



West Nile virus

National Surveillance Report

English Edition
October 6 to October 12, 2013
(Report Week 41)

Canada

Humans:

During surveillance week 41, the Public Health Agency of Canada (the Agency) was informed of three (3) human clinical case of West Nile virus (WNV): two (2) in Quebec, one (1) in Ontario. As of week 41, there have been a total of one hundred and four clinical cases and three (3) asymptomatic infections reported to the Agency: twenty-eight in Quebec; fifty in Ontario; two (2) in Manitoba; six (6) in Saskatchewan, and twenty-one in Alberta. Of the 104 clinical cases, 36 (35%) were diagnosed as WNV neurological syndrome; 48 (46%) as WNV non-neurological syndrome; and 20 (19%) as unclassified. Three fatal cases (3%) associated with West Nile virus have been reported.

Mosquitoes:

To date (Week 41), a total of 12, 476 mosquito pools have been tested for WNV [Quebec (2,351); Ontario (8,642); Manitoba (1088); Saskatchewan (106); and British Columbia (289)]. Of these, 319 (2.6%) mosquito pools tested positive for WNV [Quebec (60); Ontario (198); Saskatchewan (41); Manitoba (19); and British Columbia (1)].

Dead Birds:

A total of 175 dead birds have been tested for WNV by the Canadian Cooperative Wildlife Health Centre. Of these, 81 positives were reported [Quebec (35); Ontario (34); Manitoba (1); Saskatchewan (11)].

Domestic Animals:

A total of thirty-six animals 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.gc.ca/wnv-vwn/index.html>

United States

As of week 41, 1135 human cases of WNV have been reported by the Centers for Disease Control and Prevention in the United States. Of these, 529 (47%) were diagnosed as neuroinvasive disease, and 606 (53%) as non-neuroinvasive. Forty-four fatal cases (4%) were reported. Two hundred and forty-eight cases of presumptive viremic blood donors were reported.

http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12_detailed.html

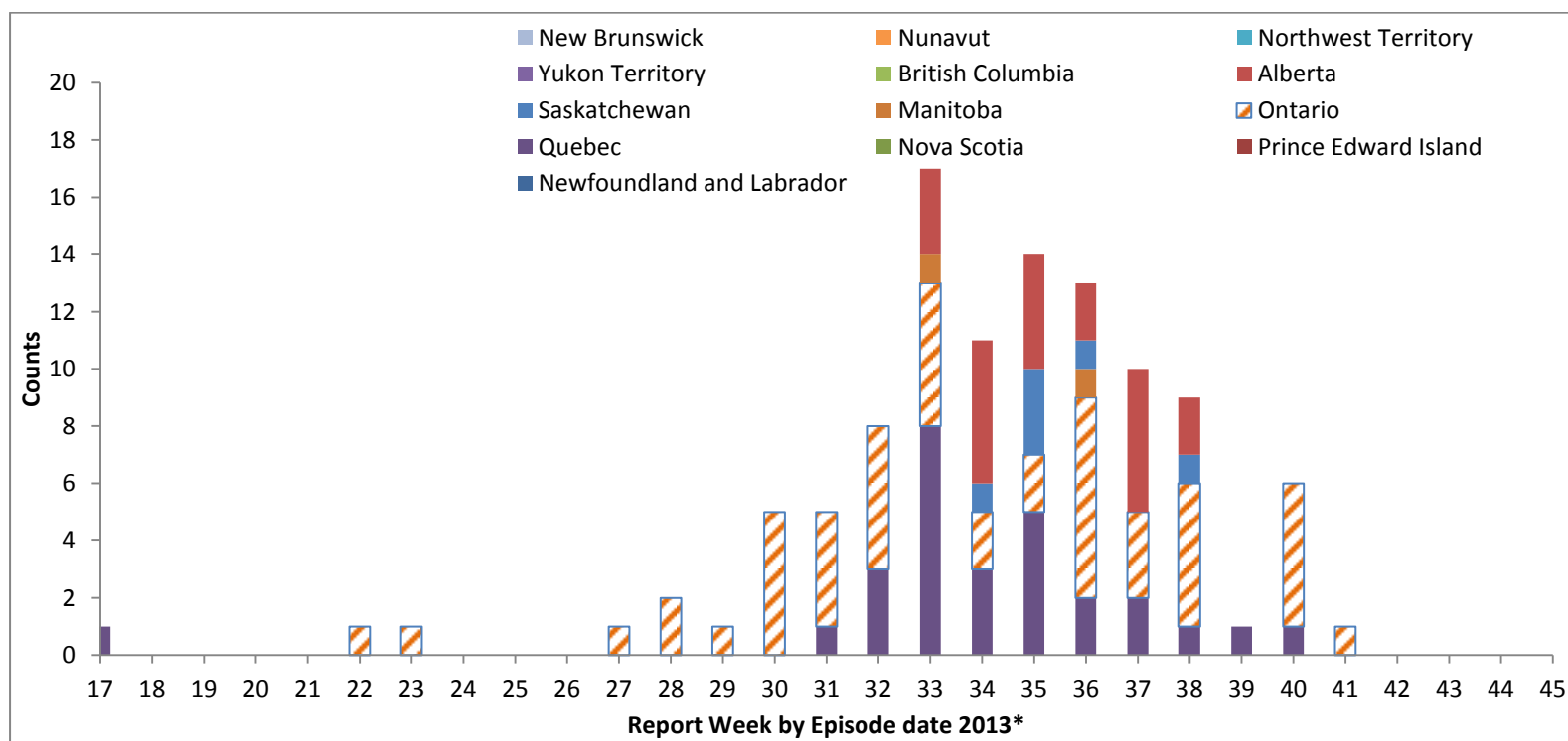
Europe and Neighbouring countries

A total of 732 human cases of WNV have been reported by the European Centre for Disease Prevention and Control. Of these, two hundred and twenty-one human cases have been reported in the European Union and the European Economic Area: Croatia (16); Greece (86), Hungary (29), Italy (68); and Romania (22). Five hundred and eleven human cases have been reported in neighbouring countries: Bosnia and Herzegovina (3), the Former Yugoslav Republic of Macedonia one (1); Montenegro (4); Serbia (260); the Russian Federation (177); Ukraine (1); Israel (59); 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



* 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				
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				
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				
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				
Quebec	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	8	3	5	2	2	1	1	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				
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				
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				
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				
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				
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				
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				
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				
Total	1	0	0	0	0	1	1	0	0	0	1	2	1	5	5	8	17	11	14	13	10	9	1	6	1				

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 6 -October 12, 2013 (Week 41)					
	West Nile virus Neurological syndrome	West Nile virus Non-Neurological syndrome	Unclassified / Unspecified	Total clinical cases ¹	# of travel related cases ²	West Nile virus asymptomatic 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
Quebec	2	0	0	2	0	0
Ontario	0	0	1	1	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	2	0	1	3	0	0
	Year to date: From January 1 to October 12, 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	20	7	0	27	2	1
Ontario	8	21	20	49	1	1
Manitoba	1	1	0	2	0	0
Saskatchewan	4	1	0	5	0	1
Alberta	3	18	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	36	48	20	104	3	3

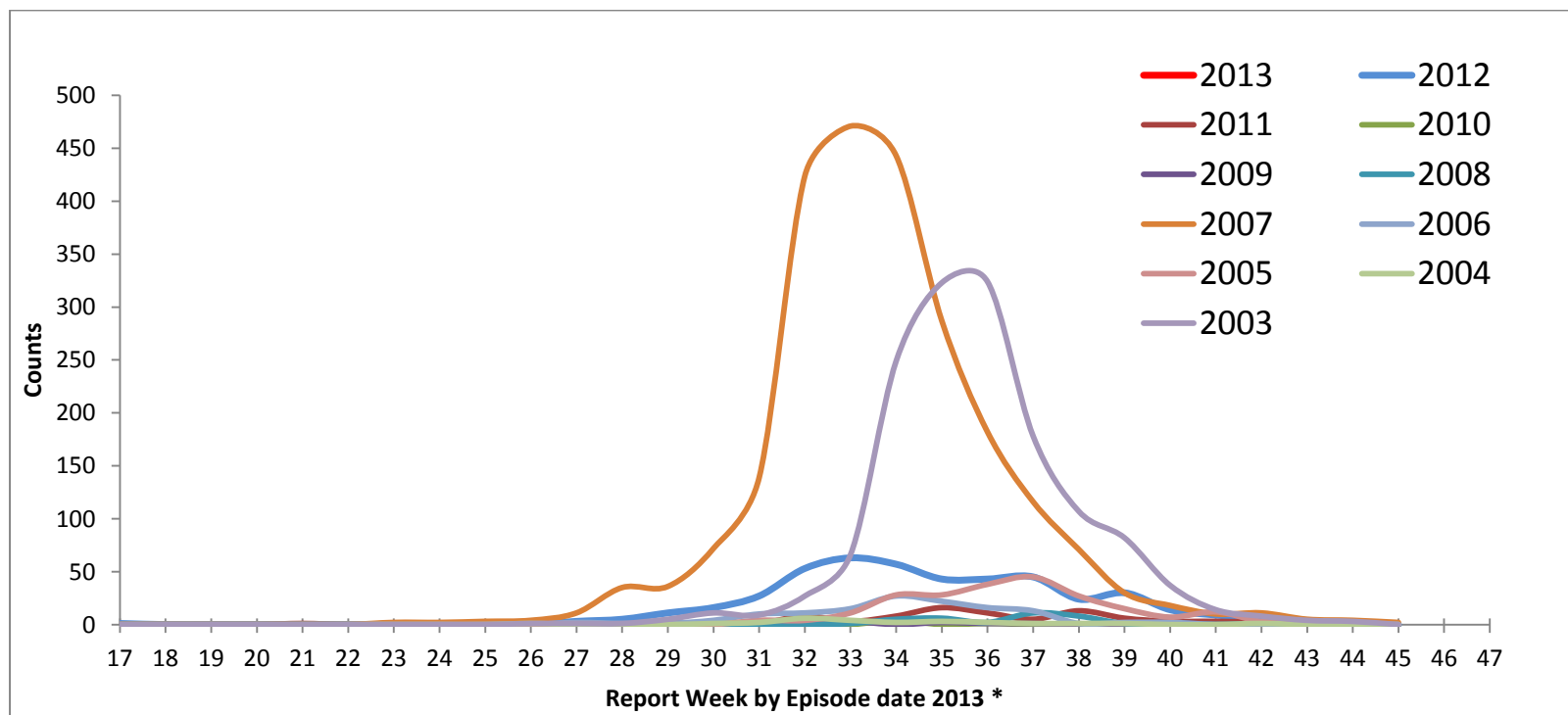
¹ Total clinical cases is the sum of both probable and confirmed: West Nile virus neurological and non-neurological syndromes, along with any unclassified or unspecified cases.

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



* 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	14	13	10	9	1	6	1					
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	

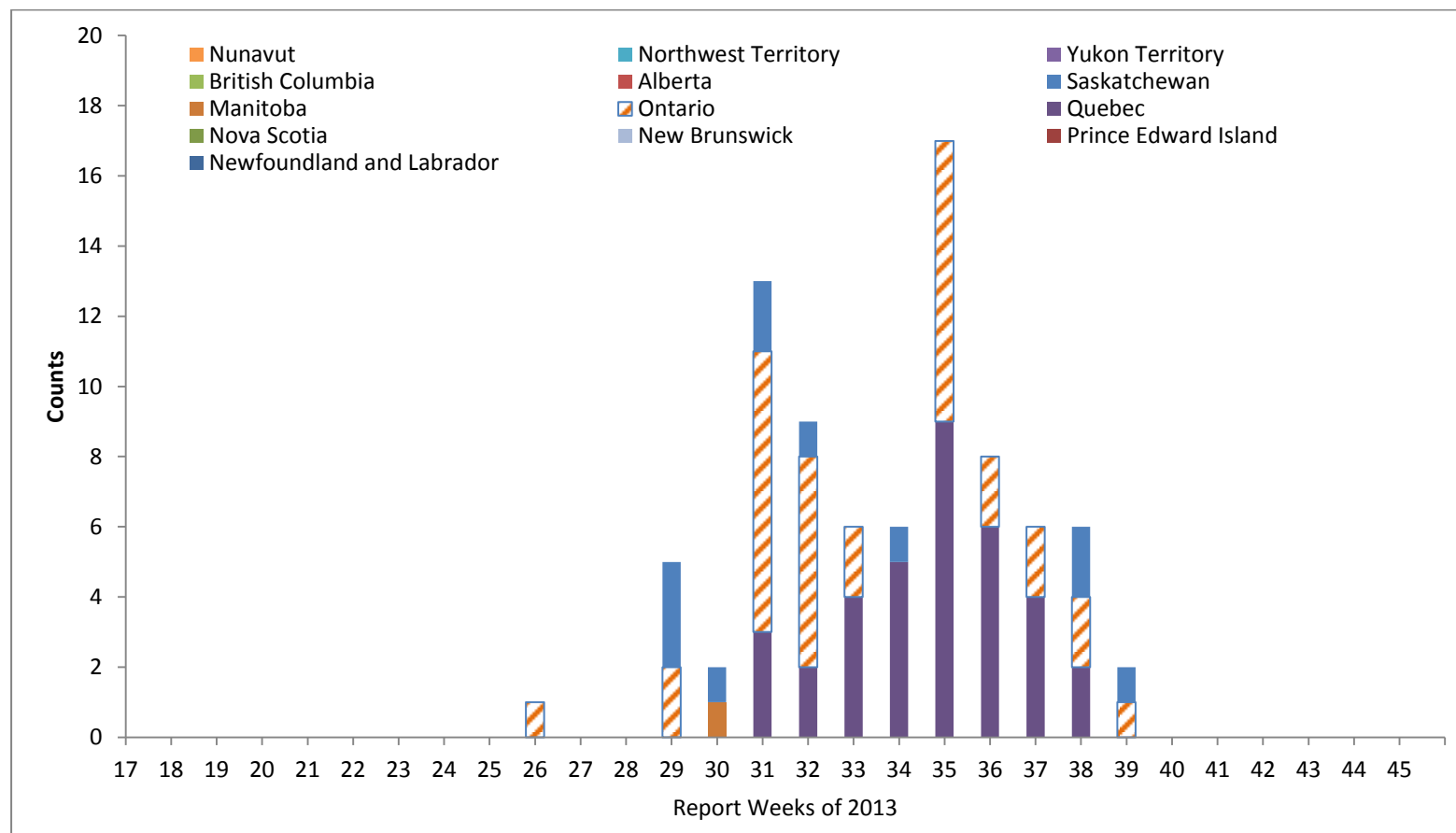
Table 4

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				
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				
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				
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				
Quebec	0	0	0	0	0	0	0	0	0	0	0	2	3	5	11	23	23	36	40	47	59	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				
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				
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				
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				
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				
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				
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				
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				
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				

Figure 3

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



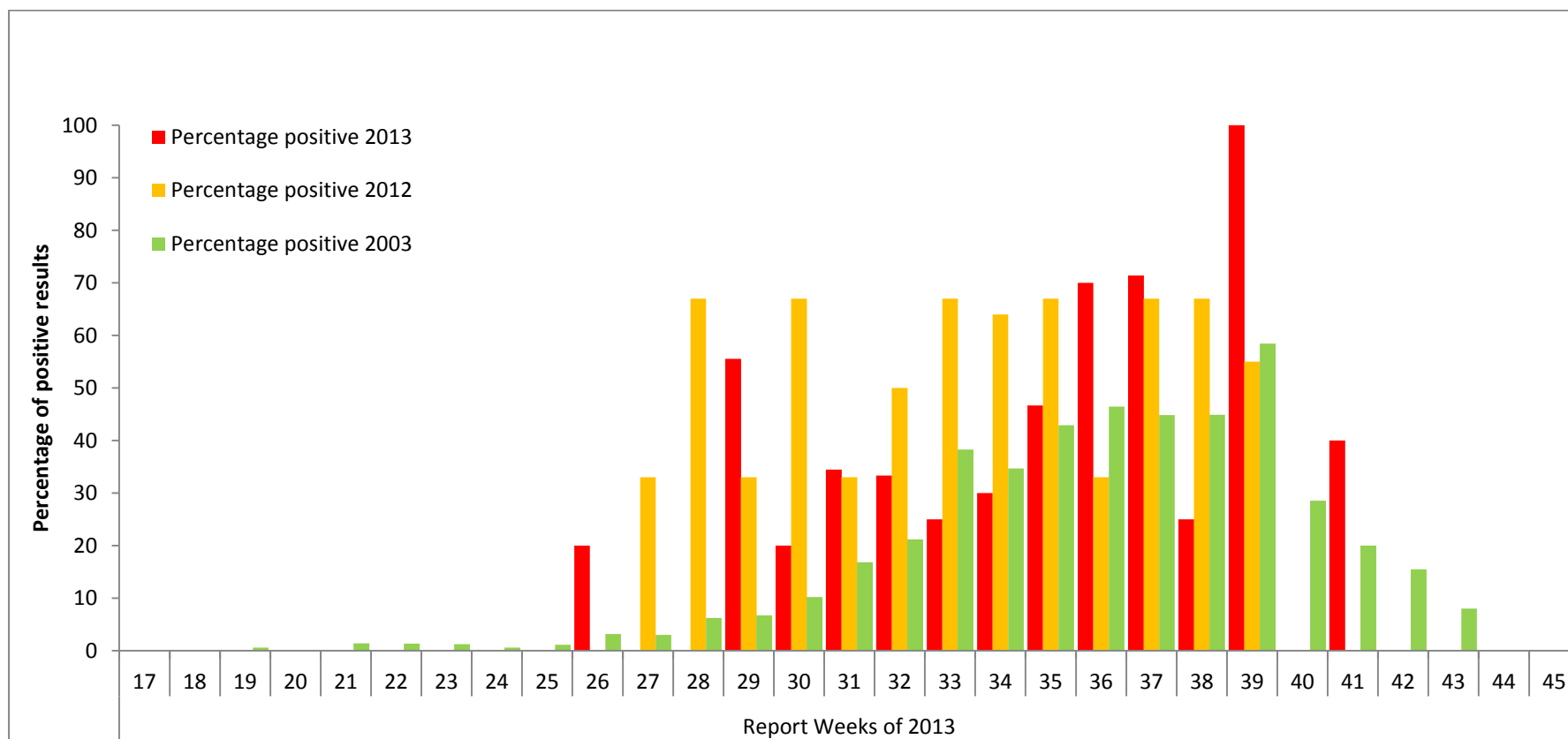
[Link figure 3 to the following table 5 below](#)

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				
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				
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				
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				
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				
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				
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				
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				
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				
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				
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				
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				
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				
Total	0	0	0	0	0	0	0	0	0	1	0	0	5	2	13	9	6	6	17	8	6	6	2	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	17	8	6	6	2	0	0					
Numbers tested	2013	0	0	0	1	0	0	0	2	2	5	8	5	9	10	29	18	16	10	15	10	7	8	2	0	5					
Percentage positive	2013	0	0	0	0	0	0	0	0	0	20	0	0	56	20	34	33	25	30	47	70	71	25	100	0	40					
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	