



# **MOSQUITO-BORNE DISEASES SURVEILLANCE REPORT**

AUGUST 2 to AUGUST 15, 2021 (WEEK 31 AND 32)

### **Year-to-Date Snapshot**

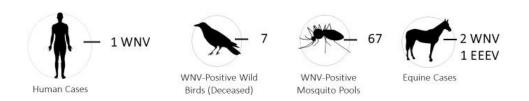
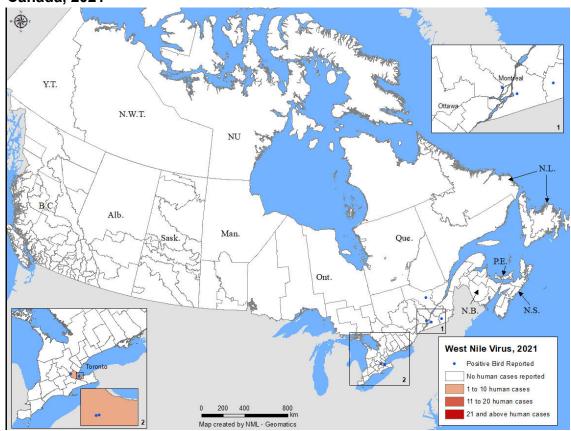


Figure 1. Geographic distribution of WNV human (clinical cases) and positive birds reported in Canada, 2021







#### **West Nile**

### **Human Epidemiology**

As of surveillance week 32, ending on August 15, 2021, one human case of West Nile virus (WNV) has 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 15, 2021)

Province	Clinical Cases			Total	Asymptomatic	YTD	Rate <sup>3</sup>
	Neurological	Non- neurological	Unclassified	Clinical Cases <sup>1</sup>	Infections <sup>2</sup>	Grand Total	(per 100,000)
Ontario	0	0	1	0	0	1	0.003
Total	0	0	1	0	0	1	0.003

<sup>&</sup>lt;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 2021 Q1 population estimates.

#### Mosquito, Wild Bird & Equine Epidemiology

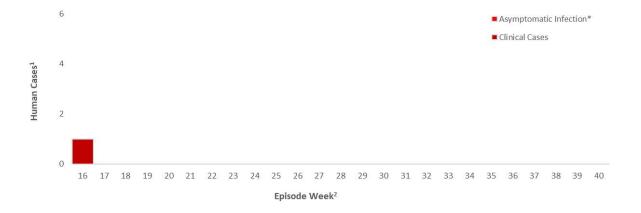
As of week 32, PHAC has been notified of 10,683 mosquito pools tested for WNV in Canada. Of these, there have been 67 WNV-positive mosquito pools identified 2 in Québec, 30 in Ontario, 29 in Manitoba and 6 in Saskatchewan (**Table 2**).

Seven wild birds have tested positive for WNV by the <u>Canadian Wildlife Health Cooperative (CWHC)</u> four in Québec and three in Ontario (**Table 3**).

Since the start of this season, the <u>Canadian Food Inspection Agency (CFIA)</u> has identified one equine case that tested positive for WNV in Saskatchewan. Additionally, the province of Saskatchewan reported one more WNV positive equine case.

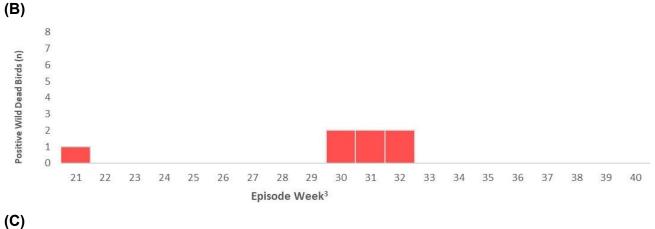
Figure 2. (A) West Nile virus human clinical cases and asymptomatic infections, (B) positive West Nile virus birds, and (C) percent positive mosquito pools by episode/report week, 2021

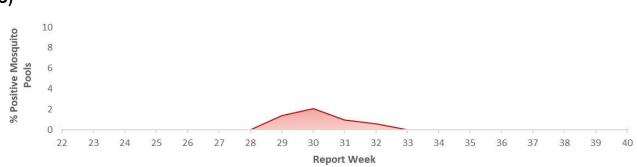












<sup>&</sup>lt;sup>1</sup> Human cases includes clinical cases and asymptomatic infection. <sup>2</sup> Episode week is based on symptom onset or best available date including: diagnosis, lab sample or date reported. <sup>3</sup>Episode week is based off date of death or best available date including: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

Table 2. Year-to-Date WNV positive pools and percent positive by province and nationally (January 1- August 15, 2021)

Province <sup>1</sup>	Positive Pools	Total Pools Tested	Percent Positive
Saskatchewan	6	289	2.08%
Manitoba	29	925*	3.14%
Ontario	30	8,303	0.36%
Québec	2	1,166	0.17%
Total	67	10,683	0.63%

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

<sup>\*</sup>Number of tested mosquito pools is until Week 30.





Table 3. Number of WNV positive equine and birds by province and nationally (January 1- August 15, 2021)

Province	Wild Birds <sup>1</sup>	Equine
Ontario	3	0
Québec	4	0
Saskatchewan	0	2
Total	7	2

<sup>&</sup>lt;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 15<sup>th</sup>, 2021, no human 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 2021 transmission season.

The CFIA has reported one horse case 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

International

Alberta - West Nile virus

U.S. Centers for Disease Control - West Nile virus

Saskatchewan - West Nile virus

European Centre Disease Control - Mosquito-borne disease

Manitoba - West Nile virus

Ontario - West Nile virus

Québec - Virus du Nil occidental

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 31 and 32). Ottawa, Canada. September 6, 2021.