



# West Nile Virus Surveillance, 2007



## West Nile Virus Surveillance Summary #8 Thursday, September 20, 2007

### WNV Activity in BC

(Data as of September 19, 2007)

#### **Thirteen imported cases of WNV have been identified.**

- All cases reported to have traveled to SK and MB, or both.

From June 1 <sup>st</sup> , 2007	Human Cases <sup>1</sup>	Birds Tested	Birds reported on-line	Mosquito pools
# Tested	582	713	530	2537
# Positive	13(*13)	0		0

<sup>1</sup>includes 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](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](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, additional new human cases have been reported in Alberta (35), SK (407), MB (149), and ON (7). Mosquito surveillance and the reduction in the number of new human cases reported (in comparison to previous weeks) suggest that WNV activity is decreasing. With 1817 reported human cases to date, 2007 is the worst year for WNV transmission since the prairie outbreak in 2003 where 1495 Canadians were affected. 4 deaths have been reported in SK and 3 in MB.

	Human Cases* (probable/confirmed /unclassified/asymp)	Positive Corvids (confirmed)^	Positive Mosquito pools	Positive Equine Cases
Alberta	246 (*32)	-	223	23
Saskatchewan	1054	-	460	55
Manitoba	504(*1)	-	948	8
Ontario	13 (*8)	68	39	0
Quebec	0	-	0	0
<b>Total</b>	<b>1817</b>	<b>68</b>	<b>1670</b>	<b>86</b>

\*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:
  - **Increased activity reported in south.** 7 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 16 counties. Activity is heaviest along the eastern border with Idaho. Positive indicators: 13 humans, 28 mosquito pools, 8 equine, 14 sentinel chickens, 1 dog and 32 dead birds positive.
- California:
  - Increased WNV activity in early 2007 compared with last year, spread throughout the state; however, current cumulative totals are similar to last year, signaling a recent waning of WNV activity.
  - Positive indicators:
    - 2007: 245 human cases, 1006 dead birds, 891 mosquito pools, 273 sentinel chicken flocks, 22 horses and 15 squirrels.
    - 2006: 214 human cases, 1098 dead birds, 724 mosquito pools, 445 sentinel chicken flocks, 44 horses, and 26 squirrels.
- 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.
  - 87 human cases, 14 birds, 12 horses, 1 llama, and 1 alpaca.
- Montana:
  - Continued WNV activity, however, activity appears to be waning. 100 human cases (32 new in the past 2 weeks), 110 mosquito pools, 24 horses, and 1 moose. Closest activity in Lincoln County bordering East Kootenays (positive horse).

### Other US states reporting WNV activity:

Data as of Sept 18; Sources: US CDC

Over the last 2 weeks, 6 new states began reporting human infections for a national cumulative total of 1982 WNV infections in 39 states and 49 fatalities. All but 3 of the contiguous states are now reporting activity. US WNV activity is slightly lower than this time last year when 2171 human cases and 74 fatalities were reported. Canada is just below the US this week in total number of WNV cases reported.

