



## Vector-Borne Diseases in Durham Region Summary Report Week of September 5, 2021



West Nile Virus (WNV) Surveillance	Week of September 5, 2021	Year To Date
# of WNV-positive Mosquito Pools	0	10
# of Confirmed Human Cases of WNV	0	1
# of Probable Human Cases *of WNV	1	2

\* Probable human cases – confirmatory laboratory testing pending

### Surveillance

**Larval Mosquitoes:** The Durham Region Health Department (DRHD) conducts routine surveillance of long-term standing surface water sites, including storm water management ponds (SWMPs), ditches, natural field pools, etc. annually from early May until mid-September. If a standing water site is found to contain moderate numbers of mosquito larvae (identified as > 7 and < 30 larvae per 10 dips) DRHD’s regionally- contracted pest control operator is immediately notified and the site is treated, within 24 hours, with an environmentally-friendly biological pesticide. The site is then monitored and treated by the contractor until no further larval development is observed, whereupon the responsibility for ongoing site surveillance is transferred back to DRHD.

To date, **2997** total standing surface water site visits have been completed resulting in 876\* larvicide treatments by our licensed pest control contractor.

*\* Note: some standing water sites require multiple larvicide treatments to eliminate larval mosquito development.*

**Adult Mosquitoes (trapping):** The adult mosquito surveillance program started June 7, 2021. **14** fixed trap sites located across Durham Region are collected weekly for Adult mosquitoes until late September. To date 454 batches of mosquitoes have been tested and **10** mosquito pools have tested positive for WNV.

**Human Cases: West Nile virus (WNV) is a reportable disease in Ontario.** This means that physicians are required to report all suspect cases of WNV to the Ontario Ministry of Health and Long-Term Care.

As of **August 26, 2021**, **1** confirmed human case of WNV have been reported in Durham Region.

**Standing Water Complaints:** DRHD received 1 report of standing water from residents last week. A total of **9** reports have been received to date in 2021.

### Larvicide Treatments

**Mosquito Reduction:** Since 2003, DRHD has conducted monitoring and larviciding of all municipally-owned, road-side catch basins as well as catch basins located on select regionally-owned properties. Each year a sample of **75** catch basins are monitored by our contractor across Durham Region beginning in early May. Once sufficient numbers of WNV vector mosquitoes begin to emerge in the monitored catch basins, larvicide treatments of all catch basins commence. The program includes **3** full rounds of regional roadside catch basin larviciding. Larviciding of regional sites commenced **June 9, 2021** and first round was completed by **June 17, 2021**. The second round of larviciding started on **July 5, 2021** and was completed by **July 30, 2021**. The third round of larviciding started on **August 2, 2021** and was completed by **August 14, 2021**.



Lyme Disease (LD) Surveillance	September, 2021	Year To Date
# of Confirmed Human Cases of LD	9	31
# of Probable Human Cases of LD	15	31

**Human Cases: Lyme disease (LD) is a reportable disease in Ontario.** As of **September 2021**, 31 confirmed cases of LD have been reported in Durham Region.

While the risk of contracting LD within Durham Region is currently low, the potential for infection is likely to increase subject to deer, small rodent and bird migration patterns across the north shore of Lake Ontario. In addition, changing climate conditions may contribute to an expansion of the distribution of ticks that carry LD.

Lyme disease is a serious illness which can spread to humans through the bite of an infected blacklegged tick. To protect yourself:

- Wear light coloured pants and long-sleeved shirts so you can easily spot ticks. Tuck your pants into your socks
- Apply insect repellent containing DEET, following label directions
- Walk in the centre of park trails and avoid high grass and brush at the edge of trails
- Shower as soon as you get home. Check yourself, your family and your pets and carefully remove any attached ticks as soon as possible

**For more information about Lyme disease or West Nile virus call 1-888-777-9613 or visit [durham.ca](http://durham.ca).**