



# **West Nile virus**

# **National Surveillance Report**

English Edition
October 20 to October 26, 2013
(Report Week 43)

#### Canada

#### **Humans:**

During surveillance week 43, three additional cases of West Nile virus in Ontario were reported to the Public Health Agency of Canada. As of week 43, there have been a total of one hundred and seven clinical cases and three (3) asymptomatic infections reported to the Agency: twenty-eight in Quebec; fifty-three in Ontario; two (2) in Manitoba; six (6) in Saskatchewan, and twenty-one in Alberta. Of the 107 clinical cases, 39 (36%) were diagnosed as WNv neurological syndrome; 45 (42%) as WNv non-neurological syndrome; and 23 (21%) as unclassified. Four fatal cases (3.6%) associated with West Nile virus have been reported.

#### Mosquitoes:

To date (Week 43), a total of 12, 655 mosquito pools have been tested for WNv [Quebec (2,530); Ontario (8,642); Manitoba (1088); Saskatchewan (106); and British Columbia (289)]. Of these, 319 (2.5%) mosquito pools tested positive for WNv [Quebec (60); Ontario (198); Saskatchewan (41); Manitoba (19); and British Columbia (1)].

#### **Dead Birds:**

A total of 180 dead birds have been tested for WNv by the Canadian Cooperative Wildlife Health Centre. Of these, 82 positives were reported [Quebec (35); Ontario (34); Manitoba (1); Saskatchewan (11)]; and Alberta (1)].

#### **Domestic Animals:**

A total of fifty-four animals positive for WNv have been reported by the Canadian Food Inspection Agency: Quebec (four horses, one domestic bird); Ontario (two alpacas, eleven horses, two birds); Manitoba (three horses); Saskatchewan (seventeen horses); Alberta (thirteen horses); and BC (one horse).

National WNv surveillance data and maps can be found on the PHAC website at: <a href="http://www.phac-aspc.qc.ca/wnv-vwn/index.html">http://www.phac-aspc.qc.ca/wnv-vwn/index.html</a>

#### **United States**

As of week 43, 2,059 human cases of WNv have been reported by the Centers for Disease Control and Prevention in the United States. Of these, 1015 (49%) were diagnosed as neuroinvasive disease, and 1044 (51%) as non-neuroinvasive. Eighty-three fatal cases (4%) were reported. Three hundred and sixty-nine cases of presumptive viremic blood donors were reported.

http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12 detailed.html

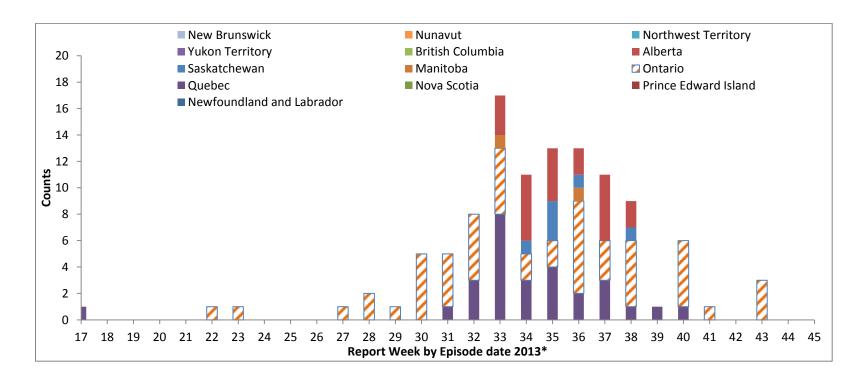
#### **Europe and Neighbouring countries**

A total of 781 human cases of WNv have been reported by the European Centre for Disease Prevention and Control. Of these, two hundred and twenty-four human cases have been reported in the European Union and the European Economic Area: Croatia (16); Greece (86), Hungary (30), Italy (68); and Romania (24). Five hundred and fifty-seven human cases have been reported in neighbouring countries: Bosnia and Herzegovina (3), the Former Yugoslav Republic of Macedonia one (1); Montenegro (4); Serbia (302); the Russian Federation (177); Ukraine (1); Israel (63); and Tunisia (6).

http://ecdc.europa.eu/en/healthtopics/west\_nile\_fever/West-Nile-fever-maps/Pages/index.aspx)

Figure 1

WNv clinical cases and asymptomatic infections, by Province / Territory and by report week, 2013 season



<sup>\*</sup> Episode date could include one of the following: onset date, diagnosis date, lab sample date, or reporting date

Table 1

													R	eport	Week	s of 20	013												
	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
Newfoundland and Labrador	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		
Prince Edward Island	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		
New Brunswick	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		
Nova Scotia	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		
Quebec	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	8	3	4	2	3	1	1	1	0	0	0		
Ontario	0	0	0	0	0	1	1	0	0	0	1	2	1	5	4	5	5	2	2	7	3	5	0	5	1	0	3		
Manitoba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0		
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	1	0	0	0	0	0		
Alberta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	4	2	5	2	0	0	0	0	0		
British Columbia	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		
Yukon Territory	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		
Northwest Territory	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		
Nunavut	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		
Total	1	0	0	0	0	1	1	0	0	0	1	2	1	5	5	8	17	11	13	13	11	9	1	6	1	0	3		

Table 2
West Nile virus human clinical cases and asymptomatic infections by Province / Territory for the current Report Week and year to date,
2013 Season

	West Nile virus	West Nile virus	Unclassified /	Total clinical	# of travel	West Nile virus
	Neurological syndrome	Non-Neurological syndrome	Unspecified	cases <sup>1</sup>	related cases <sup>2</sup>	asymptomatic infections <sup>3</sup>
Newfoundland and Labrador	0	0	0	0	0	0
Prince Edward Island	0	0	0	0	0	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	0	0	0
Quebec	0	0	0	0	0	0
Ontario	0	0	3	3	0	0
Manitoba	0	0	0	0	0	0
Saskatchewan	0	0	0	0	0	0
Alberta	0	0	0	0	0	0
British Columbia	0	0	0	0	0	0
Yukon Territory	0	0	0	0	0	0
Northwest Territory	0	0	0	0	0	0
Nunavut	0	0	0	0	0	0
Total	0	0	3	3	0	0
		Year	to date: From January	1 to October 26, 20	13	
Newfoundland and Labrador	0	0	0	0	0	0
Prince Edward Island	0	0	0	0	0	0

Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	0	0	0
Quebec	21	6	0	27	2	1
Ontario	8	21	23	52	1	1
Manitoba	1	1	0	2	0	0
Saskatchewan	4	1	0	5	0	1
Alberta	5	16	0	21	0	0
British Columbia	0	0	0	0	0	0
Yukon Territory	0	0	0	0	0	0
Northwest Territory	0	0	0	0	0	0
Nunavut	0	0	0	0	0	0
Total	39	45	23	107	3	3

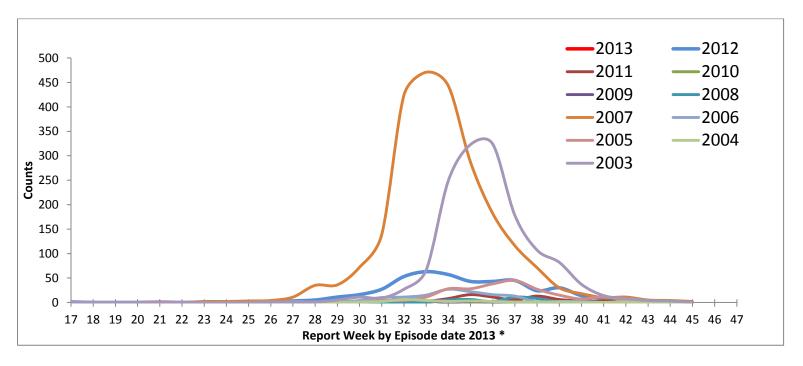
<sup>&</sup>lt;sup>1</sup> Total clinical cases is the sum of both probable and confirmed: West Nile virus neurological and non-neurological syndromes, along with any unclassified or unspecified cases.

<sup>&</sup>lt;sup>2</sup> Likely related to travel outside the province/territory. These cases are included in either the total clinical cases or West Nile virus asymptomatic infections.

<sup>&</sup>lt;sup>3</sup> 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 West Nile virus specific NAT following any positive donor screen test result.

Figure 2

WNv clinical cases and asymptomatic infections by report week, 2013 season compared to previous seasons



<sup>\*</sup> Episode date could include one of the following: onset date, diagnosis date, lab sample date, or reporting date

Table 3

														Rep	ort We	eks of	2013												
	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
2013	1	0	0	0	0	1	1	0	0	0	1	2	1	5	5	8	17	11	13	13	11	9	1	6	1	0	3		
2012	1	0	0	0	0	0	0	0	0	0	3	5	11	16	27	53	63	57	43	43	45	24	30	14	9	5	1	0	0
2011	0	0	0	0	1	0	1	0	2	0	0	0	0	0	1	8	3	8	16	11	5	13	6	3	3	2	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	2	1	1	0	0	2	0	0	1	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	5	6	2	11	8	1	1	0	1	0	0	0
2007	0	0	0	0	0	0	2	2	3	4	11	35	36	72	139	424	471	443	287	182	116	71	30	18	10	11	5	4	2
2006	0	0	0	0	0	0	0	0	0	0	2	1	1	4	10	11	15	27	22	16	13	1	2	2	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	11	28	28	38	45	27	15	7	12	3	3	1	0
2004	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	6	4	2	3	2	1	1	1	0	0	1	0	0	0
2003	0	0	0	0	0	0	0	0	0	1	1	1	5	11	9	27	66	249	323	324	178	107	82	37	14	8	4	3	0

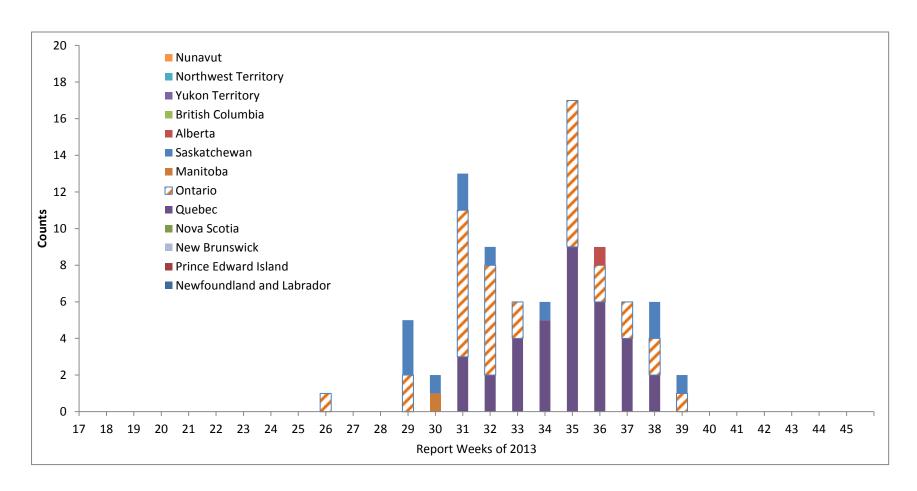
Table 4

Reported cumulative number of West Nile virus positive mosquito pools by Province/Territory and by report week, 2013 season\*

														ſ	Report	Week	s of 201	.3											
	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
Newfoundland and Labrador	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		
Prince Edward Island	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		
New Brunswick	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		
Nova Scotia	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		
Quebec	0	0	0	0	0	0	0	0	0	0	0	0	2	3	5	11	23	23	36	40	47	59	60	60	60	60	60		
Ontario	0	0	0	0	0	0	0	0	0	2	2	4	12	22	41	65	89	131	155	179	190	194	196	198	198	198	198		
Manitoba	0	0	0	0	0	0	0	0	0	0	0	1	1	7	10	16	16	17	17	17	19	19	19	19	19	19	19		
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	1	1	4	6	18	18	29	36	40	41	41	41	41	41	41	41		
Alberta	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		
British Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1		
Yukon Territory	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		
Northwest Territory	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		
Nunavut	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		
Total	0	0	0	0	0	0	0	0	0	2	2	6	16	36	62	111	147	201	245	277	298	314	317	319	319	319	319		

Reported number of dead birds testing positive for WNv by Province / Territory and by report week, 2013 season

Figure 3



### Link figure 3 to the following table 5 below

Table 5

													Re	port V	Veeks	of 20	13												
	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
Newfoundland and Labrador	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		
Prince Edward Island	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		
New Brunswick	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		
Nova Scotia	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		
Quebec	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	4	5	9	6	4	2	0	0	0	0	0		
Ontario	0	0	0	0	0	0	0	0	0	1	0	0	2	0	8	6	2	0	8	2	2	2	1	0	0	0	0		
Manitoba	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0		3	1	2	1	0	1	0	0	0	2	1	0	0	0	0		
Alberta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
British Columbia	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		
Yukon Territory	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		
Northwest Territory	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		
Nunavut	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		
Total	0	0	0	0	0	0	0	0	0	1	0	0	5	2	13	9	6	6	17	9	6	6	2	0	0	0	0		

Percentage of dead birds testing positive for WNv in the 2013 season by report week, as compared to the 2003 and 2012 seasons

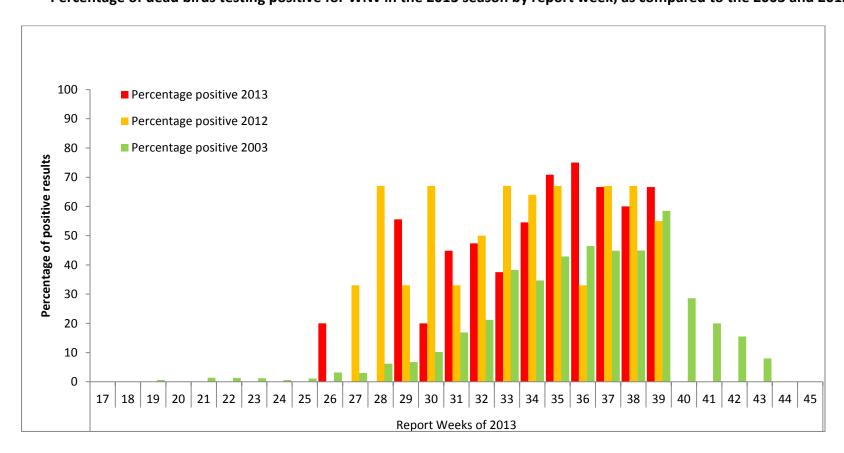


Figure 4

## Link figure 4 to the following table 7 below

Table 7

														Re	port V	Veeks	of 20	13												
		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
Numbers positive	2013	0	0	0	0	0	0	0	0	0	1	0	0	5	2	13	9	6	6	17	9	6	6	2	0	0	0	0		
Numbers tested	2013	0	0	0	1	0	0	0	2	2	5	8	5	9	10	29	19	16	11	24	12	9	10	3	3	1	0	0		
Percentage positive	2013	0	0	0	0	0	0	0	0	0	20	0	0	56	20	45	47	38	55	71	75	67	60	67	0	0	0	0		
Percentage positive	2012	0	0	0	0	0	0	0	0	0	0	33	67	33	67	33	50	67	64	67	33	67	67	55	0	0	0	0	0	0
Percentage positive	2003	0	0	1	0	1	1	1	1	1	3	3	6	7	10	17	21	38	35	43	46	45	45	58	29	20	15	8	0	0