Want to understand epidemics? Here are the 7 things to read and watch.



An FSU graduate student researches the Zika virus. (Bill Lax/FSU/Bill Lax/FSU) By Howard Markel March 4

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Every epidemic, from the black plague to Zika, follows a similar arc. There's the first mysterious case, then more cases and ultimately the triumph of medicine or the decimation of a population. These contagion crises often feature heroes, villains, scapegoats and scientific sleuths. In true Hollywood fashion, they can also be really scary. But some works nail the narrative and drama better than others. Here's a dose of microbial storytelling well worth reading or watching:

"The Plague," Albert Camus

In this 1947 novel, Camus writes about a plague sweeping through an Algerian city. Though Camus had no formal epidemiological or medical training, his portrayal of a community's battle against a terrible disease is pitch-perfect, capturing the agony of quarantine and the fear of being stricken. It also boasts one of the grossest opening scenes in all of modern literature: The main character, physician Bernard Rieux, steps on a dead rat in his path. A short time later, he realizes "that a dead rat had no business to be on his landing."

"On the Mode of Communication of Cholera," John Snow

The story of Snow's intrepid investigation of London's cholera epidemics of 1849 and 1852 has been chronicled many times, in <u>books</u>, <u>films</u> and even comic books. But I always recommend reading Snow himself rather than his explicators. His dogged determination — evidenced by the in-depth maps he made, the notes he

took and the people he interviewed — led him to ultimately link the cholera cases to a specific water source (a pump on Broad Street) and remain a marvel in scientific thought. Indeed, Snow changed the world, inspiring cities to provide clean water, sanitation and sewage systems.

"Contagion," directed by Steven Soderbergh

The production team of this 2011 motion picture did its homework by visiting the Centers for Disease Control and Prevention, interviewing health officers about their work and shadowing doctors and scientists. It shows. The film superbly captures the chaos, fear and management of a modern-day, airborne and deadly plague traveling around the world. As an added bonus, you get to see a number of movie stars melt before your eyes after they contract the fictional infection.

"An Enemy of the People," Henrik Ibsen

In this heated 1882 drama, a doctor discovers that his city's water supply is tainted with a deadly poison. Eventually, the physician is ostracized and run out of town, a poignant example of what can happen when a majority of people choose not to believe a scientific truth. There are many "enemies of the people" in this play: the microbe itself; the fickle townspeople; the mayor who denies the doctor's data because he has a vested interest in a new health spa, which draws its water from the contaminated source; and even the doctor, who does not understand how to negotiate the complex social layers of an epidemic.

"And the Band Played On," Randy Shilts

Written as tautly as a great detective story, this 1987 book describes the early years of the AIDS pandemic as it unfolded in San Francisco and New York. Shilts was the first journalist in the United States to exclusively cover the disease. In doing so, he captures the many scientific rivalries, the confusion, the blame, the shame and the unhealthy amounts of scapegoating in this epic tale, all with insight and understanding. The book is a brilliant social history of how our nation responded to (and, for a long time, ignored) the most devastating pandemic of our era. Even though the tome weighs in at more than 600 pages, it's hard to put down.

"Arrowsmith," Sinclair Lewis

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Lewis's 1925 Pulitzer Prize-winning novel features a bacteriologist-doctor named Martin Arrowsmith. After Martin discovers a potential cure for the bubonic plague, he is sent to conduct an experimental trial on the fictional island of St. Hubert, where an epidemic is raging. Caught in a maelstrom of death and disease, Martin must decide between being a healer and being a scientist by denying his "control group" this potential lifesaver.

"A Journal of the Plague Year," Daniel Defoe

This 1722 book by Defoe (of "Robinson Crusoe" fame) depicts the experiences of a man living in London in 1665 during the merciless bubonic plague epidemic. Defoe chronicles how the plague transformed a great European capital. Most important, it shows that our predecessors' contagion anxiety is not all that different from our own.

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