

When the Plague Came to Town

As War Broke Out in Europe 100 Years Ago, A War on Rats Began in the Streets of New Orleans

by Richard Campanella *New Orleans Times-Picayune* InsideOut section, August 8, 2014

One night in June 1914, a 49-year-old Swedish sailor who had recently arrived in New Orleans agonized feverishly in a steamy downtown boarding house. Rushed to Charity Hospital, he would soon die the loneliest of deaths -- in an isolation ward, far from home, surrounded by solemn doctors consulting furtively.

An autopsy confirmed their suspicions: cause of death was bubonic plague, the dreaded lymphatic disease spread by infected fleas on rats. "Black Death," which had nearly wiped out parts of Europe and Asia in the 1300s, had arrived at New Orleans—at the Volunteers of America Home at 713 St. Joseph Street, to be exact.

Previously, bubonic plague had been considered an Old World disease. It had been in recession during most of the era of European contact with the New World, the 1500s to 1800s, and the long journey across the Atlantic further kept at bay the bacteria and its vectors.

This started to change in the late 1800s, by which time invasive rat populations had established themselves throughout the Americas and larger ships crossed the oceans faster and more frequently. It was just a matter of time before infected fleas would find suitable hosts in this vast new habitat.

The first bubonic case in the Western Hemisphere appeared in Brazil in 1899. San Francisco was next in 1900, followed by Puerto Rico and Cuba in 1912. All were trading partners with New Orleans.

Concerned, city and state health officials launched a preemptive rat-trapping campaign in July 1912. Within days, they caught an infected rat on the Stuyvesant Docks between Louisiana and Napoleon avenues. No other specimens were found in 1912 or 1913, and authorities breathed a sigh of relief.

Then, on June 28, 1914, the Swede died.

A second human case came to light the next day, and additional people fell victim at a pace of one every three days for the rest of the summer. August 1914 saw the peak of the outbreak, and it's safe to say that the average New Orleanian a hundred years ago this month worried more about bubonic plague than the war erupting in Europe, a conflict that would eventually involve the United States.

What could have been an epidemiological disaster at the most inopportune moment, however, instead became a resounding public health success.

Key to the control of the epidemic was that federal, state and city authorities took the earliest signs of the plague with utmost seriousness. Working cooperatively and with broad public support, officials pounced on every suspicious situation with overwhelming force—to levels that might seem heavy-handed today.

Residents of that Volunteers of America Home, for example, were marched out and quarantined in an old plantation house outside the city, and all furnishings inside were burned in a bonfire on St. Joseph Street while the surrounding neighborhood was put under armed guard.

Infected patients, meanwhile, got sent to a special contagion ward and were treated with a newly devised anti-plague serum so powerful that, in one case, it turned a 108-degree fever into a 96-degree chill and required the

ice packs around the man's body to be replaced by hot water bags. "The patient was literally hauled back from the edge of the grave," recounted C.L. Williams, who participated in the response and lectured on it years later.

For the other 350,000 residents of the city, a three-pronged prevention strategy was enacted. It entailed reducing the rat population through a massive trapping campaign, finding and destroying nesting and breeding "foci," and, finally, transforming the cityscape to separate rats and humans as much as possible.

An army of 380 workers swept across the city to carry out the campaign. In a single week exactly a century ago, they inspected 6,500 railcars and 4,200 buildings, fumigated 101 ships, trapped 20,000 rodents, laid nearly 300,000 poison baits and discovered 17 infected rats. Using good scientific protocols, workers recorded data for each trapped rat, and when a laboratory analysis identified an infected specimen, its point of origin was subjected to a scorched-earth campaign of fumigation, burning, and in some cases, complete leveling. A building right next door to the campaign's headquarters was demolished for this reason. Tactics like these went on daily, citywide, for months.



Lab workers examine dead rats in New Orleans, circa 1914. Photo by the U.S. Public Health Service, courtesy of the National Library of Medicine



Workers display rat-trapping equipment in New Orleans, circa 1914. Photo by the U.S. Public Health Service, courtesy of the National Library of Medicine



A sign on Canal Street, circa 1915, indicates that rat-proofing efforts were underway. Photo courtesy of the U.S. Public Health Service.

Ground Zero in the geography of rats proved to be the Stuyvesant Docks, where that first infected specimen had been found two years earlier. Here, mechanical conveyors transferred Midwestern grain among railroad cars, ships and elevators. Coupled with the warm fresh water of the nearby Mississippi River and ample nesting opportunities, the Stuyvesant elevators were a veritable rat nirvana. The campaign made them into a rat graveyard.

Cases abated by year's end, but the campaign carried into the next year, when the city passed ordinances calling for the "rat-proofing" of buildings. Codes were put in place to get human living spaces raised above the land—an architectural tradition long practiced anyway for flooding reasons—while mandating gap-filled floorboards to be layered with concrete and barriers installed around crawl spaces. While the degree to which rat-proofing materially affected the city's architecture is unclear, it's worth noting this same era also witnessed the decline of traditional vernacular buildings, such as shotgun houses, in favor of subdivision-based bungalows built en masse and, in time, tract housing set on concrete slabs. Although rat-proofing ordinances did not cause these transformations, they may have abetted them. Other codes passed in 1915 regulated the raising of animals within city limits and mandated the use of closed garbage cans.

Bubonic plague did not end decisively in New Orleans; rather, it petered out. A human death in 1919 led to a redeployment of the 1914 strategy, only this time targeted at black rats -- "roof rats," which live at higher levels than ground-dwelling Norway rats -- as well as ships, the primary rodent pathway into the city. It was equally successful, and by the late 1920s, New Orleans was declared free of bubonic plague.



Workers, circa 1914, prepare rat poison in New Orleans. Photo by the U.S. Public Health Service, courtesy of the National Library of Medicine



Workers circa 1915 raise a cottage to comply with rat-proofing efforts. Photo by the U.S. Public Health Service, courtesy of the National Library of Medicine

Because of the rigor of the New Orleans campaign, the 1914 outbreak was limited to around 30 human cases and 10 deaths, sparing possibly thousands from disfiguring illness and death.

From a purely pragmatic standpoint, the campaign also had an immeasurable economic impact, in that it allowed the city to play a key role in World War I. Local authorities had successfully lobbied the military for a naval facility and quartermaster depot as well as port modernization, all of which created jobs and valuable new infrastructure. Troops in transit pumped money into the local economy, and Mississippi River traffic boomed as vast quantities of matériel heading for the front had overwhelmed the nation's rail system and forced the federal government to reinvigorate the inland waterways system, additionally benefiting New Orleans. War, of course, is a terrible thing, but life in New Orleans would have been that much worse had the conflict coincided with epidemic and quarantine.

The 1914 campaign would serve as a model to control similar outbreaks elsewhere. "New York May Be Next (in War on Rodents, Following Example of New Orleans)," read a 1915 New York Times headline, which went on to detail "Boston, Philadelphia and other important seaports" emulating the Crescent City's approach. When the plague appeared in Los Angeles in the 1920s, New Orleans quarantine station chief Dr. T.J. Liddell was dispatched to California as an expert adviser.

The success is a reminder that locally devised solutions to adversity can lay the groundwork for future economic strength. Consider, for example, how much of New Orleans' medical sector today can be traced back to the city's 19th-century battles with yellow fever. Or how the Dutch parlayed flood control and water management into national wealth-creation industries. Or how the Poles turned the destruction of World War II into a national proficiency in historic restoration.

New Orleans has all too many opportunities to convert liabilities into assets, in everything from public education and poverty to urban drainage, subsidence, hypoxia and coastal erosion.

This much is clear: New Orleans' war on bubonic plague would not have been won if all public and private sectors as well as citizens had not been united against a common enemy.

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