

Chapter	Topics	Place(s) visited	Activities
1	Spread of measles among unvaccinated. Social distancing and other limiting factors.	USA	Computer disease spread simulation. Litmus paper activity showing contagion.
2	1918 flu. Data tracking and prediction/inference. Course of an infectious disease (rise and fall).	USA	CODAP graphing of 1918 flu. Video animation intro to viruses.
3	Spread of COVID on cruise ships. Variability and data smoothing.	Off the coast of Japan	More CODAP. Examining COVID infection trends. Role-play advice to authorities.
4	Bat-spread Nipah virus. Epidemiological detective work. Transfer between species.	Bangladesh	Virus mutation card game. Second virus video animation.
5	Smallpox history and eradication through worldwide vaccination.	Colonial US and modern Bangladesh	Exploring data on smallpox eradication. Discussing social factors affecting eradication timeline.
6	Ebola. Ring vaccination. Misinformation. Importance of public trust in government.	Congo (DRC)	Discussion about vaccines and public trust. Contact tracing activity.
7	COVID-19 in different countries. Policies, government communication, and social trust.	France and Taiwan	Compare countries' COVID-19 course of infection. Matching COVID graph to country.
8	Impact of COVID on different communities related to race/ethnicity.	Navajo Nation; USA	Compare rates of COVID among different groups to their % of the overall population.
9	How are vaccines developed/tested? What is vaccine efficacy?	DRC; USA	Return to disease spread simulation to model effect of vaccination.
10	Considering COVID vaccination priorities. COVID variants.	USA	Creating vaccination priorities. Simulation of COVID variants.
11	Wastewater monitoring. How is wastewater used to monitor COVID trends? What might the future have in store with COVID?	USA	"Dog Urine" testing activity. Wastewater COVID data exploration.