



PROJECT MUSE®

---

## **No Safe Place: Disease and Panic in American History**

Margaret Humphreys

American Literary History, Volume 14, Number 4, Winter 2002, pp.  
845-857 (Article)

Published by Oxford University Press



➔ For additional information about this article

<http://muse.jhu.edu/journals/alh/summary/v014/14.4humphreys.html>

# No Safe Place: Disease and Panic in American History

*Margaret Humphreys*

The deliberate mailing of letters containing anthrax spores to media and political persons in the fall of 2001 set off an epidemic panic throughout the country far out of proportion to the morbidity and mortality occasioned by the disease. Of course, in the beginning no one knew how many letters the bioterrorist(s) had sent, or where the disease might crop up next. Newspaper stories about strange liquids or powders spilled in elevators or post offices that elicited massive public health response became common. Patients in my internal medicine practice wanted the anthrax drug of choice, ciprofloxacin, for every cough—just in case. One story told how a local doctor had ordered hundreds of doses of this drug for his family members so they could all take the prophylactic regimen suggested for those known to be exposed in New York, New Jersey, and Florida.

This recent experience of disease panic in the US pales in comparison to the historical responses to epidemics such as yellow fever, polio, cholera, and smallpox. But it gives otherwise complacent Americans some exposure to the fear that disease can engender. Elsewhere in the world ravaging epidemics remain all too common, but in the US we have largely forgotten what it is like to feel that our place is contaminated, diseased, and unsafe. Affluent Americans may share many fears—crime, travel accidents, cancer, or terrorists—but most of us feel that our homes and towns are safe from epidemic disease. Even AIDS has become a preventable disease, manageable by the conscientious use of condoms, clean blood products, and universal medical precautions.

As a historian of epidemic disease in the US I have struggled to break through that sense of safety, to recreate a time when American ground was dangerous and disease ruled both psyche and polity. How does one convey the panic of 1878, when yellow fever swept over the land, forcing Congress for the first time to respond with a national public health agency? The panic explains this dramatic divergence from constitution and past practices, yet as Lisa Lynch notes in “The Fever Next Time,” such epidemic

events can become an “unspeakable experience,” one that reveals “the inadequacy of language in the face of trauma.” Her text is John Edgar Wideman’s *The Cattle Killing*, and his protagonist reflects on the yellow fever epidemic of 1793: “I can say the word plague to you and you shudder as I shuddered hearing it before I had lived through a plague. Now the word for me is merely a word. . . . Attached are memories, melancholy associations from the time before I lived through horrors the word plague attempts to name. . . . Plague is almost a tame word now. . . . It does not, can not, convey the unspeakable experiences that altered my understanding of the life we lead on this earth” (qtd. in Lynch). Literary works often convey the emotion and fear that surround disease better than many historians can, and it is appropriate that this volume combines the perspectives of students of literature and history. Having been asked to compose a piece for this issue that comments on the rest, I kept coming back to the theme of panic and the analysis of the emotive power of contagion, epidemics, and the personal experience of enduring them.

Diseases do not cause panic in direct proportion to their morbidity and mortality, a fact that seems counterintuitive. During the 1980s the diagnosis of congestive heart failure carried the same likelihood of death within five years as the discovery of many cancers, yet it elicited none of the latter’s sense of impending doom. American women remain more afraid of breast cancer than heart disease, although the latter is much more likely to kill them. In *Illness as Metaphor* (1978) and *AIDS and Its Metaphors* (1989), Susan Sontag has explored how the significance of certain diagnoses, such as cancer, tuberculosis, and AIDS, goes far beyond their mere import for mortality to encompass issues of morality, bodily integrity, and sense of self-contamination and destruction. The diseases that cause panic are not usually the diseases that kill the most people on a daily basis.

Disease panic and the news media form their own generative circle. The more panic, the more rumors, the more demand for information to be supplied by the newspapers (and, later, CNN). The last decade has seen an escalation in disease panic, with Ebola and other hemorrhagic viruses capturing the public’s attention in fiction and the press. In fact, as Susan Moeller has argued in *Compassion Fatigue: How the Media Sell Disease, Famine, War, and Death* (1999), it is getting harder and harder to “sell” the horror of epidemics, at least those that occur outside of the developed world. The scenarios in *Outbreak* (1988) and *The Hot Zone* (1995) have not come to pass; the threat of Third World diseases spreading catastrophically to the First is fading. In their place the media

has latched onto the new fears of bioterrorism. Only time will tell if these too will fade or blossom into reality.

While there are many factors in creating panic, I believe the most essential is the relationship of each disease to its place. Yellow fever and cholera convert the safe locale to dangerous ground. Malaria lives within the place, and its inhabitants become inured to its presence. The crossing of boundaries is essential to the creation of panic. When the edge of safety cannot be defined, people react in ways that are not necessarily rational—cordoning off suspect populations; creating artificial boundaries that create the illusion of safety; fleeing somewhere, anywhere. This sort of behavior happened frequently with yellow fever and its fellow panic-engines: cholera, plague, and smallpox. Malaria never crossed that edge of safety, since it was embedded in the swampy environment and already there, every summer. Travelers created panics; local residents, however unpleasant, were accepted as inevitable.

For the reader unfamiliar with the history of epidemic disease in the US, a brief synopsis may be useful. Cholera, a waterborne bacterial disease that kills by dehydration, visited the country in three epidemic waves: in 1832, 1848, and 1866. Yellow fever is a viral illness spread by mosquitoes that breed in fresh water containers such as puddles, flowerpots, water barrels, and cisterns. It is an urban disease, spread by sailing vessels from tropical ports to temperate zones. Northeastern cities such as Philadelphia, Boston, and New York were afflicted in the eighteenth and early nineteenth centuries. For reasons not clear, the disease later retreated to the South, becoming an almost yearly visitor to New Orleans in the two decades before the Civil War. In the latter half of the nineteenth century yellow fever struck about every 10 years, until its final visit to America in 1905. Malaria, as will be described later, was endemic to the Americas from at least 1680. Gone from the US after the 1940s, it remains entrenched in Latin America. The role of mosquitoes in spreading malaria was proven in 1897.

Use of the word *panic* to describe the response to diseases like cholera and yellow fever has overtones of inappropriateness or excessiveness. Scholars describing the concept “moral panic”—which includes social anxieties over substance abuse, sexual predators of children, or witchcraft—have highlighted the term in the past decade and tended to assume that such anxieties are overdone. Erich Goode and Nachman Ben-Yehuda have argued, for example, that “[c]learly the concept [of moral panic] dovetails neatly with the view that the government, the media, and the public are excessively concerned with trivial or nonexistent problems” whereas major issues are ignored (50). In regard to disease,

this is a complex question to sort out. Perhaps we should be concerned about diseases in just the rank order in which they cause disability and death. But that leaves aside aspects such as disfigurement, age, suddenness, unfamiliarity, preventability, and so on. Certainly the deaths of those afflicted by bioterrorist anthrax in the fall of 2001 were tragic and grievous, especially to their immediate families. But did that justify the terror that this bioterrorist act generated? Can we create a disease panic-o-meter that correlates degree of emotion with some objective scale of awfulness? Avoiding such a task, my goal instead is to explore what aspects of disease seem most prone to generate terror, without designating the panics that result as either legitimate or illegitimate.

A further point about the reality of these epidemics needs to be made. Yellow fever, anthrax, smallpox, leprosy, or malaria are not bogeymen useful for scaring the naive but in reality not all that bad. Fear of acquiring such afflictions is rational, for the pain and suffering they engender is all too real. The diseases may take on meanings for individuals (such as Gregory Tomso finds for leprosy and homosexuality) or cultures (i.e., yellow fever and malaria as a punishment for the evil of slavery), but their underlying physicality will evoke somewhat similar responses across culture and time. Consider, for example, the following account of tending a yellow fever victim: "The poor girl's screams might be heard for half a square and at times I had to exert my utmost strength to hold her in bed. Jaundice was marked, the skin being a bright yellow hue: tongue and lips dark, cracked and blood oozing from the mouth and nose." These symptoms were ugly enough, but then the terrible "black vomit" followed: "By Tuesday evening it was as black as ink and would be ejected with terrific force. I had my face and hands spattered with it but had to stand by and hold her. Well it is too terrible to write any more about it."<sup>1</sup> Such symptoms were specific to the particular organism that caused yellow fever and created an unavoidable set of responses—disgust, fear, horror, and perhaps compassion. There was a time when one had to defend talking about malaria as a specific entity to an audience so imbued with the social construction of disease that specific syndromes caused by specific pathogens had lost meaning as real entities. The pendulum has swung back, however, if I read the field correctly. We have come to agree that the basic biology of specific diseases offers an underlying reality to the historical experience of them, while at the same time understanding that different cultures attach different meanings to epidemic outbreaks. Bubonic plague can cause the same pus-filled buboes in 1348 and 1900, while associated with nefarious Jews poisoning wells in the Middle

Ages and disreputable Chinese evading authorities in twentieth-century San Francisco.<sup>2</sup>

Therefore, it makes sense to discuss the role of symptoms in creating disease panic. Putrid symptoms that convert the beloved into a nasty emitter of pus, vomit, and stool rupture the social bonds in families and create scenarios of rejection and flight. The black vomit of yellow fever, consisting of partially digested blood, not only erupted from the delirious patient but gagged attendants with its smell. Smallpox made the skin slimy with pus that caked on the sheets and repelled touch. Cholera discharges soaked the sheets, the mattress, and the floor with fetid liquid. Even without fear of contagion these diseases created scenes of horror not soon to be forgotten. Compare the quiet wasting of tuberculosis, or the pitiful respiratory distress of Spanish influenza or diphtheria. Malaria likewise does little to drive away the caregiver. The patient is often in severe distress, with piercing pains in the head and spine and a shaking chill that literally rocks the bed. At its worst malaria can cause coma and death, but again nothing all that noisome for attendants, however grieved they may be by the patient's illness.

Speed of mortality is an important factor in causing panic. An 1832 New York newspaper described the stunning speed of cholera in carrying away its victims. "A prostitute at 62 Mott Street, who was decking herself before the glass at 1 o'clock yesterday, was carried away in a hearse at half past three o'clock. The broken down constitutions of these miserable creatures, perish almost instantly on the attack" (qtd. in Rosenberg, *Cholera Years* 42). While the rhetoric in this article sought to reassure affluent, prudent New Yorkers that they were not at risk, it was written in the climate of rising panic that accompanied the first cholera epidemic in the US. Yellow fever likewise dramatically struck down its victims; death within a week of the first symptoms was not uncommon. Malaria and tuberculosis tended to be slower, more chronic diseases. *Falciparum* malaria could bring coma and death rapidly, especially in the very young, but more often in the US malaria resulted in a condition of chronic malaise, sometimes slowly evolving toward death. Yellow fever could have an apparent mortality as high as 50%. Cholera similarly could kill thousands within a short span of weeks. Even though other illnesses might account for more of the year's mortality, the concentration of unusual disease and death within a few months sets the stage for panic. The very concept of epidemic, a sudden rapid rise in disease incidence that creates a wave of morbidity and mortality, creates a crisis situation that the fluctuating levels of endemic diseases do not provoke.

Still, the scariest diseases are traveling diseases. Strange plagues that threaten the place of sanctuary arouse the most fear. This is particularly true when the disease can be tracked. In 1832 American doctors followed cholera's course across Europe, eagerly reading dispatches about its symptoms, treatment, and path. Then it jumped the Atlantic to Montreal, breached the national boundary by mid-June, and arrived in New York City by the fourth of July (Rosenberg, *Cholera Years* 23–24). In 1878 a physician in rural Mississippi plotted the course of yellow fever out of New Orleans like a weather buff charting a hurricane. He saw it reach successive towns on the railroad line that led to his own village, until at last his diary entries cease, their author silenced by the invader (see Wingfield).

Rumor is key to the panic. Incomplete information escalates the fear. Throughout the nineteenth century the public feared that government officials were covering up cases of yellow fever to prevent panic, which had the opposite effect. Since a case of yellow fever did stir panic, flight, and total disruption of social and commercial life, public health officials were very cautious in diagnosing the first case of an epidemic season. And since yellow fever mimicked hepatitis B and alcoholic liver disease, two diseases common among the sailors and other inhabitants who frequented the docklands where yellow fever was often first found, the physician's task was genuinely complex. Given how quickly "urban legend" stories can travel around a community, state, and region, it is no surprise that the merest whisper of a yellow fever case would quickly raise panic in a population.

Given that the panic diseases were foreigners threatening the safety of the home place, attempts at quarantine were near universal in response. Until 1900, when Walter Reed and colleagues proved that yellow fever was spread by the *aedes aegypti* mosquito, debates raged over its contagiousness and the need for isolation. Similar controversies characterize the cholera discourse, which is not surprising given its role as the other major panic disease of the nineteenth-century US. But quarantine and isolationism featured in the popular response to each appearance of these diseases, even when doctors were disputing their usefulness. Trying to erect a barrier to keep the home place safe while keeping disease out is an inevitable response to a traveling, panic disease.

Yellow fever adapted to modern modes of transportation to move within the nineteenth-century countryside, and Southerners modified their quarantine ideas accordingly. Ships were still suspect, including steamboats moving from yellow fever ports up the Mississippi, Ohio, and Missouri Rivers, which might be refused the right to dock by suspicious townspeople. Trains likewise were

death carriers, and more than one set of train tracks was destroyed to prevent their passage. Both trains and steamboats might be met by citizens who enforced their *cordon sanitaire* with shotguns, leading to congressional discussions of shotgun quarantines and their subsequent suppression of trade. People traveling the roads by foot or wagon might likewise be turned back, forced to sleep in the fields when no one would take them in. In spite of medical reassurance to the contrary, most of the population believed yellow fever was contagious, and they created barriers to ensure that their border of safety was not breached.

One alternate response to the panic of yellow fever or cholera was to claim that the diseases did not travel at all, but were created *de novo* in the locality. This was always a hard sell to the general public, but the consequence of such argument, the general cleansing of a municipality, was popular anyway. Such arguments, that disease arose spontaneously from the filthy streets under the right circumstances, often accorded with the best of medical theory. Yet it had to contend with the problem of explaining why epidemics appeared in some years and not others. Medical authors tended to argue for some peculiar conjunction of weather and filth to explain this epidemiological pattern—which made them quite vulnerable to ridicule. Most often, calls for urban purification were most acceptable to the general population when used in addition to protective barriers. The idea of making the home place better able to resist infection accorded well with a simultaneous creation of a stronger border.

Driven by panic, the urge to contain the infected could lead to bizarre quarantine practices. In 1900 a Chinese man died of bubonic plague in San Francisco. The response was to quarantine Chinatown, allowing Caucasians to move across its borders but prohibiting the passage of Asians. Officials decreed that Chinese bodies were most susceptible to plague, perhaps because their rice diets were low in protein, and thus the way to protect the city was to keep the Chinese walled into Chinatown. A federal judge recognized the irrationality of this conclusion, noting that public health authorities had no evidence for their hypothesis about Asian susceptibilities, and ordered the quarantine called off. The epidemic smoldered until it disappeared in 1904, only to return three years later in pockets scattered over the Bay area. In the interim scientists had discovered the connection between plague and rats, so this time the panic focused on rat catching, and Chinatown was spared.<sup>3</sup>

The purveyors of American disinfectants and pesticides have been well aware of the public's fear of contagion and the invasion of the home place. In *The Gospel of Germs* Nancy Tomes



has emphasized the process by which American housewives were taught to view their homes as “whited sepulchers,” places that looked safe and clean on the surface but which harbored death dealing bacteria heretofore unnoticed. Likewise, Americans had to be taught to fear the insects that spread disease and to buy the screens and pesticides that would protect against them. In a time when public health officials blamed flies for spreading polio and typhoid, cartoons depicted monster flies threatening innocent babies (see Rogers). And a popular advertising series of mosquito cartoons drawn by Ted Geisel (a.k.a. Dr. Seuss) urged Americans to think “Quick Henry, the Flit” whenever a mosquito appeared. Most Americans over 55 remember this insecticide, which was sprayed via the Flit gun, familiar from old animated cartoons (Humphreys 56). The theme in all these messages was the same—you think your home is safe, but these hitherto unseen contaminants or unappreciated, dangerous beasts are threatening your family with death and disease. Your home place is not safe, but you can make it so by applying our purifying product.

Another way to create a border between oneself and the infected space is to map the trouble areas and thus be able to study and control them. This is one of the core tools of epidemiology. Its use by John Snow is probably the most famous early example of the technique. He hypothesized that cholera could be spread through the water supply and noted that in one London neighborhood there were two water companies, one that drew from an area of the Thames less contaminated by sewage than the second. He mapped the houses that received water from the two companies and then mapped cholera incidence in the same neighborhood, showing that the dirtier water correlated with a greater likelihood of infection. Maps of yellow fever epidemics have been employed to demonstrate proximity to the waterfront and other factors in an attempt to explain the disease. Mapping is about where the disease is, and drawing the picture begins to give some idea of how to contain and understand it.<sup>4</sup>

Priscilla Wald discusses how this technique was similarly used to understand the process and problems of urbanization in the early twentieth century. It is probably not too extreme to say that many Americans responded to the influx of foreign immigrants from the 1880s to the 1920s with a kind of nativist panic. Many disease panics in this time period were tied to nativist fears, including responses to Jewish immigrants and typhus in 1892, plague and the Chinese in 1904, and polio and Italians in New York City in 1916. Mapping the urban landscape was one way to get a handle on this burgeoning population, so foreign, so strange,

so threatening. The contagion of disease, the contagion of socialism, the very contagion of foreignness were all made more assimilable and less frightening by maps that described, limited, and contained.

Disease panics did serve a purpose, however. It is also worth remembering that they were often quite justified. Panics spurred reform, particularly reforms that required spending public money. The third cholera panic of the mid-1860s in the US led to the creation of the Metropolitan Board of Health in New York City. Charles Rosenberg has said of this event: “[T]here is no date more important than 1866, no event more significant than the organization of the Metropolitan Board of Health. For the first time, an American community had successfully organized itself to conquer an epidemic. The tools and concepts of an urban society were beginning to be used in solving this new society’s problems” (*Cholera Years* 193). Rosenberg is referring to the fact that the Metropolitan Board made use of John Snow’s work on cholera to focus on disinfecting the stools of cholera patients, as well as cleaning the streets and disinfecting privies. The cholera panic created an enormous force for reform and change.

Yellow fever panic was even more powerful. The disease occurred more often than cholera and cost more money in lost interstate trade. In 1878 a massive epidemic raged throughout the Mississippi and Ohio Valleys. In response to the national yellow fever panic, Congress created the first federal public health agency, the National Board of Health, in 1879. As the panic ebbed in subsequent years so did the fate of this institution, which lost its funding after 1883. But when yellow fever flared again in 1888 and in the 1890s, the accompanying panic drove the transition of an obscure federal agency charged with caring for sick sailors of the merchant marine into the US Public Health Service. Yellow fever, along with anxieties about cholera (1892) and plague (1904 and 1906), led to the congressional conclusion that the US needed a permanent, national public health authority.

Oddly enough, cholera does not seem to have stirred the panic in the Philippines that Warwick Anderson’s American physicians expected. When American public health workers were replaced with newly trained Filipino ones, American observers commented that they merely imitated the proper procedures, went through the motions but failed to apply appropriate rigor. One Rockefeller Foundation field man, Dr. William S. Carter, found it “discouraging to try to do something for people who will not do anything for themselves . . . the inertia of these people passeth all understanding.” One essential component for panic, as opposed

to resignation, is the assumption that something can be done, that something should be done. Common themes in the medical history of colonialism include the clash of Western and indigenous disease concepts and the sometimes-baffling (to Westerners) apathy of colonial peoples in the face of epidemics. Questions about when, where, and why disease panics have occurred in the colonial setting might well reward historians with insights into this interaction between Western and indigenous disease models.

Malaria usually did not cause panics, even though it could cause very high mortality in virgin populations. In the 1830s an epidemic raged among west-coast Indian populations, killing large numbers of them. We have no record of their emotional response, but one would expect panic when there were not enough living left to bury the dead, as Euro-American commentators noted. British soldiers stationed in west Africa in the early nineteenth century died at a fierce rate from *falciparum* malaria and yellow fever, prompting British authorities to replace white soldiers with black ones. *Falciparum* malaria led to a chronic state of sickness in the tropical and subtropical plantations of the New World, generating conditions that favored African slavery over other possible labor choices for the American South, the Caribbean, and Latin America. Malaria could, in other words, be a powerful presence. But once settled into the landscape, it usually did not induce disease panics.

From the days of Hippocrates physicians and laypersons alike knew what caused malaria. The foul air arising from swamps, the product of rotting plants in stagnant water, generated the aches and fevers of malaria. The disease was confined to place; the place itself was unhealthy. The people who lived in that place became unhealthy, but if they moved away from it, to higher ground, they left the disease behind them. There was no reason to fear the patient with malaria. Rather, the thing to fear was the place itself. One might have thought that this would change after the discoveries of the late nineteenth century demonstrated that an organism transmitted by a mosquito caused malaria. Presumably, people with malaria should now be seen as dangerous, since they served as disease carriers. But so much of the literature about malaria focused on the mosquito and its breeding place that the attention remained on the swamp, on the land. The infected person was still, oddly, almost incidental to the chain of infection. Exceptions to this rule can be found, but by and large, dangerous mosquitoes merely replaced poisonous swamp gases as the dangerous feature of the swampy environment.

People who lived in such environments tended to adopt a

resigned attitude toward the inevitability of malaria. Charles Dickens discovered this mentality in people living along the Mississippi River in his trip to America during the 1840s. In his nonfiction work *American Notes* and later in *Martin Chuzzlewit*, Dickens sketched a population soaked in malaria, having “an air of great despondency and little hope on everything” (qtd. in Humphreys 32). His eternally cheerful character Mark Tapley makes light of the situation, but he is also realistic in his claim that “we must all be seasoned, one way or the other. That’s religion, that is, you know” (32). A Southern physician later lamented this apathetic defeatism: “Malaria is such an insidious disease that it is generally considered lightly, as a necessary evil of little importance, by those who live in localities where it prevails” (Bass 339). A Public Health Service educator was similarly frustrated in his attempts to convince an audience that malaria was preventable if certain steps were taken. “The Negroes accept ‘chills’ as a necessary evil and pay it scant attention,” he despaired (Maxcy 1119). Malaria was not seen as traveling and invading; rather, it lounged and lurked, permeating a place with chronic disease.

Malaria control rarely aroused legislative interest on the order of yellow fever and cholera. Although there were federal, state, and local public health officials, aided by the Rockefeller Foundation, who took on the disease in the first decades of the twentieth century, they did so using arguments about malaria’s impact on the economy. It was said that malaria made for sickly, tired workers and dragged down the development of a region. Malaria succeeded in attracting some attention and money, but did not become a major player on the national stage until World War II. Malaria suddenly became of national import in the early 1940s because non-Southern soldiers were heading south in great numbers. Major military bases were located in the South, and as the country ramped up for entry into World War II, a great flux of men moved through them. The place had not changed, but now it was the valued person traveling from the safe place into the dangerous that created a national urgency to control malaria. Within the US Public Health Service a new office appeared, assigned to maintain Malaria Control in War Areas (MCWA). After the war MCWA expanded its duties to a full-scale eradication of malaria from the South using DDT; in 1947 the name was changed to the Communicable Disease Center (CDC, later renamed the Centers for Disease Control). Once malaria faded from the US by the end of the 1940s, the CDC became a surveillance agency, watching for the invasion of the home turf by threatening diseases. Malaria briefly aroused something like panic in World War II, but only

because of the unusual proximity of the valued bodies of American soldiers and the malarious environment.

The aftermath of disease panics is grief. People mourned deaths from malaria just as they mourned deaths from yellow fever, but the latter had experienced something more than the single loss. The communal fear, the communal sense of invasion and loss of safety, deepened the scars brought by deadly disease. Such experiences may perhaps call for commemoration, to be preserved in memory. Or to be buried deeply, forgotten as the 1918 influenza epidemic seems to have been. Wars create heroes suitable for statues, wreaths, and other sentimental markers, while epidemics are more problematic. True, there are occasionally heroes, such as Walter Reed and Clara Maass, remembered for their dangerous work on yellow fever and each with a hospital named for them. But these are science heroes, not the heroes of disease panics. The epidemics themselves are remembered in a few museum exhibits, most notably in Memphis and New Orleans. But mostly the occurrence of these epidemics is forgotten among the general public.

Historians struggle to convey the emotions of epidemic events while movies, poetry, and literature often convey them far more profoundly. The horror genres, whether books or films, know just how to tap into our fears of overwhelming disease, as Schell's essay on the virus that is conquering the world shows. Even in the US our sense of complacent safety has an edge of anxiety that loves to be titillated. But the anthrax scare and subsequent discussions of other bioterrorist agents such as smallpox have suddenly brought the possibility of disease panic much closer to the surface. Malaria, yellow fever, cholera, and polio may be snuffed bogeymen on American soil, but we need to give much thought to "the panic next time" (to borrow from Lynch's title).

### Notes

1. W. E. George to My dear friend, 4 Nov. 1897, Van Dyke Collection, Mississippi Valley Collection, The University of Memphis, Memphis, TN.
2. On the mixture of biological and culture parameters in the understanding of disease see Rosenberg, "Framing Disease."
3. See Kraut, 78–98; and Risse.
4. See Jarcho; and Rosenberg, *Cholera Years*, 193–94.

## Works Cited

- Bass, C. C. "Difficulties and Errors before and after Anti-malaria Campaigns." *Southern Medical Journal* 15 (1922): 339–43.
- Goode, Erich, and Nachman Ben-Yehuda. *Moral Panics: The Social Construction of Deviance*. Cambridge: Blackwell, 1994.
- Humphreys, Margaret. *Malaria: Poverty, Race, and Public Health in the United States*. Baltimore: Johns Hopkins UP, 2001.
- Jarcho, Saul. "Yellow Fever, Cholera, and the Beginnings of Medical Cartography." *Journal of the History of Medicine and Allied Sciences* 25 (1970): 131–42.
- Kraut, Alan. *Silent Travelers: Germs, Genes, and the 'Immigrant Menace'*. New York: Basic, 1994.
- Maxcy, Kenneth F. "Epidemiological Principles Affecting the Distribution of Malaria in the Southern United States." *Public Health Reports* 39 (1924): 1113–27.
- Risse, Guenter. "'A Long Pull, A Strong Pull, and All Together': San Francisco and Bubonic Plague, 1907–1908." *Bulletin of the History of Medicine* 66 (1992): 260–86.
- Rogers, Naomi. "Germs with Legs: Flies, Disease and the New Public Health." *Bulletin of the History of Medicine* 63 (1989): 599–617.
- Rosenberg, Charles E. *The Cholera Years: The United States in 1832, 1849, and 1866*. Chicago: U of Chicago P, 1962.
- . "Framing Disease: Illness, Society, and History." *Framing Disease: Studies in Cultural History*. Eds. Charles E. Rosenberg and Janet Golden. New Brunswick: Rutgers UP, 1992. xiii–xxvi.
- Wingfield, Marshall. "The Life and Letters of Dr. William J. Armstrong." *The West Tennessee Historical Society Papers* IV (1950): 106–8.