

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

AUGUST 3 TO AUGUST 9, 2014 – REPORT WEEK 32

## CANADA

### HUMANS:

As of surveillance week 32 (August 3 to August 9, 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 WNV season, a reported 26 mosquito pools tested positive for WNV in Canada: 10 in Quebec [Montreal (8) Laval (1) and Montérégie]; nine in Ontario [Halton Region (1), Peel Region (4), Lambton Health Unit (1), Toronto Public Health (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:

During surveillance week 32, the Canadian Wildlife Health Cooperative tested two dead birds for WNV in Saskatchewan and both are positive for WNV.

Since the start of the 2014 WNV season, the Canadian Wildlife Health Cooperative has tested 39 dead birds for WNV in Canada: Saskatchewan (26), Ontario (10) and Quebec (3). Of these, two (5.1%) are positive for WNV.

### DOMESTIC ANIMALS:

Since the start of the 2014 WNV season, the Canadian Food Inspection Agency reported two horses tested positive for WNV in Canada: Alberta (1) and Saskatchewan (1).

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 were reported by the Centers for Disease Control and Prevention [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)]. Of these, 39 (47.6%) 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

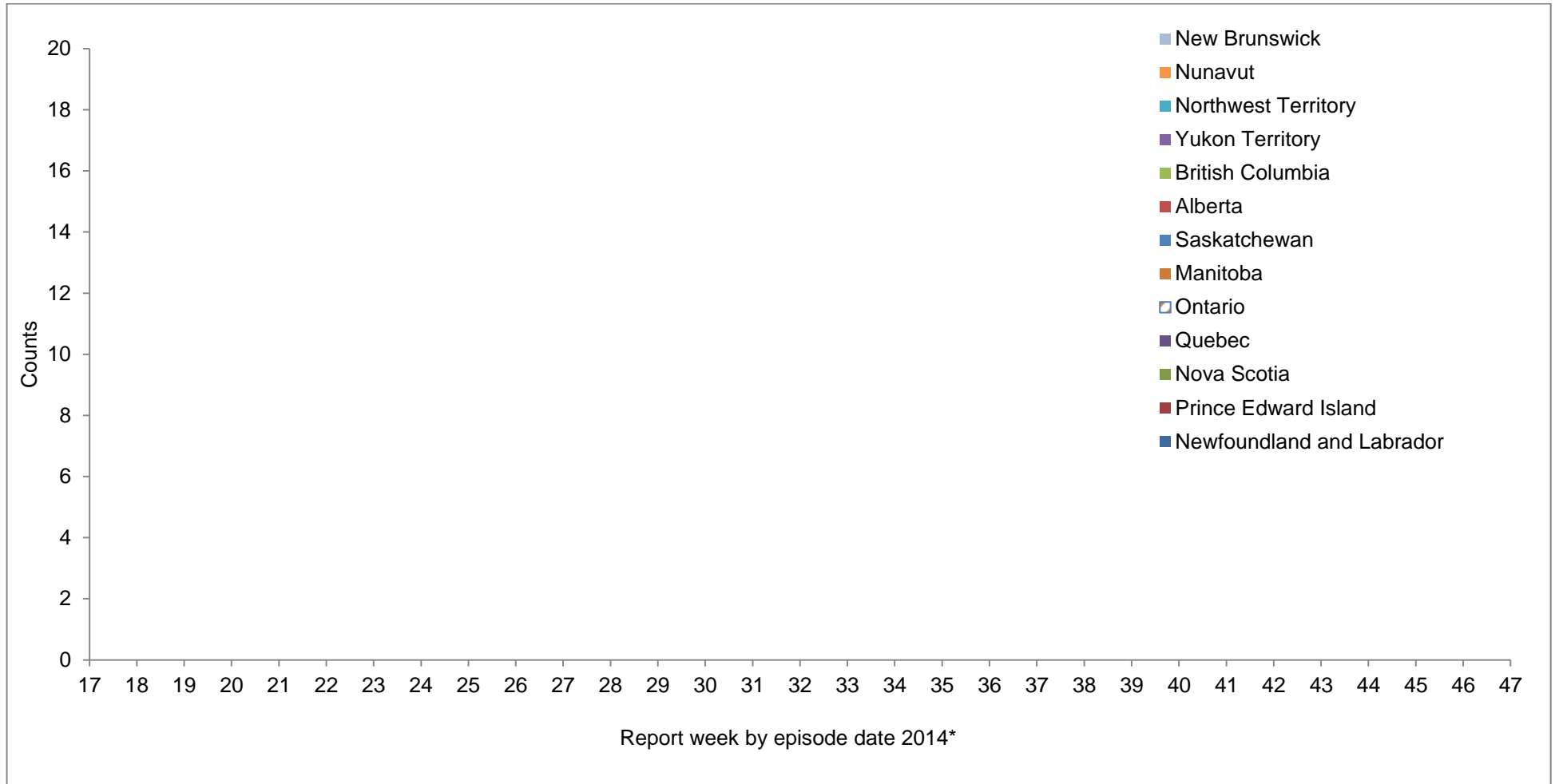
Since the start of the 2014 West Nile Virus (WNV) season, no human cases have been reported in the European Union/European Economic Area by the European Centre for Disease Prevention and Control. Twenty-five human cases have been reported in neighbouring countries: Bosnia and Herzegovina (13), Russian 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 32: August 3 to August 9, 2014					
	West Nile Virus neurological syndrome	West Nile Virus non-neurological syndrome	Unclassified/unspecified	Total clinical cases <sup>1</sup>	Number 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	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

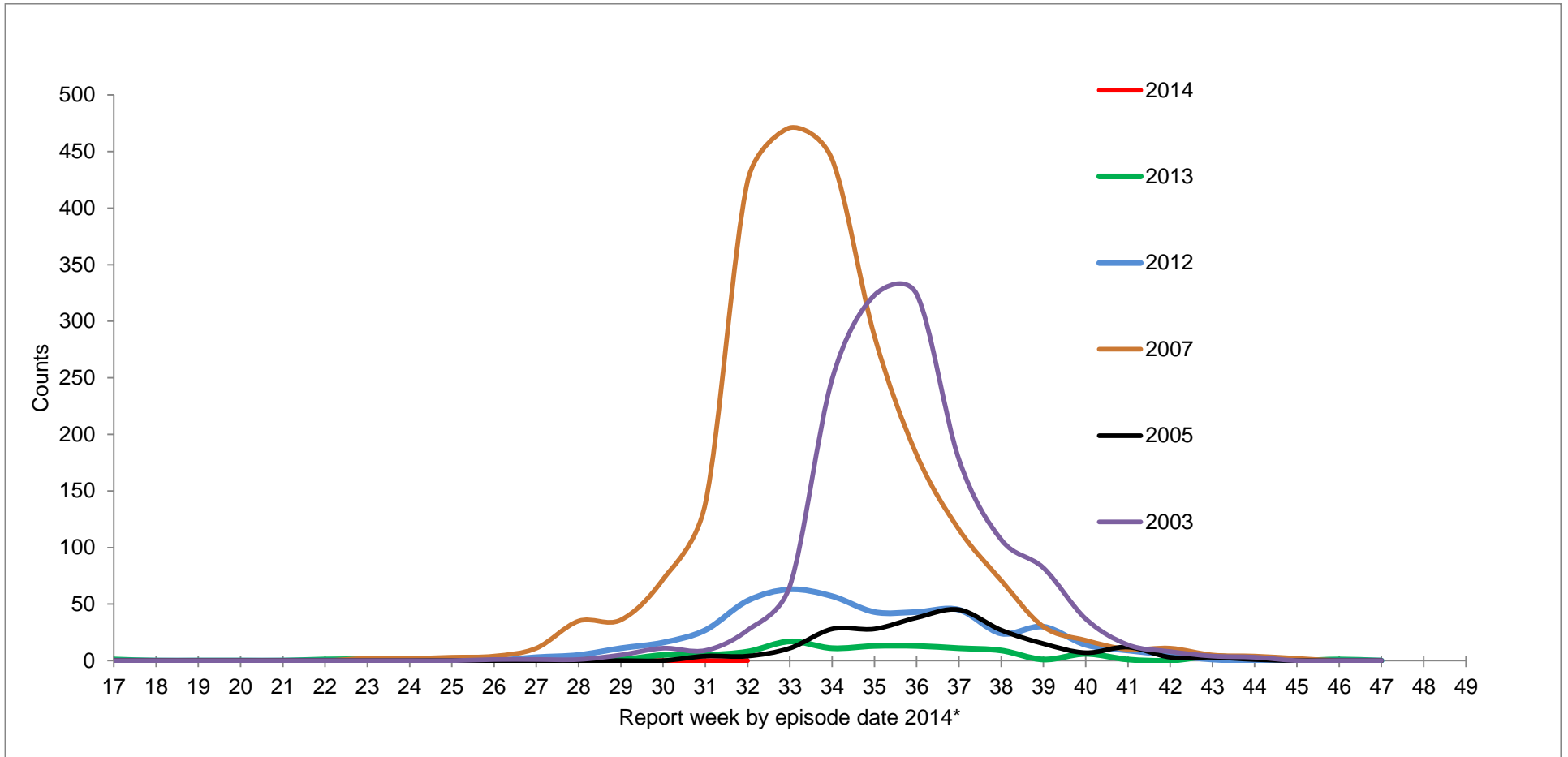
	Year to date: January 1 to August 9, 2014					
	West Nile Virus neurological syndrome	West Nile Virus non-neurological syndrome	Unclassified/unspecified	Total clinical cases <sup>1</sup>	Number of travel-related cases <sup>2</sup>	West Nile Virus asymptomatic infections <sup>3</sup>
Newfoundland and 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	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

<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:** 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	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	

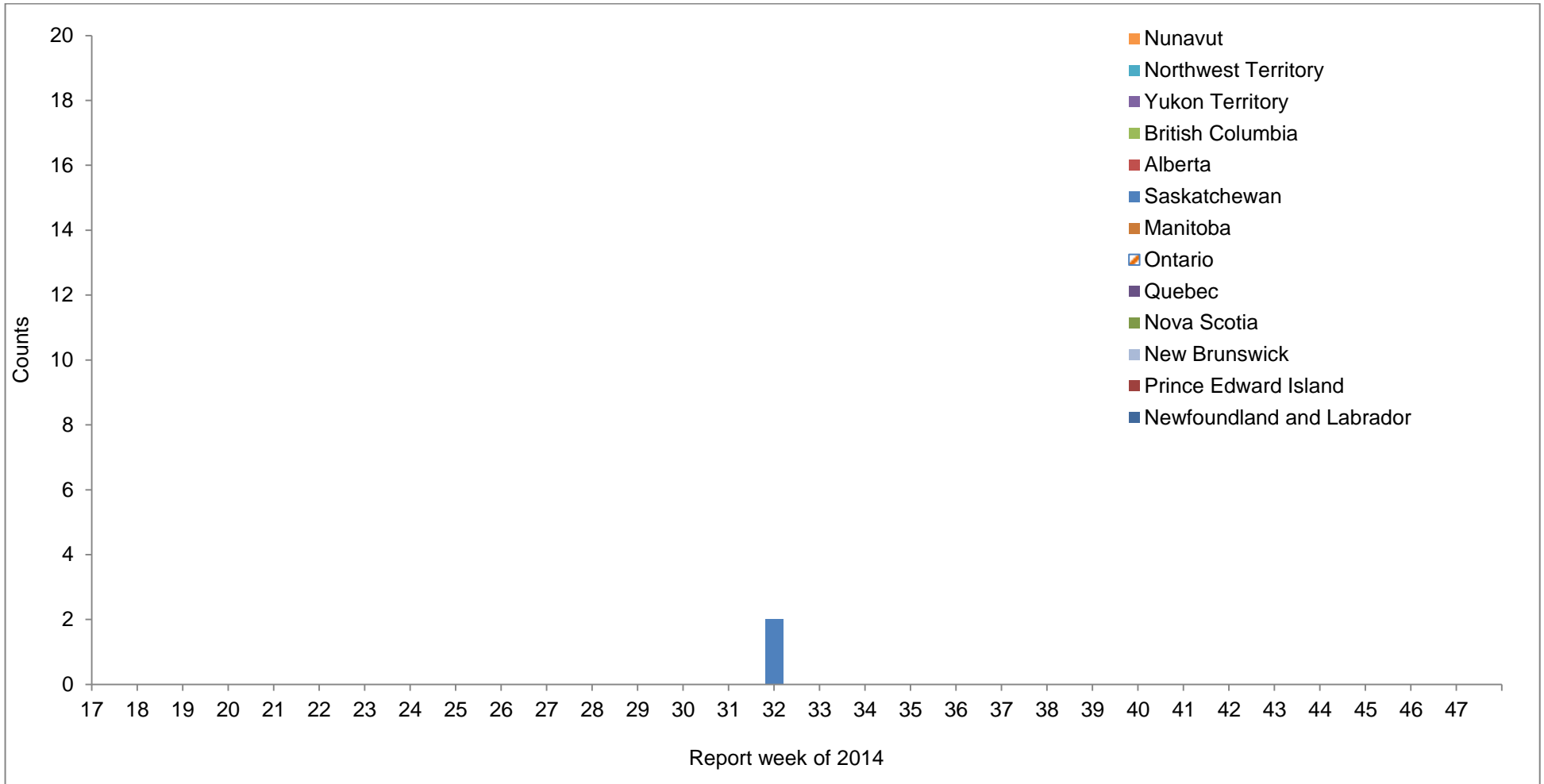




**TABLE 4.2:** Detailed mosquito pools tested and positive mosquito pools by Province/Territory, 2014 season

	Year to date: January 1 to August 9, 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	6,329	10	0.2
Ontario	3,138	9	0.3
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	10,575	26	0.2

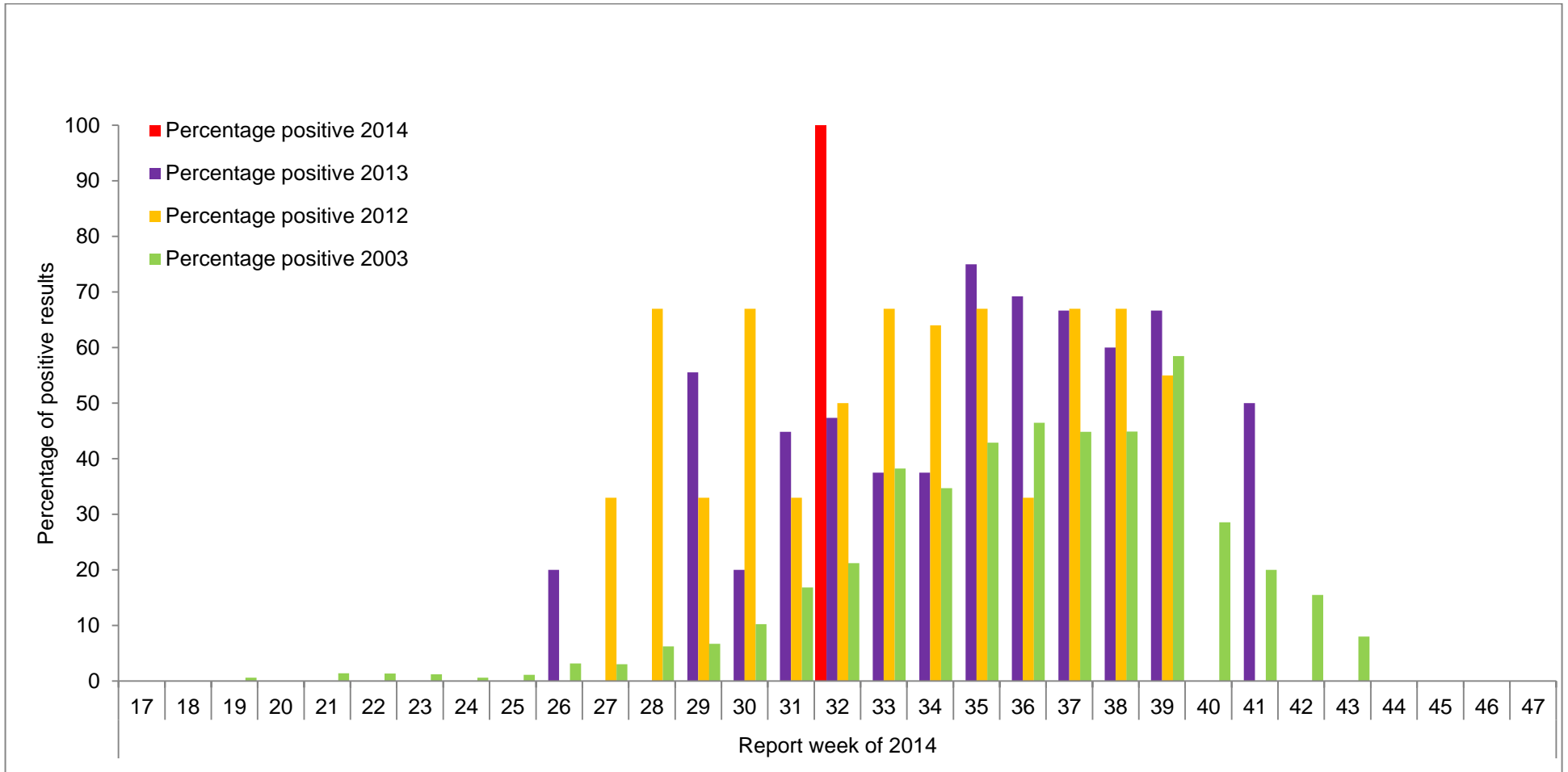
**FIGURE 3:** Reported number of dead birds testing positive for West Nile Virus by Province/Territory and by report week, 2014 season\*



\* 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	47
Numbers positive	2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2															
Numbers tested	2014	0	0	0	0	0	0	0	0	0	0	0	0	0	34	3	2															
Percentage positive	2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100																
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	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	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	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	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	0	