

## Introduction: The Origins of Dread

Death in it self is nothing; but we fear  
To be we know not what, we know not where.

-John Dryden, *Aureng-Zebe* (1675)

Epidemics fascinate us. Look at all the ways we offer accounts of epidemics, and how often. There are thousands of books in print about epidemics. There are histories of epidemics past, like the Black Death of the 1340s, the yellow fever outbreaks of 1793, cholera in the mid-1800s, the Spanish Flu pandemic of 1918, and polio in the mid-twentieth century. There are dozens of books reporting on today's pandemic, AIDS. There are books about possible future epidemics, like avian flu. There are "What-if" books about made-up epidemics sparked by bioterrorism. There are textbooks on epidemic malaria, SARS, dengue fever, encephalitis, HIV infection, and more. There are books about present-day epidemics of obesity, celiac disease, macular degeneration, hepatitis C, anxiety, asthma, attention-deficit/hyperactivity disorder, autism, childhood bipolar disorders, restless-leg syndrome, mind-body disorders, anger, teen sex, inflammation, methamphetamine use, terror on the Internet, absentee and permissive parents, and "influenza." There are myriad fictional accounts of epidemics, including Defoe's *Journal of the Plague Year*, Camus's *The Plague*, Michael Crichton's *The Andromeda Strain*, and Myla Goldberg's *Wickett's Remedy*. There are dozens of films (*Outbreak*, *The Seventh Seal*, *28 Days Later*, *Panic in the Streets*, and more). The television programs, magazine articles, and Web sites on all aspects of epidemics are simply countless.

Yet amid the outpouring of words and images about epidemics, much remains hazy. There's no constant, neatly defined thing that we can all agree is an epidemic. Nor do we agree on how to describe one. For Camus, a plague outbreak in an Algerian city reveals what is most human about its residents. In Tony Kushner's *Angels in America*, the AIDS epidemic stands as a metaphor for the sickness within American society in the 1980s. An epidemic of a mysterious "leprosy" in Karel Capek's 1937 play *The White Scourge* is a straightforward allegory of ideology-driven imperialism. Cholera reflects the fevered erotic state of Aschenbach, the main character of "Death in Venice," and the epidemic sets the stage for his demise as he yearns for an inaccessible love. These authors were not ignorant of the scientific findings on disease (by the time Mann wrote "Death in Venice," in 1912, the *Vibrio cholerae* bacterium, which causes the disease, had been known for decades, and the means by which it is transmitted were well understood). When F. W. Murnau made *Nosferatu*, the first film version of Bram Stoker's Dracula story, in 1922, the details of plague epidemics were well known. But Murnau made use of plague as a harrowing visual motif for the deadly havoc

wrought by his film's vampire, Count Orlock. At almost the same time as Murnau was filming the plague-carrying vampire rising out of a rat-infested ship's hold to spread disease, public-health authorities were using scientific knowledge to curtail real plague epidemics in Paris and Los Angeles.

Perhaps these contrasts represent no more than instances of artistic license. Leave art aside, then. Our own reactions to illness and death reveal similar contrasts. More than 100,000 Americans die every year from unintentional injuries, including about 40,000 fatalities associated with motor-vehicle crashes. American teens and young adults are more likely to die from unintentional injuries than from any other cause; only homicide and suicide come close. Yet we don't speak about an epidemic of accidents in the United States, beyond the conversation about automobile safety—and even when we do talk about vehicle mishaps, we rarely go beyond drunk driving. By contrast, there are seven- or eightfold fewer deaths from AIDS in the United States (about 14,000 annually). Still, AIDS provides grounds for continuing admonitions about the perils of drugs and sex, as well as discussions about health-care delivery, community awareness, and sex education. Pneumonia and kidney failure are far more common causes of death, and nobody talks about those as public-health crises. What accounts for the mismatch between the human costs of disease and popular rhetoric about epidemics?

One answer is that epidemics create opportunities to convey messages. The Progressive movement of the early 1900s used epidemics as a rationale to further its program of preventing venereal disease by reshaping sexual mores. The U.S. medical establishment leaned on the epidemic message about infantile paralysis—poliomyelitis—to enable it to finance and carry out a national effort to develop a polio vaccine in the mid-twentieth century. Parents of autistic children in Britain and America today put the epidemic of autism to work to demand that vaccines not be used. Pharmaceutical companies raise the specter of epidemic cervical cancer to promote the vaccine against human papillomavirus. The nature of the epidemic message is neither clear nor constant. Often, the message seems to have less to do with the actual disease burden or death toll than political opportunism. Or money.

Sometimes the lesson we are supposed to learn from an epidemic threat is not the result of any realistic assessment of dangers, but of maneuvering by the fastest claimant or most powerful bidder. What message did “epidemic” convey when, in 2007, a man said to have “XDR” tuberculosis was arrested by federal authorities, removed from the hospital where he was in isolation, and made the subject of a press conference (and lawsuits) in the name of preventing an epidemic of TB—even though he was not infectious? What does “epidemic” signal when the World Health Organization announces that it sees a global threat in the epidemic of obesity—even though most of the people who are considered “overweight” or “obese” are less likely to die from excess body mass than people who are very thin?

What should we understand by “epidemic” when it is a label we can apply equally to the Black Death and restless-leg syndrome?

When officials or entrepreneurs make use of an epidemic threat to create politically or financially useful lessons, they follow a long tradition. Medieval Christians burned Jews in hopes of warding off epidemics of plague; outbreaks of cholera in the mid-nineteenth century were blamed on Irish immigrants in England and America; early-twentieth-century epidemics of plague in San Francisco and Los Angeles were said to be caused by immigrants (Chinese and Mexican, respectively); and venereal disease epidemics have been attributed historically to “loose women.”

A deeper answer to the question about why hype about epidemics doesn’t line up with the scale of damage has to do with fear. We humans dread death. It is only natural that the mass mortality brought by a great plague makes us afraid. And besides our dread of death, we are frightened by the prospect of social disruption. To live in civilized society is to bear a dread that goes beyond the fear of death.

Perhaps this is what we really mean when we call ourselves developed countries: we live in relative comfort for a comparatively long time (some more comfortably and longer than others, but even our poor are generally better off than most residents of the so-called developing world); we are fearful about losing this way of life. We of the developed nations seem to load epidemics with anxieties about death or the collapse of society. Sometimes we are right to be afraid of cataclysmic disease. The Black Death was a sudden catastrophe. Usually, though, nature is subtler.

The deeper answer, and the one this book explores, has to do with anxieties that go beyond the normal dread of death or destitution. To judge by our response to epidemics that are less sudden or catastrophic than the Black Death, we fear much more besides: strangers, flying things, modern technology, female sexual desire, racial difference, parenting, the food we eat, and so on. These concerns, beyond the simple dread of death, are part of our makeup. They identify us as citizens of the society we live in and distinguish our world from the ancient world of demons. The way we have responded to epidemics like polio, AIDS, and SARS, and the way we are currently responding to obesity, autism, and addiction, reveal that we bring fears to the prospect of any sort of epidemic, deadly or not.

This book looks at epidemics throughout Western history, going back to the Greeks and Romans, moving up through the Black Death and the development of epidemiology in the nineteenth century, and continuing to the present day. It looks at epidemics from three different perspectives. First, an epidemic registers as a *physical event*: there is a microbial disturbance in an ecosystem with accompanying shifts in the well-being of different human populations. An epidemic also plays a role in *social crisis*: the illness and death that spread widely act as destabilizers, disrupting the organization of classes, groups, and clans that make up the society we know. Finally, an epidemic has an identity as a *narrative* that knits its other aspects

together: we tell ourselves stories about ourselves, accounts that make sense of what we see happening as well as what we fear (and hope) will happen. These three aspects of the epidemic can't be divorced from one another: all significant spread of illness also creates a social phenomenon; every social crisis moves us to make sense of it; each revision of the story of our society alters the way we study disease (and even how we define illness) and changes the pitch of social change. To read the history of epidemics is to follow a long story of the fears that go beyond the dread of death, the anxieties that make us who we are.

Epidemics often start with an outbreak of disease, but not always—and not all disease outbreaks spark us to tell an epidemic story. The so-called Spanish Flu of 1918 was the most acutely devastating outbreak of all time, with upwards of 40 million deaths worldwide in barely a year. Camouflaged by World War I, or perhaps just too catastrophic to dwell on, the flu outbreak registered hardly at all in the Western imagination, at least to judge by the absence of mention in literature or art for decades afterward. Then, in the 1970s, it became not just an epidemic but a central element of the epidemic imagination when scientists who were interested in promoting their theory that devastating flu outbreaks occur every decade or so made the 1918 outbreak an object of historical interest. Today, all discussions of flu involve some retrospection on the Spanish Flu epidemic, the rationale for “pandemic preparedness.” There is an imagined epidemic that carries meanings not self-evident in the original event.

Some epidemics start without any disease being in evidence at all, as the creation of today's obesity epidemic reveals. An epidemic is a story that has different morals for different “readers”: it teaches various lessons, follows differing accounts (depending on who is telling us what is happening), and can be a sounding of the alarm or a lament or an admonition. This book tells the story of epidemics—of how the way of looking at disease outbreaks affects what people see when there is one, and how, in turn, the epidemic we see changes how we act and what we fear. The story changes as society changes. As such, it has the capacity to illustrate the times in question and reveal the people themselves.