



West Nile Virus National Surveillance Report

English Edition

September 18, 2011 to September 24, 2011 (Week 38)

Canada

Human:

During the week 38, ending on 24 September 2011, six new human cases of West Nile virus (WNV) were reported to the Public Health Agency of Canada (PHAC). As of week 38, a total of sixty-six (66) human clinical cases [Quebec (29), Ontario (37)] and four asymptomatic infections [Quebec (2), Ontario (2)] have been reported to PHAC in Canada. Of the 66 clinical cases, twenty-two (33%) were classified as West Nile virus Neurological Syndrome, twenty-five (38%) as West Nile virus Non-Neurological Syndrome, and nineteen (29%) as unclassified. Two (2) deaths associated with WNV has been reported to PHAC.

Mosquito:

A total number of 286 mosquito pools positive for WNV have been reported in Canada, including Saskatchewan (4), Ontario (278), and Quebec (4).

Bird:

A total of 105 dead birds have been tested for WNV by the Canadian Cooperative Wildlife Health Centre (CCWHC) in Canada. Of them, twenty-two (22) positives have been reported in three provinces: Quebec (5), Ontario (16) and Saskatchewan (1).

Domestic Animal:

Nine (9) positive horses with WNV infection have been reported by the Canadian Food Inspection Agency (CFIA): six in Ontario and three in Quebec.

National WNV surveillance data and maps can be found on the PHAC web site at: <http://www.phac-aspc.gc.ca/wnv-vwn/index.html>

United States

As of September 27, a total of 362 human cases of WNV have been reported to the Centers for Disease Control and Prevention (CDC) in the United States. Of them, 244 (67%) were reported as neuroinvasive disease cases and 118 (33%) as nonneuroinvasive disease cases. Eighteen (18) deaths have been reported. Eighty-seven WNV presumptive viremic donors have been reported.

Detailed information can be accessed via the CDC web site: <http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>

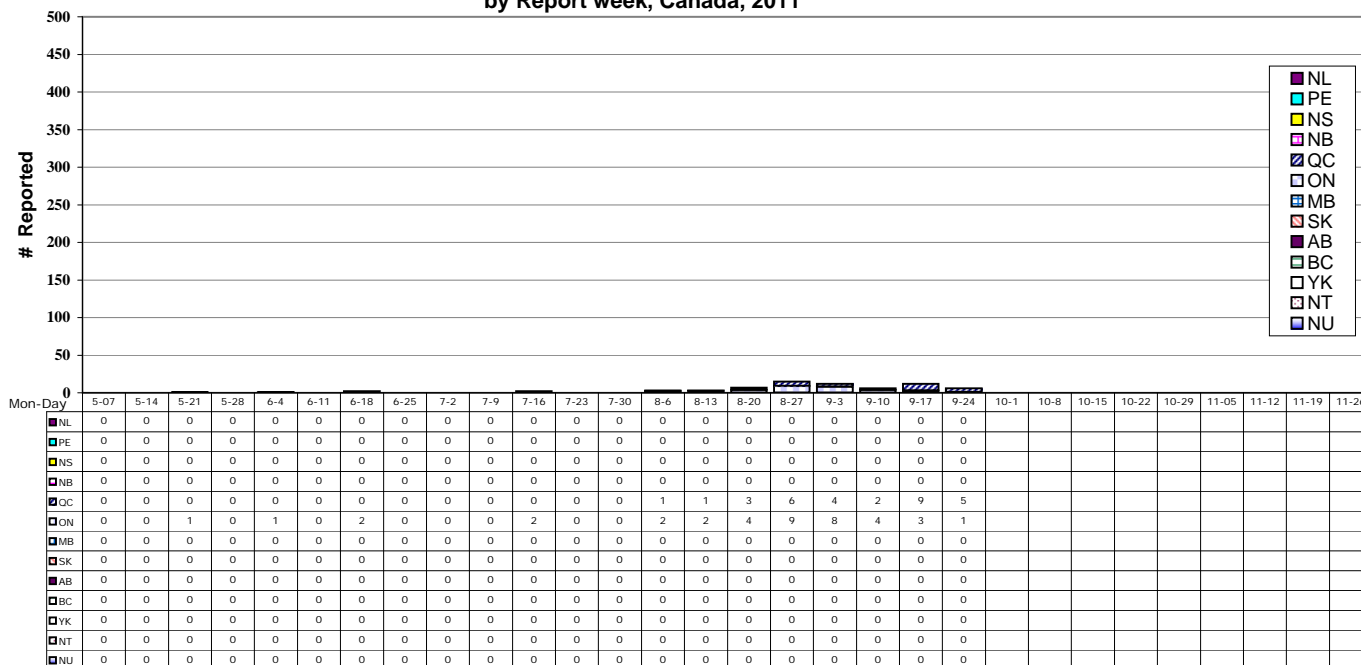
Europe and Neighbouring Countries

As of September 29, a total of 72 confirmed human cases of West Nile fever have been reported in the EU (56 cases in Greece, 7 in Italy and 9 in Romania). In the neighbouring countries, 136 cases have been reported: 114 in the Russian Federation, 2 in Albania, 2 in the former Yugoslav Republic of Macedonia, 3 in Turkey and 15 in Israel.

Detailed information can be accessed via the ECDC web site:

http://ecdc.europa.eu/en/activities/diseaseprogrammes/emerging_and_vector_borne_diseases/Pages/West_Niles_fever_Risk_Maps.aspx

WNV Human Clinical Cases and Asymptomatic Infections, by Province/Territory, by Report week, Canada, 2011



Abbreviations: Newfoundland & Labrador (NL), Prince Edward Island (PE), New Brunswick (NB), Nova Scotia (NS), Quebec (QC), Ontario (ON), Manitoba (MB), Saskatchewan (SK), Alberta (AB), British Columbia (BC), Yukon Territory (YK), Northwest Territories (NT), Nunavut (NU)

**WNV Human Clinical Cases and Asymptomatic Infections for the Current Report Week and Year-to-Date,
by Province/Territory, Canada, 2011**

| Provinces Territories | Report Week: September 18, 2011 to September 24, 2011 (Week 38) | | | | | |
|--------------------------|---|--|-------------------------------|--------------------------------------|---|---|
| | West Nile Virus Neurological Syndrome (WNNS) | West Nile Virus Non- Neurological Syndrome (WN Non_NS) | Unclassified / Unspecified | Total Clinical Cases ¹ | No. of travel related cases ² | West Nile Virus Asymptomatic Infections ³ |
| | No. Cases | No. Cases | | | | |
| NL | 0 | 0 | 0 | 0 | 0 | 0 |
| PE | 0 | 0 | 0 | 0 | 0 | 0 |
| NS | 0 | 0 | 0 | 0 | 0 | 0 |
| NB | 0 | 0 | 0 | 0 | 0 | 0 |
| QC | 2 | 0 | 3 | 5 | 0 | 0 |
| ON | 0 | 0 | 1 | 1 | 0 | 0 |
| MB | 0 | 0 | 0 | 0 | 0 | 0 |
| SK | 0 | 0 | 0 | 0 | 0 | 0 |
| AB | 0 | 0 | 0 | 0 | 0 | 0 |
| BC | 0 | 0 | 0 | 0 | 0 | 0 |
| YT | 0 | 0 | 0 | 0 | 0 | 0 |
| NT | 0 | 0 | 0 | 0 | 0 | 0 |
| NU | 0 | 0 | 0 | 0 | 0 | 0 |
| Canada | 2 | 0 | 4 | 6 | 0 | 0 |
| Provinces Territories | Year-to-Date: May 1, 2011 to September 24, 2011 | | | | | |
| | West Nile Virus Neurological Syndrome (WNNS) | West Nile Virus Non- Neurological Syndrome (WN Non_NS) | Unclassified / Unspecified | Total Clinical Cases ¹ | No. of travel related cases ² | West Nile Virus Asymptomatic Infections ³ |
| | No. Cases | No. Cases | | | | |
| NL | 0 | 0 | 0 | 0 | 0 | 0 |
| PE | 0 | 0 | 0 | 0 | 0 | 0 |
| NS | 0 | 0 | 0 | 0 | 0 | 0 |
| NB | 0 | 0 | 0 | 0 | 0 | 0 |
| QC | 9 | 7 | 13 | 29 | 0 | 2 |
| ON | 13 | 18 | 6 | 37 | 1 | 2 |
| MB | 0 | 0 | 0 | 0 | 0 | 0 |
| SK | 0 | 0 | 0 | 0 | 0 | 0 |
| AB | 0 | 0 | 0 | 0 | 0 | 0 |
| BC | 0 | 0 | 0 | 0 | 0 | 0 |
| YT | 0 | 0 | 0 | 0 | 0 | 0 |
| NT | 0 | 0 | 0 | 0 | 0 | 0 |
| NU | 0 | 0 | 0 | 0 | 0 | 0 |
| Canada | 22 | 25 | 19 | 66 | 1 | 4 |

¹ Total Clinical Cases is the sum of both probable and confirmed: WNNS, WN Non-NS and Unclassified / Unspecified

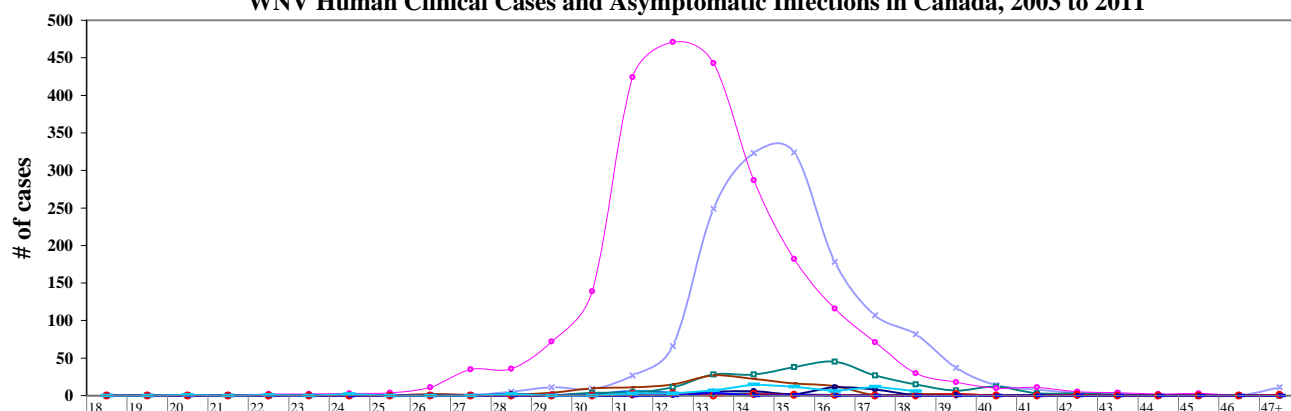
² Likely related to travel outside the province / territory. These cases are included in either the Total Clinical Cases or West Nile Virus Asymptomatic Infection

³ Satisfies West Nile virus diagnostic test criteria IN THE ABSENCE of clinical criteria. This category could include asymptomatic blood donors whose blood is screened using a Nucleic Acid Amplification Test (NAT), by Blood Operators (i.e. Canadian Blood Services or Hema-Quebec) and is subsequently brought to the attention of public health officials. Blood Operators in Canada perform a supplementary WN virus-specific NAT following any positive donor screen test result.

Details on human case definitions can be seen on the PHAC West Nile virus surveillance web site:

http://www.phac-aspc.gc.ca/wnv-vwn/hmncasedef_e.html

WNV Human Clinical Cases and Asymptomatic Infections in Canada, 2003 to 2011



| Week Date | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47+ |
|--------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 5-07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6-4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6-11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6-18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6-25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7-9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7-16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7-23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7-30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-05 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Report Week by Episode date ⁴

**Cumulative number of WNV positive mosquito pools tested by week,
by province/territory, in Canada⁵ 2011**

| Provinces | Cumulative Total Tested by Report Week | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|
| Territories | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |
| NL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| PE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| NS ⁶ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| NB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| QC ⁶ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | |
| ON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 11 | 43 | 87 | 136 | 200 | 200 | 200 | 273 | 278 | | | | | | | | |
| MB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| SK | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | | | | | | | | |
| AB ⁶ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| BC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| YK | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| NT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| NU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| Canada | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 11 | 44 | 90 | 142 | 207 | 207 | 207 | 280 | 286 | | | | | | | | |

⁴ Episode date could include one of the following: symptom onset date, diagnosis date, lab sample date, or reporting date.

⁵ Detailed WNV mosquito surveillance data can be accessed through provincial/territorial web sites.

⁶ These provinces are not conducting mosquito surveillance as part of their WNV surveillance program at provincial level in 2011.

The graph displays the progression of influenza A(H1N1) virus activity across several seasons. The 2011 season (purple line with asterisks) shows a notable increase in both the percentage and the number of positive cases, peaking around week 31-35. The 2003 season (green line with squares) also shows a significant peak in the percentage of positive cases around week 39. Other seasons (2007, 2009, 2010) show lower overall activity, with the 2010 season (red line with circles) showing a small peak around week 35.

| Report Week | On-Day | 2003 % +ve | 2007 % +ve | 2009 % +ve | 2010 % +ve | 2010 # +ve | 2011 % +ve |
|-------------|--------|------------|------------|------------|------------|------------|------------|
| 15 | 4-17 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | 5-1 | 10 | 0 | 0 | 0 | 0 | 0 |
| 19 | 5-15 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 | 5-29 | 0 | 5 | 0 | 0 | 0 | 0 |
| 23 | 6-12 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 | 6-26 | 0 | 5 | 0 | 0 | 0 | 0 |
| 27 | 7-10 | 5 | 5 | 0 | 0 | 0 | 0 |
| 29 | 7-24 | 10 | 10 | 0 | 0 | 0 | 15 |
| 31 | 8-7 | 15 | 5 | 0 | 0 | 0 | 50 |
| 33 | 8-21 | 38 | 5 | 5 | 5 | 0 | 20 |
| 35 | 9-4 | 45 | 15 | 25 | 10 | 0 | 50 |
| 37 | 9-18 | 45 | 18 | 15 | 0 | 0 | 0 |
| 39 | 10-2 | 58 | 0 | 0 | 0 | 0 | 0 |
| 41 | 10-16 | 20 | 0 | 0 | 0 | 0 | 0 |
| 43 | 10-30 | 10 | 0 | 0 | 0 | 0 | 0 |
| 45 | 11-13 | 0 | 0 | 0 | 0 | 0 | 0 |

[illegible][illegible]

⁹ These provinces are not conducting dead bird surveillance as part of their WNV surveillance program in 2009. However, WNV positive dead birds may be identified in these areas through the National Wildlife Disease Surveillance Program of the Canadian Cooperative Wildlife Health Centre (CCWHC).