



West Nile Virus Surveillance Summary #7

Thursday, September 6, 2007

WNV Activity in BC

(Data as of September 6, 2007)

Seven imported cases of WNV have been identified.

- 6 in Fraser South; 1 VIHA
- 4 WNNS; 3 WN-non-NS
- Onsets range from July 25th to August 7th
- 4 had travelled to SK, 1 to MB and 2 to both SK and MB.

From June 1 st , 2007	Human Cases ¹	Birds Tested	Birds reported on-line	Mosquito pools
# Tested	444	658	490	2367
# Positive	7(*7)	0		0

¹includes routine screening of CSF, organ and stem cell donations in addition to physician test requests

* 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 probable cases, 2 of which are travel-related.

Maps and graphs of BC surveillance data can be found at: <http://www.bccdc.org/content.php?item=373>

3-month Environment Canada climate predictions for BC

The Sep-Oct-Nov temperature forecast is above normal the province, except in southwestern BC.

http://www.weatheroffice.ec.gc.ca/saisons/image_e.html?img=sfe1t_s

The Sep-Oct-Nov precipitation forecast is normal for most of BC. A very small area along the US border is expected to receive below normal precipitation.

http://www.weatheroffice.ec.gc.ca/saisons/image_e.html?img=sfe1p_s

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

August 31st	2007	2006	2005	2004	2003	30YR
Cranbrook	442	423	307	360	476	276
Creston	607	554	446	517	620	351
Osoyoos	687	687	680	809	786	540
Kamloops	579	657	575	704	662	475
Abbotsford	295	342	340	430	360	222
Vancouver	221	239	245	329	275	170
Victoria	207	237	239	296	263	153
Prince George	189	237	184	264	196	139

Accumulated degree days are presented up to Aug 31st. Degree days past this date are not considered useful in the prediction of mosquito development since the day length is shortened and diapause is triggered for most mosquitoes. It was very warm in the Kootenays (Cranbrook and Creston) this summer. South central BC was at par with previous years, and SWBC was slightly cooler this year when compared to the past 5 years.

WNV Activity in Canada

(Data as of Sept 6, 2007)

Over the last 2 weeks, a significant number of new human cases were reported in Alberta (118), SK (605) and MB (249); ON reported their first human infections of the year. Most new cases reflect mosquito exposures before mid-August. With over 1200 reported human cases to date, 2007 is the worst year for WNV transmission since the prairie outbreak in 2003 where 1495 Canadians were affected. Manitoba mosquito surveillance suggests that the numbers of active West Nile virus-infected mosquitoes are now

decreasing but continue to be present in southern parts of the province. 3 deaths have been reported in SK and 2 in Manitoba.

	Human Cases* (probable/confirmed /unclassified/asymp)	Positive Corvids (confirmed)^	Positive Mosquito pools	Positive Equine Cases
Alberta	211 (*29)	-	218	15
Saskatchewan	647	-	411	44
Manitoba	355	-	931	6
Ontario	6 (*1)	49	19	0
Quebec	0	-	0	0
Total	1219	49	1579	65

*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 probable cases, 2 of which are travel-related.

^Provinces with a dash (-) denote those no longer running corvid monitoring as a component of WNV surveillance.

WNV Activity in the US

- Washington:
 - **Activity reported in south.** 4 equine cases have been reported from Yakima county in the south-central part of the state. Timing is similar to last year.
- Oregon:
 - Activity increased to 13 counties. Activity is heaviest along the eastern border with Idaho. Positive indicators: 11 humans, 28 mosquito pools, 5 equine, 9 sentinel chickens, 1 dog and 24 dead birds positive. Activity is similar to that of last year.
- California:
 - Increased WNV activity in early 2007 compared with last year; however current cumulative totals are similar to last year, signaling a recent waning of WNV activity.
 - Positive indicators:
 - 2007: 137 human cases, 832 dead birds, 761 mosquito pools, 189 sentinel chicken flocks, 19 horses and 11 squirrels.
 - 2006: 140 human cases, 850 dead birds, 639 mosquito pools, 343 sentinel chicken flocks.
- Idaho:
 - Continued WNV activity in south and at the base of the panhandle (mid-state). A human case of neuroinvasive disease reported in boundary county (bordering E. Kootenays) was *not* locally acquired.
 - 64 human cases, 12 birds, 8 horses, 1 llama, and 1 alpaca.
- Montana:
 - Continued WNV activity. 68 human cases (45 new in the past 2 weeks), 107 mosquito pools, 20 horses, and 1 moose. Closest activity in Lincoln County bordering East Kootenays (positive horse).

Other US states reporting WNV activity:

Data as of Sept 4; Sources: US CDC

Over the last 2 weeks, 3 new states began reporting human infections for a national cumulative total of 906 WNV infections in 33 states and 26 fatalities. US WNV activity is slightly lower than this time last year when 1267 human cases were reported in 34 states. Canada surpassed the US this week in total number of WNV cases reported.

