



Army Heritage Center
Foundation
*Telling the Army Story...
one Soldier at a time*

Voices of the Past

Part of the Army Heritage Center Foundation's Educational Series

A Deadly Scourge: Smallpox During the Revolutionary War

REVOLUTIONARY WAR

Highlights:

- People in the 18th century lacked the medical knowledge to adequately respond to the threat of infectious disease, and thus lived in dire fear of deadly epidemics.
- British Regulars, exposed to smallpox in England, were already immune, but Continental Soldiers were vulnerable to an epidemic.
- Washington faced the dual threat of an enemy army and a growing epidemic of smallpox within his own ranks.
- General Washington's decision to inoculate his Soldiers saved lives and helped to prevent the collapse of the Continental Army.

Read more at
www.armyheritage.org

Questions or
comments please
contact:
info@armyheritage.org

(United States, 1775-1778) During the Revolutionary War, one of the greatest threats to the Army came not from enemy bullets, but from disease. Perhaps the most dreaded disease was smallpox, caused by a virus that kills one out of every three infected people. Because smallpox was common in England, most British soldiers had already been exposed and were immune, but the disease was less common in America and the average Continental Soldier was not.

As early as 1775, General George Washington knew smallpox was a

serious problem for his Army. Throughout the fall and into the winter of 1775, an outbreak raged in the city of Boston. Rumors abounded that the British were deliberately spreading the disease. When the British finally evacuated Boston in March 1776, only Soldiers who had already had the disease were allowed into the city. Washington ordered his doctors to keep a sharp watch for smallpox and to send infected men to the isolation hospital immediately.

Washington faced a difficult choice: whether or not to inoculate his Army.



This 1802 engraving by James Gillray reveals popular fears over inoculation. The woman expresses her fear and hesitation as her companions experience bizarre transformations resulting from inoculation. This type of hysterical fear was common in an age when diseases were poorly understood and doctors could be as dangerous as any illness. Image courtesy of the Library of Congress.

"Our misfortunes in Canada are enough to melt the heart of a stone," The small-pox is ten times more terrible than Britons, Canadians, and Indians together. This was the cause of our precipitate retreat from Quebeck."
- John Adams

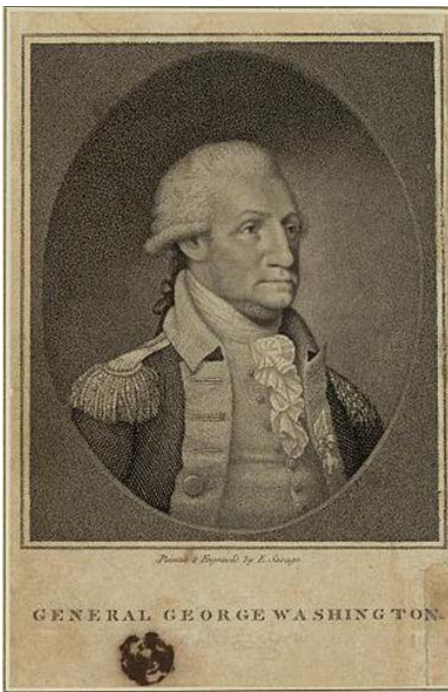


Image courtesy of the Library of Congress.

Vaccinate – To use a dead or weakened form of a disease causing organism to stimulate the immune system to provide immunity without illness.

Inoculate – To use a live organism to cause a mild case of an illness to prevent a serious case.

Inoculated Soldiers would develop a mild case of the disease which most would survive. They would then be immune. His other option was to do nothing other than isolate and treat the sick and hope the Army avoided a major outbreak. There were three problems with inoculation. The first was that inoculated Soldiers could transmit smallpox until fully recovered, so an inoculation program could trigger an uncontrollable epidemic. Secondly, the inoculated Soldiers would be unfit for duty for weeks while recovering, and as many as 2% of his Soldiers could die. If the British attacked while the men were out of commission the Army could be destroyed. The third was that the inoculation process was simple enough that the men could do it themselves in secret.

Smallpox struck the Northern Army at Quebec, where many officers and men were secretly inoculating themselves, thus intensifying the epidemic. According to General Benedict Arnold, some 1,200 of the approximately 3,200 Continentals in the Montreal area were unfit for duty, most of them sick with smallpox. By the end of May 1776, the situation of Northern Department patients was "almost sufficient to excite the pity of Brutes, Large barns [being] filled with men at the very height of smallpox and not the least things, to make them comfortable and medicines being needed at both Fort George and Ticonderoga."

Smallpox threatened the destruction of the entire Army. Major General John Thomas, Commander of the Army in Quebec, died of smallpox. "The smallpox," mourned John Adams, "is ten times more terrible than Britons, Canadians and Indians, together." By mid-July 1776, an estimated three thousand

men of the Northern Army were sick, most with smallpox. Eventually the epidemic eased and General Gates wrote to Washington that "the Smallpox is now perfectly removed from the Army." What exactly occurred has been lost to history, but sources suggest that the Northern Army proceeded with an inoculation program without authorization.

This was a risky move. Until mid-1776, the only authorized preventative measure was isolation of the sick. Inoculation was forbidden, though many Soldiers secretly inoculated themselves. When Washington moved his Army to New York, he established a smallpox isolation hospital on an island in the East River and ordered a halt to all inoculations. The general warned that "any disobedience to this order will be most severely punished." The Continental Congress supported Washington, and when a private physician in the State of New York was caught inoculating soldiers he was jailed.

Despite these precautions, smallpox fear grew among the men of the Continental Army. Recruiting suffered, and by late June, official attitudes toward inoculation began to change. Despite precautions, the illness continued to spread. By August 1776, some troops were being inoculated in segregated camps.

Washington still feared triggering an epidemic, so he took careful precautions to ensure the isolation of soldiers undergoing inoculation, moving them out of Philadelphia and into nearby segregated hospitals. He suggested sheltering newly infected soldiers in houses in the remote countryside and urged that inoculated Soldiers remain in

A Deadly Scourge: Smallpox During the Revolutionary War

isolation until fully recovered, and then issued either new or "well washed, air'd and smoaked" clothing. He recommended that the individual states immunize their recruits before sending them to join the Army.

In February 1777, while encamped at Morristown, Washington became convinced that only inoculation would prevent the destruction of his Army. Emphasizing the need for secrecy and speed, Washington ordered the inoculation of all troops. Because Virginia forbade inoculation, Washington asked Governor Patrick Henry to support the program, writing that smallpox "is more destructive to an Army in the Natural way, than the Enemy's Sword."

In the end, the gamble paid off. Fewer than 1% of the Soldiers died from being inoculated, and the program was so successful in controlling smallpox that he repeated it in the Valley Forge winter of 1778.

Adapted from: Gillet, Mary C. "Chapter 3: From Siege to Retreat, 1775 to May 1777," *The Army Medical Department, 1775-1818*. U.S. Government Printing Office: Washington, D.C., 1981. Courtesy of the Office of Medical History: <http://history.amedd.army.mil/booksdocs/rev/gillett1/ch3.html>.

Fenn, Elizabeth A. *Pox Americana: The Great Smallpox Epidemic of 1775-82*. (New York: Hill and Wang, 2001).



Soldiers receive immunizations at the Army Medical School circa 1920. Today the Army vaccinates all Soldiers for a wide variety of diseases on a regular basis, a practice that dates back to the days of George Washington and the Revolutionary War. Image courtesy of the Center of Military History.