

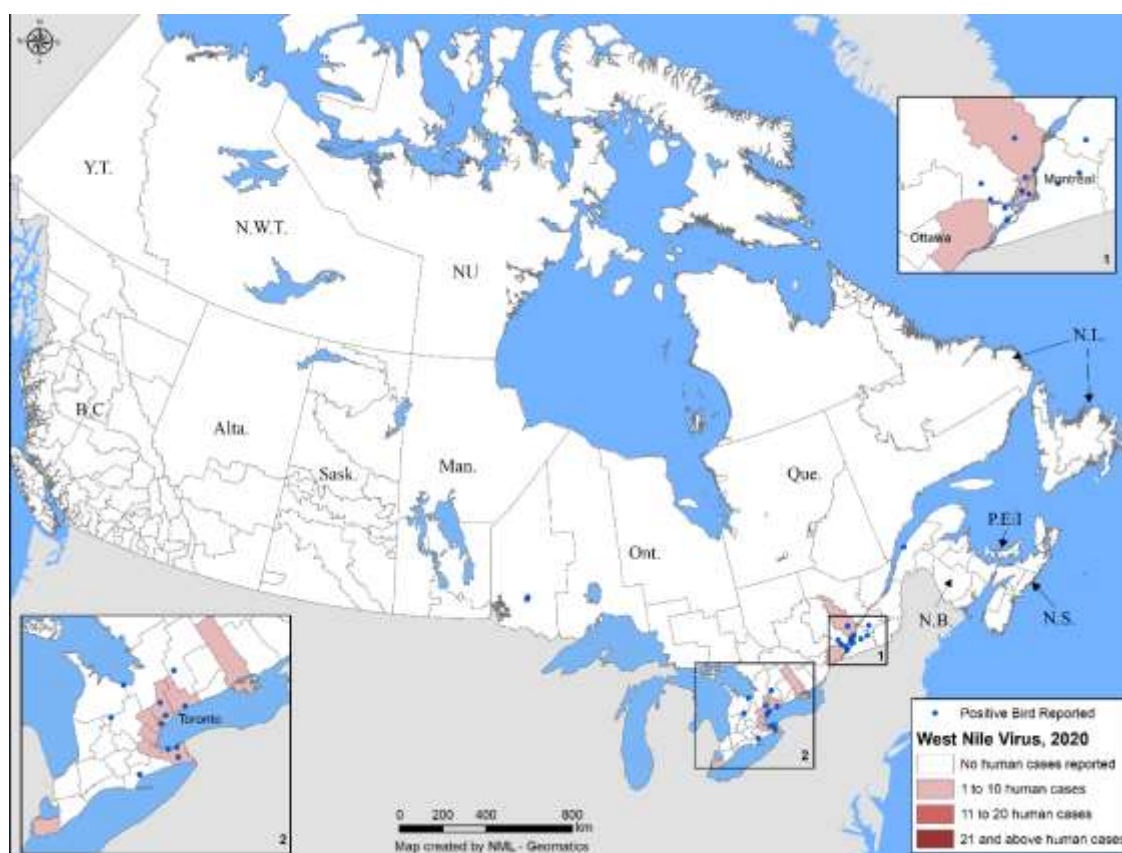
MOSQUITO-BORNE DISEASE SURVEILLANCE REPORT

AUGUST 30 to SEPTEMBER 12, 2020 (WEEK 36 and 37)

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 37, ending on September 12, 2020, 34 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- September 12, 2020)

Province	Clinical Cases			Total Clinical Cases ¹	Asymptomatic Infections ²	YTD Grand Total	Rate ³ (per 100,000)
	Neurological	Non-neurological	Unclassified				
Ontario	2	13	9	24	1	25	0.09
Québec	4	0	2	6	3	9	0.06
Total	6	13	11	30	4	34	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.

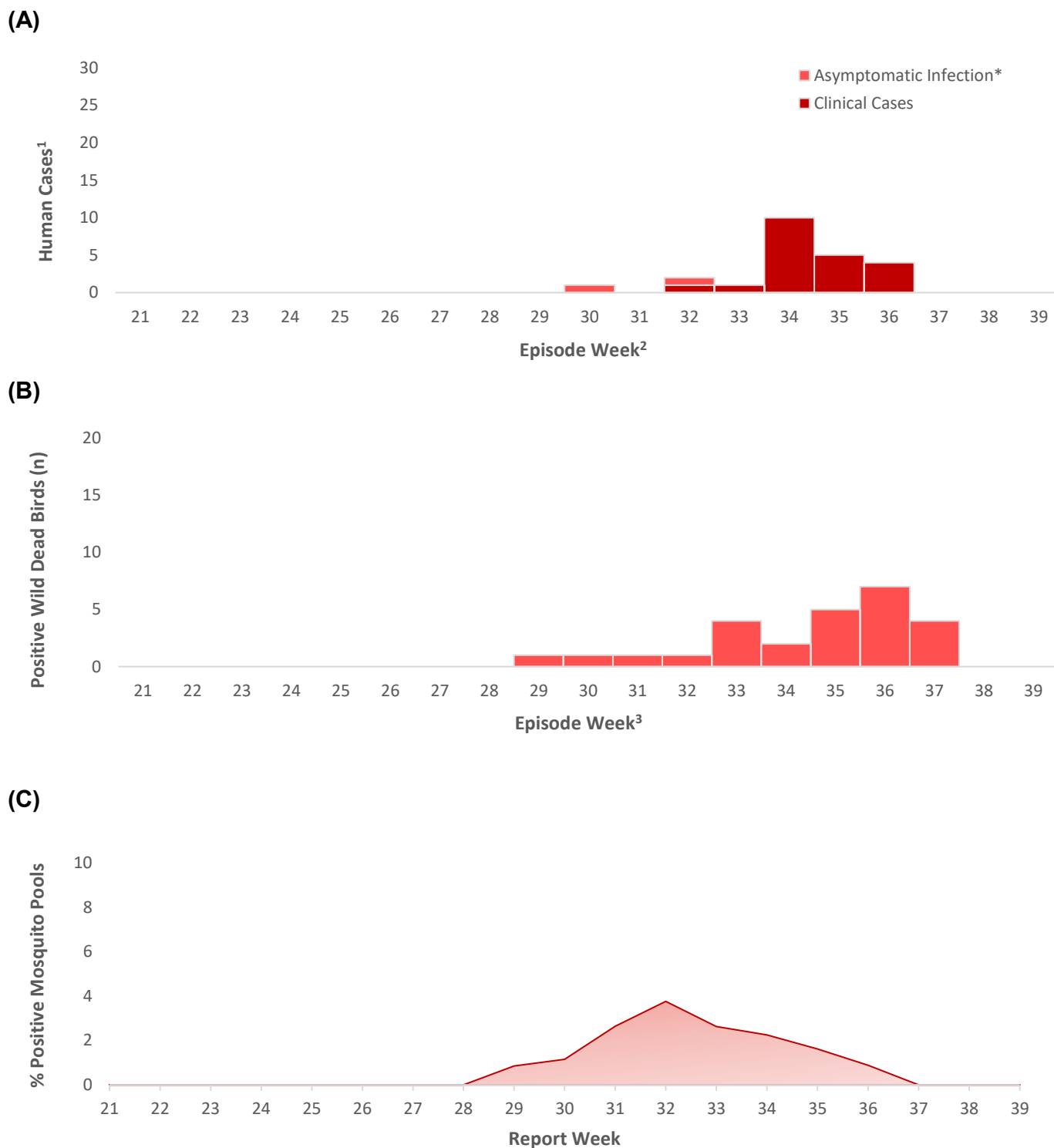
Mosquito, Wild Bird & Equine Epidemiology

As of week 36 and 37, PHAC has been notified of 14, 268 mosquito pools tested for WNV in Canada. Of these, there have been 183 WNV-positive mosquito pools identified in five in Manitoba, 166 in Ontario and twelve in Québec (**Table 2**).

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

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

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



¹ Human cases includes clinical cases and asymptomatic infection. ² Episode week is based on symptom onset or best available date including: diagnosis, lab sample or date reported. ³ Episode 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- September 12, 2020)

Province ¹	Positive Pools	Total Pools Tested	Percent Positive
Saskatchewan	0	71	0.00%
Manitoba	5*	1264	0.40%
Ontario	166	11770	1.41%
Québec	12	1163	1.03%
Total	183	14268	1.28%

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- September 12, 2020)

Province	Wild Birds ¹	Equine
British Columbia	0	0
Alberta	0	0
Saskatchewan	0	2
Manitoba	0	1
Ontario	14	1
Québec	12	1
Maritime Provinces	0	0
Territories	0	0
Total	26	5

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 September 12, 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 two horses 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.

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