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

JULY 13 TO JULY 19, 2014 - REPORT WEEK 29

CANADA

HUMANS:

As of surveillance week 29 (July 13 to July 19, 2014), no human cases of West Nile virus (WNV) have been reported to the Public Health Agency of Canada (the Agency).

MOSQUITOES:

As of surveillance week 29, Quebec reported one mosquito pool tested positive for WNV in the Montréal region.

DEAD BIRDS:

No dead birds positive for WNV have been reported by the Canadian Wildlife Health Cooperative.

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 WNV season, 29 human WNV cases [Arizona (1), California (9), Colorado (2), Georgia (1), Iowa (1), Louisiana (1), Minnesota (1), Mississippi (2), Missouri (1), Oklahoma (1), South Dakota (6), Tennessee (1), Texas (1) and Wisconsin (1)] have been reported by the Centers for Disease Control and Prevention. Of these, 14 (48.3%) were diagnosed as neuroinvasive disease cases and 15 (51.7%) as non-neuroinvasive cases. One fatal case was reported. Eight cases of presumptive viremic blood donors were reported

Detailed information can be accessed via the <u>CDC web site</u>.

EUROPEAN UNION, EUROPEAN ECONOMIC AREA AND NEIGHBOURING COUNTRIES

Since the start of the 2014 WNV season, no human cases of WNV have been reported in the European Union/European Economic Area by the European Centre for Disease Prevention and Control. Seventeen human cases have been reported in neighbouring countries: Bosnia and Herzegovina (13), Russian Federation (1) and Serbia (3).

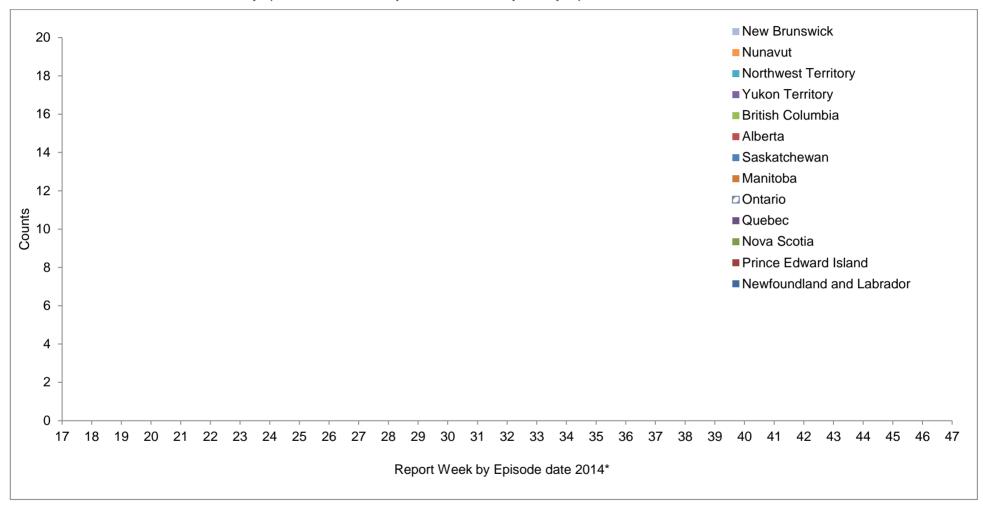
Detailed information can be accessed via the ECDC web site.

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WNV clinical cases and asymptomatic infections, by Province / Territory and by report week, 2014 season FIGURE 1:



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

TABLE 1: WNV clinical cases and asymptomatic infections, by Province / Territory and by report week, 2014 season

														Re	eport \	Week	of 20	14													
	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																		
Prince Edward Island	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																		
Nova Scotia	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																		
Ontario	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																		
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0																		
Alberta	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																		
Yukon Territory	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																		
Nunavut	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																		

TABLE 2: WNV human clinical cases and asymptomatic infections by Province / Territory for the current Report Week and year to date, 2014 Season

			Week 29: July	13 to 19, 2014		
	West Nile virus Neurological syndrome	West Nile virus Non- Neurological syndrome	Unclassified / Unspecified	Total clinical cases ¹	# 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

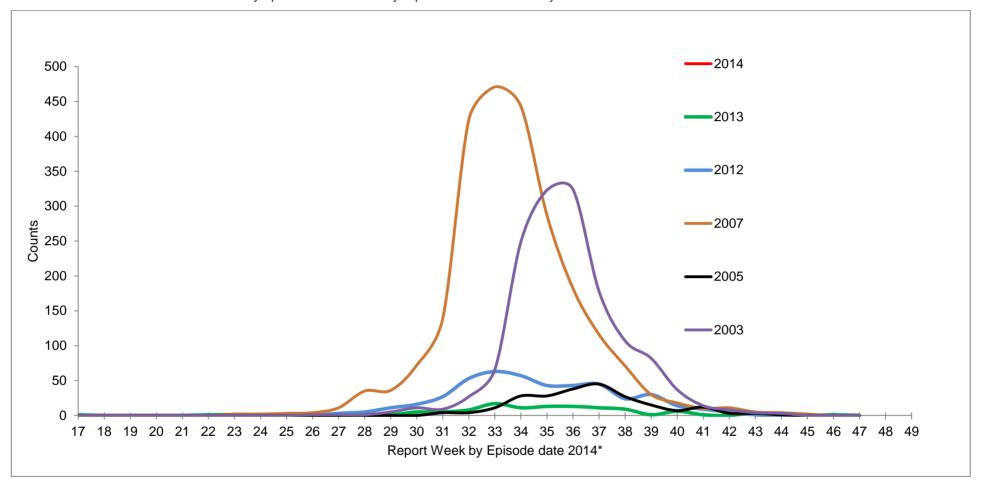
			Year to date: Janua	ry 1 to July 19, 2014		
	West Nile virus Neurological syndrome	West Nile virus Non- Neurological syndrome	Unclassified / Unspecified	Total clinical cases ¹	# of travel-related cases ²	West Nile virus asymptomatic infections ³
Newfoundland and Labrador	0	0	0	0	0	0
Prince Edward Island	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

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.

Likely related to travel outside the province/territory. These cases are included in either the total clinical cases or West Nile virus asymptomatic infections.

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: WNV 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:

WNV clinical cases and asymptomatic infections by report week for selected years

														F	Report \	Neek	of 201	4													
	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																		
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

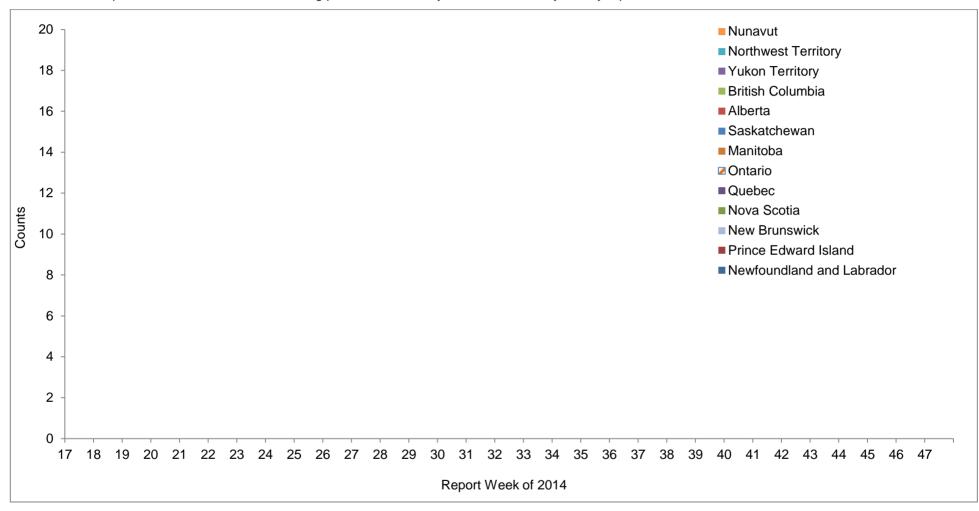
 TABLE 4.1:
 Reported cumulative number of WNV positive mosquito pools by Province / Territory and by report week, 2014 season

														Re	eport '	Week	of 20	14													
	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																		
Prince Edward Island	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																		
Nova Scotia	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																		
Ontario	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																		
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0																		
Alberta	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																		
Yukon Territory	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																		
Nunavut	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																		

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

	Y	ear to date: January 1 to July 19, 201	4
	Number of mosquito pools tested	Number 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	3 484	1	0.03
Ontario	0	0	0
Manitoba	0	0	0
Saskatchewan	0	0	0
Alberta	0	0	0
British Columbia	0	0	0
Yukon Territory	0	0	0
Northwest Territory	0	0	0
Nunavut	0	0	0
Total	3 484	1	0.03

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

															Rep	port W	/eek o	of 201	4													
	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
Prince Edward Island	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
Nova Scotia	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
Ontario	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
Saskatchewan	0	0	0	0	0	0	0	0	0	0	0	0	0																			0
Alberta	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
Yukon Territory	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
Nunavut	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

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

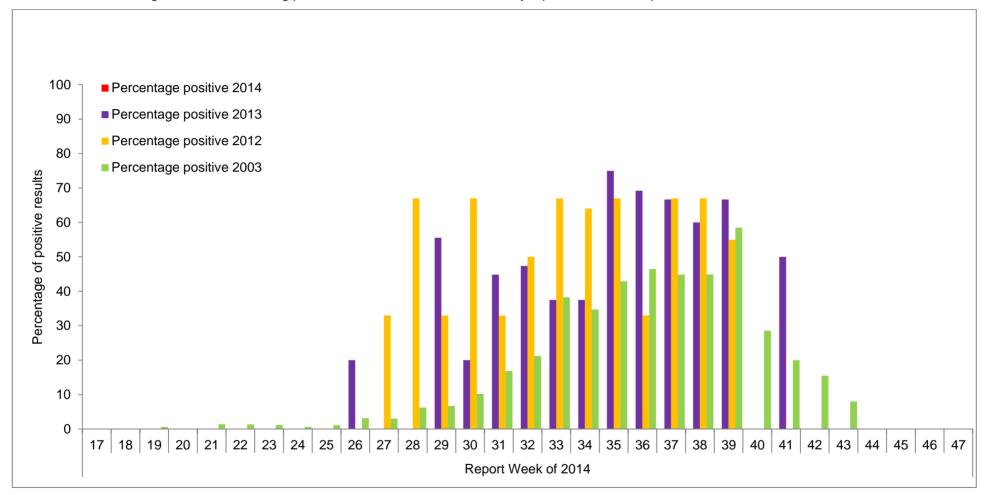


TABLE 6: Percentage of dead birds testing positive for WNV in the 2014 season by report week, as compared to the 2003, 2012 and 2013 seasons

															R	eport '	Week	of 20)14													
		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																		
Numbers tested	2014	0	0	0	0	0	0	0	0	0	0	0	0	0																		
Percentage positive	2014	0	0	0	0	0	0	0	0	0	0	0	0	0																		
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
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
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
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
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