



West Nile virus

National Surveillance Report

English Edition
September 8 to September 14, 2013
(Report Week 37)

Canada

Humans:

During surveillance week 37, the Public Health Agency of Canada (the Agency) was informed of nineteen human clinical cases of West Nile virus (WNv): eight (8) in Quebec; two (2) in Ontario; and nine (9) in Alberta. As of week 37, there have been a total of sixty-one clinical cases and two asymptomatic infections reported to the Agency: seventeen (17) in Quebec; twenty-four (24) in Ontario; two (2) in Manitoba; one (1) in Saskatchewan, and nineteen (19) in Alberta. Of the 61 clinical cases, sixteen (26%) were diagnosed as WNv neurological syndrome; thirty-five (57%) as WNv non-neurological syndrome; and ten (16%) as unclassified. Two fatal cases associated with West Nile virus have been reported.

Mosquitoes:

To date (Week 37), a total of 11,220 mosquito pools have been tested for WNv [Quebec (1,698); Ontario (8,318); Manitoba (809); Saskatchewan (106); and British Columbia (289)]. Of these, 298 (2.7%) mosquito pools tested positive for WNv [Quebec (47); Ontario (190); Saskatchewan (41); Manitoba (19); and British Columbia (1)].

Dead Birds:

A total of 148 dead birds have been tested for WNv by the Canadian Cooperative Wildlife Health Centre. Of these, 58 positives were reported [Quebec (10); Ontario (39); Manitoba (1); Saskatchewan (8)].

Domestic Animals:

A total of thirty-six animals tested positive for WNv have been reported by the Canadian Food Inspection Agency: Quebec (two horses, one domestic bird); Ontario (two alpacas, seven horses, two birds); Manitoba (two horses); Saskatchewan (eleven horses); and Alberta (nine horses).

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

United States

As of week 37, 890 human cases of WNv have been reported by the Centers for Disease Control and Prevention in the Unites States. Of these, 407 (46%) were diagnosed as neuroinvasive disease, and 483 (54%) non-neuroinvasive. Thirty-three fatal cases were reported. One hundred and ninety-two cases of presumptive viremic blood donors were reported.

 $\underline{http://www.cdc.gov/ncidod/dvbid/westnile/surv\&controlCaseCount12\ detailed.html}$

Europe and Neighbouring countries

A total of 500 human cases of WNv have been reported by the European Centre for Disease Prevention and Control. Of these, one hundred and thirty-nine human cases have been reported in the European Union and the European Economic Area: Croatia (11); Greece (65), Hungary (11), Italy (42); and Romania (10). Three-hundred and sixty-one human cases have been reported in neighbouring countries: Bosnia and Herzegovina (1), the Former Yugoslav Republic of Macedonia one (1); Montenegro (1); Serbia (177); the Russian Federation (124); Ukraine (1); and Israel (56).

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

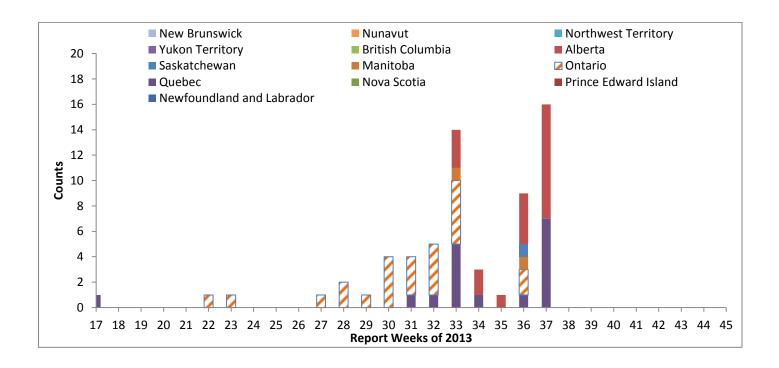


Table 1

													R	eport	Week	s 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								
Prince Edward Island	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								
Nova Scotia	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	1	5	1	0	1	7								
Ontario	0	0	0	0	0	1	1	0	0	0	1	2	1	4	3	4	5	0	0	2	0								
Manitoba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0								
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0								
Alberta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	4	9								
British Columbia	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								
Northwest Territory	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								
Total	1	0	0	0	0	1	1	0	0	0	1	2	1	4	4	5	14	3	1	9	16								

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

				September 8-14, 2	2013 (Week 37)		
		West Nile virus Neurological syndrome	West Nile virus Non-Neurological	Unclassified / Unspecified	Total clinical	# of travel related cases ²	West Nile virus
		# cases	syndrome # cases	Onspecifica	cuses	related eases	infections ³
	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
tories	Quebec	5	2	1	8	0	0
terri	Ontario	0	2	0	2	0	0
s and	Manitoba	0	0	0	0	0	0
Provinces and territories	Saskatchewan	0	0	0	0	0	0
Pro	Alberta	0	9	0	9	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	5	13	1	19	0	0
			Year to	o date: From January	1 to September 14, 2	013	
Provinces and territories	Newfoundland and Labrador	0	0	0	0	0	0
Provinc	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	11	4	1	16	1	1
Ontario	3	12	9	24	1	0
Manitoba	1	1	0	2	0	0
Saskatchewan	0	0	0	0	0	1
Alberta	1	18	0	19	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	16	35	10	61	2	2

¹ 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.

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

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 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

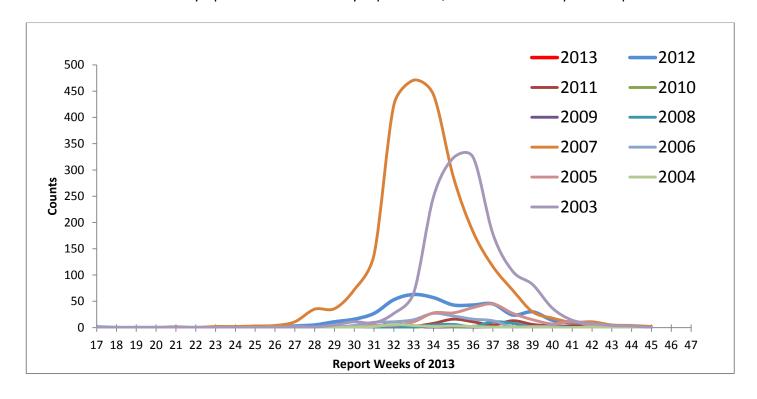


Table 3

														Rep	ort We	eks of	2013												
	1 7	1 8	1 9	2 0	2 1	2	2	2 4	2 5	2 6	2 7	2 8	2 9	3 0	31	32	33	34	35	36	37	38	3 9	4 0	4 1	4 2	4	4 4	4 5
2013	1	0	0	0	0	1	1	1	0	0	1	2	0	3	4	4	15	2	1	8									
2012	1	0	0	0	0	0	0	0	0	0	3	5	1	1 6	27	53	63	57	43	43	45	24	3	1 4	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	1 1	3 5	3 6	7 2	13 9	42 4	47 1	44 3	28 7	18 2	11 6	71	3 0	1 8	1 0	1 1	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	1 5	7	1 2	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	1 1	9	27	66	24 9	32 3	32 4	17 8	10 7	8 2	3 7	1 4	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*

														Repoi	rt Wee	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
Newfoundland	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								
New Brunswick	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								
Quebec	0	0	0	0	0	0	0	0	0	0	0	0	2	3	5	11	23	36	36	40	47								
Ontario	0	0	0	0	0	0	0	0	0	2	2	4	12	22	41	65	89	131	155	179	190								
Manitoba	0	0	0	0	0	0	0	0	0	0	0	1	1	7	10	16	16	16	17	17	19								
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3	18	29	29	36	40	41								
Alberta	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								
Yukon Territory	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								
Nunavut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								

^{*} Detailed West Nile virus mosquito surveillance data can be accessed through Provincial/ Territorial websites

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

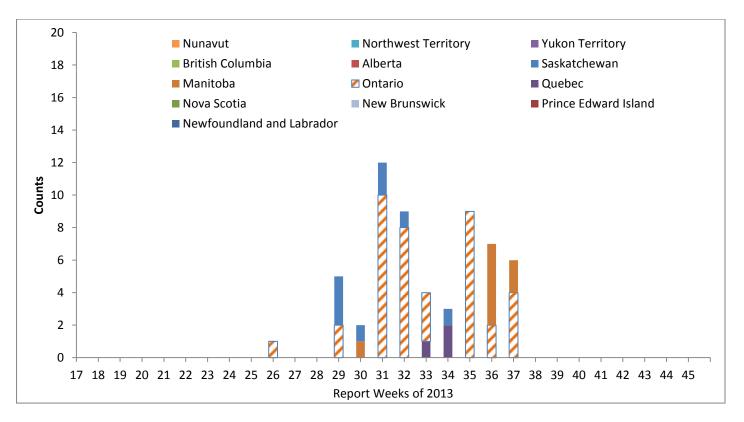


Figure 3

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								
Prince Edward Island	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								
Nova Scotia	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	0	0	1	2	0	0	0								
Ontario	0	0	0	0	0	0	0	0	0	1	0	0	2	0	10	8	3	0	9	2	4								
Manitoba	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	2								
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	3	1	2	1	0	1	0	0	0								
Alberta	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	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								
Northwest Territory	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								
Total	0	0	0	0	0	0	0	0	0	1	0	0	5	2	12	9	4	3	9	7	6								

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

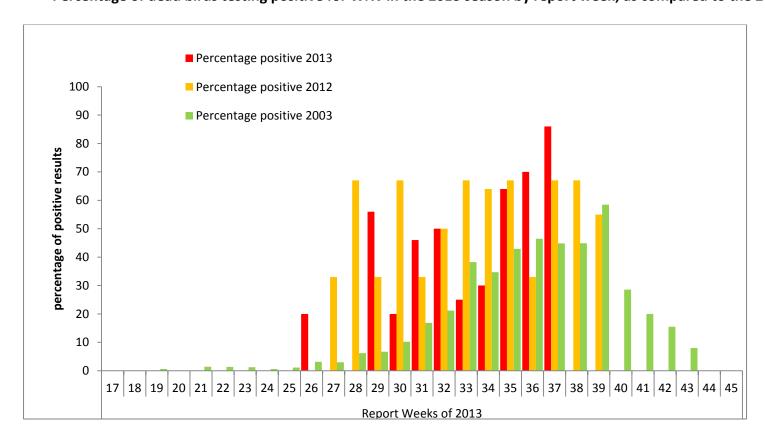


Figure 4

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	12	9	4	3	9	7	6								
Numbers tested	2013	0	0	0	1	0	0	0	0	0	5	8	5	9	10	26	18	16	10	14	10	7								
Percentage positive	2013	0	0	0	0	0	0	0	0	0	20	0	0	56	20	46	50	25	30	64	70	86								
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