



# West Nile virus

## National Surveillance Report

English Edition

September 2 to September 8, 2012

(Report Week 36)

### **Canada**

#### **Humans:**

During surveillance week 36, ending on September 8, 2012, twenty (20) clinical cases [Ontario (9), Quebec (10), and Alberta (1)] of West Nile virus have been reported to Public Health Agency of Canada (PHAC). As of week 36, a total of 224 clinical cases have been reported to PHAC. Of them, 52 (23%) were classified as West Nile virus Neurological Syndrome, 117 (52%) as West Nile virus Non-Neurological Syndrome and 55 (25%) as unclassified. To date, 15 asymptomatic infections have been reported [Quebec (6), Ontario (8), and Saskatchewan (1)] to PHAC.

#### **Mosquitoes:**

To date, a total of 575 positive mosquito pools have been reported in Canada: 434 in Ontario [Central East (223), Central West (87), Eastern (57), North East (2), South West (59), First Nations Community (6)]; 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 do not have mosquito surveillance since 2006, however, entomological surveillance is conducted in some municipalities of the province.

#### **Dead Birds:**

A total of 73 dead birds have been tested for West Nile virus by the Canadian Cooperative Wildlife Health Centre (CCWHC) in Canada. Of them, 40 were positive for West Nile virus, [21/37 in Ontario, 18/25 in Quebec and 1/7 in Saskatchewan].

#### **Domestic Animals:**

As of week 36, 28 horses tested positive for West Nile virus, reported by the Canadian Food Inspection Agency (CFIA): Alberta (5); Manitoba (5); Ontario (5); Quebec (7); and Saskatchewan (6).

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 September 11, 2012 there have been 2,636 human cases of West Nile virus infection reported to the Centers for Disease Control and Prevention in the United States, of which 1,450 (53%) were neuroinvasive and 1,231 (47%) were non-neuroinvasive. 118 deaths reported. In addition, 385 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 6, 2012 there have been 447 confirmed human cases of West Nile virus infection reported in Europe and Neighbouring countries [Greece (118), Italy (1), Hungary (2), Romania (12), Israel (15), Occupied Palestinian territory (2), Russian Federation (278), Serbia (15), Tunisia (1)].

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)



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

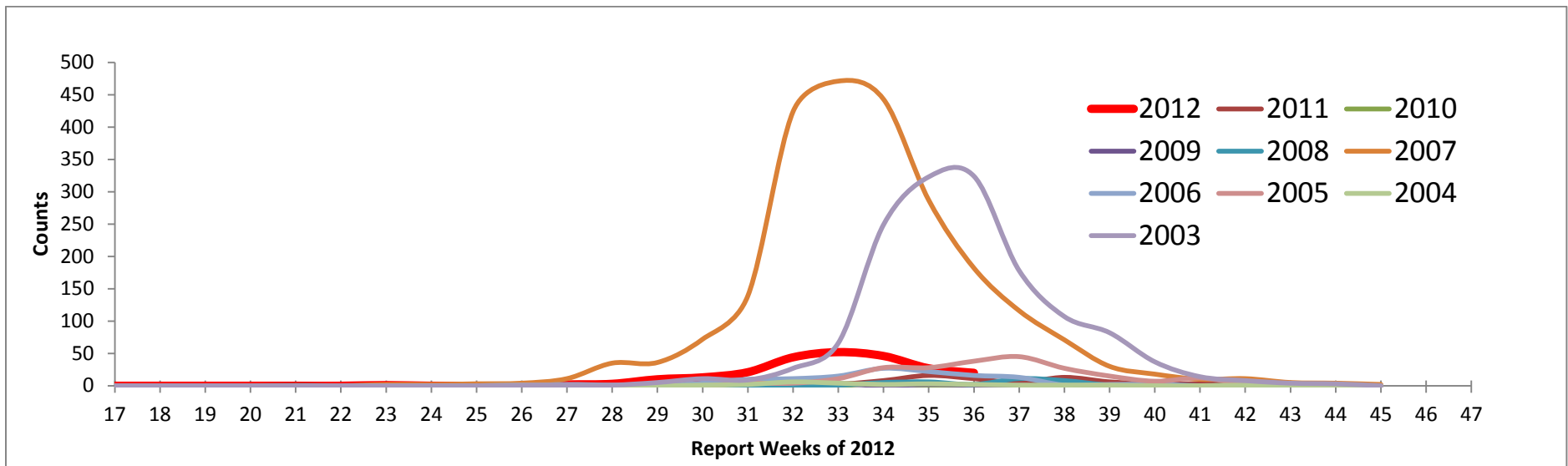
		September 2 to September 8, 2012 (Week 36)					
		West Nile virus Neurological syndrome	West Nile virus Non-Neurological syndrome	Unclassified / Unspecified	Total clinical cases <sup>1</sup>	# of travel related cases <sup>2</sup>	West Nile virus asymptomatic infections <sup>3</sup>
		# cases	# cases				
Provinces and territories	Newfoundland	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	4	2	4	10	0	0
	Ontario	0	6	3	9	0	0
	Manitoba	0	0	0	0	0	0
	Saskatchewan	0	0	0	0	0	0
	Alberta	0	1	0	1	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>4</b>	<b>9</b>	<b>7</b>	<b>20</b>	<b>0</b>	<b>0</b>
		Year to date: From January 1 to September 8, 2012					
Provinces and territories	Newfoundland	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	15	6	12	33	0	6
	Ontario	34	86	30	150	7	8
	Manitoba	1	19	13	33	2	0
	Saskatchewan	0	2	0	2	0	1
	Alberta	2	4	0	6	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>52</b>	<b>117</b>	<b>55</b>	<b>224</b>	<b>11</b>	<b>15</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	0	2	9	11	19	40	41	35	19	20										
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

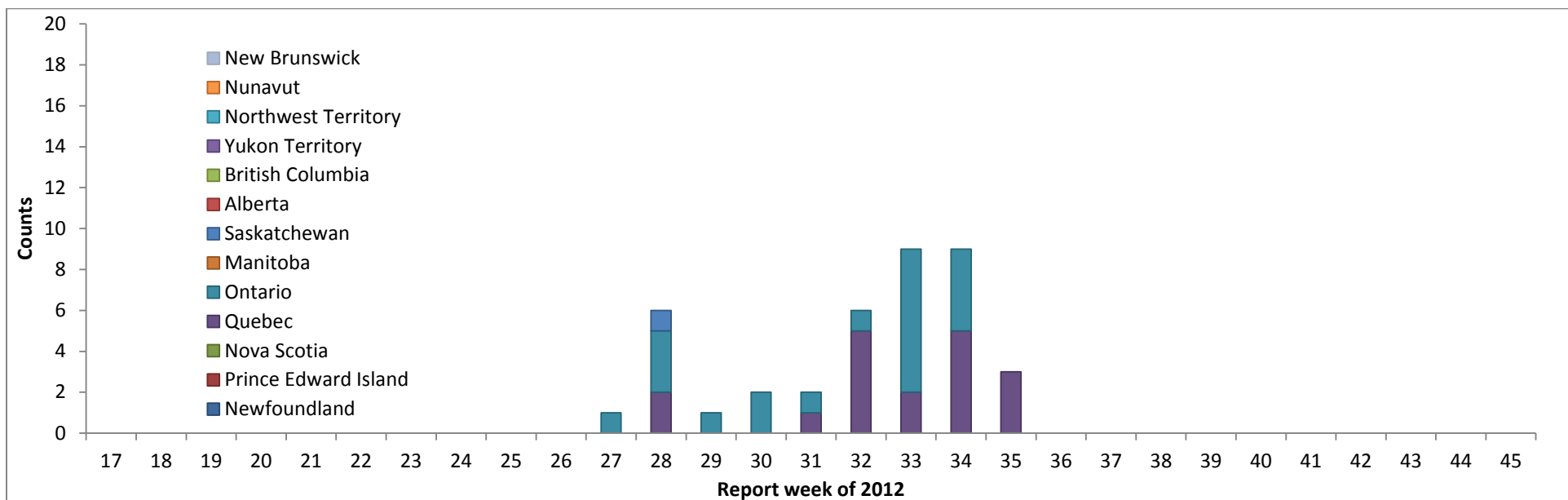
**Reported cumulative number of West Nile virus positive mosquito pools by Province/Territory and by report week, 2012 season\***

		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										
	Prince Edward Island	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										
	New Brunswick**	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										
	Ontario	0	0	0	0	0	0	0	0	2	6	10	19	30	89	162	249	312	375	409	434										
	Manitoba	0	0	0	0	0	0	0	0	0	0	0	2	20	48	62	98	108	111	116											
	Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	6	6	6										
	Alberta**	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										
	Yukon Territory	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										
	Nunavut	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

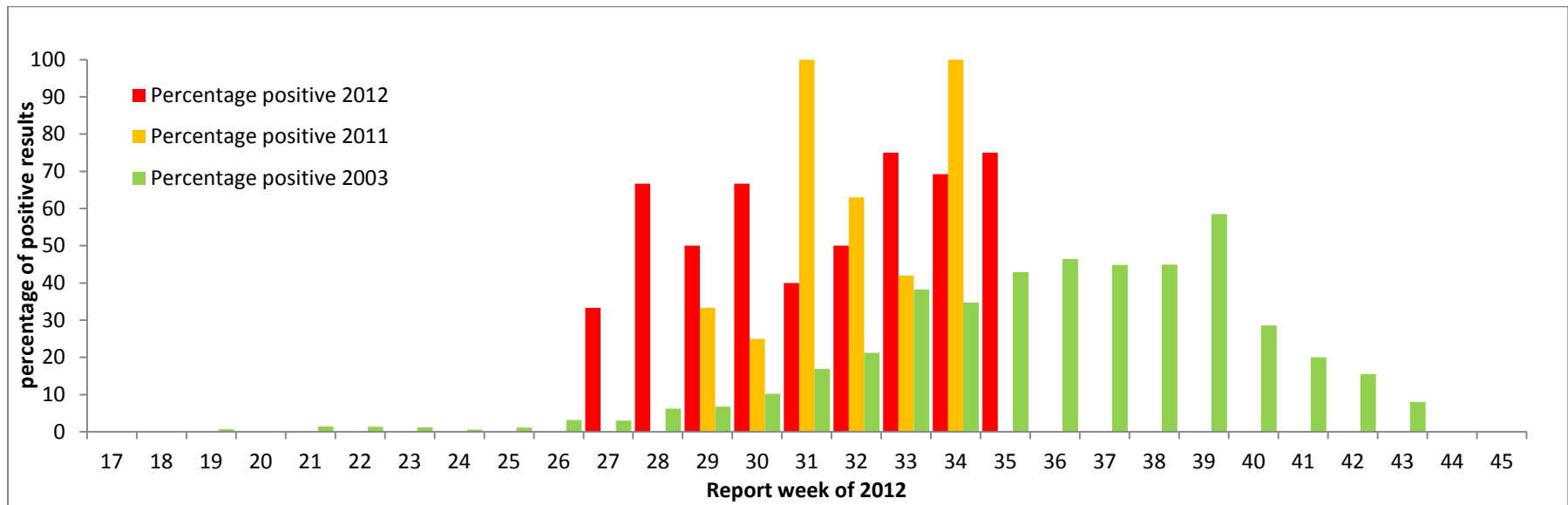
Reported number of dead birds testing positive for WNV by Province / Territory and by report week, 2012 season



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										
	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										
	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										
	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										
	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	1/2	5/5	2/3	6/5	4/3	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	7/9	5/4	0/0	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										
	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	0/0										
	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										
	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										
	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										
	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										
	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										

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	5	12	12	13	4	0									
Numbers positive		0	0	0	0	0	0	0	0	0	0	1	6	1	2	2	6	9	9	3	0									
Percentage positive		0	0	0	0	0	0	0	0	0	0	33	67	50	67	40	50	75	69	75	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