

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

AUGUST 10 TO AUGUST 16, 2014 – REPORT WEEK 33

## CANADA

### HUMANS:

As of surveillance week 33 (August 10 to August 16, 2014), no confirmed human cases of West Nile Virus were reported to the Public Health Agency of Canada.

### MOSQUITOES:

Since the start of the 2014 West Nile Virus season, a reported 51 mosquito pools tested positive for West Nile Virus in Canada: 19 in Quebec [Montreal (12) Laval (3) and Montréalégie (4)]; 11 in Ontario [Halton Regional (1), Peel Regional (4), Lambton (1), City of Toronto (1), Middlesex-London (3) and Niagara Regional (1)], 14 in Manitoba [Interlake-Eastern Health Region (6), Southern Health Region (5) and Winnipeg Health Region (3)] and seven in Saskatchewan.

### DEAD BIRDS:

During surveillance week 33, the Canadian Wildlife Health Cooperative tested eight dead birds for West Nile Virus. One dead bird tested positive for West Nile Virus in Quebec.

Since the start of the 2014 West Nile Virus season, the Canadian Wildlife Health Cooperative tested 69 dead birds for West Nile Virus in Canada: Saskatchewan (46), Ontario (16) and Quebec (7). Of these, three (4.3%) dead birds are positive for West Nile Virus: Saskatchewan (2) and Quebec (1).

### DOMESTIC ANIMALS:

Since the start of the 2014 West Nile Virus season, the Canadian Food Inspection Agency reported two horses

tested positive for West Nile Virus in Canada: Alberta (1) and Saskatchewan (1).

National West Nile Virus surveillance data and maps can be accessed via the [Public Health Agency of Canada web site](#).

## UNITED STATES

Since the start of the 2014 West Nile Virus season, 124 human West Nile Virus cases were reported by the Centers for Disease Control and Prevention [Arizona (14), Arkansas (1), California (33), Colorado (7), District of Columbia (1), Georgia (1), Indiana (1), Iowa (4), Louisiana (23), Minnesota (0), Mississippi (7), Missouri (1), Nebraska (6), New Jersey (1), New Mexico (0), New York (1), North Dakota (2), Oklahoma (1), Pennsylvania (1), South Dakota (15), Tennessee (2), Texas (1), Washington (1) and Wisconsin (0)]. Of these, 63 (50.8%) were diagnosed as neuroinvasive disease cases and 61 (49.2%) as non-neuroinvasive cases. Seven fatal cases were reported. Thirty-seven presumptive viremic blood donors have been identified.

Detailed information can be accessed via the [Centers for Disease Control and Prevention web site](#).

ISSN: 2368-2841



Public Health  
Agency of Canada

Agence de la santé  
publique du Canada

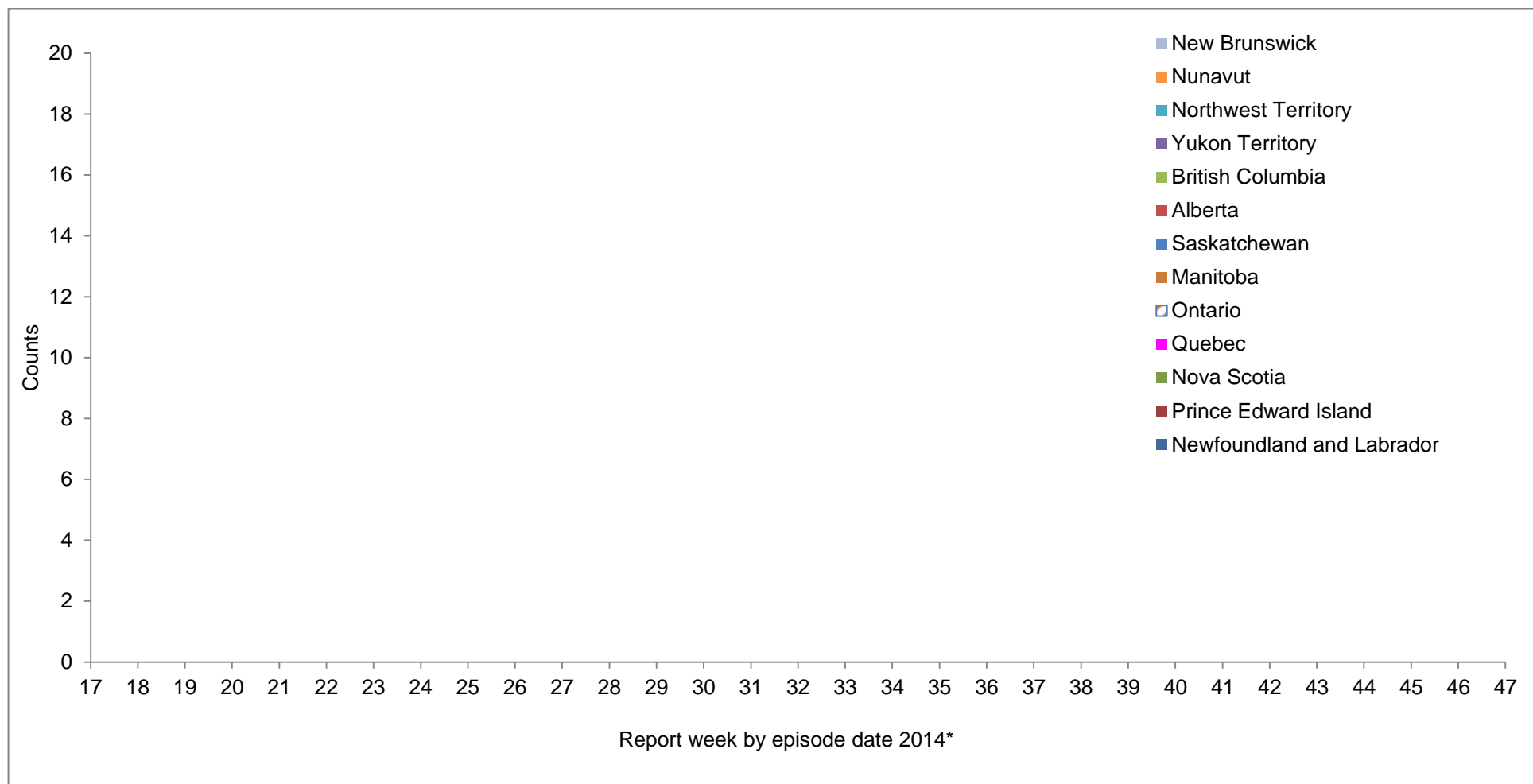
Canada

## EUROPEAN UNION, EUROPEAN ECONOMIC AREA AND NEIGHBOURING COUNTRIES

During surveillance week 33, the European Centre for Disease Prevention and Control reported that the Greek Centre for Disease Control and Prevention (KEELPNO) confirmed its first case of West Nile Virus. The Ministry of Health of Israel reported two locally acquired West Nile Virus cases. No new cases were reported for Bosnia and Herzegovina, Russian Federation and Serbia.

Since the start of the 2014 West Nile Virus season, 25 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 [European Centre for Disease Prevention and Control web site](#).

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

[illegible]

**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

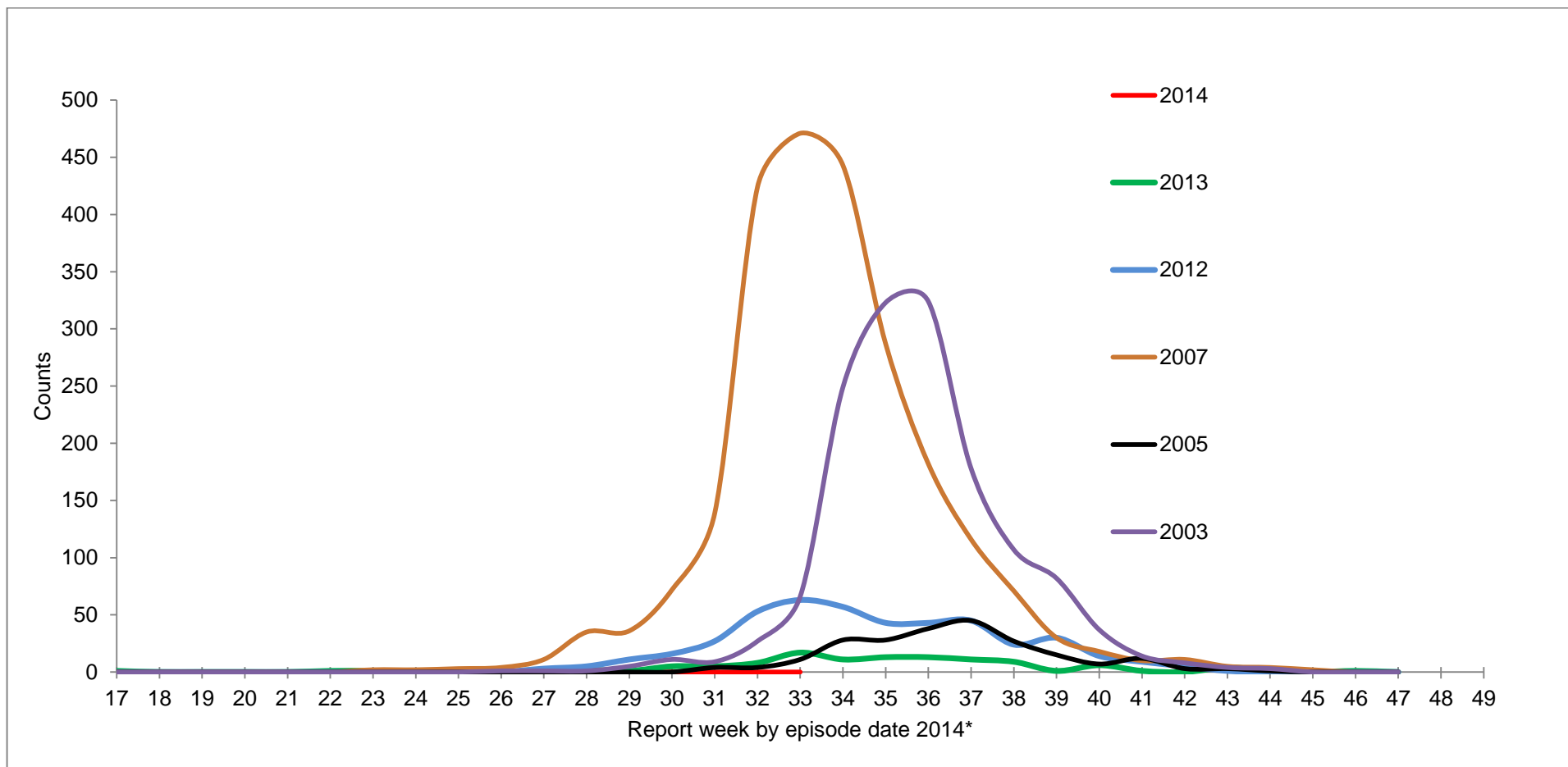
	Week 33: August 10 to August 16, 2014					
	West Nile Virus neurological syndrome	West Nile Virus non-neurological syndrome	Unclassified/unspecified	Total clinical cases <sup>1</sup>	Number of travel-related cases <sup>2</sup>	West Nile Virus asymptomatic infections <sup>3</sup>
Newfoundland and Labrador	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 16, 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, 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 nucleic acid amplification test 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		



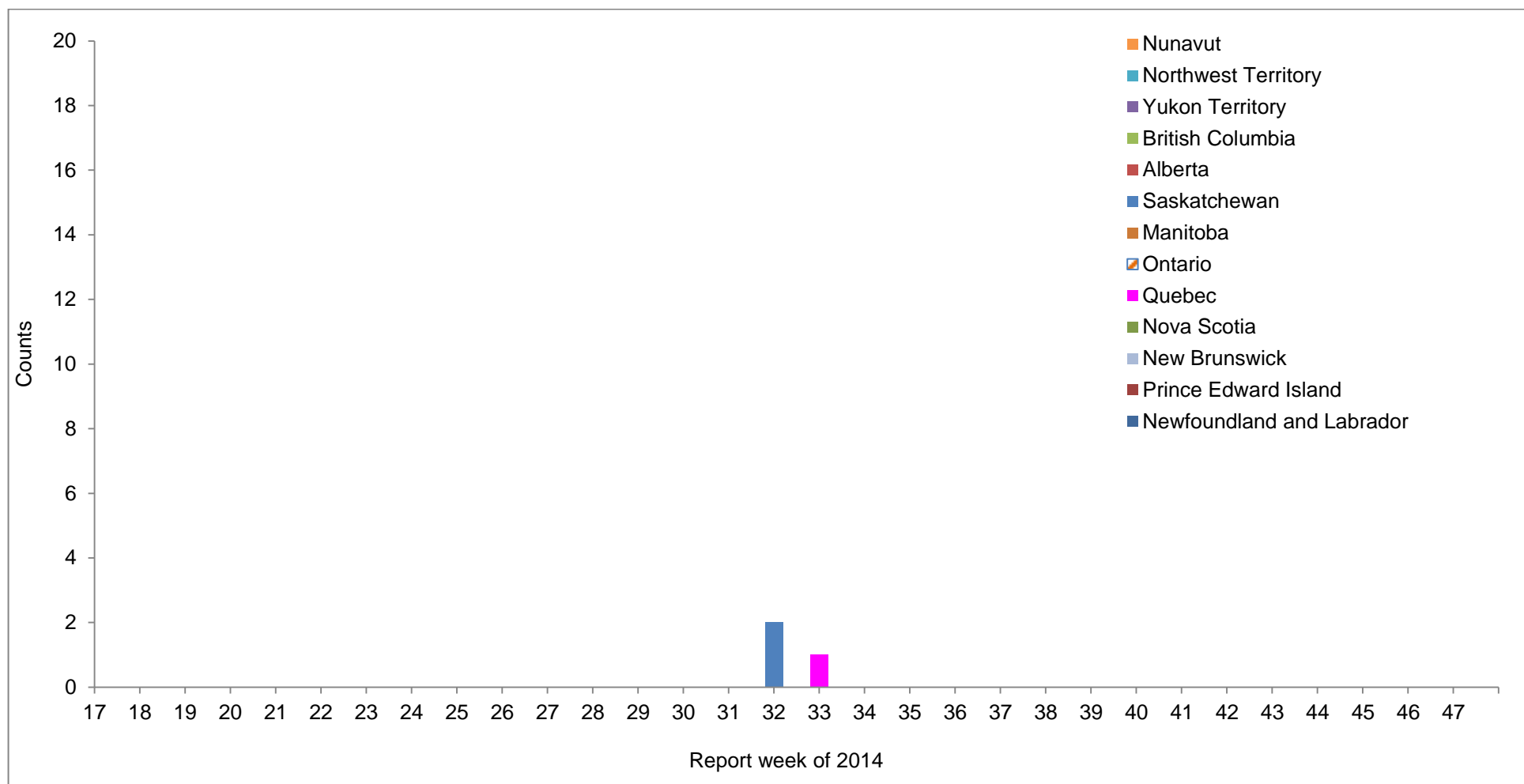
**TABLE 4.1:** Reported cumulative number of West Nile Virus positive mosquito pools by Province/Territory and by report week, 2014 season\*

	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		
Newfoundland and Labrador	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																
New Brunswick	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																
Quebec	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	10	19																
Ontario	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	9	11																
Manitoba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	14																
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7																
Alberta	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																
Yukon Territory	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																
Nunavut	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	0	0	0	1	6	21	26	51																

\* Detailed West Nile Virus mosquito surveillance data can be accessed through [Provincial/Territorial websites](#)

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

	Year to date: January 1 to August 16, 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	6,986	19	0.3
Ontario	8,825	11	0.1
Manitoba	1,173	14	1.2
Saskatchewan	540	7	1.3
Alberta	0	0	0
British Columbia	166	0	0
Yukon Territory	0	0	0
Northwest Territory	0	0	0
Nunavut	0	0	0
Total	17,690	51	0.3

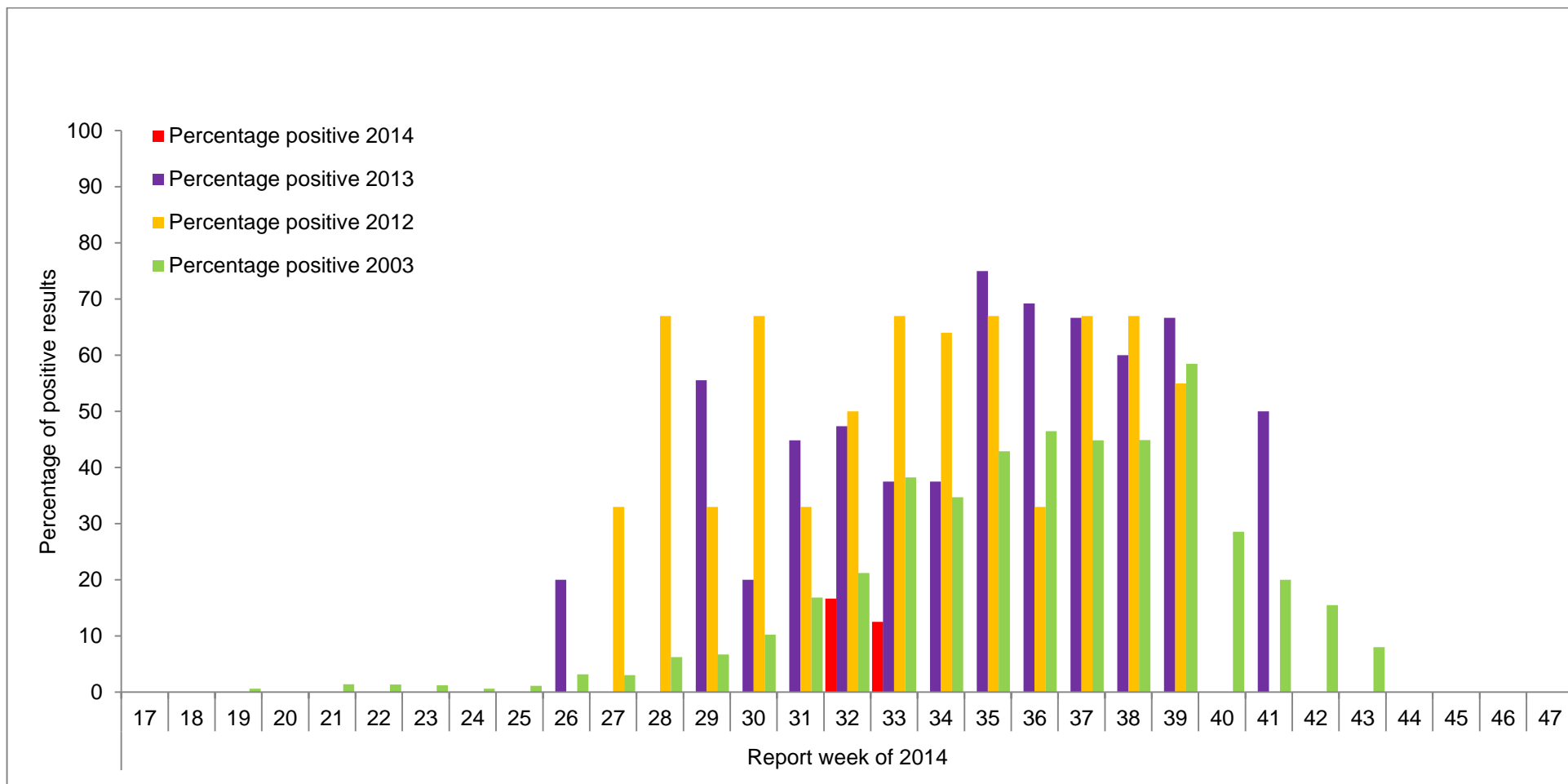
**FIGURE 3:** Reported number of dead birds testing positive for West Nile Virus by Province/Territory and by report week, 2014 season\*

\* Data from the [Canadian Wildlife Health Cooperative](#)

**TABLE 5:** Reported number of dead birds testing positive for West Nile Virus by Province/Territory and by report week, 2014 season\*

	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	Total
Newfoundland and Labrador	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
New Brunswick	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
Quebec	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1															1
Ontario	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															0
Manitoba	0	0	0	0	0	0	0	0	0	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	2	0															2
Alberta	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
Yukon Territory	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
Nunavut	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	0	0	0	0	0	0	2	1															3

\* 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	1																
Numbers tested	2014	0	0	0	0	0	0	0	0	0	0	0	0	0	39*	10	12	8																
Percentage positive	2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	13																
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	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	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	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	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	0	0	

\* Data became available during Week 30; this is a cumulative number of dead birds tested from Week 1 to Week 30.