

Pox Americana

Sept 28, 1751–George Washington, then 19, set sail with his family to Barbados. His older half-brother Lawrence suffered from “consumption” (tuberculosis) and the climate in Barbados might help him recover.

George ended up contracting smallpox and was bed-ridden for nearly one month before recovering.

The climate did not help with Lawrence’s fight with tuberculosis. He traveled to Bermuda and George returned to Virginia. Lawrence returned to Virginia in summer of 1752 and died July 26, 1752.

p 13-14

Some sufferers die within days of symptoms, before the distinctive skin lesions form.

400,000/year died from smallpox in 18th century Europe. Fatality rate was 30% and 30% of survivors suffered blindness.

Estimated 300 MILLION died from smallpox in the 20th century; 500 million died in the last 100 years.

1796–Edward Jenner introduced smallpox vaccine.

Studies show Native Americans have a uniquely homogeneous immune response to pathogens compared to European, African, and Asian populations possibly making them highly susceptible to diseases such as smallpox.

<https://en.m.wikipedia.org/wiki/Smallpox>

Massachusetts Bay Colony used quarantine to protect themselves from disease brought by sailors. “An Act to Prevent Persons from Concealing the Small Pox” required a red flag to be displayed outside any infected household. pp 30

Many colonists would flee their home when smallpox broke out. 1721 in Boston, 900 of 10,700 citizens left town for the country. Flight inadvertently spread smallpox due to asymptomatic incubation period. pp 31

Inoculation described by Puritan minister Cotton Mather of Boston in 1716. pp 32

<https://en.wikipedia.org/wiki/Variolation>

Cotton Mather inoculated Zabdiel Boylston in 1721 during smallpox outbreak in Boston. Getting disease naturally: 15% fatality; inoculation: 2% fatality. pp 33

Dr Joseph Warren inoculated John Adams' brother in 1764. Preparation for inoculation included a diet of milk and mercury preparations followed by ipecac to induce vomiting. Mercury poisoning caused teeth to severely loosen: "Every tooth in my head become so loose that I believe I could have pulled them all with my thumb and finger" pp 33-34

1767—John Smith setup inoculation business in Yorktown, Virginia. Residents feared he would open a "Pandora's box". A year later some of his patients released prematurely had started outbreaks in Williamsburg, Virginia. As inoculation patients were often not quarantined, riots almost as common as those protesting British rule were common. pp 37-38

Benjamin Waterhouse—"New England is the most democratical region on the face of the earth", yet the people there had "voluntarily submitted to more restrictions and abridgement of liberty, to secure themselves against the terrific scourge, than any absolute monarch could have enforced" pp 39

Smallpox was especially concerning to Washington with respect to the Continental Army. pp 43

Turmoil before Revolutionary War was perfect for spread of smallpox. Meetings that men from all over attended. Messengers traveling far and wide. pp 45-46

Colonial blockade of Boston in the summer of 1775 created ideal conditions for smallpox. A civilian who escaped in July 1775 said the population was "very sickly: from ten to thirty funerals a day, but no bells allowed to peal". pp 47

Smallpox was a danger to Washington's Continental Army. Composed mostly of New Englanders where inoculation was uncommon, they had little "herd immunity". Washington could inoculate them piecemeal which risked would take extreme amount of time and risk infection by someone inoculated but released too early; wholesale inoculation risked a major % of the army being unable to fight. pp 47

Many "whigs" (patriot sympathizers) were trapped in Boston proper by the colonial siege. Conditions in the city rapidly deteriorated and whigs petitioned to be allowed to leave Boston. Their petition was granted but they were forced to leave by water to Salem where they were quarantined. pp 48

The British army were largely immune due to being previously to smallpox. Those that had not been exposed were inoculated and quarantined to ships in the harbor set aside for just such purpose. Since relatively few were unexposed, inoculation did not pose the same risk it did to the colonial army. pp 49

General Howe began ordering some destitute Boston residents to leave which posed a danger of spreading smallpox to the colonial army. pp 50

March 17, 1776 the British left Boston as new fortifications on Dorchester Heights threatened British vessels in Boston harbor. The British sailed for Nova Scotia. Many civilians now wanted back into Boston and would come into contact with smallpox creating a new threat to the continental army. Whigs wanted into Boston and Loyalists wanted out. Washington sent troops immune to smallpox into Boston. Fortunately, many of his troops had already marched south to New York in anticipation of a British offensive there. pp 51-52

Inoculation prohibited in colonial Boston. Some physicians inoculated anyway. Ban lifted for twelve days on July 3, 1776. -5,000 Bostonians get inoculated. Boston was quarantined (effectively a second siege). Quarantine lifted September 18, 1776. pp 53-54

1763—General Thomas Gage signs off on blankets infected with small pox to be given to Ottawa Indians under Pontiac who had threatened Fort Pitt.

December 3, 1775—four British deserters during the siege of Boston reported that General William Howe had deliberately infected several exiles with small pox in an attempt to infect colonial forces.

George Washington recognized the danger smallpox posed to his army. Initially, his efforts to combat the disease involved quarantine and inoculation was prohibited. Philadelphia remained a center for inoculation of the general public which made it a source of the virus for anyone inoculated there or passing through or nearby. Including new recruits to the Continental Army.

Washington soon realized quarantine was not a workable solution and turned to inoculation in January 6, 1777.

Inoculation carried great risk as the soldiers that were inoculated would not be combat ready for 3-4 weeks. Mass inoculation would present a great opportunity to the British if they became aware of it. pp 92-103