

**A Revolution Within a Revolution:
Washington, Smallpox, and the Continental Army**

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While studying immunology in biology class, I learned that George Washington ordered the Continental Army inoculated against smallpox during the American Revolution. Undertaken decades before vaccines, inoculation was a risky, controversial, and sometimes fatal eighteenth-century practice that used a live virus to induce immunity. After further research, I realized that traditional narratives often overlook both the critical role smallpox played in shaping the Revolution and the revolutionary, far-reaching nature of Washington's response. This topic allowed me to explore a lesser-known aspect of the Revolution during its semiquincentennial while providing a unique perspective on the interplay between Revolution and Reaction: revolutionary conditions produced a smallpox epidemic that disrupted the Revolution, forcing Washington to react with a controversial policy that reshaped it in turn.

I began my research at local libraries, reading histories of the Revolution and smallpox to establish context and identify key debates. Because secondary literature rarely treats inoculation as a central wartime strategy, I relied more heavily on primary sources to refine my argument and build evidence. These included soldier and civilian journals, medical accounts, troop statistics, British narratives, newspapers, colonial statutes, and religious texts. Digital archives, university collections, and *Chronicling America* were especially beneficial in accessing primary materials otherwise unavailable to me. In particular, the U.S. National Archives wartime correspondence from Washington and other Founding Fathers was invaluable, providing insight into how revolutionary leaders understood and managed smallpox medically and strategically.

I chose to write a paper to present an in-depth, analytical argument and, because

my topic lacked primary source images and video, it was less suited to visual categories. I organized my paper thematically, examining smallpox's impact on the Revolution, Washington's inoculation decision, and the broader military, medical, and social consequences of his policy. I revised drafts to strengthen my historical argument, improve analysis, and integrate primary sources effectively.

Wartime conditions produced a deadly smallpox epidemic that weakened Washington's army and disrupted the Revolution. In reaction, Washington implemented a revolutionary inoculation policy that protected tens of thousands of soldiers. More than simply medical, his decision proved a military necessity that strengthened the army and helped secure American victory. Beyond the Revolution, it established early precedents for preventive medicine and public health practices that continue to resonate.

Eighteenth-century debates over inoculation remain relevant today, highlighting ongoing conflicts between public fear, medical authority, and state intervention during epidemics.

Historical accounts of the Revolution often either reduce smallpox to a peripheral medical concern or dismiss its impact entirely. This paper challenges these narratives by demonstrating smallpox's critical role in shaping military outcomes and by reframing Washington's reaction as a strategic response to that threat. Viewing Washington's inoculation policy as central to the Revolution's preservation offers a more complete interpretation of his military leadership, suggesting a willingness to defy opposition for wartime needs and sacrifice short-term readiness in pursuit of revolutionary victory.

Washington's revolutionary reaction strengthened military effectiveness, helped secure independence, shifted public attitudes, set a precedent for preventive health practices, and left a lasting legacy in the new United States.

A Revolution Within a Revolution: Washington, Smallpox, and the Continental Army

“Should Smallpox infect the Army...we should have more to dread from it than from the Sword of the Enemy” — George Washington, February 6, 1777¹

Historical accounts of the American Revolution have long emphasized the logistical, manpower, and financial constraints that faced the American war effort. However, smallpox's critical role in the conflict, and the revolutionary medical policy General George Washington undertook in response, remain comparatively underexamined, limiting understanding of both the Revolution and his leadership.

Revolutionary conditions sparked a deadly smallpox epidemic that spread through the colonies, weakening American forces and threatening the Revolution. In reaction, Washington ordered the Continental Army's mass inoculation in 1777, implementing a controversial policy amid legal restrictions, public opposition, and wartime risk. More than simply a medical response, Washington's reaction represented a strategic military intervention that strengthened army effectiveness and contributed to revolutionary success. It also advanced disease control and early preventive medicine in ways that continue to influence public health.

Washington's revolutionary reaction thus stands as one of the most significant yet undervalued achievements of his military leadership.

¹ “George Washington to William Shippen, Jr., February 6, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0281>

A Deadly Reaction to Revolution

Smallpox was one of the deadliest diseases of the eighteenth century. Highly contagious, it caused fever, severe pain, and a distinctive pustular rash, killing 20-30% and leaving many survivors blind or disfigured.² Responsible for 500 million deaths worldwide, smallpox struck indiscriminately.³ Pharaohs, Roman emperors, European monarchs, Russian tsars, and Japanese emperors all succumbed, reshaping global power and destabilizing dynasties.⁴ In the Americas, its introduction by European colonizers in the 1500s proved catastrophic, killing an estimated 95% of Indigenous populations and remaining a persistent threat across the continent.⁵

As the Revolution unfolded in the colonies in 1775, a smallpox epidemic swept alongside. While some accounts claim this “coincided” with the Revolution, the war itself created the conditions for smallpox to spread.⁶ Military mobilization, rural recruits, unsanitary camps, civilian quartering, and the influx of foreign combatants brought previously dispersed populations into close, sustained contact. These dynamics produced a North American epidemic from 1775-82 (see Appendix A) that claimed 130,000 lives, far exceeding the 37,000 deaths from combat.⁷

Americans’ limited exposure to smallpox left them highly susceptible, with contemporary estimates suggesting that “not one in twenty” colonists possessed immunity.⁸ Smallpox’s endemic presence in Europe, however, meant British troops were

² Elizabeth Fenn, *Pox Americana: The Great Smallpox Epidemic* (New York: Hill and Wang, 2001), pp.16-20.

³ “The Triumph of Science: The Incredible Story of Smallpox Eradication,” *National Foundation for Infectious Diseases*, 2023, <https://www.nfid.org/the-triumph-of-science-the-incredible-story-of-smallpox-eradication/>

⁴ Donald Hopkins, *Princes and Peasants: Smallpox in History* (Chicago: University of Chicago, 1983), p.3.

⁵ Jared Diamond, *Guns, Germs, and Steel* (New York: W.W. Norton & Company, 2005), p.78.

⁶ Geoffrey C. Ward, *The American Revolution: An Intimate History* (New York: Alfred A. Knopf, 2025), p.155.

⁷ Fenn, *Pox Americana*, p.274; Howard Peckham, *The Toll of Independence: Engagements and Battle Casualties of the American Revolution* (Chicago: University of Chicago Press, 1974), p.132.

⁸ “Jonathan Trumbull, Sr., to George Washington, July 6, 1776,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-05-02-0159>

mostly protected, giving the British Army a strategic advantage from the outset. Washington, who had himself been “strongly attacked with smallpox” in Barbados in 1751, recognized the danger this posed, referencing smallpox and its military implications over 200 times in his wartime correspondence.⁹ British reports, by contrast, rarely mention it, besides noting it posed “a deadly infection in Yankee veins.”¹⁰

This imbalance is evident as early as the siege of Boston in 1775, where smallpox had become an escalating crisis and civilians reported “ten to thirty funerals a day.”¹¹ While the epidemic posed little disruption to the occupying British forces, Washington had to take urgent precautions to prevent it reaching his troops and destabilizing his army. These measures included establishing a quarantine hospital, isolating infected soldiers, banning civilian contact, and ordering letters be “dipped in vinegar” for disinfection.¹² Military decision-making was also impacted, forcing a prolonged siege rather than a direct assault, with entry into Boston restricted until “declared...free from infection.”¹³

During the 1775-76 Québec invasion, smallpox swept through American troops, infecting “whole regiments in a few days.”¹⁴ By spring 1776, over 4,000 men, roughly half the army, were incapacitated, collapsing American momentum and ending hopes

⁹ George Washington, November 17, 1751, *The Diaries of George Washington, Vol. 1*, ed. John Fitzpatrick (Boston: Houghton Mifflin, 1925), p.25;

Kenneth Koyle, “Smallpox in the Colonial Army,” *The Medical Journal*, Spring 2025, medcoe.army.mil/the-medical-journal/; <https://founders.archives.gov/search>

¹⁰ Thomas Ainslie, December 9, 1775, *The Journal of Captain Ainslie*, ed. S.S. Cohen (Toronto, 1968), p.27.

¹¹ Christopher Marshall, July 26, 1775, *Passages from the Remembrancer of Christopher Marshall*, ed. William Duane Jr. (Philadelphia: J. Crissy, 1839), <https://catalog.hathitrust.org/Record/000219707>, p.38.

¹² Samuel Bixby, December 4, 1775, *Proceedings of the Massachusetts Historical Society 14* (Boston: The Society, 1887), <https://revwar75.com/library/bob/diaries2.htm>, p.297.

¹³ Hugh Thursfield, “Smallpox in the American War of Independence,” *Annals of Medical History*, May 1940, <https://pmc.ncbi.nlm.nih.gov/articles/PMC7942582/>, p.314; *The New-England Chronicle*, July 18, 1776, *Chronicling America*, <https://www.loc.gov/item/sn83020482/1776-07-18/ed-1/>

¹⁴ “Brigadier General John Sullivan to George Washington, June 24, 1776,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-05-02-0059>

of making Canada the ‘fourteenth colony.’¹⁵ Army physician James Tilton highlighted smallpox’s military cost, recording “we lost ten to twenty men from disease for every one by weapons of the enemy.”¹⁶ Retreating troops spread infection into civilian communities, expanding the epidemic beyond the battlefield.¹⁷

By the time independence was declared on July 4, 1776, smallpox had shifted from a logistical challenge to a direct threat to the revolutionary cause. While largely inconsequential to British forces, it proved disproportionately damaging to American strategy and campaigns, at times leaving half the Continental Army unfit for duty. Smallpox’s devastation that year prompted John Adams to denounce it as “ten times more terrible than Britons, Canadians and Indians together.”¹⁸ However, at the time, Washington still believed that discipline, vigilance, and “proper precautions” offered the best means of controlling smallpox.¹⁹

Washington’s Revolutionary Reaction

By January 1777, the Continental Army was in crisis. A series of defeats, remembered by Thomas Paine as “the black times of Seventy-six,” had reduced the army from 14,000 to just 3,000 men.²⁰ During winter quarters at Morristown, smallpox again spread uncontrollably, leaving one-third of Washington’s army sick.²¹ Fear of contagion deterred much-needed recruitment and caused “very great desertion,”

¹⁵ Charles H. Lesser, ed., *The Sinews of Independence* (Chicago: University of Chicago, 1976), pp.22-27.

¹⁶ James Tilton, *Economical Observations on Military Hospitals: and the Prevention and Cure of Diseases* (Wilmington: J. Wilson, 1813), <https://collections.nlm.nih.gov/catalog/nlm:nlmuid-2575018R-bk>, p.34.

¹⁷ Fenn, *Pox Americana*, pp.108-9.

¹⁸ “John Adams to Abigail Adams, June 26, 1776,” Adams Family Papers, *Massachusetts Historical Society*, <https://www.masshist.org/digitaladams/archive/doc?id=L17760626ja>

¹⁹ “George Washington to Jonathan Trumbull, July 7, 1776,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-05-02-0165>

²⁰ “Thomas Paine to Samuel Adams, January 1, 1803,” *The Thomas Paine Historical Society*, <https://www.thomaspaine.org/writings/1803/to-samuel-adams-january-1-1803>; Robert O’Connell, *Revolutionary: George Washington at War* (New York: Random House, 2019), p.168.

²¹ Lesser, *The Sinews of*, p.43.

leading Washington to complain his army was “here today, gone tomorrow.”²² As the backbone of American military, Washington understood that the Continental Army’s survival and the Revolution’s survival were inseparable.²³ British General Howe similarly identified “the defeat of the rebel regular army” as the “surest road to peace.”²⁴ Fearing imminent collapse, Washington wrote to Congress that “desperate diseases require desperate remedies,” and began to consider inoculation as both a medical intervention and military necessity.²⁵

Prior to this, inoculation had not been a serious consideration. Practiced for centuries across Asia and Africa, it had been introduced to the American colonies in 1716 by Onesimus, an enslaved West African man who shared his knowledge of the practice.²⁶ A pioneering approach nearly a century before the first vaccine, it involved infecting healthy individuals with live smallpox virus to induce immunity. However, inoculation was dangerous and controversial: it had a 2% mortality rate, risked uncontrollable outbreaks, and was condemned by the clergy for interfering with God’s will, declaring smallpox “a punishment from a righteous God.”²⁷

While inoculation had gained broad acceptance across Europe, where smallpox was endemic, it remained socially and politically divisive in the American colonies. Many colonists feared it could trigger widespread epidemics, leading to anti-inoculation riots

²² “Major General Horatio Gates to George Washington, August 7, 1776,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-05-02-0451>;

“George Washington to John Parke Custis, January 22, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0133>

²³ Ann Becker, *Smallpox in Washington’s Army* (London: Lexington Books, 2023), p.2.

²⁴ William Howe, *The Narrative of Lieutenant General Sir William Howe* (London: H. Baldwin, 1781), p.19.

²⁵ “George Washington to John Hancock, December 20, 1776,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-07-02-0305>

²⁶ Zabdiel Boylston, *An Historical Account of the Small-Pox Inoculated in New-England* (Boston, 1730), <http://resource.nlm.nih.gov/2544007R>, p.35.

²⁷ John Williams, *Several Arguments Proving that Inoculating the Small Pox is Not Contained in the Law of Physick* (Boston, 1721), <https://archive.org/details/2577020R.nlm.nih.gov>, p.5.

in Virginia in 1768-69 and the destruction of an inoculation hospital dubbed “Castle Pox” in Massachusetts in 1773.²⁸ To prevent uncontrollable spread, the practice was prohibited in many colonies, including New York, Connecticut, and Virginia (see Appendix B). In 1776, Congress also banned inoculation within the army, citing concerns that widespread infection “might prove fatal.”²⁹

Against this backdrop, Washington faced a difficult decision: inoculation offered the only reliable protection against what he deemed his “most dangerous enemy,” but mass inoculation had never been attempted before, risked large-scale outbreaks, generated fierce opposition, and would leave the army incapacitated and vulnerable to attack for weeks.³⁰ He remained “much at a loss what step to take” throughout January, balancing medical necessity, legal restrictions, and significant wartime pressure.³¹ At stake were thousands of lives, the army’s survival, and potentially the Revolution itself. Ultimately deciding to trust the “judgment and determination of the medical gentlemen,” Washington took the revolutionary step of ordering the Continental Army’s inoculation on February 6, 1777, announcing:

I have determined that the troops shall be inoculated. This may be attended with some inconveniences and some disadvantages, but yet I trust its consequences will have the most happy effects. Necessity not only authorizes but seems to require the measure.³²

²⁸ Andrew Wehrman, *The Contagion of Liberty* (Baltimore: Johns Hopkins University Press, 2022), p.79; Ashley Bowen, October 19, 1773, “The Journals of Ashley Bowen (1728–1813) of Marblehead,” *Colonial Society of Massachusetts*, <https://www.colonialsociety.org/node/735>, p.363.

²⁹ “General Orders, May 26, 1776,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-04-02-0312>

³⁰ “George Washington to John Hancock, July 21, 1775,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-01-02-0085>

³¹ “George Washington to Major General Horatio Gates, February 5–6, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0267>

³² “George Washington to John Hancock, February 5, 1777,” footnote 12, *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0268>; “George Washington to William Shippen, Jr., February 6, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0281>

Washington's bold act of leadership launched the first state-mandated inoculation policy in history—a decision that overrode individual consent, defied prevailing laws, and needed to be executed in secrecy at the height of war.

Traditional battlefield-centered narratives that frame Washington as “inactive” during the winter encampment overlook a critical aspect of his leadership: managing the Continental Army's mass inoculation.³³ Under Washington's direction, thousands of soldiers were isolated, transferred to hospitals, and inoculated. Their clothes were then “washed and well-smoked” and their recovery managed for weeks until declared “cleansed from infection.”³⁴ Eleven inoculation hospitals were established across six colonies in 1777 alone, forcing Congress and states like Connecticut to reverse earlier restrictions.³⁵

Washington's insistence on speed and secrecy reflects his awareness of the operation's military risk, fearing that “the enemy, knowing it, will certainly take advantage of our situation.”³⁶ A staggered schedule was devised by Alexander Hamilton, his aide-de-camp, so that “five days before one set is fit to leave, another set may be preparing to go in.”³⁷ New recruits were ordered to be inoculated “as fast as they arrive.”³⁸ Even troop reporting was suspended to conceal the army's vulnerability, since an attack by

³³ John Ferling, *Whirlwind: The American Revolution and the War that Won It* (New York: Bloomsbury Press, 2015), p.186.

³⁴ “George Washington to Major General Horatio Gates, January 28, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0180>;

“George Washington to William Shippen, Jr., February 6, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0281>

³⁵ Fenn, *Pox Americana*, p.94; Wehrman, *The Contagion of*, p.212.

³⁶ “George Washington to Major General Horatio Gates, February 5–6, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0267>

³⁷ “Alexander Hamilton to Major General Adam Stephen, March 13, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Hamilton/01-01-02-0103>

³⁸ “George Washington to Brigadier General James Mitchell Varnum, March 3, 1777,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-08-02-0531>

the 20,000-strong British could have proven disastrous with only 1,000 Continentals fit for duty.³⁹ Washington's strategy succeeded, with "nearly one-half of the troops" inoculated before the British became aware.⁴⁰

Within the army itself, reactions to the policy were mixed. Some generals, fearing that inoculation might "prove fatal...and ruin the country," hesitated to follow orders, leading Washington to complain about delays in receiving recruits.⁴¹ Soldiers who had witnessed smallpox's devastation firsthand, however, accepted the procedure "with enthusiasm."⁴² One private recalled "we lost none" and had been inoculated "favorably" alongside 400 others in Connecticut that May.⁴³ While most experienced only mild illness, records indicate that 1-2% of otherwise healthy soldiers died from inoculation, underscoring the enormous stakes of Washington's decision.⁴⁴

By 1778, Washington's policy had successfully inoculated over 40,000 soldiers.⁴⁵ Infection rates declined from 35% to 18%, and 43 newly-inoculated regiments joined Washington's forces, raising troop strength to 18,000.⁴⁶ By strengthening the army at a critical moment, Washington's policy proved pivotal in narrowing the immunity gap with British forces. At the Battle of Saratoga that year, smallpox "played no part" in

³⁹ Becker, *Smallpox in Washington's*, p.175.

⁴⁰ Henry Lee, *Memoirs of the War in the Southern Department of the United States* (Philadelphia: Bradford and Inskeep, 1812), p.48.

⁴¹ General Philip Schuyler to George Washington, August 31, 1776," *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-06-02-0152>; "George Washington to Colonel Samuel Blachley Webb, April 7, 1777," *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-09-02-0086>

⁴² Thursfield, "Smallpox in the," p.316.

⁴³ Joseph Plumb Martin, May 31, 1777, *Memoir of a Revolutionary Soldier* (Mineola: Dover Publications, 2006), p.37.

⁴⁴ Dan Liebowitz, "Smallpox Vaccination: An Early Start of Modern Medicine in America," *Journal of Community Hospital Internal Medicine Perspectives* 7(1), May 2017, doi:10.1080/20009666.2016.1273611, p.62.

⁴⁵ Becker, *Smallpox in Washington's*, p.181.

⁴⁶ Mary Gillett, *The Army Medical Department 1775-1818* (U.S. Printing Office, Washington, D.C., 1987), p.115.

weakening American troops, demonstrating inoculation's key role in the decisive American victory that secured French support.⁴⁷

From Revolution to Resolution

For the remainder of the conflict, Washington's policy continued to protect the army's military readiness. Infection rates fell to 9% and smallpox mortality dropped below 1%, a remarkable success for the time.⁴⁸ Army medical records seldom list smallpox as a cause of illness after 1778, suggesting that later outbreaks had little effect on Washington's immunized forces.⁴⁹ This shift allowed Washington to focus more on strategy, with his later correspondence showing far fewer references to smallpox.⁵⁰ Recruitment and troop strength recovered, peaking at around 48,000 men in 1779 and transforming what one historian described as Washington's "military turnstile" of sick and deserting recruits into a stable core of battle-hardened veterans.⁵¹

Washington's increased confidence in "the amazing benefits of inoculation" encouraged him to develop it into a more efficient and expansive practice.⁵² In 1778, he deemed it "more convenient" for the practice to be administered within camps rather than hospitals.⁵³ This enabled the inoculation of 3,600 additional troops at Valley Forge, where improved techniques limited fatalities to just 11 men.⁵⁴ He also expanded it

⁴⁷ Oscar Reiss, *Medicine and the American Revolution: How Diseases and their Treatments Affected the Colonial Army* (New York: McFarland, 2005), p.101.

⁴⁸ Becker, *Smallpox in Washington's*, p.181.

⁴⁹ Lesser, *The Sinews of*, January 1778 onward, passim; Becker, *Smallpox in Washington's*, p.187.

⁵⁰ Koyle, "Smallpox in the";

<https://founders.archives.gov/search>

⁵¹ Lesser, *The Sinews of*, p.10;

Joseph Ellis, *His Excellency: George Washington* (New York: Knopf, 2004), p.83.

⁵² "George Washington to John Augustine Washington, August 5-9, 1777," in *This Glorious Struggle: George Washington's Revolutionary War Letters*, ed. Edward Lengel (New York: Harper-Collins, 2007), p.104.

⁵³ "George Washington to the Commanding Officer at Alexandria, Virginia, March 20, 1778," *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-14-02-0208>

⁵⁴ Becker, *Smallpox in Washington's*, p.186.

beyond soldiers to “all subjects in camp,” providing protection to nearby civilians and the roughly 20,000 women whose labor helped sustain the army.⁵⁵

As inoculation proved effective in keeping troops healthy, military success gradually reshaped civilian attitudes toward inoculation, contributing to broader public acceptance and legislative change. Communities that had once rioted and destroyed hospitals began to offer homes and churches as isolation centers in exchange for free treatment.⁵⁶ A Massachusetts town meeting in 1777 declared inoculation as “for the public good, though inconvenient,” reflecting growing acceptance.⁵⁷ Washington used military success with inoculation to pressure governors to “repeal that most impolitic law,” helping overturn long-standing colonial prohibitions by the early 1780s.⁵⁸ Demonstrating contemporary recognition of the policy’s success, physician and Founding Father Benjamin Rush announced in 1781 that “smallpox, once fatal to thousands, has been checked in its career and...subdued by inoculation.”⁵⁹

However, access to inoculation remained unequal, reflecting broader colonial inequalities. While roughly 8,000 enslaved and free Black troops and Indigenous allies were included in Washington’s inoculation policy, their civilian counterparts remained largely unprotected.⁶⁰ As such, smallpox continued to inflict heavy losses on these

⁵⁵ “General Orders, March 18, 1778,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/03-14-02-0183>; Melvin Weig, *Morristown National Historical Park: A Military Capital of the Revolution*, 2024, <https://www.gutenberg.org/ebooks/62651>, p.7.

⁵⁶ Wehrman, *The Contagion of*, p.209.

⁵⁷ March 12, 1777, *The Acts and Resolves of the Province of Massachusetts Bay, 1771-80* (Boston: Wright and Potter, 1886), p.715.

⁵⁸ “George Washington to John Augustine Washington, August 5-9, 1777,” in *This Glorious Struggle: George Washington’s Revolutionary War Letters*, ed. Edward Lengel (New York: Harper-Collins, 2007), p.104; Wehrman, *The Contagion of*, p.220.

⁵⁹ Benjamin Rush, *The New Method of Inoculating for the Small-Pox* (Philadelphia: Charles Cist, 1781), p.4.

⁶⁰ “The Continental Army,” *U.S. Army Center of Military History*, 2026, <https://history.army.mil/Revwar250/Continental-Soldier/>

populations. Thomas Jefferson later estimated that “about 27,000” enslaved people seeking freedom with British forces died during the 1780-81 Virginia epidemic.⁶¹

By contrast, American forces remained healthy during the southern campaigns, with their high level of immunity contributing to victory at Yorktown on October 19, 1781.⁶²

By eliminating smallpox as a military constraint, Washington’s policy strengthened combat readiness, enabled key victories, and sustained the Revolution long enough to achieve independence, as well as reshaping public and legislative attitudes toward preventive health. Highlighting its significance, Washington biographer Ron Chernow ranked inoculation “as important as any military measure Washington adopted during the war.”⁶³

Beyond the Revolution, Washington’s policy advanced preventive disease management and set a precedent for state intervention in public health. In an era when public health measures were typically reactive, imposed only after outbreaks or disaster, Washington’s policy represented one of the first proactive approaches.⁶⁴ Long before germ theory was established, inoculation demonstrated that infectious disease could be prevented and controlled. One medical historian observed that “nothing in the field of early American medicine was more revolutionary than the introduction of inoculation.”⁶⁵

By the 1790s, the practice had become so well-established that, during a 1792 Boston

⁶¹ “Thomas Jefferson to William Gordon, July 16, 1788,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Jefferson/01-13-02-0266>

⁶² Paul Aron, “A Revolutionary Fever: The Smallpox Epidemic in America Affected the Course of the Revolution,” *Trend and Tradition Magazine*, *Colonial Williamsburg*, September 18, 2020, <https://www.colonialwilliamsburg.org/discover/resource-hub/trend-tradition-magazine/trend-tradition-autumn-2020/revolutionary-fever/>

⁶³ Ron Chernow, *Washington: A Life* (New York: Penguin Press, 2010), p.200.

⁶⁴ Jeanne Abrams, *Revolutionary Medicine: The Founding Fathers and Mothers in Sickness and in Health* (New York: New York University Press, 2013), pp.5-6.

⁶⁵ Michael Bennett, *War Against Smallpox: Edward Jenner and the Global Spread of Vaccination* (Cambridge: Cambridge University Press, 2020), pp.30-31;

outbreak, John Quincy Adams briefly noted that “a general inoculation has taken place...of ten thousand people.”⁶⁶

By proving that smallpox could be contained, Washington’s policy contributed to greater acceptance of Edward Jenner’s smallpox vaccine in 1798. President Thomas Jefferson promoted vaccination nationally, reinforcing the government’s role in public health.⁶⁷ The U.S. Army eventually transitioned from smallpox inoculation to vaccination in preparation for the War of 1812, keeping mandatory smallpox protection a cornerstone of military practice.⁶⁸ Over time, this legacy contributed to smallpox becoming the only contagious disease ever eradicated, with the World Health Organization declaring in 1980, “Smallpox is dead!”⁶⁹

Yet this success carries a modern irony: with smallpox vaccination now ended, many populations are as vulnerable to smallpox today as those Washington sought to protect 250 years ago.

Conclusion

Although soldiers faced numerous diseases during the Revolution, smallpox was the deadliest and most consequential, a direct response to the war’s outbreak. The 1775-82 epidemic is often overshadowed in historical accounts by the Revolution’s military and political events, yet smallpox shaped many of those same developments,

John T. Barrett, “The Inoculation Controversy in New-England,” *Bulletin of the History of Medicine*, Vol. 12, July 2, 1942, <https://www.jstor.org/stable/44446265>, p.169.

⁶⁶ “John Quincy Adams to Thomas Boylston Adams, September 2, 1792,” *Founders Online*, National Archives, <https://founders.archives.gov/documents/Adams/04-09-02-0170>

⁶⁷ Jonathan Tucker, *Scourge: The Once and Future Threat of Smallpox* (New York: Atlantic Monthly Press, 2001), p.28.

⁶⁸ Jacqueline Gase and Amanda Quinn, “U.S. Military Immunization: The Fight Against Infectious Diseases,” *National Museum of Health and Medicine*, August 15, 2019, https://medicalmuseum.health.mil/micrograph/index.cfm/posts/2019/us_military_immunization

⁶⁹ John Bland et al., “Smallpox is Dead!” *World Health Organization Journal*, May 1980, <https://iris.who.int/items/37ac8cab-f049-44ea-82b0-7f7bfc376bf5>

disproportionately affecting American strategy and campaigns. In response, Washington implemented an unprecedented mass inoculation policy, revolutionary in both concept and scale. In the face of significant controversy, risk, and wartime pressure, his decision marked a bold reaction at a moment when collapse seemed imminent.

Beyond simply a medical response, Washington's policy proved a necessary strategic gamble that stabilized the Continental Army and contributed to American victory. Accounts that omit this framing risk minimizing the extent to which smallpox and inoculation reshaped the Revolution's military and political trajectory. They also present an incomplete picture of Washington's wartime leadership, particularly his strategic prioritization of long-term survival over immediate readiness and his understanding that military success depended on more than battlefield command alone.

Furthermore, Washington's policy constituted public health innovation, helping normalize preventive medicine and establish military and public health practices that continue to influence modern policy. The controversies surrounding eighteenth-century inoculation reappear in public health debates today, reflecting enduring tensions between public fear, medical authority, and state intervention during epidemic crises.

Washington's revolutionary reaction to smallpox saved his troops, secured the Revolution, and left a lasting legacy, making it one of the most significant yet undervalued aspects of his military leadership.

Appendix A

Map of Epidemic Spread, 1775-82



Smallpox transmission through North America, 1775-82, denoted by clusters of red dots.

Map reproduced from Geoffrey C. Ward, *The American Revolution: An Intimate History*, (New York: Alfred A. Knopf, 2025), p.155.

Appendix B

Colonial Newspaper Accounts Showing Inoculation Bans Across Colonies, 1774-77

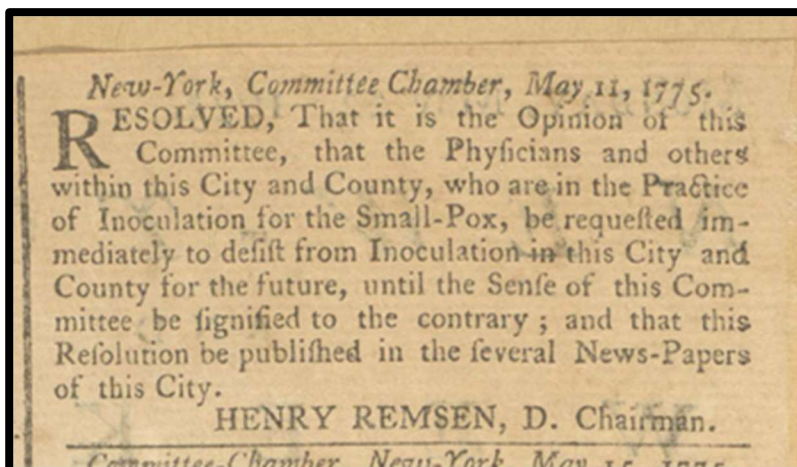


Figure B1. Inoculation ban announcement: New York, May 1775.

The New-York Gazette, and the Weekly Mercury. (New York, NY), May 22, 1775. *Chronicling America* (Library of Congress). <https://www.loc.gov/item/sn83030493/1775-05-22/ed-1/>.

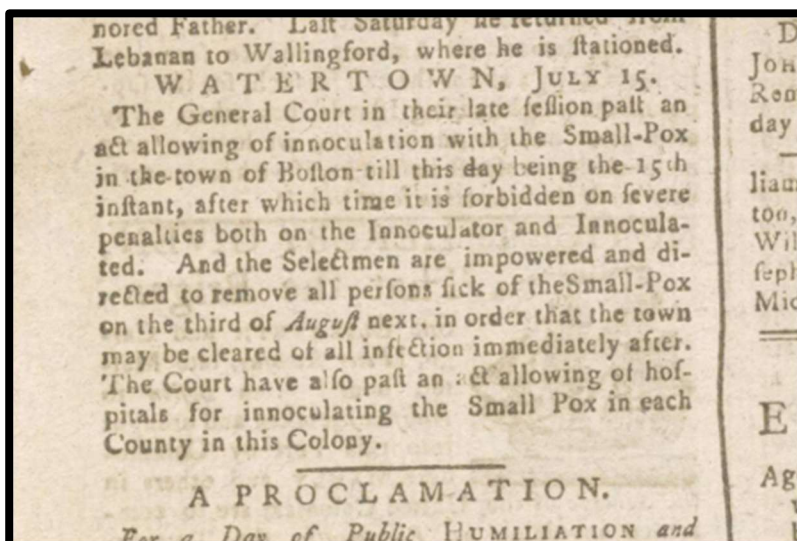


Figure B2. Inoculation ban announcement: Massachusetts, July 1776.

The American Gazette, or, the Constitutional Journal. (Salem, MA), July 16, 1776. *Chronicling America* (Library of Congress). <https://www.loc.gov/item/sn83020494/1776-07-16/ed-1/>.

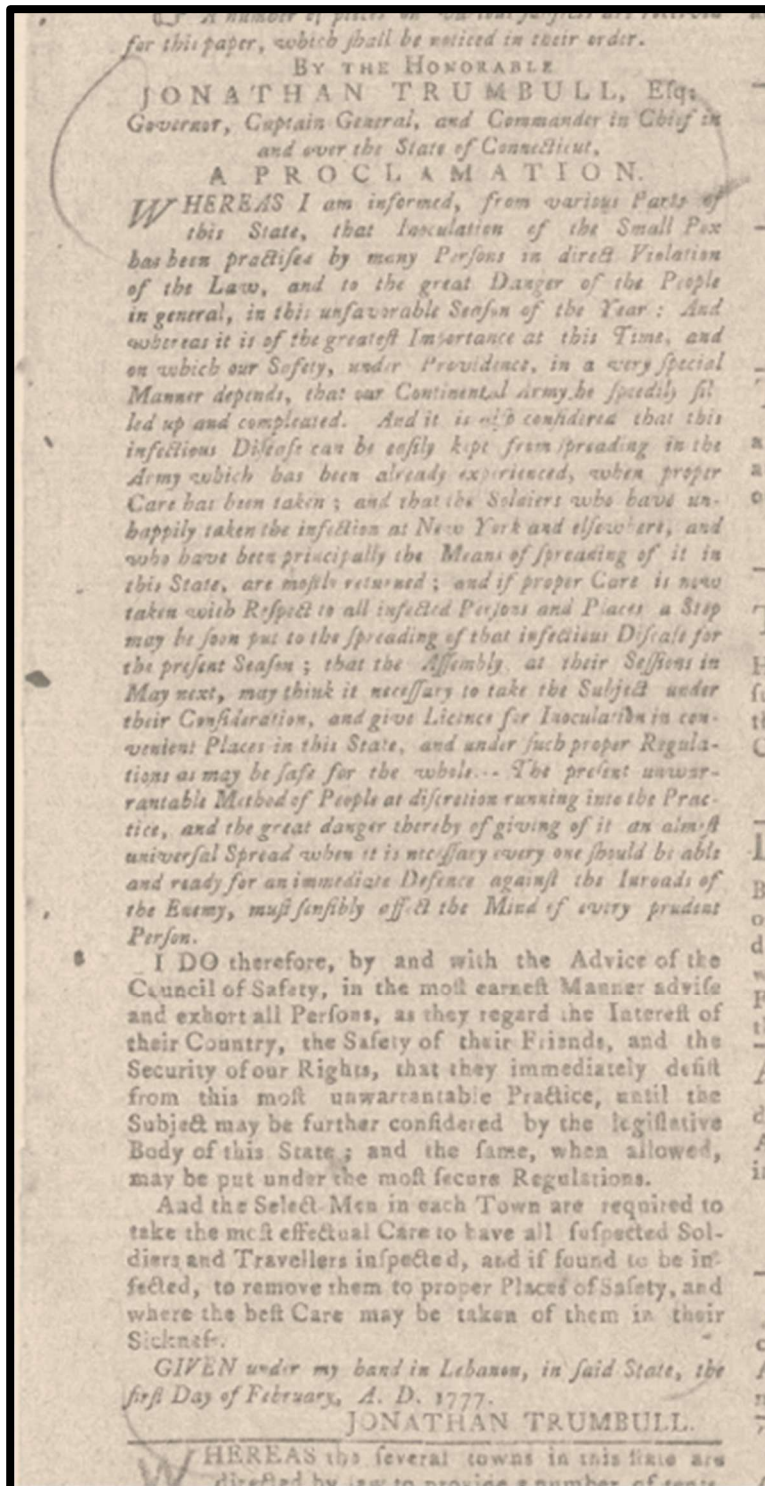


Figure B3. Inoculation ban announcement: Connecticut, February 1777.*

*Note: The Act was passed into law on February 1, 1777 but appeared in the newspaper after Washington's order due to newspaper printing delays.

The Connecticut Courant and Hartford Weekly Intelligencer. (Hartford, CT), February 10, 1777.
Chronicling America (Library of Congress). <https://www.loc.gov/item/sn82016139/1777-02-10/ed-1/>.

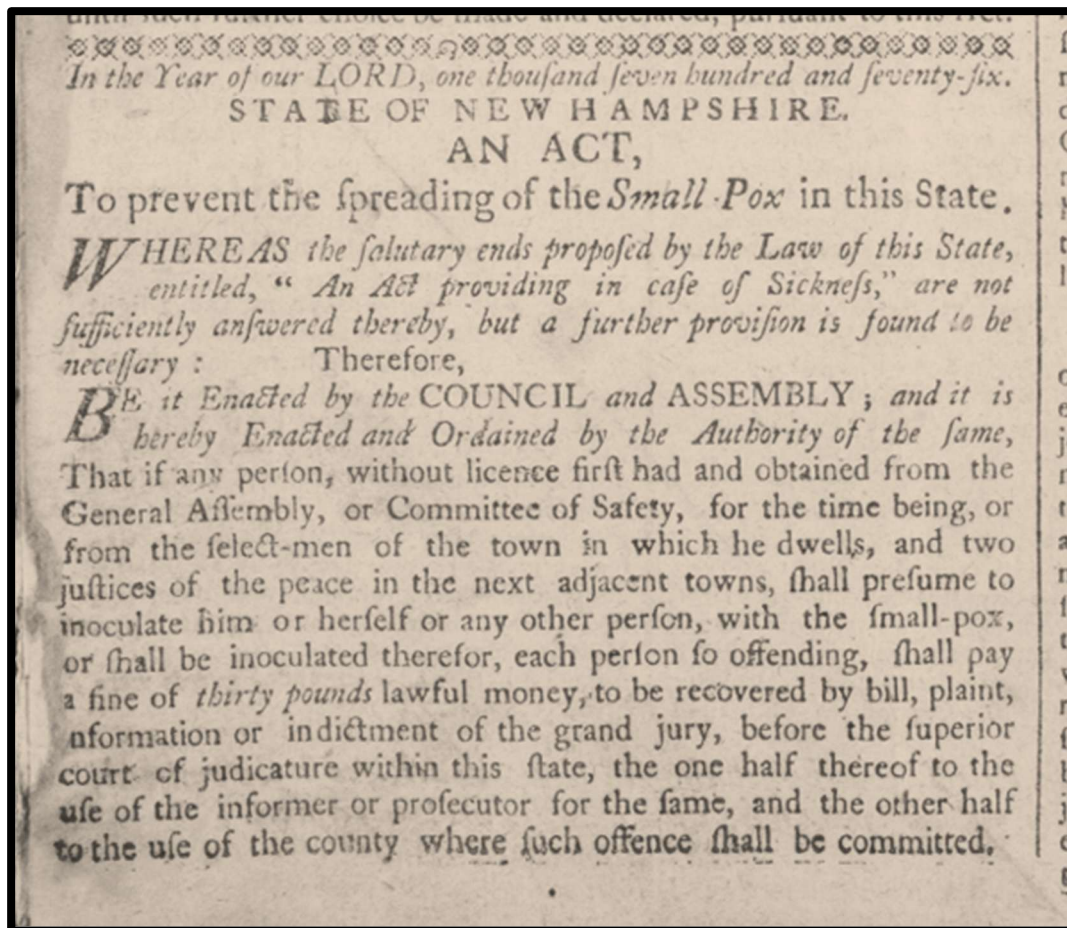


Figure B4. Inoculation ban announcement: New Hampshire, February 1777.*

*Note: The Act was passed into law on December 13, 1776 but appeared in the newspaper after Washington's order due to newspaper printing delays.

The Freeman's Journal, or, New-Hampshire Gazette. (Portsmouth, NH), February 25, 1777. *Chronicling America* (Library of Congress). <https://www.loc.gov/item/sn83025583/1777-02-25/ed-1/>.

BALTIMORE (MARYLAND) *March 2, 1774.*

To the Inhabitants of VIRGINIA.

KNOWING that the Legislature of your Colony have prohibited INOCULATING for the SMALLPOX, I therefore offer myself to those who may choose to come abroad to take that Disorder; but as I am almost an utter Stranger in *Virginia*, it would be extreme Folly to expect much Confidence without something more than a simple Information to the Publick. The subjoined Testimony, I imagine, will be the best Recommendation I can give of my Ability in that Branch of my Profession.

I have understood that a Prejudice prevails against Mercury in the Preparation, and perhaps with Justice, if used indiscriminately; but as that Change of Constitution for receiving the Smallpox favourably can be made without it, though not with the same Expedition, I have always been sparing of it. As I deal in no Secrets nor Nostrums, the Change I apprehend to be made is this: The inflammatory Disposition of the Blood is corrected, and the Elasticity of the Solids enfeebled; or, to speak still in a more simple Style, the System in general is weakened to a certain Degree. This Mercury effects, I think, quicker than any Thing else yet discovered. Upon the Whole, whoever comes under my Care may be assured of every Attention being paid in my Power.

ALEXANDER STENHOUSE.

THE above *Alexander Stenhouse* has inoculated for the Smallpox these several Years in this County, and in our Families, when required, with as much Success as any we have heard of in the Profession.

CLEM. BROOK.	THOMAS HARRISON.
WILLIAM LUX.	JAMES CHRISTIE, Jun.
JAMES FRANKLIN.	ROBERT CHRISTIE, Jun.
SAMUEL PURVIANCE.	ANTHONY STEWART,
WILLIAM M'GACHEN.	of ANNAPOLIS.

PRINCE GEORGE, *March 10, 1774.*

Figure B5. Advertisement by a Maryland physician offering inoculation services to neighboring Virginian residents, where inoculation was prohibited: Virginia, March 1774.

The Virginia Gazette. (Richmond, VA), March 17, 1774. *Chronicling America* (Library of Congress). <https://www.loc.gov/item/sn84024739/1774-03-17/ed-1/>.

Bibliography

Primary Sources

Acts and Resolves of the Province of Massachusetts Bay, 1771-1780. Boston: Wright and Potter, 1886. <https://catalog.hathitrust.org/Record/008374362>.

I have included this as a primary source because it reproduces the official legislative acts of colonial Massachusetts Bay during the Revolution, providing direct evidence of eighteenth-century legal and governmental responses to smallpox and inoculation. I used it to understand contemporary legal restrictions on inoculation, shifting public and official attitudes to the practice, and for insight into how authorities navigated public health prior to Washington's policy.

"Adams Family Papers: An Electronic Archive." *Massachusetts Historical Society*. 2026. <https://www.masshist.org/digitaladams/archive/>.

This site holds the digital transcriptions of personal correspondence to and from John Adams. As many of his letters to his wife have survived, this was a key way to gain insight into his personal thoughts on smallpox during the war, and I used one of his quotes in my paper to highlight his fears on how the disease was impacting the Revolution.

Ainslie, Thomas. *Canada Preserved: The Journal of Captain Thomas Ainslie*, edited by S. S. Cohen. Toronto, 1968.

This is a firsthand account of Thomas Ainslie, a British military captain during the disastrous Québec operation in 1775-76 that resulted in thousands of American smallpox infections and deaths. It provides an important perspective of the British awareness of smallpox's impact on Americans. I used one of his quotes in my paper to illustrate the significance of disease and inoculation in shaping military outcomes.

The American Gazette, or, The Constitutional Journal. (Salem, MA), July 16, 1776.

Chronicling America. Library of Congress.

<https://www.loc.gov/item/sn83020494/1776-07-16/ed-1/>.

This newspaper article provided a primary source perspective on how smallpox was discussed in contemporary newspapers. It gave me insight into how towns implemented quarantines back then to limit spread of the epidemic, illustrating public responses for disease and the context for Washington's inoculation policy. I also included its announcement of the inoculation ban in my Appendix to demonstrate opposition to inoculation in Massachusetts.

Andrlik, Todd. *Reporting the Revolutionary War: Before it was History, it was News*.

Naperville: Sourcebooks, 2012.

This is a collection of firsthand newspaper articles and eyewitness accounts from newspapers printed on both sides of the Atlantic, documenting life before and during the Revolution, covering from 1763 to 1783. This was a great way for me to understand how disease was discussed back then and what life was like for the colonists across a range of sources.

Beebe, Lewis. *Journal of Dr. Lewis Beebe, a Physician on the Expedition Against Québec, 1776*. New York: Arno Press, 1971.

This is a reprint of a physician's journal who accompanied the ill-fated 1775-76 Québec expedition. His observations were important for me to understand the widespread devastation that smallpox caused among soldiers.

Bixby, Samuel. "Diary of Samuel Bixby." *Proceedings of the Massachusetts Historical Society*. Boston: Society, 1876. <https://revwar75.com/library/bob/diaries2.htm>.

Samuel Bixby was a private in the Massachusetts Militia during the Revolutionary War who kept a detailed diary of his service during the Siege of Boston. His accounts were crucial to my understanding of the role of smallpox and Washington's responses in the early campaigns. His account was a fascinating

insight into how Washington tried to contain the disease before inoculation and without a modern understanding of infection.

Blanco, Richard. *Physician of the American Revolution: Jonathan Potts*. New York: Garland Press, 1979.

I have included this as a primary source because it reproduces the firsthand accounts of Jonathan Potts, a physician in the Continental Army during the Revolutionary War, and notes of his contemporaries. It helped me understand the views of physicians about the disease and their methods for treating and controlling it, giving me vital medical context for Washington's policy.

Bowen, Ashley. *The Journals of Ashley Bowen (1728–1813) of Marblehead*. Colonial Society of Massachusetts. 2017. <https://www.colonialsociety.org/node/735>.

Ashley Bowen was one of the rioters involved in the burning of the Massachusetts inoculation hospital in 1773, providing a firsthand perspective on colonist fears surrounding the practice. I used his quote referring to the hospital as “Castle Pox” to illustrate the anxieties and opposition colonists had to inoculation prior to its success within the army.

Boylston, Zabdiel. *An Historical Account of the Small-Pox Inoculated in New-England*. Boston, 1730. <http://resource.nlm.nih.gov/2544007R>.

Dr. Boylston was a Boston physician who was instrumental in introducing inoculation into the colonies in the 1720s. His firsthand account of the benefits and advantages of this revolutionary procedure were important for understanding not just how the procedure came to America, but also how it was received by contemporaries, and the opposition it faced 50 years before Washington's policy.

Commager, Henry and Morris, Richard, ed. *The Spirit of Seventy-Six: The Story of the American Revolution as Told by Participants*. New York: Harper and Row, 1967. This is a collection of hundreds of firsthand accounts from British and American sources, including letters, journals, diaries, official documents, and personal

recollections. Organized by topic and event, it provided a broad perspective on smallpox and treatment during the Revolution. In particular, from physicians describing the horrors they witnessed of smallpox among soldiers during the Québec campaign, highlighting the impact the disease had on the army before inoculation.

The Connecticut Courant and Hartford Weekly Intelligencer. (Hartford, CT), February 10, 1777. *Chronicling America*. Library of Congress.

<https://www.loc.gov/item/sn82016139/1777-02-10/ed-1/>.

I included this newspaper article in my Appendix to show an inoculation ban being announced in Connecticut in 1777, demonstrating opposition to inoculation in the state.

Continental Congress. *Journals of the Continental Congress, 1774–1789*. Washington: U.S. Government Printing Office, 1904–37. <https://www.loc.gov/item/05000059/>.

These official records document the deliberations and decisions of the Continental Congress during the Revolutionary War. I used them to examine governmental discussions of troop health and disease management, providing primary source insight into the political and administrative context surrounding Washington's decisions.

The Freeman's Journal, or, New-Hampshire Gazette. (Portsmouth, NH), February 25, 1777. *Chronicling America*, Library of Congress.

<https://www.loc.gov/item/sn83025583/1777-02-25/ed-1/>.

I included this newspaper article in my Appendix to show an inoculation ban being announced in New Hampshire in 1777, demonstrating opposition to inoculation in the state.

Frothingham, Richard. *History of the Siege of Boston*. Boston: Little and Brown, 1849. <https://archive.org/details/historyofsiegeof00frot>.

I have included this as a primary source because it contains multiple firsthand diagrams, maps, data, and accounts of the 1775 Siege of Boston. This gave me a better understanding of the role of smallpox on Washington's siege.

Gale, Benjamin. "Historical Memoirs, Relating to the Practice of Inoculation for the Smallpox, in the British American Provinces." Royal Society of London. *Philosophical Transactions* 55. 1765. <https://doi.org/10.1098/rstl.1765.0025>. This paper provides one of the earliest detailed accounts of smallpox inoculation in colonial New England, including mortality rates, procedures, and attitudes. I used it to understand the development of inoculation between its introduction in Boston in 1721 and the Revolution, focusing on both the medical rationale and social anxieties around the procedure. I also used it to compare mortality and infection rates before and after inoculation became common as it contains many useful statistics.

Hening, William, ed. *Statutes at Large: Being a Collection of all the Laws of Virginia, 1764-1773*, Vol.8. (Richmond: J. & G. Cochran, 1821). <https://catalog.hathitrust.org/Record/009714930>. This published collection of Virginia colonial laws provided important context for understanding the colony's 1769 inoculation ban. I used it to analyze firsthand both the language of the legislation and the concerns lawmakers cited in justifying restrictions on inoculation during epidemics.

Hoadley, Charles, ed. *The Public Records of the Colony of Connecticut, 1757-1762*, Vol.11. (Hartford: Brown and Parsons, 1880). <https://catalog.hathitrust.org/Record/010488165>. This collection of Connecticut public records helped me examine the colony's 1760 inoculation ban and understand firsthand how officials justified legal restrictions on the practice during epidemics.

Howe, William. *The Narrative of Lieutenant General Sir William Howe*. London: H. Baldwin, 1781.

<https://ia600609.us.archive.org/28/items/narrativeoflieut00howe/narrativeoflieut00howe.pdf>.

British General William Howe's account of the Revolution was a crucial multiple perspective for me, especially around how the British army handled disease and inoculation before and during the war. I used his quote about how defeating the American army would bring victory to demonstrate how important it was for Washington to keep the army together, militarily and politically.

Jenner, Edward. *An Inquiry into the Causes and Effects of the Variolae Vaccinae*. Massachusetts: Ashley and Brewer, 1802.

<https://archive.org/details/b24759247/page/n5/mode/2up>.

Jenner's account of his smallpox vaccine was important to my paper to understand the progression of preventive health in America as the successor to inoculation. Also, for understanding why his procedure was accepted as a safer and more effective measure than inoculation.

Jenner, Edward. *Vaccination Against Smallpox*. New York: Prometheus Books, 1996.

This modern reprint contains Jenner's original treatises from 1798-1800, presenting his evidence for vaccination and documenting individual cases. It was useful for me to understand the scientific foundation and rationale behind his discovery, showing how early practices evolved from inoculation to the broader adoption of preventive vaccination.

Lee, Henry. *Memoirs of the War in the Southern Department of the United States*. Philadelphia: Bradford and Inskeep, 1812.

<https://archive.org/details/memoirsofwarin02leeh/page/252/mode/2up>.

Henry Lee was an officer in the Continental Army. His accounts contain useful information about Washington's attempts to keep the 1777 inoculation campaign

a secret. I used his quote about the number of troops who were inoculated before the British found out as a useful statistic.

Lesser, Charles H., ed. *The Sinews of Independence: Monthly Strength Reports of the Continental Army*. Chicago: University of Chicago Press, 1976.

I have included this book as a primary source because it is a collection of the original eighteenth-century monthly returns, troop strength reports, and military records from the National Archives documenting the condition of the Continental Army. With army numbers and statistics hard to come by, this book is considered a well-respected source for me to ascertain troop strength, disease impact, and the logistical constraints facing Washington's army.

Library of Congress. *Chronicling America: Historic American Newspapers*.

<https://chroniclingamerica.loc.gov/>.

I used this database to locate and compare multiple colonial newspaper accounts of smallpox and inoculation throughout the 1770s and 1780s. It enabled analysis of how public attitudes and official responses varied across colonies, supporting my argument that perceptions of inoculation were contested and legal restrictions were subject to change. I included some of the most representative examples in Appendix B to illustrate this range of colonial responses.

Marshall, Christopher. *Passages from the Remembrancer of Christopher Marshall*, edited by William Duane Jr. Philadelphia: J. Crissy, 1839.

<https://catalog.hathitrust.org/Record/000219707>.

This is a firsthand account by a civilian during the Siege of Boston. It showed me how civilians feared and experienced the epidemic. I used a quote from him to substantiate the extent of the crisis from the point of view of a civilian.

Martin, Joseph Plumb. *Memoir of a Revolutionary Soldier*. Mineola: Dover, 2006.

Joseph Martin was a private in the Continental Army who recorded details about his inoculation in his diary. This was essential for my understanding of what the

procedure looked and felt like from the position of those going through it. His favorable and upbeat reaction showed that most soldiers were enthusiastic and glad to have protection, so I used his quote in my paper to give that perspective.

Mather, Cotton. *Sentiments on the Small Pox Inoculated*. Boston: William Edwin Rudge, 1721. https://archive.org/details/BIUSante_67914/.

Cotton Mather was a Puritan clergyman in Boston who was the slave-owner of Onesimus, the enslaved West African man who brought knowledge of inoculation across from Africa. Through Onesimus, Mather was instrumental in advocating for inoculation, helping it become more mainstream and acceptable. This account was a fascinating read of early arguments in favor of this controversial procedure, especially from a clergyman.

Morgan, John. *A Recommendation of Inoculation, According to Baron Dimsdale's Method*. J. Gill: Queen-Street, 1776. https://catalog.nlm.nih.gov/permalink/01NLM_INST/1o1phhn/alma992562813406676.

Dr. John Morgan served as Director General of the Hospital of the Army and Physician-in-Chief to the Continental Army from 1775 to 1777 during the Revolutionary War. Having been medically trained in England, Dr. Morgan was a long-time advocate of inoculation as a medical procedure and his advocacy through this book helped me understand how he helped persuade Washington that the policy could succeed.

The New-England Chronicle. July 18, 1776. *Chronicling America*. Library of Congress. <https://www.loc.gov/item/sn83020482/1776-07-18/ed-1/>.

This is a contemporary newspaper article that reported on the importance of stopping people entering Boston during the epidemic. I used a quote from this article about how Boston had been closed until the town was cleared of disease to show how smallpox constrained military operations.

The New-Hampshire Gazette and Historical Chronicle. February 10, 1775. *Chronicling America*. Library of Congress.

<https://www.loc.gov/item/sn83025582/1775-02-10/ed-1/>.

This newspaper article reported on the “insurgents” at Marblehead who “caused a great insurrection” and “burnt the hospital.” This was important information on how civilians feared the procedure more than the disease and how the ‘insurgency’ was reported at the time.

The New-York Gazette, and the Weekly Mercury. (New York, NY), May 22, 1775. *Chronicling America*. Library of Congress.

<https://www.loc.gov/item/sn83030493/1775-05-22/ed-1/>.

I included this newspaper article in my Appendix to show an inoculation ban being announced in New York in 1775, demonstrating opposition to inoculation in the state.

Paine, Thomas. *The Revolutionary Writings of Thomas Paine*. The Thomas Paine Historical Society. 1774-1783. <https://thomaspaine.org/writings/>.

Thomas Paine’s writings, including *Common Sense*, *The American Crisis*, and his letters, were aimed at bolstering morale and defining the stakes of the Revolution. They helped me understand the thinking of leaders like Washington and Adams and I used Paine’s description of 1776 as the “black times” to further illustrate the severity of the crisis facing Washington, showing that even the Revolution’s ‘chief propagandist’ recognized the critical conditions underlying Washington’s decisions.

Peckham, Howard H. *The Toll of Independence: Engagements and Battle Casualties of the American Revolution*. Chicago: University of Chicago Press, 1974.

This book is widely regarded and referenced as the most accurate accounting of the casualties of the Revolution, reprinting the raw statistical data. I used this book to confirm American and British battle death statistics, providing a basis to

compare the human cost of combat with the impact of the 1775–82 smallpox epidemic over the same period.

Reide, Thomas Dickson. *A View of the Diseases of the Army in Great Britain, America, and the West Indies*. London, 1793.

<https://wellcomecollection.org/works/hgu67duh/items?canvas=10>.

This is a medical account of common diseases affecting British and American forces during the Revolution, including detailed tables of sickness and mortality. I used it to understand how smallpox compared to other illnesses in military contexts and how disease shaped campaign outcomes, helping me understand why commanders like Washington prioritized infectious disease among troops.

Rush, Benjamin. *The New Method of Inoculating for the Small-Pox*. Philadelphia: C. Cist, 1781. <https://collections.nlm.nih.gov/catalog/nlm:nlmuid-2569040R-bk>.

Dr. Rush was a Founding Father and physician during the Revolution. His speech about the importance of the ‘new method’ of inoculating was important information about how the success of Washington’s policy was seen at the time.

Serle, Ambrose. *The American Journal of Ambrose Serle, Secretary to Lord Howe, 1776-1778*. San Marino: Huntingdon Library, 1940.

<https://archive.org/details/americanjournalo0000ambr>.

This primary source account from British General Lord Howe’s secretary provides a detailed, firsthand account of the American Revolution from the point of view of the British. It was interesting to see how differently inoculation and smallpox were considered by the British to compare with how Washington had to manage the crisis.

Sewall, Jonathan. “Diary of Jonathan Sewall.” *Proceedings of the Massachusetts Historical Society* 30, 1896. <http://www.jstor.org/stable/25079785>.

This is a firsthand diary from a civilian during the Siege of Boston. I used it to further understand the reaction of civilians to the epidemic.

Thacher, James. *A Military Journal during the American Revolutionary War, from 1775 to 1783*. Boston: Cottons and Barnard, 1827.

<https://archive.org/details/b33092801/page/n5/mode/2up>.

This is the detailed journal of a surgeon during the Revolution. He included many firsthand accounts of smallpox's effects on the army and the many fatalities. He was also a big advocate of inoculation, having been inoculated against state laws, helping me understand a physician's perspective on inoculation's benefits.

Tilton, James. *Economical Observations on Military Hospitals: and the Prevention and Cure of Diseases Incident to an Army*. Wilmington, 1813.

<https://collections.nlm.nih.gov/catalog/nlm:nlmuid-2575018R-bk>.

Dr. James Tilton was a hospital physician during the Revolution who went on to become Surgeon General. This was a very helpful source as an account of his observations during the War and his recommendations on inoculations, based on his widespread experience in inoculating soldiers during Washington's policy.

U.S. National Archives. *Founders Online: Correspondence and Other Writings of Seven Major Shapers of the United States, 1775–83*. <https://founders.archives.gov/>.

This collection of wartime correspondence was a crucial source for my paper, allowing me to search and trace discussions of smallpox and inoculation among generals, Founding Fathers, and their families, including George Washington, John Adams, Thomas Jefferson, and John Hancock. I used multiple quotes, primarily to and from Washington, to show evolving fears, debates, and assessments of Washington's policy within the broader context of the war. While these records are digitally reprinted from original sources, I have included digital links to provide convenient access to the original wording and context.

The Virginia Gazette. March 17, 1774. *Chronicling America*. Library of Congress.

<https://www.loc.gov/item/sn84024739/1774-03-17/ed-1/>.

I included this newspaper article in my Appendix to demonstrate the inoculation ban in Virginia in 1774, showing its widespread controversies.

The Virginia Gazette. January 13, 1776. *Chronicling America*. Library of Congress.
<https://www.loc.gov/item/sn84024739/1776-01-13/ed-1/>.

This newspaper article contained useful information on how they were trying to keep smallpox out of Boston and the precautions they were taking.

Washington, George, *The Diaries of George Washington*, edited by John Fitzpatrick. Boston: Houghton Mifflin, 1925.

This is a reprint of Washington's journal, which included his account of having smallpox aged nineteen in Barbados, his only time off the American mainland. Reading about how he felt "attacked" by the disease gave a useful insight into how he knew how dangerous the disease was when he faced it again during the War, and the importance of him having lifelong immunity as a result.

Washington, George. *This Glorious Struggle: George Washington's Revolutionary War Letters*, edited by Edward Lengel. New York: Harper-Collins, 2007.

This is a collection of Washington's correspondence during the war years, which included some that were not included in the National Archives collection. In particular, I quoted a letter to his brother about how he was trying to get colonial governors to overturn their inoculation bans to show how he advocated for the procedure in later years.

Williams, John. *Several Arguments Proving that Inoculating the Small Pox is not Contained in the Law of Physick*. Boston: J. Frankling, 1721.

<https://archive.org/details/2577020R.nlm.nih.gov>.

This was a fascinating read from a New England minister in 1721 about why he believed inoculation went against the laws of physics and God. I used a quote from him about how smallpox was a 'punishment from an angry God' to show why inoculation was so contested and controversial by the 1770s.

Secondary Sources

Abrams, Jeanne E. *Revolutionary Medicine: The Founding Fathers and Mothers in Sickness and in Health*. New York: New York University Press, 2013.

This book provided an insightful study of early American medicine and the role of inoculation in shaping public health. It helped me understand how inoculation was a proactive rather than reactive response to disease, offering historical context for how Washington's decision transformed early public health measures.

Allen, Arthur. *Vaccine: The Controversial Story of Medicine's Greatest Lifesaver*. New York: W.W. Norton, 2007.

This was a useful account of the history and controversy surrounding state-mandated vaccines. It helped me understand the social and political debates that accompany vaccines and the challenge of implementing public health measures.

Allen, Thomas B. *Remember Valley Forge: Patriots, Tories, and Redcoats Tell Their Stories*. Washington, D.C.: National Geographic, 2007.

This book gave me a detailed perspective on the role of smallpox (and other diseases) during the Valley Forge camp in winter 1778. This helped me understand Washington's decision to protect a further 3,600 men under harsh conditions, showing the policy's practical and strategic impact, as well as Washington's growing confidence in inoculation.

Aron, Paul. "A Revolutionary Fever: The Smallpox Epidemic in America Affected the Course of the Revolution." *Trend and Tradition Magazine*. *Colonial Williamsburg*. September 18, 2020. <https://www.colonialwilliamsburg.org/discover/resource-hub/trend-tradition-magazine/trend-tradition-autumn-2020/revolutionary-fever/>.

This was a good article that offered a detailed examination of Washington's dilemma from a medical perspective. It was useful to my thinking about how Washington's newly immune forces contributed to strategic advantages that helped shape the outcome of the Revolution.

Atkinson, Rick. *The Fate of the Day: the War for America, Fort Ticonderoga to Charleston, 1777-1780*. New York: Crown, 2025.

This is the second book in Atkinson's trilogy on the American Revolution, covering the middle years of the war. In particular, I used it to understand how smallpox affected British troops in the later southern campaigns and its devastating impact on civilian enslaved and Indigenous populations who were rarely included in inoculation efforts.

Barrett, John T. "The Inoculation Controversy in New-England." *Bulletin of the History of Medicine*, Vol. 12. July 2, 1942. <https://www.jstor.org/stable/44446265>.

This article was a great summary of where and why inoculation was controversial in the American colonies in the 1700s. I used his quote in my paper to show how revolutionary inoculation was to early American medicine to help prove my thesis.

Becker, Ann M. *Smallpox in Washington's Army: Disease, War, and Society during the Revolutionary War*. London: Lexington Books, 2023.

This book provided a comprehensive overview of smallpox, inoculation, and Washington's decision, giving me medical, military, and social context for the policy. It was a crucial starting point for me to understand the background, the immediate effects on the Continental Army, and the broader implications.

Bennett, Michael J. *War Against Smallpox: Edward Jenner and the Global Spread of Vaccination*. Cambridge: Cambridge University Press, 2020.

This book was critical for me to understand Washington's policy in the broader context of modern disease prevention worldwide. It helped me understand the development and significance of vaccination globally over time, showing how Washington's policy shaped public health and military strategy for years to come.

Bland, John, et al. "Smallpox Is Dead!" *World Health Organization Journal* 34, no. 5,

May 1980. <https://iris.who.int/items/37ac8cab-f049-44ea-82b0-7f7bfc376bf5>.

This article highlights the eradication of smallpox and the crucial role vaccination played in eliminating it. I included it to contextualize Washington's policy within the long-term impact of preventive medicine, showing how early inoculation efforts contributed to the eventual removal of smallpox from everyday life.

Chernow, Ron. *Washington: A Life*. New York: Penguin Press, 2010.

This biography provided a comprehensive portrait of Washington's life, placing his inoculation policy within the full scope of his leadership and decision-making. It helped me understand his character, strategic foresight, and willingness to take calculated risks in other areas, helping my analysis of why he pursued inoculation despite controversy. I included his quote in my paper about the historical and military significance of Washington's policy to help establish my thesis.

Davis, Burke. *George Washington and the American Revolution*. New York: Random House, 1975.

Davis's narrative emphasizes the military campaigns and challenges of the Continental Army. This book helped contextualize the impact of smallpox on troop readiness and morale, how it shaped battlefield strategy, and the practical impacts of Washington's inoculation decision.

Diamond, Jared. *Guns, Germs, and Steel*. New York: W.W. Norton & Company, 2005.

This book was recommended to me by my librarian when she saw the topics of the books I was checking out. I was grateful as it gave good context to the role of disease in colonization and gave me a key statistic about how devastating smallpox had been to the Indigenous population in the Americas in the 1500s and beyond.

Ellis, Joseph J. *His Excellency: George Washington*. New York: Alfred A. Knopf, 2004.

Ellis highlights Washington's political and public leadership, including his

management of public perception and relations with Congress and civilians. This helped me understand inoculation as both a medical decision and a strategic one. I used his quote about Washington's army as a "military turnstile" in the early years of the war to contrast with the stability of his army after inoculation.

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

This book provides a comprehensive account of the smallpox epidemic of 1775-82 across North America, examining its spread, impact, and responses in multiple regions. It was my first major read on the topic and helped me situate his inoculation policy within the broader medical, social, and military consequences of the epidemic. It provided essential context for understanding why the disease was such a critical factor in Revolutionary-era decision-making, and the scope and scale of the epidemic itself.

Ferling, John. *Whirlwind: The American Revolution and the War that Won It*. New York: Bloomsbury Press, 2015.

As I began my research, I borrowed various well-respected books on the Revolution to further my understanding of military and political developments, however I quickly realized that this scholarly account entirely omits any reference to smallpox or inoculation, or their impact on the Revolution. Ironically, this very omission led me to realize how overlooked this aspect of the war is and helped shape my thesis and focus of study, helping me conclude that my topic is surprisingly underexamined. As a result of this oversight, this paper argues they can only provide a limited understanding of the Revolution and Washington's leadership.

Gase, Jacqueline and Amanda Quinn. "U.S. Military Immunization: The Fight Against Infectious Diseases." *National Museum of Health and Medicine*. August 15, 2019.

https://medicalmuseum.health.mil/micrograph/index.cfm/posts/2019/us_military_immunization.

This article covers the history of mandatory military vaccinations in the U.S. Army from 1777 until today. In particular, it gave me context for how compulsory military smallpox inoculations and later vaccinations continued from Washington's policy in 1777, through World War II, until 1990 when it ended due to smallpox's eradication. This helped me understand the enduring importance of Washington's policy to military practice today.

Gillett, Mary. *The Army Medical Department 1775-1818*. Washington, D.C., U.S. Printing Office, 1987. <https://catalog.hathitrust.org/Record/002229180>.

This book is a great record of the establishment and role of the Continental Army's Medical Department throughout the war. This gave me a detailed account of disease, especially smallpox, during the war from a medical perspective, as well as a detailed record and statistics of how and where inoculation was carried out during the war years.

Hasselgren, Per-Olof. "The Smallpox Epidemics in America in the 1700s and the Role of the Surgeons." *World Journal of Surgery* 44 (2020): 3848–3856. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7335227/>.

This article connected the smallpox epidemics of the 1700s to the societal fear and panic that threatened lives during the recent coronavirus pandemic. It helped me draw parallels between Washington's management of smallpox and modern public health responses, offering perspective on how leadership and preventive measures can shape outcomes amid widespread disease.

Historic Ipswich, "The Marblehead Smallpox Riot, January 1774." January 1, 2022. <https://historicipswich.net/2022/01/01/marblehead-smallpox-riot/>.

This article provided a detailed understanding of the fears that surrounded inoculation in the 1700s. I referenced its accounts of the riots and burning of the

hospital to show the intensity of public opposition and the social challenges that faced Washington's decision.

Hopkins, Donald R. *Princes and Peasants: Smallpox in History*. Chicago: University of Chicago Press, 1983.

This historical account traces smallpox from origins to eradication, providing essential context for the development of inoculation and the spread of disease. It helped me understand the broader spread and severity of the disease before the 1700s, explaining why Washington's policy was both necessary and risky, as well as its development afterwards.

Koyle, Kenneth. "Smallpox in the Colonial Army." *The Medical Journal* (Spring 2025). <https://medcoe.army.mil/the-medical-journal/>.

This article examines smallpox in the army specifically from a medical and military perspective. It helped me understand the impact of the disease on troop readiness and strategy, as well as its long-term implications for public health and preventive practices today.

Liebowitz, Dan. "Smallpox Vaccination: An Early Start of Modern Medicine in America." *Journal of Community Hospital Internal Medicine Perspectives*. 2017. doi: 10.1080/20009666.2016.1273611.

This article was a useful understanding of inoculation in the context of early modern medicine and how Washington's policy enabled the later acceptance of vaccines. I used some of the article's statistics in my paper to show how quickly inoculation improved infection and mortality rates.

National Foundation for Infectious Diseases. "The Triumph of Science: The Incredible Story of Smallpox Eradication." May 8, 2023. <https://www.nfid.org/the-triumph-of-science-the-incredible-story-of-smallpox-eradication/>

I used this article because it was a reliable source for the statistic that around 500 million people have died from smallpox over the past 3,000 years. I used this

statistic in my paper to show how devastating the disease was before it could be prevented and controlled.

O'Connell, Robert L. *Revolutionary: George Washington at War*. New York: Random House, 2019.

This book provides a broader view of Washington as a military leader, helping me understand his decisions within the challenges of him as Commander in Chief. It also helped me understand how his leadership style, strategic thinking, and concern for troop readiness informed the medical choice he made despite the widespread controversy.

O'Shaughnessy, Andrew Jackson. *The Men Who Lost America: British Leadership, the American Revolution, and the Fate of the Empire*. New Haven: Yale University Press, 2013.

This book provided me with a valuable British perspective on the Revolutionary War. I used it to examine the impact of smallpox on British troops and to compare how the disease affected their campaigns compared to Washington's, highlighting the strategic role of smallpox in the conflict.

Reiss, Oscar. *Medicine and the American Revolution: How Diseases and Their Treatments Affected the Colonial Army*. New York: McFarland, 2005.

This book was a good overview of the various diseases and illnesses faced by the Continental Army during the Revolution, and the methods available for treating them. I used a quote from this source in my paper to show how quickly inoculation protected the troops and helped them win important battles.

Robertson, Roland. *Rotting Face: Smallpox and the American Indian*. Caldwell, ID: Caxton Press, 2001.

This book focuses specifically on the impact of smallpox on Indigenous populations in the Americas throughout history. It provided essential context for

understanding how devastating the disease had been and its potential devastation to Washington's troops.

Thursfield, Hugh. "Smallpox in the American War of Independence." *Annals of Medical History Journal*. May 1940. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7942582/>. This account is one of the first detailed historical studies of smallpox's role in the Revolution that influenced subsequent historical scholarship on the topic. It was critical reading for me, particularly his conclusion that Washington's inoculation policy was of critical importance to the outcome of the Revolution.

Tucker, Jonathan B. *Scourge: The Once and Future Threat of Smallpox*. New York: Atlantic Monthly Press, 2001.

This book was a helpful understanding of the history of smallpox. Its discussion of the disease's potential as a biological weapon today and the relative vulnerability of modern populations to smallpox helped me draw comparisons to the vulnerability of Washington's troops and the enduring dangers of the disease back in the 1700s.

U.S. Army Center of Military History. "The Continental Army." 2026.

<https://history.army.mil/Revwar250/Continental-Soldier/>

I used this article as it was a reliable source for information on the number of Black and Indigenous people who served with or alongside Washington's army, which was important to showing that he included them in his initial policy.

Ward, Geoffrey C. *The American Revolution: An Intimate History*. New York: Alfred A. Knopf, 2025.

This book is the accompaniment to Ken Burns' recent documentary, *The American Revolution*. I used it to gain broader understanding of the Revolution but referenced it in my paper as an example of how some accounts still downplay the impact of smallpox and Washington's inoculation policy. I also used a copy of

its map in my Appendix to show the spread of the 1775-82 epidemic across North America.

Ward, Lucy. *The Empress and the English Doctor: How Catherine the Great Defied a Deadly Virus*. London: Oneworld Publications, 2022.

This book provided excellent background information on the history and development of inoculation across Russia and Europe in the 1700s. It helped me understand why the practice had become familiar and accepted in England by the time of the American Revolution, explaining the resulting immunity of British troops and the relative vulnerability of the American ones.

Wehrman, Andrew J. *The Contagion of Liberty: The Politics of Smallpox in the American Revolution*. Baltimore: Johns Hopkins University Press, 2022.

This book covered smallpox during the Revolution from a civilian and political perspective. This helped me understand how inoculation was received by colonial governments, colonists, and other non-military groups, providing important context for the broader societal response to the procedure.

Weig, Melvin. *Morristown National Historical Park, a Military Capital of the American Revolution*. Ebook, 2024. <https://www.gutenberg.org/ebooks/62651>.

This book discusses the relevance and significance of the town of Morristown, New Jersey during the Revolution. Because Washington and his army were camped there during his initial inoculation efforts, this helped me understand local responses to the policy, community attitudes toward disease, and the impact of surviving gravesites in the area to smallpox victims.

Williams, Tony. *The Pox and the Covenant*. Illinois: Sourcebooks, 2010.

This is a detailed look at the 1721 Boston smallpox epidemic that caused great controversy around the disease and inoculation. It helped me understand the debates and attitudes towards inoculation 50 years before the war, as well as how communities handled the disease before Washington's policy.

Witt, John Fabian. *American Contagions: Epidemics and the Law from Smallpox to COVID-19*. New Haven: Yale University Press, 2020.

This book took a unique perspective on smallpox: looking at it from a legal point of view. This helped me understand how pandemics, and their medical reactions, have shaped American law, especially more modern debates about the role of the federal government in public health.