

**Animal-related Public Health Crises
in
First Nation Communities**

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Animal-related Public Health Crises in First Nation Communities

Dr. Richard G. Herbert

Preface:

Animal-related Public Health Crises in First Nation Communities was written for the Anishinaabe Nation in Treaty #3 as an aid to understanding the significance of a veterinary infrastructure and the consequences of its lack.

Dr R. G. Herbert

Submitted to:

- Anishinaabe Nation in Treaty #3

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Table of Contents

Title	Page
Foreword	1
Introduction	1
Traditional Meat and Fish-related Public Health Crises	1
Dog-related Public Health Crises	2
(1) <u>Bites, Pack Aggression, and Mauling Deaths</u>	2
(2) <u>Zoonotic Disease</u>	3
(3) <u>Animal Suffering</u>	4
Nuisance Wildlife-related Public Health Crises	5
Conclusion	6

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Foreword:

This brief has been written to familiarize First Nation organizations and citizens with public health problems related to the lack of a First Nation veterinary infrastructure. It was not written to detail solutions contained within developing First Nation veterinary infrastructure programs. Work initiated within Treaty #3 so there are specific references to the Anishinaabe Nation in Treaty #3. However, information and Animal-related public health crises exist in virtually all nation communities in Canada and across the globe.

Introduction:

The essence of public health is to maintain control over situations that can adversely affect a community's mental, social, or physical well being. In that regard, a public health crisis is when one or more situations are out of control and negatively impact one or more of these aspects of our community's health. Our nation communities have recurrent public health crises caused by eating contaminated, locally harvested, fish or meat as part of their traditional diet. We have frequent public health crises caused by out-of-control dog populations. We also have public health crises caused by nuisance wildlife. Public health crises originating with inadequate fish and meat safety, from uncontrolled dog problems, or due to wildlife problems have been solved in non-native communities through services provided from a veterinary infrastructure. Veterinary infrastructure services can also provide our communities with solutions to our animal-related public health crises.

Traditional Meat and Fish-related Public Health Crises:

All domestic Canadian meat and fish are subject to a variety of regulations and inspections by both Provincial and Federal authorities before sale and public consumption. This occurs to lower the exposure of Canadian citizens to food-borne disease and poisonings. Wild meat and locally harvested fish are not subject to the same safety measures. The vast majority of communities in Ontario that routinely use these local sources as their community's meat and fish are nation communities. Consequently, our communities are the communities in Ontario routinely eating unsecured meat and fish. An entire veterinary services industry (farm service) is geared to prevent disease from entering the food chain in non-native communities by maintaining disease-free farmed animals. These same veterinary safety mechanisms do not exist to prevent the spread of disease through the wildlife which form the basis of our traditional diet. A veterinary infrastructure containing fish, wild meat, and wildlife disease monitoring programs would prevent public health crises with traditional fish and wild meat diets and generally reduce our exposure to food-borne diseases, including tuberculosis and toxicoses. A Treaty #3 wild meat and local fish veterinary infrastructure would have prevented poisonings in Grassy Narrows and Wabaseemoong First Nations. Wild meat and local fish safety infrastructures would also enable our communities to develop a sustainable economy based on traditional hunter-gatherer roles with wildlife management, harvest, and retail of inspected wild meat and fish.

Animal-related Public Health Crises in First Nation Communities

Dr. Richard G. Herbert

Dog-related Public Health Crises:

Most Northern Ontario Nation communities are plagued by out-of-control dog populations and dog-related problems. Dog overpopulation is identified as one of the top ten environmental problems within our communities¹. Dog overpopulation negatively impacts community public health through dog bites, pack aggression, mauling deaths, zoonotic disease transmission², and animal suffering. Neglecting dog populations and their derivative problems has a negative psychological impact on children and is linked to subsequent violent offences within a community³. These dog-related public health crises are a direct result of the lack of veterinary infrastructure services to our communities.

(1) Bites, Pack Aggression, and Mauling Deaths:

We will address dog bites and mauling deaths, either by a single dog or through a dog pack, together for general discussion purposes. It is easy to understand how uncontrolled dog populations and dog overpopulation will result in increased opportunities for bites and mauling deaths. Increased levels of these problems, above Canadian national averages, should trigger a public health crisis. Unfortunately, Health Canada officials, First Nation and Inuit Health Branch,

- Only record a small fraction of the dog bites occurring in nation communities,
- Do not adjust these “reported” dog bite values to better reflect the extent of the problem,
- Do not make First Nation dog bite data available for public scrutiny and
- Will not fund public health solutions related to dog management because they do not have an established program through which to flow funding. Unfortunately, Health Canada will also not fund pilot projects to develop fundable programs for dog-related public health solutions.

It is therefore conveniently impossible for us to measure and publish the significance of our dog bite problems for appropriate resource allocation; and, it is impossible to obtain funding to develop or implement programs to decrease the number of dog bite and mauling deaths in First Nation communities. Fortunately, newspapers cover horrific incidents, including dog child mauling deaths. While child mauling deaths represent only the most extreme dog bite scenario, they give a clear picture of the dog attack public health crises magnitude in Canada’s First Nation communities.

1 Environmental Contaminants & Traditional Foods Workshop Final Report. March 15, 2004. Page 28.
Environmental Research Division, First Nation and Inuit Health Branch, Health Canada. Thunder Bay, Ontario,
February 10-11, 2004.

2 Zoonotic diseases are diseases that can be spread from wild or domestic animals to people.

3 Senator Mobina S. B. Jaffer. March 29, 2004. Senate speech on Bill C22, to amend the criminal code (cruelty to animals).

Animal-related Public Health Crises in First Nation Communities

Dr. Richard G. Herbert

A search of the CBC archives yielded 11 dog mauling deaths January 1998 and April 2007⁴ in Canada. This rate is in general agreement with published Canadian dog mauling death rates⁵. All of these deaths were in children under eight-years-old and seven occurred in Inuit or Nation communities. When adjusted for on-reserve Nation populations⁶, **children living on-reserve were 180 times more likely to be killed by a dog** than children living off-reserve. While we can not assume dog biting incidents are equally disproportionate in their representation within Nation communities, we can assume that they are very high and of significant public health concern. Unconfirmed reports place **on-reserve dog bite incidents 20-100 times above those in the rest of Canada**. We have a public health crisis in progress!

(2) Zoonotic Disease:

There is a long list of zoonotic diseases that may be expected to transmit from dogs to our citizens in Northwestern Ontario⁷. The most notable is rabies. Rabies is a virus disease spread predominantly through saliva during biting. However, it can also be spread through the air in bat colonies, by ingestion or contact with infected tissues, transplacental, and rarely through the environment⁸. Rabies started as a northern disease in arctic fox and then spread through the Americas adapting to other animal species. The incubation period can vary from three weeks to five months. Rabies is a fatal disease with no cure. If exposed, the disease can be prevented from progressing with post-exposure vaccinations given within 10 days of exposure. After that time, rabies invariably progresses to death. Any one can be exposed to rabies through saliva and bites but trappers, hunters, and citizens can also be exposed through the processing and eating of wildlife. Rabies did not exist in the Treaty #3 territory until it migrated in along the railway approximately 50 years ago. Currently we have bat and fox rabies in our region at a low level. There is also a skunk rabies outbreak to the South in Minnesota poised to enter our region.

Dogs are still the primary source of rabies infection to our nation communities. Each community's dog population forms a barrier between its citizens and rabies infected wildlife. If 70% or more of a community's dogs are vaccinated against rabies, the community will be

4 1998, Stouffville, ON; 1998, Cross Lake, MB; 1999, Garden River, AB; 1999, Lutsel'ke, NWT; 2002, Barrie, ON; 2003, Kingston Peninsula, NB; 2003, Nelson House, MB; 2004, Vancouver, BC; 2006, Tadoule Lake, MB; 2006, Hollow Water, MB; 2006, North Tallcree, AB. CBC News Archives

5 Jasline Florea, Janet Brown, Susan G. Mackenzie, & Pierre Maurice. Innovative CHIRPP project focuses on dog bites. Canadian Hospital Injury Reporting and Prevention Program. CHIRPP NEWS, issue 11, July 1997. Health Canada, Population

6 2001 Census, Standard Data Products, Aboriginal Peoples of Canada, Statistics Canada.

7 Examples: Rabies, tuberculosis, salmonellosis, toxoplasmosis, scabies, cryptococcosis, psittacosis, campylobacteriosis, yersiniosis, leptospirosis, brucellosis, echinococcosis, visceral larval migrans, strongyloidiasis, giardiasis, trichinosis, blastomycosis, tularaemia, and *etc.*

8 Greene, C. E. & Dreesen, D.W. Rabies. In C.E.Greene's (Ed) Infectious Disease of the Dog and Cat. Philadelphia, W.B. Saunders Company, 1990, pp 365-383.

Animal-related Public Health Crises in First Nation Communities

Dr. Richard G. Herbert

protected from a rabies outbreak. Our nation communities currently do not meet the 70% dog vaccination target for community protection but non-native communities do. This is because:

- Our “federal” First Nation reserves are not serviced by “provincial” veterinary services;
- First Nation communities are not permitted to own or operate veterinary facilities;
- Health Canada policies will not allow federal veterinary authorities (Canadian Food Inspection Agency - CFIA) to aid Nation communities with rabies vaccinations until after a rabies outbreak begins and is verified;
- Dog rabies vaccinations are not mandatory unless an area is declared rabies endemic (always present) by provincial health authorities (even though provincial health authorities have no jurisdiction over federal Aboriginal communities);
- Provincial health authorities will not declare Northern Ontario rabies endemic citing that CFIA rabies monitoring evidence from wild and domestic animals indicates rabies is not in Northern Ontario. This despite the fact rabies started as, and still is, an arctic fox disease and therefore endemic in Northern Ontario;
- The CFIA will not monitor for rabies in wild and domestic animals in Northern Ontario citing provincial health authorities have not declared the area rabies endemic and Northern Ontario is therefore not eligible for the CFIA rabies monitoring program; and,
- If Northern Ontario is not declared rabies endemic, not either the provincial or federal governments need to provide access to veterinary services in remote First Nation communities for mandatory rabies vaccinations (programs which can't be developed because Health Canada will not fund pilot program development).

Translating the above government rhetoric, our nation communities are left exposed to recurrent rabies outbreaks simply because the Ontario and Canadian governments do not want to provide funds for remote First Nation community access to veterinary care. When will we have consistent vaccination programs to prevent rabies-related public health crises? Rabies is a preventable catastrophe waiting to happen again.

(3) Animal Suffering:

The relation between dog suffering and public health is still not general knowledge. Causing or ignoring animal suffering is defined as cruelty to animals. Cruelty to animals has a devastating psychological impact on young children witnessing the act. The willful act of causing or ignoring animal suffering is also linked to subsequent violent offences against people. This is especially true in domestic violence⁹. Questionnaires administered to battered women in Canadian shelters indicated that 75 per cent of battered women who had pets reported that their aggressor had also injured or killed one or more of their pets. The act of children throwing stones at or hitting unwanted dogs with sticks, even in self-defense, can lead to escalating violent behaviors in these children. Children that see dogs they play with shot, trapped, or poisoned will be psychologically impacted, even if these dogs were killed to control the dog population. The reason for this is that

⁹ Ascione, Frank R., Battered Women's Reports of Their Partners' and Their Children's Cruelty to Animals, *Journal of Emotional Abuse*, Vol. 1(1) 1998.

Animal-related Public Health Crises in First Nation Communities

Dr. Richard G. Herbert

people bond to a dog in the same way they bond to family members. We bond well with dogs because they also have a similar need for a family unit. In essence, dogs bond to people the same way people bond to dogs. This bonding is called the human animal bond. A dog can be a powerful source of unconditional love through this bond. Abuse of this human animal bond is part of the cycle of abuse seen in domestic violence. Our judges, health professionals and law enforcement officers have linked animal abuse to the bigger problem of violence in society¹⁰. The evidence for this “link” is that virtually every serial killer and almost every habitual violent offender began by torturing or killing animals.

Out-of control dog populations in Northern Ontario First Nation communities will result in unnecessary dog suffering and increased willful and neglectful acts of cruelty. The willful act of causing or ignoring cruelty to animals has a negative impact on a community’s mental, social, and physical health. It is also part of an escalating level of domestic violence. Current statistics indicate that **on-reserve communities have an 8 times higher violent crime rate** than the rest of Canada¹¹. Preventing animal cruelty is part of breaking the cycle of violence plaguing our communities. Animal cruelty is a major public health concern and is at crisis levels in our nation!

Nuisance Wildlife-related Public Health Crises:

Most nuisance wildlife issues involve minor property damage or inconveniences, but not all. Public health crises arise with nuisance wildlife due to zoonotic disease carried by wildlife into our communities and as a result of personal injury with aggressive or predaceous wildlife.

Almost every nation community in Northern Ontario has had crises caused by aggressive or predaceous wildlife. By far the most common nuisance species is the black bear followed by wolves and then cougars. Bear populations in Northern Ontario are at alarmingly high levels. The bear overpopulation problem has been accelerated by changed Ontario bear hunting policies. Bear overpopulation will lead to increased mauling or predaceous attacks on our citizens. Bear-related public health crises are recurrent problems in Nation communities.

Smaller, less frightening, wildlife can also cause public health crises through zoonotic diseases they carry into our communities. Birds carry *Salmonella spp.*; snakes, *Cryptosporidium spp.*; field mice, hantavirus; skunks, raccoons, bats, and foxes, rabies; raccoons and ground hogs, *Baylisascaris spp.*. Any one of these, and other, zoonotic diseases can become a public health crisis at any time.

10 Senator Mobina S. B. Jaffer. March 29, 2004. Senate speech on Bill C22, to amend the criminal code (cruelty to animals).

11 Juristat, Victimization and offending among the Aboriginal population in Canada. Statistics Canada - Catalogue No. 85-002-XIE, Vol 26, No.3, 2006.

Animal-related Public Health Crises in First Nation Communities

Dr. Richard G. Herbert

Conclusion:

Our Nation does not have a veterinary infrastructure to either replace or harmonize with existing Provincial and Federal veterinary infrastructure services. The root origin of this infrastructure void arises from the exclusion of First Nations from Federal and Provincial veterinary-related legislation and services. As such, we have recurrent public health crises caused by unsafe food, out-of-control dog populations, and nuisance wildlife. Further, we are prevented from developing a sustainable traditional economy based on the trade of inspected safe traditional food.

Services supplied by veterinarians that are considered fundamental community infrastructures in the developed world involve maintaining quality disease-free meat supplies, zoonotic disease prevention, companion animal population control¹², nuisance wildlife control, farm animal production, and the prevention of animal suffering. Ontario's Nation communities are within the developed world. As such, they should have access to the same public health solutions as non-native communities, including veterinary services.

12 Companion animals are traditionally considered to be dogs and cats.