Public Health Agency of Canada | Agence de la santé publique du Canada

Canada

West Nile Virus and Other Mosquito-borne Diseases National Surveillance Report

English Edition

July 3 to July 9, 2016 (Week 27)

Canada

Humans:

As of surveillance week 27, ending July 9 in 2016, there are no human cases of West Nile virus (WNV) reported to the Public Health Agency of Canada.

Mosquitoes:

As of surveillance week 27, 2 (0.07%) out of 3051 mosquito pools have tested positive for WNV in Canada: Quebec (1) and Saskatchewan (1).

Birds:

As of July 9 in 2016, the Canadian Wildlife Health Cooperative has examined a total of 16 dead birds for WNV. There are no positive reports.

Domestic Animals:

As of July 9 in 2016, there are no cases of WNV in domestic animals.

United States and U.S. territories

As of July 9 in 2016, there are 36 cases of West Nile virus disease in the United States and U.S. territories, including North Dakota (1) and Michigan (1). All of these cases (100%) were diagnosed as neuroinvasive disease.

Detailed information can be accessed via the Centre for Disease Control and Prevention (CDC) web site:

http://wonder.cdc.gov/mmwr/mmwr_2016.asp?mmwr_year=2016&mmwr_week=27&mmwr_table=2N&request=Submit&mmwr_location=

Europe and Neighbouring Countries

As of July 9 in 2016, no cases have been reported in the European Union (EU) and seven cases have been reported in the neighbouring countries.

Detailed information can be accessed via the ECDC web site:

http://ecdc.europa.eu/en/healthtopics/west_nile_fever/West-Nile-fever-maps/pages/index.aspx

FIGURE 1: Geographic Distribution of Human Clinical cases of WNV in Canada, as of July 9, 2016 season

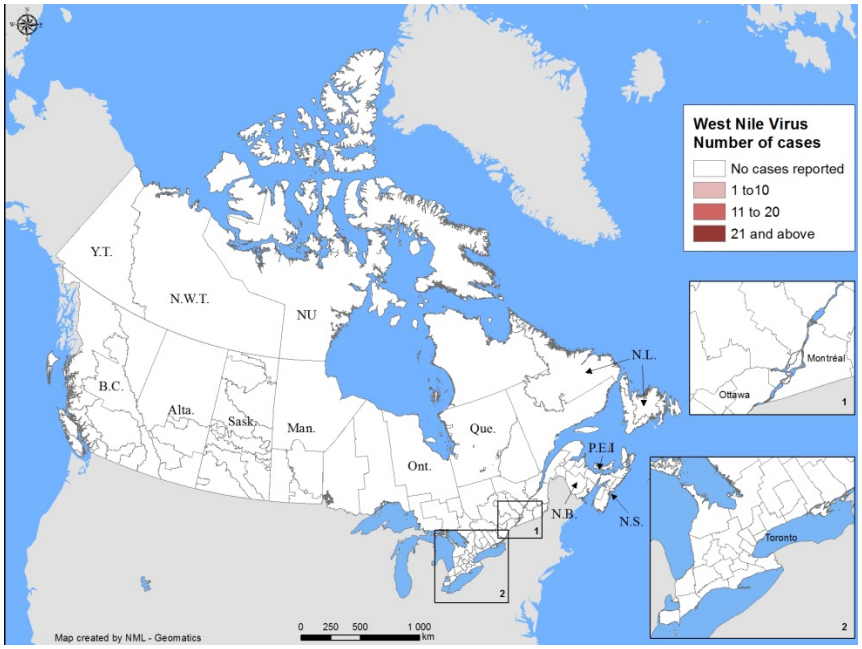


FIGURE 2: WNV Human Clinical cases and Asymptomatic Infections in Canada, by Province/ Territory and by Report week, as of July 9, 2016 season

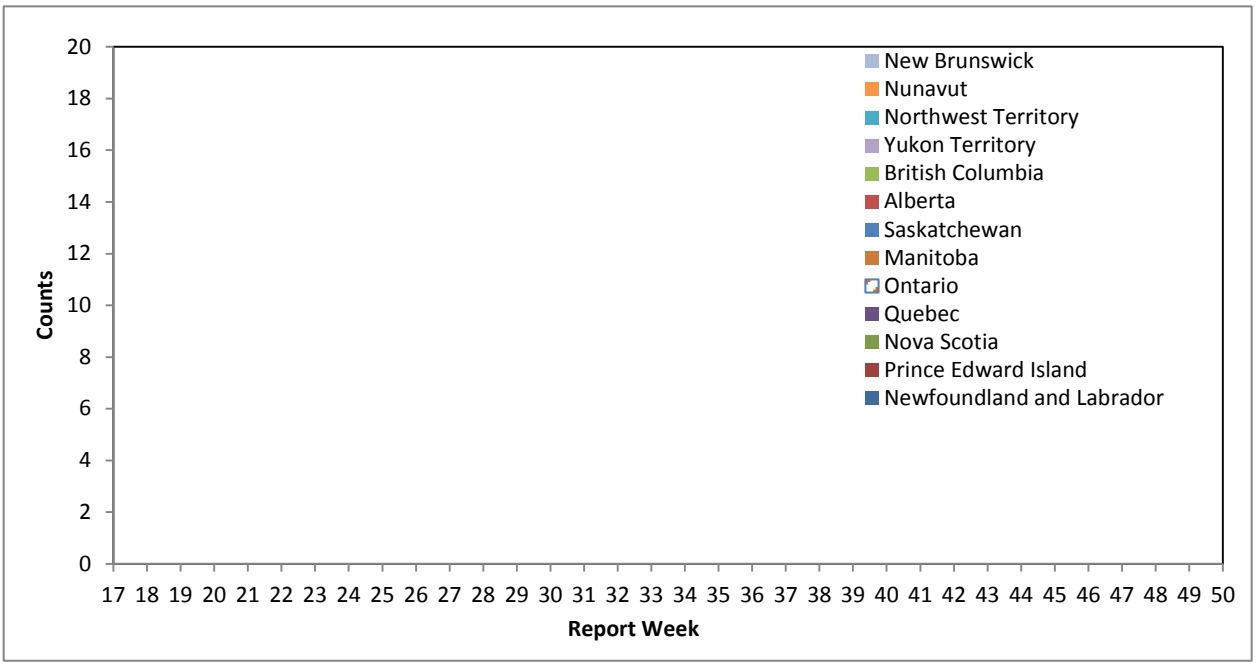
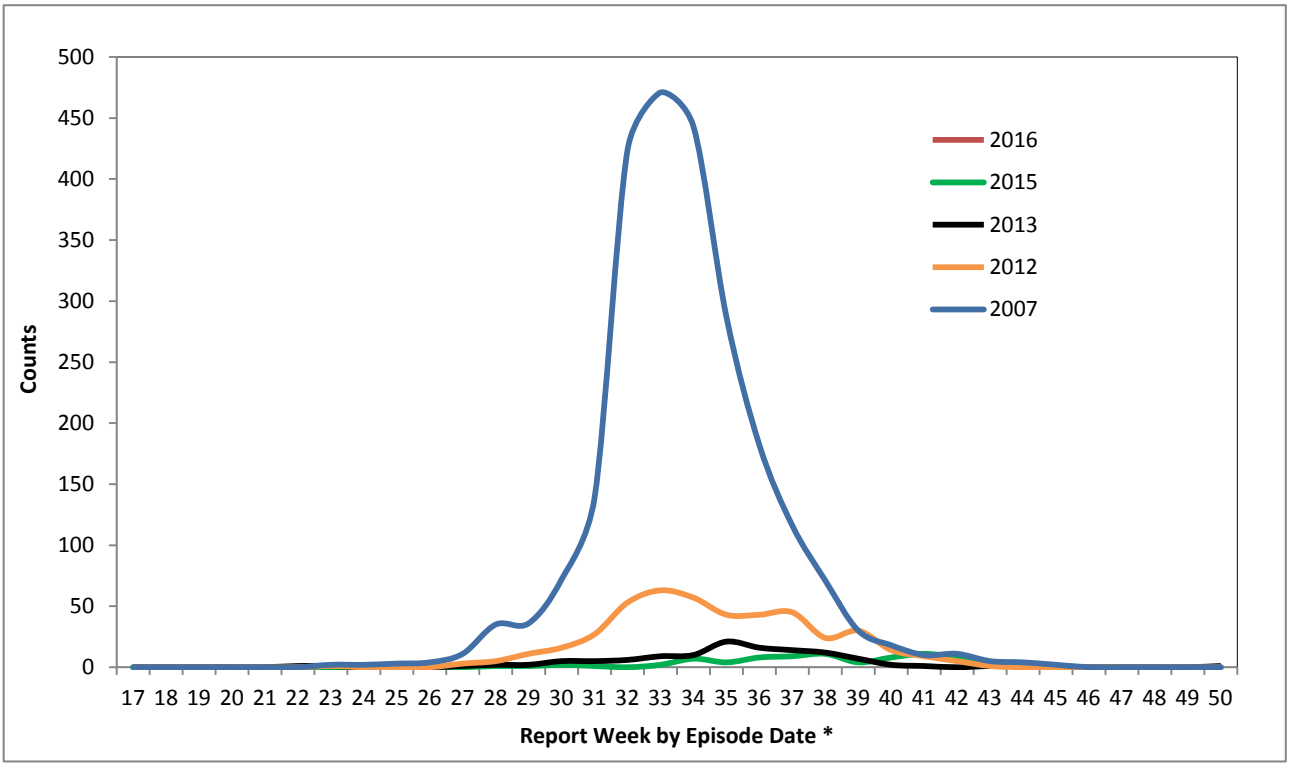


FIGURE 3: WNV Human Clinical cases and Asymptomatic Infections in Canada, by Report week for selected years



*West Nile virus clinical cases and asymptomatic infections are grouped by report week, based on episode date. Episode date could include one of the following: onset date, diagnosis date, lab sample date or reporting date.

TABLE 1: West Nile Virus Human Clinical cases and Asymptomatic Infections in Canada, by Province/Territory for the current report week and year to date, 2016 season

	Week 27: July 3 to July 9, 2016					
	West Nile virus neurological syndrome	West Nile virus non-neurological syndrome	Unclassified/ unspecified	Total clinical cases[1]	Number of travel-related cases[2]	West Nile virus asymptomatic infection[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: January 1 to July 9 , 2016					
	West Nile virus neurological syndrome	West Nile virus non-neurological syndrome	Unclassified/ unspecified	Total clinical cases[1]	Number of travel-related cases[2]	West Nile virus asymptomatic infection[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

[1] 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.

[2] Likely related to travel outside the Province/Territory. These cases are included in either the total clinical cases or West Nile virus asymptomatic infections.

[3] 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.

TABLE 2: Number of mosquito pools tested and number of WNV positive mosquito pools in Canada, by Province/Territory, 2016 season

Province	Year to date: January 1 to July 9, 2016≈		
	Number of WNV positive mosquito pools	Number of mosquito pools tested	Percentage of WNV positive mosquito pools (%)
Quebec	1	60	1.67
Ontario	0	2718	0
Manitoba	0	215	0
Saskatchewan	1	58	1.72
Total	2	3051	0.07

≈During the 2016 WNV season in Canada, mosquito surveillance is conducted by the following provinces only: Quebec, Ontario, Manitoba and Saskatchewan.

TABLE 3: Number of WNV positive mosquito pools/ Total number of mosquito pools tested in Canada, by Report week and by Province/ Territory, 2016 season ǂ

Province / Territory	Report week of 2016																					
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Newfoundland and Labrador	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											
New Brunswick	0	0	0	0	0	0	0	0	0	0	0											
Nova Scotia	0	0	0	0	0	0	0	0	0	0	0											
Quebec	0	0	0	0	0	0	0	0	0	0	1/60											
Ontario	0	0/6	0/5	0/12	0/49	0/90	0/190	0/460	0/542	0/562	0/802											
Manitoba	0	0	0	0	0/4	0/8	0/3	0/17	0/56	0/58	0/69											
Saskatchewan	0	0	0	0	0	0	0/1	0/9	0/8	0/14	1/26											
Alberta	0	0	0	0	0	0	0	0	0	0	0											
British Columbia	0	0	0	0	0	0	0	0	0	0	0											
Yukon Territory	0	0	0	0	0	0	0	0	0	0	0											
Northwest Territory	0	0	0	0	0	0	0	0	0	0	0											
Nunavut	0	0	0	0	0	0	0	0	0	0	0											
Total	0	0/6	0/5	0/12	0/53	0/98	0/194	0/486	0/606	0/634	2/957											

ǂDetailed West Nile virus mosquito surveillance data can be accessed through Provincial/ Territorial websites.

FIGURE 4: Reported number of dead birds tested positive for WNV in Canada, by Province/ Territory and by Report week, 2016 season

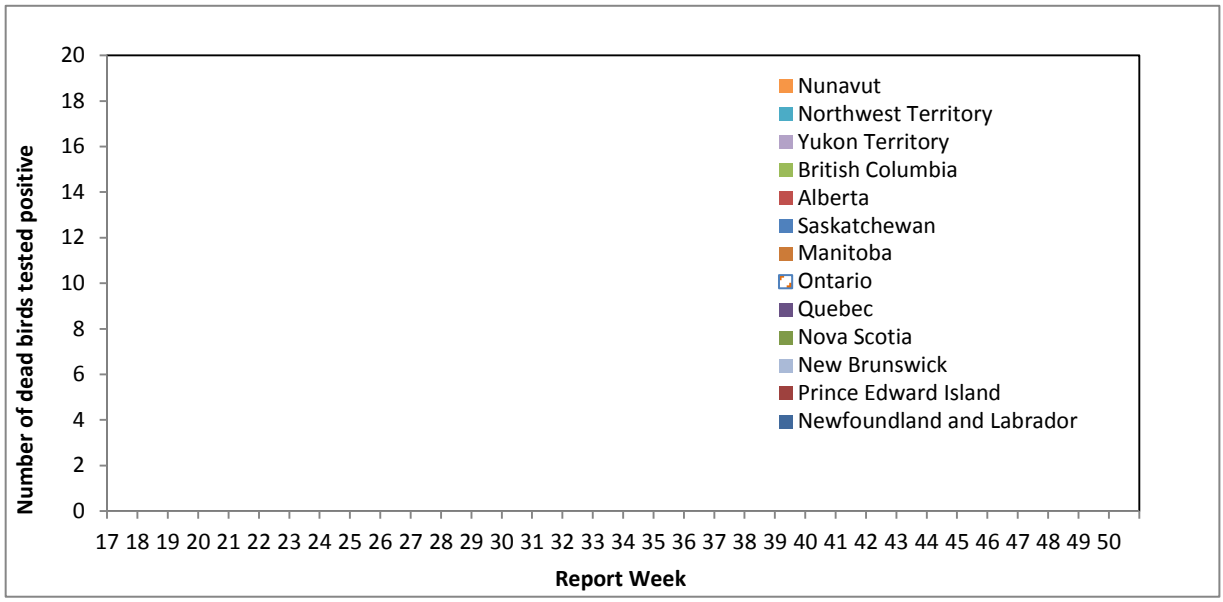
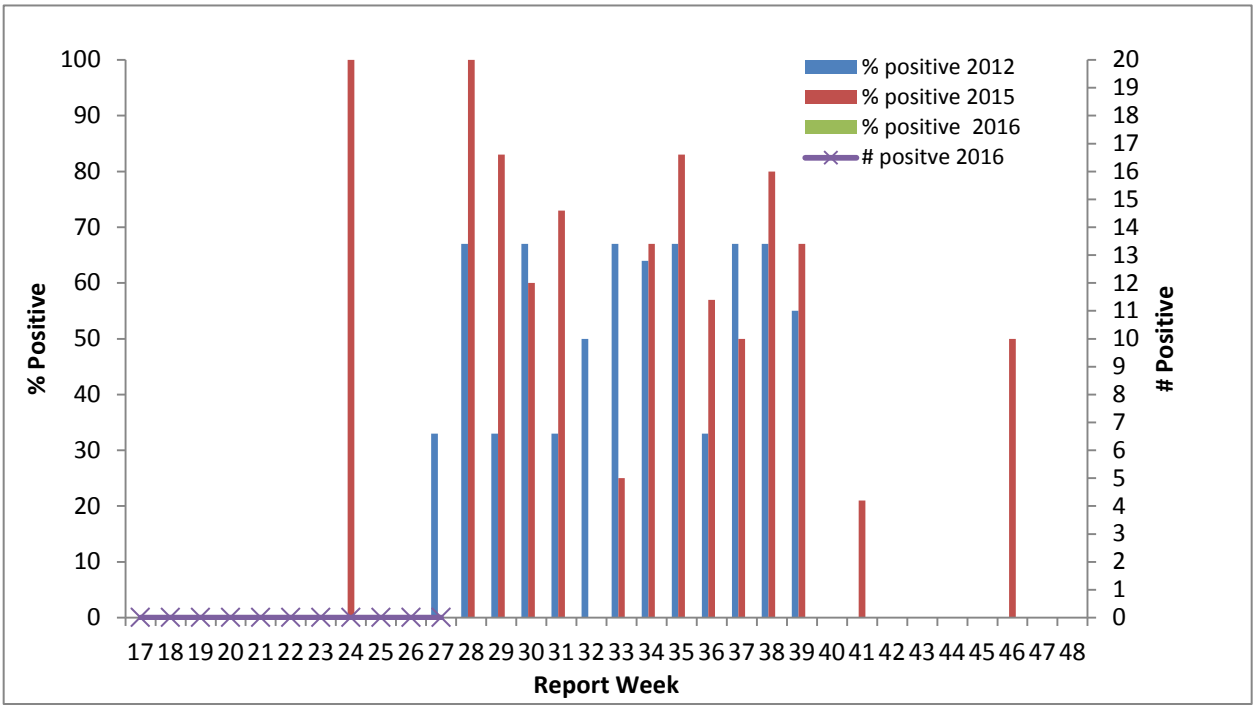


FIGURE 5: Percentage of dead birds tested positive for WNV in Canada, by Report week in 2012, 2015 and 2016, and number of dead birds tested positive for WNV, by Report week, 2016 season ¶



¶ Not all provinces in Canada are conducting dead bird surveillance as part of their own WNV surveillance program. However, WNV positive dead birds may be identified through the National Wildlife Disease Surveillance Program of the Canadian Wildlife Health Cooperative (CWHC)