

SCIENCE**from the John W. Kluge Center
at the Library of Congress****George Washington and the First
Mass Military Inoculation**

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**George Washington on horseback during the
battle of Princeton.** Prints & Photographs Division,
Library of Congress.

DISCLAIMER

George Washington's military genius is undisputed. Yet American independence must be partially attributed to a strategy for which history has given the infamous general little credit: his controversial medical actions. Traditionally, the Battle of Saratoga is credited with tipping the revolutionary scales. Yet the health of the Continental regulars involved in battle was a product of the ambitious initiative Washington began earlier that year at Morristown, close on the heels of the victorious Battle of Princeton. Among the Continental regulars in the American Revolution, 90 percent of deaths were caused by disease, and Variola the small pox virus was the most vicious of them all. (Gabriel and Metz 1992, 107)

On the 6th of January 1777, George Washington wrote to Dr. William Shippen Jr., ordering him to inoculate all of the forces that came through Philadelphia. He explained that: "Necessity not only authorizes but seems to require the measure, for should the disorder infect the Army . . . we should have more to dread from it, than from the Sword of the Enemy." The urgency was real. Troops were scarce and encampments had turned into nomadic hospitals of festering disease, deterring further recruitment. Both Benedict Arnold and Benjamin Franklin, after surveying the havoc wreaked by Variola in the Canadian campaign, expressed fears that the virus would be the army's ultimate downfall. (Fenn 2001, 69)

At the time, the practice of infecting the individual with a less-deadly form of the disease was widespread throughout Europe. Most British troops were immune to Variola, giving them an enormous advantage against the vulnerable colonists. (Fenn 2001, 131) Conversely, the history of inoculation in America (beginning with the efforts of the Reverend Cotton Mather in 1720) was pocked by the fear of the contamination potential of the process. Such fears led the Continental Congress to issue a proclamation in 1776 prohibiting Surgeons of the Army to inoculate.

Washington suspected the only available recourse was inoculation, yet contagion risks aside, he knew that a mass inoculation put the entire army in a precarious position should the British hear of his plans. Moreover, Historians estimate that less than a quarter of the Continental Army had ever had the virus; inoculating the remaining three quarters and every new recruit must have seemed daunting. Yet the high prevalence of disease among the army regulars was a significant deterrent to desperately needed recruits, and a dramatic reform was needed to allay their fears.

Weighing the risks, on February 5th of 1777, Washington finally committed to the unpopular policy of mass inoculation by writing to inform Congress of his plan. Throughout February, Washington, with no precedent for the operation he was about to undertake, covertly communicated to his commanding officers orders to oversee mass inoculations of their troops in the model of Morristown and Philadelphia (Dr. Shippen's Hospital). At least eleven hospitals had been constructed by the year's end.

Variola raged throughout the war, devastating the Native American population and slaves who had chosen to fight for the British in exchange for freedom. Yet the isolated infections that sprung up among Continental regulars during the southern campaign failed to incapacitate a single regiment. With few surgeons, fewer medical supplies, and no experience, Washington conducted the first mass inoculation of an army at the height of a war that immeasurably transformed the international system. Defeating the British was impressive, but simultaneously taking on Variola was a risky stroke of genius.

References:

Fenn, Elizabeth. Pox Americana: the Great Smallpox Epidemic of 1775-82. New York: Hill and Wang, 2001. 370 p.

Gabriel, Richard, and Karen Metz. A History of Military Medicine. New York: Greenwood Press, 1992. 2 v.

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