Yellow Fever
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American gynecologist Howard Atwood Kelly’s 1906 biography of Walter Reed (see Figure 1 and 2) emphasizes the Army physician’s role in tracing the source of yellow fever. Five years earlier, Reed and his colleagues had determined that a certain species of mosquito was responsible for transmitting the disease.

While most prevalent in the hot, humid environments where mosquitoes thrived, epidemics of yellow fever had also swept through the urban centers of the northern United States. One of the most notable epidemics occurred during the 1790s in Philadelphia, with the devastation extending into Wilmington later in the decade.

Prior to Reed’s findings, the accepted theory attributed the spread of yellow fever to fomites, or objects that had come into contact with infected patients. A minority of dissenters, including Cuban physician Carlos Finlay, argued instead that mosquitoes were the transmitters. Without firm proof, however, the medical community largely ignored this claim.

Following an outbreak of yellow fever in Havana at the turn of the 20th century, the U.S. Army assigned Reed to head a commission to study the disease. Combining the research of Finlay and other predecessors with their own, Reed and his colleagues proved conclusively that a certain species of mosquito was responsible for transmitting the disease.

The identification of yellow fever as a vector-borne disease, as we call it today, made it possible to take steps to limit its spread. Efforts like draining sources of standing water, fumigating areas with high mosquito populations, and using nets for protection have all helped to combat yellow fever and reduce its devastating effects.

Information used in this article courtesy of Harvard University Library, Encyclopedia Britannica, the National Institute of Health, and the New York Times.

Figure 1. Walter Reed and Yellow Fever, by Howard Atwood Kelly, 1906, front page.
Figure 2. Walter Reed and Yellow Fever, by Howard Atwood Kelly, 1906, spine.