

THE USE OF SMALLPOX AS A BIOWEAPON AGAINST NATIVE AMERICANS

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Abstract

This study examines the use of smallpox as a biological weapon during the European colonization of the Americas, focusing on its deployment against indigenous populations as an early example of unethical human experimentation and biowarfare. Primary and secondary historical sources were reviewed, including correspondence from British military officers and documented accounts of smallpox-infected materials being deliberately distributed to Native American populations. Evidence from historical accounts, particularly exchanges between General Jeffrey Amherst and Colonel Henry Bouquet, indicates intentional efforts to spread smallpox among Native Americans during Pontiac's Rebellion. Although outbreaks followed these events, the impact was less widespread than anticipated, likely due to partial immunity within some indigenous populations. Additional reports suggest similar strategies were employed against the Chippewa tribe, and with later accounts possibly linking the 1831 Pawnee epidemic to contaminated trade routes. In conclusion, the intentional use of smallpox as a bioweapon during European colonization represents an early instance of biowarfare. These historical events underscore the ethical and public health risks associated with biowarfare and the discriminatory use of such weapons against indigenous tribes.

Key words: biological warfare, public health, Chimera Project, epidemics, bioterrorism

Resumen

El uso de la viruela como arma biológica contra los nativos americanos

Este estudio examina el uso de la viruela como arma biológica durante la colonización europea de las Américas, centrándose en su implementación contra las poblaciones indígenas como un temprano ejemplo de experimentación humana no ética y guerra biológica. Se revisaron fuentes históricas primarias y secundarias, incluyendo correspondencia de oficiales militares británicos y relatos documentados sobre la distribución deliberada de materiales infectados con viruela a las poblaciones nativas americanas. La evidencia de relatos históricos, en particular los intercambios entre el general Jeffrey Amherst y el coronel Henry Bouquet, indica esfuerzos intencionales para propagar la viruela entre los nativos americanos durante la Rebelión de Pontiac. Aunque se produjeron brotes tras estos eventos, el impacto fue menos extendido de lo esperado, probablemente debido a la inmunidad parcial en algunas poblaciones indígenas. Informes adicionales sugieren que estrategias similares fueron empleadas contra la tribu Chippewa y relatos posteriores podrían vincular la epidemia de 1831 en los Pawnee con rutas comerciales contaminadas. En conclusión, el uso intencional de la viruela como arma biológica durante la colonización europea representa un caso temprano de guerra biológica. Estos eventos

históricos resaltan los riesgos éticos y de salud pública asociados con la guerra biológica y el uso discriminatorio de tales armas contra las tribus indígenas.

Palabras clave: guerra biológica, salud pública, Proyecto Quimera, epidemias, bioterrorismo

The origin of smallpox as a natural disease dates to prehistory. The disease was described as early as 1122 BC in China and is also mentioned in Indian ancient medical texts¹. During the 18th-century, in Europe, smallpox was responsible for approximately one-third of global blindness and an estimated 400 000 deaths annually². The weaponization of smallpox, particularly during the European colonization of the Americas, involved the deliberate use of smallpox-infected materials to decimate indigenous populations^{1,3}.

Smallpox as a biowarfare agent against Native Americans

The discovery of the Americas introduced numerous diseases to which Native populations had no immunity due to centuries of isolation between the continents. Historical reports illustrate how smallpox was weaponized, with individuals knowingly spreading the disease to Native Americans through contaminated clothing and other everyday items. For example, contaminated tobacco and a flag reportedly wrapped with a barrel of alcohol were delivered by a fur trading company at Mackinac as an act of revenge for the robbery of a trader. Another incident involved the deliberate transmission of smallpox to the Chippewa tribe via a set of contaminated boxes. These actions can be classified as bioterrorism, as they were carried out by independent individuals, without direct government involvement. However, they often occurred under the watch of colonial authorities, usually with impunity³.

One of the most well-documented cases of biological warfare involving smallpox occurred during Pontiac's Rebellion (1763-1766). This conflict involved a confederation of Native American tribes in the Great Lakes region waging war against British colonial forces. What makes this instance unique is the organization and approval of a biowarfare strategy by state officials. The rebellion is notable not only for its military en-

agements but also for the documented efforts of British officers to use smallpox as a weapon. The key figure in this episode was General Jeffrey Amherst (1717-1797)⁴, a prominent British army officer and Chief of the Armed Forces of the British Army. Amherst played a crucial role in Britain's military campaigns during the Seven Years' War (1756-1763) particularly in the conquest of New France. His successes led to the capture of Quebec and Montreal, earning him significant acclaim. However, his reputation in contemporary times has been tarnished by his association with the use of smallpox against Native Americans⁵.

Correspondence between General Amherst and his subordinate Colonel Bouquet reveals their willingness to use smallpox as a weapon. In letters exchanged in July 1763, Amherst suggested the possibility of dispatching items infected with smallpox among the tribes that had joined the Rebellion⁶:

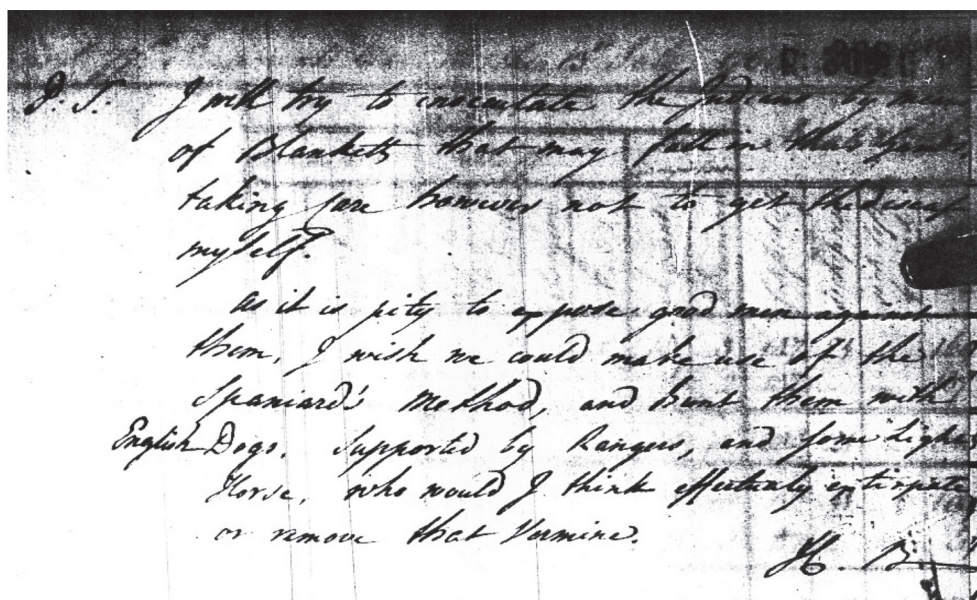
General Amherst, July 8: P.S. *Could it not be contrived to send the smallpox among those disaffected tribes of Indians? We must, on this occasion, use every stratagem in our power to reduce them.*

Colonel Bouquet, July 13: P.S. *I will try to inoculate the Indians by means of blankets that may fall in their hands, taking care however not to get the disease myself. As it is a pity to expose good men against them, I wish we could make use of the Spaniard's method and hunt them with English Dogs supported by Rangers and some light Horse who would, I think, effectually extirpate or remove that Vermine (Fig. 1).*

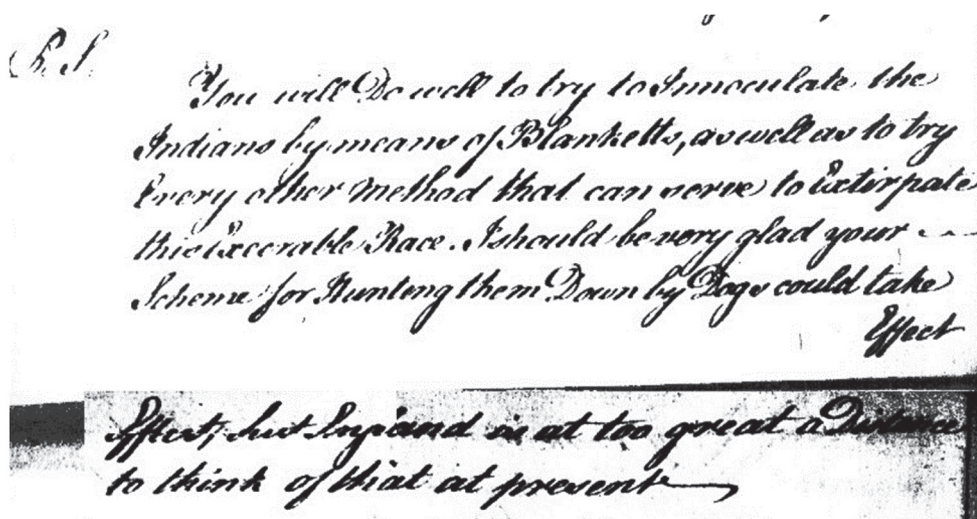
Amherst, July 16: P.S. *You will Do well to try to Inoculate the Indians by means of Blankets, as well as to try Every other method that can serve to Extirpate this Execrable Race. I should be very glad your Scheme for Hunting Them Down by Dogs could take effect, but England is at too great a Distance to think of that at present (Fig.2).*

Bouquet, July 19: *The signal for Indian Messengers, and all your Directions will be observed* ⁶.

The plan involved distributing smallpox-infected blankets and a handkerchief to Native American delegates during peace negotiations at Fort Pitt (modern-day Pittsburgh). Two blankets and a handkerchief were deliberately handed over to the Native American representatives with the intend to spread the disease. Despite the malicious intent, the plan failed. Historical

Figura 1 | Figure 1: Excerpt from the letter of Colonel Bouquet of July 13, 1763⁶


J. S. I will try to inoculate the Indians by means of Blanketts that may fall in their hands, taking care however not to get the disease myself.
As it is pity to oppose good men against them, I wish we could make use of the Spaniards' method, and hunt them with English Dogs, supported by Rangers, and some light Horse, who would I think effectually extirpate or remove that Vulture.

Figura 2 | The approval of the plan to infect natives with Smallpox by Sir Jeffrey Amherst, July 16, 1763⁶


J. S. You will do well to try to inoculate the Indians by means of Blanketts, as well as to try every other method that can serve to extirpate this execrable Race. I should be very glad your Scheme for hunting them down by Dogs could take Effect.
Effect, but England is at too great a Distance to think of that at present.

records indicate that the smallpox outbreak was relatively minor, given the context of the epidemic diseases of the time. Approximately one hundred Native Americans died from smallpox in the following months. However, this was not the extensive devastation that Amherst had hoped for. It is believed that this limited spread

was likely due to the partial immunity among the Native American populations, acquired through previous encounters with the disease⁷. Amherst's correspondence and actions represent one of the earliest documented cases of biological warfare intent. In modern times, Amherst's legacy is controversial, with his name re-

moved from public spaces and institutions that once honored him, reflecting a reevaluation of historical figures whose actions contradict contemporary ethical standards⁵.

More than half a century later, the potential deliberate transmission of smallpox to the Pawnee tribe in 1831 is considered another potential act of bioterrorism. Settlers reportedly left smallpox-contaminated items along trade routes from St. Louis to Santa Fe, spanning 1600 kilometers. These trade routes were frequently targeted by native raids, leading to significant losses for settlers in terms of men, horses, and supplies. Reports suggest that some traders intentionally carried infectious materials, such as smallpox-infected blankets and clothing to distribute to the Native Americans. We should highlight a notable incident involving a Pawnee war party that reportedly received contaminated items from individuals immune to smallpox while traveling south

of their settlement area. In the spring of 1832, shortly after the war party's return, the Pawnee community suffered a catastrophic smallpox outbreak, with nearly half the population dying within days. This episode illustrates the deliberate use of immune individuals and the calculated transmission of infectious material as a strategic act^{5, 7}.

Conclusions

Colonial ambitions have often driven the use of bioweapons, frequently targeting indigenous populations rather than Europeans. These actions were rarely condemned when directed against non-Europeans, reflecting a trend that persisted over time. Most large-scale biological attacks occurred outside Europe, where they were more easily concealed and, in some cases, possibly met with social acceptance.

Conflicts of interest: None to declare

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