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## **Lewis Cass and the Politics of Disease**

### **The Indian Vaccination Act of 1832**

*J. Diane Pearson*

n May 5, 1832, the U.S. Congress enacted the first piece of federal legislation designed to deal with a specifically American Indian health problem, epidemic smallpox. The legislation commonly known as the Indian Vaccination Act enabled the federal government to vaccinate around forty to fifty thousand American Indians. In the wake of an especially vicious smallpox epidemic savaging American Indian communities on the western frontier, various persons urged the secretary of war and the commissioner of Indian affairs to petition Congress for the money and authority to vaccinate affected Native Americans. As the largest program of its kind in the United States, protection of American Indians from a deadly disease was the ostensible goal of the program, though other federal agendas provided the real motivation. There was no input from American Indians during the conception, design, and implementation of the program, and vaccinations were used to enable Indian removal, to permit relocation of Native Americans to reservations, to consolidate and compact reservation communities, to expedite westward expansion of the United States, and to protect Indian nations viewed as friendly or economically important to the United States.

After setting spending limits, Congress granted the secretary of war absolute authority over the program. As the leader of the U.S. Army and as the person who controlled the Office of Indian Affairs, Secretary of War Lewis Cass designed and supervised every aspect of the vaccination program. He selected the tribes for vaccination, authorized the

hiring of all vaccination personnel, delegated limited authority to the commissioner of Indian affairs, and set the parameters that limited or denied vaccinations to Indian nations. On Cass's orders, U.S. Army surgeons and enlisted personnel administered as many of the vaccinations as possible because their services were considered less costly than those of private practitioners. However, many civilian physicians, who often viewed jobs offered by the act as political patronage, also participated in the vaccination program.

The programs initiated under the Indian Vaccination Act were funded with an initial \$12,000 appropriation in 1832, plus another \$5,000 that was set aside in 1839 to cover vaccinations after the smallpox epidemic of 1837–38.<sup>1</sup> This \$17,000 constituted the main federal effort to control smallpox among American Indian tribes for almost a decade, as vaccinations were used to legitimize and justify an otherwise intrusive federal presence among American Indian nations.

### LEGISLATIVE PROCESSES

Two years prior to the Vaccination Act, U.S. Indian agents had been authorized by the acting secretary of war, Dr. L. G. Randolph, to hire physicians on an ad hoc basis to vaccinate or treat American Indians at their agencies.<sup>2</sup> As smallpox spread to American Indian communities across the Central Plains between 1831 and 1832, individual efforts were not sufficient to stop the spread of the disease. From October 1831 to April 1832, desperate federal Indian agents begged regional superintendents of Indian affairs and the commissioner of Indian affairs, Elbert Herring, for help. By March 1832, Baptist missionary and federal surveyor Isaac McCoy echoed the pleas of the agents and personally lobbied members of Congress and the commissioner of Indian affairs in Washington, D.C.<sup>3</sup> The reports of Indian agents John Dougherty and James Jackson and those of missionary McCoy spoke of the horrors of smallpox as it struck tribe after tribe located along the western frontier. The spread of the disease was a significant problem for a Congress that was deeply involved in plans to remove another seventy-two thousand American Indians into the heavily infected frontier areas.<sup>4</sup>

In his annual report to the secretary of war and to the Congress (1832), Commissioner Herring attributed the first epidemics of smallpox among the Chippewas to their associations with the French and British. Herring implied that Chippewa political alliances unfavorable to the United States had placed them in a position to bring smallpox into their nation. Herring also claimed that sometime in the mid-1700s Chippewas had brought the disease on themselves by drinking from a forbidden keg of liquor that had been wrapped in a flag poisoned with smallpox material. The tale involved trade with foreign nations, alcohol, germ warfare, the spread of the disease by war parties, and the

further introduction of the disease among the Chippewas by French voyageurs. Using the logic and rhetoric of victimization or deficit-based theories, Herring absolved the United States of responsibilities for the disease, shifted the blame to the victims themselves, and then put forth his request for federal smallpox vaccinations. Once the victims were considered responsible for their own afflictions, members of the federal government felt that they were in a position to offer the Indian nations some type of relief.<sup>5</sup>

Commissioner Herring's report was transmitted to the House Committee on Indian Affairs where, by April 1832, congressmen and senators were forced to deal with the problem of Indian vaccinations. Passage of any bill that offered medical aid to American Indians was problematic because there were no precedents for the legislation. In addition, there were no medical benefit provisos in extant treaties, nor were any included in Indian removal stipulations, instructions, or treaties. The proposed legislation that was submitted to Congress contained a single \$12,000 appropriation that was intended to "prevent the spreading of the smallpox along the Indian frontiers."<sup>6</sup>

The bill was vigorously opposed by Southerners who either challenged the legislation in its original form or were against it in its entirety. Southern congressmen first opposed the bill on financial grounds, maintaining that \$6,000 would be satisfactory since the Indians had already had smallpox. They also suggested reducing surgeons' fees to \$4 per day (in lieu of the proposed \$6) or that vaccinations could be performed by military surgeons to further reduce federal costs. Southern congressmen also insisted that the secretary of war should not be given discretionary spending authority for the \$12,000. Congressman Wickliffe (Ky.), who was most outspoken against passage of the bill, finally relented in the face of strong support from Northern congressmen, and the bill was forwarded to the Senate.<sup>7</sup>

In the Senate, resistance to the bill was mounted by a block of nine Southern senators determined to oppose any relief to American Indians. Senator Buckner (Mo.), who delayed passage of the bill, spoke most viciously against helping Native Americans:

He did not wish to cherish these persons . . . our natural enemy . . . who had marked their course by fire and desolation . . . [who] had so frequently snatched the infant from the nipple of its mother's breast, and dashed its brains out against a tree . . . those who had done so much injury to our own citizens.<sup>8</sup>

Buckner, an obvious proponent of the "savage" stereotype applied to American Indians, also objected that the appropriation would set a precedent for further expenses, and that the \$12,000 appropriation

and the \$6 per diem fees were excessive. He also worried that the Constitution restricted such aid to perceived enemies of the state.<sup>9</sup>

Senators Grundy (Tenn.), Miller (S.C.), and Mangum (N.C.) supported Buckner's extreme position. Of the ten senators who voted against the bill, nine were from Southern, pro-Indian removal states, including Alabama, Indiana, Missouri, Louisiana, Missouri, North Carolina, and Virginia. (The tenth senator was from New Jersey.) A majority of Northern senators supported the bill and finally passed it on its third reading. Among the thirty-one senators who voted for the bill were three Southerners and one well-known senator from Massachusetts, Daniel Webster.<sup>10</sup>

No objections to the bill were raised on the basis of treaty rights or obligations because there were no medical benefit treaties in effect on May 5, 1832, except for very limited cash endowment provisions in the 1826 Miami treaty.<sup>11</sup> Resistance to the \$12,000 appropriation was somewhat specious, considering that the money was a drop in a large federal bucket. By 1832, American Indians had already ceded almost 350 million acres of land to the United States, and total fiscal year 1832 requisitions for the Indian Department amounted to nearly \$1 million. Though politicians did not mention the numbers, they must have recognized the consequences of sending over seventy thousand unprotected people into an area raging with smallpox.<sup>12</sup> Vaccination protection was simply a matter of good politics that could be used to support federal goals that included deportation of American Indians out of the South.

### **THE INDIAN VACCINATION ACT, MAY 5, 1832**

The Indian Vaccination Act limited the vaccination program to \$12,000, set vaccinating physicians' pay at \$6 per day, and gave the secretary of war full authority over development and implementation of the program. The act established no specific demographic parameters, merely providing that vaccination be extended to those tribes on the American "frontier." "Frontier" was not defined, and it was left to the secretary of war to determine which American Indian nations were vaccinated and when and where they would be vaccinated. American Indians had no input into any of the political or decision-making processes involved with the bill or into implementation of the act.

By May 10, 1832, Secretary of War Lewis Cass had issued two sets of orders implementing the vaccination program. In addition to the general vaccination order, Cass specifically ordered Indian agent John Dougherty to limit vaccinations to tribes located in the Lower Missouri River Valley.<sup>13</sup> Cass's general vaccination order was sent to Indian agents and superintendents of reservation or removal tribes. It

specified vaccination processes, determined who was hired to perform the vaccinations, and authorized expenditures. During the course of the next three months, vaccinations were authorized for the tribes and groups listed in table 1.<sup>14</sup>

Missouri River agency vaccinations were arranged for Otoes, Iowas, Omahas, Poncas, Yankton, Yanktonai, and Teton Sioux, and members of the Republican, Grand, and Loup Pawnee bands.<sup>15</sup> Various groups of American Indians were vaccinated in addition to the Indians of Illinois and west of the Mississippi River category. These groups included the Sioux at Fort Snelling, Winnebagoes and Menominees, Sauks and Foxes, Wyandots, Munsees, Shawnees, Ottawas, Chippewas, Potawatomes, Senecas of Lewistown, Miamis, and Christian Indians. Vaccinations authorized under the act that were performed before its passage included vaccination of the Great and Little Osages, Creeks located in the twenty eastern towns, Creeks living near Fort Mitchell, Indians living near Fort Leavenworth (Kansas), Chippewas and Ottawas residing in Michigan,<sup>16</sup> Delawares, Shawnees, some other Sioux bands, Menominees, Ottawas of the Miami, and Potawatomes of the St. Joseph.<sup>17</sup>

**Table 1.**

**Indian Vaccination Act, Appropriations by Group, 1832**

<i>Tribes and Groups</i>	<i>Appropriations</i>
Upper Missouri River	\$2,000.00
Potawatomes and Miamis	400.00
Indians of Illinois and west of the Mississippi River	300.00
Choctaws	300.00
Osages	350.00
Shawnees and Kickapoos	350.00
Chippewas and Ottawas	200.00
Cherokees, West	200.00
Creeks, West	200.00
Menominees	200.00
Seminoles	150.00
Indians of Ohio	150.00
Chippewas of Lake Superior	600.00
Creeks, East	985.50
Porter's Agency	900.00
Vaccine Matter	210.00
<b>Total</b>	<b>\$7,495.50</b>

Source: "Statement D of the Fund for Extending the Benefits of Vaccination to the Indian Tribes, Report from the Office of Indian Affairs," *Annual Report, Commissioner of Indian Affairs, 1832* (Englewood, Colo.: Microcard Editions, an Indianhead Co.), microfiche 1925, 174.

Civilian physicians were hired to vaccinate groups at the Missouri River Agency, Potawatomes and Miamis and the Choctaws, Osages, Shawnees, Kickapoos, Seminoles, and Creeks (east), and certain tribes in Michigan.<sup>18</sup> Army physicians were assigned to vaccinate all other tribes. Civilian physicians were to be paid \$.06 per vaccination or, in cases where travel was involved, \$6.00 per day, based on a rate of one hundred administered vaccinations per day.<sup>19</sup> Army physicians received no additional stipends, only their regular salaries of about \$50 a month, plus eight rations and forage for three horses.<sup>20</sup>

Political patronage filled a significant number of jobs offered by the Office of Indian Affairs, including those sought by physicians. As illustrated by the cases of Doctors James, Burns, and Deames, without the "right" connections, gaining federal employment was a tricky business. James went directly to Secretary of War Lewis Cass, while Burns and Deames petitioned members of the House of Representatives for employment. Though the men sought jobs as physicians to migrant Choctaws or Cherokees, none of them received the anticipated employment. After refusing James a physician's job, Cass offered him employment as a teacher in the Choctaw Nation. Dr. Burns was told to pass the Medical Examining Board exams if he sought alternate employment as a physician in the U.S. military, since removal positions were not available. Congressman James K. Polk was notified by commissioner of Indian affairs C. A. Harris that his petitioner, Dr. Deames, should make proper application to the superintendent of Cherokee immigration.<sup>21</sup>

Physicians who knew how to manipulate the patronage processes were able to gain lucrative federal Indian Office positions. Dr. Charles Graham of New York went directly to the president when he wanted employment as a physician to treaty delegates. The president expressed his support for Dr. Graham to the secretary of war, who then contacted the commissioner of Indian affairs. The commissioner notified the doctor that there would probably be no treaty delegation, but offered Graham alternate employment investigating Indian depredations in the state of Florida. Dr. G. M. Fitch appealed to a senator for employment as a physician to emigrating Potawatomes of Chicago, and received the job. On April 9, Senator John Tipton petitioned Commissioner Harris on behalf of Dr. Fitch, and by June 11, the doctor had the job.<sup>22</sup> In spite of the many congressmen who requested jobs for their favorite physicians, most doctors hired under the Vaccination Act lived near the vaccination areas.

## DEMOGRAPHICS OF THE INDIAN VACCINATION ACT

By February 1, 1833, the commissioner of Indian affairs considered vaccinations under the federal program to be complete. Initial disburse-

ments totaling \$7,495.50 had been made that provided for all groups included in the primary program. According to federal reports, at least 17,045 American Indians had been vaccinated by February 1, 1833.<sup>23</sup> Federal vaccination efforts covered by the Indian Vaccination Act advanced sporadically between 1833 and 1838, although vaccination of removal tribes continued throughout the period. Review of Indian removal records and the records of the Office of Indian Affairs, manuscripts, diaries, and Grant Foreman's works on Indian removal reveals a great deal of information about federal smallpox vaccinations covered under the act.<sup>24</sup>

The numbers of vaccinations filed were incomplete at the time of the 1833 report, and could not be reconstructed until removal reports, Indian agency reports, and physicians' reports were filed after conclusion of a second, smaller federal vaccination effort in 1839. By 1840, the government had committed a total of \$17,000 to American Indian smallpox vaccinations. The first \$12,000 had been exercised in response to epidemic smallpox among American Indian communities located on the Central Plains, and the second \$5,000 had been prompted by the smallpox epidemic of 1837–1838 among the Missouri River tribes. By 1838, when word of the disastrous epidemic that struck Upper Missouri River tribes had finally percolated through the various federal offices, vaccinations under the act were mostly complete for removal groups. After 1837, Indian removal regulations had been modified to include provision of physicians and medical care for removal groups, which exempted further deportees from the provisos of the Indian Vaccination Act.<sup>25</sup>

The data in table 1 includes monies apportioned under both the Indian Vaccination Act in 1832 and the subsequent \$5,000 vaccination appropriation authorized by Congress in 1839. The first \$12,000 was allocated to Indian agencies and to removal groups, and the second \$5,000 was assigned to the St. Louis Superintendency, the Detroit Agency, and to the Western Superintendency, which included many of the groups already transported to the west.<sup>26</sup>

Reports filed by both physicians and Indian agents indicate that at least 21,036 American Indians had been vaccinated by the end of 1839. Vaccinations involved all of the tribes scheduled for removal (except 15,000 Choctaws) and 9,471 vaccinations that had been administered but were not immediately reported. Census data from tribes remaining "south of Lake Superior" indicated a possible vaccination population of 8,238 American Indians in that area.<sup>27</sup> When the known vaccinations (21,036 and 9,471) are added to the census data (8,238) from Michigan and Wisconsin, where Indian agents and superintendents concentrated on vaccinations, the estimated minimum total of administered vaccinations is 38,745 (table 2). Vaccinations from the Western Superintendency were not reported for the second vaccination



program, so are not included in the vaccination totals. No adjustment is made for underreporting because some physicians increased estimates in their on-site reports to compensate for their lack of record keeping while delivering vaccinations.<sup>28</sup> Vaccinations dispensed by physicians working under treaty stipulations that began in 1833 are not included under the Vaccination Act or the subsequent \$5,000 appropriation because these costs were covered by the treaties.<sup>29</sup>

The 38,745 individuals vaccinated under the Vaccination Act is the minimum number vaccinated, at a total cost of \$14,692.50.<sup>30</sup> Since so many different entities were involved in the Indian vaccination program, it is practically impossible to establish absolute numbers of vaccinations administered under the act. In addition, although the act mandated that records be maintained by vaccinating physicians, doctors and Indian agents operating in the field often admitted that they had been overwhelmed. Faced with large vaccination populations who were often located in remote areas, depleted supplies of vaccine matter, and severe time constraints, doctors prioritized their exertions and tried to administer as many vaccinations as possible. The doctors usually discontinued the recording processes and addressed their reports once the vaccinations were completed.

Though the absolute number of vaccinations is elusive, certain facts are clear. The \$.06 per person was never a realistic cost assessment since vaccination costs, as reported, averaged an estimated \$.27 per person. When adjusted to \$13,192.50 (the lowest adjusted total of vaccination appropriations), the lower limit of the fund, based on the \$.27 per person cost, would have provided around 38,745 vaccinations. When based on the higher adjusted appropriation level of \$14,692.50,

**Table 2.**

**Indian Vaccination Act, Vaccinations 1832–1841**

<i>Tribes and Groups</i>	<i>Number of Vaccinations</i>
Cherokees	4,000
Senecas, Shawnees	652
Creeks, East	6,839
Michigan Superintendency	11,347
Shawnees, Kickapoos, Ottawas of Ohio	1,925
Great and Little Osages	2,177
Potawatomies, Miamis	2,140
Sioux, Otoe, Iowas, Omahas, Pawnees	9,665
Total	38,745

*Note:* 1832 Michigan vaccinations included 2,070 Chippewas and Ottawas, 399 Ottawas and Chippewas, 700 Winnebagoes, Menominees. 1839–40, by census, 8,238 vaccinations in tribes living below Lake Superior in the Michigan and Wisconsin areas.

the upper limit would have been around 54,416 administered vaccinations. Considering that underreporting was common and that one Indian agency did not report vaccinations after 1839, the minimum and maximum number of vaccinations under the act can be established as between 38,745 and 54,416.

## **PRECEDENTS FOR AMERICAN INDIAN HEALTH CARE**

The Indian Vaccination Act did set a precedent for American Indian health care, but not the precedent that Congress had feared. The act was not the precursor of large appropriations for Indian health services, nor did it commission a standard of regular, preventative smallpox vaccination programs among American Indians. Smallpox vaccinations, as a result of the act, not only legitimized a colonizing presence among American Indians, but were also the one proven "scientific" medical procedure that was demonstrably effective. Consequently, when smallpox struck a group or an area, politicians, physicians, and the military rushed in with vaccination materials as demonstrations of federal power. The practice of preventative medicine, including a regular, systematic approach to smallpox vaccinations applied over a broad demographic area, was not part of Indian health care before 1871. Vaccination programs were only initiated in response to epidemic conditions among specific groups of American Indians.

## **POLITICAL PURPOSES OF AMERICAN INDIAN SMALLPOX VACCINATIONS**

Vaccination funds were not always employed for the exclusive vaccination of American Indians. Henry R. Schoolcraft spent \$800 of the initial \$12,000 fund to help defray the costs of a federal cartographic and geological survey of Chippewa country. Vaccination of Chippewas, Ottawas, and some of the Sioux near Fort Snelling was actually conducted as a sideline of the project. Schoolcraft's "vaccination expedition" involved mapping lakes and rivers, and included extensive metallurgical and geological reports written by the expedition physician, Dr. Houghton. Houghton's involvement in the expedition as both vaccinator and cartographer was a common practice of the time, as physicians were often delegated to other "scientific" positions on federal exploratory journeys.<sup>31</sup>

Disgruntled reports filed by the army lieutenant who was assigned to accompany Schoolcraft indicate that Schoolcraft's primary interest in the expedition was Chippewa land. Once the mapping, political meetings with tribes, and reports of metals and ores that composed the bulk of the expedition had been completed, Schoolcraft left

the expedition and returned to his agency. The doctor and the lieutenant, somewhat dissatisfied by Schoolcraft's desertion, eventually found their way out of the northern woods. Allen noted that the expedition physician, Dr. Houghton, did perform some vaccinations, but that the vaccinations were secondary to other purposes of the trip. Houghton's report mentioned no vaccinations, but provided Congress with detailed metallurgical information and maps. In his final report, Schoolcraft mentioned that an estimated 2,070 people had been vaccinated, though the bulk of his message was devoted to the maps, surveys, and census data obtained on the journey.<sup>32</sup>

One of the other problems with the Indian Vaccination Act that has been overlooked centers around Secretary of War Lewis Cass and the political agendas and consequences of his decision to exclude Mandan Indians and other Upper Missouri River tribes from the vaccination program. At times, scholars have sought to explain or justify Cass's decision by centering on historical anomalies, economic development, or justification based on circumstance. Nothing has been said of the political motives and implications that were at the core of Cass's decision-making processes. Nor has anyone seriously addressed the idea that Cass's decisions not only denied vaccinations to the Mandans and their northern neighbors, the Hidatsas (and by inference, their other neighbors, the Arikaras), but purposely excluded many thousands of Cree, Blackfeet, and Assiniboin Indians who inhabited the northern regions of the Upper Missouri River.

Early scholars E. Wagner Stearn and Allen E. Stearn asserted that Cass intentionally denied Mandans and Arikaras vaccination protection. When they published their seminal work on American Indians and epidemic smallpox in 1945, the Stearns printed a portion of Lewis Cass's order to Indian agent John Dougherty.<sup>33</sup> Inherent to their scholarship, and in Cass's order to Dougherty, was the idea that Mandan and Arikara Indians had been deliberately denied federal smallpox vaccinations in 1832. In effect, the Stearns suggested that denial of vaccinations to the tribes of the Upper Missouri River region had been a political decision that segregated them from federal concerns. The Stearns' implications were not seriously reexamined, however, until historian David Ferch began to question the Cass decision in 1983.<sup>34</sup>

Ferch argued that Cass's decision to deny vaccination to Upper Missouri River tribes was economically motivated and that Cass "more likely" had realized that the fur trade on the Upper Missouri River was no longer profitable due to increasing costs and incidents of violence. Ferch also held that the \$12,000 allocated for the Indian Vaccination Act was sufficient to have extended the vaccination program to Upper Missouri River groups.<sup>35</sup> Though not directly addressing the Cass decision, John Ewers also supported the idea that by 1831 the "importance of the Mandan villages as a trading center had waned." Ewers likewise

advocated the idea that by 1831 Missouri River Valley groups (who were vaccinated) were considered economically preferential to other groups located on the Upper Missouri River.<sup>36</sup> Though Ewers did not comment on Cass's decision or on smallpox vaccinations, his work supports Ferch's concerns that Upper Missouri River tribes were not considered economically viable trading partners by the United States.

There is also little doubt that by 1832 federal politicians perceived differing economic potentials and preferences for Indian nations located along the Missouri River. As early as 1806, fur trader Truteau had informed Thomas Jefferson and members of the Lewis and Clark expedition that the Sioux could bring the greatest economic advantages to the United States. Truteau remarked that the Sioux were preeminent beaver hunters who were capable of supplying the United States with more beaver pelts than any other Indian nation located along the Missouri River.<sup>37</sup> It was by no mistake that in 1832–33 and 1838–39 members of the various Sioux nations were heavily vaccinated under the Indian Vaccination Act. Ferch was certainly correct when he noted that Indian nations that were not considered economically viable trading partners of the United States, such as the Mandans, Arikaras, and Hidatsas, were not vaccinated under the act.

In 1992, Michael Trimble maintained that Upper Missouri River tribes had not been vaccinated due to unavoidable delays in the vaccination program. Doctors hired to vaccinate at the Council Bluffs Agency did not reach Fort Leavenworth until mid-July, and Indian agent John Dougherty, delayed in St. Louis, did not join them until August 2, 1832. According to Trimble, additional delays were caused when one doctor ran out of vaccines and was forced to purchase or develop additional vaccine materials.<sup>38</sup> Trimble's work infers that starting the project so late in the season, coupled with delays caused by the lack of vaccines, precluded vaccination of American Indian communities located farther north on the Missouri River.

Though well researched, Trimble's work glossed over three important facts: (1) There were no orders or instructions issued to countermand Cass's original instructions to Indian agent Dougherty. (2) Trimble failed to note that Commissioner of Indian Affairs Elbert Herring personally rejected Dougherty's subsequent request that the vaccination program return to the Missouri River area the following year. As far as the commissioner of Indian affairs and the Office of Indian Affairs were concerned, the vaccination program was over.<sup>39</sup> (3) The federal records contain no proof that delays in program processes would have affected the Upper Missouri River groups because there had been no plans to vaccinate those groups. Trimble was correct that a program implemented toward the middle of May (in Washington, D.C.) would take considerable time to become functional along the reaches of the Missouri River. Trimble was also correct about the delays. The delays

were not, however, insurmountable, and vaccinations did begin in Dougherty's agency as soon as possible. Dougherty issued orders from St. Louis for one physician to begin the vaccination program without him, and when the doctors ran out of vaccine matter, they either obtained more vaccines from St. Louis or reproduced vaccine matter from persons recently vaccinated. Substituting the idea of unavoidable delays replaced the unpleasant thought that the secretary of war had purposely excluded the Mandans, Arikaras, and their northern neighbors from vaccination protection.

There were no delays on Cass's part, as orders were issued almost immediately after passage of the act. On May 10, 1832, Cass issued a general circular (i.e., order) that extended vaccination benefits to thousands of American Indians. Though no official caveat was included in Cass's order, examination of all vaccination records and federal Indian treaties indicates that vaccinations were to be provided to American Indians who were involved with the United States through treaties of peace, friendship, development or protection of trade, removal, or reservation. No American Indians were vaccinated who had been branded as aggressor nations by the United States or who were regarded as beyond the concerns of the United States by Mr. Cass. Specifically excluded from vaccination were the Mandans, who were defined as having committed hostilities on "some of the citizens of the United States" in the preamble to their treaty of July 30, 1825.<sup>40</sup> Cass's decision also excluded two other tribes branded as aggressor nations by treaties, the Hidatsas and Arikaras, both of whom were accused of "unprovoked acts of hostility" against the United States in the Atkinson-O'Fallon treaties of 1825.<sup>41</sup> American Indians located north of the Mandans, including the Assinboins, the Blackfeet, and the Crees, were excluded from vaccination because Secretary of War Cass, as noted in his article published in the *North American Review* in 1826, considered them beyond the pale of civilization. In the pro-removal article, Cass noted that he had not been an admirer of the Upper Missouri River tribes for some time. "The Indians, in that extensive region, are to this day far beyond the operation of any causes, primary or secondary, which can be traced to civilised [*sic*] man." Cass discussed in particular the Mandans and the Arikaras and, by inference, all other tribes located along the northern rise of the Missouri River.<sup>42</sup> Examination of federal records indicates that no Indian nations were vaccinated under the act that were not pledged to the United States in treaties favorable to the United States.<sup>43</sup> Removal tribes receiving federal small-pox vaccinations included Choctaws, Shawnees, Kickapoos, Cherokees, Creeks, Seminoles, the Indians of Ohio, and the Lewistown Senecas (table 1). Other vaccinated treaty tribes were involved with land cessions, reservations, or territorial consolidation. By "consolidation" is meant that extant reservations were being reduced in size and that

many of these reservation populations were often subjected to removal, after 1832, in the wake of settler in-migrations. These groups included Potawatomes, Miamis, Indians of Illinois and those located immediately west of the Mississippi River, Osages, Chippewas, Ottawas, Menominees, Chippewas of Lake Superior, and various other groups of Wyandots, Munsees, Shawnees, Winnebagoes, and Christian Indians (table 1).

Of the \$4,795.50 spent for smallpox vaccinations in 1832, an estimated 25 percent was allocated for the vaccination of American Indian nations holding treaties with the United States that were located within John Dougherty's agency at Council Bluffs. Here various groups of Pawnees, Omahas, Otoes, Iowas, Yankton, Yanktonai, and Teton Sioux were vaccinated.<sup>44</sup> All of the tribes vaccinated under Mr. Dougherty's jurisdiction had signed treaties favorable to the United States in which none of them had been labeled an individual aggressor nation. These tribes had been involved in a series of treaties, drawn in 1825 by treaty commissioners Brigadier General Henry Atkinson and Major Benjamin O'Fallon, that sought to establish peace, friendship, and exclusive trade with the Indian nations.

On May 9, 1832, Cass ordered agent Dougherty to exclude Mandans and other Upper Missouri River tribes from the federal vaccination program. The following day, Cass copied his order to Commissioner Herring and to General William Clark, superintendent of Indian affairs in St. Louis.<sup>45</sup> Cass's order to Dougherty was the only order in the federal record that specifically excluded particular groups from federal smallpox vaccinations. The order also circumvented both the commissioner of Indian affairs and the superintendent of Indian affairs in St. Louis by being addressed directly to the Indian agent in charge of the vaccinations. The policy of exclusion can thus be attributed directly to Cass, because the normal chain of command was from the secretary of war to the commissioner of Indian affairs, to the superintendents of Indian affairs, and from the superintendents to the specific Indian agents.

The bulk of Cass's order to Dougherty contains the same information as the general circular issued on May 10, 1832. The instructions of May 9 to Dougherty, however, contain specific provisos that are addressed in no other vaccination instructions:

It is impossible for this department to give you specific instructions respecting the best and most economical mode of affecting the object of the law. . . . I will state to you, however, my general views, in relation to the Indians upon the Missouri River. . . . Under any circumstances, no effort will be made to send a Surgeon higher up the Missouri than the Mandans, and I think not higher than the Aricaras.<sup>46</sup>

Dougherty apparently followed Mr. Cass's instructions. Nothing indicates that federal smallpox vaccinations were extended to the Mandans, Arikaras, Hidatsas, or to any tribes living to their north, including the Blackfeet, Crees, and Assiniboin. There is no evidence that the United States ever intended to vaccinate these last three groups, none of whom were mentioned in U.S. treaties until 1851.<sup>47</sup> Federal policies did not extend medical aid to any group with whom the United States was not engaged in favorable diplomatic negotiations, or from whom they did not want something.

Of the Upper Missouri River tribes in 1832, only the Mandans, Arikaras, and Hidatsas had treaties with the United States. Though all three groups had entered into treaties of peace, friendship, and trade with the United States, each was individually identified by the United States as an aggressor nation.<sup>48</sup> Other treaties with vaccinated groups addressed intertribal warfare and peace and friendship without labeling specific treaty groups as aggressor nations. These included treaties with the Teton, Yankton, Yanktonai, Sioune, and Oglala Sioux, various groups of Chippewas, Sacs and Foxes, Menominees, Iowas, Winnebagoes, and Ottawas that were ratified June through August 1825. The majority of the tribes vaccinated in 1832 held treaties that included concessions of land, reservation or reservation reduction, removal, or agreements to exclusive trade relationships with the United States. None of these groups were identified or considered aggressor nations by representatives of the federal government U.S. Army Brigadier General Henry Atkinson and U.S. Indian agent Major Benjamin O'Fallon.

Records witness that the United States usually generated problems with the Arikara Indians and, as a consequence, their Mandan neighbors, during periods of federal expansion following 1803. Botched diplomatic relations on the Upper Missouri River began with the Lewis and Clark expedition and the death of an Arikara chief in Washington, D.C. Failure to deliver a timely message about the death of this man to the Arikaras, in 1806, caused much of the early Arikara irritation with the United States.<sup>49</sup>

Over the years, a number of other events contributed to the problems experienced by Native Americans living on the Upper Missouri River. These problems included failed American diplomatic and trading expeditions, incursion of American trappers into tribal hunting and trapping territories, and American efforts to establish economic and military control over the Upper Missouri River tribes.<sup>50</sup> By 1831, the situation in the area had deteriorated to the point that trading relations with the Arikaras had been temporarily terminated.<sup>51</sup>

Various federal records indicate that the prevailing attitudes toward the people of the Upper Missouri River remained unchanged for some time after Cass's resignation as secretary of war on October 4, 1836.<sup>52</sup> Sioux agent and former trader Joshua Pilcher, who often re-

ported to Secretary Cass and who was well acquainted with Indian agent John Dougherty, was no friend of the Arikaras. Pilcher, a former participant in a U.S. military excursion against the Arikara nation, made his feelings known about them to missionary Samuel Allis. According to Allis, Pilcher had told him that he knew of "no other way to stop them [Arikaras] than to kill them off."<sup>53</sup> Agent Pilcher also filed a scathing review of the Upper Missouri River Indians that was published by the commissioner of Indian affairs in 1838. In the wake of the disastrous smallpox epidemic that killed so many of the Upper Missouri River Indians, Pilcher counseled that the few Mandan survivors who had joined with surviving Arikaras would undoubtedly regret the decision. "The Riccaras [Arikaras] have long been notorious for their treachery and barbarity."<sup>54</sup>

Pilcher's comments became another part of the continuing federal record that branded the Arikaras (and by inference the Mandans) as barbarous. In Pilcher's words, "within my own recollection, [Arikaras] have murdered and pillaged more of our citizens than all . . . other tribes between the western borders of the . . . Missouri and the . . . Columbia River." Pilcher also noted that the federal government had no business protecting American trading interests on the Upper Missouri River. "Government has quite enough on our immediate frontier to occupy its forces, without wandering into those remote regions to protect the trade."<sup>55</sup> Pilcher recounted that by 1831, trade on the Upper Missouri River had drawn to a standstill, a fact that historians Ferch and Ewers supported many years later.

### **CONSEQUENCES OF THE INDIAN VACCINATION ACT**

Federal officials tried to cover up, or justify, some of the problems occasioned by application of the Indian Vaccination Act. As Isaac McCoy, the Baptist missionary who had lobbied for Indian vaccinations said in 1840, the act (and the subsequent \$5,000 appropriation) had been applied in a "feeble, unsystematic" manner.<sup>56</sup> Not only did the secretary of war favor vaccination of Indian removal groups and viable U.S. trading partners, he used his power to support American Indian nations that the United States viewed as political allies. The effects of Cass's decisions were to become all too evident after the smallpox epidemic of 1837–38, when uncountable thousands of Mandans, Hidatsas, Arikaras, Crees, Assiniboin, and Blackfeet died without vaccination protection. Once word of the devastation that struck the Upper Missouri River reached the new commissioner of Indian affairs, C. A. Harris, and the public press, federal agents' efforts to justify their behaviors in the wake of the tragedy illustrated McCoy's concerns and the basic weaknesses of the program.



The summer, fall, and winter of 1837–38 brought epidemic smallpox to the cities of the United States and to the unvaccinated tribes of the Upper Missouri River. Timely vaccinations of non-Native populations in the United States, however, averted the type of tragedy that befell the Upper Missouri River tribes.<sup>57</sup> Striking especially hard among groups who had not been vaccinated under the federal program, reports of the staggering mortalities suffered by the Mandans, Arikaras, Hidatsas, and other northern Missouri River tribes were slow in reaching Washington, D.C.<sup>58</sup> Six months after the epidemic had ripped its destruction through the Indian communities, Commissioner Harris requested a written explanation about the deaths on the Upper Missouri River from William Clark, superintendent of Indian affairs, St. Louis. Clark replied that he had not known of the epidemic until after it had happened, spoke of letters never received, related tales of a Mandan subagent who rarely, if ever, visited his post, and offered letters in his own support from Sioux agent Joshua Pilcher. In effect, Clark offered a string of evidence that relieved him of responsibility for any knowledge of the devastating loss of life the previous summer and fall.<sup>59</sup>

Clark supplied Harris with copies of letters written, but apparently not mailed, the previous June and July, and subsequent reports from agent Pilcher that exonerated everyone but the absentee Mandan subagent.<sup>60</sup> Clark also told Harris that he felt Pilcher's suggestion to vaccinate Missouri River tribes seemed viable, but that he felt that nothing could have stopped the progress of the disease the previous summer. Clark told Harris that he had also conferred with another Indian agent in the Missouri River area, John Dougherty, and that Dougherty concurred with Clark's opinion.<sup>61</sup> Clark also counseled that he and Dougherty agreed that new vaccinations might stop further spread of the epidemic disease. To Commissioner Harris's credit, within twenty days of Clark's letters and explanations, funds and vaccine materials were forwarded to St. Louis with instructions to begin another vaccination campaign. By March 6, an additional thousand dollars had been added to the vaccination fund and was forwarded for Major Pilcher's use for council gifts and vaccine matters necessary to vaccinate Sioux bands located within his agency.<sup>62</sup>

In the meantime, Clark had also remarked that letters from the absentee Mandan subagent, supposedly dated the previous September, were bogus, and that the agent was repeating what he heard in St. Louis. Apparently, agent William N. Fulkerson had not been anywhere near the Mandan Agency since before the start of the epidemic. As a result of the mismanagement, Fulkerson tendered his resignation to Clark on March 1, 1838, and filed a self-serving report that indicated that the Mandan Agency was of such little importance to the United States that it should be abandoned. Fulkerson also recommended better

pay for Indian agents and more government funds for Indians in the area if the government chose to continue operations there.<sup>63</sup> In response to Harris's letters, funds, inquiries, and instructions, Major Pilcher vaccinated an additional three thousand people, primarily Yankton and Santee Sioux, plus a few Otoes and Omahas.<sup>64</sup>

By August 1838, reports citing General Clark and Major Pilcher and their opinions about the loss of life to the Upper Missouri River tribes had appeared in issues of the *Boston Medical and Surgical Journal* and in an issue of *The Friend*.<sup>65</sup> These reports once again exonerated Clark and Pilcher but neglected to mention Cass's order that had denied vaccination to the Upper Missouri River tribes.

### INFLUENCES OF VACCINATIONS ON INDIAN REMOVAL

Vaccinations under the act, or the lack of them, influenced Indian removal groups as well as the Upper Missouri River Indian nations. Many of the deportees who had been vaccinated prior to removal did not have to contend with smallpox along with the other horrors of their journeys. When smallpox vaccinations worked, they worked well. When something went wrong with the process, however, rarely did anyone realize in a timely manner that the vaccinations had not "taken." Such was the case for groups of Senecas and Shawnees from Lewistown, Ohio, whose chiefs had requested vaccinations before removal. Having learned that epidemic smallpox was raging among tribes west of the Mississippi River, the Lewistown Indians refused to move without vaccination protection.<sup>66</sup>

Groups of Choctaws and Chickasaws had a different experience. More worried about cholera epidemics along removal routes than about smallpox, one group of Choctaws refused vaccinations before deportation.<sup>67</sup> Another group of Choctaws was not vaccinated because the doctor hired to perform the operations died of cholera at the Choctaw Agency. Groups of Chickasaws and others who were unprotected from smallpox were moved into a country ablaze with smallpox, a fact that was painfully noticeable by late 1838 when many of the new immigrants contracted the disease.<sup>68</sup> The smallpox situation was so bad in the new territory that by spring of 1838 the army sent an enlisted man to vaccinate the entire Choctaw nation.<sup>69</sup> One wonders how effective these vaccinations were, however, since historian Grant Foreman noted that the epidemic still raged among the western Chickasaws, Choctaws, Creeks, Seminoles, Cherokees, and troops at Fort Gibson by the end of 1838. Lack of vaccinations, ineffective vaccine materials, and the almost overwhelming numbers of people being deported undoubtedly combined to create large unprotected populations in the new nations.

## EPILOGUE AND CONCLUSION

Termination of Vaccination Act benefits did not end federal responses to smallpox among American Indian nations. Future requests were met on an ad hoc basis or through the efforts of individual Indian agents, on the authority of the commissioner of Indian affairs and, after 1849, under the jurisdiction of the Department of the Interior. By the mid-1850s, treaties had been made with various American Indian nations in Washington and Oregon Territories that provided federal vaccination benefits. The majority of the western nations, however, was not covered by any type of medical benefits treaties, nor were military physicians and surgeons always available to handle increased vaccination loads during smallpox epidemics. In response to requests from the military and from various Indian agents, in 1858 the commissioner of Indian affairs instigated a new "smallpox solution" for American Indian communities. The Department of the Interior and the Office of Indian Affairs provided American Indians, on request, "Special Agents for Vaccination."

The special agents for vaccination (i.e., physicians) were responsible to the commissioner of Indian affairs and ultimately reported directly to him. In turn, the doctors were often sent to military posts where they were instructed by military personnel, Indian agents, or superintendents of Indian affairs to proceed with vaccinations. The agents, military personnel, or superintendents often chose the order of the tribes to be vaccinated and served as local "point men" for the medical missions that were always in response to epidemic smallpox in an area or in a certain group of American Indians. The special agents for vaccination were expected to vaccinate and treat any sick Indians requesting their help, and there were to be no charges to Native Americans for their services. The physicians also served as goodwill ambassadors to Indian nations, provided detailed reports on tribal locations and movements, and, in general, put in some long, hard miles in the course of their duties.<sup>70</sup>

Physicians who served as special agents for vaccination were initially paid \$1,000 per year, which was increased to \$1,200 a year by 1862. Travel expenses were reimbursed in addition to the salary. Physicians drew vaccine matters, medical cases, supplies, and revolvers directly from departmental sources, and returned surplus materials, including the revolvers, at the end of their tours of duty. Physicians met with the commissioner of Indian affairs to receive their working orders, then proceeded west from Washington, D.C., to their assignments.

Dr. Joseph C. R. Clark vaccinated tribes located within the Upper Missouri River Agency in 1858 and 1859, and was appointed to vaccinate Cheyennes, Arapahos, and other American Indians located on the Upper and Lower Platte River during the summer and fall of

1859. By October 25, 1859, Dr. Clark had vaccinated 277 men and 281 women from Brule and Oglala Sioux groups, Pawnees, Cheyennes, and Arapahos. During 1861 he also vaccinated American Indians located within the Utah Superintendency.<sup>71</sup>

In June 1862, Dr. H. T. Ketcham replaced Dr. Clark as the special agent to vaccinate American Indians. Ketcham was ordered to vaccinate Indians in the Southern Superintendency, and when his duties were completed there, he was sent to Fort Laramie, Wyoming.<sup>72</sup> The post commandant at Fort Laramie had requested vaccination for soldiers stationed at the fort and for American Indians located in the area because of smallpox reported on the overland mail route. Once vaccinations were completed in the Fort Laramie area, Dr. Ketcham was ordered to report to the governor of Colorado Territory for further vaccination assignments.

Dr. Ketcham reported to Governor Evans that he had been sent from Fort Lyon by the army, who had requested that he vaccinate additional Arapahos, Kiowas, Comanches, and Apaches who were mostly located, at that time, in western Kansas.<sup>73</sup> Dr. Ketcham traveled without an interpreter, during the depths of a western Kansas winter, remarking that the snow and intense cold often made it impossible for him to travel. Both Dr. Ketcham and Dr. Clark reported to the commissioner of Indian affairs that without fail they had been met with kindness, respect, and a great deal of relief by all American Indians they had vaccinated. Both doctors reported locations of groups treated, and Dr. Ketcham also reported to Governor John Evans of Colorado the peaceful dispositions of the tribes and the fact that everyone in the area had suffered heavy infections of smallpox.

By spring of 1864, Dr. Ketcham had vaccinated Arapahos, Cheyennes, Caddoes, Apaches, and Kiowas located in the area around Fort Larned, Kansas. The doctor had not been able to reach the Comanches, however, who had been in winter camp about seventy-five miles south of the fort.<sup>74</sup> Ketcham also noted that he had spent two weeks vaccinating among the Kiowas, and that he had been a guest in Satanta's (White Bear's) village for four days, where Satanta and "all his people treated me with much friendship." Once the vaccinations were completed, the military then sent Dr. Ketcham west to vaccinate Utes, after which he returned to his medical duties with the southern Civil War refugee Indians in Kansas.<sup>75</sup>

Dr. Ketcham took his orders from the commissioner of Indian affairs, who assigned him to appropriate military posts, superintendents of Indian affairs, or to the governor of Colorado Territory for further orders. The commissioner remained Ketcham's primary employer, and all of his reports were eventually submitted to him. All of Dr. Ketcham's reports relative to the tribes in Colorado Territory and Kansas indicated the general peaceful nature of the Indians and that they were grateful

that the Great Father had sent the vaccination relief. There were no indications that any of the vaccinated tribes had problems with the United States. Dr. Ketcham did, however, warn that a body of Kiowas, Comanches, and some Cheyennes, "Intend to make another raid into Texas in about five or six weeks." Ketcham also supplied the commissioner information concerning proper etiquette for travel through Indian country. "They like liberality, and will suffer those to pass through their country . . . who are generous enough to give them a little provisions. . . . they will steal the stock of a stingy man."<sup>76</sup>

Dr. Ketcham served as a diplomat to American Indian nations that were being treated for a dread disease at the request of the military and of the commissioner of Indian affairs. The vaccinated nations that Dr. Ketcham served were also being threatened with destruction by Governor John Evans of Colorado Territory.<sup>77</sup> Dr. Ketcham, a civilian, was sent to provide medical aid and filed reports that were nonmilitary in nature. Ketcham's reports were essential to the governor of Colorado who sought information in them to control the various tribes. Ketcham, however, indicated the peaceful intentions of the tribes toward the United States, regardless of the governor's stated designs of tribal extermination. The military, powerful civilian politicians, and the medical community all interacted with the tribes in accordance with differing agendas that may, or may not, have been evident to the physician who vaccinated, reported, observed, and legitimized a federal presence among American Indian nations.

Dr. Clark continued to vaccinate select Indian nations, and Dr. Ketcham remained as attending physician to southern refugee Indians during the Civil War. Neither doctor appears in Civil War federal Army records, but the war eventually defeated Dr. Ketcham's efforts with the refugee Indian service. Ketcham finally resigned from federal service after being assigned to repatriate refugees returned to the Cherokee Nation in 1864. According to Ketcham, the situation around Fort Gibson was so dangerous that doctors had no call to be in the country "until such time as they will be enabled to visit their patients without being bushwhacked."<sup>78</sup> Ketcham resigned from service in the Office of Indian Affairs on September 30, 1864.

Regardless of the intentions of Southern congressmen and senators to deny vaccinations to American Indians, vaccination of Native Americans became the largest program of its kind in the United States. The Indian Vaccination Act of 1832 did provide a significant number of smallpox vaccinations to American Indians during the severe smallpox epidemics of 1831–32 and 1837–38. With no input from American Indians during the conception, design, and implementation of the program, however, vaccinations were used to enable Indian removal and to facilitate reservations and the consolidation and reduction of reservations. Westward expansion of the United States was also expedited

by the act, since Indian nations viewed as friendly or economically important to the United States were protected by the federal smallpox vaccination program, but Indian nations viewed as aggressor nations were not.

Lewis Cass used his powers as secretary of war to selectively protect American Indian nations who were involved in treaties favorable to the United States. Part of Cass's rationale for his denial of vaccinations to American Indians was attributable to the perceived economic development of the United States. Circumstances were responsible for minor delays in administration of the federal vaccinations, though they were not critical to refusal of vaccinations for Mandans, Arikaras, Hidatsas, Assiniboinis, Crees, and Blackfeet Indians located on the Upper Missouri River. No vaccinations had ever been intended for these nations, and when it was suggested that physicians be returned to the Upper Missouri River the next year to continue vaccinations, the commissioner of Indian affairs made it clear that there were no plans to vaccinate anyone else in the area. Most important, political processes and historical perceptions and problems exacerbated by the United States on the Upper Missouri River were among the main contributors to Cass's decision to limit vaccinations to Lower Missouri River Indian nations. Another critical concept in Cass's decision making was his perception of the Upper Missouri River tribes as savage nations. In 1826, Cass claimed that these nations were beyond the pale of civilization, and in 1832 Cass undoubtedly felt that it was politically efficacious to avoid vaccination of the Upper Missouri River tribes.

Lewis Cass was a political sycophant who advocated Indian removal and the westward expansion of the United States.<sup>79</sup> He was a significant participant in a majority of the treaties that reduced Chippewa and Ottawa land bases during his terms as governor of Michigan and ex officio superintendent of Indian affairs between 1813 and 1831. A loyal supporter of President Andrew Jackson, Cass was appointed secretary of war in 1831, where he served until designated U.S. minister to France.<sup>80</sup> Cass and his family were living in Paris during the summer of 1837, when epidemic smallpox killed untold thousands of unvaccinated American Indians located along the Upper Missouri River. Cass returned to the United States in 1842, where he lost a bid for the presidency in 1844. In 1845, Lewis Cass became the U.S. senator from Michigan.<sup>81</sup>

#### NOTES

1 The Indian Vaccination Act was intended "to provide the means of extending the benefits of vaccination, as a preventative of smallpox, to the Indian tribes, and therefore,

as far as possible, to save them from the destructive ravages of that disease" (May 5, 1832, *U.S. Public Statutes at Large* [Boston: Charles C. Little and James

Brown], 4: 514); "Appropriations: Vaccination of Indians, \$5,000.00," (March 3, 1839, *U.S. Public Statutes*, 6: 323).

- 2 L. G. Randolph, M.D., acting secretary of war, letter to Dr. Thomas S. Bryant, assistant surgeon, U.S. Army, Cantonment Leavenworth, Missouri, September 23, 1830, in *Letters Sent by the Office of Indian Affairs, 1824-1881* (Washington, D.C.: National Archives and Records Administration), records group 75, microfilm 465 (hereafter *Letters Sent*), reel 7.
- 3 J. Dougherty, letter to William Clark, superintendent of Indian affairs, "Smallpox among the Indians," October 29, 1831, 22d Cong., 1st sess., H. Doc. 190, s.s. 233: 1-2; J. Dougherty, "Smallpox among the Indian tribes," February 8, 1832, 22d Cong., 2d sess., H. Doc. 190, s.s. 233: 3-10; J. Jackson, report to secretary of war, Lewis Cass, March 16, 1832, 22d Cong., 1st sess., H. Doc. 190, s.s. 233: 2; I. McCoy, letter to secretary of war, Lewis Cass, March 23, 1832, 23d Cong., 1st sess., H. Doc. 190, s.s. 233: 3; I. McCoy, letter to secretary of war, Lewis Cass, March 27, 1832, 23d Cong., 1st sess., H. Doc. 190, s.s. 233: 3.
- 4 "Vaccination of the Indians," April 17, 18, 24, 1832, Sen. 791-95, Sen. 822-34, in *Gales and Seaton's Register of the Debates of Congress, 1828-1839, 1831-1832* (Washington, D.C.: Historical Documents Institute, 1830), 4: 2, 3; "an act to provide for exchange of lands with the Indians residing in any of the states or territories, and for their removal west of the river Mississippi" (1830, *U.S. Public Statutes* 4: 411-12).
- 5 E. Herring, November 22, 1832, vaccination report, 22d Cong., 2d sess., Ex. Doc. 2, s.s. 233, 1: 159-65, 174-77.

6 "Vaccination of the Indians," April 4, 1832, H. R. 2384-85, in *Gales and Seaton's Register*, reels 2 and 3.

7 Ibid.

8 "Vaccination of the Indians," April 17, 18, 1832, Sen. 791, Sen. 795-96, in *ibid.*

9 Ibid.

10 "Vaccination of the Indians," April 24, 1832, Sen. 834, in *ibid.*

11 The Miami Treaty of 1826 provided cash endowments of \$2,000 a year for the care of the "poor and infirm," though that amount did not cover smallpox vaccinations and was not always paid to the tribe as scheduled. C. J. Kappler, "Treaty with the Miamis," 1826.7 Stat. 300, in *Indian Affairs: Laws and Treaties* (Washington, D.C.: GPO, 1903), 2: 199.

12 348,986,056 acres: "Statement of lands purchased from Indian tribes in each year, from 1789 to 1838, inclusive, with the amounts stipulated to be paid therefore," February 2, 1839, Doc. no. 147, in *The New American State Papers: Indian Affairs*, 13 vols. (Wilmington, Del.: Scholarly Resources, 1972), 1: 576. \$958,959.28: "Statement B, showing the amount of requisitions drawn in the Indian Department between the first of January, and the thirtieth day of September, 1832, the amount of accounts rendered for settlement, and balance remaining to be accounted for," November 22, 1832; Vaccination of Indians, May 1832, report from the Office of Indian Affairs, 22d Cong., 2d sess., H. Doc. 2, 159-77; "Census of Indian tribes, reported in 1836: Number of Indians emigrated," March 8, 1836, in *New American State Papers*, 1: 416, 417.

13 L. Cass, circular, Indian Vaccination Act instructions, May 10, 1832, in *Letters Sent*, reel 12: 465;

- L. Cass, letter to Major John Dougherty, May 9, 1832, in *ibid.*, reel 8: 344–47.
- 14 The following Indian agents or superintendents were responsible for vaccination of the groups of American Indians identified in table 1: J. M. Street, Indian agent for the Indians of Illinois and west of the Mississippi River; L. Taliaferro, Indian agent at Fort Snelling for the Sioux; J. H. Kenzie, Indian agent for the Winnebagoes and Menominees; F. St. Vrain, Indian agent for the Sauks and Foxes; George B. Porter, governor and ex officio superintendent of Indian affairs for Wyandots, Munsees, Shawnees, Ottawas, Chippewas, Potawatomies, Senecas of Lewis-town, Miamis, Winnebagoes, and Christian Indians.
- 15 D. H. Davis, M.D., vaccination report, October 21, 1832, in *Letters Received by the Office of Indian Affairs, 1824–1881* (Washington, D.C.: National Archives and Records Administration), records group 75, microfilm 234 (hereafter *Letters Received*), reel 884; M. Martin, M.D., vaccination report, November 21, 1832, in *ibid.*; Maximilian, Prince of Wied, *Maximilian, Prince of Wied's Travels in the Interior of North America, 1832–1834*, vol. 22–24 of *Early Western Travels, 1847–1848*, ed. R. G. Thwaites (Cleveland, Ohio: Arthur A. Clark, 1906).
- 16 Herring, *Report: Vaccination of the Indians*, February 1, 1833, 22d Cong., 2d sess., H. Doc. 82, s.s. 233; E. Herring, December 1, 1832, "Statement D of the Fund for Extending the Benefits of Vaccination to the Indian Tribes and Remarks on Statement D," *Annual Report, Commissioner of Indian Affairs, 1832* (Englewood, Colo.: Microcard Editions, an Indian-head Co.), microfiche 1925, 174–75.
- 17 Herring, December 1, 1832, "Statement D."
- 18 *Ibid.*
- 19 Herring, *Report: Vaccination of the Indians*, February 1, 1833.
- 20 M. C. Gillett, *The Army Medical Department, 1818–1865* (Washington, D.C.: GPO, 1987), 30–31.
- 21 L. Cass, letter to Doctor Edward James, Albany, December 2, 1833, in *Letters Sent*, reel 11: 376; C. A. Harris, letter to R. Chapman, May 12, 1838, in *ibid.*, reel 24: 193–94; C. A. Harris, to James K. Polk, March 21, 1838, in *ibid.*, reel 23: 481.
- 22 C. A. Harris, letter to Doctor Charles Graham, New York, August 29, 1837, in *ibid.*, reel 22: 270; J. Robb, letter to James K. Polk, House of Representatives, re: Dr. Deames, March 21, 1838, in *ibid.*, reel 23; letter to Dr. Deames, in *ibid.*, reel 23: 481; C. A. Harris, letter to John Tipton, April 9, 1838, in *ibid.*; letter to Dr. Fitch, in *ibid.*, reel 4: 24.
- 23 Herring, *Report: Vaccination of the Indians*, February 1, 1833.
- 24 *Indian Removals*, 5 vols. (New York: AMS Press, 1974); G. Foreman, *Pioneer Days in the Old Southwest* (Cleveland, Ohio: Arthur H. Clark, 1926); G. Foreman, *Indian Removal: The Emigration of the Five Civilized Tribes of Indians* (Norman: University of Oklahoma Press, 1932); G. Foreman, *The Last Trek of the Indians* (Chicago: University of Chicago Press, 1946); *Letters Received, Letters Sent*. Other manuscripts and diaries include materials from historical collections held by a number of historical societies, universities, and those published by the individuals involved. Overall, over 160 sources were accessed to provide the data for table 2.
- 25 J. R. Poinsett, "Revised Regulations no. V, concerning the Emigration of Indians," May 13, 1837, *Annual Report, Commissioner of Indian Affairs, 1837*, microfiche 1925: 123, 124.



- 26 W. B. Lewis, *Report of the Second Auditor, no. 14, Statement A: Treasury Department to Secretary of War Lewis Cass*, November 29, 1834, 23d Cong., 2d sess., H. Doc. 2, 1: 284, 285; W. B. Lewis, *Letter from the Second Auditor of the Treasury Transmitting Statements of the Disbursements of Money, Goods, or Effects, for the Benefit of the Indians, during the Year Ending the 30th of September, 1840*, February 4, 1841, 26th Cong., 2d sess., S. Doc. 161, s.s. 378: 1-114.
- 27 "Census of Indian Tribes, Reported in 1836: Number of Indians Emigrated, March 8, 1836," in *The New American State Papers, Indian Affairs*, 1: 416-17.
- 28 D. H. Davis, M.D., vaccination report, October 21, 1832, in *Letters Received*, reel 884; M. Martin, M.D., vaccination report, November 21, 1832, in *ibid.*; D. J. R. Prefontaine, M.D., letter to Joshua Pilcher, July 9, 1838, in *ibid.*
- 29 See C. J. Kappler, "Treaty with the Chippewa, Ottawa, and Potawatomes," September 26, 1833, in *Indian Affairs: Laws and Treaties* (Washington, D.C.: GPO, 1903), vol. 2, 7 Stat. 431: 296; "Treaty with the Chippewa, Ottawa, and Potawatomes," March 28, 1836, in *ibid.*, Stat. 491: 334; "Treaty with the Winnebagoes," September 15, 1832, in *ibid.*, Stat. 370: 251.
- 30 Total cost is equal to \$17,000.00 less \$3,807.50 that was funneled into other removal medical expenses, plus \$1,500.00 that Commissioner Harris charged to the original act February 26, 1838.
- 31 H. R. Schoolcraft, "Schoolcraft's Expedition to Indians of the Northwest," June 6, 1832, in *The New American State Papers, Indian Affairs*, 4: 269-322.
- 32 J. Allen, "A Map and Report of Lt. Allen and H. B. Schoolcraft's Visit to the Northwest Indians in 1832," May 9, 1832, in *ibid.*, 4: 267-69.
- 33 E. W. Stearn and A. E. Stearn, *The Effect of Smallpox on the Destiny of the Amerindian* (Boston: Bruce Humphries, 1945), 63-64.
- 34 D. L. Ferch, "Fighting the Smallpox Epidemic of 1837-1838: The Response of the American Fur Company Traders," *Museum of the Fur Trade Quarterly* 19, no. 4 (1983): 2-7.
- 35 *Ibid.*, 4.
- 36 J. C. Ewers, *Plains Indian History and Culture: Essays on Continuity and Change* (Norman: University of Oklahoma Press, 1997), 42.
- 37 "Excerpts from Truteau's Journal of Instructions, to M. Lewis from Thomas Jefferson, Nov. 16, 1803," in *Letters of the Lewis and Clark Expedition, with Related Documents, 1783-1854*, ed. D. D. Jackson (Urbana: University of Illinois Press, 1962), 138.
- 38 M. K. Trimble, "The 1832 Inoculation Program on the Missouri River," in *Disease and Demography in the Americas*, ed. J. W. Verano and D. G. Ubelaker (Washington, D.C.: Smithsonian Institution Press, 1992), 261-63.
- 39 E. Herring, letter to Major John Dougherty, St. Louis, Missouri, January 5, 1833, *Letters Sent*, reel 11: 464.
- 40 Kappler, "Mandan Treaty," in *Indian Affairs: Laws and Treaties*, 2: 171.
- 41 Kappler, "Hidatsa Treaty and Arikara Treaty," in *ibid.*, 2: 167, 169.
- 42 L. Cass, "Indians of North America," *North American Review* 24 (1826): 391, microfilm 3299, reel 270.
- 43 C. J. Kappler, "Treaties Drawn with Indian Nations," in *Indian Affairs: Laws and Treaties*, 2: 139-289.

- 44 D. H. Davis, M.D., vaccination report, October 21, 1832, in *Letters Received*, reel 884; M. Martin, M.D., vaccination report, November 21, 1832, in *ibid*.
- 45 E. Herring, to General William Clark, superintendent of Indian affairs, May 10, 1832, *Letters Sent*, reel 8: 352.
- 46 L. Cass, letter to Major John Dougherty, May 9, 1832, in *ibid*.
- 47 Kappler, in *Indian Affairs: Laws and Treaties*, 2: 809, 813.
- 48 Each treaty preamble clearly identifies the subject group as an aggressor nation by the United States: treaty with the Arikaras, July 18, 1825, "To put an end to unprovoked hostility on the part of the Ricara Tribe of Indians against the United States, and to restore harmony between the parties"; treaty with the Belantse-etoa or Minnetsaree (Hidatsa), July 30, 1825, "Whereas acts of hostility have been committed, by some restless men of the Belantse-etoa or Minnetsaree tribe of Indians, upon some of the citizens of the United States"; treaty with the Mandans, July 30, 1825, "Whereas acts of hostility have been committed by some restless men of the Mandan Tribe of Indians upon some of the citizens of the United States" (Kappler, in *ibid*., 2: 167, 169, 171). No other American Indians included in the Indian vaccination program in 1832 were labeled in this manner, including all other tribes located on the Missouri River.
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- 50 J. Barbour, *Documents of the Expedition up the Missouri River*, March 16, 1824, 19th Cong., 1st sess. (1826), H. Doc. 117, s.s. 136: 12 (Washington, D.C.: Congressional Information Service); M. H. Breckenridge, in *Exploring the Northern Plains, 1804-1876*, ed. L. McFarling (Caldwell, Idaho: Caxton Printers, 1955); J. C. Calhoun, *Report to the Committee of Military Affairs, Military Expedition up the Missouri River from Council Bluffs to the Mandan Villages and the Yellow Stone River*, 1820, 16th Cong., 1st sess., H. Doc. 23 s.s. 40: 6; P. Chouteau, letter to William Henry Harrison, May 22, 1805, in *Letters of the Lewis and Clark Expedition, with Related Documents, 1783-1854*, 2d ed., ed. D. D. Jackson (Urbana: University of Illinois Press, 1978), 1: 242-43, 246; P. Chouteau, letter to William Eustis, December 14, 1809, in *Letters of the Lewis and Clark Expedition*, 2d ed., 2: 481-83; E. P. Gaines, *Report: Arikara Campaign*, July 28, 1823, 22d Cong., 1st sess., H. Doc. 1, s.s. 020, 4: 57-80; T. Jessup, *To Select Committee, House of Representatives: Expediency of Moving Troops to Occupy and Erect Fort at Mandan Villages*, 1824, H. Doc. 110, s.s. 106, microfiche 3; J. C. Luttig, *Journal of a Fur-Trading Expedition on the Upper Missouri, 1812-1813* (New York: Argosy-Antiquarian, 1964).
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