coronavirus disease 2019 (COVID-19): cloth face covers FAQs. U.S. Department of Health and Human Services; [last reviewed 2020 Apr 4; accessed 2020 Apr 6]. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-faq.html>.
2905. Livingston E, Desai A, Berkwits M. 2020. Sourcing personal protective equipment during the COVID-19 pandemic. *JAMA*. [Epub ahead of print 2020 Mar 28; accessed 2020 Apr 6]. <https://doi.org/10.1001/jama.2020.5317>.
2906. van der Sande M, Teunis P, Sabel R. 2008. Professional and home-made face masks reduce exposure to respiratory infections among the general population. *PLoS ONE*. 3(7):e2618. <https://doi.org/10.1371/journal.pone.0002618>.
2907. Davies A, Thompson KA, Giri K, Kafatos G, Walker J, Bennett A. 2013. Testing the efficacy of homemade masks: would they protect in an influenza pandemic? *Disaster Med Public Health Prep*. 7(4):413–418. <https://doi.org/10.1017/dmp.2013.43>.
2908. Rengasamy S, Eimer B, Shaffer RE. 2010. Simple respiratory protection—evaluation of the filtration performance of cloth masks and common

fabric materials against 20–1000 nm size particles. *Ann Occup Hyg*. 54(7):789–798. <https://doi.org/10.1093/annhyg/meq044>.

2909. O’Kelly E, Pirog S, Ward J, Clarkson PJ. 2020 Apr 17. Informing home-made emergency facemask design: the ability of common fabrics to filter ultra-fine particles. *medRxiv.org*. [accessed 2020 Apr 19]. <https://doi.org/10.1101/2020.04.14.20065375>.

2910. Centers for Disease Control and Prevention. 2020. Coronavirus disease 2019 (COVID-19): cloth face covers. U.S. Department of Health and Human Services; [last reviewed 2020 Apr 4; accessed 2020 Apr 6]. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>.

2911. National Environmental Agency. 2020 Jan 28. Interim guidelines for environmental cleaning and disinfection in residences that may be exposed to the COVID-19 virus. Singapore: NEA; [revised 2020 Feb 24; accessed 2020 Apr 1]. <https://www.nea.gov.sg/our-services/public-cleanliness/environmental-cleaning-guidelines/guidelines/interim-guidelines-for-environmental-cleaning-and-disinfection-in-residences>.

2912. Cheng CY. 2003. SARS and PPE (part 5). *Singapore Med Assoc News*. 35:17–22.

2913. Soucheray S. 2020 Feb 13. Unmasked: experts explain necessary respiratory protection for COVID-19. Minneapolis: Center for Infectious Disease Research and Policy; [accessed 2020 Apr 1]. <http://www.cidrap.umn.edu/news-perspective/2020/02/unmasked-experts-explain-necessary-respiratory-protection-covid-19>.

2914. U.S. Department of Health and Human Services. 2006 March. Draft pandemic influenza preparedness and response plan. Washington: HHS; <http://www.dhhs.gov/nvpo/pandemicplan/>.

2915. Chughtai AA, Seale H, Islam MS, Owais M, Macintyre CR. 2020. Policies on the use of respiratory protection for hospital health workers to protect from coronavirus disease (COVID-19). *Int J Nurs Stud*. [Epub ahead of print 2020 May; accessed 2020 Apr 1]. <https://doi.org/10.1016/j.ijnurstu.2020.103567>.

2916. Soucheray S. 2020 Feb 13. Unmasked: experts explain necessary respiratory protection for COVID-19. Minneapolis: Center for Infectious Disease Research and Policy; [accessed 2020 Apr 1]. <http://www.cidrap.umn.edu/news-perspective/2020/02/unmasked-experts-explain-necessary-respiratory-protection-covid-19>.

2917. Dick EC, Jennings LC, Mink KA, Wartgow CD, Inhorn SL. 1987. Aerosol transmission of rhinovirus colds. *J Infect Dis*. 156(3):442–448. <https://doi.org/10.1093/infdis/156.3.442>.

2918. Gwaltney JM, Hendley JO. 1982. Transmission of experimental rhinovirus infection by contaminated surfaces. *Am J Epidemiol.* 116(5):828–833. <https://doi.org/10.1093/oxfordjournals.aje.a113473>.
2919. Brankston G, Gitterman L, Hirji Z, Lemieux C, Gardam M. 2007. Transmission of influenza A in human beings. *Lancet Infect Dis.* 7(4):257–265. [https://doi.org/10.1016/S1473-3099\(07\)70029-4](https://doi.org/10.1016/S1473-3099(07)70029-4).
2920. Ashour HM, Elkhatab WF, Rahman MM, Elshabrawy HA. 2020. Insights into the recent 2019 novel coronavirus (SARS-CoV-2) in light of past human coronavirus outbreaks. *Pathogens.* 9(3):186. <https://doi.org/10.3390/pathogens9030186>.
2921. Sandaradura I, Goeman E, Pontivivo G, Fine E, Gray H, Kerr S, Marriott D, Harkness J, Andresen D. 2020. A close shave? Performance of P2/N95 respirators in healthcare workers with facial hair: results of the BEARDS (BENchmarking Adequate Respiratory DefenceS) study. *J Hosp Infect.* Article in press. [accessed 2020 Apr 1]. <https://doi.org/10.1016/j.jhin.2020.01.006>.
2922. Jefferson T, Del Mar CB, Dooley L, Ferroni E, Al-Ansary LA, Bawazeer GA, van Driel ML, Nair S, Jones MA, Thorning S, et al. 2011. Physical interventions to interrupt or reduce the spread of respiratory viruses. *Cochrane Database Syst Rev.* 7:CD006207. <https://doi.org/10.1002/14651858.CD006207.pub4>.
2923. Han Q, Lin Q, Ni Z, You L. 2020. Letter to the editor: uncertainties about the transmission routes of 2019 novel coronavirus. *Influenza Other Respir Viruses.* [Epub ahead of print 2020 Mar 4; accessed 2020 Apr 1]. <https://doi.org/10.1111/irv.12735>.
2924. Deng W, Bao L, Gao H, Xiang Z, Qu Y, Song Z, Gong S, Liu J, Liu J, Yu P, et al. 2020 Mar 14. Rhesus macaques can be effectively infected with SARS-CoV-2 via ocular conjunctival route. *bioRxiv.org.* <https://doi.org/10.1101/2020.03.13.990036>.
2925. Shaw K. 2006. The 2003 SARS outbreak and its impact on infection control practices. *Public Health.* 120(1):8–14. <https://doi.org/10.1016/j.puhe.2005.10.002>.
2926. Chughtai AA, Seale H, Islam MS, Owais M, Macintyre CR. 2020. Policies on the use of respiratory protection for hospital health workers to protect from coronavirus disease (COVID-19). *Int J Nurs Stud.* [Epub ahead of print 2020 May; accessed 2020 Apr 1]. <https://doi.org/10.1016/j.ijnurstu.2020.103567>.
2927. Centers for Disease Control and Prevention. 2020 Mar 18. 10 things you can do to manage your health at home. U.S. Department of Health and Human Services; [accessed 2020 Apr 1]. <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/caring-for-yourself-at-home.html>.
2928. Centers for Disease Control and Prevention. 2020 Mar 25. What to do if you are sick: steps to help prevent the spread of COVID-19 if you are sick. U.S. Department of Health and Human Services; [last reviewed 2020 Mar 25;

accessed 2020 Mar 31]. https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html?deliveryName=USCDC_2067-DM23796.

2929. World Health Organization. 2020 Mar 25. Coronavirus disease 2019 (COVID-19) situation report—65. Geneva: WHO; [accessed 2020 Mar 31]. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200325-sitrep-65-covid-19.pdf?sfvrsn=ce13061b_2.

2930. Neher RA, Dyrda R, Druelle V, Hodcroft EB, Albert J. 2020. Potential impact of seasonal forcing on a SARS-CoV-2 pandemic. *Swiss Med Wkly*. 150(11-12):w20224. <https://doi.org/10.4414/sm.w.2020.20224>.

2931. Moriyama M, Hugentobler WJ, Iwasaki A. 2020. Seasonality of respiratory viral infections. *Annu Rev Virol*. [Epub ahead of print 2020 Mar 20; accessed 2020 Apr 1]. <https://doi.org/10.1146/annurev-virology-012420-022445>.

2932. Altamimi A, Ahmed AE. 2019. Climate factors and incidence of Middle East respiratory syndrome coronavirus. *J Infect Public Health*. [Epub ahead of print 2019 Dec 6; accessed 2020 Apr 1]. <https://doi.org/10.1016/j.jiph.2019.11.011>.

2933. Moriyama M, Hugentobler WJ, Iwasaki A. 2020. Seasonality of respiratory viral infections. *Annu Rev Virol*. [Epub ahead of print 2020 Mar 20; accessed 2020 Apr 1]. <https://doi.org/10.1146/annurev-virology-012420-022445>.

2934. Lipsitch M. 2020. Seasonality of SARS-CoV-2: will COVID-19 go away on its own in warmer weather? Boston: Center for Communicable Disease Dynamics; [accessed 2020 Apr 1]. <https://ccdd.hsph.harvard.edu/will-covid-19-go-away-on-its-own-in-warmer-weather/>.

2935. Fox SJ, Miller JC, Meyers LA. 2017. Seasonality in risk of pandemic influenza emergence. *PLoS Comput Biol*. 13(10):e1005749. <https://doi.org/10.1371/journal.pcbi.1005749>.

2936. Juzeniene A, Ma LW, Kwitniewski M, Polev GA, Lagunova Z, Dahlback A, Moan J. 2010. The seasonality of pandemic and non-pandemic influenzas: the roles of solar radiation and vitamin D. *Int J Infect Dis*. 14(12):e1099–1105. <https://doi.org/10.1016/j.ijid.2010.09.002>.

2937. Lipsitch M. 2020. Seasonality of SARS-CoV-2: will COVID-19 go away on its own in warmer weather? Boston: Center for Communicable Disease Dynamics; [accessed 2020 Apr 1]. <https://ccdd.hsph.harvard.edu/will-covid-19-go-away-on-its-own-in-warmer-weather/>.

2938. Kwok KO, Lai F, Wei WI, Wong SYS, Tang J. 2020. Herd immunity—estimating the level required to halt the COVID-19 epidemics in affected countries. *J Infect*. [Epub ahead of print 2020 Mar 21; accessed 2020 Apr 1]. <https://doi.org/10.1016/j.jinf.2020.03.027>.

2939. Sayburn A. 2020 Mar 25. Covid-19: experts question analysis suggesting half UK population has been infected. *BMJ* 368:m1216. [accessed 2020 Apr 1]. <https://doi.org/10.1136/bmj.m1216>.
2940. Kwok KO, Lai F, Wei WI, Wong SYS, Tang J. 2020. Herd immunity—estimating the level required to halt the COVID-19 epidemics in affected countries. *J Infect*. [Epub ahead of print 2020 Mar 21; accessed 2020 Apr 1]. <https://doi.org/10.1016/j.jinf.2020.03.027>.
2941. Bao L, Deng W, Gao H, Xiao C, Liu J, Xue J, Lv Q, Liu J, Yu P, Xu Y, et al. 2020 Mar 14. Reinfection could not occur in SARS-CoV-2 infected rhesus macaques. *bioRxiv.org*. [accessed 2020 Apr 1]. <https://doi.org/10.1101/2020.03.13.990226>.
2942. Duan K, Liu B, Li C, Zhang H, Yu T, Qu J, Zhou M, Chen L, Meng S, Hu Y, et al. 2020. Effectiveness of convalescent plasma therapy in severe COVID-19 patients. *Proc Natl Acad Sci U S A*. [Epub ahead of print 2020 Mar 5; accessed 2020 Apr 9]. <https://doi.org/10.1073/pnas.2004168117>.
2943. Tang F, Quan Y, Xin ZT, Wrammert J, Ma MJ, Lv H, Wang TB, Yang H, Richardus JH, Liu W, et al. 2011. Lack of peripheral memory B cell responses in recovered patients with severe acute respiratory syndrome: a six-year follow-up study. *J Immunol*. 186(12):7264–7268. <https://doi.org/10.4049/jimmunol.0903490>.
2944. Kissler SM, Tedijanto C, Goldstein E, Grad YH, Lipsitch M. 2020 Apr 14. Projecting the transmission dynamics of SARS-CoV-2 through the post-pandemic period. *Science*. [accessed 2020 Apr 18]. <https://doi.org/10.1126/science.abb5793>.
2945. Hunter P. 2020 Mar 17. The spread of the COVID-19 coronavirus: health agencies worldwide prepare for the seemingly inevitability of the COVID-19 coronavirus becoming endemic. *EMBO Rep*. e50334. [accessed 2020 Mar 30]. <https://doi.org/10.15252/embr.202050334>.
2946. Fung S-Y, Yuen K-S, Ye Z-W, Chan C-P, Jin D-Y. 2020. A tug-of-war between severe acute respiratory syndrome coronavirus 2 and host antiviral defence: lessons from other pathogenic viruses. *Emerg Microbes Infect*. 9(1):558–570. <https://doi.org/10.1080/22221751.2020.1736644>.
2947. Adalja AA, Watson M, Toner ES, Cicero A, Inglesby TV. 2019. Characteristics of microbes most likely to cause pandemics and global catastrophes. In: Inglesby TV, Adalja AA, editors. *Global Catastrophic Biological Risks. Current Topics in Microbiology and Immunology*, vol 424. Switzerland: Springer. p. 1–20. https://doi.org/10.1007/82_2019_176.
2948. Mandl JN, Schneider C, Schneider DS, Baker ML 2018. Going to bat(s) for studies of disease tolerance. *Front Immunol*. 9:2112. <https://doi.org/10.3389/fimmu.2018.02112>.

2949. Mandl JN, Schneider C, Schneider DS, Baker ML 2018. Going to bat(s) for studies of disease tolerance. *Front Immunol.* 9:2112. <https://doi.org/10.3389/fimmu.2018.02112>.
2950. Benvenuto D, Giovanetti M, Salemi M, Prosperi M, De Flora C, Alcantara LCJ, Angeletti S, Ciccozzi M. 2020 Feb 12. The global spread of 2019-nCoV: a molecular evolutionary analysis. *Pathog Glob Health.* [accessed 2020 Mar 30]. <https://doi.org/10.1080/20477724.2020.1725339>.
2951. Cui J, Li F, Shi Z-L. 2019. Origin and evolution of pathogenic coronaviruses. *Nat Rev Microbiol.* 17:181–192. <https://doi.org/10.1038/s41579-018-0118-9>.
2952. Grubaugh ND, Petrone ME, Holmes EC. 2020. We shouldn't worry when a virus mutates during disease outbreaks. *Nat Microbiol.* 5:529–530. <https://doi.org/10.1038/s41564-020-0690-4>.
2953. Zhang J, Jia W, Zhu J, Li B, Xing J, Liao M, Qi W. 2020. Letter to the editor: insights into the cross-species evolution of 2019 novel coronavirus. *J Infect.* Article in press. [accessed 2020 Mar 30]. <https://doi.org/10.1016/j.jinf.2020.02.025>.
2954. Weaver J. 2005. What can nervous Americans do about bird flu? MSNBC, October 18.
2955. Potter CW. 2001. A history of influenza. *J Appl Microbiol.* 91(4):572–579. <https://doi.org/10.1046/j.1365-2672.2001.01492.x>.
2956. Nebehay S. 2005. WHO's Chan aims to prepare world for bird flu outbreak. Reuters, September 13.
2957. Abbott A. 2005. Avian flu special: what's in the medicine cabinet? *Nature* 435:407–9. nature.com/news/2005/050523/full/435407a.html.
2958. Gostin L. 2004. Influenza pandemic preparedness: legal and ethical dimensions. *Hastings Center Report* 35:10–11.
2959. Public Broadcasting System. American Experience Transcript. 1918 Influenza Timeline. pbs.org/wgbh/amex/influenza/timeline/index.html.
2960. Lezzoni L. 1999. Influenza 1918: The Worst Epidemic in American History (New York, NY: TV Books).
2961. Evans WA, Armstrong DB, Davis WH, Kopf EW, Woodward WC. 1918. Influenza: report of a special committee of the American Public Health Association. *Journal of the American Medical Association* 71:2068–73.
2962. Hudson C. 1999. Something in the air. *Daily Mail*, August 21, pp. 30–31.
2963. Lezzoni L. 1999. Influenza 1918: The Worst Epidemic in American History (New York, NY: TV Books).

2964. Traxel D. 1998. Outbreak: the 1918 flu epidemic killed 13,000 Philadelphians in eight weeks. Scientists still don't know what made it so deadly. *Philadelphia Inquirer*, October 4.
2965. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
2966. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
2967. Crosby AW. 2003. *America's Forgotten Pandemic: The Influenza of 1918* (Cambridge, UK: Cambridge University Press).
2968. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
2969. Scanlon B. 2005. Recalling 1918's perilous plague. *Rocky Mountain News*, November 26.
2970. Evans WA, Armstrong DB, Davis WH, Kopf EW, Woodward WC. 1918. Influenza: report of a special committee of the American Public Health Association. *Journal of the American Medical Association* 71:2068–73.
2971. 1918. *British Medical Journal*, December 21 as cited in Billings M. The influenza pandemic of 1918: the public health response. June 1997. virus.stanford.edu/uda/fluresponse.html.
2972. Correia S, Luck S, Verner E. 2020 Mar 30. Pandemics depress the economy, public health interventions do not: evidence from the 1918 flu. SSRN. [revised 2020 Apr 13; accessed 2020 Apr 18]. <https://dx.doi.org/10.2139/ssrn.3561560>.
2973. Cowen T. 2005. Avian flu: what should be done. Mercatus Center at George Mason University: Working Paper Series, November 11.
2974. Kelvin AA, Halperin S. 2020. COVID-19 in children: the link in the transmission chain. *Lancet Infect Dis*. [Epub ahead of print 2020 Mar 25; accessed 2020 Apr 8]. [https://doi.org/10.1016/S1473-3099\(20\)30236-X](https://doi.org/10.1016/S1473-3099(20)30236-X).
2975. World Health Organization. 2005. Avian influenza: assessing the pandemic threat, January 1. www.who.int/csr/disease/influenza/H5N1-9reduit.pdf.
2976. Jones L. 2005. America under attack. *Men's Health*, November, pp. 154–9.
2977. Neergaard L. 2005. Is it time to vaccinate more kids to stop flu's spread? Associated Press, October 5. www.oanow.com/servlet/Satellite?pagename=OAN%2FMGArticle%2FOAN_BasicArticle&c=MGArticle&cid=1031785427827&path=%21features%21.
2978. Massie MK. 2004. Precautions can help prevent flu or ease pain. *Pittsburgh Post-Gazette*, October 13, p. A6.

2979. Lee PJ, Krilov LR. 2005. When animal viruses attack: SARS and avian influenza. *Pediatric Annals* 34(1):43–52.
2980. Oxford JS, Bossuyt S, Balasingam S, Mann A, Novelli P, Lambkin R. 2003. Treatment of epidemic and pandemic influenza with neuraminidase and M2 proton channel inhibitors. *Clinical Microbiology and Infection* 9:1–14.
2981. Massie MK. 2004. Precautions can help prevent flu or ease pain. *Pittsburgh Post-Gazette*, October 13, p. A6.
2982. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
2983. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London, UK: Routledge, pp. 1–26).
2984. Zwillich T. 2005. Warnings grow dire on bird flu threat. *WebMD Medical News*, June 16. www.webmd.com/content/article/107/108562?src=RSS_PUBLIC.
2985. Specter M. 2005. Nature's bioterrorist. *New Yorker*, February 28, pp. 52–61.
2986. Brown D. 1992. It all started in Kansas. *Washington Post Weekly Edition* 9(21). March 23–30.
2987. American Samoa Government. Historical calendar. November. www.asg-gov.net/026HISTORICALCAL_NOVEMBER.htm.
2988. American Samoa Government. Historical calendar. November. www.asg-gov.net/026HISTORICALCAL_NOVEMBER.htm.
2989. American Samoa Government. Historical calendar. November. www.asg-gov.net/026HISTORICALCAL_NOVEMBER.htm.
2990. Herda PS. 1995. The 1918 influenza pandemic in Fiji, Tonga, and the Samoas. In: Bryder L, Dow DA (eds.), *New Countries and Old Medicine: Proceedings of an International Conference on the History of Medicine and Health* (Auckland, New Zealand: Pyramid Press, pp. 46–53).
2991. American Samoa Government. Historical calendar. November. www.asg-gov.net/026HISTORICALCAL_NOVEMBER.htm.
2992. Herda PS. 1995. The 1918 influenza pandemic in Fiji, Tonga, and the Samoas. In: Bryder L, Dow DA (eds.), *New Countries and Old Medicine: Proceedings of an International Conference on the History of Medicine and Health* (Auckland, New Zealand: Pyramid Press, pp. 46–53).
2993. American Samoa Government. Historical calendar. November. www.asg-gov.net/026HISTORICALCAL_NOVEMBER.htm.

2994. Ravenholt RT, Foege WH. 1982. 1918 Influenza, encephalitis lethargica, parkinsonism. *Lancet* 320(8303):860–4.
2995. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London, UK: Routledge, pp. 1–26).
2996. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
2997. Brown D. 1992. It all started in Kansas. *Washington Post Weekly Edition* 9(21). March 23–30.
2998. Knobler SL, Mack A, Mahmoud A, Lemon SL (eds.), 2005. *The Threat of Pandemic Influenza: Are We Ready? Workshop Summary* (Washington, DC: National Academies Press).
2999. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
3000. Knobler SL, Mack A, Mahmoud A, Lemon SL (eds.), 2005. *The Threat of Pandemic Influenza: Are We Ready? Workshop Summary* (Washington, DC: National Academies Press).
3001. Gulliford A (ed.), 2003. *Living in the San Juan Mountains: prospectus on traditional cultural properties on the San Juan National Forest and adjacent public lands*. Fort Lewis College Foundation, Center of Southwest Studies. swcenter.fortlewis.edu/inventory/UsfSanJuanTCP.htm.
3002. Porter KA. 1990. *Pale Horse, Pale Rider* (Orlando, Florida: Harcourt Brace and Company).
3003. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
3004. Scanlon B. 2005. Recalling 1918's perilous plague. *Rocky Mountain News*, November 26.
3005. Soper GA. 1918. Influenza pneumonia pandemic in the American army camps during September and October, 1918. *Science* 48:451–6.
3006. Bleakley L. 2005. Bird flu may see NZ close borders. *The Press* (New Zealand). September 23. stuff.co.nz/stuff/0,2106,3419499a11,00.html.
3007. Louv R. 2005. We are not prepared for a pandemic. *San Diego Union-Tribune*, October 11. www.signonsandiego.com/news/metro/louv/20051011-9999-lz1e11louv.html.
3008. GlobalSecurity.org. 2005. Flu pandemic mitigation-social distancing. www.globalsecurity.org/security/ops/hsc-scen-3_flu-pandemic-distancing.htm.

3009. Monroe JA. 2005. Pandemic influenza plan. Indiana State Department of Health. www.in.gov/isdh/pdf.s/PandemicInfluenzaPlan.pdf.
3010. Connolly C. 2006. U.S. plan for flu pandemic revealed. *Washington Post*, April 16, p. A01. [washingtonpost.com/wp-dyn/content/article/2006/04/15/AR2006041500901.html](http://www.washingtonpost.com/wp-dyn/content/article/2006/04/15/AR2006041500901.html).
3011. Kennedy M. 2005. No way of knowing effectiveness of pandemic plan until outbreak hits. *Vancouver Sun*, March 11, p. A4.
3012. Lenehan GP. 2004. Universal respiratory etiquette: a modest proposal. *Journal of Emergency Nursing* 30(1):3.
3013. Tierno, PM Jr. 2001. *The Secret Life of Germs* (New York, NY: Atria Books).
3014. Barker J, Stevens D, Bloomfield SF. 2001. Spread and prevention of some common viral infections in community facilities and domestic homes. *Journal of Applied Microbiology* 91(1):7–21.
3015. Boone SA, Gerba CP. 2005. The occurrence of influenza A virus on household and day care center fomites. *Journal of Infection* 51(2):103–9.
3016. Couch RB. 1995. *Medical Microbiology* (Galveston, Texas: University of Texas Medical Branch, p. 1–22).
3017. De Castro AB, Peterson C. 2005. Preventing exposure to influenza: steps health care workers can take. *American Journal of Nursing* 105(1):112.
3018. Tierno, PM Jr. 2001. *The Secret Life of Germs* (New York, NY: Atria Books).
3019. Tierno, PM Jr. 2001. *The Secret Life of Germs* (New York, NY: Atria Books).
3020. Bean B, Moore BM, Sterner B, Petersen RN, Gerding DN, Balfour HH. 1982. Survival of influenza viruses in environmental surfaces. *Journal of Infectious Diseases* 146(1):47–51.
3021. Boone SA, Gerba CP. 2005. The occurrence of influenza A virus on household and day care center fomites. *Journal of Infection* 51(2):103–9.
3022. England B. 1982. Detection of viruses on fomites. In: Gerba CP, Goyal SM (eds.), *Methods in Environmental Virology: Microbiology Series*, vol. 7 (New York, NY: Marcel Dekker Inc, pp. 179–91).
3023. De Castro AB, Peterson C. 2005. Preventing exposure to influenza: steps health care workers can take. *American Journal of Nursing* 105(1):112.
3024. Cairncross S. 2003. Handwashing with soap—a new way to prevent ARIs? *Tropical Medicine and International Health* 8(8):677–9.
3025. Morens DM, Rash VM. 1995. Lessons from a nursing home outbreak of influenza A. *Infection Control and Hospital Epidemiology* 16(5):275–80.

3026. Larson E. 2001. Hygiene of the skin: when is clean too clean? *Emerging Infectious Diseases* 7:225–30.
3027. Tierno PM Jr. 2001. *The Secret Life of Germs* (New York, NY: Atria Books).
3028. Teleman MD, Boudville IC, Heng BH, Zhu D, Leo YS. 2004. Factors associated with transmission of severe acute respiratory syndrome among health-care workers in Singapore. *Epidemiology and Infection* 132:797–803.
3029. Bren L. 2001. Fighting the flu. *FDA Consumer* 35(1):12–3.
3030. Bakalar N. 2003. *Where the Germs Are: A Scientific Safari* (New York, NY: Wiley).
3031. Klevens RM, Edwards JR, Richards CL, Horan TC, Gaynes RP, Pollock DA, Cardo DM. 2007. Estimating health care-associated infections and deaths in U.S. hospitals, 2002. *Public Health Rep.* 122(2):160–166. <https://dx.doi.org/10.1177/003335490712200205>.
3032. Albert RK, Condie F. 1981. Hand-washing patterns in medical intensive-care units. *New England Journal of Medicine* 304(24):1465–6.
3033. Tibballs J. 1996. Teaching medical staff to handwash. *Medical Journal of Australia* 164:395–8.
3034. Pritchard RC, Raper RF. 1996. Doctors and hand washing. *Medical Journal of Australia* 164:389–390.
3035. Boyce JM. 1999. It is time for action: Improving hand hygiene in hospitals. *Annals of Internal Medicine* 130(2):153–5.
3036. Boyce JM. 1999. It is time for action: Improving hand hygiene in hospitals. *Annals of Internal Medicine* 130(2):153–5.
3037. Tierno PM Jr. 2001. *The Secret Life of Germs* (New York, NY: Atria Books).
3038. Centers for Disease Control and Prevention. [date unknown]. When & how to wash your hands. U.S. Department of Health and Human Services; [last reviewed 2020 Apr 2; accessed 2020 Apr 9]. <https://www.cdc.gov/handwashing/when-how-handwashing.html>.
3039. Tierno PM Jr. 2001. *The Secret Life of Germs* (New York, NY: Atria Books).
3040. Laestadius JG, Dimberg L. 2005. Hot water for handwashing—where is the proof? *Journal of Occupational and Environmental Medicine* 47(4):434–5.
3041. Meadows M. 2001. Beat the winter bugs: how to hold your own against colds and flu. *FDA Consumer* 35(6):11–7. www.fda.gov/fdac/features/2001/601_flu.html.

3042. Tierno PM Jr. 2001. *The Secret Life of Germs* (New York, NY: Atria Books).
3043. World Health Organization Consultation on Hand Hygiene in Health Care. 2005. WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft). Global Patient Safety Challenge, 2005–2006. who.int/entity/patient-safety/events/05/HH_en.pdf.
3044. Macias AE, Ponce-de-Leon S. 2005. Infection control: old problems and new challenges. *Archives of Medical Research* 36(6):637–45.
3045. World Health Organization Consultation on Hand Hygiene in Health Care. 2005. WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft). Global Patient Safety Challenge, 2005–2006. who.int/entity/patient-safety/events/05/HH_en.pdf.
3046. World Health Organization Consultation on Hand Hygiene in Health Care. 2005. WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft). Global Patient Safety Challenge, 2005–2006. who.int/entity/patient-safety/events/05/HH_en.pdf.
3047. Starkman D. 2000. Y2K related buying distorts some companies results; concerns about foul ups lead to stock-piling. *Wall Street Journal*, January 31.
3048. Centers for Disease Control and Prevention. [date unknown]. When & how to use hand sanitizer. U.S. Department of Health and Human Services; [last reviewed 2020 Mar 3; accessed 2020 Apr 7]. <https://www.cdc.gov/hand-washing/show-me-the-science-hand-sanitizer.html>.
3049. Travers AH, Sosnowski T. 2002. St. Patrick, the organic chemist and Sherlock Holmes meet in the emergency department: a case report. *Canadian Journal of Emergency Medicine* 4(4). www.caep.ca/004.cjem-jcmu/004-00.cjem/vol-4.2002/v44-289.htm.
3050. World Health Organization Consultation on Hand Hygiene in Health Care. 2005. WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft). Global Patient Safety Challenge, 2005–2006. who.int/entity/patient-safety/events/05/HH_en.pdf.
3051. Laurance J. 2005. Washing hands defense against bird flu. *New Zealand Herald*, October 14. www.nzherald.co.nz/author/story.cfm?a_id=93&objectid=10350158.
3052. Kuchment A. 2003. A matter of hygiene. *Newsweek*, April 14, p. 49.
3053. Uhlman M. 2005. In a flu pandemic, hygiene is a lifesaver. *Philadelphia Inquirer*, October 11.
3054. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).

3055. Kleffman S. 2006. As flu pandemic swept world, locals sought isolation. *Contra Costa Times*, March 26. contracostatimes.com/mld/cctimes/news/local/states/california/14191058.htm.
3056. Chow CB. 2004. Post-SARS infection control in the hospital and clinic. *Paediatric Respiratory Reviews* 5:289–95.
3057. Teleman MD, Boudville IC, Heng BH, Zhu D, Leo YS. 2004. Factors associated with transmission of severe acute respiratory syndrome among health-care workers in Singapore. *Epidemiology and Infection* 132:797–803.
3058. Department of Health and Human Services. 2006. Draft pandemic influenza preparedness and response plan. March. dhhs.gov/nvpo/pandemicplan/.
3059. Hong Kong University Task Force on SARS. 2004. Guidelines on the Use of Facemasks. August 10. hku.hk/uhs/he/flu/facemask.htm.
3060. Chow CB. 2004. Post-SARS infection control in the hospital and clinic. *Paediatric Respiratory Reviews* 5:289–95.
3061. Chow CB. 2004. Post-SARS infection control in the hospital and clinic. *Paediatric Respiratory Reviews* 5:289–95.
3062. U.S. Institute of Medicine Board on Health Sciences Policy. 2006. Reusability of Facemasks During an Influenza Pandemic: Facing the Flu (Washington, DC: National Academies Press). darwin.nap.edu/books/0309101824/html.
3063. Teleman MD, Boudville IC, Heng BH, Zhu D, Leo YS. 2004. Factors associated with transmission of severe acute respiratory syndrome among health-care workers in Singapore. *Epidemiology and Infection* 132:797–803.
3064. Department of Health and Human Services. 2006. Draft pandemic influenza preparedness and response plan. March. dhhs.gov/nvpo/pandemicplan/.
3065. Abbott A. 2005. Avian flu special: what's in the medicine cabinet? *Nature* 435:407–9. nature.com/news/2005/050523/full/435407a.html.
3066. Goldmann DA. 2001. Epidemiology and prevention of pediatric viral respiratory infections in health-care institutions. *Emerging Infectious Diseases* 7:249–53.
3067. Bridges CB, Kuehnert MJ, Hall CB. Transmission of influenza: implications for control in health care settings. *Clinical Infectious Diseases* 37:1094–101.
3068. Cheng CY. 2003. SARS and PPE (part 5). *Singapore Medical Association News* 35:17–22.
3069. Piotrowski J. 2003. Respiratory etiquette. *Modern Healthcare* 33(43):13.
3070. Cheng CY. 2003. SARS and PPE (part 5). *Singapore Medical Association News* 35:17–22.

3071. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3072. Oldenburg D. 2003. N95 masks flying off shelves, but they offer scant protection. Washington Post, February 15. www.ph.ucla.edu/EPI/bioter/n95masks.html.
3073. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3074. U.S. Institute of Medicine Board on Health Sciences Policy. 2006. Reusability of Facemasks During an Influenza Pandemic: Facing the Flu (Washington, DC: National Academies Press). darwin.nap.edu/books/0309101824/html.
3075. Abbott A. 2005. Avian flu special: what's in the medicine cabinet? Nature 435:407–9. nature.com/news/2005/050523/full/435407a.html.
3076. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3077. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3078. Bridges CB, Kuehnert MJ, Hall CB. Transmission of influenza: implications for control in health care settings. Clinical Infectious Diseases 37:1094–101.
3079. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3080. Bosman A, Mulder YM, de Leeuw JRJ, et al. 2004. Executive summary: avian flu epidemic 2003: public health consequences. RIVM (Research for Man and Environment) Report 630940004 (Bilthoven, The Netherlands: National Institute for Public Health and the Environment)
3081. World Health Organization. 2005. WHO global influenza preparedness plan. The role of WHO and recommendations for national measures before and during pandemics. www.who.int/csr/resources/publications/influenza/GIP_2005_5Eweb.pdf.
3082. World Health Organization. 2020. Coronavirus disease (COVID-19) advice for the public: when and how to use masks. Geneva: WHO; [accessed 2020 Apr 7]. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks>.
3083. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3084. Uhlman M. 2005. Bird flu threat spurs run on masks: experts say it's hard to tell what's needed to protect against a pandemic. Knight-Ridder Tribune News, October 29. www.bird-flu-symptom.info/news/face-mask/.

3085. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3086. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3087. Cheng CY. 2003. SARS and PPE (part 5). Singapore Medical Association News 35:17–22.
3088. Nickerson C. 2005. Europe bracing to battle bird flu: fears heighten of global outbreak. Boston Globe, October 10. www.boston.com/news/world/europe/articles/2005/10/10/europe_bracing_to_battle_bird_flu/.
3089. Cooper S. 2005. Don't fear fear or panic panic: an economist's view of pandemic flu. BMO Nesbitt Burns Inc. bmonesbittburns.com/economics/reports/20051011/dont_fear_fear.pdf.
3090. Branswell H. 2003. Vomiting? The trots? You don't have flu. Toronto Star, January 20, p. E06. www.ctv.ca/servlet/ArticleNews/story/CTVNews/20030114/flu_not030114/Health?s_name=&no_ads=.
3091. Bouchard GA. Watch out for holiday leftovers. University of Alberta Faculty News. www.afhe.ualberta.ca/Index.asp?page=News&news=463.
3092. Cunha BA. 2004. Influenza: historical aspects of epidemics and pandemics. Infectious Disease Clinics of North America 18:141–55.
3093. Bren L. 2001. Fighting the flu. FDA Consumer 35(1):12–3. fda.gov/fdac/features/2001/101_flu.html.
3094. Bender BS. 2000. Barbara, what's a nice girl like you doing writing an article like this? The scientific basis of folk remedies for colds and flu. Chest 118:887–8. chestjournal.org/cgi/content/full/118/4/887.
3095. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), The Spanish Influenza Pandemic of 1918–19: New Perspectives (London, UK: Routledge, pp. 1–26)
3096. Bender BS. 2000. Barbara, what's a nice girl like you doing writing an article like this? The scientific basis of folk remedies for colds and flu. Chest 118:887–8. chestjournal.org/cgi/content/full/118/4/887.
3097. Meadows M. 2001. Beat the winter bugs: how to hold your own against colds and flu. FDA Consumer 35(6):11–7. www.fda.gov/fdac/features/2001/601_flu.html.
3098. Eglan AG. 2006. March 23. Pediatrics, dehydration. emedicine.com/emerg/topic372.htm.
3099. Woodson G. 2005. Preparing for the Coming Influenza Pandemic. crofs-blogs.typepad.com/h5n1/files/ComingPandemic.pdf.

3100. Bender BS. 2000. Barbara, what's a nice girl like you doing writing an article like this? The scientific basis of folk remedies for colds and flu. *Chest* 118:887–8. chestjournal.org/cgi/content/full/118/4/887.
3101. Kamienski MC. 2003. Reye syndrome. *American Journal of Nursing*. 103(7):54–7.
3102. Acha PN. 2003. Influenza. In: *Zoonoses and Communicable Diseases Common to Man and Animals, Volume II, Chlamydioses, Rickettsioses, and Viroses* (Washington, DC: Pan American Health Organization, pp. 155–71).
3103. Herskovits B. 2005. Popeyes, KFC forge plans in case of bird flu outbreak. *PR Week*, November 11. prweek.com/us/thisissue/article/527525/popeyes-kfc-forge-plans-case-bird-flu-outbreak.
3104. Palamara AT, Nencioni L, Aquilano K, et al. 2005. Inhibition of influenza A virus replication by Resveratrol. *Journal of Infectious Diseases* 191(10):1719–29.
3105. Walle T, Hsieh F, DeLegge MH, Oatis JE Jr, Walle UK. 2004. High absorption but very low bioavailability of oral resveratrol in humans. *Drug Metabolism and Disposition* 32(12):1377–82. dmd.aspetjournals.org/cgi/content/full/32/12/1377.
3106. Roy H, Lundy S. 2005. Resveratrol. *Pennington Nutrition Series: Number 7*. www.pbrc.edu/education/pdf/PNS_resveratrol.pdf.
3107. Grammaticas D. 2005. Bird flu. Is it the new BSE? Independent, August 28. findarticles.com/p/articles/mi_qn4159/is_20050828/ai_n14899800/print.
3108. Lee PJ, Krilov LR. 2005. When animal viruses attack: SARS and avian influenza. *Pediatric Annals*, January 2005:43–51.
3109. Karesh W, Cook RA. 2005. The human-animal link. *Foreign Affairs* 84(4):38–50. foreignaffairs.org/20050701faessay84403/william-b-karesh-robert-a-cook/the-human-animal-link.html?mode=print.
3110. Osterholm MT. 2005. Preparing for the next pandemic. *Foreign Affairs* 84(4). foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html?mode=print.
3111. Powell J. 2004. Bird flu seen as the next pandemic. *Minneapolis Star Tribune*, November 16. www.all-hands.net/Article1467.html.
3112. Appleby J. 2005. Economists say avian flu could have huge impact. *USA Today*, October 6. www.usatoday.com/money/economy/2005-10-06-bird-flu-usat_x.htm.
3113. Osterholm MT. 2005. Preparing for the next pandemic. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.

3114. Cooper S, Coxe D. 2005. An investor's guide to avian flu. BMO Nesbitt Burns Research, August. bmonesbittburns.com/economics/reports/20050812/avian_flu.pdf.
3115. Branswell H. 2005. Flu pandemic could trigger second Great Depression, brokerage warns clients. Canadian Press, August 17.
3116. Council on Foreign Relations. 2005. Q&A with Laurie Garrett. Foreign Affairs, May 25. www.foreignaffairs.org/background/pandemic/Garrett2.
3117. International Monetary Fund. 2020 Apr. World economic outlook. Chapter 1. The great lockdown. Washington(DC): IMF; [accessed 2020 Apr 18]. <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/World-Economic-Outlook-April-2020-The-Great-Lockdown-49306>.
3118. Osterholm MT. 2005. Preparing for the next pandemic. New England Journal of Medicine 352(18):1839–42. content.nejm.org/cgi/content/full/352/18/1839.
3119. Branswell H. 2005. Flu pandemic could wreak economic havoc. Canadian Press, October 18.
3120. Reynolds G. 2004. The flu hunters. New York Times, November 7. www.nytimes.com/2004/11/07/magazine/07FLU.html?ex=1257570000&en=03e105e1ce5a804e&ei=5090&partner=rssuserland.
3121. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. Federal News Service, June 16. www.cfr.org/publication/8198/threat_of_global_pandemics.html.
3122. Schwartz R, Bicks M, Chapman S, et al. 2005. Avian flu: is the government ready for an epidemic? ABC News. www.wirednewyork.com/forum/archive/index.php/t-7324.html.
3123. Garrett L. 2005. The next pandemic? Probable cause. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.
3124. Osterholm MT. 2005. Preparing for the next pandemic. Foreign Affairs 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.
3125. Sandman PM. 2005. The flu pandemic preparedness snowball. Peter Sandman Column, October 10. www.psandman.com/col/panflu3.htm.
3126. Walsh B. 2005. A wing and a prayer. Time Asia, September 19. www.time.com/time/asia/magazine/printout/0,13675,501050926-1106457,00.html.
3127. Weintraub A. 2005. The “horrific” economics of avian flu. Business Week, September 19. www.businessweek.com/magazine/content/05_38/b3951011.htm.

3128. Wysocki Jr B, Lueck S. 2006. Just-in-time inventories leave U.S. vulnerable. *Wall Street Journal*, January 6, p. 1. calnurses.org/media-center/in-the-news/2006/january/page.jsp?itemID=27523122.
3129. 2005. The threat of global pandemics. Council on Foreign Relations Meeting. Federal News Service, June 16. cfr.org/publication/8198/threat_of_global_pandemics.html.
3130. Branswell H. 2005. Pandemic could create serious and sustained food shortages, expert warns. *Canadian Press*, June 20. mediresource.sympatico.ca/health_news_detail_pf.asp?news_id=7069.
3131. Huff AG, Beyeler WE, Kelley NS, McNitt JA. 2015. How resilient is the United States' food system to pandemics? *J Environ Stud Sci*. 5(3):337–347. <https://doi.org/10.1007/s13412-015-0275-3>.
3132. Booz Allen Hamilton. 2006. Influenza pandemic simulation: implications for the public and private sectors. boozallen.com/media/file/Influenza_Pandemic_Simulation.pdf.
3133. 2006. Bird flu: the untold story. *Oprah Winfrey Show*, January 24.
3134. Milbank D. 2005. Capitol Hill flu briefing was no trick, and no treat. *Washington Post*, October 13, p. A02. www.washingtonpost.com/wp-dyn/content/article/2005/10/12/AR2005101202250.html.
3135. Homeland Security Council. 2006. National Strategy for Pandemic Influenza Implementation Plan. May. www.whitehouse.gov/homeland/nspi_implementation.pdf.
3136. Robins B. 2005. If the chickens come home to roost . . . *Sydney Morning Herald*, September 12. www.smh.com.au/news/business/if-the-chickens-come-home-to-roost-133/2005/09/11/1126377202189.html.
3137. Atkins T. 2006. U.N. may use “flu-casters” if pandemic hits. *Reuters*, January 28. www.alertnet.org/thenews/newsdesk/L28274955.htm.
3138. Weintraub A. 2005. The “horrific” economics of avian flu. *Business Week*, September 19. www.businessweek.com/magazine/content/05_38/b3951011.htm.
3139. Schwartz R, Bicks M, Chapman S, et al. 2005. Avian flu: is the government ready for an epidemic? *ABC News*. www.wirednewyork.com/forum/archive/index.php/t-7324.html.
3140. Osterholm M, Branswell H. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak (webcast). Woodrow Wilson International Center for Scholars, September 19. www.wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.
3141. Verity R, Okell LC, Dorigatti I, Winskill P, Whittaker C, Imai N, Cuomo-Dannenburg G, Thompson H, Walker PGT, Fu H, et al. 2020. Estimates of the

severity of coronavirus disease 2019: a model-based analysis. *Lancet Infect Dis*. [Epub ahead of print 2020 Mar 30; accessed 2020 Apr 7]. [https://doi.org/10.1016/S1473-3099\(20\)30243-7](https://doi.org/10.1016/S1473-3099(20)30243-7).

3142. Osterholm M, Branswell H. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak (webcast). Woodrow Wilson International Center for Scholars, September 19. www.wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.

3143. Stern A. 2006. Preparing for pandemic: know how to bury your dead. *The Star* (Malaysia), February 16. jphpk.gov.my/English/Feb06%2016h.htm.

3144. Osterholm M, Branswell H. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak (webcast). Woodrow Wilson International Center for Scholars, September 19. www.wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.

3145. Osterholm M, Branswell H. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak (webcast). Woodrow Wilson International Center for Scholars, September 19. www.wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.

3146. Public Health Agency of Canada. 2005. Canadian Pandemic Influenza Plan. Guidelines for the Management of Mass Fatalities During an Influenza Pandemic. phac-aspc.gc.ca/cpip-pclpci/pdf-cpip-03/cpip-appendix-i.pdf.

3147. Jones L. 2005. America under attack. *Men's Health*, November, pp. 154–9.

3148. Jones L. 2005. America under attack. *Men's Health*, November, pp. 154–9.

3149. Agence France Press. 2020 Mar 23. Madrid ice rink turned into morgue due to coronavirus. CTV News. [updated 2020 Mar 23; accessed 2020 Apr 7]; <https://www.ctvnews.ca/world/madrid-ice-rink-turned-into-morgue-due-to-coronavirus-1.4864644>.

3150. Durkin E. 2020 Mar 30. FEMA sends refrigerated trucks to New York City to hold bodies. *Politico*. [accessed 2020 Apr 7]; <https://www.politico.com/states/new-york/albany/story/2020/03/30/fema-sends-refrigerated-trucks-to-new-york-city-to-hold-bodies-1269600>.

3151. Armus T. 2020 Apr 3. 'Every day it's getting worse': bodies of coronavirus victims are left on the streets in Ecuador's largest city. *Washington Post*. [accessed 2020 Apr 7]; <https://www.washingtonpost.com/nation/2020/04/03/ecuador-coronavirus-bodies/>.

3152. Kilgannon C. 2020 Apr 10. As morgues fill, N.Y.C. to bury some virus victims in Potter's Field. *New York Times*. [accessed 2020 Apr 12]; <https://www.nytimes.com/2020/04/10/nyregion/coronavirus-deaths-hart-island-burial.html>.

3153. Davis M. 2005. The coming avian flu pandemic. Tomdispatch.com www.tomdispatch.com/indexprint.mhtml?pid=13470.
3154. Wilson B. 2005. Grim flu theory: millions could die. Advertiser, January 29, p. 70. theglobeandmail.com/servlet/ArticleNews/TPStory/LAC/20051025/HEALTHPOLL25/TPNational/TopStories.
3155. Pyne C. 2005. Mass graves for bird flu. Sunday Mail, October 30, p. 93.
3156. Priest L. 2005. Pandemic fears moderate, poll says. Globe and Mail, October 25, p. A11.
3157. Cooper S. 2005. Don't fear fear or panic panic: an economist's view of pandemic flu. BMO Nesbitt Burns Inc. bmonesbittburns.com/economics/reports/20051011/dont_fear_fear.pdf.
3158. Olivari N. 2005. Some currency investors debate bird flu mutation. Reuters, October 17.
3159. Cooper S, Coxe D. 2005. An investor's guide to avian flu. BMO Nesbitt Burns Research, August. bmonesbittburns.com/economics/reports/20050812/avian_flu.pdf.
3160. Citigroup. 2006. Global portfolio strategist: avian flu. March 9. smithbarney.com/pdf/global_port_strat.pdf.
3161. Quisenberry D. 2005. Remembering the 1918 flu pandemic. Grand Rapids Press, October 30.
3162. Folley A. 2020 Mar 11. Alex Jones promotes toothpaste he claims 'kills' coronavirus; FDA warns it's fraudulent. The Hill. [updated 2020 Mar 12; accessed 2020 Apr 7]. <https://thehill.com/blogs/blog-briefing-room/news/487149-alex-jones-promotes-toothpaste-he-claims-kills-coronavirus-as>.
3163. Davies P. 2000. The Devil's Flu (New York, NY: Henry Holt and Company).
3164. Levenson M. 2020 Mar 27. Price gouging complaints surge amid coronavirus pandemic. New York Times. [accessed 2020 Apr 7]; <https://www.nytimes.com/2020/03/27/us/coronavirus-price-gouging-hand-sanitizer-masks-wipes.html>.
3165. Davis B. In Washington, tiny think tank wields big stick on regulation. Wall Street Journal, July 16. mercatus.org/pdf/materials/806.pdf.
3166. Cowen T. 2005. Avian flu: what should be done. Mercatus Center at George Mason University: Working Paper Series, November 11. mercatus.org/article.php?id=1435&print=1.
3167. Osterholm M, Branswell H. 2005. Emerging pandemic: costs and consequences of an avian influenza outbreak (webcast). Woodrow Wilson International Center for Scholars, September 19. www.wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.

3168. Branswell H. 2005. Businesses need to do continuity planning for flu pandemic, report suggests. Canadian Press, October 11. cbc.ca/cp/business/051011/b1011108.html.
3169. Cooper S, Coxe D. 2005. An investor's guide to avian flu. BMO Nesbit Burns Research, August. bmonesbitburns.com/economics/reports/20050812/avian_flu.pdf.
3170. Cooper S, Coxe D. 2005. An investor's guide to avian flu. BMO Nesbit Burns Research, August. bmonesbitburns.com/economics/reports/20050812/avian_flu.pdf.
3171. Brainerd E, Siegler MV. 2002. The economic effects of the 1918 influenza epidemic. National Bureau of Economic Research, Inc. (Washington, DC: Summer Institute). williams.edu/Economics/wp/brainerdDP3791.pdf.
3172. Council on Foreign Relations. 2005. Conference on the Global Threat of Pandemic Influenza, Session 5: What would the world look like after a pandemic? November 16. cfr.org/publication/9246/council_on_foreign_relations_conference_on_the_global_threat_of_pandemic_influenza_session_5.html.
3173. Hamilton G. 2005. Surviving the influenza pandemic. Vancouver Sun, August 25.
3174. Berkrot B. 2005. Flu-resistant investments? Try vaccines, gold. Reuters, October 24.
3175. Cooper S, Coxe D. 2005. An investor's guide to avian flu. BMO Nesbit Burns Research, August. bmonesbitburns.com/economics/reports/20050812/avian_flu.pdf.
3176. Cowen T. 2005. Avian flu: what should be done. Mercatus Center at George Mason University: Working Paper Series, November 11. mercatus.org/pdf/materials/1435.pdf.
3177. Kirby A. 2004. Bird flu's "huge potential risk." BBC News, April 21. www.news.bbc.co.uk/2/hi/science/nature/3643643.stm.
3178. Berkrot B. 2005. Flu-resistant investments? Try vaccines, gold. Reuters, October 24.
3179. Tilney FC. 1916. Commentary during a symposium on poliomyelitis. Long Island Medical Journal 10:469. medscape.com/viewarticle/472896?src=mp.
3180. Sandman PM. 2005. The flu pandemic preparedness snowball. Peter Sandman Column, October 10. www.psandman.com/col/panflu3.htm.
3181. Mackay N. 2005. Warning: this bird could kill. Sunday Herald, August 28. www.sundayherald.com/51482.
3182. Farago A. 2005. History's actors catch a cold. Orlando Sentinel, September 13.

3183. 2005. Relief workers confront “urban warfare.” CNN, September 1. www.cnn.com/2005/WEATHER/09/01/katrina.impact/.
3184. 2005. Pandemic project needed, expert says. *The Vancouver Sun*, May 5, p. A2.
3185. Osterholm MT. 2005. Preparing for the next pandemic. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.
3186. An Account of the Influenza Epidemic in Perry County, Kentucky. 1919. 8/14/19, NA, RG 200, Box 689 as cited in Institute of Medicine Board of Health. *The Threat of Pandemic Influenza: Are We Ready?* (Washington, DC: National Academies Press).
3187. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
3188. Barry JM. 2004. *The Great Influenza: The Epic Story of the Deadliest Plague in History* (New York, NY: Penguin Books).
3189. Jordan E. 1927. *Epidemic Influenza*, 1st Edition (Chicago, Illinois: American Medical Association).
3190. Crosby A. 1999. Influenza 1918. PBS American Experience. pbs.org/wgbh/amex/influenza/filmmore/transcript/transcript1.html.
3191. Garrett L. 2005. The next pandemic? Probable cause. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-garrett/the-next-pandemic.html.
3192. Rodies KE. 1998. That great call: the pandemic of 1918. *Nursing and Health Care Perspectives* 19(5):204–5.
3193. Crosby A. 1999. Influenza 1918. PBS American Experience. pbs.org/wgbh/amex/influenza/filmmore/transcript/transcript1.html.
3194. Harris G. 2005. Bush plan shows U.S. not ready for deadly flu. *New York Times*, October 8. query.nytimes.com/gst/fullpage.html?res=9E07E7DB1F30F93BA35753C1A9639C8B63&sec=health&pagewanted=print.
3195. Harbrecht L. 2005. Doctoral student’s research brings lessons, insight to a looming pandemic. *AScribe Newswire*, October 25. newswire.ascribe.org/cgi-bin/ behold.pl?ascribeid=20051025.095424&time=10%2023%20PDT&year=2005&public=0.
3196. Beech H. 2003. The quarantine blues: with suspected SARS patients getting dumped in their backyards, China’s villagers rebel. *Time Asia*, May 19. time.com/time/asia/magazine/article/0,13673,501030519-451009,00.html.
3197. O’Toole T, Mair M, Inglesby TV. 2002. Shining light on “Dark Winter.” *Clinical Infectious Diseases* 34(7):972–83. www.journals.uchicago.edu/CID/journal/issues/v34n7/020165/020165.web.pdf.

3198. Wright D. 2004. Bioterrorism: the new threat of infectious diseases. *Science and Technology*, October. brynmawr.edu/sandt/2004_october/index.html.
3199. Enserink M. 2004. Influenza: girding for disaster. Looking the pandemic in the eye. *Science* 306(5695):392–4.
3200. Nordqvist C. 2006. Who should get pandemic vaccine first? The strong, the weak, the young or the elderly? *Medical News Today*, May 12. medicalnewstoday.com/healthnews.php?newsid=43348.
3201. Branswell H. 2006. Priority urged for youth in pandemic: Top ethicist suggests “life-cycle” principle approach for vaccines. *Canadian Press*, May 12. hamiltonspectator.com/NASApp/cs/ContentServer?pagename=hamilton/Layout/Article_Type1&c=Article&cid=1147384212873&call_pageid=1020420665036&col=1112101662670.
3202. Emanuel EJ, Wertheimer A. 2006. Public health. Who should get influenza vaccine when not all can? *Science* 312(5775):854–5.
3203. Enserink M. 2004. Influenza: girding for disaster. Looking the pandemic in the eye. *Science* 306(5695):392–4.
3204. Cosic M. 2003. Panic attack. *Australian Magazine*, May 10, p. 26.
3205. Bollet AJ. 2004. *Plagues and Poxes: The Impact of Human History on Epidemic Disease* (New York, NY: Demos).
3206. Souter CR. 2005. “Psychology of looting” explained. *New England Psychologist*, November. masspsy.com/leading/0511_ne_qa.html.
3207. 2002. In the wake of the plague: the Black Death and the world it made. *New England Journal of Medicine* 247(4):297–8.
3208. Phua K, Lee LK. 2005. Meeting the challenges of epidemic infectious disease outbreaks: an agenda for research. *Journal of Public Health Policy* 26:122–32. palgrave-journals.com/jphp/journal/v26/n1/pdf/3200001a.pdf.
3209. Kelley A. 2020 Mar 31. Attacks on Asian Americans skyrocket to 100 per day during coronavirus pandemic. *The Hill*. [accessed 2020 Apr 7]; <https://thehill.com/changing-america/respect/equality/490373-attacks-on-asian-americans-at-about-100-per-day-due-to>.
3210. Porter R. 1997. *The Greatest Benefit to Mankind* (New York, NY: W.W. Norton and Company, Inc.).
3211. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
3212. Crosby A. Alfred Crosby on: influenza’s very democratic. *Influenza 1918*. Public Broadcasting System American Experience transcript. pbs.org/wgbh/amex/influenza/filmmore/reference/interview/drcrosby4.html.

3213. Schoch-Spana M. 2000. Implications of pandemic influenza for bioterrorism response. *Clinical Infectious Diseases* 31:1409–13. www.journals.uchicago.edu/CID/journal/issues/v31n6/000949/000949.text.html?erFrom=113277705876320080Guest.
3214. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
3215. 2002. In the wake of the plague: the Black Death and the world it made. *New England Journal of Medicine* 247(4):297–8.
3216. Knobler S, Mahmoud A, Lemon S, Mack A, Sivitz L, Oberholtzer K (eds.), *Learning from SARS, Preparing for the Next Disease Outbreak*, Workshop Summary (Washington, DC: National Academies Press, pp. 116–36). darwin.nap.edu/html/SARS/0309091543.pdf.
3217. Risse GB. 1988. Epidemics and history: ecological perspectives and social responses. In: Fee E, Fox DM (eds.), *AIDS: The Burdens of History* (Berkeley, CA: University of California Press, pp. 33–66).
3218. Phillips H, Killingray D. 2003. Introduction. In: Phillips H, Killingray D (eds.), *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London, UK: Routledge, pp. 1–26).
3219. 2005. Religious conservatives claim Katrina was God's omen, punishment for the United States. *Media Matters for America*. September 13. mediamatters.org/items/200509130004.
3220. 2005. Hurricane is God's work: Christian extremists. *Sydney Morning Herald*, September 3. www.smh.com.au/news/world/hurricane-is-gods-work-christian-extremists/2005/09/03/1125302770141.html.
3221. Brown J, Martin A. 2005. New Orleans residents: God's mercy evident in Katrina's wake. *Agape Press*, September 2. www.headlines.agapepress.org/archive/9/22005b.asp.
3222. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
3223. Homeland Security Council. 2006. *National Strategy for Pandemic Influenza Implementation Plan*. May. www.whitehouse.gov/homeland/nspi_implementation.pdf.
3224. Collier R. 1974. *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, NY: Atheneum).
3225. Citigroup. 2006. *Global Portfolio Strategist: Avian Flu*. March 9. smithbarney.com/pdf/global_port_strat.pdf.
3226. Osterholm M, Branswell H. 2005. *Emerging pandemic: costs and consequences of an avian influenza outbreak* (webcast). Woodrow Wilson Interna-

- tional Center for Scholars, September 19. www.wilsoncenter.org/index.cfm?topic_id=116811&fuseaction=topics.event_summary&event_id=142787.
3227. Osterholm MT. 2005. Preparing for the next pandemic. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84402/michael-t-osterholm/preparing-for-the-next-pandemic.html.
3228. Solomon C. 2005. Sims warns of flu pandemic. *Seattle Times*, October 4. seattletimes.nwsourc.com/cgi-bin/PrintStory.pl?document_id=2002538085&zsection_id=2002120005&slug=fluforum04m&date=20051004.
3229. Rosenthal E, Bradsher K. 2006. Is business ready for a flu pandemic? *New York Times*, March 16.
3230. Neergaard L. 2005. Few U.S. companies ready for flu pandemic. *Associated Press*, December 2.
3231. Sandman PM. 2005. The flu pandemic preparedness snowball. *Peter Sandman Column*, October 10. www.psandman.com/col/panflu3.htm.
3232. Harris S. 2005. Federal government's role in bird-flu response limited. *National Journal*, October 21. govexec.com/story_page.cfm?articleid=32616&printerfriendlyVers=1&.
3233. Johnston M. 2005. Bird flu victims may be forced to fend for themselves. *New Zealand Herald*, October 13. www.nzherald.co.nz/author/story.cfm?a_id=110&ObjectID=10349987.
3234. New Zealand Ministry of Health. 2005. Influenza, avian influenza, pandemic influenza FAQ. *Scoop Independent News*, September 15. www.scoop.co.nz/stories/GE0509/S00077.htm.
3235. Sandman PM. 2005. The flu pandemic preparedness snowball. *Peter Sandman Column*, October 10. www.psandman.com/col/panflu3.htm.
3236. Mason M. 2005. Official: preventing pandemic impossible. *ABC News*, October 15. abcnews.go.com/Health/wireStory?id=1216962&CMP=OTC-RSSFeeds0312.
3237. Sandman PM. 2005. The flu pandemic preparedness snowball. *Peter Sandman Column*, October 10. www.psandman.com/col/panflu3.htm.
3238. Hawaleshka D. 2005. Bracing for bird flu. *Maclean's*, March, p.46. www.macleans.ca/topstories/health/article.jsp?content=20050321_102364_102364.
3239. Bialik C. 2005 Jan 13. Just how deadly is bird flu? It depends on whom you ask. *Wall Street Journal*. [accessed 2020 Apr 12]; <https://www.wsj.com/articles/SB110512998255120225>.
3240. Gorman C. 2005. How scared should we be? Scared enough to take action. *Time*, October 17. www.time.com/time/archive/preview/0,10987,1115685,00.html.

3241. De Gennaro N. 2005. Avian flu pandemic real threat, says national expert. Daily News Journal, October 8.
3242. Sandman PM. 2005. The flu pandemic preparedness snowball. Peter Sandman Column, October 10. www.psandman.com/col/panflu3.htm.
3243. New Zealand Ministry of Health. 2005. Ministry of Health flu fact sheet. October 21. xtramsn.co.nz/news/0,11964-4925488,00.html.
3244. Vasquez J. 2006. U.S. govt. bird flu advice: stockpile tuna, milk. CBS 5, March 13. cbs5.com/topstories/local_story_073011212.html.
3245. Leno J. 2006. Late-night political jokes. March 12–18. politicalhumor.about.com/library/bldailyfeed3.htm.
3246. Leno J. 2006. Late-night political jokes. March 12–18. politicalhumor.about.com/library/bldailyfeed3.htm.
3247. U.S. Department of Health and Humane Services. 2006. Pandemic flu planning checklist for individuals and families. January. pandemicflu.gov/plan/pdf/Individuals.pdf.
3248. Robertson J, Robertson R. 2005. Apocalypse Chow: How to Eat Well When the Power Goes Out (New York, NY: Simon Spotlight Entertainment).
3249. 2006. Bird flu: things to know, not fear. USA Today, April 12. usatoday.com/news/opinion/editorials/2006-04-11-bird-flu_x.htm.
3250. 2006. Bird flu: the untold story. Oprah Winfrey Show, January 24.
3251. Avila J, Ramsey M. 2006. Renowned bird flu expert warns: be prepared. March 14. abcnews.go.com/WNT/AvianFlu/story?id=1724801&page=1.
3252. Screenshot of google cache archived at <http://ryanschultz.vox.com/library/post/us-consulate-in-hong-kong-backtracks-on-bird-flu-warning-why.html>
3253. U.S. Department of Health and Human Services. 2006 Jan. Pandemic flu planning checklist for individuals and families. HHS; <http://www.pandemic-flu.gov/plan/pdf/individuals.pdf>,
3254. Baum D. 2006 Nov 11. State Department simply offers good advice. Greenhammer. <http://www.greenhammer.net/2006/week45.htm>.
3255. Dreifus C. 2006. Bird flu and you. AARP.34–35.
3256. Smallheer S. 2006. Towns told: no federal help if bird flu strikes. Rutland Herald, May 12.
3257. Woodson G. 2005. Preparing for the Coming Influenza Pandemic (Decatur, GA: The Druid Oak Health Center). crofsblogs.typepad.com/h5n1/files/ComingPandemic.pdf.

3258. Deutsche Presse-Agentur. 2006 Nov 7. Stockpiling suggested for possible bird flu. Bangkok Post Breaking News. http://www.bangkokpost.net/breaking_news/breakingnews.php?id=114048
3259. Federal Emergency Management Agency. 2004. Are you ready? An in-depth guide to citizen preparedness. August. fema.gov/pdf/areyouready/areyouready_full.pdf.
3260. Dreifus C. 2006. Bird flu and you. AARP. 34–35.
3261. U.S. Environmental Protection Agency. 2005. Emergency disinfection of drinking water. September. epa.gov/safewater/faq/emerg.html.
3262. Owens SR. 2001. Being prepared: preparations for a pandemic of influenza. European molecular Biology Organization Reports 2(12):1061–3.
3263. Kennedy M. 2005. Turning fear into action. Ottawa Citizen, March 9, p. A6.
3264. Association of Avian Pathologists American College of Poultry Veterinarians fact sheet. 2005. Asian bird flu.
3265. Pluimers F (Chairman). 2003. Workshop 4: Control measures and legislation. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands, at library.wur.nl/frontis/avian_influenza/workshop4.pdf).
3266. U.S. Department of Agriculture National Agricultural Statistics Service. 2006. Poultry slaughter-2005 annual summary. February. usda.mannlib.cornell.edu/reports/nassr/poultry/ppy-bban/pslaan06.pdf.
3267. 2003. Workshop 4. Control measures and legislation. In: Schrijver RS, Koch G (eds.), Avian Influenza: Prevention and Control. Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control. The Netherlands 13–15 October. library.wur.nl/frontis/avian_influenza/workshop4.pdf.
3268. Campitelli L, Fabiani C, Puzelli S, et al. 2002. H3N2 influenza viruses from domestic chickens in Italy: an increasing role for chickens in the ecology of influenza? Journal of General Virology 83:413–20.
3269. World Health Organization. 2004. Avian influenza A(H5) in rural areas in Asia: food safety considerations. February 12. who.int/foodsafety/micro/avian2/en/index.html.
3270. Capua I, Mutinelli F, Marangon S, Alexander DJ. 2000. H7N1 avian influenza in Italy (1999 to 2000) in intensively reared chickens and turkeys. Avian Pathology 29:537–43.
3271. Editorial. 2005. Avian influenza virus: are we prepared? Canadian Medical Association Journal 172:965. cmaj.ca/cgi/content/full/172/8/965.

3272. Food and Agriculture Organization of the United Nations 2005. Animal health special report. avian influenza—questions and answers. www.fao.org/ag/againfo/subjects/en/health/diseases-cards/avian_qa.html#1.

3273. Dierauf L. Avian influenza in wild birds. U.S. Department of the Interior U.S. Geological Survey. Wildlife Health Bulletin 04-01. www.nwhc.usgs.gov/publications/wildlife_health_bulletins/WHB_04_01.jsp.

3274. Marangon S, Capua SI, Rossi E, Ferre N Dalla Pozza M, Bonfanti L, Manelli A. 2003. The control of avian influenza in areas at risk: the Italian experience 1997. In: Schrijver RS, Koch G (eds), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control*. The Netherlands 13–15 October. library.wur.nl/frontis/avian_influenza/05_marangon.pdf.

3275. Enserink M. 2004. Bird flu infected 1,000, Dutch researchers say. *Science* 306:590.

3276. World Health Organization, Department of Communicable Disease Surveillance and Response, Global Influenza Programme. 2004. Vaccines for pandemic influenza: informal meeting of WHO, influenza vaccine manufacturers,

3277. McNeil DG. 2004. Experts call wild birds victims, not vectors. *New York Times*, October 12, p. 6.

3278. Ruef C. 2004. A new influenza pandemic—unprepared for a big threat? *Infection* 32:313–4.

3279. Sturm-Ramirez KM, Ellis T, Bousfield B, et al. 2004. Reemerging H5N1 influenza viruses in Hong Kong in 2002 are highly pathogenic to ducks. *Journal of Virology* 78:4892–901. jvi.asm.org/cgi/content/full/78/9/4892?view=long&pmid=15078970.

3280. BirdLife International. 2006. BirdLife statement on avian influenza. April 11. birdlife.org/action/science/species/avian_flu/index.html.

3281. 2004. Flu pandemic could wreck ecosystem. *Australia Seven News*, December 11 as cited in Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press, p. 123).

3282. Hulse-Post DJ, Sturm-Ramirez KM, Humberd J, et al. 2005. Role of domestic ducks in the propagation and biological evolution of highly pathogenic H5N1 influenza viruses in Asia. *Proceedings of the National Academy of Sciences of the United States of America* 102(30):10682–87.

3283. Hulse-Post DJ, Sturm-Ramirez KM, Humberd J, et al. 2005. Role of domestic ducks in the propagation and biological evolution of highly pathogenic H5N1 influenza viruses in Asia. *Proceedings of the National Academy of Sciences of the United States of America* 102(30):10682–87.

3284. Adler J. 2005. The fight against the flu. *Newsweek*, October 31.

3285. Sturm-Ramirez KM, Hulse-Post DJ, Govorkova EA, et al. 2005. Are ducks contributing to the endemicity of highly pathogenic H5N1 influenza virus in Asia? *Journal of Virology* 79(17):11269–79.
3286. Chong J. 2006. Bird flu defies control efforts. *Los Angeles Times*, March 27.
3287. University of Georgia Southeastern Cooperative Wildlife Disease Study. 2002. Low pathogenicity AI in Virginia. SCWDS Briefs, July.
3288. 2006. Farmers protest against free-range duck ban. *World Poultry* 22(3):6.
3289. Piller C. 2005. Vietnam officials ban duck, goose farming to staunch bird flu. *Los Angeles Times*, February 5.
3290. Brown D. 2005. Scientists race to head off lethal potential of avian flu. *Washington Post*, August 23.
3291. Nstate, LLC. 2005. Minnesota. Netstate.com June 2. netstate.com/states/intro/mn_intro.htm.
3292. Halvorson DA. 1995. Avian influenza control in Minnesota. *Poultry Digest*, September, pp. 12–19.
3293. Stegeman A (Chairman). 2003. Workshop 1: Introduction and spread of avian influenza. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control*. library.wur.nl/frontis/avian_influenza/workshop1.pdf.
3294. Minnesota Agricultural Statistics Service. 2005. Turkeys raised. *Minnesota Ag News*, January 7. www.nass.usda.gov/mn/tkrds05.pdf.
3295. Stegeman A (Chairman). 2003. Workshop 1: Introduction and spread of avian influenza. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control*. library.wur.nl/frontis/avian_influenza/workshop1.pdf.
3296. Suarez DL. 2000. Evolution of avian influenza viruses. *Veterinary Microbiology* 74:15–27.
3297. Suarez DL. 2000. Evolution of avian influenza viruses. *Veterinary Microbiology* 74:15–27.
3298. Easterday BC. 1975. Animal influenza. In: Kilbourne ED (ed.), *The Influenza Viruses and Influenza* (New York, NY: Academic Press, pp. 449–81).
3299. Minnesota Department of Agriculture. 2005. *Poultry Your Way: A Guide to Management Alternatives for the Upper Midwest* (University of Minnesota, St. Paul Minnesota Institute for Sustainable Agriculture). www.cias.wisc.edu/pdf/poultryway.pdf.

3300. Bureau of Natural Resources–Wildlife Division. 2000. Wild turkey (*meleagris gallopavo*). Wildlife in Connecticut Informational Series. January. dep.state.ct.us/burnatr/wildlife/factshts/wldtrky.htm.
3301. Bureau of Natural Resources–Wildlife Division. 2000. Wild turkey (*meleagris gallopavo*). Wildlife in Connecticut Informational Series. January. dep.state.ct.us/burnatr/wildlife/factshts/wldtrky.htm.
3302. Minnesota Department of Agriculture. 2005. Poultry Your Way: A Guide to Management Alternatives for the Upper Midwest (University of Minnesota, St. Paul Minnesota Institute for Sustainable Agriculture). cias.wisc.edu/pdf/poultryway.pdf.
3303. Halvorson DA, Kelleher CJ, Senne DA. 1985. Epizootiology of avian influenza: effect of seasonal incidence in sentinel ducks and domestic turkey in Minnesota. *Applied and Environmental Microbiology* 49:914–9.
3304. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 113–30).
3305. Stegeman A (Chairman). 2003. Workshop 1: Introduction and spread of avian influenza. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control*. library.wur.nl/frontis/avian_influenza/workshop1.pdf.
3306. Furtman M. 2006. Waterfowling's tug of war. Minnesota Department of Natural Resources. www.dnr.state.mn.us/volunteer/novdec99/flyway.html.
3307. Alexander DJ. 1993. Orthomyxovirus infection. In: McFerran JB, McNulty MS (eds.), *Virus Infections of Birds* (Amsterdam, The Netherlands: Elsevier Science Publishers, pp. 287–316).
3308. Alexander DJ. 1993. Orthomyxovirus infection. In: McFerran JB, McNulty MS (eds.), *Virus Infections of Birds* (Amsterdam, The Netherlands: Elsevier Science Publishers, pp. 287–316).
3309. Hall C. 2004. Impact of avian influenza on U.S. poultry trade relations-2002: H5 or H7 low pathogenic avian influenza. *Annals of the New York Academy of Science* 1026:47–53. www.blackwell-synergy.com/doi/abs/10.1196/annals.1307.006.
3310. Halvorson DA. 1995. Avian influenza control in Minnesota. *Poultry Digest*, September, pp. 12–19.
3311. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press).
3312. Shortridge KF, Peiris JSM, Guan Y. 2003. The next influenza pandemic: lessons from Hong Kong. *Journal of Applied Microbiology* 94:70–9.

3313. Stegeman A (Chairman). 2003. Workshop 1: Introduction and spread of avian influenza. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control. library.wur.nl/frontis/avian_influenza/workshop1.pdf.
3314. Swayne DE, Akey BL. 2003. Avian influenza control strategies in the United States of America. In: Schrijver RS, Koch G (eds.), Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control (Wageningen, The Netherlands, pp. 113–30).
3315. Flesher J. 2005. Low-grade case of H5N1 bird flu found in Michigan three years ago. Associated Press, October 26. curevents.com/vb/archive/index.php/t-26103.html.
3316. 2005. Web focus—avian flu timeline. Nature Web. www.nature.com/nature/focus/avianflu/timeline.html.
3317. Swayne DE. 2003. Transcript of the question and answer sessions from the Fifth International Symposium on Avian Influenza. *Avian Diseases* 47:1219–55.
3318. FAOSTAT. 2019. Livestock primary. Food and Agriculture Organization of the United Nations; [updated 2020 Mar 4; accessed 2020 Apr 7]. <http://www.fao.org/faostat/en/#data/QL>.
3319. Whiting D. 2004. Herculean task to clean up Asia's family farms. The Star Online, January 29. forests.org/articles/reader.asp?linkid=28841.
3320. Food and Agriculture Organization of the United Nations. 2004. FAO Recommendations on the prevention, control and eradication of highly pathogenic avian influenza (HPAI) in Asia. www.fao.org/ag/againfo/subjects/en/health/diseases-cards/27septrecomm.pdf.
3321. Food and Agriculture Organization of the United Nations. 2004. Questions and answers on avian influenza; briefing paper prepared by AI Task Force, Internal FAO Document, January 30. animal-health-online.de/drms/faoinfluenza.pdf.
3322. Gilbert M, Wint W, Slingenbergh J. 2004. The ecology of highly pathogenic avian influenza in East and South-east Asia: outbreaks distribution, risk factors and policy implications. Consultancy report for the Animal Health Service of the Animal Production and Health Division of the Food and Agriculture Organization of the United Nations, Rome, Italy, August.
3323. Pitt D. 2020 Apr 10. Industry scrambles to stop fatal bird flu in South Carolina. Associated Press. [accessed 2020 Apr 18]. <https://apnews.com/7e284ee45dae602841d246f933fae6ec>.
3324. Branswell H. 2005. Penning poultry indoors doesn't eliminate risk of bird flu spread: officials. Canadian Press, August 24. avianflu.futurehs.com/?m=20050824.

3325. MacKenzie D. 2005. Bird flu may have reached Europe. *New Scientist*, October 10.
3326. 2005. Europe puts poultry indoors as bird flu cases multiply. Agence France Presse, February 7. breitbart.com/news/2006/02/17/060217125003.zx1q7vqk.html.
3327. Soil Association. 2001. Organic farming, food quality and human health. A review of the evidence. August. [soilassociation.org/Web/SA/saweb.nsf/9f788a2d1160a9e580256a71002a3d2b/de88ae6e5aa94aed80256abd00378489/\\$FILE/foodqualityreport.pdf](http://soilassociation.org/Web/SA/saweb.nsf/9f788a2d1160a9e580256a71002a3d2b/de88ae6e5aa94aed80256abd00378489/$FILE/foodqualityreport.pdf).
3328. Gilbert M, Chaitaweesub P, Parakamawongsa T, et al. 2006. Free-grazing ducks and highly pathogenic avian influenza, Thailand. *Emerging Infectious Diseases* 12(2):227–34.
3329. Order of British Columbia. Perry Robert William Kendall. www.protocol.gov.bc.ca/protocol/prgs/obc/2005/2005_Kendall.htm.
3330. Branswell H. 2005. Penning poultry indoors doesn't eliminate risk of bird flu spread: Officials. Canadian Press, August 24. promedmail.org/pls/promed/f?p=2400:1001::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:1000%2C30173.
3331. Centers for Disease Control and Prevention. 2004. Update on avian influenza A (H5N1). April 12. www.cdc.gov/flu/avian/professional/han081304.htm.
3332. Richmond JY. 1998. The 1, 2, 3's of Biosafety Levels. Centers for Disease Control and Prevention Office of Health and Safety, February 6. www.cdc.gov/od/ohs/symp5/jyrtext.htm.
3333. Centers for Disease Control and Prevention. 2004. Update on avian influenza A (H5N1). April 12. www.cdc.gov/flu/avian/professional/han081304.htm.
3334. Environment, Health and Safety Division: Ernes Orlando Lawrence Berkeley National Laboratory. Biosafety program. lbl.gov/ehs/biosafety/Biosafety_Manual/html/bio_level_3.shtml.
3335. Richmond JY. 1998. The 1, 2, 3's of Biosafety Levels. Centers for Disease Control and Prevention Office of Health and Safety, February 6. www.cdc.gov/od/ohs/symp5/jyrtext.htm.
3336. Environment, Health and Safety Division: Ernes Orlando Lawrence Berkeley National Laboratory. Biosafety program. lbl.gov/ehs/biosafety/Biosafety_Manual/html/bio_level_3.shtml.
3337. Richmond JY. 1998. The 1, 2, 3's of Biosafety Levels. Centers for Disease Control and Prevention Office of Health and Safety, February 6. www.cdc.gov/od/ohs/symp5/jyrtext.htm.

3338. Environment, Health and Safety Division: Ernes Orlando Lawrence Berkeley National Laboratory. Biosafety program. lbl.gov/ehs/biosafety/Biosafety_Manual/html/bio_level_3.shtml.
3339. Stegeman A (Chairman). 2003. Workshop 1: Introduction and spread of avian influenza. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control*. library.wur.nl/frontis/avian_influenza/workshop1.pdf.
3340. Cutler GJ. 1986. The nature and impact of layer industry changes. *Proceedings of the Second International Symposium on Avian Influenza* (University of Wisconsin: U.S. Animal Health Association, pp. 423–6).
3341. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The threat of global pandemics. Presentation for the Council on Foreign Relations, June 16. cfr.org/publication.html?id=8198.
3342. Delgado CL, Narrod CA, Tiongco MM. 2003. Policy, technical, and environmental determinants and implications of the scaling-up of livestock production in four fast-growing developing countries: a synthesis. Submitted to the Food and Agricultural Organization of the United Nations by the International Food Policy Research Institute. July 24. www.fao.org/WAIRDOCS/LEAD/x6170e/x6170e00.htm.
3343. Garrett L. 2005. The next pandemic? Probable cause. *Foreign Affairs* 84(4). www.foreignaffairs.org/20050701faessay84401/laurie-Garrett/the-next-pandemic.html.
3344. Webster R, Plotkin S, Dodet B. 2005. Emergence and control of viral respiratory diseases. *Emerging Infectious Disease*. www.cdc.gov/ncidod/EID/vol11no04/05-0076.htm.
3345. Gilbert M, Wint W, Slingenbergh J. 2004. The ecology of highly pathogenic avian influenza in East and South-east Asia: outbreaks distribution, risk factors and policy implications. Consultancy report for the Animal Health Service of the Animal Production and Health Division of the Food and Agriculture Organization of the United Nations, Rome, Italy, August.
3346. Council on Foreign Relations. 2005. Session 1: Avian flu—where do we stand? Conference on the Global Threat of Pandemic Influenza, November 16. cfr.org/publication/9230/council_on_foreign_relations_conference_on_the_global_threat_of_pandemic_influenza_session_1.html.
3347. Council on Foreign Relations. 2005. Session 1: Avian flu—where do we stand? Conference on the Global Threat of Pandemic Influenza, November 16. cfr.org/publication/9230/council_on_foreign_relations_conference_on_the_global_threat_of_pandemic_influenza_session_1.html.
3348. Shortridge K. 2006. H5N1 “bird flu”—some insight. *New Zealand Pharmacy*, April, pp. 23–7.

3349. Woods M. 2001. How to brew flu: put ducks, people, and pigs together. *Pittsburgh Post-Gazette*, April 29, p. A18.
3350. Rudd K. 1995. Poultry reality check needed. *Poultry Digest*, December 1995, pp. 12–20. www.ansci.cornell.edu/poultry/ppapril99.pdf.
3351. Berry W. 1999. Nation's destructive farm policy is everyone's concern. *Herald-Leader*, July 11. agrenv.mcgill.ca/agrecon/ecoagr/doc/berry.htm.
3352. Tyson Foods, Inc. 2006. History: timeline. www.tysonfoodsinc.com/AboutTyson/History/Timeline.aspx.
3353. Perdue ML, Swayne DE. 2005. Public health risk from avian influenza viruses. *Avian Diseases* 49:317–27.
3354. Zanella A. 2002. Avian influenza attributable to Serovar H7N1 in light layers in Italy. *Avian Diseases* 47:1177–80.
3355. Food and Agriculture Organization of the United Nations. 2004. Emergency Prevention System Transboundary Animal Diseases, Bulletin No. 25 January-June. fao.org/documents/show_cdr.asp?url_file=/docrep/007/y5537e/y5537e09.htm.
3356. Linares JA, Gayle L, Sneed L, Wigle W. 2004. H5N2 avian influenza outbreak in Texas. In: 76th Northeastern Conference on Avian Diseases: June 9–11 (State College, Pennsylvania: Department of Veterinary Science, College of Agricultural Sciences, Pennsylvania State University, p. 14). www.vetsci.psu.edu/NECAD/NECADProceedings.pdf.
3357. Van Kerkhove MD, Vong S, Guitian J, Holl D, Mangtani P, San S, Ghani AC. 2009. Poultry movement networks in Cambodia: implications for surveillance and control of highly pathogenic avian influenza (HPAI/H5N1). *Vaccine*. 2009 Oct 23;27(45):6345–6352. <https://doi.org/10.1016/j.vaccine.2009.05.004>.
3358. Alexander DJ. 2007. An overview of the epidemiology of avian influenza. *Vaccine*. 25:5637–5644.
3359. Veterinary Services; Surveillance, Preparedness, and Response Services; Animal and Plant Health Inspection Service. 2016. Final report for the 2014–2015 outbreak of highly pathogenic avian influenza (HPAI) in the United States. U.S. Department of Agriculture; [revised 2016 Aug 11; accessed 2020 Apr 7].
3360. U.S. Department of Agriculture. 2020 Apr 9. USDA confirms highly pathogenic H7N3 avian influenza in a commercial flock in Chesterfield County, South Carolina. USDA. [accessed 2020 Apr 18]. https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/sa_by_date/sa-2020/sa-04/hpai-sc.
3361. Enserink M. 2005. Veterinary scientists shore up defenses against bird flu. *Science* 308(5720):341.
3362. Capua I, Alexander DJ. 2004. Avian influenza: recent developments. *Avian Pathology* 33:393–404.

3363. Webby RJ, Webster RG. 2001. Emergence of influenza A viruses. *Philosophical Transactions of the Royal Society of London* 356:1817–28.
3364. World Health Organization. 2005. Avian influenza: assessing the pandemic threat, January 1. www.who.int/csr/disease/influenza/H5N1-9reduit.pdf.
3365. Enserink M. 2005. Veterinary scientists shore up defenses against bird flu. *Science* 308(5720):341.
3366. Capua I, Alexander DJ. 2004. Avian influenza: recent developments. *Avian Pathology* 33:393–404.
3367. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press).
3368. U.S. Government Accountability Office. 2017 Apr 13. Avian influenza: USDA has taken actions to reduce risks but needs a plan to evaluate its efforts. Washington: GAO. Report No.: GAO-17-360. [accessed 2020 Apr 7]. <https://www.gao.gov/assets/690/684086.pdf>.
3369. Zanella A. 2002. Avian influenza attributable to Serovar H7N1 in light layers in Italy. *Avian Diseases* 47:1177–80.
3370. Swayne DE. 2003. Transcript of the question and answer session from the Fifth International Symposium on Avian Influenza. *Avian Diseases* 47:1219–55.
3371. Normile D. 2004. Stopping Asia's avian flu: a worrisome third outbreak. *Science* 303:447.
3372. Ross E. 2004. Asia is the traditional cradle of influenza, although disease can originate anywhere. *Biotech Week*, February 25, p. 628.
3373. Abbot A. 2004. Canadian bird flu prompts mass cull. *Nature News*, April 6.
3374. Food and Agriculture Organization of the United Nations. FAOSTAT database. faostat.fao.org/faostat/collections?subset=agriculture.
3375. Osterholm MT. 2005. Preparing for the next pandemic. *New England Journal of Medicine* 352(18):1839–42. content.nejm.org/cgi/content/full/352/18/1839.
3376. Food and Agriculture Organization of the United Nations. FAOSTAT database. faostat.fao.org/faostat/collections?subset=agriculture.
3377. Sipress A. 2005. As SE Asian farms boom, stage set for a pandemic; conditions ripe for spread of bird flu. *Washington Post*, February 5, p. A01.
3378. Osterholm MT. 2005. Preparing for the next pandemic. *New England Journal of Medicine* 352(18):1839–42. content.nejm.org/cgi/content/full/352/18/1839.
3379. Delgado CL, Narrod CA 2002. Impact of the changing market forces and policies on structural change in the livestock industries of selected fast-growing

developing countries. Final Research Report of Phase I, International Food Policy Research Institute.

3380. Wallace RG, Bergmann L, Hogerwerf L, Gilbert M. 2010. Are influenzas in southern China byproducts of the region's globalising historical present? In: Giles-Vernick T, Craddock S, Gun JL, editors. *Influenza and public health: learning from past pandemics*. London: Earthscan. p. 101–144.

3381. Orent W. 2006. Big chicken farms gave birds the flu. *Pittsburgh Post-Gazette*, March 19. post-gazette.com/pg/06078/672413-109.stm.

3382. ZhichuuYan J, et al. 2003. Inside China. *Pig Progress* 19(1).

3383. 2004. Current quotations. Associated Press, February 2.

3384. Shortridge KF. 1982. Avian influenza A viruses of southern China and Hong Kong: ecological aspects and implications for man. *Bulletin of the World Health Organization* 60:129–35.

3385. Ross E. 2004. Asia is the traditional cradle of influenza, although disease can originate anywhere. *Biotech Week*, February 25, p. 628.

3386. 2005. Poultry is fastest-growing sector of meat industry: UN expert. *Agence France Presse*, February 24.

3387. Bellaver C, Bellaver IH. 1999. Livestock production and quality of societies' life in transition economies. *Livestock Production Science* 59:125–35.

3388. FAOSTAT. 2019. Food and agriculture data. Rome: Food and Agriculture Organization of the United Nations; <http://faostat.fao.org/faostat/collections?subset=agriculture>.

3389. Delgado CL, Narrod CA. 2002. Impact of the changing market forces and policies on structural change in the livestock industries of selected fast-growing developing countries. Final Research Report of Phase I, International Food Policy Research Institute.

3390. Food and Agriculture Organization of the United Nations (FAO). 1998. *Industrial livestock production, concentrate feed demand and natural resource requirements in China* Ke Bingsheng. Beijing, China: China Agricultural University.

3391. Food and Agriculture Organization of the United Nations (FAO). 2007b. FAOSTAT. Rome, Italy.

3392. Food and Agriculture Organization of the United Nations (FAO). 1998. *Industrial livestock production, concentrate feed demand and natural resource requirements in China* Ke Bingsheng. Beijing, China: China Agricultural University.

3393. Simpson JR, Shi Y, Li O, Chen W, Liu S. 1999. Pig, broiler and laying hen farm structure in China, 1996. Proposal to International Agrohydrology Research and Training Center (IARTC) International Symposium, June 25–26.

3394. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. Federal News Service, June 16. www.cfr.org/publication/8198/threat_of_global_pandemics.html.
3395. Oshitani H. Communicable diseases in the Western Pacific region. Inaugural Ceremony of the Scientific Advisory Structure of the Centre for Health Protection, Department of Health, Hong Kong. www.info.gov.hk/gia/general/200406/23/ppt2.pdf.
3396. Motavalli J. 2005. Laurie Garrett: are we prepared for avian flu? Interviewed by Jim Motavalli. E Magazine, July–August 2005, www.emagazine.com/view/?2826.
3397. De Haan C, Steinfeld H, Blackburn H. 1997. Livestock and the Environment: Finding a Balance (Brussels, Belgium: European Commission Directorate-General for Development). fao.org/docrep/x5303e/x5303e00.htm.
3398. United National Environment Programme Global Environment Facility. 2003. Protecting the Environment from the Impact of the Growing Industrialization of Livestock Production in East Asia. Working paper. Thailand as cited in Davis M. 2005. The Monster at Our Door: The Global Threat of Avian Flu (New York, NY: The New Press, p. 83).
3399. Tao B. 2003. A stitch in time: addressing the environmental, health, and animal welfare effects of China's expanding meat industry. Georgetown International Environmental Law Review, Winter. findarticles.com/p/articles/mi_qa3970/is_200301/ai_n9187183/print.
3400. Taylor M. 2005. Is there a plague on the way? Farm Journal, March 10.
3401. U.S. Department of Agriculture. Center for Emerging Issues 2000. Overseas investments by U.S. meat corporations what's the future for U.S. exports? Changing Times in Animal Agriculture, July.
3402. Powell J. 2004. A global game of chicken: with lives and billions of dollars at stake, a Cargill processing plant in Thailand has become an industry model in the war against avian influenza. Star Tribune (Minneapolis, MN), November 1, p. 1D.
3403. Powell J. 2004. A global game of chicken: with lives and billions of dollars at stake, a Cargill processing plant in Thailand has become an industry model in the war against avian influenza. Star Tribune (Minneapolis, MN), November 1, p. 1D.
3404. Dominguez A. 2005. Antiviral use on Chinese poultry makes bird flu fight tougher. Associated Press, June 20.
3405. Uyeki TM, Peiris M. 2019. Novel avian influenza A virus infections of humans. Infect Dis Clin North Am. 33(4):907–932. <https://doi.org/10.1016/j.idc.2019.07.003>.

3406. Philippon DAM, Wu P, Cowling BJ, Lau EHY. 2020 Mar 10. Avian influenza human infections at the human-animal interface. *J Infect Dis.* [Epub ahead of print 2020 Mar 10; accessed 2020 Apr 6]. <https://doi.org/10.1093/infdis/jiaa105>.
3407. Centers for Disease Control and Prevention. 2005. Avian influenza infections in humans, May 24. www.cdc.gov/flu/avian/gen-info/avian-flu-humans.htm.
3408. Poirot E, Levine MZ, Russell K, Stewart RJ, Pompey JM, Chiu S, Fry AM, Gross L, Havers FP, Li ZN, et al. 2019. Detection of avian influenza A(H7N2) virus infection among animal shelter workers using a novel serological approach—New York City, 2016–2017. *J Infect Dis.* 219(11):1688–1696. <https://doi.org/10.1093/infdis/jiy595>.
3409. Centers for Disease Control and Prevention. 2005. Avian influenza infections in humans, May 24. www.cdc.gov/flu/avian/gen-info/avian-flu-humans.htm.
3410. Lopez-Martinez I, Balish A, Barrera-Badillo G, Jones J, Nuñez-García TE, Jang Y, Aparicio-Antonio R, Azziz-Baumgartner E, Belser JA, Ramirez-Gonzalez JE, et al. 2013. Highly pathogenic avian influenza A(H7N3) virus in poultry workers, Mexico, 2012. *Emerg Infect Dis.* 19(9):1531–1534. <https://doi.org/10.3201/eid1909.130087>.
3411. Puzelli S, Rossini G, Facchini M, Vaccari G, Di Trani L, Di Martino A, Gaibani P, Vocale C, Cattoli G, Bennett M, et al. 2014. Human infection with highly pathogenic A(H7N7) avian influenza virus, Italy, 2013. *Emerg Infect Dis.* 20(10):1745–1749. <https://doi.org/10.3201/eid2010.140512>.
3412. Uyeki TM, Peiris M. 2019. Novel avian influenza A virus infections of humans. *Infect Dis Clin North Am.* 33(4):907–932. <https://doi.org/10.1016/j.idc.2019.07.003>.
3413. Philippon DAM, Wu P, Cowling BJ, Lau EHY. 2020 Mar 10. Avian influenza human infections at the human-animal interface. *J Infect Dis.* [Epub ahead of print 2020 Mar 10; accessed 2020 Apr 6]. <https://doi.org/10.1093/infdis/jiaa105>.
3414. Mudeva A. 2005. Bird flu fears haunt Netherlands again. Reuters, September 15. www.jphpk.gov.my/English/Sept05%2016.htm.
3415. The World Factbook. 2006. Netherlands. January 10. www.cia.gov/cia/publications/factbook/geos/nl.html.
3416. Capua I, Alexander DJ. 2004. Avian influenza: recent developments. *Avian Pathology* 33:393–404.
3417. Enserink M. 2004. Bird flu infected 1,000, Dutch researchers say. *Science* 306:590.

3418. Enserink M. 2004. Bird flu infected 1,000, Dutch researchers say. *Science* 306:590.
3419. World Health Organization. 2003. Avian influenza in the Netherlands: disease outbreak reported. *Epidemic and Pandemic Alert and Response*. April 24. www.who.int/csr/don/2003_04_24/en/.
3420. Koopmans M, Wilbrink B, Conyn M, et al. 2004. Transmission of H7N7 avian influenza A virus to human beings during a large outbreak in commercial poultry farms in the Netherlands. *Lancet* 363(9409):587–93.
3421. Shortridge KF. 2003. Avian influenza viruses in Hong Kong: zoonotic considerations. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands. pp. 9–18).
3422. Democracy Now. 2005. Transcript—Mike Davis on The Monster at Our Door: The Global Threat of Avian Flu. Democracy Now. October 19. democracynow.org/article.pl?sid=05/10/19/1332209.
3423. Perry S. 2006. Bird flu: “This thing just continues to march.” *City Pages*, March 22. citypages.com/databank/27/1320/article14219.asp.
3424. Alexander DJ, Capua I, Brown IH. 2003. Avian influenza viruses and influenza in humans. In: Schrijver RS, Koch G (eds.), *Proceedings of the Frontis Workshop on Avian Influenza: Prevention and Control* (Wageningen, The Netherlands, pp. 1–12).
3425. Daily G, Ehrlich PR. 1996. Global change and human susceptibility to disease. *Annual Review of Energy and the Environment* 21:125–44.
3426. New Harvest. new-harvest.org.
3427. Webster RG, Wright SM, Castrucci MR, Bean WJ, Kawaoka Y. 1993. Influenza—a model of an emerging virus disease. *Intervirology* 35:16–25.
3428. Goetz T. 2006. The battle to stop bird flu. *Wired*, January, p. 111–5.
3429. Macmahon E. 2005. Preface. *Journal of Antimicrobial Chemotherapy* 55:i1.
3430. Thomas G, Morgan-Witts M. 1982. *Anatomy of an Epidemic* (Garden City, New York, NY: Doubleday)
3431. MacKenzie D. 2006. Genes of deadly bird flu reveal Chinese origin. *New Scientist*, February 6. www.newscientist.com/article.ns?id=dn8686.
3432. U.S. Department of the Interior, U.S. Geological Survey. 2005. The avian influenza H5N1 threat. August. www.nwhc.usgs.gov/publications/fact_sheets/pdf/s/ai/HPAI082005.pdf.

3433. Gambaryan A, Tuzikov A, Pazynina G, Bovin N, Balish A, Klimov A. 2005. Evolution of the receptor binding phenotype of influenza A (H5) viruses. *Virology* 344(2):432–8.
3434. Davis M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu* (New York, NY: The New Press).
3435. Myers KP, Olsen CW, Setterquist SE, et al. 2006. Are swine workers in the United States at increased risk of infection with zoonotic influenza virus? *Clinical Infectious Diseases* 42(1):14–20.
3436. Beare AS, Webster RG. 1991. Replication of avian influenza viruses in humans. *Archives of Virology* 119:37–42.
3437. Ison MG, Mills J, Openshaw P, Zambon M, Osterhaus A, Hayden F. 2002. Current research on respiratory viral infections: Fourth International Symposium. *Antiviral Research* 55:227–8.
3438. Gray R. 2005. Scientists aim for clone cure to bird flu. Scotland on Sunday, October 23.
3439. Truyen U, Parrish CR, Harder TC, Kaaden O. 1995. There is nothing permanent except change. The emergence of new virus diseases. *Veterinary Microbiology* 43:103–22.
3440. Perez DR, Nazarian SH, McFadden G, Gilmore MS. 2005. Miscellaneous threats: highly pathogenic avian influenza, and novel bio-engineered organisms. In: Bronze MS, Greenfield RA (eds.), *Biodefense: Principles and Pathogens* (Norfolk, UK: Horizon Bioscience).
3441. Food and Agriculture Organization of the United Nations. 2004. FAO workshop on social and economic impacts of avian influenza control, Bangkok, Thailand. www.fao.org/ag/againfo/subjects/documents/execsumm_avian.pdf.
3442. Shortridge KF. 2003. Severe acute respiratory syndrome and influenza. *American Journal of Respiratory and Critical Care Medicine* 168:1416–20.
3443. Christensen K. 2003. Population genetics. kursus.kvl.dk/shares/vet-gen/_Popgen/genetics/8/2.htm.
3444. University of Waikato. Human evolution. sci.waikato.ac.nz/evolution/HumanEvolution.shtml.
3445. Food and Agriculture Organization of the United Nations. 2004. FAO workshop on social and economic impacts of avian influenza control, Bangkok, Thailand. www.fao.org/ag/againfo/subjects/documents/execsumm_avian.pdf.
3446. Center for Infectious Disease Research and Policy. 2005. WHO: flu pandemic threat may be growing. *CIDRAP News*, May 18. www.cidrap.umn.edu/cidrap/content/influenza/avianflu/news/may1805who.html.
3447. Bevins SN, Dusek RJ, White CL, Gidlewski T, Bodenstein B, Mansfield KG, DeBruyn P, Kraege D, Rowan E, Gillin C, et al. 2016. Widespread detection

- of highly pathogenic H5 influenza viruses in wild birds from the Pacific Flyway of the United States. *Sci Rep*. 6(1):1–9. <https://dx.doi.org/10.1038/srep28980>.
3448. Schuettler D. 2005. Asia's bird flu here to stay, FAO says. Reuters, February 23.
3449. Henig RM. 1992. The flu pandemic. *New York Times*, November 29, p. 28.
3450. Gadsby P. 1999. Fear of flu—pandemic influenza outbreaks. *Discover*, January.
3451. BirdLife International. 2004. Avian flu and wild birds. July.
3452. Davies P. 2000. *The Devil's Flu* (New York, NY: Henry Holt and Company).
3453. Young E. 2002. Hong Kong chicken flu slaughter “failed.” *New Scientist*, April 19.
3454. Pillar C. 2005. Vietnam moves to curb bird flu. *Los Angeles Times*, February 3. www.biotech.wisc.edu/seebiotech/seemail/020705.html.#485.
3455. Osterholm M, Colwell R, Garrett L, Fauci AS. 2005. The Council on Foreign Relations meeting: the threat of global pandemics. *Federal News Service*, June 16. www.cfr.org/publication/8198/threat_of_global_pandemics.html.
3456. Tangwisutijit N. 2005. Virus shock: bird-flu mutates, adapts to humans. *The Nation* (Thailand), May 20.
3457. American Association for the Advancement of Science, Atlas of Population and Environment. Meat and fish. atlas.aaas.org/index.php?part=2&sec=nares&sub=meatfish.
3458. Xianglin L. 2004. The livestock revolution and feed demand in China. www.eseap.cipotato.org/MF-ESEAP/Publications/PH-China-2004/03-Chapter-3.pdf.
3459. Willett W. 2001. *Eat, Drink, and Be Healthy: The Harvard Medical School Guide to Healthy Eating* (New York, NY: Simon and Schuster).
3460. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
3461. Shortridge KF. 1992. Pandemic influenza: a zoonosis? *Seminars in Respiratory Infections* 7:11–25.
3462. Motavalli J. 2005. Laurie Garrett: are we prepared for avian flu? Interviewed by Jim Motavalli. *E Magazine*, July/August 2005, www.emagazine.com/view/?2826.
3463. McKenna MAJ. 2004. Animal diseases threaten humans. *Cox News Service*, March 2.

3464. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
3465. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
3466. Sompayrac L. 2002. *How Pathogenic Viruses Work* (Sudbury, Massachusetts: Jones and Bartlett Publishers).
3467. Centers for Disease Control and Prevention. 2006. Epidemiology and Prevention of Vaccine-Preventable Diseases: The Pink Book. www.cdc.gov/nip/publications/pink/flu.pdf.
3468. Zambon M. 2006. Influenza, respiratory syncytial virus and SARS. *Medical Progress*, January. www.medicalprogress.com/dispdf.cfm?fname=Influenza.pdf.
3469. Webster RG, Bean WJ, Gorman OT, Chambers TM, Kawaoka Y. 1992. Evolution and ecology of influenza A viruses. *Microbiological Reviews* 56(1):152–79.
3470. Ferguson L, Luo K, Olivier AK, Cunningham FL, Blackmon S, Hanson-Dorr K, Sun H, Baroch J, Lutman MW, Quade B, et al. 2018. Influenza D virus infection in feral swine populations, United States. *Emerg Infect Dis.* 24(6):1020–1028. <https://doi.org/10.3201/eid2406.172102>.
3471. Silveira S, Falkenberg SM, Kaplan BS, Crossley B, Ridpath JF, Bauermann FB, Fossler CP, Dargatz DA, Dassanayake RP, Vincent AL, et al. 2019. Sero-survey for influenza D virus exposure in cattle, United States, 2014–2015. *Emerg Infect Dis.* 25(11):2074–2080. <https://doi.org/10.3201/eid2511.190253>.
3472. White SK, Ma W, McDaniel CJ, Gray GC, Lednicky JA. 2016. Serologic evidence of exposure to influenza D virus among persons with occupational contact with cattle. *J Clin Virol.* 81:31–33. <https://doi.org/10.1016/j.jcv.2016.05.017>.
3473. Asha K, Kumar B. 2019. Emerging influenza D virus threat: what we know so far! *J Clin Med.* 8(2):192. <https://doi.org/10.3390/jcm8020192>.
3474. Capua I, Mutinelli F, Marangon S, Alexander DJ. 2000. H7N1 avian influenza in Italy (1999 to 2000) in intensively reared chickens and turkeys. *Avian Pathology* 29:537–43.
3475. Yousaf M. 2004. Avian influenza outbreak hits the industry again. *World Poultry*, Volume 20, No. 3, pp. 22–5.
3476. Lee S, Kasif S. 2006. The complete genome sequence of a dog: a perspective. *BioEssays.* 28(6):569–573. <https://doi.org/10.1002/bies.20421>.

3477. Iwami S, Takeuchi Y, Liu X. 2009. Avian flu pandemic: can we prevent it? *J Theor Biol.* 257(1):181–190. <https://doi.org/10.1016/j.jtbi.2008.11.011>.
3478. Lopez-Martinez I, Balish A, Barrera-Badillo G, Jones J, Nuñez-García TE, Jang Y, Aparicio-Antonio R, Azziz-Baumgartner E, Belser JA, Ramirez-Gonzalez JE, et al. 2013. Highly pathogenic avian influenza A(H7N3) virus in poultry workers, Mexico, 2012. *Emerg Infect Dis.* 19(9):1531–1534. <https://doi.org/10.3201/eid1909.130087>.
3479. Iwami S, Takeuchi Y, Liu X. 2009. Avian flu pandemic: can we prevent it? *J Theor Biol.* 257(1):181–190. <https://doi.org/10.1016/j.jtbi.2008.11.011>.
3480. New Zealand Press Association. 2005. Bird flu expert says virus entering critical phase. *Stuff*, November 24. stuff.co.nz/stuff/0,2106,3488861a7144,00.html.
3481. Axford RFE, Bishop SC, Nicholas FW, Owen JB (eds.), *Breeding for disease resistance in its evolutionary context*. In: *Breeding for Disease Resistance in Farm Animals* (Wallingford, UK: CABI Publishing, pp. ix–xiv).
3482. Olsen CW, Carey S, Hinshaw L, Karasin AI. 2000. Virologic and serologic surveillance for human, swine and avian influenza virus infections among pigs in the north-central United States. *Arch Virol.* 145(7):1399–1419. <https://doi.org/10.1007/s007050070098>.
3483. Lee JH, Gramer MR, Joo HS. 2007. Efficacy of swine influenza A virus vaccines against an H3N2 virus variant. *Can J Vet Res.* 71(3):207–212.
3484. Karasin AI, Schutten MM, Cooper LA, Smith CB, Subbarao K, Anderson GA, Carman S, Olsen CW. 2000. Genetic characterization of H3N2 influenza viruses isolated from pigs in North America, 1977–1999: evidence for wholly human and reassortant virus genotypes. *Virus Res.* 68(1):71–85. [https://doi.org/10.1016/s0168-1702\(00\)00154-4](https://doi.org/10.1016/s0168-1702(00)00154-4).
3485. Olsen CW, Carey S, Hinshaw L, Karasin AI. 2000. Virologic and serologic surveillance for human, swine and avian influenza virus infections among pigs in the north-central United States. *Arch Virol.* 145(7):1399–1419. <https://doi.org/10.1007/s007050070098>.
3486. Fraser L. 2002. Doctors fear deadly flu virus will lead to new pandemic. *Daily Telegraph*, September 22.
3487. Slingenbergh J, Gilbert M, de Balogh K, Wint W. 2004. Ecological sources of zoonotic diseases. *Revue Scientifique et Technique Office International des Epizooties* 23:467–84.
3488. U.S. Department of Agriculture, Animal Plant Health Inspection Service, Veterinary Services, National Animal Health Monitoring System. 2005. Poultry '04 part II: Reference of health and management of gamefowl breeder flocks in the United States, 2004. www.aphis.usda.gov/vs/ceah/ncahs/nahms/poultry/poultry04/poultry04_report_gamefowl.pdf.

3489. Brooymans H. 2004. Organic farms called potential avian flu portal. *Edmonton Journal* (Alberta), April 4, p. A6.
3490. Frabotta D. 2005. Bird flu's U.S. flyby? *DVM Newsmagazine*, December 1. www.dvmnewsmagazine.com/dvm/article/articleDetail.jsp?id=274373.
3491. McNeil DG. 2004. Experts call wild birds victims, not vectors. *New York Times*, October 12, p. 6.
3492. Food and Agriculture Organization of the United Nations Avian Influenza Technical Task Force. 2004. Update on the avian influenza situation. *Avian Influenza Disease Emergency News*, issue 16. fao.org/AG/AGInfo/subjects/documents/ai/AVIBull016.pdf.
3493. Blokhuis HJ, de Jong IC, Koolhaas JM, Korte SM, Lambooij E, Prelle IT, van de Burgwal JA. 2000. Effects of environmental enrichment on behavioural responses to novelty, learning, and memory, and the circadian rhythm in cortisol in growing pigs. *Physiology and Behaviour* 68(4), 571–578.
3494. Ritchie BW. 1995. *Avian Viruses: Function and Control* (Lake Worth, FL: Wingers Publishing).
3495. Avens JS. Colorado State University. 1987. Overview: Salmonella—what's the problem? Third Poultry symposium Proceedings: Managing for Profit.
3496. Soil Association. 2002. Animal health—the prevention of infectious livestock diseases. Written evidence from the Soil Association to the Royal Society, for the inquiry into infectious livestock diseases. [www.soilassociation.org/web/sa/saweb.nsf/librarytitles/1AE72.Html/\\$file/Animal%20Health%20-.pdf](http://www.soilassociation.org/web/sa/saweb.nsf/librarytitles/1AE72.Html/$file/Animal%20Health%20-.pdf).
3497. Peste des petits ruminants—an emerging plague? *New Agriculturist*. www.new-agri.co.uk/00-6/focuson/focuson9.html.
3498. Food and Agriculture Organization of the United Nations. 2003. No evidence that SARS stems from farm animals. Interview with Peter Roeder. *FAO news release*, May 5.
3499. Pesticide Action Network (PAN) Asia and the Pacific. 2004. Avian Flu: One more indictment of unsafe industrial food production. February 20. [lists.iatp.org/listarchive/archive.cfm?id=89067](http://iatp.org/listarchive/archive.cfm?id=89067).
3500. Pesticide Action Network (PAN) Asia and the Pacific. 2004. Avian Flu: One more indictment of unsafe industrial food production. February 20. [lists.iatp.org/listarchive/archive.cfm?id=89067](http://iatp.org/listarchive/archive.cfm?id=89067).
3501. Young E. 2002. Hong Kong chicken flu slaughter “failed.” *New Scientist*, April 19.
3502. Food and Agriculture Organization of the United Nations 2004. *FAO workshop on social and economic impacts of avian influenza control*. Siam City Hotel, Bangkok, Thailand, December 8–9. fao.org/ag/againfo/subjects/documents/AIReport.pdf.

3503. National Live Stock and Meat Board. 1991. Facts from the Meat Board: The animal welfare/rights challenge.
3504. Wisconsin Agri-Business Foundation. 1989. Our Farmers Care, p. 15.
3505. Cheeke P. 1999 Contemporary Issues in Animal Agriculture, 2nd ed (Danville, IL: Interstate Publishers).
3506. Cheeke P. 1999 Contemporary Issues in Animal Agriculture, 2nd ed (Danville, IL: Interstate Publishers).
3507. Knobler SL, Mack A, Mahmoud A, Lemon SL (eds.), 2005. The Threat of Pandemic Influenza: Are We Ready? Workshop Summary (Washington, DC: National Academies Press). p. 29.
3508. Knobler SL, Mack A, Mahmoud A, Lemon SL (eds.), 2005. The Threat of Pandemic Influenza: Are We Ready? Workshop Summary (Washington, DC: National Academies Press). p. 29.
3509. Davis M. 2005. The Monster at Our Door: The Global Threat of Avian Flu (New York, NY: The New Press, p. 92).
3510. Environmental Defense. 2000. Factory hog farming: the big picture. Hogwatch, November. www.environmentaldefense.org/documents/2563_FactoryHogFarmingBigPicture.pdf.
3511. U.S. Animal Health Association. 2004. Report of the committee on transmissible diseases of poultry and other avian species. www.usaha.org/committees/reports/2004/report-pad-2004.pdf.
3512. Marano N (Moderator). 2004. Avian Influenza Symposium transcript. Centers for Disease Control and Prevention. November 3, p.1.
3513. Byrne D. 2004. Combating emerging zoonoses: Challenges and prospects at community level. Conference on Infectious Disease: European Response to Public Health Risks from Emerging Zoonotic Diseases, The Hague, September 17. medicalnewstoday.com/medicalnews.php?newsid=13681.
3514. Madec F and Rose N. 2003. How husbandry practices may contribute to the course of infectious diseases in pigs. In: 4th International Symposium on Emerging and Re-emerging Pig Diseases (Rome, Italy June 29–July 2, pp. 9–18).
3515. Network for the Prevention and Control of Zoonoses. 2005. How zoonoses are transmitted. www.medvetnet.org/cms/templates/doc.php?id=21
3516. Heasman M, Mellentin J. 2006. Will Europe's BSE crisis bring about a new relationship between food and health? The Centre for Food and Health Studies, March 1. www.euractiv.com/Article?tcaturi=tcm:29-117667-16&type=Analysis
3517. Piper E. 2000. Stop factory farming and end BSE, UK scientists say. Reuters, December 4.

3518. Heasman M, Mellentin J. 2006. Will Europe's BSE crisis bring about a new relationship between food and health? The Centre for Food and Health Studies, March 1. www.euractiv.com/Article?tcmuri=tcm:29-117667-16&type=Analysis
3519. Cornelius de Haan et al. 2001. Directions in Development, Livestock Development, Implications for Rural Poverty, the Environment, and Global Food Security (Washington, DC: World Bank, pp. xii-xiii).
3520. Waltner-Toews D, Lang T. 2000. A new conceptual base for food and agricultural policy: the emerging model of links between agriculture, food, health, environment and society. *Global Change and Human Health* 1:116–30.
3521. American Public Health Association. 2003. Precautionary moratorium on new concentrated animal feed operations. Association News: 2003 Policy Statements. www.apha.org/legislative/policy/2003/2003-007.pdf.
3522. Duncan IJH. 2005. Science-based assessment of animal welfare: farm animals. *Revue Scientifique et Technique* 24(2):483–92.
3523. Gruhn P, Goletti F, Yudelman M. 2000. Integrated nutrient management, soil fertility, and sustainable agriculture: current issues and future challenges. Food, Agriculture, and the Environment: Discussion Paper 32 (Washington, DC: International Food Policy Research Institute). www.ifpri.org/2020/dp/2020dp32.pdf.
3524. Brown LR, Flavin C, French H, et al. 2000. The State of the World 2000 (New York, NY: W. W. Norton and Co, pp. 24–26).
3525. McMichael AJ, Haines A, Sloof R, Kovats S (eds.), 1996. Climate change and human health. World Health Organization, World Meteorological Organization, UN Environment Programme.
3526. United Nations Development Programme. 2000. Human Development Report 2000 (New York, NY: Oxford University Press).
3527. Gardner G, Halweil B. 2000. Underfed and overfed: the global epidemic of malnutrition. Worldwatch Paper 150, Worldwatch Institute. www.worldwatch.org/pubs/paper/150.html.
3528. Epstein PR. 2000 The WTO, globalization and a new world order. *Global Change and Human Health* 1:41–43.
3529. Citizens' Environmental Coalition and Sierra Club. 2005. The wasting of rural New York State. newyork.sierraclub.org/conservation/agriculture/Wasting_NYS_Report.pdf.
3530. 2004. The American Heritage Dictionary of the English Language, 4th Edition (Boston, MA: Houghton Mifflin).

3531. American Public Health Association. 2003. Precautionary moratorium on new concentrated animal feed operations. Association News: 2003 Policy Statements. www.apha.org/legislative/policy/2003/2003-007.pdf.
3532. American Public Health Association. 2019 Nov 5. Precautionary moratorium on new and expanding concentrated animal feeding operations. Washington: APHA; [accessed 2020 Apr 7]. <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2020/01/13/precautionary-moratorium-on-new-and-expanding-concentrated-animal-feeding-operations>.
3533. Metheringham J, Hubrecht R. 1996. Poultry in transit—a cause for concern? *British Veterinary Journal* 152:247–9.
3534. Specter M, Greenman B. Fighting the flu. *New Yorker Online*. 21 February 2005.
3535. The Humane Society of the United States. 2006. An HSUS report: the economic consequences of adopting alternative production practices to genetic selection for rapid growth in poultry. hsus.org/farm/resources/research/economics/fast_growth_econ.html.
3536. Salvador RJ, Zdorkowski GA. Cheap food that isn't. www.public.iastate.edu/~rjsalvad/cheapfood.htm.
3537. Waltner-Toews D, Lang T. 2000. A new conceptual base for food and agricultural policy: the emerging model of links between agriculture, food, health, environment and society. *Global Change and Human Health* 1:116–30.
3538. Tilman D, Cassman KG, Matson PA, Naylor R, Polasky S. 2002. Agricultural sustainability and intensive production practices. *Nature* 418:671–7.
3539. Michigan State University. 2004. MSU veterinary college dean named to Institute of Medicine. News release, October 18. newsroom.msu.edu/site/indexer/2177/content.htm.
3540. O'Rourke K. 2004. O.I.E. takes action at annual meeting. *Journal of the American Veterinary Medical Association* 225:486–7.
3541. National Agricultural Research, Extension, Education, and Economics Advisory Board Meeting and Focus Session. 2004. Protecting our food system from current and emerging animal and plant diseases and pathogens: implications for research, education, extension, and economics. Washington Court Hotel, 525 New Jersey Ave., N.W., Washington, DC. October 27–29.
3542. National Agricultural Research, Extension, Education, and Economics Advisory Board Meeting and Focus Session. 2004. Protecting our food system from current and emerging animal and plant diseases and pathogens: implications for research, education, extension, and economics. Washington Court Hotel, 525 New Jersey Ave., N.W., Washington, DC. October 27–29.

3543. National Agricultural Research, Extension, Education, and Economics Advisory Board Meeting and Focus Session. 2004. Protecting our food system from current and emerging animal and plant diseases and pathogens: implications for research, education, extension, and economics. Washington Court Hotel, 525 New Jersey Ave., N.W., Washington, DC. October 27–29.
3544. Torres-Vélez F, Brown C. 2004. Emerging infections in animals—potential new zoonoses. *Clinics in Laboratory Medicine* 24:825–38.
3545. Garrett L. 1994. *The Coming Plague* (New York, NY: Penguin Books).
3546. Cullington BJ. 1990. Emerging viruses, emerging threat. *Science* 247:279–80.
3547. Lythgoe KA, Read AF. 1998. Catching the Red Queen? The advice of the rose. *Trends Ecology and Evolution* 13:473–474.
3548. Carroll L. 1872. *Through the Looking Glass and What Alice Found There* (London, UK: Macmillan).
3549. Cullington BJ. 1990. Emerging viruses, emerging threat. *Science* 247:279–80.
3550. Mitchison A. 1993. Will we survive? As host and pathogen evolve together, will the immune system retain the upper hand? *Scientific American*, September, pp. 136–44.
3551. Torrey EF, Yolken RH. 2005. *Beasts of the Earth: Animals, Humans, and Disease* (New Brunswick, NJ: Rutgers University Press).
3552. Drexler M. 2002. *Secret Agents: The Menace of Emerging Infections* (Washington, DC: Joseph Henry Press).
3553. Mitchison A. 1993. Will we survive? As host and pathogen evolve together, will the immune system retain the upper hand? *Scientific American*, September, pp. 136–44.
3554. Shortridge K. 2006 April. H5N1 “bird flu”—some insight. *New Zealand Pharm.* p. 23–27.
3555. Branswell H. 2006 April 15. Decade after H5N1 virus emerged, experts ponder best-before-date question. Canadian Press. cnews.canoe.ca/CNEWS/Canada/2006/04/15/1535656-cp.html.
3556. Perdue ML, Swayne DE. 2005. Public health risk from avian influenza viruses. *Avian Dis.* 49(3):317–327.