

May 1, 2020

RESEARCH RESULTS ON THE COVID 19 PANDEMIC AND FIRST NATIONS INCLUDING SMALLPOX IMPACT SINCE FIRST CONTACT

OVERVIEW

This report summarizes the findings from a series of articles and research papers (including videos) on smallpox and other infectious diseases that have plagued our nations since first contact. For each article or film a quick synopsis of its content is provided, with links (where available) to the article or video. This will assist in developing appropriate messages to our member nations on how to be more diligent about this particularly virulent and destructive strain of Coronavirus. The report also provides a timeline of the viral diseases worldwide. The timeline also indicates which viruses affected our people, the most obvious and destructive example of course, is smallpox.

The key message that should be strongly conveyed after viewing the documentary “Corona” on Netflix, is that this is not a government conspiracy or germ warfare against our people as was the infected smallpox blanket from the 19th century. The COVID 19 pathogens are real and we have to respond accordingly to prevent its potentially devastating impacts in our communities, particularly where many of our people already have underlying medical issues.

It is vital to our survival that the Carrier and Sekani people recognize that they must take preventative actions to minimize the risks of COVID 19 infections because as history has shown us, the results could be devastating. Like smallpox, we do not have the medical treatment resources sufficient to contain an outbreak or to treat those who may be infected, particularly our elders and our children.

To that end, the message to member nations should stress again the importance of social distancing and in some cases self-isolation (and handwashing). One interpretative way of communicating the virus from a cultural perspective might be to compare the self isolation and social distancing measures traditionally taken when on a vision quest. The Carrier and Sekani people have always exercised this form of self isolation during a healing journey or rite of passage. Some excerpts below from various sources might be used to demonstrate this cultural component. The following pages contain passages from various sources which document the impact of smallpox and other such pandemics on the Carrier people.

LESSONS FROM HISTORY – THE CARRIER PEOPLES AND PANDEMICS

Although the Sekanis occasionally experienced famine due to shortages of game, their mobile, dispersed and geographically remote pattern of settlements spared them from epidemics (Lanoue, 1983: 174-183). The Carriers, however, suffered terribly from periodic epidemics that drastically reduced their numbers (Hudson, 1983: 99-101). Throughout the latter half of the 19th century, measles, smallpox, whooping cough and influenza took a terrible toll. In one instance, an entire southern Carrier band in the Bowron Lakes area was wiped out (Furniss, 1995: 534). In 1918, there was a devastating outbreak of influenza that decimated villages throughout the Carrier region. The notebook of Father Coccoła, for example, recorded that one-third of the village of Stoney Creek (Saikuz) perished from influenza (Coccoła, 1919: 27). In some cases, entire villages disappeared (Morice, 1978: 307-308).

The impact of epidemics on Carrier society was traumatic. Families disappeared; other families adopted orphaned children; many clan leaders, Elders, skillful hunters and spiritual leaders

died. The matrilineal pattern of the central and northern Carrier, through which the clan system perpetuated itself, was blurred as families were fractured and re-organized to accommodate the disaster. The loss of clan leaders and Elders, the custodians of Carrier oral traditions, was especially destabilizing as regards the maintenance of traditional Bahlats government.

[Brown: Carrier-Sekani Self-Government in Context; Doug Hudson: 37]

Social conduct coupled with vision quests to access personal guidance (which required one to be separated from community and families) as one's spirit animal or guardian spirit was a rite of passage for adolescents.

The benefits of the traditional way of life depended on the individual members of Carrier and Sekani communities learning all they could about the plant and animal communities surrounding them, and about the practical application of indigenous technology to resource harvesting. Good social conduct also fostered economic success through cooperative group effort and sharing. Many of the traditional stories (e.g., Rossetti, 1991), used to educate children as they grew up, stressed kinship with, and respect for, other living creatures as well as ethical social conduct based on mutual respect, good humour, generosity, and patience. It was common for adolescent boys and girls to access personal guidance from the spirit world through communicating with the spirits of animals who were perceived in dreams as guardian spirits. In the traditional worldview people, animals, plants, fish, and other aspects of nature were part of one large interdependent family, each member having a rightful and respected place in a shared reality. Even today it is still common for Elders to remind their people that the earth is like everyone's mother, and all living things are her children.

[Brown: Carrier-Sekani Self-Government in Context; Doug Hudson: 37]

SMALLPOX

European colonization imported smallpox into North America in the 17th century. The global spread of smallpox can be traced to the growth and spread of European civilizations, exploration, and the expansion of trade routes. The disease arrived in what is Canada with French settlers in the early 17th century. Mig'maq tribes had no immunity to smallpox, resulting in devastating infection and high rates. In 1768, arm-to-arm inoculation became more widely practised in North America. By 1800, advances in vaccination helped control the spread of smallpox, however in British Columbia efforts at reduced rates of infection did not help aboriginal people. In the 20th century, Canadian scientists helped the World Health Organization eradicate smallpox. Eradication was achieved in 1979, but virus stocks still exist for research and precautionary reasons.

The first cases of smallpox in British Columbia can be traced to a passenger arriving on March 12, 1862 from San Francisco to Victoria to take part in the gold rush. Along with the merchandise and mules, “the ship carried 350 passengers to Victoria, then home to 4000 to 5000 colonists, with slightly more Indigenous people from various nations camped nearby for trade and work.” [British Colonist Newspaper]

The story of the 1862-63 smallpox epidemic on Vancouver Island and in British Columbia carries further lessons for the present day. It highlights the historic injustices that have brought First Nations to the disadvantaged situation they occupy today. For historians of medicine,

...it illustrates how social, political and religious issues can intersect in the midst of a medical crisis. The absence of institutional arrangements and of reliable testing and treatment methods can produce capricious responses to such a crisis. We might hope that our modern arrangements offer rational, predictable and effective solutions to public health incidents as they develop. But when standard procedures falter in the face of new threats, individuals and groups (particularly those asserting authority) can exploit the situation or, at the very least, allow their various social, political and religious views to guide their behaviour more freely than usual. Procedures can be standardized and regulated; core values cannot. While the possibility of a truly all-encompassing epidemic, as well as the attitudes of the 19th century European colonists, may sometimes seem distant to many of us today, we have never fully eliminated either, but merely kept them at bay. <https://doi.org/10.3138/cbmh.23.2.541>

In reviewing some of the historical references to smallpox, the most lethal and destructive was the smallpox wave of 1862 which is estimated to have caused 14,000 deaths among indigenous people. on the coast, despite attempts for inoculation and vaccination:

How effective were all these vaccination and inoculation campaigns? Dr. Helmcken reported that the Songhees, many of whom he had vaccinated or inoculated, remained free of the disease. Henry Ball reported after his vaccination campaign in the summer of 1862 that “as yet the disease has not spread into the Interior of British Columbia.” Metlakatla, where William Duncan worked, apparently escaped the epidemic. A number of these successes coincided with successful isolation (e.g., Metlakatla, the Songhees on Discovery Island), so the relative effectiveness of vaccination versus isolation is hard to determine. In other locations, vaccination efforts did not stop smallpox from raging in the area; for example, William Manson noted a violent outbreak of smallpox in the Kamloops area, despite all his vaccination efforts. Estimates vary widely for the total number of Natives who died in the epidemic across Vancouver Island and British Columbia; Robert Boyd suggests that nearly 14,000

died on the coast alone. If such enormous estimates are roughly correct, then vaccination efforts must have been horribly insufficient or even counterproductive. The clinical expression of smallpox could sometimes be quite complex, and determining whether a vaccination had been effective was frequently very difficult; many vaccines might have been completely ineffective. Furthermore, vaccination efforts might have been so sporadic, so few and far between, that great swaths of death surrounded the tiny remaining stands of survival. Finally, as the disease rapidly began to spread, efforts to contain the disease became increasingly difficult, and would often come too late.

<https://doi.org/10.3138/cbmh.23.2.541>

SYNOPSIS OF ARTICLES AND VIDEOS RELATED TO COVID 19 PANDEMIC AND FIRST NATIONS:

This Tye article stresses that First Nations must be extra vigilant - it details the impact of smallpox on Indigenous people in BC and the north. It also talks about measles and other diseases that killed thousands First Nations.

<https://thetyee.ca/Analysis/2020/04/01/First-Nations-Know-Pandemics/>

This video provides a history of smallpox by former Mayor of Vancouver, Sam Sullivan, narrator of the film. Because First Nations had no immunity, the disease spread quickly. Whole villages were wiped out. Note the photograph below this link which depicts the Blackwater Indians graveyard and their near annihilation from smallpox. Smallpox has had a major impact on world history, not least because indigenous populations of regions where smallpox was non-native, such as the Americas and Australia, were rapidly decimated and weakened by smallpox (along with other introduced diseases) during periods of initial foreign contact, which helped pave the way for conquest and colonization.

<https://www.youtube.com/watch?v=7qmxrVPxc6Y>



Item NA-39553 - Common grave at Graveyard Lake; members of the Blackwater Tribe wiped out by smallpox:

COVID 19 AND FIRST NATIONS

This informative article is about worldwide pandemics including smallpox which devastated First Nations especially in British Columbia. While most of the data is accurate, there appears to be some discrepancy with dates regarding the various smallpox waves that hit B.C. The article refers mainly to the waves of smallpox from the late 1700's. In actuality, the last big wave of smallpox to hit B.C. was in 1862. Please refer to the timeline I created on all pandemics attached to the end of .

Source: <https://www.ictinc.ca/blog/indigenous-peoples-and-covid-19>

This is a good survey article on "The doomed 30-year battle to stop a pandemic" It emphasizes that the pandemic can be widespread and devastating in the long term.

<https://www.macleans.ca/news/world/the-doomed-30-year-battle-to-stop-a-pandemic/>

The Atlantic has a more telling warning; Now Is the Time to Overreact “ If the measures we're taking to fight the coronavirus work, they'll look excessive later on. But the alternative is worse.”

<https://www.theatlantic.com/health/archive/2020/03/theres-no-shame-in-overreacting-to-the-coronavirus/608140/>



Circa 1909; Mig'maq woman with smallpox; National Archives of Canada

ARTICLES

The following article published in 2015 discusses the impact of diseases such as smallpox, tuberculosis, and other influenzas on indigenous populations (especially in the Prince George Carrier territory). It draws parallels to colonialism and how vulnerable indigenous people were to the ravages of not just disease, but health and social policies by the Department of Indian Affairs.

One of the researchers and contributors is none other than Sarah de Leuw; The paper was prepared by Prince George: Socio-historical, Geographical, Political, and Economic Context Profile; Varcoe, C. M., Browne, A. J., & Einboden, R. (2015). EQUIP Healthcare: Research to equip primary healthcare for equity, in partnership with Central Interior Native Health Society. University of British Columbia, Vancouver & Prince George, BC.

Smallpox, influenza, and famine

Disease followed shortly behind each wave of settlers, devastating British Columbia's Indigenous populations. From 1782, smallpox spread overland from the south, killing "one-third of affected communities in BC, mostly in Salish territories. By 1840, smallpox, influenza and other diseases kill[ed] roughly 65 to 95 per cent of Indigenous populations in the area" (Union of British Columbia Indian Chiefs, 2005, p. 14). The spread of disease throughout Aboriginal communities was expedited by forced displacement and relocation by the colonialists, as well as the gradual destruction of Indigenous health and healing practices.



Figure 6: Coast Salish Territory (retrieved from: <http://www.seattleu.edu/artsci/ethnobotanical/default.aspx?id=15866>)



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Britain established colonial authority after the War of 1812, and the political agenda shifted from conquest to development. The British Crown reinforced the European ideal of colony development, with a particular focus on agriculture and industry (Furniss, 1995). The continued migration of Aboriginal peoples within their traditional territories, which had been advantageous to white settlers during the time of the fur trade, began to interfere with these agricultural and industrial pursuits (Furniss, 1995). Traditional nomadic practices were essential to maintaining alliances with neighbouring Aboriginal communities, successful hunting and fishing practices, and the preservation of safe and clean living environments. These relationships, both with each other and the land, ensured food security in the extreme environmental conditions of northern BC, and had *successfully protected Indigenous population health for centuries* (Furniss, 1995). The Crown viewed the establishment of reserves as the ideal solution to this ‘problematic’ competition for land and resources, however, limiting the movement of Aboriginal people and impeding Aboriginal individuals from properly caring for and feeding both themselves and their communities.

When a second epidemic of smallpox erupted in 1862, it devastated Indigenous communities near Fort Victoria, the site of present-day City of Victoria. At this time, infectious diseases began to be used as *an aggressive technique of colonial power*. The Union of British Columbia Indian Chiefs recounts the spread of the disease, as “infected people [were] forced (some by gunboat) back to their communities. By 1864, Indigenous communities [had lost the] majority of their population” (2005, p. 17).

The geographic spread of smallpox increased in the mid-1860s as it was brought from the coast into the remote northern regions of the Dakelh territories; this was facilitated, as previously mentioned, by the Cariboo Wagon Road and the influx of gold miners. Kelm (1999) argues that the Aboriginal death rates were systematically underestimated in official records, allowing the Aboriginal health crisis to be easily disregarded and neglected by officials and settlers. Incredibly high mortality rates, concurrent with an influx of white settlers, meant that Indigenous people were outnumbered by settlers by the 1890s (Fisher as cited in Kelm, 1999).

Assumptions that “Aboriginal bodies are *naturally*, inevitably stressed once in contact with Europeans” (Kelm, 1998, p. xvi, emphasis original) legitimized the shift from conquest to paternalistic protection. Colonialists imagined the Aboriginal body as inherently weak, with a genetic inability to fight infectious diseases; this supported an increasing number of policies and practices that were not only detrimental to Aboriginal people, but that *detracted attention from the broader historical, social, and political contexts undermining Aboriginal peoples’ health and wellbeing*. Many Aboriginal people understood these policies as negatively affecting their communities, however some did believe that Western medicine might offer relief for suffering Aboriginal communities, and many Indigenous peoples willingly engaged with Western medical practices. Racist assumptions that Aboriginal people were unsanitary made the detrimental health effects of colonization easily ignorable, and this *further legitimized any and all colonial attempts to assimilate Aboriginal persons into settler culture*.



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Medical practices offered on reserves² were funded through the Department of Indian Affairs (DIA). This department was initially founded in 1755 to manage Britain's military alliances. By the late 18th century responsibility for the department was assigned to the colonial government. By the mid-1800s, as the military significance of Indigenous people decreased, the Department of Indian Affairs began focusing on 'civilizing' Aboriginal people through various colonial projects, including the organization and control of culturally inappropriate Aboriginal healthcare (Indian and Northern Affairs Canada, 2011). This care was notoriously inconsistent, as attracting and retaining quality staff in rural communities was challenging. Additionally, even competent and committed practitioners divided their practice between the DIA and other contracts within the wider community. In 1902, the DIA altered their funding arrangements from pay-per-service to a low salary, leaving "little incentive to spend more time on reserve [when] paying non-Native patients beckoned" (Kelm, 1999, pp. 29-30). These funding arrangements contributed to increasingly poor access to health care for BC's Aboriginal communities. Overtime, inequitable access to care became entrenched within Indigenous communities, a persistent problem that continues to impact the Aboriginal populations of British Columbia today.

In 1918, the Spanish Influenza epidemic spread internationally as soldiers were demobilized at the end of World War I. High morbidity and mortality rates across populations and the lack of a cure meant that resources for quarantine and supportive care for hydration were quickly overwhelmed. Municipalities closed social programs and services, and while the Prince George hospital treated some Carrier men, many communities were left with no support. Elder Mary John, from the Saik'uz Nation, remembers that during the flu epidemic the departmental physician in Vanderhoof (roughly 100 km West of Prince George), "hardly came to the reserve at all" (Moran, 2010 [1988], p. 33). By this time, the Indian Act, explained in more detail in following sections, had outlawed practices that were central to Indigenous health and healing, resulting in concentrated mortality and morbidity within Aboriginal populations (Kelm, 1998).

Based on data from the National Health and Welfare records and interviews, Kelm (1999) describes Aboriginal "death rates [as] *over nine times higher than [those] for non-Natives* across the province" (p. 37, emphasis added). Mortality did differ between different Indigenous groups, and death rates for the Dakelh were by and large disproportionately high, particularly for children under the age of 17 and adults over the age of 65 (see blue highlighted cells in Table 1, below).



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Table 1: Spanish influenza crude mortality rates, October-November 1918

Lytton		Stoney Creek (Carrier/ Dakelh people)		Kitamaat (Haisla people)	
per 1,000 population	Age (years)	per 1,000 population	Age (years)	per 1,000 population	Age (years)
1.2	< 6	133	< 6	224	< 6
0	6-15	222	6-15	63	6-15
59	16-20	294	16-20	39	16-20
34	21-65	216	21-65	25	21-65
15	> 65	666	> 65	125	> 65

Adapted from: (Kelm, 1999, p. 38)

“[F]our out of six of the elders aged over sixty-five reported to be alive in 1917 died in October 1918. [...] Nearly one-third of the population at Stoney Creek was carried off by the disease; half were under the age of twenty. [...] Carrier Elder Margaret Gagnon remembers that when she was eventually able to get out of bed, her reserve at Shelley *was like a ghost town*” (Kelm, 1999, p. 37, emphasis added). Concurrent high morbidity meant that rituals essential to the proper care of

the dead could not be observed, and dangerous transgressions at the boundary between the dead and living haunted the community (Kelm, 1999).

This morbidity was directly related to confinement in reserves, consequential issues with resources and nutrition, and the confinement of children within institutionalized residential schools (Furniss, 1995; Kelm, 1999; see following section for more information). High mortality rates in those 20 years of age or younger are unusual for influenza, and generally *signify chronic underlying illness*. In this context, mortality from influenza in this young population was directly and explicitly related to the endemic tuberculosis acquired and perpetuated in residential schools.

Epidemics occurring throughout Aboriginal populations, and especially in the Dakelh territories, are illustrative of the ways colonization compromised Aboriginal people's health (Kelm, 1999). These epidemics act as a *material representation of colonial power and its effects*. Isolating infected individuals within their communities through the use of force, the inability of Western medicine to offer a cure and/or limit the contagions, and the outlawing of Indigenous health practices and ceremonies were strategic techniques of oppressive colonial power (Furniss, 1999; Kelm, 1998). The impacts of infectious diseases on the Indigenous communities of Northern British Columbia can be understood as resulting from the *complex intertwining of biological, geographical, social and political processes*.

VIDEOES

In terms of videos, this APTN News Broadcast show why some Manitoba chiefs think that Indigenous peoples are 'resilient' and can survive COVID 19:

'Our people are resilient': Manitoba First Nations organization prepares for pandemic:

<https://aptnnews.ca/2020/03/18/our-people-are-resilient-manitoba-first-nations-organization-prepares-for-pandemic/>

The Canadian Encyclopedia article on smallpox in Canada shares grim news about the impact on Indigenous peoples:

<https://www.thecanadianencyclopedia.ca/en/article/smallpox>

This video on smallpox in early British Columbia is most revealing. "With the COVID 19 Pandemic, we remember the disastrous first epidemic to strike British Columbia. Our province has experienced several contagious outbreaks but none matches this first one. Also known as

SARS CoV 2 and the Corona Virus, these types of pandemics often hit vulnerable populations like indigenous people very hard."

1862 Smallpox Epidemic: British Columbia's First Major Contagious Outbreak

<https://www.youtube.com/watch?v=7qmxrVPxc6Y>

The First Nations Health Authority has a series of short videos that touch on the traditional versus post-contact approaches to dealing with illness.

<https://www.fnha.ca/WellnessSite/OurHistoryOurHealthSite>

This video talks of what Sir John A. Macdonald did to Indigenous people ...

https://www.youtube.com/watch?time_continue=76&v=-SFcgtcUTjs&feature=emb_title

The National Post article that accompanies it is here:

<https://nationalpost.com/news/canada/here-is-what-sir-john-a-macdonald-did-to-indigenous-people>

TIMELINE OF WORLDWIDE DISEASES AND PANDEMICS: THOSE IS RED AFFECTED FIRST NATIONS IN CANADA

Name	Time period	Type / Pre-human host	Death toll
Antonine Plague	165-180	Believed to be either smallpox or measles	5M
Japanese smallpox epidemic	735-737	Variola major virus	1M

Plague of Justinian	541-542	Yersinia pestis bacteria / Rats, fleas	30-50M
Black Death	1347-1351	Yersinia pestis bacteria / Rats, fleas	200M
New World Smallpox Outbreak	1520 – onwards	Variola major virus	56M
Great Plague of London	1665	Yersinia pestis bacteria / Rats, fleas	100,000
Italian plague	1629-1631	Yersinia pestis bacteria / Rats, fleas	1M
Cholera Pandemics 1-6	1817-1923	V. cholerae bacteria	1M+
New World Smallpox Outbreak	1862	Variola virus	14,000 British Columbia
Third Plague	1885	Yersinia pestis bacteria / Rats, fleas	12M (China and India)
Yellow Fever	Late 1800s	Virus / Mosquitoes	100,000-150,000 (U.S.)
Russian Flu	1889-1890	Believed to be H2N2 (avian origin)	1M
Spanish Flu	1918-1919	H1N1 virus / Pigs	40-50M
Asian Flu	1957-1958	H2N2 virus	1.1M
Hong Kong Flu	1968-1970	H3N2 virus	1M

HIV/AIDS	1981-present	Virus / Chimpanzees	25-35M
Swine Flu	2009-2010	H1N1 virus / Pigs	200,000
SARS	2002-2003	Coronavirus / Bats, Civets	770
Ebola	2014-2016	Ebolavirus / Wild animals	11,000
MERS	2015-Present	Coronavirus / Bats, camels	850
COVID-19	2019-Present	Coronavirus – Unknown (possibly pangolins)	234,000 (Johns Hopkins University estimate as of 5:32am PT, May 1, 2020)

Note: Many of the death toll numbers listed above are best estimates based on available research. Some, such as the Plague of Justinian and Swine Flu, are subject to debate based on new evidence.

<https://www.visualcapitalist.com/history-of-pandemics-deadliest/>