



# West Nile virus

## National Surveillance Report

English Edition  
October 27 to November 9, 2013  
(Report Weeks 44 & 45)

### Canada

#### Humans:

During weeks 44-45, one clinical case of West Nile virus was reported to the Public Health Agency of Canada (the Agency): Quebec (1). As of week 45, a total of one hundred and eight clinical cases and three (3) asymptomatic infections have been reported to the Agency: twenty-nine in Quebec; fifty-three in Ontario; two (2) in Manitoba; six (6) in Saskatchewan, and twenty-one in Alberta. Of the 108 clinical cases, 40 (37%) were diagnosed as WNV neurological syndrome; 45 (42%) as WNV non-neurological syndrome; and 23 (21%) as unclassified. Four fatal cases (3.7%) associated with West Nile virus have been reported.

#### Mosquitoes:

To date (Week 45), 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 187 dead birds have been tested for WNV by the Canadian Cooperative Wildlife Health Centre. Of these, 84 positives were reported [Quebec (35); Ontario (34); Manitoba (2); Saskatchewan (11)]; Alberta (1); and BC (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: <http://www.phac-aspc.gc.ca/wnv-vwn/index.html>

### United States

As of week 45, 2,215 human cases of WNV have been reported by the Centers for Disease Control and Prevention in the United States. Of these, 1108 (50%) were diagnosed as neuroinvasive disease, and 1107 (50%) as non-neuroinvasive. Ninety-three fatal cases (4%) were reported. Three hundred and eighty-nine cases of presumptive viremic blood donors were reported.

[http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12\\_detailed.html](http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12_detailed.html)

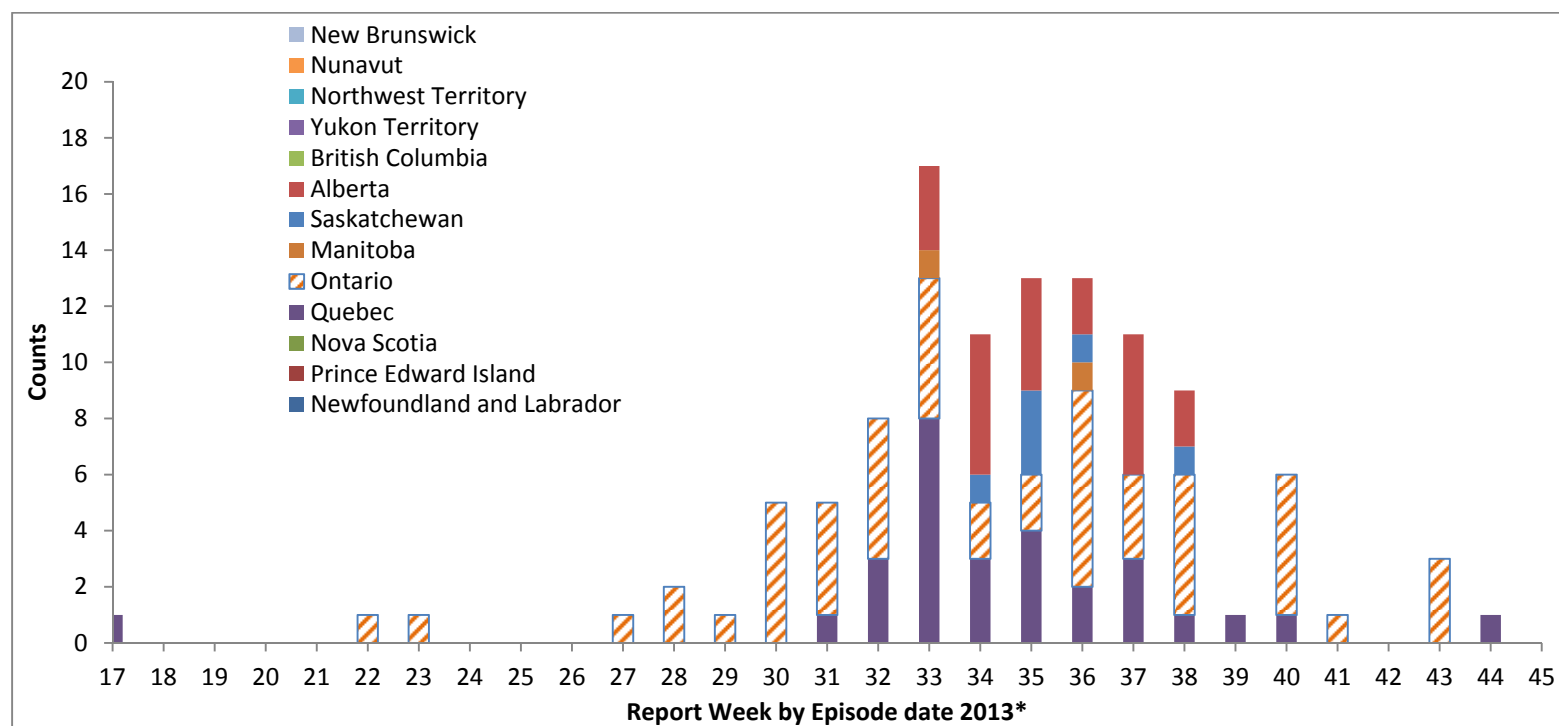
### Europe and Neighbouring countries

A total of 783 human cases of WNV have been reported by the European Centre for Disease Prevention and Control. Of these, two hundred and twenty-six human cases have been reported in the European Union and the European Economic Area: Croatia (16); Greece (86), Hungary (31), Italy (69); 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](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



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

[Link Figure 1 to the following table 1 below](#)

Table 1

	Report Weeks 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 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	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	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	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	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	1	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	0	0	
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	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	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	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	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	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	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	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	1	0	

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

	October 27- November 9, 2013 (Weeks 44 & 45)					
	West Nile virus Neurological syndrome	West Nile virus Non-Neurological syndrome	Unclassified / Unspecified	Total clinical cases <sup>1</sup>	# of travel related cases <sup>2</sup>	West Nile virus 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	1	0	0	1	0	0
Ontario	0	0	0	0	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	1	0	0	1	0	0
	Year to date: From January 1 to November 9, 2013					
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	22	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	40	45	23	108	3	3

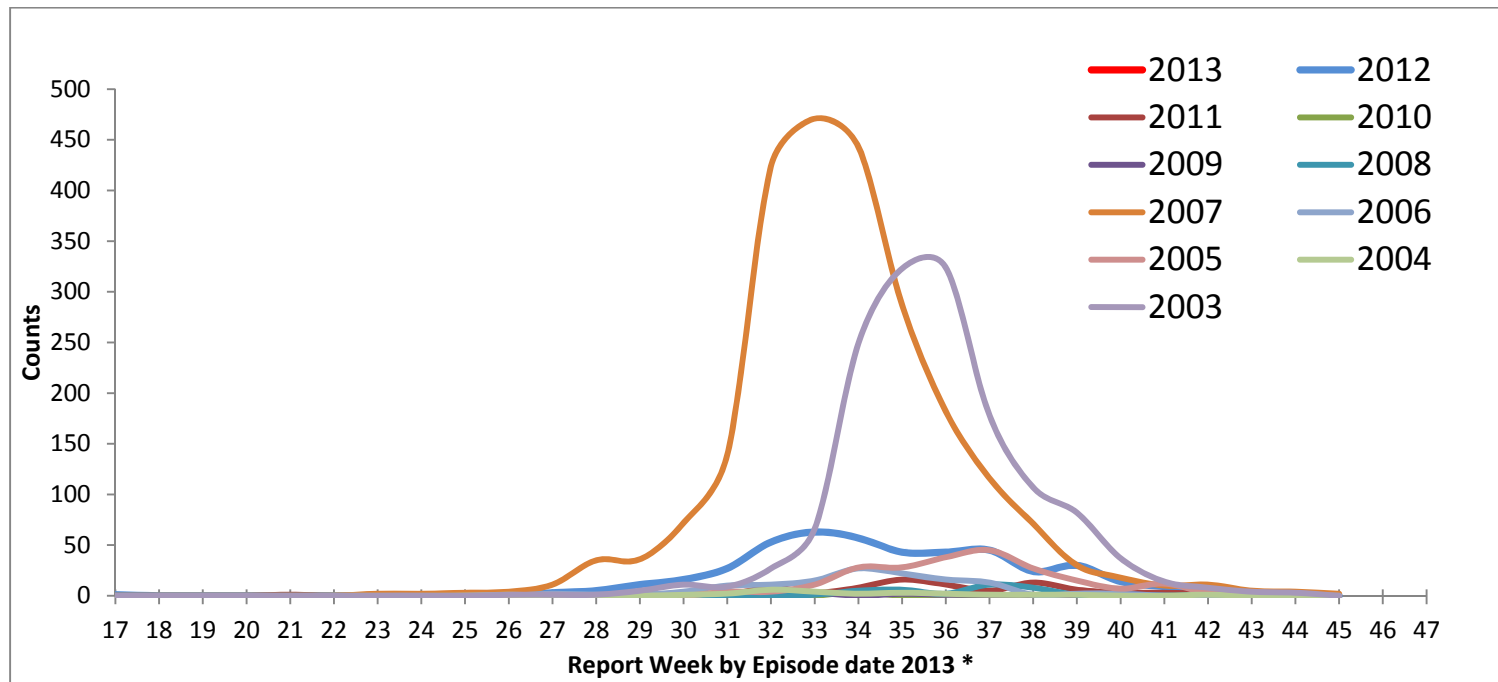
<sup>1</sup> Total clinical cases is the sum of both probable and confirmed: West Nile virus neurological and non-neurological syndromes, along with any unclassified or unspecified cases.

<sup>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>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



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

[Link Figure 2 to the following table 3 below](#)

Table 3

	Report Weeks 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	1	0
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

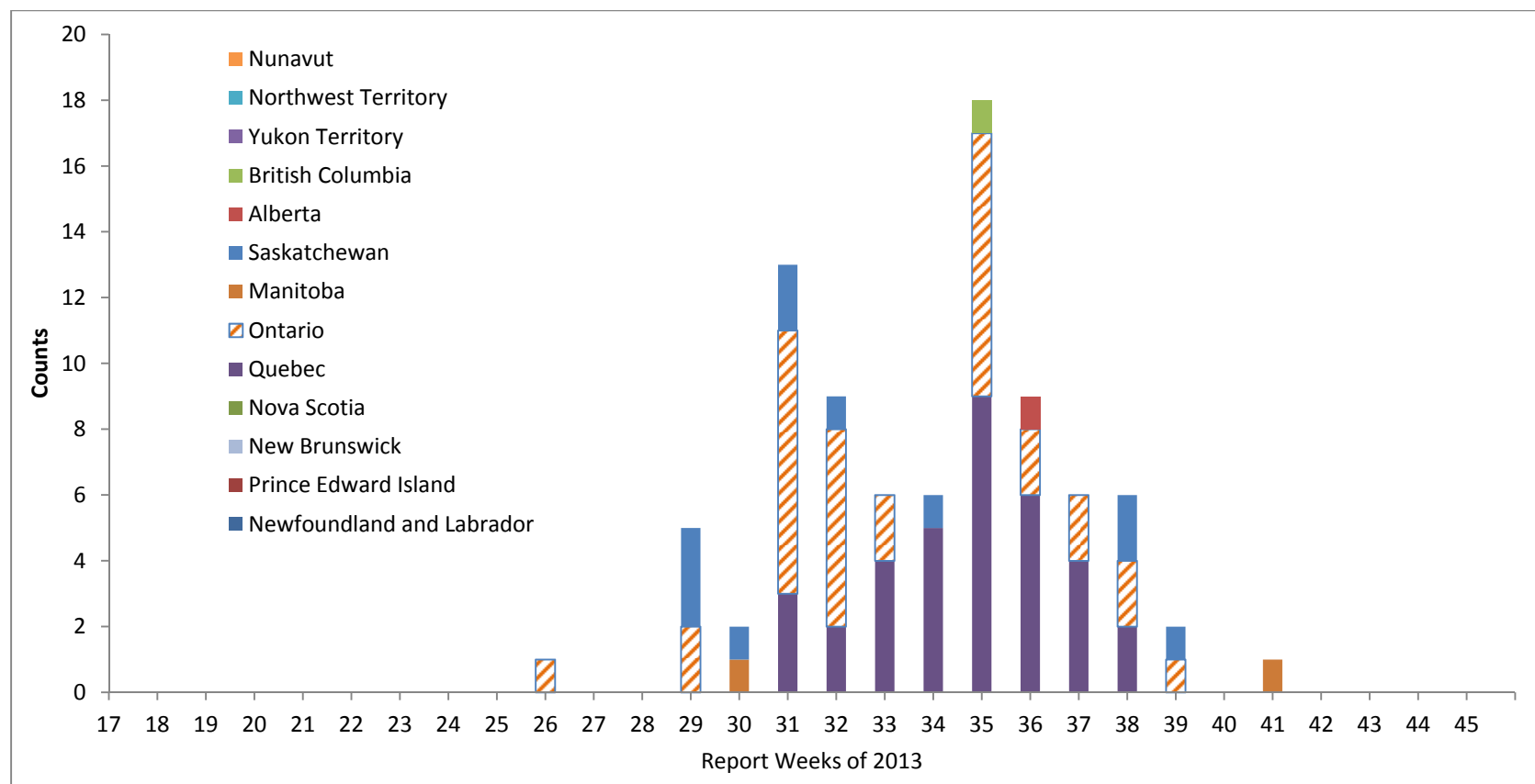
**Reported cumulative number of West Nile virus positive mosquito pools by Province/Territory and by report week, 2013 season\***

	Report Weeks 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 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	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	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	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	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	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	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	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	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	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	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	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	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	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	319	319



Figure 3

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



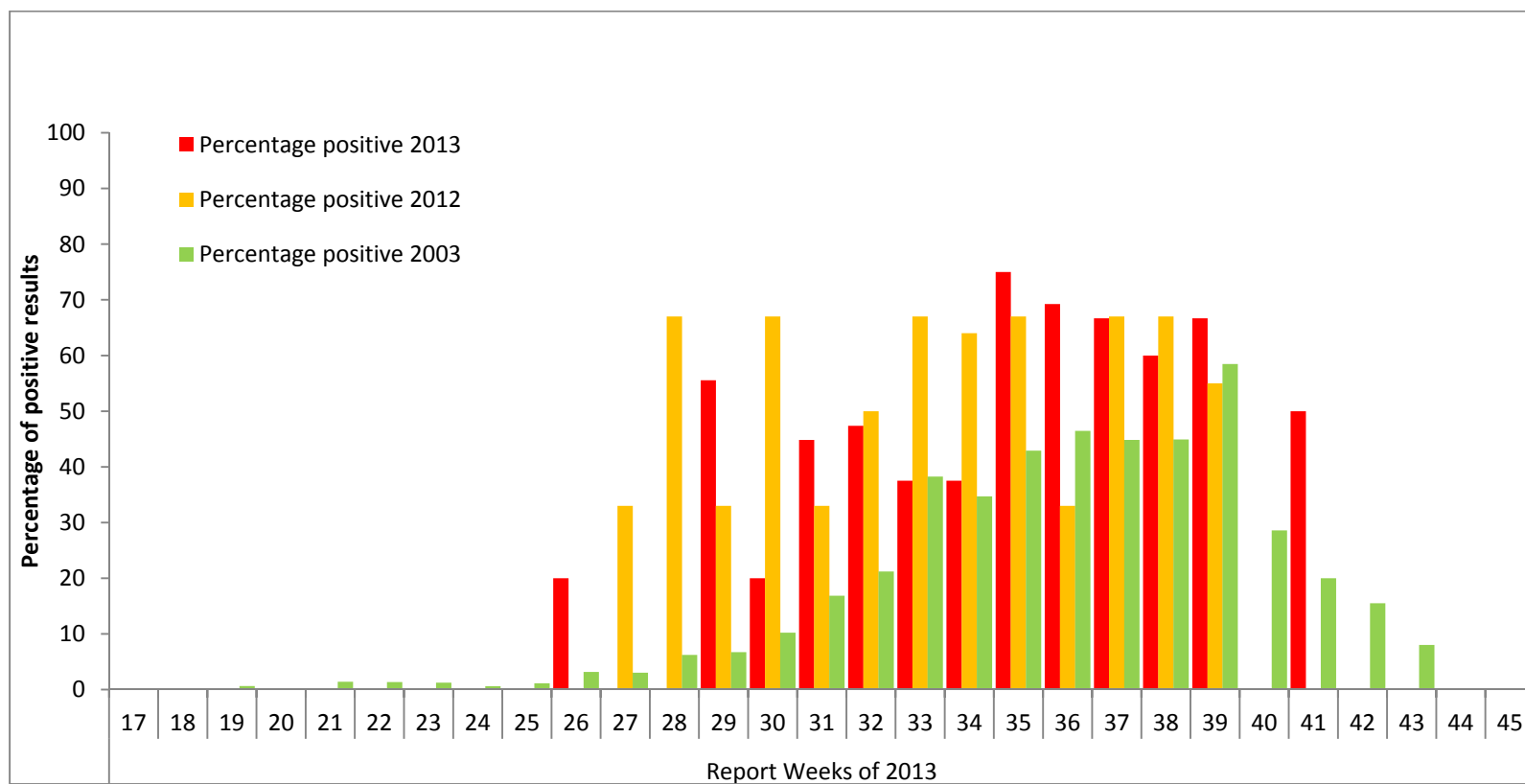
[Link figure 3 to the following table 5 below](#)

Table 5

	Report Weeks 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 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	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	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	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	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	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	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	1	0	0	0	0
Saskatchewan	0	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	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	0	0
British Columbia	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	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	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	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	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	5	2	13	9	6	6	18	9	6	6	2	0	1	0	0	0	0

Figure 4

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



[Link figure 4 to the following table 7 below](#)

Table 7

		Report Weeks 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
Numbers positive	2013	0	0	0	0	0	0	0	0	0	1	0	0	5	2	13	9	6	6	18	9	6	6	2	0	1	0	0	0	0
Numbers tested	2013	0	0	0	1	0	0	0	2	2	5	8	5	9	10	29	19	16	16	24	13	9	10	3	3	2	0	0	0	0
Percentage positive	2013	0	0	0	0	0	0	0	0	0	20	0	0	56	20	45	47	38	38	75	69	67	60	67	0	50	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