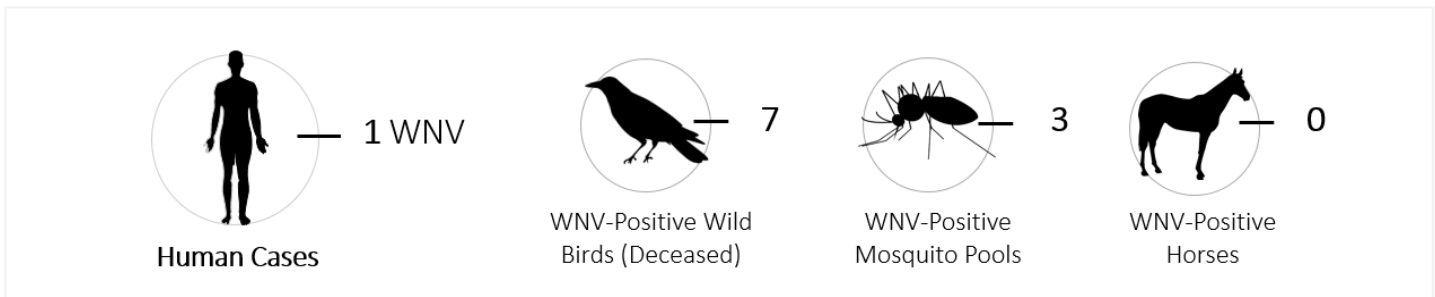


# MOSQUITO-BORNE DISEASE SURVEILLANCE REPORT

JULY 28 to AUGUST 3, 2019 (WEEK 31)

## Year-to-Date Snapshot



## West Nile

### Human Epidemiology

As of surveillance week 31, ending on August 3, 2019, one probable human case of West Nile virus (WNV) in Ontario has been reported to the Public Health Agency of Canada (PHAC) (**Table 1**).

**Table 1. Year-to-Date (YTD) WNV human cases, by disease classification and province (January 1- August 3, 2019)**

Province	Clinical Cases			Total Clinical Cases <sup>1</sup>	Asymptomatic Infections <sup>2</sup>	YTD Grand Total	Rate <sup>3</sup> (per 100,000)
	Neurological	Non-neurological	Unclassified				
British Columbia	0	0	0	0	0	0	0
Alberta	0	0	0	0	0	0	0
Saskatchewan	0	-	-	0	0	0	0
Manitoba	0	0	0	0	0	0	0
Ontario	0	0	1	1	0	1	0
Québec	0	0	0	0	0	0	0
Maritime Provinces	0	0	0	0	0	0	0
Territories	0	0	0	0	0	0	0
<b>Total</b>	<b>0 [0%]</b>	<b>0 [0%]</b>	<b>1 [100%]</b>	<b>1 [100%]</b>	<b>0</b>	<b>1</b>	<b>0</b>

<sup>1</sup> Clinical cases are the sum of confirmed and probable: WNV neurological and non-neurological syndromes, along with any unclassified. <sup>2</sup> 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. <sup>3</sup> Calculated with grand total of clinical and asymptomatic cases, using Statistics Canada 2018 population estimates.

Mosquito, Wild Bird & Equine Epidemiology

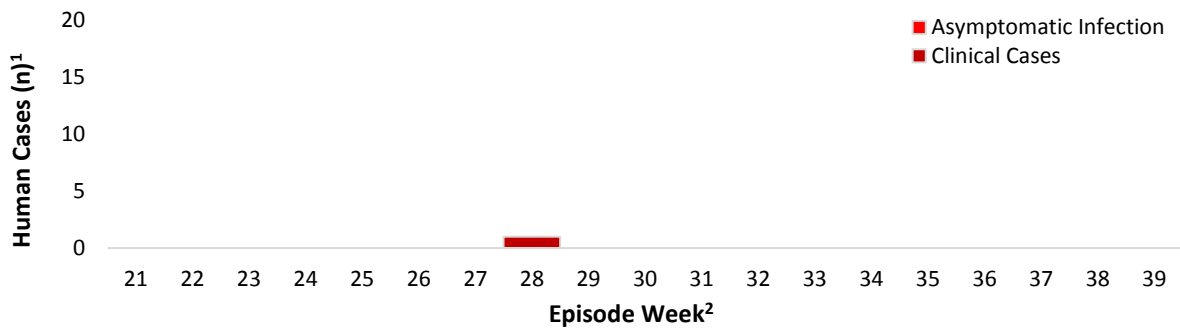
As of week 31, PHAC has been notified of 3,775 mosquito pools tested for WNV. Of these, three were positive: two in Ontario and one in Manitoba (**Table 2**).

Seven of 26 dead wild birds have tested positive for WNV, by the [Canadian Wildlife Health Cooperative \(CWHC\)](#): four in Ontario and three in Quebec (**Table 3**).

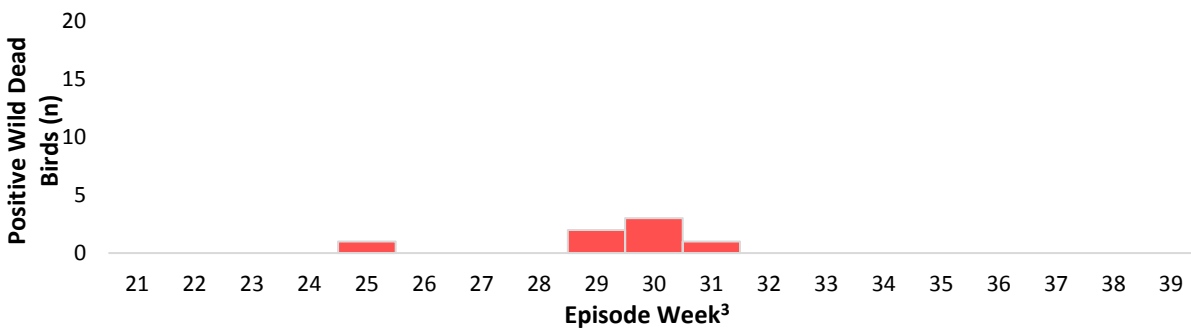
Since the start of this season, the [Canadian Food Inspection Agency \(CFIA\)](#) has not reported any domestic animals that tested positive for WNV (**Table 3**).

**Figure 1. (A) WNV human clinical cases and asymptomatic infections, (B) positive WNV birds, and (C) percent positive mosquito pools by episode or report week, in Canada, 2019**

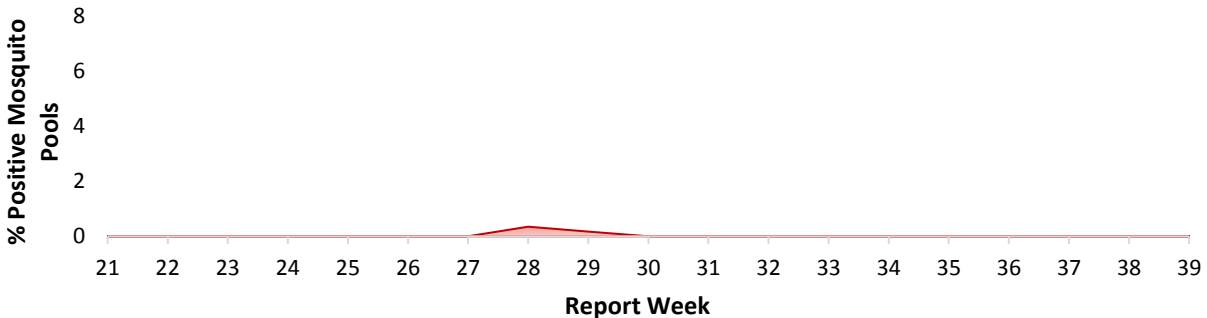
(A)



(B)



(C)



<sup>1</sup> Human cases includes clinical cases and asymptomatic infection. <sup>2</sup> Episode week is based on symptom onset or best available date including: diagnosis, lab sample or date reported. <sup>3</sup> 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- August 3, 2019)**

Province <sup>1</sup>	Positive Pools	Total Pools Tested	Percent Positive
Saskatchewan	0	71	0.00 %
Manitoba	1	701	0.14 %
Ontario	2	2176	0.09 %
Québec	0	827	0.00 %
<b>Total</b>	<b>3</b>	<b>3775</b>	<b>0.08 %</b>

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

**Table 3. Number of WNV positive animal cases for current week and Year-to-Date (YTD) (January 1- August 3, 2019)**

Province	Wild Birds <sup>1</sup>		Equine	
	Week 31	YTD Total	Week 31	YTD Total
British Columbia	0	0	0	0
Alberta	0	0	0	0
Saskatchewan	0	0	0	0
Manitoba	0	0	0	0
Ontario	0	4	0	0
Québec	1	3	0	0
Maritime Provinces	0	0	0	0
Territories	0	0	0	0
<b>Total</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>0</b>

<sup>1</sup> 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 3, 2019, 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 2019 transmission season.

The CFIA has not reported any horses testing positive for Eastern Equine Encephalitis virus (EEEV) in Canada.

## 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: Weekly Edition (Week 31), 2019. Ottawa, Canada. August 13, 2019.