



# West Nile virus

## National Surveillance Report

September 23 to September 29, 2012

(Report Week 39)

### **Canada**

#### **Humans:**

During surveillance week 39, ending on September 29, 2012, twenty eight (28) additional clinical cases [Ontario (1), Quebec (26), and Prince Edward Island (1)] and one (1) asymptomatic infection [Quebec (1)] caused by the West Nile virus were reported to the Public Health Agency of Canada (PHAC). The case reported in Prince Edward Island was related to travel outside the province. As of week 39, there have been a total of 386 clinical cases and 16 asymptomatic infections reported to PHAC. Of the 386 clinical cases, 113 (29%) were classified as Neurological Syndrome, 206 (53%) Non-Neurological Syndrome, and 67 (17%) Unclassified.

#### **Mosquitoes:**

To date, a total of 603 positive mosquito pools have been reported in Canada: 462 in Ontario [Central East (233), Central West (97), Eastern (61), North East (2), South West (62), First Nations Community (7)]; 116 in Manitoba [Interlake-Eastern (13), Southern (48), Western (35), Winnipeg (20)]; six (6) in Saskatchewan [Sun Country (3), and Saskatoon (1), Five Hills (1), Cypress (1)] and 19 in Quebec [Laval (3), Bois-des-Filion (3), Gatineau (1), Sainte-Anne-des-Plaines (3), Terrebonne (5), Boisbriand (1), Rosemere (1), and Trois-Rivieres (2)].

Note: Quebec public health authorities have not done mosquito surveillance since 2006, however, entomological surveillance is conducted in some municipalities of the province.

#### **Dead Birds:**

A total of 100 dead birds have been tested for West Nile virus by the Canadian Cooperative Wildlife Health Centre (CCWHC) in Canada. Of them, 58 were positive for West Nile virus, [27/43 in Ontario, 30/46 in Quebec and 1/10 in Saskatchewan].

#### **Domestic Animals:**

As of week 39, the Canadian Food Inspection Agency (CFIA) has reported 37 horses testing positive for West Nile virus: [Alberta (5); Manitoba (6); Ontario (6); Quebec (13); and Saskatchewan (7)].

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 October 2, 2012 there have been 3,969 human cases of West Nile virus infection reported to the Centers for Disease Control and Prevention in the United States, of which 2,012 (51%) were neuroinvasive and 1,959 (49%) were non-neuroinvasive. 163 deaths have been reported. In addition, 508 West Nile virus presumptive viremic blood donors have been reported.

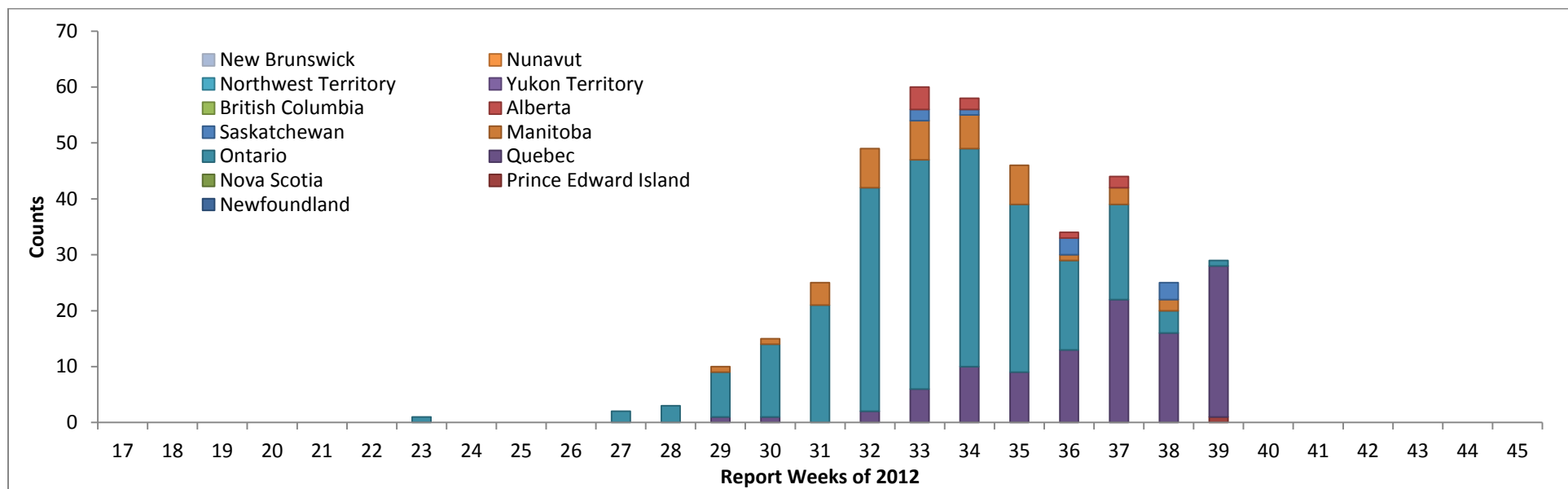
Source: [http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12\\_detailed.htm](http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12_detailed.htm)

### **Europe and Neighbouring countries**

As of September 27, 2012 there have been 665 confirmed human cases of West Nile virus infection reported in Europe and Neighbouring countries [Greece (152), Hungary (8), Italy (30), Romania (14), Croatia (5), Yugoslav (4), Israel (46), Kosovo (4), Palestine (2), Russian Federation (366), Serbia (30), and Tunisia (4)].

Source: [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)

WNV clinical cases and asymptomatic infections, by Province / Territory and by report week, 2012 season



Link Figure 1 to the following table 1 below

	Report Week of 2012																												
	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	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	1						
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						
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						
Quebec	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	6	10	9	13	22	16	27						
Ontario	0	0	0	0	0	0	1	0	0	0	2	3	8	13	21	40	41	39	30	16	17	4	1						
Manitoba	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	7	7	6	7	1	3	2	0						
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	3	0						
Alberta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	1	2	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						
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						
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						
Nunavut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						

Table 2

## West Nile virus human clinical cases and asymptomatic infections by Province / Territory for the current Report Week and year to date, 2012 Season

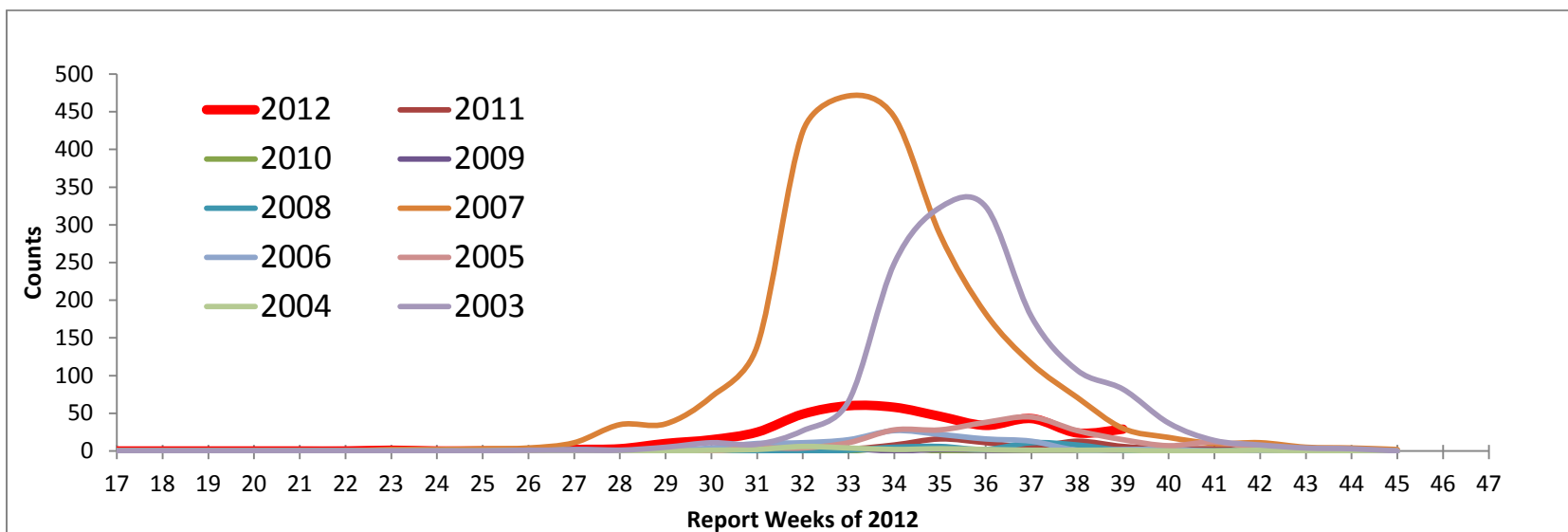
September 23 to September 29, 2012 (Week 39)						
	West Nile virus Neurological syndrome	West Nile virus Non-Neurological syndrome	Unclassified / Unspecified	Total clinical cases <sup>1</sup>	# of travel related cases <sup>2</sup>	West Nile virus asymptomatic infections <sup>3</sup>
	# cases	# cases				
Newfoundland	0	0	0	0	0	0
Prince Edward Island	1	0	0	1	1	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	0	0	0
Quebec	5	2	19	26	0	1
Ontario	0	1	0	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
<b>Total</b>	<b>6</b>	<b>3</b>	<b>19</b>	<b>28</b>	<b>1</b>	<b>1</b>
Year to date: From January 1 to September 29, 2012						
Newfoundland	0	0	0	0	0	0
Prince Edward Island	1	0	0	1	1	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	0	0	0
Quebec	49	26	27	102	0	6
Ontario	53	138	35	226	11	10
Manitoba	6	28	5	39	2	0
Saskatchewan	0	9	0	9	2	0
Alberta	4	5	0	9	2	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
<b>Total</b>	<b>113</b>	<b>206</b>	<b>67</b>	<b>386</b>	<b>18</b>	<b>16</b>

<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.

WNV clinical cases and asymptomatic infections by report week, 2012 season compared to previous seasons



Link Figure 2 to the following table 3 below

	Report Weeks of 2012																													
	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	
2012	0	0	0	0	0	0	1	0	0	0	2	3	10	15	25	49	60	58	46	34	44	25	29							
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	##	82	37	14	8	4	3	0	

Table 4

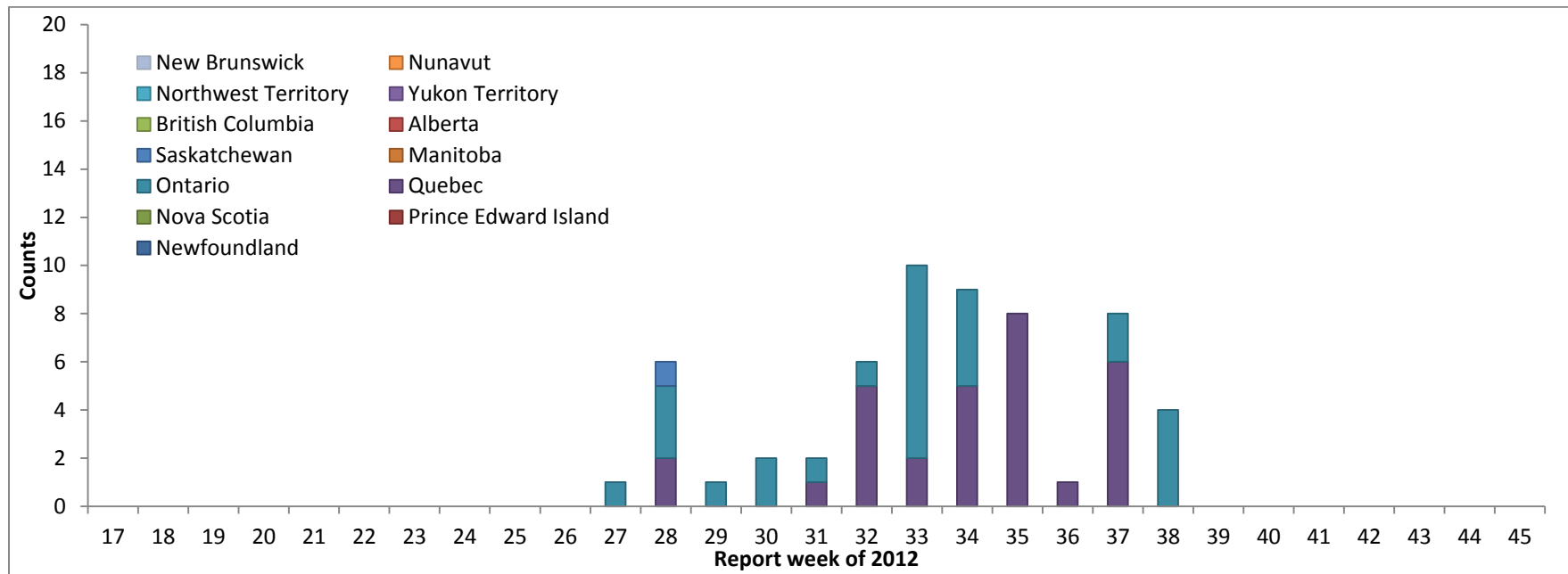
**Reported cumulative number of West Nile virus positive mosquito pools by Province/Territory and by report week, 2012 season\***

	Report weeks of 2012																												
	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	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						
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						
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						
Quebec**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8	19	19	19	19	19	19	19						
Ontario	0	0	0	0	0	0	0	0	2	6	10	19	30	89	162	249	312	375	409	434	454	462	462						
Manitoba	0	0	0	0	0	0	0	0	0	0	0	0	2	20	48	62	98	108	111	116	116	116	116						
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	6	6	6	6	6	6						
Alberta**	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						
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						
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						
Nunavut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						

\* Detailed West Nile virus mosquito surveillance data can be accessed through Provincial/ territorial websites

\*\* These Provinces/Territories are not conducting mosquito surveillance as part of their West Nile virus surveillance program at provincial level in 2012

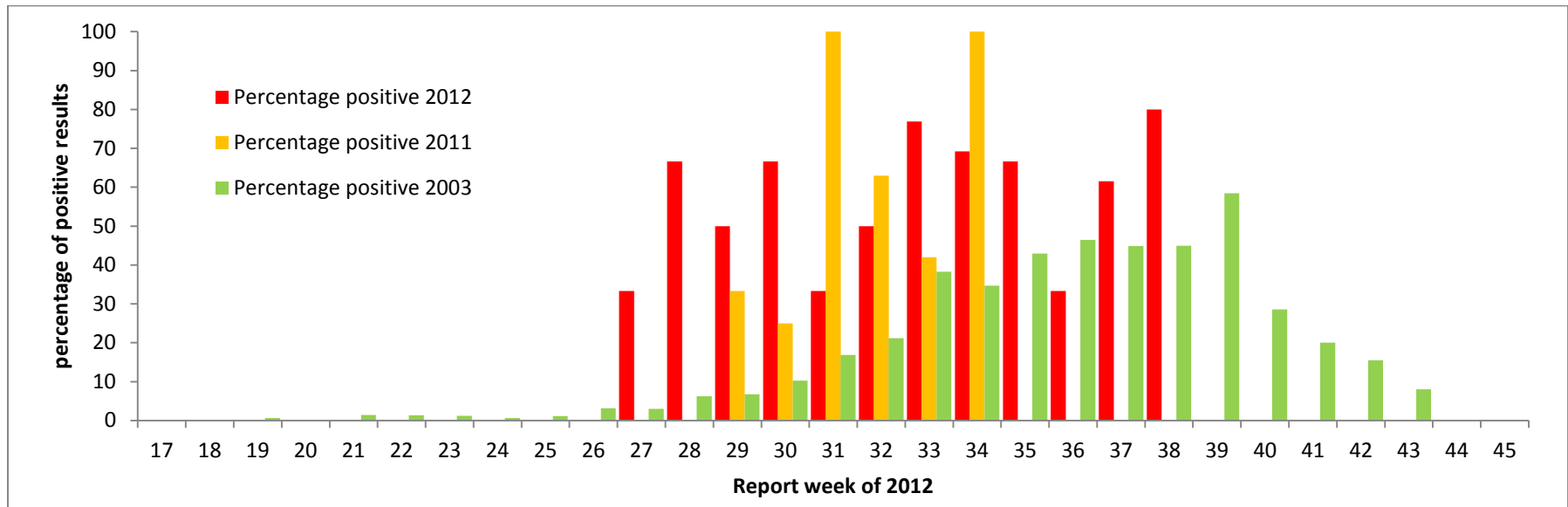
Reported number of dead birds testing positive for WNV by Province / Territory and by report week, 2012 season



Link figure 3 to the following table 5 below

	Report Weeks of 2012																												
	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	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	0/0	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	0/0	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	0/0	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	0/0	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	0/0	0/0	0/0	2/4	0/0	0/1	1/3	5/5	2/3	5/6	8/12	1/1	6/11	0/0	0/0						
Ontario	0/0	0/0	0/0	0/0	0/1	0/1	0/0	0/3	0/1	0/0	1/1	3/3	1/2	2/2	1/2	1/6	8/10	4/5	0/0	0/0	2/2	4/4	0/0						
Manitoba	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	0/0	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	0/0	0/0	0/0	0/1	1/2	0/0	0/0	0/1	0/1	0/0	2/0	0/0	0/2	0/0	0/1	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	0/0	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	0/1	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	0/0	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	0/0	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	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0						

Percentage of dead birds testing positive for WNV in the 2012 season by report week as compared to the 2003 and 2011 seasons



Link figure 4 to the following table 6 below

		Weeks of 2012																														
		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 tested	2012	0	0	0	0	1	1	0	3	1	0	3	9	2	3	6	12	13	13	12	3	13	5	0								
Numbers positive		0	0	0	0	0	0	0	0	0	0	1	6	1	2	2	6	10	9	8	1	8	4	0								
Percentage positive		0	0	0	0	0	0	0	0	0	0	33	67	50	67	33	50	77	69	67	33	62	80	0								
Percentage positive	2011	0	0	0	0	0	0	0	0	0	0	0	0	33	25	100	63	42	100	0	0	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		