

Public Health Demography Reading List

Ethan Roubenoff

September 15, 2020

1 Infectious Disease Modeling and Case Studies

Berge, T. et al. (Jan. 1, 2017). “A Simple Mathematical Model for Ebola in Africa”. In: *Journal of Biological Dynamics* 11.1, pp. 42–74. ISSN: 1751-3758. DOI: 10.1080/17513758.2016.1229817. pmid: 29067875. URL: <https://doi.org/10.1080/17513758.2016.1229817> (visited on 08/04/2020).

Bjørnstad, Ottar N, Rbel F Finkensta Dt, and Bryan T Grenfell (2002). “Dynamics of Measles Epidemics: Estimating Scaling of Transmission Rates Using a Time Series SIR Model”. In: *Ecological Monographs* 72.2, p. 16.

Camacho, Anton et al. (Dec. 22, 2011). “Explaining Rapid Reinfections in Multiple-Wave Influenza Outbreaks: Tristan Da Cunha 1971 Epidemic as a Case Study”. In: *Proceedings of the Royal Society B: Biological Sciences* 278.1725, pp. 3635–3643. DOI: 10.1098/rspb.2011.0300. URL: <https://royalsocietypublishing.org/doi/10.1098/rspb.2011.0300> (visited on 07/07/2020).

Chowell, Gerardo, Amna Tariq, and James M. Hyman (Aug. 22, 2019). “A Novel Sub-Epidemic Modeling Framework for Short-Term Forecasting Epidemic Waves”. In: *BMC Medicine* 17.1, p. 164. ISSN: 1741-7015. DOI: 10.1186/s12916-019-1406-6. URL: <https://doi.org/10.1186/s12916-019-1406-6> (visited on 06/15/2020).

- Davies, Nicholas G. et al. (Aug. 2020). “Age-Dependent Effects in the Transmission and Control of COVID-19 Epidemics”. In: *Nature Medicine* 26.8 (8), pp. 1205–1211. ISSN: 1546-170X. DOI: 10.1038/s41591-020-0962-9. URL: <https://www.nature.com/articles/s41591-020-0962-9> (visited on 08/28/2020).
- Fine, Paul E. M. (Jan. 1, 1993). “Herd Immunity: History, Theory, Practice”. In: *Epidemiologic Reviews* 15.2, pp. 265–302. ISSN: 0193-936X. DOI: 10.1093/oxfordjournals.epirev.a036121. URL: <https://academic.oup.com/epirev/article/15/2/265/440430> (visited on 04/01/2020).
- Finkenstädt, B. F. and B. T. Grenfell (2000). “Time Series Modelling of Childhood Diseases: A Dynamical Systems Approach”. In: *Journal of the Royal Statistical Society: Series C (Applied Statistics)* 49.2, pp. 187–205. ISSN: 1467-9876. DOI: 10.1111/1467-9876.00187. URL: <https://rss.onlinelibrary.wiley.com/doi/abs/10.1111/1467-9876.00187> (visited on 06/15/2020).
- Grenfell, Bryan T. et al. (Jan. 16, 2004). “Unifying the Epidemiological and Evolutionary Dynamics of Pathogens”. In: *Science (New York, N.Y.)* 303.5656, pp. 327–332. ISSN: 1095-9203. DOI: 10.1126/science.1090727. pmid: 14726583.
- He, Daihai, Edward L. Ionides, and Aaron A. King (Feb. 6, 2010). “Plug-and-Play Inference for Disease Dynamics: Measles in Large and Small Populations as a Case Study”. In: *Journal of the Royal Society Interface* 7.43, pp. 271–283. ISSN: 1742-5689. DOI: 10.1098/rsif.2009.0151. pmid: 19535416. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2842609/> (visited on 08/16/2020).
- Keeling, M. J. and B. T. Grenfell (Jan. 3, 1997). “Disease Extinction and Community Size: Modeling the Persistence of Measles”. In: *Science* 275.5296, pp. 65–67. ISSN: 0036-8075, 1095-9203. DOI: 10.1126/science.275.5296.65. pmid: 8974392. URL: <https://science.sciencemag.org/content/275/5296/65> (visited on 04/01/2020).
- Keeling, Matthew James and Pejman Rohani (2008). *Modeling Infectious Diseases in Humans and Animals*. Princeton: Princeton University Press. ISBN: 978-0-691-11617-4.
- Kissler, Stephen M et al. (2020). “Projecting the Transmission Dynamics of SARS-CoV-2 through the Postpandemic Period”. In: p. 10.
- Kucharski, Adam J. et al. (June 15, 2020). “Effectiveness of Isolation, Testing, Contact Tracing, and Physical Distancing on Reducing Transmission of SARS-CoV-2 in Different Settings: A Mathematical Modelling

- Study”. In: *The Lancet. Infectious Diseases*. ISSN: 1474-4457. DOI: 10.1016/S1473-3099(20)30457-6. pmid: 32559451.
- Lipsitch, Marc et al. (June 20, 2003). “Transmission Dynamics and Control of Severe Acute Respiratory Syndrome”. In: *Science (New York, N.Y.)* 300.5627, pp. 1966–1970. ISSN: 0036-8075. DOI: 10.1126/science.1086616. pmid: 12766207. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2760158/> (visited on 08/04/2020).
- Miller, Ian F. et al. (Aug. 2020). “Disease and Healthcare Burden of COVID-19 in the United States”. In: *Nature Medicine* 26.8 (8), pp. 1212–1217. ISSN: 1546-170X. DOI: 10.1038/s41591-020-0952-y. URL: <https://www.nature.com/articles/s41591-020-0952-y> (visited on 08/28/2020).
- Mina, Michael J. et al. (Nov. 1, 2019). “Measles Virus Infection Diminishes Preexisting Antibodies That Offer Protection from Other Pathogens”. In: *Science* 366.6465, pp. 599–606. ISSN: 0036-8075, 1095-9203. DOI: 10.1126/science.aay6485. pmid: 31672891. URL: <https://science.sciencemag.org/content/366/6465/599> (visited on 08/28/2020).
- Smith, Neal R. et al. (Aug. 17, 2018). “Agent-Based Models of Malaria Transmission: A Systematic Review”. In: *Malaria Journal* 17.1, p. 299. ISSN: 1475-2875. DOI: 10.1186/s12936-018-2442-y. URL: <https://doi.org/10.1186/s12936-018-2442-y> (visited on 06/15/2020).

2 Seasonality

- Altizer, Sonia et al. (Apr. 2006). “Seasonality and the Dynamics of Infectious Diseases”. In: *Ecology Letters* 9.4, pp. 467–484. ISSN: 1461-0248. DOI: 10.1111/j.1461-0248.2005.00879.x. pmid: 16623732.
- Bharti, N. et al. (Dec. 9, 2011). “Explaining Seasonal Fluctuations of Measles in Niger Using Nighttime Lights Imagery”. In: *Science* 334.6061, pp. 1424–1427. ISSN: 0036-8075, 1095-9203. DOI: 10.1126/science.1210554. URL: <https://www.sciencemag.org/lookup/doi/10.1126/science.1210554> (visited on 06/14/2020).
- Bramness, Jørgen G. et al. (Aug. 1, 2015). “Analyzing Seasonal Variations in Suicide With Fourier Poisson Time-Series Regression: A Registry-Based Study From Norway, 1969–2007”. In: *American Journal of Epidemiology* 182.3, pp. 244–254. ISSN: 0002-9262. DOI: 10.1093/aje/kwv064. URL: <https://academic.oup.com/aje/article/182/3/244/168231> (visited on 07/07/2020).

Grassly, Nicholas C and Christophe Fraser (Oct. 7, 2006). “Seasonal Infectious Disease Epidemiology”. In: *Proceedings of the Royal Society B: Biological Sciences* 273.1600, pp. 2541–2550. ISSN: 0962-8452. DOI: 10.1098/rspb.2006.3604. pmid: 16959647. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1634916/> (visited on 06/15/2020).

Metcalf, C. Jessica E. et al. (Dec. 7, 2009). “Seasonality and Comparative Dynamics of Six Childhood Infections in Pre-Vaccination Copenhagen”. In: *Proceedings of the Royal Society B: Biological Sciences* 276.1676, pp. 4111–4118. ISSN: 0962-8452. DOI: 10.1098/rspb.2009.1058. pmid: 19740885. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2821338/> (visited on 06/15/2020).

3 Heterogeneity

Bansal, Shweta, Bryan T Grenfell, and Lauren Ancel Meyers (Oct. 22, 2007). “When Individual Behaviour Matters: Homogeneous and Network Models in Epidemiology”. In: *Journal of the Royal Society Interface* 4.16, pp. 879–891. ISSN: 1742-5689. DOI: 10.1098/rsif.2007.1100. pmid: 17640863. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2394553/> (visited on 04/01/2020).

Ferrari, M. J., B. T. Grenfell, and P. M. Strebel (Aug. 5, 2013). “Think Globally, Act Locally: The Role of Local Demographics and Vaccination Coverage in the Dynamic Response of Measles Infection to Control”. In: *Philosophical Transactions of the Royal Society B: Biological Sciences* 368.1623. ISSN: 0962-8436. DOI: 10.1098/rstb.2012.0141. pmid: 23798689. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3720039/> (visited on 04/01/2020).

Funk, Sebastian, Marcel Salathé, and Vincent A. A. Jansen (Sept. 6, 2010). “Modelling the Influence of Human Behaviour on the Spread of Infectious Diseases: A Review”. In: *Journal of the Royal Society Interface* 7.50, pp. 1247–1256. ISSN: 1742-5689. DOI: 10.1098/rsif.2010.0142. pmid: 20504800. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2894894/> (visited on 06/15/2020).

Mossong, Joël et al. (Mar. 25, 2008). “Social Contacts and Mixing Patterns Relevant to the Spread of Infectious Diseases”. In: *PLOS Medicine* 5.3, e74. ISSN: 1549-1676. DOI: 10.1371/journal.pmed.0050074. URL:

- <https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0050074> (visited on 04/01/2020).
- Pitzer, Virginia E. et al. (July 17, 2009). “Demographic Variability, Vaccination, and the Spatiotemporal Dynamics of Rotavirus Epidemics”. In: *Science (New York, N.Y.)* 325.5938, pp. 290–294. ISSN: 1095-9203. DOI: 10.1126/science.1172330. pmid: 19608910.

4 Spatial Epidemiology

- Elliott, Paul and Daniel Wartenberg (June 2004). “Spatial Epidemiology: Current Approaches and Future Challenges”. In: *Environmental Health Perspectives* 112.9, pp. 998–1006. ISSN: 0091-6765. DOI: 10.1289/ehp.6735. pmid: 15198920. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1247193/> (visited on 06/15/2020).
- Hasyim, Hamzah et al. (Feb. 20, 2018). “Spatial Modelling of Malaria Cases Associated with Environmental Factors in South Sumatra, Indonesia”. In: *Malaria Journal* 17. ISSN: 1475-2875. DOI: 10.1186/s12936-018-2230-8. pmid: 29463239. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5819714/> (visited on 06/15/2020).
- Robinson, Marguerite, Nikolaos I. Stilianakis, and Yannis Drossinos (Mar. 21, 2012). “Spatial Dynamics of Airborne Infectious Diseases”. In: *Journal of Theoretical Biology* 297, pp. 116–126. ISSN: 0022-5193. DOI: 10.1016/j.jtbi.2011.12.015. pmid: 22207025. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7094105/> (visited on 06/15/2020).

5 Social Epidemiology

- Berkman, Lisa F and S Leonard Syme (1979). “Social Networks, Host Resistance, and Mortality: A Nine-Year Follow-Up Study of Alameda County Residents”. In: *SOCIAL NETWORKS*, p. 19.
- Braveman, Paula and Laura Gottlieb (Jan. 1, 2014). “The Social Determinants of Health: It’s Time to Consider the Causes of the Causes”. In: *Public Health Reports* 129 (1_suppl2), pp. 19–31. ISSN: 0033-3549. DOI: 10.1177/00333549141291S206. URL: <https://doi.org/10.1177/00333549141291S206> (visited on 06/14/2020).

- Case, Anne and Angus Deaton (2017). “Mortality and Morbidity in the 21st Century”. In: *Brookings Papers on Economic Activity* 2017.1, pp. 397–476. ISSN: 1533-4465. DOI: 10.1353/eca.2017.0005. URL: <https://muse.jhu.edu/article/671752> (visited on 08/04/2020).
- Christakis, Nicholas A. and James H. Fowler (July 26, 2007). “The Spread of Obesity in a Large Social Network over 32 Years”. In: *New England Journal of Medicine* 357.4, pp. 370–379. ISSN: 0028-4793. DOI: 10.1056/NEJMsa066082. pmid: 17652652. URL: <https://doi.org/10.1056/NEJMsa066082> (visited on 07/24/2020).
- (May 22, 2008). “The Collective Dynamics of Smoking in a Large Social Network”. In: *New England Journal of Medicine* 358.21, pp. 2249–2258. ISSN: 0028-4793, 1533-4406. DOI: 10.1056/NEJMsa0706154. URL: <http://www.nejm.org/doi/abs/10.1056/NEJMsa0706154> (visited on 07/23/2020).
- Currie, Janet (May 1, 2011). “Inequality at Birth: Some Causes and Consequences”. In: *American Economic Review* 101.3, pp. 1–22. ISSN: 0002-8282. DOI: 10.1257/aer.101.3.1. URL: <https://pubs.aeaweb.org/doi/10.1257/aer.101.3.1> (visited on 07/15/2020).
- Dockery, Douglas W. et al. (Dec. 9, 1993). “An Association between Air Pollution and Mortality in Six U.S. Cities”. In: *New England Journal of Medicine* 329.24, pp. 1753–1759. ISSN: 0028-4793. DOI: 10.1056/NEJM199312093292401. pmid: 8179653. URL: <https://doi.org/10.1056/NEJM199312093292401> (visited on 08/27/2020).
- Galea, Sandro and Bruce G. Link (Sept. 15, 2013). “Six Paths for the Future of Social Epidemiology”. In: *American Journal of Epidemiology* 178.6, pp. 843–849. ISSN: 0002-9262. DOI: 10.1093/aje/kwt148. URL: <https://academic.oup.com/aje/article/178/6/843/110518> (visited on 06/14/2020).
- Galea, Sandro, Melissa Tracy, et al. (Aug. 2011). “Estimated Deaths Attributable to Social Factors in the United States”. In: *American Journal of Public Health* 101.8, pp. 1456–1465. ISSN: 0090-0036. DOI: 10.2105/AJPH.2010.300086. pmid: 21680937. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3134519/> (visited on 07/23/2020).
- Glymour, M. Maria, Mauricio Avendano, and Ichiro Kawachi (2014). “Socioeconomic Status and Health”. In: *Social Epidemiology*. Ed. by Lisa F. Berkman, Ichirō Kawachi, and M. Maria Glymour. Second edition. Oxford: Oxford University Press. ISBN: 978-0-19-537790-3 978-0-19-939533-0.

- House, James S., Ronald C. Kessler, and A. Regula Herzog (1990). "Age, Socioeconomic Status, and Health". In: *The Milbank Quarterly* 68.3, p. 383. ISSN: 0887378X. DOI: 10.2307/3350111. JSTOR: 3350111?origin=crossref.
- House, James S., James M. Lepkowski, et al. (1994). "The Social Stratification of Aging and Health". In: *Journal of Health and Social Behavior* 35.3, pp. 213–234. ISSN: 0022-1465. DOI: 10.2307/2137277. JSTOR: 2137277.
- Link, Bruce G. and Jo Phelan (1995). "Social Conditions As Fundamental Causes of Disease". In: *Journal of Health and Social Behavior*, pp. 80–94. ISSN: 0022-1465. DOI: 10.2307/2626958. JSTOR: 2626958.
- Osypuk, Theresa L. and Dolores Acevedo-Garcia (Nov. 1, 2010). "Beyond Individual Neighborhoods: A Geography of Opportunity Perspective for Understanding Racial/Ethnic Health Disparities". In: *Health & Place* 16.6, pp. 1113–1123. ISSN: 1353-8292. DOI: 10.1016/j.healthplace.2010.07.002. URL: <http://www.sciencedirect.com/science/article/pii/S1353829210000936> (visited on 06/14/2020).
- Phelan, Jo C., Bruce G. Link, and Parisa Tehranifar (Mar. 1, 2010). "Social Conditions as Fundamental Causes of Health Inequalities: Theory, Evidence, and Policy Implications". In: *Journal of Health and Social Behavior* 51 (1_suppl), S28–S40. ISSN: 0022-1465. DOI: 10.1177/0022146510383498. URL: <https://doi.org/10.1177/0022146510383498> (visited on 06/14/2020).
- Segerstrom, Suzanne C. and Gregory E. Miller (July 2004). "Psychological Stress and the Human Immune System: A Meta-Analytic Study of 30 Years of Inquiry". In: *Psychological bulletin* 130.4, pp. 601–630. ISSN: 0033-2909. DOI: 10.1037/0033-2909.130.4.601. pmid: 15250815. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1361287/> (visited on 08/27/2020).
- Shevitz, Abby et al. (Dec. 15, 1996). "The Association Between Youth, Women, and Acquired Immunodeficiency Syndrome". In: *JAIDS Journal of Acquired Immune Deficiency Syndromes* 13.5, pp. 427–433. ISSN: 1525-4135. URL: https://journals.lww.com/jaids/Fulltext/1996/12150/The_Association_Between_Youth,_Women,_and_Acquired.5.aspx (visited on 09/04/2020).
- Weiss, Robin A and Anthony J McMichael (Dec. 2004). "Social and Environmental Risk Factors in the Emergence of Infectious Diseases". In: *Nature Medicine* 10.S12, S70–S76. ISSN: 1078-8956, 1546-170X. DOI: 10.1038/nm1150. URL: <http://www.nature.com/articles/nm1150> (visited on 06/15/2020).