

WEST NILE VIRUS AND OTHER MOSQUITO-BORNE DISEASE NATIONAL SURVEILLANCE REPORT

JULY 27 TO AUGUST 2, 2014 – REPORT WEEK 31

CANADA

HUMANS:

As of surveillance week 31 (July 27 to August 2, 2014), no confirmed human cases of West Nile Virus (WNV) were reported to the Public Health Agency of Canada (the Agency).

MOSQUITOES:

Since the start of the 2014 West Nile Virus (WNV) season, 21 mosquito pools tested positive for WNV in Canada: nine in Quebec [Montreal (8) and Laval (1)]; five in Ontario [Lambton Health Unit (1), Peel Region (1), Halton Region (1) and Middlesex-London (2)] and seven in Manitoba [Interlake-Eastern Health Region (4), Winnipeg Health Region (1) and Southern Health Region (2)].

DEAD BIRDS:

Since the start of the 2014 WNV season, the Canadian Wildlife Health Cooperative has tested 34 dead birds for WNV in Canada: Saskatchewan (21), Ontario (10) and Quebec (3). No dead birds positive for WNV have been reported.

During surveillance week 31, the Canadian Wildlife Health Cooperative tested three dead birds for WNV in Canada: Saskatchewan (3). No dead birds positive for WNV have been reported.

DOMESTIC ANIMALS:

No animals positive for WNV have been reported by the Canadian Food Inspection Agency.

National WNV surveillance data and maps can be accessed via the [PHAC web site](#).

UNITED STATES

Since the start of the 2014 West Nile Virus (WNV) season, 82 human WNV cases [Arizona (13), Arkansas (1), California (19), Colorado (5), District of Columbia (1), Georgia (1), Iowa (3), Louisiana (11), Mississippi (5), Missouri (2), Nebraska (5), New York (1), Oklahoma (1), South Dakota (12), Tennessee (1), Texas (1) and Wisconsin (1)] have been reported by the Centers for Disease Control and Prevention. Of these, 39 (47.5%) were diagnosed as neuroinvasive disease cases and 43 (52.4%) as non-neuroinvasive cases. Four fatal cases were reported. Twenty-eight presumptive viremic blood donors have been identified.

Detailed information can be accessed via the [CDC web site](#).

EUROPEAN UNION, EUROPEAN ECONOMIC AREA AND NEIGHBOURING COUNTRIES

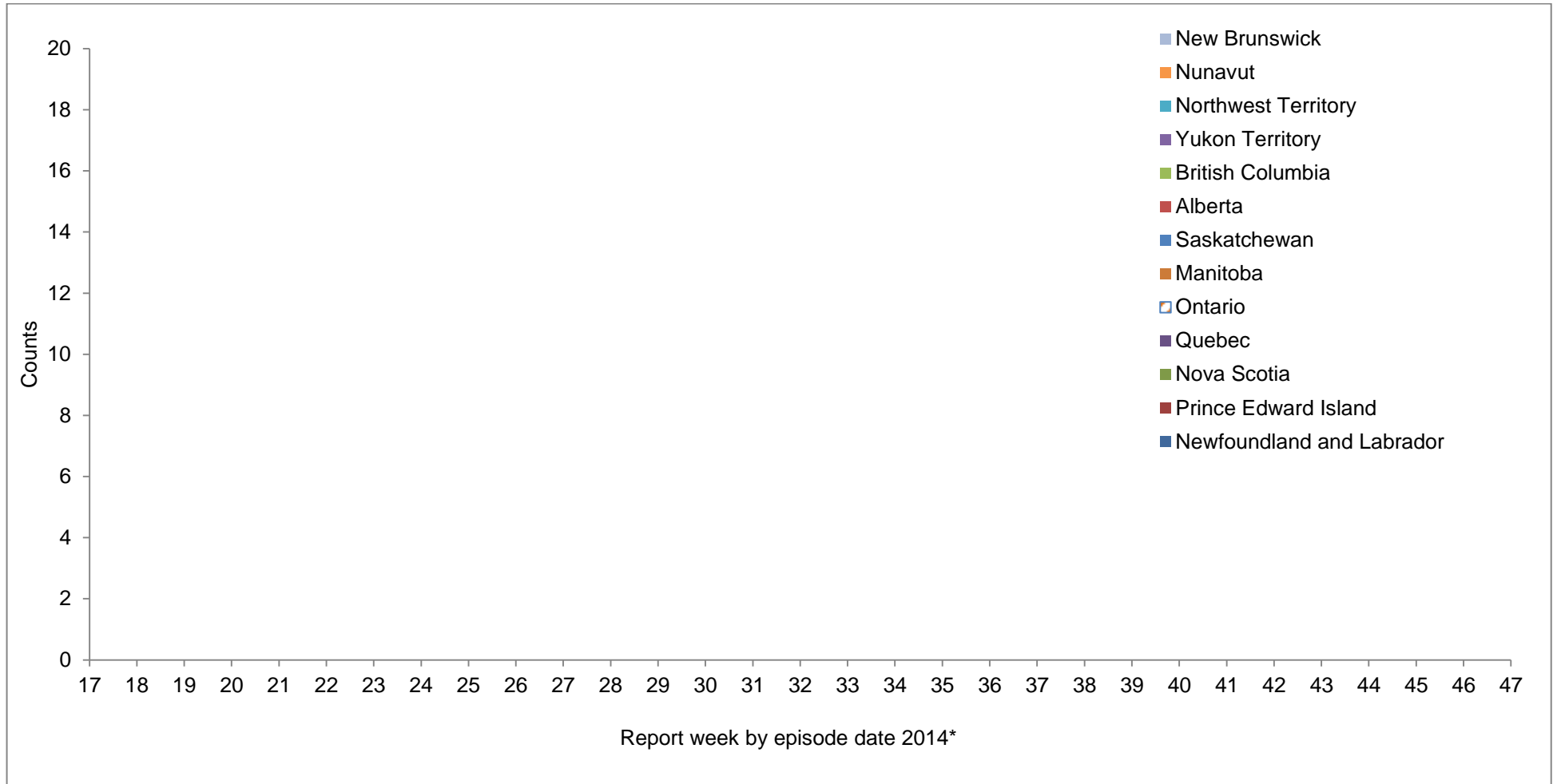
Since the start of the 2014 West Nile Virus (WNV) season, no human cases have been reported in the European Union/European Economic Area by the European Centre for Disease Prevention and Control. Twenty-five human cases have been reported in neighbouring countries: Bosnia and Herzegovina (13), Russian Federation (7) and Serbia (5).

Detailed information can be accessed via the [ECDC web site](#).

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FIGURE 1: West Nile Virus clinical cases and asymptomatic Infections, by Province/Territory and by report week, 2014 season



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

TABLE 2: West Nile Virus human clinical cases and asymptomatic infections by Province/Territory for the current report week and year to date, 2014 season

	Week 31: July 27 to August 2, 2014					
	West Nile Virus neurological syndrome	West Nile Virus non-neurological syndrome	Unclassified/unspecified	Total clinical cases ¹	Number 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	0	0	0	0	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	0	0	0	0	0	0

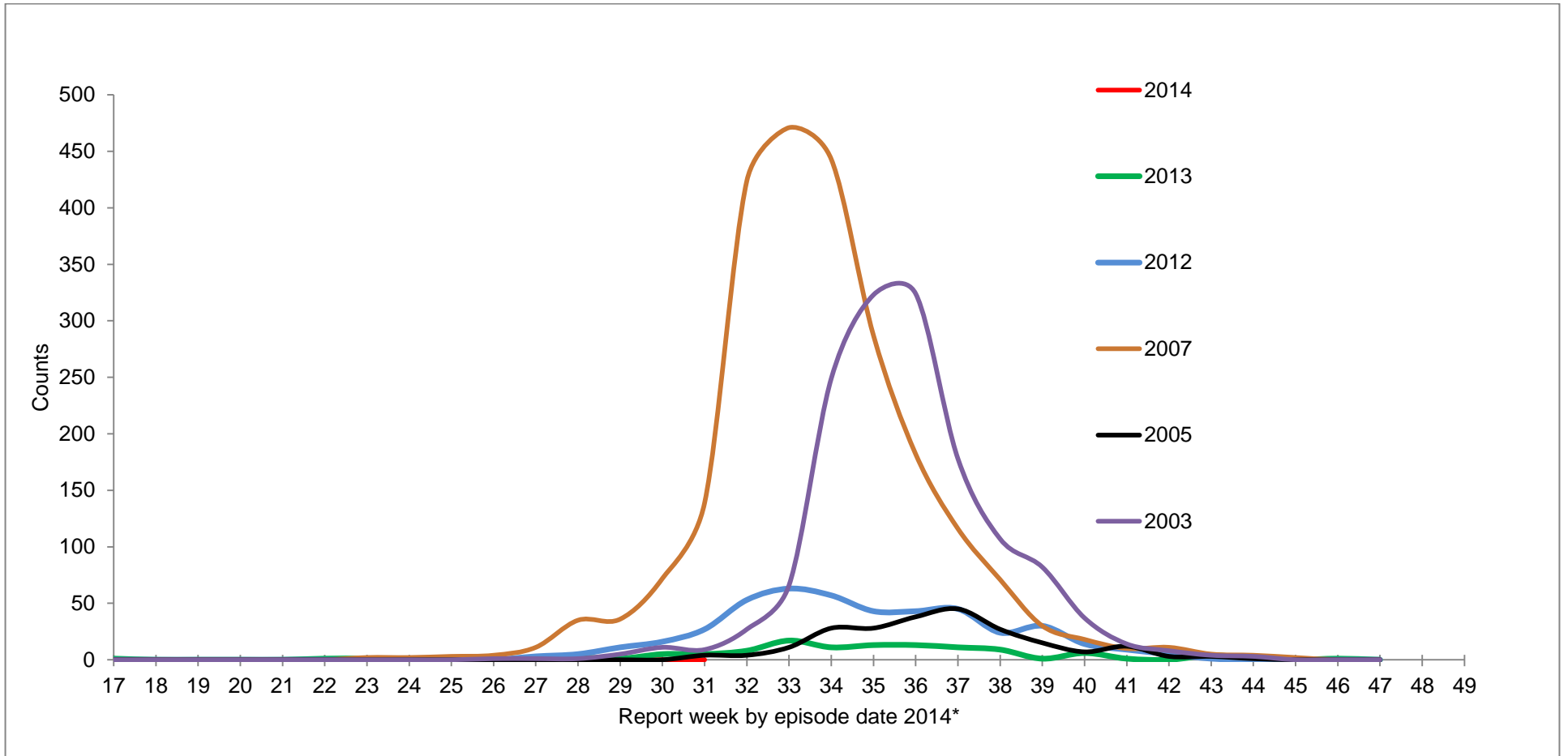
	Year to date: January 1 to August 2, 2014					
	West Nile Virus neurological syndrome	West Nile Virus non-neurological syndrome	Unclassified/unspecified	Total clinical cases ¹	Number of travel-related cases ²	West Nile Virus asymptomatic infections ³
Newfoundland and Labrador	0	0	0	0	0	0
Prince Edward Island	0	0	0	0	0	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	0	0	0
Quebec	0	0	0	0	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	0	0	0	0	0	0

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: West Nile Virus clinical cases and asymptomatic infections by report week for selected years



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

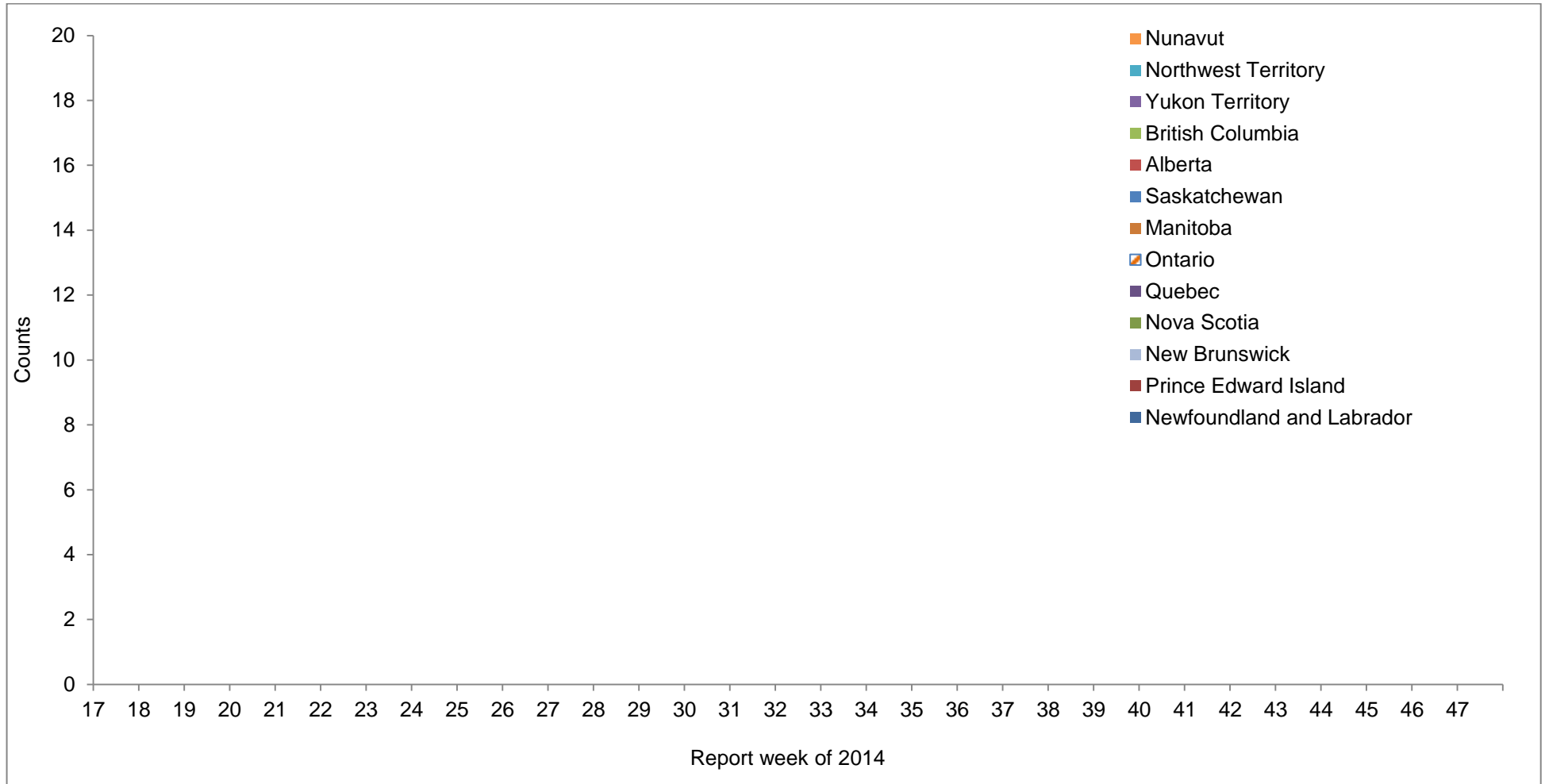
TABLE 3: West Nile Virus clinical cases and asymptomatic infections by report week for selected years

	Report week of 2014																														
	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	47
2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
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	4	1	0	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	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	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	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	0	0

TABLE 4.2: Detailed mosquito pools tested and positive mosquito pools by Province/Territory, 2014 season

	Year to date: January 1 to August 2, 2014		
	Number of mosquito pools tested	Number of positive mosquito pools	Percentage of positive mosquito pools (%)
Newfoundland and Labrador	0	0	0
Prince Edward Island	0	0	0
New Brunswick	0	0	0
Nova Scotia	0	0	0
Quebec	5743	9	0.2
Ontario	2061	5	0.2
Manitoba	734	7	1.0
Saskatchewan	273	0	0
Alberta	0	0	0
British Columbia	101	0	0
Yukon Territory	0	0	0
Northwest Territory	0	0	0
Nunavut	0	0	0
Total	8912	21	0.2

FIGURE 3: Reported number of dead birds testing positive for West Nile Virus by Province/Territory and by report week, 2014 season*



* Data from the Canadian Wildlife Health Cooperative

FIGURE 4: Percentage of dead birds testing positive for West Nile Virus in the 2014 season by report week, as compared to the 2003, 2012 and 2013 seasons

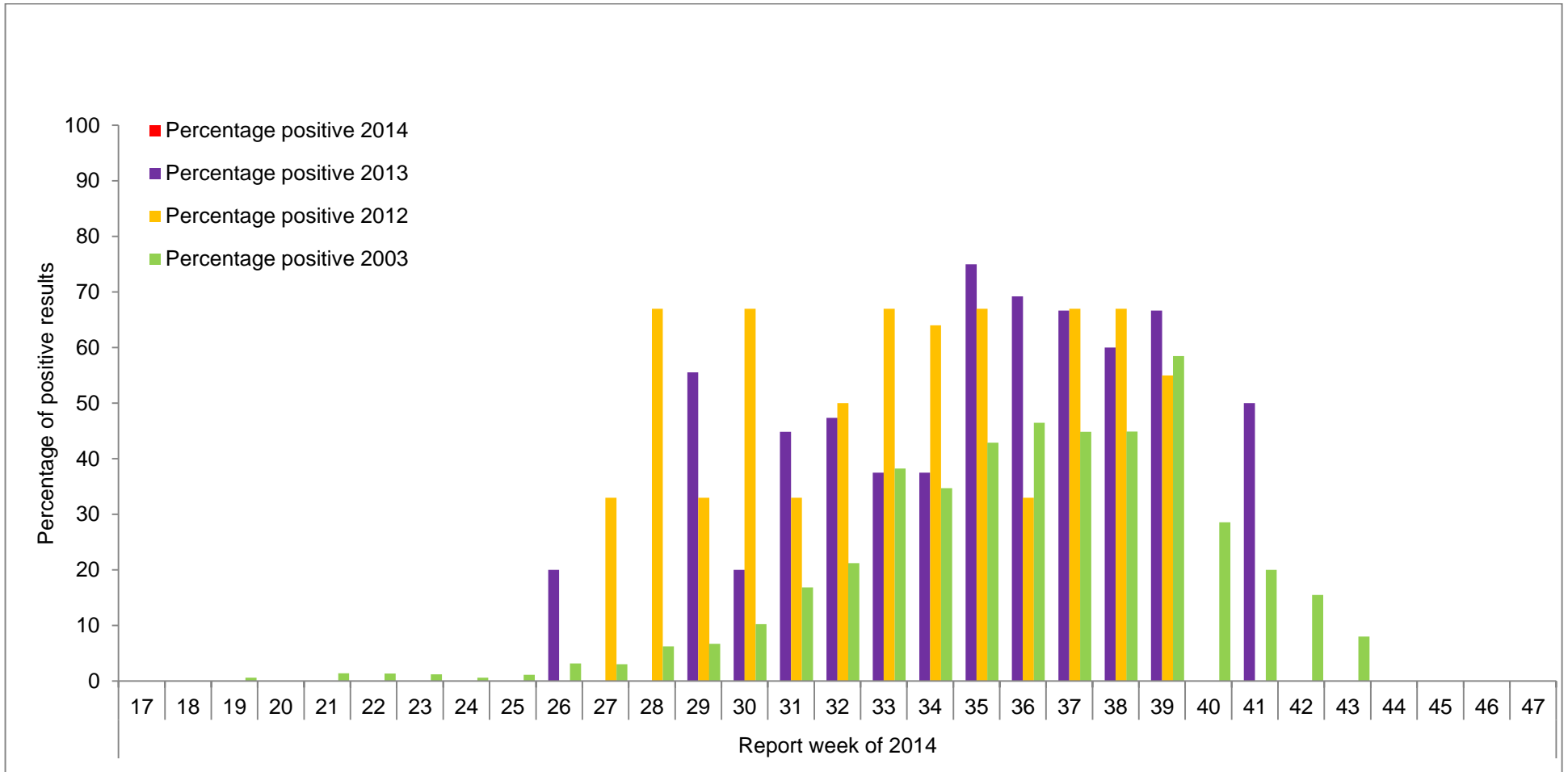


TABLE 6: Percentage of dead birds testing positive for West Nile Virus in the 2014 season by report week, as compared to the 2003, 2012 and 2013 seasons

		Report week of 2014																													
		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
Numbers positive	2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
Numbers tested	2014	0	0	0	0	0	0	0	0	0	0	0	0	34	3																
Percentage positive	2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
Numbers positive	2013	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	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	20	0	0	56	20	45	47	38	38	75	69	67	60	67	0	50	0	0	0	0	0	
Percentage positive	2012	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	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	