

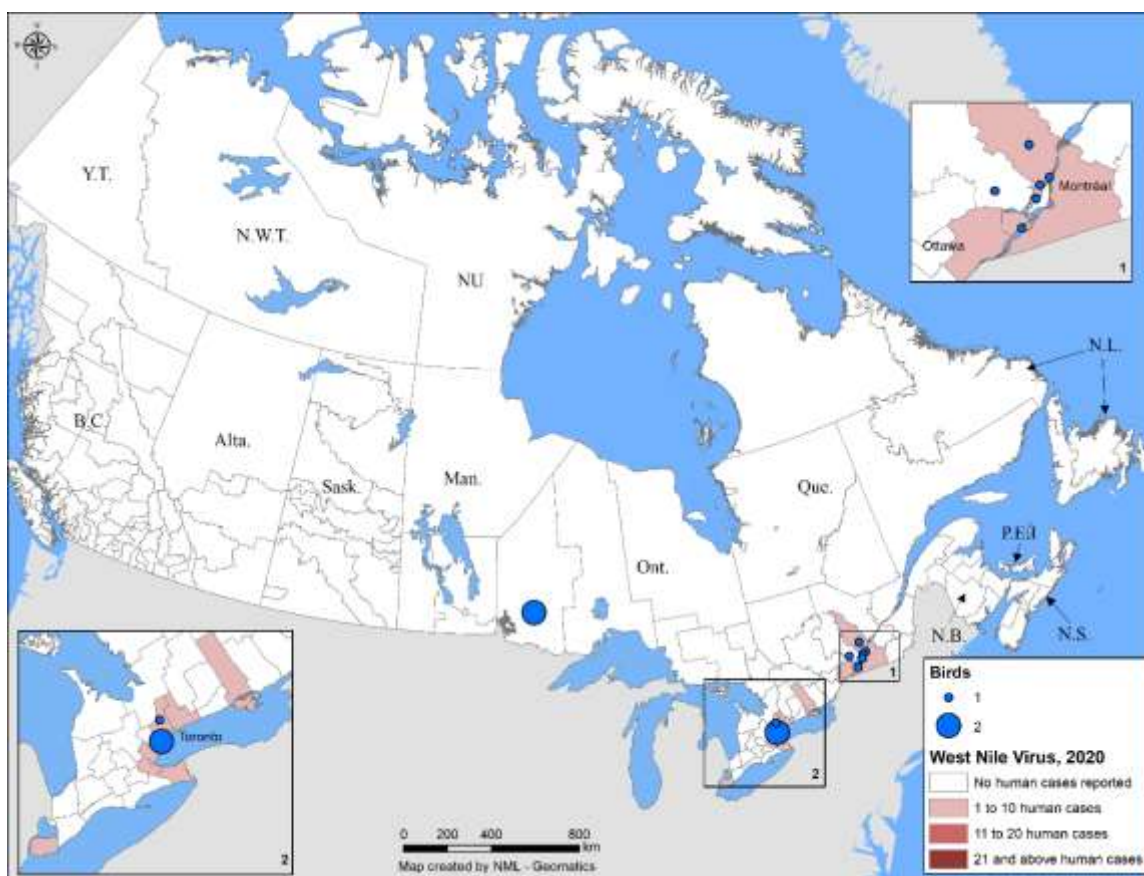
MOSQUITO-BORNE DISEASE SURVEILLANCE REPORT

AUGUST 16 to AUGUST 29, 2020 (WEEK 34 and 35)

Year-to-Date Snapshot



Figure 1. Geographic distribution of WNV human (clinical cases and asymptomatic infections) and positive birds reported in Canada, 2020



West Nile

Human Epidemiology

As of surveillance week 35, ending on August 29, 2020, twenty-two human cases of West Nile virus (WNV) have been reported to the Public Health Agency of Canada (PHAC) (**Table 1**).

Table 1. West Nile virus human cases, by disease classification and province (January 1- August 29, 2020)

Province	Clinical Cases			Total Clinical Cases ¹	Asymptomatic Infections ²	YTD Grand Total	Rate ³ (per 100,000)
	Neurological	Non-neurological	Unclassified				
Ontario	1	6	5	12	1	13	0.09
Québec	4	0	2	6	3	9	0.06
Total	5	6	7	14	4	22	0.05

¹ Clinical cases are the sum of confirmed and probable: WNV neurological and non-neurological syndromes, along with any unclassified. ² Satisfies WNV diagnostic test criteria in the absence of clinical criteria (i.e., asymptomatic blood donors whose blood is screened by blood operators, Canadian Blood Services or Héma-Québec. ³ Calculated with grand total of clinical and asymptomatic cases, using Statistics Canada 2020 Q1 population estimates.

Mosquito, Wild Bird & Equine Epidemiology

As of week 34 and 35, PHAC has been notified of 12, 926 mosquito pools tested for WNV in Canada. Of these, there have been 5 WNV-positive mosquito pools identified in Manitoba, 147 in Ontario and 12 in Québec (**Table 2**).

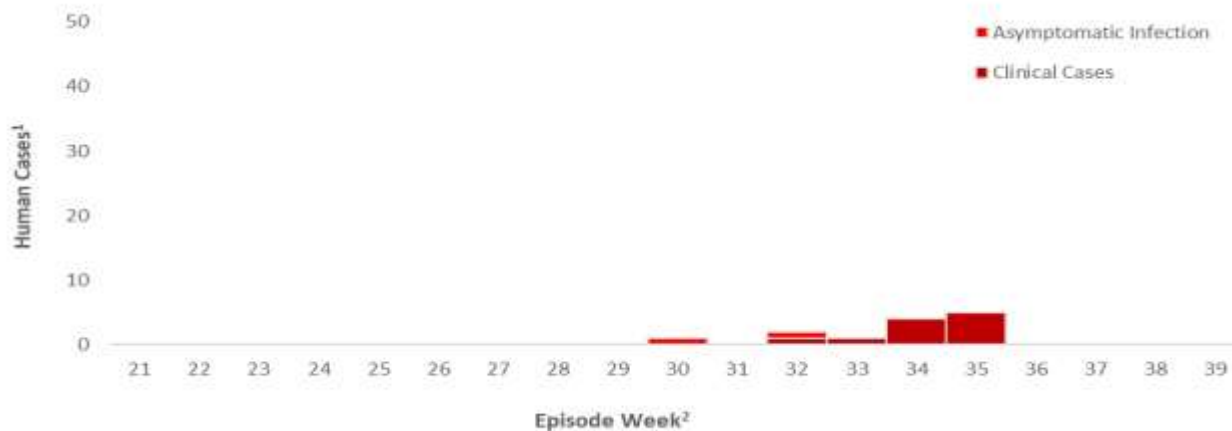
Eleven dead wild birds have tested positive for WNV, by the [Canadian Wildlife Health Cooperative \(CWHC\)](#) five in Ontario and six in Québec (**Table 3**).

Since the start of this season, the [Canadian Food Inspection Agency \(CFIA\)](#) has one equine case that tested positive for WNV in Saskatchewan (**Table 3**).

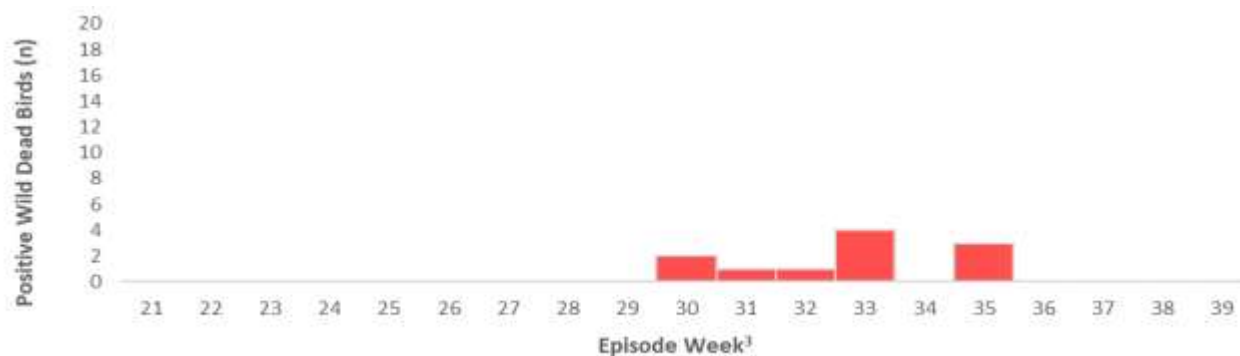
Province	Wild Birds ¹		Equine	
	Week 34 and 35	YTD Total	Week 34 and 35	YTD Total
British Columbia	0	0	0	0
Alberta	0	0	0	0
Saskatchewan	0	0	1	1
Manitoba	0	0	0	0
Ontario	0	5	0	0
Québec	3	6	0	0
Maritime Provinces	0	0	0	0
Territories	0	0	0	0
Total	3	11	1	1

Figure 2. (A) West Nile virus human clinical cases and asymptomatic infections, (B) positive West Nile virus birds, and (C) percent positive mosquito pools by episode/report week, 2020

(A)



(B)



(C)



¹Human cases includes clinical cases and asymptomatic infection. ²Episode week is based on symptom onset or best available date including: diagnosis, lab sample or date reported. ³Episode week is based off date of death or best available date including: date found, submitted, or received.

Table 2. Year-to-Date WNV positive pools and percent positive by province and nationally (January 1- August 29, 2020)

Province ¹	Positive Pools	Total Pools Tested	Percent Positive
Saskatchewan	0	71	0%
Manitoba	5*	1236	0.40%
Ontario	147	10456	1.41%
Québec	12	1163	1.03%
Total	164	12926	1.27%

¹ Mosquito surveillance data is reported by the following four provinces: Saskatchewan, Manitoba Ontario and Quebec.

*No WNV infected mosquito pools have been found as part of Manitoba Health's West Nile virus surveillance program, which submits information to PHAC, however two (2) positive mosquito pools were detected by another surveillance program in the Prairie Mountain Health Region.

Table 3. Number of WNV positive equine and birds by province and nationally (January 1- August 29, 2020)

Province	Wild Birds ¹	Equine
British Columbia	0	0
Alberta	0	0
Saskatchewan	0	1
Manitoba	0	0
Ontario	5	0
Québec	6	0
Maritime Provinces	0	0
Territories	0	0
Total	11	1

¹ Not all provinces conduct dead wild bird surveillance as part of their respective WNV surveillance program. However, WNV positive dead wild birds may be identified through the National Wildlife Disease Surveillance Program, CWHC or by specific provinces.

California Serogroup

As of August 29, 2020, no human exposures or cases of California serogroup virus have been reported by the [National Microbiology Laboratory](#).

Eastern Equine Encephalitis

No human cases of EEEV have been reported to PHAC since the beginning of the 2020 transmission season.

The CFIA has reported one horse testing positive for Eastern Equine Encephalitis virus (EEEV) in Ontario.

Provincial/Territorial & International Surveillance Links

Data reported to PHAC is subject to change and may differ from provincial webpages due to reporting timelines. To obtain the latest arbovirus surveillance data, please refer to the following jurisdictional/regional webpages:

Provincial

[Alberta - West Nile virus](#)

[Saskatchewan - West Nile virus](#)

[Manitoba - West Nile virus](#)

[Ontario - West Nile virus](#)

[Québec - Virus du Nil occidental](#)

International

[U.S. Centers for Disease Control - West Nile virus](#)

[European Centre Disease Control - Mosquito-borne disease](#)

Thank you to all our partners for participating in the National WNV/MBD surveillance program.

Suggested Citation: Public Health Agency of Canada. Mosquito-borne Disease Surveillance Report: Biweekly Edition (Week 34 and 35), 2020. Ottawa, Canada. September 10, 2020.