

# 1878 Memphis Yellow Fever Epidemic

*Essential Question: What factors contributed to the high death rate during the 1878 Memphis yellow fever epidemic?*

“Yellow Jack,” as yellow fever was sometimes called, had plagued the United States from its earliest days. An outbreak in Philadelphia in 1793 had nearly stopped the new nation in its tracks as Washington, Jefferson and Adams fled the city to avoid the disease. Alexander Hamilton, who had contracted the disease, was banned from entering New York City out of fear that he would trigger an epidemic there.

Yellow fever is a virus spread by the *Aedes aegypti* mosquito. The virus operates by entering healthy cells and then using the cell's components to replicate until the cell bursts. The process is repeated until the host either begins to recover or dies. The first symptom is usually a severe headache followed by a fever that can climb to 105 degrees. The pulse slows and the intestines and kidneys begin to shut down. Stomach cramps and body aches from severe dehydration come next. Many patients then seem to recover and ask for food. Strangely, those cases are almost always fatal. The cramps return and then become convulsions. As patients die, their livers release bile which turns their skin and the whites of their eyes yellow and gives the disease its name. Yellow fever emerged as a killer of humans in the steamy jungles of West Africa. Over thousands of years, people living in West Africa developed some immunity to the disease, by enduring repeated outbreaks. However, Europeans had no such immunity.

The slave trade brought yellow fever to North America where it found an abundance of potential victims among both Native Americans and Europeans. In the 1700's it was the port cities of New York, Boston and Philadelphia that suffered the worst outbreaks. But as the slave trade shifted south, so too did Yellow Jack. He would make a new home for himself in Memphis.

Memphis was created following the Jackson Purchase in 1819. The city grew slowly until 1832 when the further land cessions by the Chickasaw opened up thousands of acres of prime cotton land in northern Mississippi. Memphis became the cotton capital of the south. During the Civil War, Memphis fell under Union control but the enterprising businessmen of Memphis did not allow that to interfere with commerce. Many of the Northerners who passed through Memphis during the war returned there after the war to take advantage of business opportunities. They were joined by thousands of immigrants, many of them Irish. By 1870, Memphis was the second largest city in the South.

The 1878 outbreak began in Havana, Cuba where ships from West Africa transported mosquitoes along with their cargo. It is thought that the virus of 1878 was a new strain, not seen

in North America before. The crew of the *Emily B. Souder* became infected in Havana and brought the virus to New Orleans. Ships were regularly inspected by quarantine officers before being allowed to make port. However, the captain of the *Souder* convinced the quarantine officer that his men were suffering from hangovers, not yellow fever. The ship was allowed to pass bringing its deadly cargo into the United States.

Effective quarantine was Memphis' most important defense against yellow fever. It failed in 1878 because yellow fever and quarantine were bad for business. When the Memphis Board of Health met to discuss the possibility of quarantine, they were hampered by the lack of reliable evidence from New Orleans. Officials there were keeping the outbreak quiet so that trade was not interrupted. In Memphis, the decision to quarantine the city was overturned by public outcry to keep the river trade flowing. By the time the decision was reversed on July 27, Yellow Jack had already made his appearance.

Once the outbreak became public knowledge, the wealthy fled the city in droves leaving the poor to survive however they could. As the fever spread, the doctors and nurses that remained in Memphis were overwhelmed by the numbers of patients. With no effective treatment for the disease, doctors and nurses could do little for their patients. Entire families perished as the fever swept through the city. At the height of the epidemic, 17,000 of the 19,000 people in the city were sick. Despite President Hayes' estimation of the crisis as "greatly exaggerated," hundreds of doctors, nurses and ministers bravely volunteered to care for the sick. Many of them also contracted the illness and died. The sisters of St. Mary's Cathedral worked tirelessly to care for the sick during the epidemic. The nuns and priests of St. Mary's who died during the epidemic are known as the Martyrs of Memphis.

The epidemic finally ended in October when a hard frost finally broke the breeding cycle of the mosquitoes. By then over 5,000 people had died in Memphis. The mortality rates for yellow fever varied widely according to race. Among African Americans the mortality rate was 8 percent, but among whites 70 percent of the people who fell sick died. Among the Irish immigrant community, the mortality rate was even higher.

The 1878 yellow fever epidemic had long lasting effects on Memphis. Families were fractured by the epidemic. Ida B. Wells became head of her family after losing her parents to the epidemic. Many of Memphis' intellectual and cultural elite decided not to return. Immigrants, who had suffered so terribly during the epidemic, also did not return. Increasingly, Memphis was populated by African Americans and poor whites from rural areas. The epidemic also led the city fathers to build an innovative sewer system that reduced the number of ditches and privies in which the mosquitoes could breed. Memphis would never again suffer through a visit from Yellow Jack.

Source: Crosby, Molly Caldwell. *The American Plague: The Untold Story of Yellow Fever, The Epidemic That Shaped Our History*. New York: Berkley Books. 2006. Print.

# 1878 Memphis Yellow Fever Epidemic

*Design a poster on the 1878 Memphis Yellow Fever Epidemic. Include the information in the graphic organizer below in your poster.*

**Who?**

**What?**

**Where?**

**When?**

**What were the short-term effects of the epidemic?**

**What were the long-term effects of the epidemic?**

**Sample Headline**