
FIRST CONTACT: Smallpox "a sickness that no medicine could cure, and no person escape" ${ }^{\text {st }}$


## I N TR O D U C T I O N

The subject of "contact" provides an avenue for discussing a broad range of Stó:lōXwelitem relations in the pre-settlement years. This chapter diverges from the traditional approach that views contact as an aspect of the Xwelitem exploration process, instead focusing on the complex and controversial issues of depopulation and disease. Smallpox reached the traditional territory of the Stó:lō people at least a generation before the arrival of the first Euroamerican (Xwelitem in the Halq'eméylem
 language). To better appreciate the physical and social impact of smallpox on Stó:lō communities this chapter documents the clinical features of the disease, and then places the discussion within a broad historical context. The cultural survival of the Stó:lō people in the wake of such devastation serves as an indicator of the strength of their cultural traditions and their ability to adapt in the face of adversity.


1FIRST CONTACT WAS PASSIVE - NOT ACTIVE, BUT IT WAS DEVASTATING When people ask "when did first 'contact' occur between the Stó:lō and Euroamericans," a common response is "in 1808, when Simon Fraser travelled down the Fraser River." This answer is probably satisfactory if we think of "contact" as simply being the first "face-to-face" meeting of people from different cultures. Scholars suggest that we also consider the likelihood that at least a few Stó:lō must have briefly met European maritime fur traders and explorers like Captain George Vancouver in the Strait of Georgia, almost sixteen years before Simon Fraser arrived. ${ }^{2}$

In many ways the "face-toface" definition is too limiting. Perhaps a better way to define "contact" is to try and determine when meaningful or significant exchange occurred between the Stó:lō and Xwelítem.

Fraser only spent a few short days in the region, and therefore one might conclude that "contact" did not really occur until years after his arrival, perhaps at the time Fort Langley was established in 1827 by the Hudson's Bay Company. However, when using the definition "meaningful exchange" it is more useful to look back, rather than forward, into history to the year 1782 - twen-ty-six years before Simon Fraser arrived. In that year, a devastating disease called "smallpox" was introduced into Stó:lō territory from Mexico through an extensive network of Aboriginal trade routes. ${ }^{3}$

It is estimated that within weeks of contracting smallpox in 1782, roughly two thirds of the Stó:lō population died horrible, painful deaths. By comparison, the kind of "contact" represented by the arrival of Simon Fraser had a relatively small impact upon Stó:lō society. This is interesting, because Fraser's
contact was "active," in the sense that he made a conscious effort to meet the Stó:lō. Ironically, the devastating 1782 smallpox epidemic was a passive form of "contact," because no one from either culture intended it to happen. In fact, Europeans were unaware that the smallpox disease had travelled into Stó:lō territory until a decade later. Similarly, because no Europeans were in Stó:lō territory when the epidemic broke out, the Stó:lo did not immediately associate the disease with its European source.


Two generations of Stó:lō people had been exposed to aspects of "contact" before the Hudson's Bay Company establish Fort Langley in 1827 along the lower Fraser River.


Variola Virus - The first ambassador of European society to the Stó:lō. Virions of variola virus (A and B) and varicella virus (C) as seen in negatively stained preparations submitted for diagnosis to the WHO Collaborating Centre at the Centres for Disease Control, Atlanta Georgia. Bar $=100 \mathrm{~nm}$.

2

## WHAT IS SMALLPOX?

Smallpox is caused by a parasitic virus called variola. It is classified as a parasitic disease because the virus is destructive to its host (the person who catches it). Smallpox is also considered a "crowd disease" because it only spreads between humans and requires a large densely populated community in order for it to survive. Like other crowd diseases, smallpox spreads from urban centres outwards into non-immune populations until it eventually reaches areas where the population is too thin to allow it to spread further. Once smallpox runs out of new host bodies, it dies out.

Biologists believe that approximately 3000 years ago (in either Egypt or India), a virus which originally effected only cattle, mutated, creating the smallpox virus. This follows the trend of the world's extremely lethal "crowd" diseases, most of which originated after the domestication of animals. Because large scale animal domestication
never occurred in North or South America this region essentially escaped such viruses until they were introduced by Europeans. ${ }^{4}$

Smallpox is spread by "droplet infection." Droplets are body fluid, such as the moisture which escapes when a person sneezes. A single human sneeze releases up to 5000 droplets, each of which has the potential to carry viruses. During a sneeze droplets are expelled from a person's mouth at up to $160 \mathrm{~km} / \mathrm{hr}$, and travel over four metres. Smallpox can also be transmitted by other forms of physical contact. The smallpox virus remains active on corpses for up to three weeks, and can therefore spread from a dead host to a living host though body fluids. If the smallpox virus is deposited onto warm damp items, such as clothing or blankets, it can remain infectious for up to one year.

## 3

IMMUNIZATION/ VACCINATION
If a person catches smallpox and lives, they develop an immunity to the disease and can never catch it again. People in Europe and Asia accidentally discovered that people who became infected with smallpox through a scratch on the skin suffered a less severe form of the disease than those who contracted it through their respiratory tract. By the early 1700 's, some European doctors began storing samples of smallpox pus and scabs in jars. If an epidemic broke out, doctors made a small cut in a person's arm and smeared some of the pus or scab into the wound. Intentionally infecting people in this manner was called "inoculation." Inoculated patients became sick with

## TOTS NEED THEIR SHOTS!



## Immunization Guide

and Christian missionaries began attempting to vaccinate Aboriginal people whenever a smallpox outbreak occurred. During one devastating smallpox epidemic, in 1862, Catholic and Methodist missionaries vaccinated hundreds of Stó:lō people, thereby preventing their communities from being as badly impacted by the disease as more northern Aboriginal people who had no access to the vaccine.

By the early twentieth century, most Canadians were being routinely vaccinated as children. This process was so successful, that by the 1970's smallpox had been essentially eliminated, and the government began to phase out their vaccination program. Until the early 1980's the smallpox vaccine was available upon request for Canadian travellers visiting isolated countries. The world's last immunization occurred in 1983.5 In that year the World Health Organization (WHO) declared that due to the success of the immunization process there was no longer any chance of smallpox occurring naturally - the virus had been eliminated. To prevent future outbreaks, scientists with WHO destroyed all existing samples of smallpox, locking a single flask containing the last known sample of the variola virus in a vault at the offices of the U.S. Centre for Disease Control in Atlanta, Georgia. WHO plans to destroy this sample on June 30, 1999. But before doing so, they want to be absolutely certain the disease has been truly eradicated in the natural environment, and that no samples are held by terrorist organizations. Today, you can identify a person who has been vaccinated or immunized by the presence of a small round "pox scar" on their shoulder or hip. People born in British Columbia after the late 1970's do not have this scar, because they were not vaccinated.


The official parchment certifying the global eradication of smallpox， December 9， 1979.

## 4

THE SMALLPOX DISEASE
Imagine what would happen if a terrorist broke into the vault at the Centre for Disease Control and stole the flask containing the only remaining sample of the vario－ la smallpox virus and in their escape they dropped the flask and became infected．Imagine further，that person visit－ ed your home town and sneezed on you as you walked down the street．The＂sneeze droplets＂would immediately be sucked into your respiratory tract，infecting you，and making you infectious to others．For the next seven to eighteen days the virus would incubate within you，yet there would be no symptoms to indicate to you or anyone else that you had caught the virus．After the incubation period had ended，you would begin to show outward signs of being sick．First，you would develop a fever，headache， and body pains．The head and body aches would last two days，but the fever would remain throughout the duration of the sickness．After two weeks，you would develop a rash． Red spots would appear on your face，hands，and feet，and then slowly spread over your entire body．These spots would soon become raised lesions which would fill with a watery pus similar to a blister．The lesions would grow to approximately the size of a dime and would quickly transform into pustules as hard crusty scabs formed over their surface．

All of the symptoms described above are standard responses for anyone contracting the smallpox disease．If you were lucky，and survived to this stage，the dried scabs
covering your body would slowly fall off，leaving deep permanent scars called pockmarks．Once the scabs had disappeared，you would no longer be con－ tagious．If you were not as lucky，the sores would move from your outer skin and spread to the inside of your mouth or throat．Once this occurred，you would be unable to eat and could only swallow liq－ uids with a great deal of pain．Such sores sometimes became so large，they would grow together into giant hemorrhaging lesions．If this happened，it would not be unusual for all the skin on your arm， leg，or face to simply slip off，exposing raw muscle and bone．

If the disease reached this point there is essen－ tially no chance of your survival．It would take only one month from the time the terrorist，or someone he infected，sneezed on you until either the scabs fell off or you died．The death rate increases substan－ tially if other factors combine to complicate the sit－ uation．For example，people who are exposed to smallpox often developed pneumonia，pleurisy，and blindness caused by scarring of the cornea．Death rates are also higher for infants，children，elderly people，and pregnant women．

Today，even with modern medicine there is no cure for smallpox．If you become infected，

## SMALLPOX



The above United Nations poster provides a visual depiction of smallpox rashes on four areas of the body following the incubation period．


Mr. F.D., age 28, suffering from smallpox in Vancouver General Hospital, 1932.
absolutely nothing can be done to stop the disease from running its full course and there is little doctors can do to alleviate the painful symptoms. Once you are exposed to smallpox you have smallpox. ${ }^{6}$ A minimum of one third, or $33 \%$, of all people exposed to smallpox die from the disease.


Mr. L.P. age 21, suffering from smallpox in Vancouver General Hospital, 1932.

Mrs. E.S., age 37 , suffering from smallpox in Vancouver General Hospital, 1932.
of 104 degrees Fahrenheit ( 40 degrees Celsius). Rash rapidly spread to involve whole body and showed early tendency to become confluent (merge). Many spots in mouth and pharynx (mouth, nose, and upper throat).

- February 3rd much oedema (swelling) of throat.
- Patient died February 7th.

5
BRITISH COLUMBIA'S LAST SMALLPOX EPIDEMIC
For a variety of reasons, in the early twentieth century some British Columbian residents refused to allow doctors to vaccinate them against smallpox. In January of 1932, approximately 100 people in the Vancouver region became sick, suffering from fever, headaches, and rashes. Doctors became horrified when, upon admitting the patients to the Vancouver General Hospital they learn that the people had contracted smallpox. Tragically, nearly all died within a month.

As the disease progressed, detailed notes, records, and some photos of the patients were kept by Dr. Mathewson

## Mr. L.P.:

- (Symptoms began on) February 1st when patient developed headache and backache. The following day he was nauseated and felt chilly. February 3rd (patient) started to develop muscular rash on forehead, face and arms.
- Admitted to the hospital February 4th. Temperature 103.2 degrees Fahrenheit (39.6 degrees Celsius). On admission erythema- redness typical in character and distribution. Very severe lobster red crythoma on face. General adenopathy (enlargement of lymph glands). February 7th patient developed toxic psychosis.
- Died February 14th.

Dentalia shells originating from the
deep waters off the west coast of
Vancouver Island, recently excavated
in Stó:lō territory by UBC
archaeologists working with the
Stólō Nation.


Map showing the route taken by the smallpox virus as it travelled to Stó:lō territory in 1782.


Mr. F.D., age 28, case 52 , lying on his back.

## Mr. F.D.

- Temperature 96 degree Fahrenheit (35.6 degree Celsius).
- Severe confluent smallpox with intrapockal hemorrhages (bleeding within pocks just below surface).
- Admitted to hospital on November 27th, 1931 for treatment of fractured right femur (leg bone) and synovitis of the right knee.
- On February 8th, 1932, had incision on right ostermyeritis abscess (collection of puss) of the right thigh.
- Wound well healed on March 1st.
- On March 7th in Ward F had sudden onset of abdominal cramps and vomiting, accompanied
by moderate headache.
- On March 8th, a macular rash appeared over the chest, back and on left leg. Later appeared on axillae (underarm).
- On the 6th of March temperature was 101 Fahrenheit ( 38.3 degrees Celsius).
- On the 8th of March rash well out; temperature 103 degrees Fahrenheit (39.4 degrees Celsius).
- On 10th of March, temperature 100 degrees Fahrenheit ( 37.8 degrees Celsius). There are occasional haemorrhages (bleeding) into some of the vesicles (small sac containing liquid). Outcome of this case was considered doubtful.
- April 8th, 1932. Patient is making an astonishing recovery. At the present time practically all the scabs have separated, leaving him badly scarred. His recovery is complicated by a few scattered boils and a foot drop (foot "drops" due to paralysis of muscles on front leg) on the left side.
- Confluent haemorrhagic smallpox. (Severe and highly fatal type) Bleeding occurs in skin and mucus membranes (moist live cells, eg: lips, tongue, cheeks, eyelids, etc.) before onset of rash or after rash appears.
- Vaccinated on March 6th after exposure to patient in the next bed Mr. R. D. who had mild smallpox. Has been conscientious objector (and therefore was not vaccinated during WWI).


Map showing the location for some Stó:lō place names which refer to epidemic disease and stories of population decline.

European explorers such as Captain Vancouver reported seeing Aboriginal people in Puget Sound in 1792 who had "suffered very much from the smallpox." He reported that

> Tbis deplorable disease is not only common, but it is greatly to be apprehended is very fatal amongst them as its indelible marks were seen on many; and several had lost the sight of one eye, which was remarked to be generally the left, owing most likely to the virulent effects of this baneful disorder?

When Vancouver's ship neared the Fraser River, one of his crew reported that most of the Aboriginal people were covered with pock marks, "and most terribly pitted they are; indeed many have lost their eyes and no doubt it has raged with uncommon inveteracy among them..." ${ }^{8}$ As well as the pockmarked survivors, Captain Vancouver
within North American Aboriginal societies for thousands of years. This is demonstrated in the archaeological record through the analysis of artifacts. For example, dentalia shells found in the Fraser Valley come from the west coast of Vancouver Island. Artifacts manufactured from obsidian, a black volcanic glass, and found in Stó:lō archaeological sites are manufactured with obsidian that can be sourced from sites in southern Oregon.

A few competing theories exist regarding how the first smallpox epidemic reached Stó:lō communities. One suggests it spread along Aboriginal exchange networks from Alaska where it had been introduced by Russian fur traders after the Kamchatka Siberian epidemic of 1769. A second and more likely theory argues that the disease spread to the Fraser River all the way from Mexico. According to this interpretation, smallpox was contracted by an Aboriginal community in Mexico from a Spaniard in 1779 The disease then spread to another neighbouring Aboriginal community to the north which in turn gave it to the next community and so on. In a few short months


Drying racks were used by the Stó:lö to "wind dry" salmon for winter consumption. the disease had spread as far north as the present day state of Idaho. From Idaho, it travelled down the Snake River from one Aboriginal community to the next, and then along the Columbia River. The Chinook people living near the mouth of the Columbia had extensive trading networks with the southern Coast Salish people of Puget Sound. These people in turn had family and trade connections with the Stólōo on the lower Fraser River. Thus, through indigenous exchange networks - networks which connected densely populated communities - smallpox travelled all the way from Mexico to the Fraser Valley. This happened despite the fact that the Europeans who actually introduced the disease were never closer than $3,600 \mathrm{~km}$ to the Fraser River.
also witnessed the devastating mortality the disease had caused. Along the sea-shore he observed human skeletons "promiscuously scattered about the beach, in great numbers." What were once large populated villages had now "fallen into decay... overrun with weeds.""

As mentioned, the arrival of the smallpox virus to Stó:lō communities in 1782 was not due to direct person-to-person contact with Europeans, but was spread in large part through existing Aboriginal exchange and trade networks. Such wide-reaching networks had been in existence

## 7 STÓ:LŌ ORAL TRADITIONS OF SMALLPOX

Stó:lō Elders provide their own knowledge about the devastating smallpox epidemics. They are remembered in place names as well as oral traditions. Throughout the Fraser Valley there are many sites with names that tell part of the story of the various smallpox epidemics that impacted Stó:lō communities. These place names create a cultural geography that keep the story of smallpox alive. For exam-
ple, the place name "Sxwóxwiymelh" means "a lot of people died at once." Stó:lō Elder Evangeline Pete of Chawathil (near Hope), explains the name's meaning by relating how during the smallpox epidemic twenty-five to thirty people died at Sxwoxwiymelh each day. Their bodies were placed in one of the larger pit houses and set on fire. ${ }^{10}$ Another site is called "Smimstiyexwálá" which means "people container." Stó:lō Elder Jimmie Charlie of Chehalis explains that this name refers to a mass grave site where survivors of the smallpox epidemic buried the bodies of relatives and neighbours. ${ }^{11}$

Other Stó:lō Elders also spoke of the ravages of smallpox. Albert Louie of Yeqwyeqwi:ws (Yakweakwioose) in Sardis explained that smallpox "killed, oh, half the Indians all around the Fraser River there. ${ }^{12}$ Dan Milo of Skowkale related that after the epidemic everyone at the village of $K w ' e k w ' i: q w$ (just east of Abbotsford) died except one boy who "settled down with a girl who was the only survivor from a village nearby." ${ }^{13}$

In 1936, Stó:lō Elder Peter Pierre of Katzie (near Maple Ridge) told what is probably the most detailed oral history account of the smallpox epidemic of 1782 .

The news reached them from the east that a great sickness was travelling over the land, a sickness that no medicine could cure, and no person escape. Terrified, they held council with one another and decided to send their wives, with half the children, to their parents' homes, so that every adult might die in the place where he or she was raised. Then the wind carried the smallpox sickness among them. Some crawled away into the woods to die; many died in their homes. Altogether
about three-quarters of the Indians perished.

My great-grandfather happened to be roaming in the mountains at this period, for his wife had recently given birth to twins, and according to custom, both parents and children had to remain in isolation for several months. The children were just beginning to walk when he returned to the village at the entrance to Pitt Lake, knowing nothing of the calamity that had overtaken its inhabitants. All his kinsmen and relatives lay dead inside


Stó:lō men standing beneath their elevated fish caches. These caches were used as storage containers to hold wind dried salmon throughout the winter months. If food was not put away people suffered throughout the winter, as likely happened during the smallpox epidemic. their homes; only in one house did there survive a baby boy, who was vainly sucking at his dead mother's breast. They rescued the child, burned all the houses, together with the corpses that lay inside them, and built a new home for themselves several miles away. If you dig today on the site of any of the old villages you will uncover countless bones, the remains of the Indians who perished during this epidemic of smallpox. Not many years later Europeans appeared on the Fraser, and their coming ushered in a new era. ${ }^{14}$ 중

DEVASTATION
ACCOMPANYING SMALLPOX
The Stó:lō procured and preserved food at seasonally prescribed times of the year when the salmon were "running" and berries and other plant resources were ripe. If they were unable to collect berries when they ripened there was no second chance. If the berries were not dried and stored the Stó:lō would not


The emotional, psychological, and spiritual legacy of smallpox was horrific. Many Aboriginal people suffered from profound "despondency" as they tried to deal with their losses.
lack variety in their winter diet, they would also lack an essential source of Vitamin C. The same was true for salmon. If a family failed to catch and dry hundreds of salmon in the late summer for winter consumption they would go hungry.

Researchers believe the smallpox epidemic of 178283 likely struck $S t o ́: \overline{l o}$ communities in the late summer or early autumn. One reason to suspect this is the high number of survivors who suffered from blindness. Blindness was a common complication among smallpox victims who were malnourished. If smallpox did arrive in late summer of early autumn the entire community would have been seriously ill and unable to hunt, fish or gather food. Moreover, the surviving population would have been in mourning, depressed, and fearful about what had occurred. Many of Stó:lō undoubtedly developed pneumonia and other sicknesses. The devastating effects of smallpox were thus compounded by many other factors.

## Many Waves of Introduced Diseases

The epidemic of 1782 was only the first in a series of devastating European diseases to impact the Stó:lō. They were also effected over the course of the next century by
at least three other major epidemics (smallpox or measles in 1824; measles in 1848; and smallpox in 1862). In addition, Stó:lō communities were effected by outbreaks of mumps, tuberculosis (T.B.), venereal disease (gonorrhea, syphilis etc.) colds, influenza (flu), and alcoholism. With each epidemic and every outbreak of disease people were impacted. Scholars estimate that $62 \%$ of the population died in the 1782 smallpox epidemic. In subsequent epidemics, the figures may have been lower because survivors of previous epidemics would have been immune, and missionaries and government officials began vaccinating the Stó:lō against smallpox in the 1860's.

Mumps and influenza outbreaks took the lives of approximately $10 \%$ of population each time there was an outbreak. Alcoholism has since deprived many Stó:lō of their lives and dignity (See Appendix 1 for a comparative list of introduced and indigenous diseases).

## Traditional Medicinal Responses to Smallpox

Some traditional Stó:lō medical practices may have compounded the smallpox death rate. The medical problems Stó:lō people dealt with prior to "contact" were of a different nature. Their traditional health care practices were not designed to deal with this type of illness. For example, some traditional healing practices involved community members gathering around the sick person's bed singing, praying, among other things, to provide spiritual assistance. While this demonstration of community support was beneficial for many pre-contact diseases, with smallpox it simply ensured everyone was exposed to the infected person. Other medical practices included cleansing "sweats" and cold morning baths in rivers or lakes. Again, while appropriate for many pre-contact illnesses such techniques sent smallpox sufferers into a state of shock sometimes killing them instantly.

We should not be surprised that traditional Stó:lō medical practises did not work against smallpox. Nor should we categorize them as ineffective simply because they were not designed to deal with a non-indigenous, introduced, parasitic crowd disease. In the past, people in Europe used to believe the "Black Plague" was spread by smell and they were encouraged to carry fragrant flowers to protect themselves from the disease. The nursery rhyme "Ring Around the Rosy" refers to people trying to avoid falling "down" dead with the plague by stuffing their pockets with sweet smelling "posies." Similarly, in Europe, doctors used to place live leaches on sick people to draw out what was considered "bad blood." In many instances this practise actually lowered blood pressure in already weakened people and increased the likelihood of death. Similar inappropriate medical practices have also occurred in contemporary times. For example, only a few


Because of their sacred nature, contemporary Stó:Lō people do not allow photographs to be taken of masked sxwó:yxwey dancers.
They have graciously consented to allowing use of this photo of a carving of a masked sxwó:yxwey dancer found on the house post at Skowkale Hall.
decades ago doctors were prescribing a drug called "thalidomide" to pregnant women, thinking it would simply relieve the symptoms of nausea and vomiting. In reality the medication also affected the development of the fetus causing children to be born without hands and feet.

The problems associated with treating unknown or poorly understood diseases are clearly formidable. While many traditional Stó:lō medical practises would not have been effective against smallpox, Stó:lō oral traditions provide examples of traditional medicine being able to cure people of introduced diseases. One such story, told by Mrs. Robert Joe to the anthropologist Wilson Duff in 1949, describes the arrival in Stó:lō territory of a terrible disease. Based upon the genealogical evidence provided by Mrs. Joe, Duff estimated that she was describing events "roughly about 1780 ."

In Mrs. Joe's story the disease causes a wealthy young man's skin to "break and rot," and his flesh to "stink." The young man "spent all his wealth trying to cure (himself), but failed." In desperation he left the village to "hide himself somewhere and die." Arriving at the edge of a bluff at Kawakawa Lake near Hope the man fell into the water, but he did not drown. Upon reaching the bottom of the lake he met a community of people who were covered in sores similar to his own. One of them asked the young man to cure the people, to which he replied "I'll cure them if you cure me." The man from the lake then took shredded cedar-bark and "wiped away the sores on the young man's body and he was cured." The young man then observed that the sick water people's sores were caused by "human spit which had fallen from the surface of the lake."

He cured them by using cedar-bark to wipe away the spit. The lake people asked the young man what he wanted in payment for curing them. They offered him many valuable things, but in the end he asked for and received a special mask and regalia which was called the "sxwó:yxwey." ${ }^{15}$ (The root of the word sxwo: yxwey means many peopled all died at once. ${ }^{16}$ ) Another version of this story, recorded by turn of the century ethnographer Charles Hill-Tout explains that after the man returned to his community he was able to cure other people of their sickness. ${ }^{17}$ Today the hereditary sxwó:yxwey mask continues to be used by Stó:lō people during celebrations and certain healing or purification ceremonies.

Other Stó:lō oral histories explain that spiritual healers used songs to cure people of smallpox and other sicknesses. While Stó:lō people today make full use of modern medical facilities and technology, they still rely heavily upon spiritual healing power. In the 1920's a well know Stólō spiritual healer named Tasalt (or Catholic Tommy) agreed to allow some of his healing songs to be recorded by a researcher from the Smithsonian Institute. Tasalt explained that these songs were not passed down to him by his mother, who was also a spiritual healer. Rather he received all of his songs from spirits. While singing the songs he "gets the sickness and throws it away." After the "sickness had been taken out" Tasalt's patients reportedly regained their strength rapidly. Tasalt had different songs for each illness. Among his healing songs were ones that treated "smallpox, fever, palsy, hemorrhage for the lungs, and pneumonia," among other sicknesses. ${ }^{18}$ Tasalt's song for treating smallpox is as follows:


Other stories of people being healed of smallpox describe someone acquiring special "spirit power" which made them strong enough to withstand the deadly disease. Sometimes through special spiritual intervention people were able to escape some of the subsequent smallpox epidemics which revisited Stólō communities in the nineteenth century. For example, Gwen Point relates a story that she learned from her grandmother Dolly Felix of Chehalis (near Harrison Hotsprings). The story is an excellent example of the blending of traditional Stó:lō and Christian healing traditions:
$A^{11 \text { that I remember is my }}$ grandmother Dolly Felix talking to us about the smallpox epidemic that went through and why Chehalis survived the smallpox. And what she said is that her grand uncle (Ey:ía) was Tike that man who took care of the people all his life and after he died the creator said that where that man is buried will grow a cedar tree. He didn't take a family for himself, you know he just lived and worked with the people in the longhouse. He helped all the different families in the community. They knew when the smallpox was coming soon, this disease was coming up the river like that. Anyway this man, he knew that he has it and he tola the one family that he was sick and the women in the longhouse just started crying because they didn't want to lose him.... He knew that he was going to die so he called two young men over and told them "tie my canoe up and take me across the river. I want you to dig a hole so that when I die 'Ill fall in the hole and you can just cover me up. Burn my canoe, burn everything. Don't touch nothing." ...In those days they didn't normally bury the people in the ground, they put them up in the trees. ...So it was like an insult to go in the ground. Only the bad people went into the ground. But he was worried about the other people, if this disease spread. He was covered with sores, so they brought him across the river and left him there. He sat there right at the head of the hole that they had dug, the grave, facing the river with a blanket over him... Early the next morning all they heard is "oooooooh, oooooh, ooooh, ooooh" four times like that. All the women started to cry again. "He's dead, he's gone." They were feeling really bad. But they sent the same two young men "you go over there and bury him, that's what he wanted, and you burn his canoe, everything..." So the same two boys got on the canoe and started to go across the river... They could see him sitting there yet with the blanket over and the two young boys were getting a little bit scared,
thinking that maybe that was his ghost talking in the language.... Then they really got scared, you know, and they wanted to leave. Then he called them in "don't be afraid, come
in."... Just when they were getting close to him, he took the blanket off. He was clean and he didn't have a mark on him. ... He said "I was getting ready to die and I prepared myself to die and thought that my time came and he looked up like that and he could see coming over the mountain, coming like if it came from over the mountain, a light. The light got closer." He said that there was a man inside this light. The man standing there with his hands open. He said that my name is Jesus. He said that I'm going to help you and then I want you to go back and help your people. So that's what he did. He went back across the river and helped the people that were sick. That's why they say the smallpox didn't kill as many
of the families in Chehalis.

## 9

## CONCLUSION: SOCIAL AND CULTURAL IMPACT OF SMALLPOX - CULTURAL CONTINUITY AND SURVIVAL

It would have been impossible for Sto:lol life to continue as normal after the 1782 epidemic suddenly wiped out two thirds of their population. Understanding the physical impact of smallpox allows us to speculate about the social and cultural legacy of the disease. Without books or computers, one of the greatest impacts upon Sto:lo society would have been the terrible effects of "culture loss." Sto:lō Elders possessed a large proportion of the community's cultural knowledge. In traditional Sto:lō society there were no books or computers to store information. Knowledge could only be passed on by word of mouth. While the analogy is imperfect and in no way captures the rich and complex importance of Elders within Sto:lō society, people might find it useful to think of Elders playing a role in Sto:lō society that was somewhat analogous to the position of a hard drive in a computer system. The variola smallpox virus was like a computer virus that erases information off hard drives. The smallpox epidemics killed most of the Elders which therefore resulted in a loss of their knowledge and a gap in learning. Some people refer to this as "culture loss." Sto:lō survivors also suffered from severe depression. In addition, economic hardships were encountered, which resulted in poverty and feelings of despair. While some aspects of Sto:los society were necessarily altered, the striking feature was not the changes, but the amazing degree of cultural continuity. This cultural survival is a testimony to the strength, endurance and innovative nature of Stó:lō cultural traditions.

## Appendíx 1

## LIST OF INDIGENOUS AND INTRODUCED DISEASES ${ }^{20}$

Indigenous North/South American Diseases
dysentery (bacillary, amoebic)
viral pneumonia
non-ventral syphilis + pinta
American leishmaniasis (Forest Yaws)
American trypanosomiasis (Chagas)
6. localized rickettsial diseases (Rocky Mtn. Spotted Fever)
7. streptococcus + staphylococcus (Strep throat, Rheumatic Fever. etc.)
8. salmonella + other food poisons
9. tuberculosis
10. trachoma (Chlamydia) (?)

Diseases Introduced to North/South America
smallpox
malaria
. viral influenza
4. yellow fever
5. measles
6. typhus
7. bubonic plague
8. typhoid fever
9. cholera
10. pertussis (Whooping Cough)
11. diphtheria
12. scarlatina (Scarlet Fever)
13. polio
14. colds (?)
15. venereal syphilis (?)
16. herpes zoster (?)

## Recommended Further Readings

Jenness, Diamond, The Faith of a Coast Salish Indian, Victoria: Anthropology in British Columbia, Memoirs 3, 1955.

Harris, Cole, "Voices of Disaster: Smallpox around the Strait of Georgia in 1782," Etbnohistory, Winter 1994. Wells, Oliver, The Chilliwacks and Their Neighbours, Vancouver: Talonbooks, 1987

## Footnotes

1 Peter Pierre of Katzie, as quoted in Wayne Suttles, Katzie Ethnographic Notes, (containing Diamond Jenness, Faith of A Coast Salish Indian), (Victoria: Provincial Museum, 1955), p. 34.
2 Historians continue to debate whether or not Juan De Fuca (aka Apostolos Valerianos, a Greek sea captain working for the Spanish Crown) sailed as far north as
the straights between Vancouver Island and the mainland that now bare his name in the year 1592.
3 Cole Harris, "Voices of Disaster: Smallpox Around the Strait of Georgia in 1782." In Ethnohistory 41:4 (fall 1994).
4 Robert T. Boyd, The Introduction of Infectious Diseases Among the Indians of the Pacific Northwest, 1774-1874, (Unpublished Ph.D. Dissertation, University of Washington, 1985), Chapters $1 \& 2$.
5 Personal communication with Dr. Rick Mathius, Epidemiologist, University of British Columbia, June 14, 1995.
6 See Boyd, Chapter 2.
7 W. Kaye Lamb, ed., A Voyage of Discovery to the North Pacific Ocean and Around the World, 17911795, (London: Hakluyt Society, 1984), p. 540.
8 Peter Puget, Log of the Discovery, Fune 12-August 19, 1792, (Manuscript Admiralty, 55/27, Public Record Office, London; Microfilm No. 274 in Suzzallo Library, University of Washington, Seattle), p. 34.
9 Lamb, p.516, 538.
10 Reuban Ware, Stó:lō History Field Notes, (Unpublished manuscript, Stó:lō Nation Archives, 1978).
11 Jimmie Charlie in conversation with Keith Carlson, January 16, 1993.
12 Albert Louie in conversation with Oliver Wells, (Copy on file at Stó:lō Nation Archives), July 28, 1965.
13 Oliver Wells, The Cbilliwack and Neigbbours, (Vancouver: Talonbooks, 1987), p. 40.
14 Jenness, p. 34.
15 For the full story as told by Mrs. Robert Joe see Wilson Duff, The Upper Stalo Indians, (Victoria: British Columbia Provincial Museum, 1952), pp.123125.

16 Brent Galloway, A Grammar of Upriver Halkomelem, (Los Angeles: University of California Press, 1984), p. 585.
17 Charles Hill-Tout, "Ethnological Studies of the Mainland Halkomelem, A Division of the Salish of British Columbia," in Ralph Maud, ed., The Salish People, Vol.III, (Vancouver: Talonbooks, 1978), pp. 63-65.
18 Frances Densmore, Music of the Indians of British Columbia, (New York: Da Capo Press, 1972), p. 20.

19 Conversation between Gwen Point and Keith Carlson, (Transcript on File at Stó:lō Nation Archives), October, 1995.
20 See Boyd and Merck, Manual of Diagnosis and Therapy.

