

Yellow Jack's Wrath: The 1878 Yellow Fever Epidemic and Public Health in Mississippi

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Abstract

During the nineteenth century, yellow fever outbreaks were common for communities in the American South. In 1878, a yellow fever epidemic far exceeded earlier outbreaks in its devastation across the Mississippi River Valley and beyond. While an extensive historiography exists for the effects of the 1878 epidemic on urban areas like New Orleans, Memphis, and Atlanta, historians have largely neglected its impact on rural regions. This paper addresses the rural white and black experiences in Mississippi, using the town of Grenada as a case study. It also examines the conflicts between health and charity advocates over the role of government in public health. Many white supremacists in the South feared that government control over public health would impede their control over their communities. Ultimately, their resistance prevented lasting changes to Mississippi's public health system. It was only decades later, with the attempt to eradicate hookworms and pellagra (two chronic diseases), that reformers began to create a system in Mississippi that went beyond quarantines alone.

Keywords: yellow fever, public health, 1878 epidemic, Grenada, Mississippi, United States

In his 1879 speech before the Mississippi State Board of Health, Dr. John Brownrigg gave a harrowing account of the destruction of yellow fever:

On Sunday, the 9th day of last August, in the stillness and beauty of a summer day, it was announced in Grenada that yellow fever was epidemic....The besom of destruction has swept over the place....The plague destroyed social organization and the mechanism of civilization as if they had been living beings.... Its victims hide themselves to die like wild beasts.²

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² Oration by Dr. John Brownrigg before the Mississippi State Medical Association, 1879, in J. L. Power, *The Epidemic of 1878 in Mississippi: Report of the Yellow Fever* (Jackson, MS: Clarion Steam Pub. House, 1879), 165-166.

Grenada was a common stop just south of where two lines of the Mississippi & Tennessee Railroad merged in north Mississippi. Like many other towns, it had an open sewer, a hot summer, and a nearby river. Despite these characteristics, which would become the focus of disease prevention measures, Grenada had never before had an encounter with yellow fever. Coastal areas—most prominently New Orleans, Louisiana—saw numerous epidemics, but rural inland areas generally escaped the scourge of Yellow Jack.³ In the 1878 epidemic, however, hundreds died in Grenada and a subsequent panic caused the majority of the town's white residents to flee. The death and destruction brought national attention to the small Mississippi community, until the epidemic spread further beyond its normal region of infection, eventually reaching communities across the South and even some cities in the North.⁴

Before the 1878 epidemic, there were outbreaks of yellow fever in cities around the South. It was a terrible disease, and while scientists now know it is caused by a mosquito-borne virus, its etiology was still not understood in the nineteenth century. Symptoms include fever, liver failure, hemorrhages throughout the body, and vomit that is black from blood. It was also highly deadly, killing up to half of those infected with the most virulent strains, a sizeable mortality rate for such a common disease. Citizens across the South feared Yellow Jack.⁵

Yellow fever outbreaks were a familiar phenomenon for communities in the South throughout the nineteenth century. It was an endemic disease, and it routinely caused havoc in the region. Residents of urban areas, such as New Orleans and Memphis, Tennessee, enacted strong public health measures to mediate its economic disruption and deadly effects. Other areas, such as Mississippi, favored weaker, more localized responses. In 1878, a yellow fever outbreak devastated the Mississippi River Valley and beyond on a scale larger than the epidemics before it. State and local governments in Mississippi were woefully unprepared and unable to respond to this crisis, and most aid came from private charities. These, too, struggled to address Mississippians' needs.

New Orleans, Louisiana, was the largest city in the South and one to which many southern Mississippians felt both a close cultural connection and economic connection. It also experienced epidemics multiple times each decade through the nineteenth century. As city officials learned how to respond, New Orleans became a pioneer among Southern cities in public health measures. Debates over the etiology of the disease led to disputes over how to combat outbreaks. In the eighteenth and early nineteenth centuries, physicians believed it was caused by foul, moist, and hot air, meaning it was noncontagious and limited to cities that were unclean. In the 1840s, however, Southern physicians outside New Orleans argued that it was indeed a contagious disease that spread from the ports of the city into rural regions and other communities around it. The New Orleans business elite initially opposed the contagionists' arguments for increased quarantines, since the measure closed off whole communities and disrupted the economy. Yet better recordkeeping that tracked the spread of the disease, as it affected communities in Louisiana, Mississippi, and Alabama during an 1853 epidemic, helped prove that the disease was communicable.⁶ After this outbreak, quarantines became the most common way to combat the

³ The term "yellow jack" as slang for yellow fever comes from the practice of a yellow flag (or jack) being flown at naval hospitals or on quarantined vessels to warn others of the presence of contagious disease. John S. Farmer and W. E. Henley, *Slang and its Analogues: Past and Present Vol. VII Part I* (1904), 374.

⁴ Khaled J. Bloom, *The Mississippi Valley's Great Yellow Fever Epidemic of 1878* (Baton Rouge, LA: Louisiana State University Press, 1993), 143-149; J. L. Power, *The Epidemic of 1878 in Mississippi*, 162-164.

⁵ Jeanette Keith, *Fever Season: The Story of a Terrifying Epidemic and the People Who Saved a City* (New York, NY: Bloomsbury Press, 2012), 59-60.

⁶ Margaret Humphreys, *Yellow Fever and the South* (New Brunswick, NJ: Rutgers University Press, 1992), 17-24.

spread of yellow fever, and, prior to the Civil War, states had complete control over these quarantines.⁷ The 1878 epidemic, however, caused states and cities to revisit their public health systems.

Prior to the yellow fever outbreak in 1878, Mississippians generally supported a limited Mississippi Board of Health that would merely advise counties on how to institute quarantines and would leave counties the power to administer them. However, the epidemic caused extreme social and economic destruction, from high death counts, to the complete disruption of economic activities, to the migration of people fleeing the disease. The turmoil convinced many Mississippians that the purely advisory role of the Mississippi Board of Health and the system of private relief were not enough to protect the public health of the state, leading to calls for both a stronger state health infrastructure and, more notably, the creation of a powerful federal public health agency. Despite this change in mindset, the reforms that came immediately after the epidemic focused only on establishing a quarantine system and did not have a meaningful impact on Mississippi's public health care system more generally. Ultimately, Mississippians showed more concern about the threat of broadly powerful federal and state governments to their local interests. In the context of Redemption-era politics, when the state's leaders were faced with a crisis that demanded a choice between protecting public health and maintaining their systems of white supremacy, they chose the latter.

Letters, newspaper articles, charity logbooks, and political cartoons reveal a range of responses to the 1878 epidemic among community members and outside providers of assistance in Grenada. Letters between members of the Grenada Yellow Fever Relief Committee, for example, paint a picture of conflict. Amid the turmoil of the epidemic, parties in the town positioned for control over relief monies and disputed their duties and the duties of African American residents of the town. Newspapers—both in the fever-stricken South and in distant places like New York City—published harrowing tales of destruction and hopeful tales of charity drives and fundraising efforts. They also provided editors' and politicians' reactions to the epidemic and the subsequent reform movement. Members of charity organizations, such as John Logan Power of Jackson, Mississippi, compiled reports of aid. Their records illustrate the nationwide relief efforts and the immense disruption to daily life that the epidemic caused. Finally, these messages became even more poignant in the form of political cartoons. Illustrators drew pictures of desperate families and charity drives during the epidemic to encourage donations. Once the outbreak had subsided, they drew cartoons depicting prevention measures or symbolic mythological figures to further their positions on how states' rights and public health should intertwine.

Historians have examined the effects of the 1878 yellow fever epidemic in the South extensively. Francois Delaporte has studied the history of scientific beliefs about yellow fever from before the advent of germ theory, bacteriology, and the breakthrough discovery in 1900 that the *Aedes aegypti* mosquito spread the disease.⁸ Khaled Bloom, John Ellis, Margaret Humphreys, and Jeanette Keith have all provided poignant narratives of many communities, especially New Orleans and Memphis, Tennessee. They have also, to different extents, examined the effects of the

⁷ Katherine Vanderhook, "Origins of Federal Quarantine and Inspection Laws" (third year paper, Harvard Law School, 2002).

⁸ Francois Delaporte, *The History of Yellow Fever: An Essay on the Birth of Tropical Medicine* (Cambridge, MA: MIT Press, 1991).

epidemic on health reforms, arguing that yellow fever provided motivation to fund health boards.⁹ Deanne Stephens Nuwer conducted a similar examination on the epidemic in Mississippi, while Ruth Janet Severson Haug looked at the institutionalization of public health in Mississippi but focused on a later period. Jennifer Ford has likewise focused on disease in Mississippi and post-1878 public health with her examination of a typhoid fever outbreak in Oxford, Mississippi, in 1896.¹⁰

In addition to the responses of the government, various private charity organizations and individual donors across the country responded to the 1878 epidemic. Edward Blum has looked at the effect of the 1878 epidemic on reconciliation and charity between the North and the South in the post-Reconstruction era, demonstrating that the devastation in the South provided an avenue for Northerners to help their American brothers and mend wounds from the Civil War. Michael Katz and Keith Wailoo have discussed the role of private organizations and donations in the healthcare of the city of Memphis, which was often a model city for northern Mississippi. They addressed how political leaders recognized the negative impact of disease on the city, which sparked the municipal government to begin involving itself in public health through sanitation measures, thus demonstrating a changing perception of the benefits provided by a focus on promoting a common health across an entire community.¹¹

Finally, there is scholarship on the role of the federal government in public health and how it helped respond to yellow fever epidemics. Katherine Vanderhook has looked at the legal justification for federal and state quarantine laws and how the powers of the federal government increased after the Civil War. J. M. Michael has researched the brief history and demise of the National Board of Health, which lasted from 1879-1883. It collapsed due to controversy surrounding state and federal authority and internal resistance to centralization, marking the failure of attempts to create a federal public health service for the next two decades.¹²

While there has been extensive writing on the 1878 yellow fever epidemic and its effects on public health on cities like New Orleans and Memphis, there has been very little on the effects of the epidemic on Mississippi specifically. For example, even though Nuwer's *Plague Among the Magnolias* focused on the narrative of the epidemic in urban and rural communities across the state, it did not address the long-term impact it had on health in Mississippi. Her discussion of rural areas is also unique. Although the majority of Americans lived in rural communities at the time, by associating yellow fever with city life, historians have ignored its effect on most of the population. Mississippi provides a good model for these regions because it was a rural state and it embodied the individualistic attitudes and preference for local control that rural states exhibited

⁹ Bloom, *Mississippi Valley*; John H. Ellis, *Yellow Fever and Public Health in the New South* (Lexington, KY: University Press of Kentucky, 1992); Humphreys, *Yellow Fever and the South*; Keith, *Fever Season*.

¹⁰ Deanne Stephens Nuwer, *Plague Among the Magnolias: The 1878 Yellow Fever Epidemic in Mississippi* (Tuscaloosa, AL: University of Alabama Press, 2009); Ruth Janet Severson Haug, "From the Ground Up: The Institutionalization of Public Health Administration in Mississippi" (PhD diss., Mississippi State University, 1995); Jennifer Ford, "1896 Typhoid Fever Outbreak in Oxford, Mississippi: A New Letter from James Ezekiel Edmonds," *The Southern Quarterly* 53, no. 3/4 (Spring/Summer 2016): 190-198.

¹¹ Edward J. Blum, "The Crucible of Disease: Trauma, Memory, and National Reconciliation during the Yellow Fever Epidemic of 1878," *The Journal of Southern History* 69, no. 4 (Nov. 2003): 791-820; Michael B. Katz, *In the Shadow of the Poorhouse: A Social History of Welfare in America* (New York, NY: Basic Books, 1996); Keith Wailoo, *Dying in the City of the Blues: Sickle Cell Anemia and the Politics of Race and Health* (Chapel Hill, NC: University of North Carolina Press, 2001).

¹² Vanderhook, "Origins of Federal Quarantine and Inspection Laws;" J. M. Michael, "The National Board of Health: 1879-1883," *Public Health Reports* 126, no. 1 (2011): 123-129.

across the country.¹³ These attitudes contributed to Mississippi health reformers' failure to establish an effective public health organization after the 1878 epidemic.

Part I: Yellow Fever, Systems of Relief, and Political Turmoil Before the 1878 Epidemic

Americans in the nineteenth century experienced a transition from a public health system that was focused on disaster mitigation to one that encouraged more preventative measures in the fight against disease. Around the start of the nineteenth century, some cities created health boards as a response to disease outbreaks, but these boards were not permanent solutions. For example, in New Orleans, the municipal government created a city board of health in 1804 in response to a yellow fever outbreak. The new board oversaw some sanitation and quarantine efforts, but it was not fully independent, as its actions needed approval from the city council. The council did not renew it the next year. Two other health boards also dissolved shortly after their formations, and city officials did not create a permanent board until 1841.¹⁴

Furthermore, the federal government's focus on public health, like that of the states and cities, was one that merely reacted to disease outbreaks and sought to limit their spread rather than enact measures to prevent them outright. The first federal law that addressed quarantines was passed on June 9, 1794, and it enabled states to impose duties on ships arriving from foreign ports.¹⁵ This law, however, merely granted permission to states to respond to epidemics and did not permit a federal response. On May 27, 1796, Congress passed "An Act Relative to Quarantine" that allowed the Department of the Treasury to oversee quarantine efforts and on July 16, 1798, it established the Marine Hospital Service to observe and assist states with their quarantines. Yet, Congress did not give the Service authority to enact or enforce any quarantine.¹⁶

Although quarantines were the prevailing public health measure, government officials and business leaders did not like them. They negatively impacted cities by creating an unsafe reputation and the loss of trade, and they were merely reactive. Furthermore, officials enacted quarantines in both the North and the South, but they focused on cities, which were at a higher risk of epidemics due to dirtier conditions, denser populations, and increased traffic of goods and people. By the 1830s most American cities had begun sanitary reform movements as a way to prevent disease and to avoid harming commerce. Repeated outbreaks of Asiatic cholera, which was considered a "filth disease," drove these reforms in Northern cities.¹⁷

In the South, there were far fewer large cities. New Orleans, however, was notorious for its repeated encounters with yellow fever. Quarantines were also the prevailing public health measure there in the early and mid-nineteenth century, and they often elicited a negative political response. Businessmen in New Orleans, who depended on trade along the Mississippi River to maintain their profits, fought the notions that yellow fever was contagious and that quarantines would be effective against it. Even after a Mississippi physician provided epidemiological data of an 1853 yellow fever epidemic that led to a general scientific consensus that yellow fever was contagious, some doctors still dissented.¹⁸ As late as 1878, Dr. Thomas O. Summers declared, "Is Yellow Fever

¹³ Haug, "From the Ground Up," 33.

¹⁴ John Duffy, *The Sanitarians: A History of American Public Health* (Urbana and Chicago, IL: University of Illinois Press, 1990), 60-61.

¹⁵ Vanderhook, "Introduction" in "Origins of Federal Quarantine and Inspection Laws."

¹⁶ Fitzhugh Mullan, *Plagues and Politics: The Story of the United States Public Health Service* (New York, NY: Basic Books, Inc., 1989), 14; Vanderhook, "Origins of Federal Quarantine and Inspection Laws."

¹⁷ Duffy, *The Sanitarians*, 72, 79.

¹⁸ Bloom, *Mississippi Valley*, 47-50; Humphreys, *Yellow Fever and the South*, 17-24.

contagious? Most assuredly not,” in his book on the 1878 yellow fever epidemic in Tennessee, and instead blamed it on the humid weather.¹⁹ The lack of boards of health in most Southern states exacerbated the reluctance to enforce quarantines on the local level. Meanwhile, corruption and nepotism plagued the Marine Hospital Service, whose role was to advise local authorities on when and how to quarantine possible disease carriers, rendering it ineffective.²⁰

New Orleans served as an influential model for the livelihoods of southern Mississippians. In north Mississippi, Memphis served as the cultural model. Both of these cities had a history with yellow fever and both had health boards—the Louisiana Board of Health and the Memphis Board of Health—that coordinated quarantine efforts.²¹ These government boards did little to provide material aid to the citizens of their cities, however. Government funding of “outdoor relief,” assistance in the form of goods and money, had become unpopular around the nation.²² J. M. Keating, the editor of the Memphis *Appeal* newspaper, wrote that the post-Civil War era was “one of extravagance throughout the Union.” Furthermore, “municipalities were freely bled for...unnecessary public and semi-public improvements. Appropriations of public monies were made in the most reckless way.”²³

The era Keating referred to, Reconstruction, was a tumultuous time in the South, when federal troops occupied the region and enacted programs to transition it away from a slaveholding society—an effort that most elite white Southerners resented. Congress created the Freedmen’s Bureau to provide aid for former slaves in the form of “provisions, clothing, and fuel...for the immediate and temporary shelter and supply of destitute and suffering refugees and freedmen and their wives and children.”²⁴ It also established hospitals that administered medical care and acted as almshouses for African Americans when existing ones turned them away. Federal lawmakers resisted paying for these hospitals at a federal level, meaning local communities often had to contribute. Oliver Otis Howard, the director of the Freedmen’s Bureau, wrote, “From the start I felt sure that the relief offered by the Bureau to refugees and freedmen...[was] abnormal to our system of government....We [labored] hard to reduce the number of freedmen’s courts, hospitals, asylums, and eleemosynary [charitable] features.” He continued, “the majority of whites in the South were...very unfriendly to the Freedmen’s Bureau.”²⁵ It furthered their distrust of a larger government and harmed efforts to implement systems of government aid.²⁶

The whites who bemoaned aid for blacks in the South were much less resistant to aid for whites. Widespread economic devastation caused by the Civil War prompted Southern whites to call for direct relief to soldiers’ families. During the war, the Confederate and state governments rationed food, controlled prices, and took control of the railroads. Direct public aid to whites grew to a grand scale. In Alabama, for example, at least one quarter of all whites received public assistance from the government, and the majority of the Confederacy’s tax revenue went to

¹⁹ Thomas O. Summers, *Yellow Fever* (Nashville, TN: Wheeler Brothers Press, 1879), 14.

²⁰ Mullan, *Plagues and Politics*, 19; Vanderhook, “The Fight Against Yellow Fever and the Acts of 1878-1879” in “Origins of Federal Quarantine and Inspection Laws.”

²¹ Bloom, *Mississippi Valley*, 70-78; Keith, *Fever Season*, 49-50.

²² Katz, *In the Shadow of the Poorhouse*, 38-39.

²³ J. M. Keating, *A History of the Yellow Fever: The Yellow Fever Epidemic of 1878 in Memphis, Tenn.* (Memphis, TN: Printed for the Howard Association, 1879), 101.

²⁴ *Senate Journal*. 38th Cong., 2nd sess., March 3, 1865, 507-509.

²⁵ Oliver Otis Howard, *Autobiography of Oliver Otis Howard, Major General, United States Army* (New York, NY: The Baker & Taylor Company, 1907), 226.

²⁶ Jim Downs, *Sick from Freedom: African-American Illness and Suffering During the Civil War and Reconstruction* (New York, NY: Oxford University Press, 2012), 74-75, 86-87.

distributing food directly to the poor. The rations were meager, though, and bread riots broke out in several Southern cities.²⁷ After the war, the federal government provided the bulk of the aid in the South, which it distributed to whites as well as blacks. The Freedmen's Bureau provided assistance to members of both races, and whites even received more relief than blacks from the Bureau in Alabama. Southern states also created indirect welfare systems that focused on helping whites, such as the establishment of public schools, in an elite effort to win the allegiance of poor whites and create racial solidarity.²⁸

White supremacists tapped into and inflamed opposition to Reconstruction in the South, and they launched a two-pronged approach to gain control over Southern states' governments and end Reconstruction in a period known as Redemption. They started in Mississippi in 1874, where Redeemers worked through the Democratic Party to win elections throughout the state. Their leader was Lucius Quintus Cincinnatus Lamar, a former Congressman and member of Mississippi's secession committee before the Civil War, which declared that "utter subjugation await[ed them] in the Union."²⁹ To secure these elections, white supremacists began a campaign of terror to suppress or kill African American and white Republican voters. They first acted in Vicksburg, Mississippi, during their municipal elections on August 5, 1874. Armed whites killed blacks at a political rally, stood watch at voting booths, and "impressed upon the whole city that fear which comes naturally from an organized and irresponsible mob prepared for violence."³⁰ Their efforts succeeded, and Democrats won in a sweeping victory.³¹

After their triumph in Vicksburg, white supremacists incited violence throughout the rest of the state. Editors of the *Weekly Clarion*, a Democratic newspaper based in Jackson, Mississippi, argued that the Republican Party was formed as the "black man's party," which sought to "remit those States [with a negro majority] to the indefinite control of the African race." Furthermore, they wrote, "white men should, in self-defense, form a similar organization...[or] our State seems doomed to destruction."³² In short, white Democrats equated black political participation with black domination and resolved to end it. President Ulysses S. Grant's decision to not send federal troops to put down the violent attacks encouraged further armed aggression. Lamar condemned the violence, but he claimed that it happened within black communities, and that white violence was greatly exaggerated.³³ He argued that the solution was "a discontinuance of Federal supervision" in the South.³⁴ Ultimately, the Redeemers succeeded when the Mississippi legislature elected Lamar to the United States Senate in 1875, and Adelbert Ames, the Republican governor of Mississippi, resigned on March 29, 1876. Democrats then implemented the "Mississippi Plan" in states across the South.³⁵

²⁷ Elna C. Green, *Before the New Deal: Social Welfare in the South, 1830-1930* (Athens, GA: University of Georgia Press, 1999), xiv.

²⁸ Green, *Before the New Deal*, xv.

²⁹ Biographical Directory of the United States Congress, *Lamar, Lucius Quintus Cincinnatus (1825-1893)*, accessed Nov. 21, 2017, <http://bioguide.congress.gov/scripts/biodisplay.pl?index=L000030>; Mississippi Secession Committee, *A Declaration of the Immediate Causes which Induce and Justify the Secession of the State of Mississippi from the Federal Union*, January 9, 1861; Nicholas Lemann, *Redemption: The Last Battle of the Civil War* (New York, NY: Farrar, Straus and Giroux, 2006), 67-70.

³⁰ "Visccksburgh Troubles," House Report 265, 43rd Cong., 2nd Sess., iii, in Lemann, *Redemption*, 73-74.

³¹ Lemann, *Redemption*, 70-75.

³² "The Color Line," *Weekly Clarion*, August 24, 1874, accessed February 27, 2018, <https://chroniclingamerica.loc.gov/lccn/sn83016926/1874-08-27/ed-1/seq-1/>.

³³ Lemann, *Redemption*, 97.

³⁴ L.Q.C. Lamar, letter to Edward Clark, February 1, 1875, Clark Family Papers, in Lemann, *Redemption*, 97.

³⁵ Lemann, *Redemption*, 164, 170, 180.

Since Southern state governments were in turmoil in the 1870s, and their architects denounced state relief, private charity organizations provided what aid was available. These organizations were important during times of crisis to return communities to normalcy, especially in a period when many wealthy citizens across the country argued that government relief was immoral and ineffective.³⁶ In New Orleans and Memphis, the major source of private aid in the mid- to late nineteenth century was the Howard Association, an organization that young businessmen founded in New Orleans to dedicate funds and medical care to victims of yellow fever outbreaks. Its relief efforts, though, focused solely on providing treatment and aid during epidemics. It was unable to fund preventative public health reforms. Other groups, such as the Masons and the Odd Fellows, faced similar restrictions, indicating that voluntarism could only attempt to ameliorate the damages from an outbreak. Only governmental reform—both on the state and federal levels—could have enacted meaningful change.³⁷

While these cities were an important model, the state of Mississippi was overwhelmingly rural in the mid- and late nineteenth century, and doctors did not believe that yellow fever was an issue for rural communities. In 1874, one Tennessee physician wrote, “yellow fever is peculiarly a disease of cities, where large numbers of people are crowded together and effete animal matters are allowed to pollute the atmosphere.”³⁸ Since the American public health movement began in cities, largely as a response to diseases like cholera in the North and yellow fever in the South, rural areas of Mississippi that doctors believed to be immune to disease had very few, if any, health regulations. Both a lack of money to fund a robust public health service and a general distrust in all levels of government compounded this issue, as conflicts between the vestiges of the Republican Reconstruction and resurgent Democratic forces collided. Even though the state legislature created the Mississippi Board of Health and directed the creation of county boards of health in 1877 and 1878, the state’s public health infrastructure was still not yet fully organized and public health laws were only nominally enforced by the summer of 1878.³⁹ These conditions set the scene that allowed the yellow fever epidemic of 1878 to be among the worst recorded outbreaks that the Mississippi Valley had ever seen.

Part II: The “Besom of Destruction” Descends: Yellow Fever in Grenada

The first case of yellow fever in this epidemic happened on July 13 in New Orleans, but it was not reported until July 26. In response, doctors from Memphis established quarantine stations along major railroads both around Memphis and in Mississippi towns such as Grenada. Unfortunately for both, the inefficiency of health reporting and the slow travel of news meant that these quarantines were too late to stop the disease.⁴⁰ Furthermore, massive expansion of railroads in the 1870s connected inland communities to New Orleans and other coastal regions like never before. These rail lines enabled refugees to flee yellow fever outbreaks and carry the disease with them to vulnerable communities. Since yellow fever historically only infected port communities, inland

³⁶ Katz, *In the Shadow of the Poorhouse*, 38-39, 45.

³⁷ Duffy, *The Sanitarians*, 164-165; Humphreys, *Yellow Fever and the South*, 81; Katz, *In the Shadow of the Poorhouse*, 60-61; Keith, *Fever Season*, 53; Power, *The Epidemic of 1878 in Mississippi*, 3-4.

³⁸ C. Happoldt, “Remarks on the Yellow Fever Epidemic of Memphis, Tenn., in 1873,” *Richmond and Louisville Medical Journal*, XVIII (1874), 134, in Bloom, *Mississippi Valley*, 79.

³⁹ Bloom, *Mississippi Valley*, 143-149; Haug, “From the Ground Up,” 32-33; Nuwer, *Plague Among the Magnolias*, 5.

⁴⁰ J. C. Hathorn, *A History of Grenada County* (The National Library Bindery Co. of Georgia, 1978), 99-100; Keating, *A History of the Yellow Fever*, 105-106.

areas had weaker quarantine protocols—if they had any at all.⁴¹ The 1878 outbreak eventually reached as far north as Pittsburgh, Pennsylvania, and as far east as Florida, but it impacted the Mississippi River Valley the most.⁴²

Grenada was one town in this region that was representative of many rural towns in Mississippi. It had no sanitary infrastructure, and its sewer was an often-dry brook that flowed through the town. Excrement was “exposed to fester in the sun and exhale its impurities into the atmosphere,” and it was “extremely offensive.” Furthermore, “privy vaults...[were] easily pervious to water, and very rarely emptied.”⁴³ The town was also situated along a river, and it experienced hot, humid summers. Many doctors, like Thomas O. Summers of Nashville, Tennessee, argued these conditions were responsible for yellow fever, although Grenada had never before experienced an outbreak of the disease.⁴⁴

Because Grenada had not had an encounter with Yellow Jack before, it was unprepared for the outbreak in 1878. When the town’s Board of Supervisors met at the beginning of August, they did not once mention yellow fever.⁴⁵ Mrs. Capt. Fields, the first Grenada case and the first case in Mississippi, contracted the disease on July 20th and died on July 31. Ten of her thirteen family members also became sick. Seven died and only three recovered. A panic ensued in which “everybody who was able to get away fled as speedily as possible.”⁴⁶ Around 1,000 of the town’s 1,300 white residents and about 200 of the town’s 1,200 black residents fled to camps a few miles outside Grenada or to other towns. More of Grenada’s black residents left at the first signs of yellow fever, but they returned to their homes in the predominantly black southwestern quarter of the town since the outbreak had not yet touched it, and, more significantly, they were unable to afford to stay away. While the camps escaped the disease, residents that went elsewhere carried the disease with them.⁴⁷ A St. Louis *Globe-Democrat* correspondent summarized the dire situation of Grenada by proclaiming that “the most fearful war could not have produced a greater desolation.”⁴⁸ A reporter for the *New York Herald* wrote, “In all Grenada there is not a store open, not a market house, not a saloon. The Howards (with the exception of Rev. Mr. McCracken and Mr. Ringgold) are the only people who are at work.”⁴⁹ The community was in disarray and its economy had shut down.

⁴¹ Urmi Engineer Willoughby, *Yellow Fever, Race, and Ecology in Nineteenth-Century New Orleans* (Baton Rouge, LA: Louisiana State University Press, 2017), 113-115.

⁴² Humphreys, *Yellow Fever and the South*, 60-62.

⁴³ Power, *The Epidemic of 1878 in Mississippi*, 160.

⁴⁴ Bloom, *Mississippi Valley*, 143-149.

⁴⁵ Hathorn, *A History of Grenada County*, 99.

⁴⁶ Power, *The Epidemic of 1878 in Mississippi*, 161-162.

⁴⁷ Power, *The Epidemic of 1878 in Mississippi*, 162; James West Davidson, *They Say: Ida B. Wells and the Reconstruction of Race* (Oxford, England: Oxford University Press, 2009), 46.

⁴⁸ St. Louis *Globe-Democrat*, September 6, 1878, in Bloom, *Mississippi Valley*, 147.

⁴⁹ “Grenada Like a Deserted City,” *New York Herald*, September 4, 1878, accessed November 24, 2017, <https://chroniclingamerica.loc.gov/lccn/sn83030313/1878-09-04/ed-1/seq-3/>.

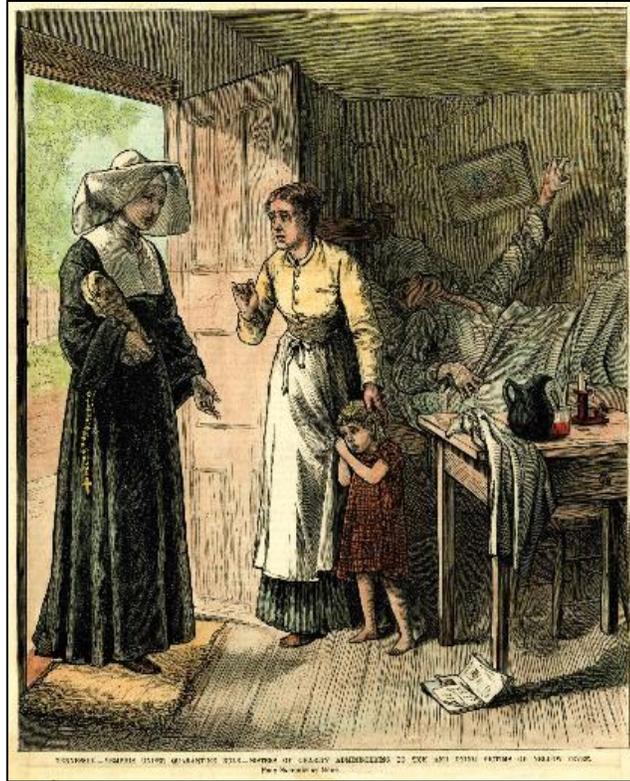


Figure 1: “Catholic Sisters of Charity.”⁵⁰ The Catholic Sisters of Charity was one of several private charity groups that provided food to the victims of the yellow fever epidemic, especially women and children. Courtesy of the Tennessee State Library and Archives via the Digital Library of Tennessee and the Digital Public Library of America.

Due to the devastation, the town sought outside help for relief from several organizations. “There came a most anxious call for nurses and physicians,” wrote J. M. Keating for the Howard Association, and John Logan Power, the director of the Masons’ and Odd Fellows’ relief efforts in Mississippi, recorded that the Masons contributed \$729.75 and the Odd Fellows \$1361.10 in aid.⁵¹ The disbursement of the relief, though, encountered difficulties when Col. Anderson, the representative of the Howard Association in Grenada, died of the disease. “There is no member of our association at Grenada,” wrote J. P. Smith on September 6, and the administration of charity relief fell to two rival factions in Grenada: the Relief Committee and the Sub-Relief Committee.⁵²

John Powell and Robert Mullen sat on the Grenada Relief Committee, which managed and spent the relief monies from the various charity organizations, most notably the Howards. They did not feel safe in Grenada, though, so they fled the town with hundreds of its other citizens and conducted business four miles away in a refugee camp, promising “to have a messenger who will go in daily so that [they] can keep up a close communication and act in concert for the best interest

⁵⁰ “Catholic Sisters of Charity,” (1870s), in the Digital Public Library of America, accessed Sept. 18, 2017, <http://cdm15138.contentdm.oclc.org/cdm/ref/collection/p15138coll18/id/78>; “Report of the Mississippi Board of Health,” in *Public Health Reports and Papers, Volume IV, Presented at the Meetings of the American Public Health Association in the Years 1877-1878* (Boston, MA: The Riverside Press, 1880), 207-209.

⁵¹ Keating, *A History of the Yellow Fever*, 106; Power, *The Epidemic of 1878 in Mississippi*, 69-70.

⁵² J. P. Smith to R. Mullins, letter, September 6, 1878, Yellow Fever in Grenada: 1878, Misc. Manuscripts folder 1, box 5, Mitchell Memorial Library, Mississippi State University, copies made Aug. 12, 1969.

of [their] people and the trust committed to [them].”⁵³ Their distance, however, led some in the town to resent them and argue that they did not fulfill their duties. Dr. W. C. McCracken, who was included among the relief workers by the *New York Herald* correspondent, urged the people of Grenada to remove them from the Relief Committee because “they have failed to act as a relief committee.” When his motion failed, Dr. McCracken instead successfully moved to create a Sub-Relief Committee that included him and two others who were in Grenada and providing relief themselves.⁵⁴

While organizers were able to dispense aid “to all, rich and poor, black and white,” their feud over the expenditure of relief money and which of the two committees had played a larger role in the aid of Grenada’s residents continued for years afterward. Evidence of the dispute is exemplified in a letter from a friend of Dr. McCracken, who reassured him that “all the general visiting work, done after [August 28], was performed by you solely and alone. I know it to be a fact that you walked over the town carrying baskets and bundles, containing medicine and nourishment for the sick” and that “philanthropy...is a thankless investment, your motives are misconstrued.”⁵⁵ The conflict in Grenada, while more dramatic than in many other towns, provides a clear example of the chaos caused by the epidemic and the confusing nature of public health in Mississippi, where many organizations and people tried to take charge and organizational hierarchies were nominal at best.

The plight of the South during the epidemic was so severe that the private relief charities that traditionally were able to help towns recover struggled, and Congress did not provide any money to the Marine Hospital Service to help due to the prevailing belief that aid should come from private sources.⁵⁶ The Grenada Relief Committee emphasized their lack of funds, writing that when “[Physicians’ and Nurses’] services can be disposed with, it is important that this should be done, as we may lack funds to pay.”⁵⁷ The Committee could not afford to fully support the health needs of Grenada’s residents, and it urged relief organizers to cut costs whenever possible. Its difficulties were reflected across the region. Southern politicians and newspaper editors telegraphed an appeal to chambers of commerce across the country, writing, “great as has been the charity, the necessity is yet greater and the sums subscribed are yet inadequate to the wants of the suffering.”⁵⁸ Dramatic cartoons of hungry and destitute families—usually women and children—and of long lines of men and women willing to donate supplies helped inspire people from outside

⁵³ John Powell and Robert Mullin to Rev. W. C. McCracken, letter, September 10, 1878, Yellow Fever in Grenada: 1878, Misc. Manuscripts folder 1, box 5, Mitchell Memorial Library, Mississippi State University, copies made Aug. 12, 1969.

⁵⁴ Town Gathering Proceedings, September 9, 1878, Yellow Fever in Grenada: 1878, Misc. Manuscripts folder 1, box 5, Mitchell Memorial Library, Mississippi State University, copies made Aug. 12, 1969.

⁵⁵ J. L. Power, *The Epidemic of 1878 in Mississippi*, 164; Thos. J. Brogan to Rev. Wm. C. McCracken, letter, March 12, 1882, Yellow Fever in Grenada: 1878, Misc. Manuscripts folder 1, box 5, Mitchell Memorial Library, Mississippi State University, copies made Aug. 12, 1969.

⁵⁶ Duffy, *The Sanitarians*, 165.

⁵⁷ John Powell and Robert Mullin to Sub-Relief Committee, letter, September 10, 1878, Yellow Fever in Grenada: 1878, Misc. Manuscripts folder 1, box 5, Mitchell Memorial Library, Mississippi State University, copies made Aug. 12, 1969.

⁵⁸ *Report of the Executive Committee of the Yellow Fever National Relief Commission, Organized at Washington, D. C., September 11, 1878* (Washington: 1879), 6.



Figure 2: “For The Fever-Stricken—Collection Of Clothing In New York.”⁵⁹ Americans from all across the country donated to relief efforts to help the victims of the yellow fever epidemic. Courtesy of The New York Public Library via the Digital Public Library of America.

the South to contribute to the yellow fever relief effort. Citizens from over thirty states and territories contributed money and supplies to the Masons and the Odd Fellows.⁶⁰ Fundraising methods were also creative. For example, abolitionist William Lloyd Garrison organized a fair in Tarrytown, New York, “in behalf of the yellow fever sufferers at the South” in which there were “one or two hundred tickets of admission, at ten cents each.”⁶¹ According to historian Edward J. Blum, the epidemic even helped heal the last vestiges of contempt from the Civil War that remained between white Northerners and Southerners, as it provided a national emergency that united the people of both regions in their relief efforts. He further argued that, “while northern and southern whites reveled in their newfound solidarity, they also joined together to neglect the medical needs of southern blacks.”⁶² White Southerners received aid from around the country, but their help came at the expense of black support.

Black Mississippians, who accounted for 72.7% of Grenada County’s population and 57.5% of the state’s population in 1880, received significantly less aid than their white counterparts. Across the South, dispensation of relief supplies was largely left to white local authorities. As a result, there was a racial disparity in who received aid, even if it was intended for sufferers of any

⁵⁹ Theodore R. Davis, “For the Fever-Stricken--Collection of Clothing in New York,” (1878), in the Digital Public Library of America, accessed Sept. 18, 2017, <https://digitalcollections.nypl.org/items/510d47e0-d730-a3d9-e040-e00a18064a99>.

⁶⁰ Power, *The Epidemic of 1878 in Mississippi*, 37, 48.

⁶¹ William Lloyd Garrison to his son Francis, letter, Sept. 9, 1878, in the Digital Public Library of America, accessed Sept. 18, 2017, <https://archive.org/details/lettertomydearfr1878garr6>.

⁶² Edward J. Blum, *Reforging the White Republic: Race, Religion, and American Nationalism, 1865-1898* (Baton Rouge, LA: Louisiana State University Press, 2005), 146-148.

race.⁶³ Hattie A. Milton, a representative in charge of dispensing relief for the American Missionary Society in Tennessee, wrote that, “although several thousand dollars were sent here to relieve yellow fever sufferers, many of the colored people received but little, some nothing.”⁶⁴ Furthermore, American health systems underwent vast improvements in the late nineteenth century, but white politicians and reformers privileged white recipients with care and routinely denied similar benefits to black, immigrant, and other minority populations. While voluntary aid agencies in Grenada claim to have distributed supplies to all members of every race and class, they did not keep statistics on how equitable this distribution was. As a general trend across the South, white relief agencies often focused on helping wealthier white women and children while limiting aid to poor whites and almost completely excluding African Americans. Black communities organized their own training and relief programs, through organizations such as the Peabody Association and black churches, but without access to the political or economic systems that benefited white southerners, those programs had fewer available resources.⁶⁵ This meant that when yellow fever struck, African Americans were hit even harder than whites. “To the Colored People of the United States....Our people are suffering, dying and destitute,” wrote New York City’s Colored Preachers’ Aid Society in the *New York Herald*. They cried, “for Heaven’s sake relieve us all you can by sending us means. We are not able to bury our dead or to nurse and feed the sick and destitute.”⁶⁶ During the epidemic, the situation for most African Americans in Mississippi was dire.

Even in their grim state, African Americans contributed to relief efforts, often disproportionately relative to their wealth and status. The prevailing belief among late nineteenth-century physicians was that they were more resistant to yellow fever.⁶⁷ They were also less able to flee towns and cities when the disease struck. Black workers thus held vital jobs when whites would or could not. In Memphis, for example, the city government hired black policemen, a sign of desperation in a time when whites were driving blacks out of all positions of power.⁶⁸ In Grenada, one thousand African Americans remained after the panic caused by the first cases of disease, compared to only 325 whites. When looting and assaults increased during the chaos, J. H.

⁶³ Department of Commerce, Bureau of the Census, *Negro Population, 1790-1915* (Washington: Government Printing Office, 1918), 51; Jessica Wells, “The Suffering South: 1878 Yellow Fever Narratives and Post-Reconstruction Southern Identity” (PhD diss., University of South Florida, 2017); “Mississippi State Census—1880,” in *Mississippi Senate Journal, 1882* (Jackson, MS: J. L. Power State Printer, 1882).

⁶⁴ “Material and Spiritual Value of the Yellow Fever Fund,” *American Missionary* 33, 5 (May 1879): 149.

⁶⁵ Wells, “The Suffering South,” 189; Willoughby, *Yellow Fever, Race, and Ecology*, 123-125; W. Michael Byrd and Linda A. Clayton, *An American Health Dilemma: Volume One: A Medical History of African Americans and the Problem of Race: Beginnings to 1900* (New York, NY: Routledge Press, 2000), 368; National Academy of Sciences, Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (Washington: The National Academies Press, 2003), 472.

⁶⁶ Colored Preachers’ Aid Society, “An Appeal to Colored People,” *New York Herald*, September 4, 1878, accessed November 24, 2017, <https://chroniclingamerica.loc.gov/lccn/sn83030313/1878-09-04/ed-1/seq-3/>.

⁶⁷ Historians have generally agreed with this belief and have only recently begun to question whether African Americans are truly more resistant to yellow fever. The debate is not settled. No biological mechanisms for a genetic immunity to yellow fever have been discovered, but a mathematical analysis indicated a statistically significant difference in population mortality. For further discussion, see Mariola Espinosa, “The Question of Racial Immunity to Yellow Fever in History and Historiography,” *Social Science History* 28, no. 3&4 (Fall/Winter 2014): 437-453 and Lauren E. Blake and Mariano A. Garcia-Blanco, “Human Genetic Variation and Yellow Fever Mortality during 19th Century U.S. Epidemics,” *mBio* 5, no. 3 (June 2014): 1-4, accessed September 26, 2018, DOI: 10.1128/mBio.01253-14.

⁶⁸ K. David Patterson, “Yellow Fever Epidemics and Mortality in the United States, 1693-1905,” *Social Science & Medicine* 34, no. 8 (1992): 862-863.

Campbell, a Democrat and the sole remaining white member of the city council, worked with the black city councilors who stayed behind to establish a black police force. According to historian Dianne Stephens Nuwer, Democratic officials in violent, Redemption-era Mississippi were expected to express suspicion of African Americans. Campbell demonstrated his distrust by refusing to arm the black police officers and, in a letter to the governor, he complained that the force was “composed of Negroes in whom [he had] as much confidence as [he could] place in a negro.” Still, the turmoil wrought by the yellow fever epidemic meant “it was the best [he could] do.”⁶⁹

African Americans also acted as “common laborers” and gravediggers in Grenada, and the Relief Committee promised to pay them one or two dollars a day, respectively. When the workers were actually paid for their services, though, members of the Relief Committee were suspicious of their “very large” payments, which they felt the need to “scrutinize and see that they [were] correct.”⁷⁰ A black nurse was even one of the causes of the dispute between the Relief Committee and the Sub-Relief Committee. The Sub-Relief Committee recorded that “Henry Young (colored) nursed faithfully Mrs. Ed Sherman for twenty five days at \$2.00 per day for...\$50.00.”⁷¹ The members of the Relief Committee responded by reiterating their policy that “no nurses were to be paid only on Doctors Certificates” (documents from physicians that certified whether a nurse or patient was eligible for relief), and that they needed to be approved by members of the Relief Committee.⁷² In that same letter the Relief Committee stated their policy to pay nurses five dollars per day, but they refused to pay Henry Young anything. They did not approve the use of a black nurse.⁷³ Instead, Grenada’s white leaders prioritized white supremacy over public health. Despite claims of interracialism, white Southerners could not overcome their aversion to African Americans in political power or their distrust of black motives, even in a time of crisis.

Undeterred by racial tensions, African Americans donated money and supplies to both black and white citizens in Grenada. George D. Dillard, the mayor of Macon, Mississippi, informed J. L. Power that “the colored people here...raised fifty-one dollars and sent it to Grenada. The ladies can send sheets, towels, pillow cases, etc., if such things are needed.” Furthermore, he said, “the colored people wish to know if poultry cannot be transported to...Grenada...if so they can set up a large quantity.”⁷⁴ In spite of their work during the epidemic, the general public often did not even recognize African Americans, even in death. The *New York Herald*, for example, compiled the names of dozens of whites who died in the epidemic from newspapers in Memphis and Mississippi,

⁶⁹ Campbell to Stone, September 24, 1878, Stone Papers, in Nuwer, *Plague Among the Magnolias*, 70; Nuwer, *Plague Among the Magnolias*, 70-71.

⁷⁰ Jno. Powell to Rev. W. C. McCracken, letter, September 16, 1878, Yellow Fever in Grenada: 1878, Misc. Manuscripts folder 1, box 5, Mitchell Memorial Library, Mississippi State University, copies made Aug. 12, 1969.

⁷¹ W. C. McCracken, bill, September 17, 1878, Yellow Fever in Grenada: 1878, Misc. Manuscripts folder 1, box 5, Mitchell Memorial Library, Mississippi State University, copies made Aug. 12, 1969.

⁷² Jno. Powell to Rev. W. C. McCracken, letter, September 16, 1878, and R. Mullin and Jno. Powell to Rev. W. C. McCracken, letter, September 18, 1878, Yellow Fever in Grenada: 1878, Misc. Manuscripts folder 1, box 5, Mitchell Memorial Library, Mississippi State University, copies made Aug. 12, 1969; Willoughby, *Yellow Fever, Race, and Ecology*, 123-125.

⁷³ Henry Young is the only nurse to have his race clarified as “colored.” Because no other nurses or physicians who are mentioned in the correspondence of the Relief and Sub-Relief Committees have this clarification, they are assumed to be white. Furthermore, no other payments to nurses were recorded as disputed between the two groups.

⁷⁴ Power, *The Epidemic of 1878 in Mississippi*, 99.

but it included only statements like “a colored man died at six o’clock this evening” to recognize black victims.⁷⁵

Over the course of the entire epidemic, the Howard Association spent over \$1.1 million on relief.⁷⁶ Most of the money and supplies went to white widows and orphans, indicating the segregated nature of late nineteenth century charities and the prevailing belief that providing help to African Americans and working-age men created an immoral system of paupers, even in the midst of a deadly epidemic.⁷⁷ The War Department also gave food to fever-stricken areas, but “there was no shadow of law to authorize these appropriations” according to the editors of Jackson’s *Weekly Clarion*. Instead, “[the authority] was found in the instincts of humanity.”⁷⁸ Overall, the interstate nature of the epidemic and the response to it demonstrated that individual states were not always able to handle large epidemics on their own. Furthermore, it caused many doctors and politicians, such as Mississippi Senator L.Q.C. Lamar, to call for stronger federal control over public health.

Part III: The Federal and State Responses to the 1878 Epidemic

A few months before the yellow fever epidemic, on April 29, 1878, the United States Congress had passed a law titled “An Act to Prevent the Introduction of Contagious or Infectious Diseases into the United States” after yellow fever outbreaks in Cuba and the West Indies ignited fears of it spreading to Gulf Coast states. It granted the Marine Hospital Service the ability to gather disease outbreak data from around the world, but it only enabled the Service to enforce quarantines in ports, and it did not even appropriate funds for its new responsibilities. It also explicitly prohibited federal involvement on quarantine within states.⁷⁹ This law served as a moderate compromise in the debate over local or federal control of quarantine procedures, but many politicians quickly dismissed it as inadequate when Congress next met.

President Rutherford B. Hayes opened the third session of the Forty-Fifth Congress on December 2, 1878, where he recognized the large impact of the yellow fever epidemic and called for Congress to address it:

The fearful spread of this pestilence has awakened a very general public sentiment in favor of national sanitary administration, which shall not only control quarantine, but have the sanitary supervision of internal commerce in times of epidemics...[and have] power to deal with whatever endangers the public health.... It is recommended that Congress give to the whole subject early and careful consideration.⁸⁰

⁷⁵ “Death’s Advance,” *New York Herald*, September 4, 1878, accessed November 24, 2017, <https://chroniclingamerica.loc.gov/lccn/sn83030313/1878-09-04/ed-1/seq-3/>.

⁷⁶ Blum, “The Crucible of Disease,” 792-793; Patterson, “Yellow Fever Epidemics,” 862-863.

⁷⁷ *Report of the Executive Committee of the Yellow Fever National Relief Commission*, 6; Nathaniel Deutsch, *Inventing America’s “Worst” Family: Eugenics, Islam, and the Fall and Rise of the Tribe of Ishmael* (Berkeley, CA: University of California Press, 2009), 60, 71; Katz, *In the Shadow of the Poorhouse*, 76.

⁷⁸ “Supplies Furnished to the Fever Stricken Communities,” *Weekly Clarion*, December 25, 1878, accessed November 25, 2017, <https://chroniclingamerica.loc.gov/lccn/sn83016926/1878-12-25/ed-1/seq-2/>.

⁷⁹ Duffy, *The Sanitarians*, 163; Ellis, *Yellow Fever and Public Health in the New South*, 71; “An Act to Prevent the Introduction of Contagious or Infectious Diseases into the United States,” 20 Stat. L., 37, in US Department of the Treasury, United States Public Health Service, *Regulations for the Government of the United States Public Health Service* (Washington: Government Printing Office, 1913), 144-146.

⁸⁰ Rutherford B. Hayes, “Second Annual Message,” December 2, 1878, online by Gerhard Peters and John T. Woolley, *The American Presidency Project*. <http://www.presidency.ucsb.edu/ws/?pid=29519>.

That same day, several Southern senators, including Lamar, introduced proposals to create congressional committees to investigate the outbreak. Then, on December 10, Lamar introduced Senate Bill 1462, which would create a department of health that would have oversight over the Marine Hospital Service, control the quarantine and sanitary efforts of the federal government, and be led by a newly created Cabinet-level officer. He also designed the bill so this public health agency would be able to administer quarantines throughout the United States under the Interstate Commerce Clause.⁸¹ Lamar's introduction of a bill to expand the power of the federal government is notable because he had helped lead the effort to expel federal troops and leaders from the South during the Redemption movement. He was even willing to risk political scandal by working with Alex R. Shepherd, chairman of the Yellow Fever National Relief Commission and his longtime political enemy, to secure funding for the Catholic and Protestant Orphan Asylums in Vicksburg, Mississippi, because "the vital interests of the South...prompted all that [he did]."⁸² One of the reasons for his dramatic shift in thought was his recognition that the yellow fever epidemic of 1878 was devastating for his state, which did not have the resources to address it alone.

The nascent Mississippi Board of Health also participated in the movement for a stronger federal public health system. At the American Public Health Association's Richmond, Virginia, meeting in November 1878, where yellow fever was the dominant issue, representatives of the Board reported that "[Sanitary measures] proved utterly futile in arresting its progression. The disease spread in spite of them." Furthermore, the 1878 epidemic "demonstrated how difficult, how well-nigh impossible, it is to arrest...yellow fever when it has once reached our shores....The use of disinfectants [has] proven wholly ineffectual." They concluded that "the utter failure of [existing] quarantine regulations...has sufficiently demonstrated their inadequacy to afford us protection....We do most earnestly recommend that Congress take such action as will afford to these states the means of making the quarantine of these ports as rigid and effectual as possible."⁸³ The federal government, they argued, had the best chance of protecting Americans from yellow fever.

Ultimately, Lamar's bill did not become law. The Senate referred it to the Select Committee to Investigate and Report the Best Means of Preventing the Introduction and Spread of Epidemic Diseases, where it died.⁸⁴ A coalition of Northern congressmen and some Southern ones who argued that quarantines should remain under state control defeated a similarly expansive bill in the House of Representatives from Casey Young, the Representative of Memphis. Members of this coalition argued that, rather than wanting to help the victims of the epidemic, the Southern legislators who wanted a national public health agency were instead pursuing the political goal of attacking state powers through a federal quarantine system, as exemplified in Thomas Nast's

⁸¹ Duffy, *The Sanitarians*, 16; Ellis, *Yellow Fever and Public Health in the New South*, 72-75; *Senate Journal*, 45th Cong., 3rd sess., December 2, 1878, 41.

⁸²L.Q.C. Lamar to Edward Donaldson Clark, letter, February 3, 1879, L.Q.C. Lamar Collection folder 27, Department of Archives and Special Collections, University of Mississippi; *Report of the Executive Committee of the Yellow Fever National Relief Commission*, 3, 69.

⁸³ "Report of the Mississippi Board of Health," in *Public Health Reports and Papers, Volume IV*, 207-209; Duffy, *The Sanitarians*, 166.

⁸⁴ *Senate Journal*, 45th Cong., 3rd sess., 657.



Figure 3: “Another ‘Federal Interference,’ the Struggle between Athena Hygieia and Yellow Jack.”⁸⁵ Supporters of strong states’ rights feared increased federal powers after the epidemic. “National Quarantines” is written on Athena Hygieia’s spear. Federal action can defeat Pestilence, but it also leads to the death of states’ rights.

cartoon “Another ‘Federal Interference.’” The editors of the *Memphis Avalanche* were so incensed that they declared the Southerners who helped defeat the bill to be “nincompoops who fall down once a day and worship the glimmering ghost of the state rights abstractions.”⁸⁶

⁸⁵ Thomas Nast, *Harper’s Weekly*, April 19, 1879, in Blum, “The Crucible of Disease,” 820.

⁸⁶ *Memphis Avalanche*, March 11, 1879, in Humphreys, *Yellow Fever and the South*, 63; Ellis, *Yellow Fever and Public Health in the New South*, 76; Humphreys, *Yellow Fever and the South*, 63.

Instead, the committee produced Senate Bill 1784, “A Bill to Prevent the Introduction of Infectious or Contagious Disease into the United States and to Establish a National Board of Health.” The Board’s functions would be gathering information on contagious diseases, advising the federal and state governments on public health matters, and devising a system for national quarantines to be presented to Congress. The bill, like previous ones, did not empower a federal agency to enact internal quarantines. It passed on March 3, 1879, with Lamar voting in favor. Congress passed another law, “An Act to Prevent the Introduction of Contagious or Infectious Diseases into the United States” on June 2, 1879, that limited the powers of the National Board of Health to a four-year period, meaning they would need to be reauthorized in 1883.⁸⁷ If reauthorization was not passed in this time—a time long enough for anxiety from the 1878 epidemic and support for a federal board of health to fade—the National Board of Health would lose the limited powers it had.

In its first ever report, the National Board of Health demonstrated the centrality of yellow fever to its function. It opened with the purpose of the organization, which explicitly included the investigation of yellow fever in Cuba, and it devoted a significant portion of the report to causes, locations, and prevention of the disease.⁸⁸ One issue with the effectiveness of officials’ response, though, was that the cause of yellow fever was still unknown. The Congressional Commission on Yellow Fever directed physicians to study the “meteorological phenomena...character of soil...and forms of vegetable growth” in its desperate quest to better understand the disease.⁸⁹ The National Health Board recognized that “practitioners of medicine, obtaining their livelihood by their skill exclusively in the cure of disease, are by no means necessarily well instructed in the etiology and prevention of disease” and it argued that “Naval surgeons, and especially those among them charged with marine sanitation, are of all other medical men best entitled to credence and confidence in this matter.”⁹⁰ These surgeons, in their 1881 report on the yellow fever outbreak on the *U.S.S. Plymouth*, concluded that “the cause of yellow fever is a product of the development of a microscopic vegetable organism,” a reflection of the revolutionary impact of the germ theory on the study of disease. Now, they were beginning to incorporate the idea of microscopic organisms into their ideas on the etiology of yellow fever. They then wrote,

Of the five concurrent conditions which appear to be necessary to the production of an epidemic of yellow fever, namely high temperature, humidity, a suitable nidus [site of bacterial replication], a peculiar meteorological state, and the presence of the germ, only two are such as can reasonably be expected to be preventable, and these two are humidity and a suitable nidus.⁹¹

⁸⁷ Michael, “The National Board of Health,” 124, 127; *Senate Journal*, 45th Cong., 3rd sess., 41, 362, 657.

⁸⁸ US House of Representatives, *Annual Report of the National Board of Health, 1879* (Washington: Government Printing Office, 1879), 3, 9.

⁸⁹ “Yellow-Fever,” *Memphis Daily Appeal*, December 28, 1878, accessed November 25, 2017, <https://chroniclingamerica.loc.gov/lccn/sn83045160/1878-12-28/ed-1/seq-4/>.

⁹⁰ *Annual Report of the National Board of Health, 1879*, 55.

⁹¹ Navy Department. Bureau of Medicine and Surgery, *Report on Yellow Fever in the U.S.S. Plymouth in 1878-’9* (Washington: Government Printing Office, 1881), 46-47.

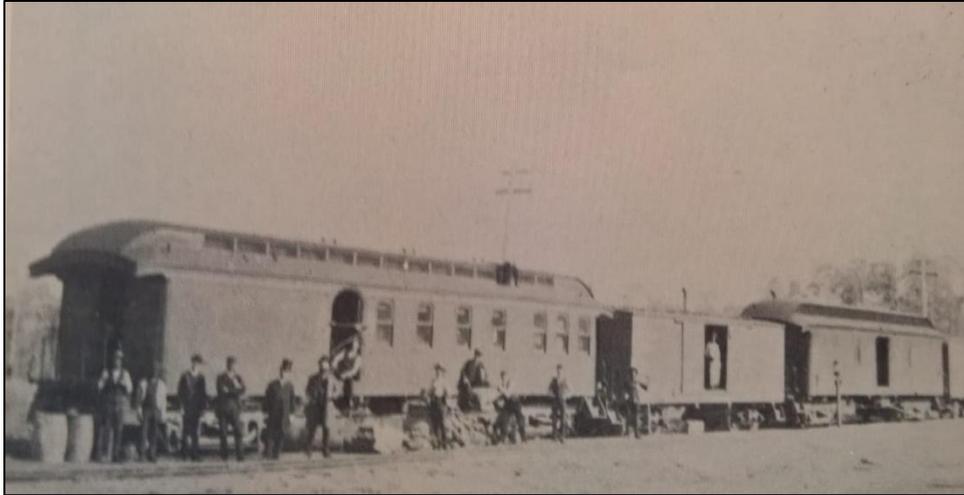


Figure 4: “U.S. Postal Car, Mail, Passengers, and Box Cars at Mail Fumigation Station, 1880-1900.”⁹² The U.S. Marine Hospital Service would use train cars as yellow fever disinfection stations at the request of state authorities. Image from the USPHS Records.

Naval officials recommended anchoring ships offshore to change the humid environment on the ships, which they believed was helping yellow fever to propagate.⁹³ Such advice was essentially useless to public health officials on land, however, as they were unable to alter the humidity in their communities.

Furthermore, many physicians argued that yellow fever was not directly contagious so there must be some reservoir of germs that could be destroyed. In response, the Marine Hospital Service began fumigating ships and later houses and trains, in an effort to prevent its spread.⁹⁴ The debate on the cause of yellow fever was divided between contagionists, who believed it was an imported disease, and sanitarians, who believed it arose from dirt and filth. At the end of the nineteenth century, American physicians came to accept Cuban epidemiologist Carlos Finlay’s theory that *Aedes aegypti* mosquitoes transmitted yellow fever, and representatives of the U.S. Army Yellow Fever Commission presented it to the annual American Public Health Association meeting on October 23, 1900.⁹⁵ This revelation did not come in time to save the National Board of Health. The *New York Times* reported that “a genuine surprise” occurred at the 1884 Conference of State Boards of Health when the members of the conference declined to endorse an extension of funding for the Board. Even though the members of the conference “were regarded as special friends of the board,” they instead sought to abolish it, a sign that the “National Board of Health [had], in some way or other, become somewhat unpopular.”⁹⁶

The absence of large yellow fever outbreaks in the period immediately after 1878 and physicians’ inability to determine definitive etiology and prevention methods of the disease all

⁹² Ralph Chester Williams, *The United States Public Health Service, 1798-1950* (Washington: Commissioned Officers Association of the United States Public Health Service, 1951), 116. Image from USPHS Records.

⁹³ *Report on Yellow Fever in the U.S.S. Plymouth in 1878-'9*, 47.

⁹⁴ Delaporte, *The History of Yellow Fever*, 17-19; Humphreys, *Yellow Fever and the South*, 151.

⁹⁵ Duffy, *The Sanitarians*, 166; “Historical Information for the U.S. Army Yellow Fever Commission,” Philip S. Hench Walter Reed Yellow Fever Collection, online by the Claude Moore Health Sciences Library, University of Virginia Health System, accessed November 22, 2017, <https://search.lib.virginia.edu/catalog/uva-lib:2513789>.

⁹⁶ “A New National Board of Health,” *The New York Times*, December 13, 1884, accessed November 21, 2017, <http://query.nytimes.com/mem/archive-free/pdf?res=9C07E5DF1138E033A25750C1A9649D94659FD7CF>.

contributed to a feeling that continued funding for the Board was pointless. Additionally, some members of Congress remained skeptical of the intentions of the Board. “The great bulk of their money...goes in their own machinery,” wrote Senator James Beck of Kentucky. “Any amount of money that is necessary if the yellow fever breaks out...I am perfectly willing to give; but it seems to me that we have given them as much as it is fairly safe to give men...who do not seem to be practicing any sort of economy,” he added. Then he expressed his deepest concern: “I suppose it will not be two years before this National Board of Health...will be running every city, every neighborhood, entering houses where they like, breaking up State organizations as they please, and demanding any amount of money.”⁹⁷ The *Times* summarized the broader sentiment of Congress by declaring that its members “impatiently characterized [the Board] as an excrescence.”⁹⁸ The Marine Hospital Service regained control over national quarantines on March 2, 1883, when the law creating the National Board of Health expired. As a result, the federal quarantine system returned to one that was unable to “interfere” or “conflict” with state and municipal quarantine regulations. These restrictions, like before, prevented the implementation of uniform, effective national quarantines.⁹⁹

The Mississippi Board of Health experienced similar frustrations. In 1877, the Mississippi State Medical Association made its first foray into public health. It lobbied the state legislature to create a board of health. Although the legislature did create a board, the Association lamented its lack of actual power in their 1877 meeting at Grenada. “A bill was presented at the last session of the Legislature, which, after being completely emasculated and radically altered, was passed....It is needless to say that, in its present form, the law is worthless to the State,” reported the Association’s executive committee. The committee went on to say the statute was nonbinding, and it predicted that it “will be amended and made effective whenever its capacities and benefits shall be demonstrated and fully appreciated.”¹⁰⁰

Furthermore, according to Dr. J. F. Hunter, the secretary of the Board in 1903, “there was no money appropriated by the legislature for the use of the Board for the first few years.”¹⁰¹ It was so underfunded that, for the official trip to the Richmond American Public Health Association meeting, members of the delegation had to pay their travel expenses using their personal money.¹⁰² Given these conditions, it is no surprise that the government public health infrastructure was so sparse in Mississippi, creating a need for private relief.

During the 1878 epidemic, local governments did mount some degree of a response. When Grenada first reported fifty cases of yellow fever on August 12, 1878, towns throughout the state created health boards and implemented quarantines. These towns also sprayed disinfectants like carbolic acid, burned clothes and bedding from infected patients, and quickly buried dead bodies. Some communities even escaped the disease, like Jefferson County, which stationed mounted

⁹⁷ Senator James Beck, speaking on *Statements of Appropriations and Expenditures and Estimates of National Board of Health*, 46th Cong., 2nd sess., *Congressional Record* 10 (June 10, 1880), 4365.

⁹⁸ “A New National Board of Health,” *The New York Times*, December 13, 1884, accessed November 21, 2017, <http://query.nytimes.com/mem/archive-free/pdf?res=9C07E5DF1138E033A25750C1A9649D94659FD7CF>.

⁹⁹ Katherine Vanderhook, “The Fight Against Yellow Fever and the Acts of 1878-1879” in “Origins of Federal Quarantine and Inspection Laws.”

¹⁰⁰ *Transactions of the Mississippi State Medical Association, 1877*, in E. F. Howard, *History of the Mississippi State Medical Association* (Vicksburg, MS, 1910): 13.

¹⁰¹ Dr. J. F. Hunter to the Surgeon-General, letter, in Treasury Department. U.S. Public Health and Marine-Hospital Service. *Transactions of the First Annual Conference of State and Territorial Health Officers with the United States Public Health and Marine-Hospital Service* (Washington: Government Printing Office, 1903), 70-72.

¹⁰² Haug, *From the Ground Up*, 76.

police along its seventy-mile border to enforce its quarantine and allow nobody in.¹⁰³ Even though the state board could only coordinate information between local boards, health officials did make efforts to prevent the spread of the disease.

The Mississippi State Medical Association's prediction came true after the yellow fever epidemic. In 1880 the state legislature strengthened the state board, granting it the ability to form an executive council that could act on behalf of the Board while it was not meeting, to conduct oversight over county health officers, and to direct district attorneys to enforce vital statistics reporting and health regulations. It also increased funding to the Board in 1880 and again in 1882 after fears of another yellow fever outbreak. Carroll Kendrick, a Mississippi legislator and president of the Mississippi State Medical Association from 1898-1899, wrote, "When the yellow fever epidemic swept over the South like a cyclone in 1878 we had no board of health with money to fight the awful plague....There were men in the legislature who could see nothing but selfish motive in everything the doctors desired." He continued, "The fever in 1878 did more than all else...to prove that the doctors were right. After that fearful scourge the legislature was willing to come to our aid. Since we have a well-equipped board of health yellow fever...has become almost a thing of the past, remembered only as a hideous dream."¹⁰⁴ Yellow fever was the catalyst for the creation of a state public health system in Mississippi.

The epidemic also sparked calls for reform at a local level. The editors of the *Weekly Clarion* of Jackson, Mississippi, wrote, "whatever may be done...by the State authorities, for public protection against a recurrence of the yellow fever pestilence, they should leave nothing undone." In an appeal to enact sanitary reforms, they wrote, "medical and sanitary authorities...decided that drainage...and cleanliness are efficacious in warding off a yellow fever pestilence. Whatever is necessary to bring about this healthy condition of the town should be done." Finally, they even supported a tax to reimburse citizens whose possessions were burned to prevent the spread of the disease: "Our citizens can better afford to submit to a small tax...than to choose between flight from their homes and enduring the horrors of a plague."¹⁰⁵

Even after reforms, Mississippi's public health system in the late nineteenth century was not designed to cope with much more than a yellow fever epidemic. Dr. J. F. Hunter, in his letter to the Surgeon-General in 1903, outlined the structure of the system. There were county boards of health that reported to the state board, but the state legislature had passed no law to require the county boards to collect or report vital statistics, and it designed the system solely around quarantines. The state still relied heavily on the Public Health and Marine Hospital Service for assistance when addressing outbreaks (Congress expanded the Marine Hospital Service in 1902).¹⁰⁶ The legislature also created an exemption to allow county health boards to avoid having a health officer that reported to the state board, weakening it even further.¹⁰⁷

¹⁰³ "Report of the Mississippi Board of Health," in *Public Health Reports and Papers, Volume IV*, 207-209.

¹⁰⁴ Carroll Kendrick, "Some Thoughts about the Mississippi State Medical Association After an Experience as a Member for Forty Years," in *Transactions of the Mississippi State Medical Association* (1913): 51-52; Haug, *From the Ground Up*, 76-80.

¹⁰⁵ "Shall we Have Another Yellow Fever Visitation in Jackson Next Season?" *Weekly Clarion*, December 25, 1878, accessed November 25, 2017, <https://chroniclingamerica.loc.gov/lccn/sn83016926/1878-12-25/ed-1/seq-2/>.

¹⁰⁶ Dr. J. F. Hunter to the Surgeon-General, letter, in *Transactions of the First Annual Conference*, 70-72; "Remarks at the Conference by Dr. J. F. Hunter, Secretary of the State Board of Health", in *Transactions of the First Annual Conference*, 70; "History," *Commissioned Corps of the U.S. Public Health Service*, accessed November 21, 2017, <https://www.usphs.gov/aboutus/history.aspx>.

¹⁰⁷ Ruth Janet Severson Haug, *From the Ground Up*, 78-79.

Additionally, in a report to the Fourth Annual Conference of State and Territorial Health Officers in 1906, Dr. Hunter described the state public health system through a lens of quarantines and epidemic-prevention techniques. The legislature had not passed sanitation or other health laws, and yellow fever remained the main focus.¹⁰⁸ In 1896, for example, the Union Female College in Oxford, Mississippi, experienced an outbreak of typhoid fever. The school's administration, not any government, enforced a quarantine of the sick students, and it was responsible for renovating the water system and checking to ensure that it was safe.¹⁰⁹ Typhoid fever, evidently, was not a disease that could inspire fear or a statewide response like Yellow Jack.

Conclusion

While the 1878 yellow fever epidemic did spark new interest in enforcing public health measures in Mississippi, the state still lagged behind many others in America. Its system focused on preventing the introduction and spread of the disease, but it did not work to address its cause, largely because scientists had not yet reached a consensus. After health officials accepted Finlay's theory that mosquitoes transmitted yellow fever, they began working on methods to eradicate it. In 1898, William Gorgas, "by the most brilliant sanitary experiment ever made, put an end to the disease in its very stronghold," Havana, Cuba, through mosquito control methods like fumigating infested areas, improving drainage, and covering standing water with kerosene.¹¹⁰ At the Second Annual Conference of State and Territorial Health Officers, Edmond Souchon, the president of the Louisiana State Board of Health, provided an outline of prevention techniques, which focused on sanitary reforms and controlling water sources. He prefaced his report by stating "the cardinal and ideal principle to prevent the spread of yellow fever in a locality is to make that locality mosquito proof....The problem is an engineering one altogether."¹¹¹ Officials enacted these reforms across the country, and they received support from businesses, like Woodward, Wight, & Co. of New Orleans, who helped spread awareness about the fight against mosquitoes through advertisements and postcards. Citizens committees also encouraged mosquito-proofing techniques, such as one in New Orleans that distributed buttons with the slogan "My cisterns are all right; how are yours?" to encourage people to cover their cisterns in screens or oil.¹¹² The anti-mosquito methods were successful, and the last yellow fever epidemic in the United States occurred in 1905. By 1914, "the disease [was]...eradicated.

¹⁰⁸ Dr. J. F. Hunter to the Surgeon-General, letter, in Treasury Department, U.S. Public Health and Marine-Hospital Service, *Transactions of the Fourth Annual Conference of State and Territorial Health Officers with the United States Public Health and Marine-Hospital Service* (Washington: Government Printing Office, 1906), 65-67.

¹⁰⁹ Ford, "1896 Typhoid Fever Outbreak in Oxford, Mississippi," 195-197.

¹¹⁰ Charles V. Chapin, "Dirt, Disease, and the Health Officer," *Public Health Papers and Reports Presented at the Thirteenth Annual Meeting of the American Public Health Association* (1902), 28 (1903): 296-299; Eduardo Faerstein and Warren Winkelstein Jr., "William Gorgas: Yellow Fever Meets Its Nemesis," *Epidemiology* vol. 2, issue 6 (November 2011): 872; Harvard University Open Collections Program, "William Gorgas, 1854-1920," *Contagion: Historical Views of Diseases and Epidemics*, accessed November 12, 2017, <http://ocp.hul.harvard.edu/contagion/gorgas.html>.

¹¹¹ Treasury Department, U.S. Public Health and Marine-Hospital Service, *Transactions of the Second Annual Conference of State and Territorial Health Officers with the United States Public Health and Marine-Hospital Service* (Washington: Government Printing Office, 1904): 59-65.

¹¹² "Yellow Fever in New Orleans," *The Independent*, August 3, 1905, in *The Independent Volume LIX* (New York, NY: Independent Publications, 1905), 233-234.

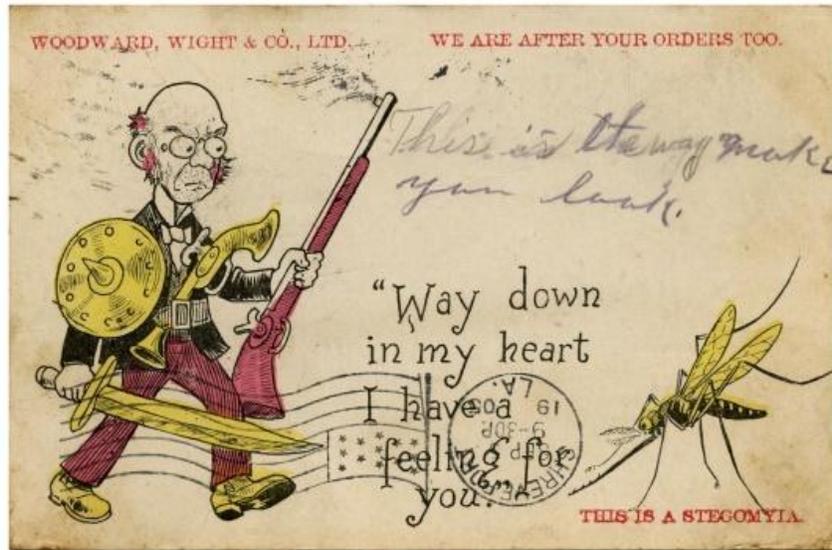


Figure 5: “Fighting Mosquitoes.”¹¹³ A postcard from 1905 by Woodward, Wight, & Co., a supply house in New Orleans. It demonstrates the popular sentiment for reforms to fight mosquitoes and yellow fever. Courtesy of the private collection of Joe E. Haynes via the Portal to Texas History and the Digital Public Library of America.

The ‘yellow jack’ [had] completely lost its power to produce fear....The new [prevention method was] humane and effective.”¹¹⁴

Yet this story is a story of failure. Yellow fever did not improve Mississippi’s public health efforts in the long term. During that last epidemic in 1905, counties set up “shotgun” quarantines, as they had for many previous encounters with the disease. Armed police lined the borders of the county and blocked people from entering. But in one county, a quarantine officer faced a conundrum: a mob that sought to lynch “that [damn] negro, Sam.” A correspondent for the *New York Tribune* wrote that “the quarantine guard fell back as if yellow fever was no more dangerous than chilblains,” a slight rash from the cold. The mob found Sam, lynched him, and rode home. The correspondent concluded by stating “a lynching party surely does have rights.”¹¹⁵ When the lynch mob first rode up to the quarantine officer, they presented him with a dilemma. He could either let them pass so they could enforce white supremacy, or he could block them and protect the health of his county. By granting the mob entry, the officer put the lives of his entire community in danger. He could have chosen to protect both his community and the victim of the lynch mob, but he followed the dictates of white supremacy and sacrificed both. His decision was a continuation of the trend set in the 1878 epidemic, demonstrating that attitudes toward the choice between health and power had not changed.

Without yellow fever to encourage officials to fund public health efforts, the health movement in Mississippi faltered. It would take the intervention of outside health officers and two chronic,

¹¹³ Woodward, Wight, & Co, “Fighting Mosquitoes,” (1905), in the Digital Public Library of America, accessed Sept. 18, 2017, <https://dp.la/item/40a78d9607b5e00a270dff9ff76a45a>.

¹¹⁴ Henry Bixby Hemenway, *Legal Principles of Public Health Administration* (Chicago, IL: T. H. Flood & Co., 1914), 30; Nuwer, *Plague Among the Magnolias*, 136.

¹¹⁵ “Guards Pass Lynching Party,” *New York Tribune*, August 28, 1905, accessed April 15, 2018, <https://chroniclingamerica.loc.gov/lccn/sn83030214/1905-08-28/ed-1/seq-3/>

slow-acting diseases—hookworm disease and pellagra—to demonstrate the importance of public health and convince legislators to establish a system beyond one of just quarantines around the start of World War I.¹¹⁶ Even today, epidemics spark public fear. The H1N1/09, or swine flu, outbreak in 2009 caused a panic and calls for reform, but these efforts faded as public attention moved away from the disease and on to the next alarming issue.¹¹⁷ Improving public health systems is a long, difficult process that faces resistance for its large costs, need for high levels of engagement, and lengthy time commitment. Epidemics provoke anxiety in the public mind, making them a starting point for public health campaigns, but they burn out quickly. Health reformers need to focus on longer-lasting issues to enact meaningful change. More broadly, in segregated and unequal societies, leaders tend to prioritize their own power and control before public health. By neglecting public health, they leave everyone at greater risk of disease. The only way to achieve good health outcomes is to provide justice to all members of society.

¹¹⁶ Haug, “From the Ground Up,” 277, 281.

¹¹⁷ Rohit Srinivasan, “Swine Flu: Is Panic the Key to Successful Modern Health Policy?” *Journal of the Royal Society of Medicine* 103, no. 8 (August 1, 2010): 340-343.