

North American Vaccination above the 49th Parallel

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Smallpox was an epidemic disease of major public health significance in Canada until its disappearance by about 1946. This report begins by describing the diffusion of smallpox in the landmass north of the 49th parallel, and the progress of vaccinators, and finally there is an account of efforts to produce, and deliver to vaccinators, an effective, uncontaminated, and cheap vaccine.

During the 16th and 17th centuries, the native (indigenous) populations of North America were ravaged by intermittent smallpox infections and epidemics brought by European colonisers who themselves sometime died. At that time and almost a century later, the colonizing population was concentrated on the eastern, in Quebec, and the eastern part of what is now called Ontario.

Moving westward the first exploration group breached the Rocky Mountains to reach the Pacific Ocean in 1793, just a few years before Edward Jenner's first book.

Smallpox diffused along trading hunting and exploration routes encouraged by the development of forts primitive settlements and large unsanitary centres of population in a country that was still sparsely populated approximately 75 years post-Jenner.

There were two other routes of entry for the disease. Trading vessels and settlers from Russia and China reached the west coast and Alaska. The Spaniard's voyaged north from their settlements in what is now California. However there is a lack of historical evidence to support a hypothesis that either of these routes played an important role for vaccination in Canada.

It was not until 1879 that the National Vaccine Establishment (NVE) developed the animal Vaccine Establishment so it is probably from the NVE that the Hudson's Bay Coy obtained its supply in the earlier part of the 19th century. Whatever method was employed, transport to or across Canada was sometimes unsatisfactory and there seems to have been worldwide uncertainty regarding the best method. In Canada, as in other parts of the world, serial vaccination of travellers seems to have been an important early method.

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