
Peace River Regional District Report



TO: Chair and Directors

FROM: Shannon Anderson, General Manager of Environmental Services

DATE: November 2, 2009

RE: 2009 West Nile Virus Program – Final Report

In the spring of this year the Regional District received a West Nile Virus provincial grant in the amount of \$5,774.93 to finance the 2009 West Nile Virus program for the Regional District. Northern Health operated the program on our behalf, please find attached the final report indicating their efforts for 2009.

As indicated in the report, Northern Health scaled back their surveillance program for 2009, as recommended by the Provincial West Nile Virus Planning Committee.

Funds to operate the Program are applied for annually based on the availability of provincial funding. The Regional District, in conjunction with Northern Health have operated a Regional District West Nile Virus program since 2006.

Attachment:

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Dept Head:

CAO:

Nov 12 2009

SA

Invoice to Finance

R-6

October 26th, 2009

Peace River Regional District
Box 810
Dawson Creek BC V1G 4H8



Re: West Nile Virus Program Summary 2009

Northern Health continued with the scaled back surveillance program for the 2009 season, as recommended by the Provincial West Nile Virus Planning Committee. Northern Health did not collect mosquitoes or corvids for WNV testing and again, focused efforts on public awareness.

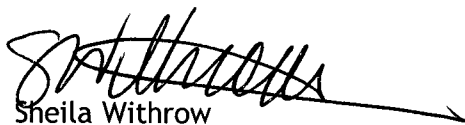
BC reported their first endemic human cases in 2 residents of the Okanagan. One additional case was identified, but this case is likely to be travel related. As these cases were detected late in the summer, when the northern regions had already experienced frost, no increase in surveillance was required. Southern BC continued to test dead corvids and trap mosquitoes this year. A total of 144 birds were submitted for testing and all were negative for the virus. Out of 2474 mosquito pools, 10 were positive for WNV and there were also three equine cases reported.

Northern Health produced news releases, urging the public to be aware of the potential dangers of WNV, as well as the precautions taken to reduce the possibility of contracting WNV. Once again, pamphlets and posters were distributed extensively throughout the northern region. Numerous phone calls were successfully dealt with by the WNV Coordinator informing the public on the safe disposal of corvids and reporting to the BCCDC website. The WNV Coordinator was kept up to date on the WNV province wide surveillance via weekly teleconference hosted by BCCDC.

WNV surveillance data for 2009, compiled by the BC Centre for Disease Control, is enclosed showing the extent of WNV activity in BC and Alberta.

With WNV now endemic in the province of BC, Northern Health will be following the recommendations that come out of the Provincial WNV Planning Committee meeting, in November, for the 2010 season.

Yours truly,



Sheila Withrow
NE Manager
Public Health Protection

SW/bb



BCCDC has changed its phone numbers: The new main line is (604) 707-2400

BC Centre for Disease Control
An agency of the Provincial Health Services Authority

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2009 Surveillance Data

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There are three parts to the West Nile Virus program in B.C.:
Communications/Education, Mosquito Control and Surveillance.

Dead birds belonging to the corvid family (ravens, crows, magpies and jays [jays include Steller's jay, grey jay, blue jay and Clark's nutcracker]) that are found and called in are sent for testing to the Animal Health Centre in Abbotsford, B.C. They are tested for the West Nile Virus.

Mosquitoes are trapped in a number of locations along the southern part of the province, and sent in to BCCDC for identification. Mosquitoes identified as *Culex pipiens* and *Cx. tarsalis* are tested for the virus.

Finally, dead corvids that are not suitable for testing, or cannot be picked up can be [reported online](#).

Updated: on Oct 7 ¹	Humans	Birds	Mosquitoes ²	Horse
# Tested	371	144	2474	
# Positive	3(1)*	0	10	3

1. Surveillance begins on June 1st and ends on October 3rd.

2. A mosquito pool may contain up to 50 mosquitoes that are tested at one time.

* The number of cases in brackets denotes the number of cases considered to be travel-related.

For example, 6 (*2) would indicate a total of 6 confirmed cases, 2 of which are travel-related.

Note: This travel-related case is classified as probable; confirmatory testing is pending.

Maps

- [Dead Bird Testing by LHA](#)
- [Mosquito Testing by HSDA](#)
- [WNV Activity by HSDA](#)

Tables

Nov 12 2009

2009 Mosquito Surveillance for West Nile Virus by Health Service Delivery Areas in British Columbia

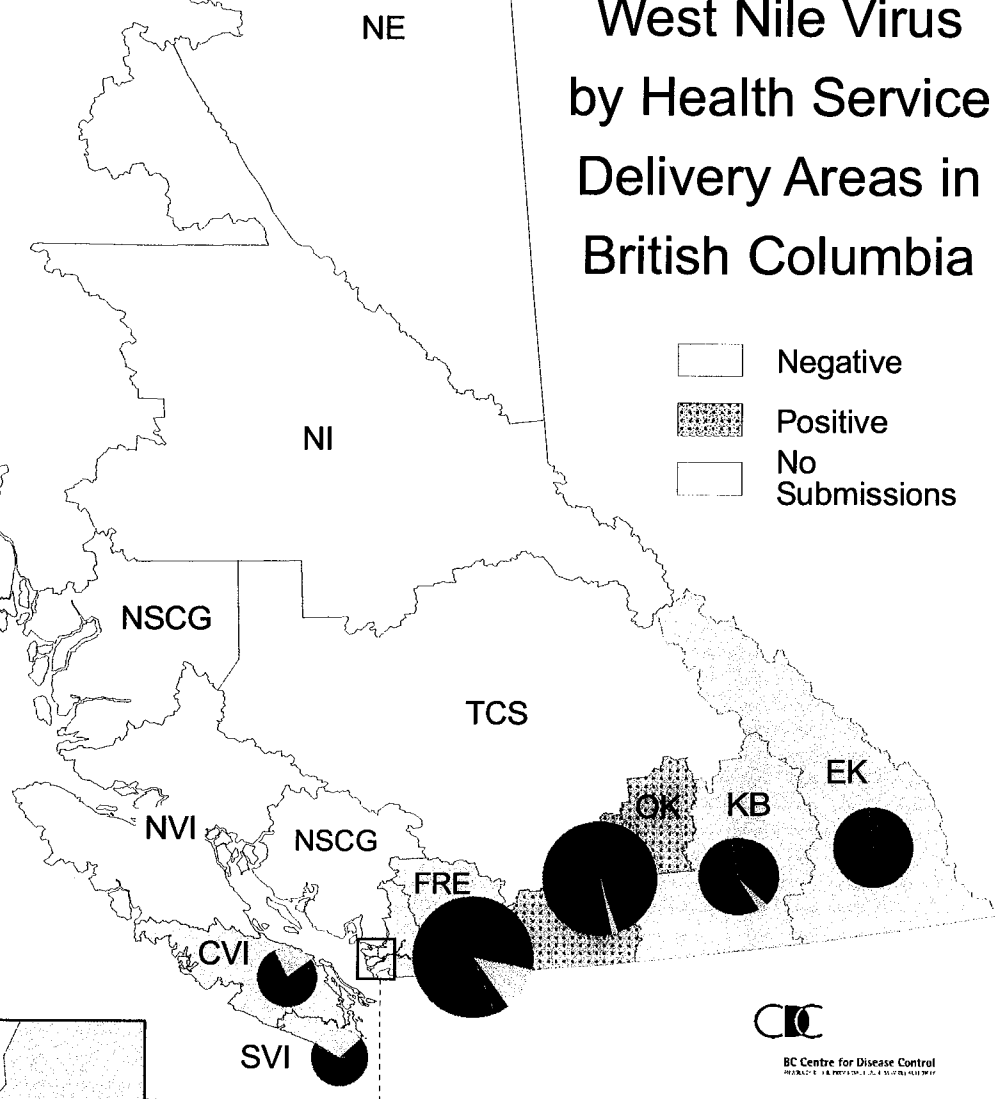
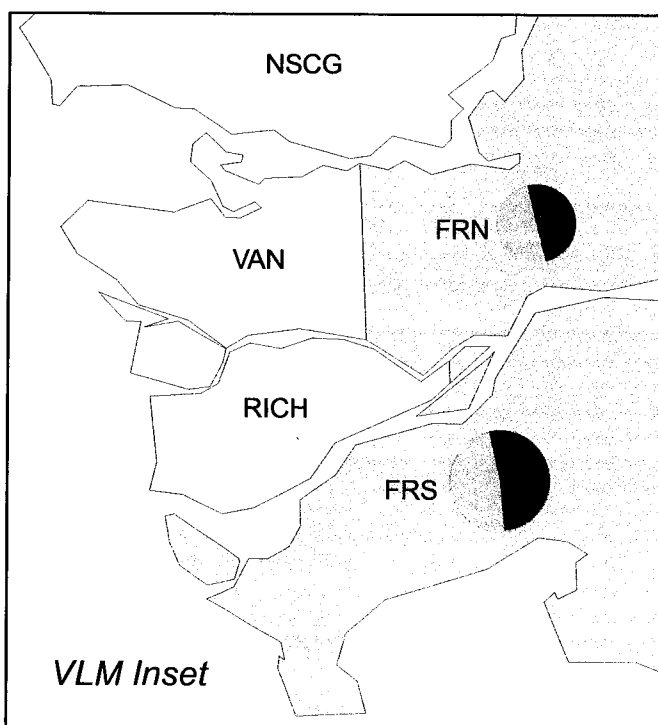
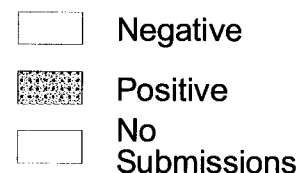
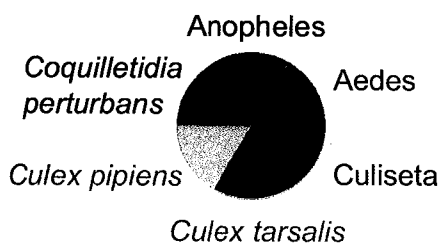
Cumulative Submissions from June 1 - Oct 2, 2009

No. of mosquitoes caught = 181 942

10 *Culex tarsalis* pools from Okanagan HSDA tested positive for WNV



Mosquito Speciation (n = number of mosquitoes)



CDC
BC Centre for Disease Control
HEALTH SERVICES & PROFESSIONAL REGULATORY DIVISION

SUMMARY OF 2009 SURVAILLANCE

HSDA	Aedes	Anoph.	Cx.pipi.	Cx.tars.	Culis	Total
EK	3050	669	9999	93	125	14076
KB	2814	571	6815	464	59	12287
OK	29904	1090	8322	861	8430	50070
TCS	0	0	0	0	0	0
FRE	43091	834	1461	6147	1015	53286
FRN	2166	166	1849	7219	1301	14418
FRS	5440	341	4823	17248	7256	36319
RICH	0	0	0	0	0	0
VAN	0	0	0	0	0	0
NSCG	0	0	0	0	0	0
SVI	15	0	55	187	7	613
CVI	39	0	28	143	10	653
NVI	0	0	0	0	0	0
NW	0	0	0	0	0	0
NI	0	0	0	0	0	0
NE	0	0	0	0	0	0

West Nile Virus R-6 Activity in





British Columbia

October 7, 2009



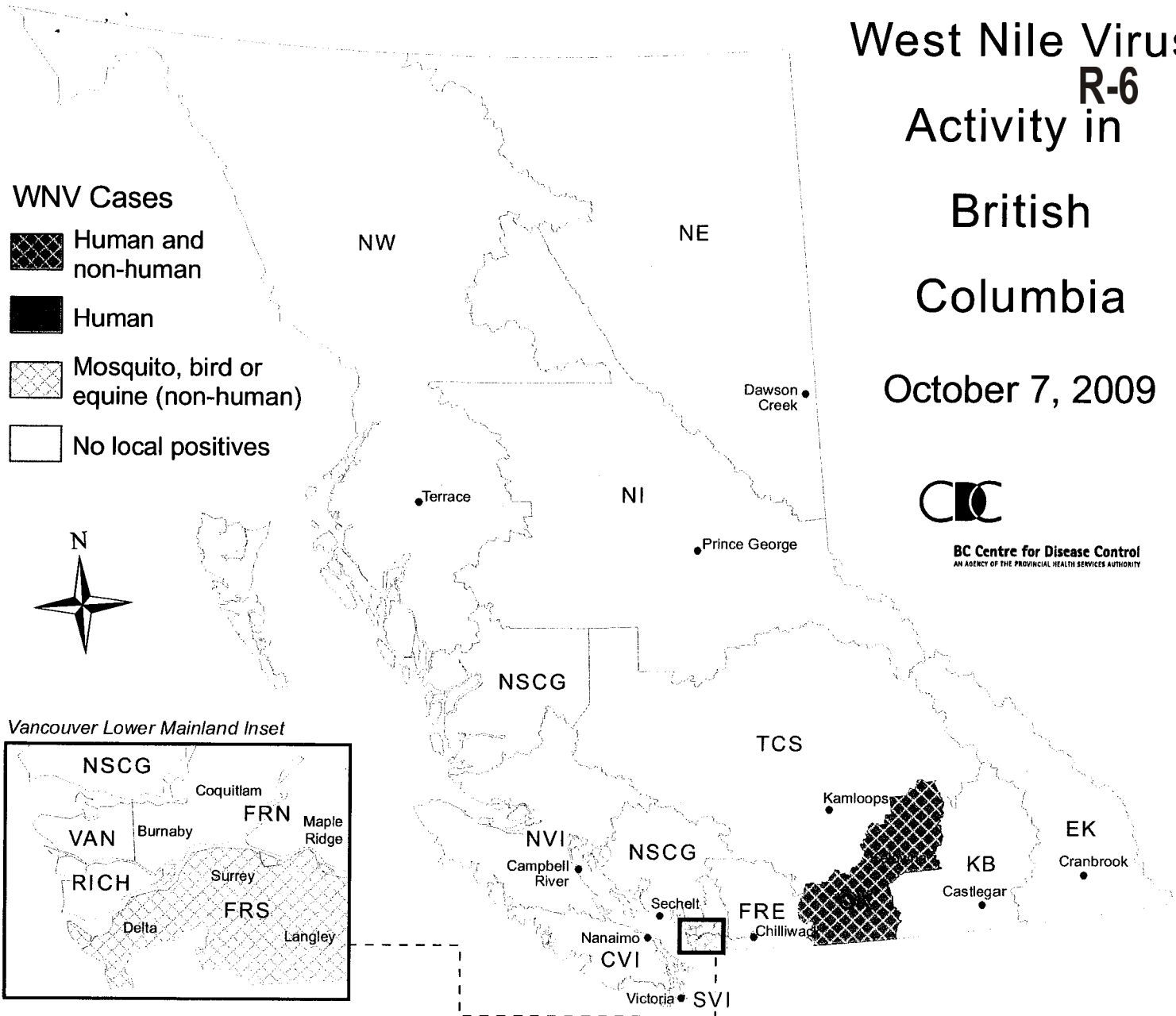
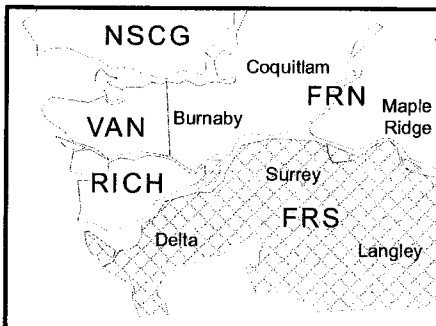
BC Centre for Disease Control
AN AGENCY OF THE PROVINCIAL HEALTH SERVICES AUTHORITY

WNV Cases

-  Human and non-human
-  Human
-  Mosquito, bird or equine (non-human)
-  No local positives



Vancouver Lower Mainland Inset



HSDA	HUMANS ¹	CORVIDS	MOSQUITO POOLS ²	EQUINE
East Kootenay	0	0	0	0
Kootenay Boundary	1[1*]	0	0	0
Okanagan	2	0	10	2
Thompson Cariboo Shuswap	0	0	0	0
Fraser East	0	0	0	0
Fraser North	0	0	0	0
Fraser South	0	0	0	1
Richmond	0	0	0	0
Vancouver	0	0	0	0
North Shore/Coast Garibaldi	0	0	0	0
South Vancouver Island	0	0	0	0
Central Vancouver Island	0	0	0	0
North Vancouver Island	0	0	0	0
Northwest	0	0	0	0
Northern Interior	0	0	0	0
Northeast	0	0	0	0
TOTAL POSITIVES	3[1*]	0	10	3

1. Number of travel related cases are indicated in brackets: [1].

2. A pool may contain up to 50 mosquitoes that are tested at one time.

*Probable case pending confirmation

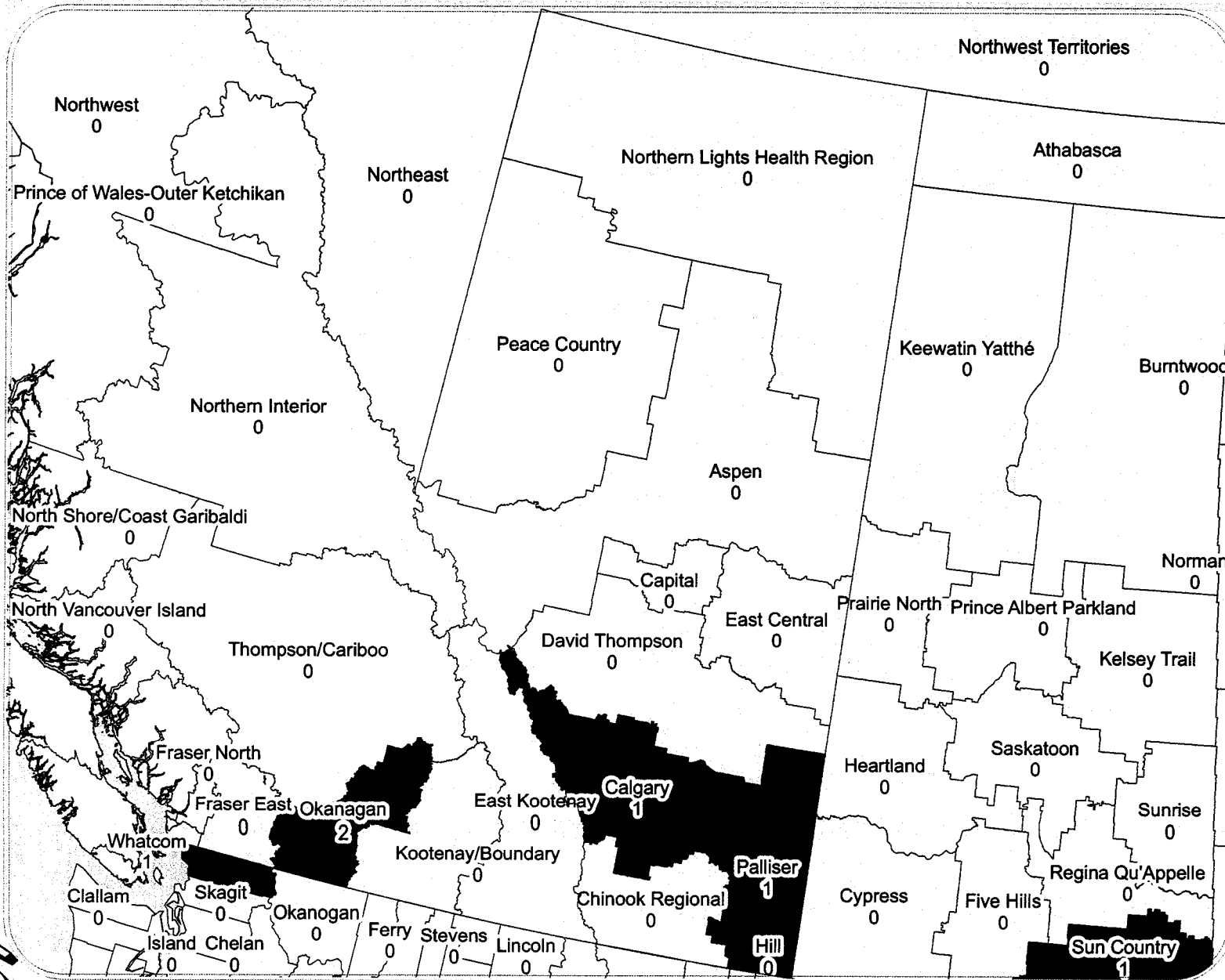
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Clinical Human West Nile Virus Cases 2009

Alberta

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Legend

County/Health Region

□ No Cases

■ Positive Cases

Disclaimer



Updated: Oct 20, 2009 **Nov 12 2009**



Now that you've learned more, remember...

Many species of mosquito do not carry the virus. The greatest risk from being bitten is later in the season, from July to September.

While the overall risk is low, West Nile virus can cause serious and sometimes long-term health effects.

About 1 in 5 people bitten by an infected mosquito will experience symptoms like:

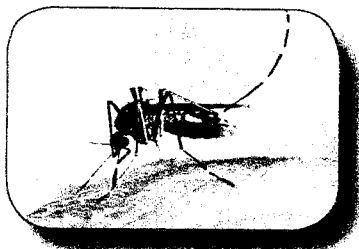
- Fever
- Stiff neck
- Severe headache
- Muscle weakness
- Confusion
- Sudden sensitivity to light

In some cases, these symptoms can last for months, and in a small number of cases, more serious complications or even death can occur.

Personal protection for yourself and your family is the most important preventive measure for West Nile virus.

Take personal steps to protect yourself from mosquito bites, including wearing long clothing, applying DEET-based repellents, and draining sources of standing water around your home.

Handle dead birds with care, and report dead corvids (ravens, crows, magpies, and jays) online at www.bccdc.org



Mosquito photos in this brochure courtesy of Agriculture & Agri-food Canada.
Agriculture Canada Publication 1781/E (Biting flies attacking man and livestock in Canada)

If you have Health-Related Questions...

... about West Nile virus, please call the BC NurseLine at **1-866-215-4700**, 24 hours a day, seven days a week. This line provides translation services in 130 languages. Deaf and hearing-impaired callers can dial 1-866-889-4700.

NH Environmental Health Officers are also available to answer your questions. To reach your local EHO, call:

Northern Interior:

Prince George: (250) 565-2150
Quesnel: (250) 983-6810
Vanderhoof: (250) 567-6900

Northwest:

Terrace: (250) 631-4222
Smithers: (250) 847-6400
Prince Rupert: (250) 622-6380

Northeast:

Dawson Creek: (250) 719-6500
Fort Nelson: (250) 774-7092
Fort St. John: (250) 263-6000

For more information, visit
www.northernhealth.ca



Nov 12 2009

Reorder #10-400-3146 Rev05/09mac



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West Nile Virus

*Health Protection Advice for the
2009 Mosquito Season*



northern health
public health

partners in wellness

Learn more about West Nile virus...

West Nile virus is a disease that first came into North America through New York in 1999. It can infect people, birds, and other animals, and is transmitted through certain mosquitoes.

Up until now, there have been no cases of West Nile virus originating in BC. However, it could arrive this year, likely in other parts of the province before it reaches the North.

West Nile virus can have serious health effects for people, and some animals. The greatest risk from being bitten is later in the season, from July to September. Many species of mosquito found in the north aren't the type known to carry the virus.

Of the people who become infected with West Nile virus:

- Most people will have no symptoms
- About 1 in 5 (20%) will have flu-like symptoms, which can in some cases have lasting health effects, and
- One to two percent may experience long-term, or potentially life-threatening symptoms.

At this time, there is no vaccine available for West Nile virus. A vaccine is in development and may be available for a few more years.

It makes sense to prevent West Nile virus, whether you are travelling. The chances of being bitten by an infected mosquito in the north are currently considered low, but the risk is higher in other parts of Canada and in the United States.

Learn more about Personal Protection...

Your best protection against West Nile virus is personal protection, and then going on with your life as normal.

Personal protection against mosquito bites includes the following:

- Wear light coloured, loose fitting clothes with long sleeves and pants when possible;
- Apply DEET-based mosquito repellent (except for children under six months of age) according to recommended applications;
- Use mosquito nets around your home, especially when mosquito populations are high;
- Repair mosquito screens on doors and windows;
- Mosquitoes only need one teaspoon of water to breed. Empty any source of standing water (a perfect breeding ground for mosquitoes) every two days. These include pet bowls, children's wading pools, flower pots, and wheelbarrows;
- Remove old tires and cover rain barrels with netting as these can also attract mosquitoes;
- Remove dense, weedy vegetation and keep your lawn cut;
- Avoid going outside at dawn and dusk, as mosquitoes are more active during these times;
- For lagoons, dugouts and standing water on rural properties check for larvae and treat with Aquabac 500 (Bti) if present.

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Learn more about Bird Carcasses...

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Large numbers of deceased corvids (ravens, crows, magpies, and jays) can be an indicator of West Nile virus. To help with WNV surveillance, please report sightings of dead corvids to the BC Centre for Disease Control, at www.bccdc.org

Bird carcasses, like other animals remains, shouldn't be left to rot on the ground or handled with bare hands. When you're disposing of a bird carcass:

- Make sure your hands and clothing do not touch the bird or its blood, secretions, or droppings.
- Use heavy-duty, leak-proof rubber gloves like those used for house-cleaning.
- If you don't have rubber gloves, use leak-proof plastic bags as a glove.
- Carefully pick up the bird with your hand protected by at least two layers of leak-proof plastic bags. Then turn the bags inside out over the bird so it ends up inside the bags, with your hand on the outside.
- Handle the bird so that the beak or claws do not puncture the bag or gloves.
- Tightly close the plastic bag containing the bird, place it in another clean plastic bag, and tightly close that one as well.
- Wash your gloved hands, and then wash your bare hands after handling any dead animal.
- Dispose of your bird according to local garbage bylaws.