



West Nile Virus Surveillance



BC Centre for Disease Control

West Nile Virus Surveillance Summary #11 Thursday, October 8, 2009

WNV Activity in BC

(Data as of October 7, 2009)

A probable human WNV infection has been reported in a resident of Interior Health. The case reported non-neurological symptoms and is linked to travel to Saskatchewan. One additional horse infection was also reported from the S. Okanagan for a total of three equine infections in 2009.

The BCCDC webpage on West Nile can be viewed directly at: <http://www.bccdc.ca>

From June 1 st , 2009	Humans*	Corvids submitted	Corvids sighted	Mosquito pools	Horses
# Tested	379	144	398	2482	-
# Positive	3** (1)	0		10	3

*includes routine screening of CSF, organ and stem cell donations in addition to physician test requests

** one case is classified as probable, confirmatory testing is pending.

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

Maps and graphs of BC surveillance data can be found at: <http://www.bccdc.ca>

Accumulated base 16 °C growing degree days comparison for select BC communities

August 31 st	2009	2008	2007	2006	2005	2004	2003	30YR
Cranbrook	368	366	442	423	307	360	476	276
Creston	519	414	607	554	446	517	620	351
Osoyoos	750	649	687	687	680	809	786	540
Kamloops	696	580	579	657	575	704	662	475
Abbotsford	385	280	295	342	340	430	360	222
Vancouver	289	204	221	239	245	329	275	170
Victoria	255	189	207	237	239	296	263	153
Prince George	252	185	189	237	184	264	196	139

All communities experienced dramatically increased accumulated degree days this year compared to last year and the 30 year average. Degree day calculations beyond August 31st are not calculated as newly hatched mosquitoes have entered diapause by this time (a state where they do not seek a blood meal); therefore, the effect of temperature on mosquito development and viral replication after this time does not contribute to WNV risk.

WNV Activity in Canada

(Data as of September 26, 2009)

Ontario and Manitoba each reported their first human infections. Overall, two human infections were reported as neurological syndrome (25%). Activity in Canada was lower than compared to previous seasons, although BC saw their highest WNV activity to date.

	Human Cases	Positive Corvids (confirmed)	Positive Mosquito pools	Positive Equine Cases
BC	3	0	10	3
Alberta	2	n/a	n/a	0
Saskatchewan	1	1	11	0
Manitoba	1	0	2	0
Ontario	1	6	14	1
Total	8	7	37	4

AB, SK and MN and ON are not testing corvids as part of their WNV programs, all birds have been tested by the Canadian Cooperative Wildlife Health Centre

AB is not testing mosquito pools

WNV Activity in the US

- Washington:
 - There have been 27 human cases, 341 positive pools, 20 positive birds and 67 positive horses.
 - This is the highest activity in a season reported for human and equine cases and mosquito pools.
 - Most activity was reported in the southern and central parts of the State.
- Oregon:
 - There have been 7 human cases, 15 positive birds, 5 positive horses and 266 positive mosquito pools reported.
 - Activity was reported in 5 Counties located in the north and eastern part of Oregon.
 - The number of human cases reported was lower in 2009 compared to 2008, although the number of positive mosquito pools, birds and horses was higher than the previous season.
- California:
 - Activity was reported in 41 counties. There have been 72 human cases, 471 dead birds, 1034 mosquito pools, 330 sentinel chicken flocks, 15 horses and 9 squirrels reported as positive in 2009.
 - Surveillance indicators were lower this season compared to previous seasons in California.
 - Sixteen counties report human cases, the majority of which were in the southern and central part of the State.
- Montana:
 - There were a total of 5 human cases, 14 horses and 6 mosquito pools reported positive in 2009.
 - Activity was reported in 6 Counties. One positive horse was reported in Flathead County which borders with BC.
- Idaho:
 - 29 human cases were reported in 2009, all were reported in Counties in the southern part of the state.
 - 1 bird and 10 horse infections as well as nine counties reported positive mosquito pools, all were reported also in southern Counties.

Other US states reporting WNV activity:

(Data as of Oct 6; Sources: USGS survey)

436 human cases of WNV have been reported in 33 States. 53% of human cases have been reported as encephalitis/meningitis. Sixteen fatalities were reported. The number of human cases reported was lower compared to previous seasons.

