

2022 March 11

To: Mayors and Chief Administrative Officers

RE: **Notice of Action under Ontario Regulation 199/03**
West Nile Virus Response – Larviciding

On May 31, 2003, the Province of Ontario published Ontario Regulation 199/03 that requires the Medical Officer of Health to make a determination based on a local risk assessment whether action is required by municipalities to decrease the risk of West Nile Virus (WNV). Ontario Regulation 199/03 provides a table to guide in the determination of a WNV response. A copy of this Regulation and Table is attached.

From 2003 through 2021, the Health Unit conducted a comprehensive WNV surveillance program. This program included an assessment of disease burden in humans, mosquitos and larvae. The number of WNV human cases in Windsor-Essex County from 2005-2021 is presented in the attached Appendix A.

The majority of humans infected with WNV are asymptomatic. Some can have non-neurological symptoms, such as fever or rash. A few patients will have neurological symptoms such as encephalitis. It is estimated that less than one percent of infections will have neurological complications.

In accordance with Ontario Regulation 199/03, the WECHU is making a formal Notice of Action required to decrease the risk of West Nile Virus to persons in the Health Unit area of Windsor-Essex County. Given the virus continues to be found in the mosquito population, larviciding is a prudent measure to undertake at this time. It has been determined that, in accordance with Table 1 of Ontario Regulation 199/03, it is appropriate to larvicide catch basins and standing/surface water indicated as potential breeding sites within two kilometers of an urban area. This Notice of Action mandates action by the municipalities for lands under their jurisdiction and supports applications to the Ministry of Environment for the application of larvicide on private lands.

GDG Canada (GDG) has been selected as the Consultant/Provider for the 2021 WNV Larviciding Program for Windsor-Essex. As in previous years, Municipalities will be required to pay for the program in advance. Once the program funding/budget is formally approved by the Ministry, the Health Unit will then be able to reimburse municipalities a portion of cost, consistent with the provincial contribution. As in past years, the Health Unit is willing to coordinate this program and invoice each municipality for their shared costs. Any cost above and beyond the approved ministry budget will be billed at hundred percent of the cost to the municipalities.

Please find enclosed a template that can be used to document your municipality's consent for larviciding. This will be needed by GDG to support the specific permit application to the Ministry of Environment. The application to the Ministry of Environment will form the details of the requirements for action under Ontario Regulation 199/03. Please forward a copy of your signed letter to the WNV program secretary at etroy@wechu.org by Friday, April 15th, 2022.

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As was the case in previous years, the WECHU will continue with a coordinated strategy for larviciding.

Please note that if Windsor-Essex continues to experience record-breaking milder than normal weather conditions, this will affect the strategy/commencement of the program.

Furthermore, the WECHU will continue to steer the WNV program planning meetings consisting of members of the health unit management team, the service provider 'GDG', and a representative(s) from your municipality.

Thank you for your continued assistance in this important issue. If you have any questions, please reach out to Kristy McBeth, Program Director at 519-258-2146, ext. 3402.

Sincerely,



Shanker Nesathurai, MD, MPH, FRCPC
Acting Medical Officer of Health



Nicole Dupuis
Chief Executive Officer

Attachments: Ontario Reg. 199/03
Appendix A
Municipal Template to Support Larviciding/Pesticide Application (email to etroy@wechu.org by April 15th, 2022).

cc: WNV Program Planning Representatives
Windsor – Mayor, CAO
Tecumseh – Mayor, CAO
Amherstburg – Mayor, CAO
Essex – Mayor, CAO
Kingsville – Mayor, CAO
Lakeshore – Mayor, CAO
LaSalle – Mayor, CAO
Leamington – Mayor, CAO
County of Essex – CAO
GDG Environmental

**Health Protection and Promotion Act
Loi sur la protection et la promotion de la santé**

**ONTARIO REGULATION 199/03
CONTROL OF WEST NILE VIRUS**

Consolidation Period: From December 15, 2017 to the [e-Laws currency date](#).

Last amendment: [500/17](#).

Legislative History: [231/03](#), [322/04](#), [413/06](#), [422/07](#), [229/08](#), [241/09](#), [500/17](#).

This Regulation is made in English only.

Determination if action required

1. A medical officer of health shall make a determination whether action is required by a municipality to decrease the risk of West Nile Virus to persons either inside or outside the health unit served by the medical officer of health, based upon a local risk assessment. O. Reg. 231/03, s. 1; O. Reg. 322/04, s. 1; O. Reg. 413/06, s. 1; O. Reg. 422/07, s. 1; O. Reg. 229/08, s. 1; O. Reg. 241/09, s. 1.

Notice to municipality

2. (1) Where the medical officer of health has determined that action is required, he or she may give notice to the municipality of the required action. O. Reg. 199/03, s. 2 (1).

(2) In determining required actions under subsection (1), the medical officer of health shall have regard to,

- (a) the guidelines published by the Minister under section 7 of the Act; and
- (b) the generally accepted practices in the field of public health with regard to decreasing the risk of West Nile virus to persons. O. Reg. 199/03, s. 2 (2); O. Reg. 241/09, s. 2.

Must comply

3. A municipality shall comply with any requirements set out in the notice. O. Reg. 199/03, s. 3.

What may be required

4. Action required under this Regulation may include, without being limited to,

- (a) requirements respecting source reduction measures;
- (b) requirements respecting surveillance;
- (c) requirements respecting public awareness campaigns about personal protection;
- (d) requirements respecting control measures for larviciding and adulticiding; and
- (e) requirements respecting the time within which the action shall be taken.

TABLE 1
LARVICIDING AND ADULTICIDING IN ONTARIO — WEST NILE VIRUS RESPONSE

“Triggers” based on surveillance of WNV positive humans, birds, mosquito pools or mammals (horses)

Current-Year WNV findings in Health Unit or municipality	Last Year's WNV findings in Health Unit or municipality	Preparatory Status (Larval surveys, mosquito trapping, mapping, training, etc.)	Larviciding ACTION	Adulticiding ACTION
No West Nile virus found yet	No West Nile virus found; virus found in adjacent Health Unit(s)	Not yet done	Do the preparatory work, then larvicide where indicated	Not indicated
No virus found yet	Virus found	Not yet done	Do the preparatory work, then larvicide where indicated	Not indicated
No virus found yet	Virus found	Done last year and under way this year	Larvicide where indicated	Not indicated
Virus found in <u>non</u> -human (dead bird, mosquito pool or mammal) — isolated or as a “hot spot”	Virus found or not found	Done or under way this year	If a “hot spot” and larvae are present, larvicide around this “hot spot” (if not too late in the season)	Adulticide a 3-km “Zone” ONLY IF there are high-risk indicators of transmission to humans*
<u>Human</u> case(s) — one or a few in a space-time “cluster”	Virus found or not found	Done or under way this year	Larvicide around the case or cluster if larvae are present (and if not too late in season)	Adulticide a 3-km radius Zone around the case or cluster
Human cases continue to occur; continued high-risk indicators*	Virus found or not found	Done or under way this year	Larvicide widely where larvae are found (if not too late in season)	Adulticide 3-km Zones — may be contiguous or overlapping

Note: Public education efforts and non-pesticide means of mosquito source reduction should be in place, and increased as increasing evidence of virus is found (especially human cases) in the current year.

* **High-risk indicators of transmission to humans:** increasing dead bird sightings; high mosquito infection rates; abundant bridge vector populations; increasing mammal (horse) cases; proximity of mosquito breeding sites to human populations (especially large population centres) and weather conditions that favour mosquito breeding.

1. These are minimum activity standards. Medical Officers of Health may increase the Zone size to be treated or take additional mosquito control actions, if justified by scientific data or recommendations.
2. Medical Officer of Health will maintain a means to record, investigate, and report any confirmed or likely adverse or unintended human health effects attributed to mosquito control actions, and will report any non-human environmental adverse effects that he or she knows about to the Ministry of the Environment and/or other relevant local or provincial authorities.

APPENDIX A

Confirmed and probable cases of West Nile virus illness in humans in Windsor-Essex County, Ontario, and Canada (2005-2021).

Year	Number of cases in Windsor-Essex	Number of cases in Ontario	Number of cases in Canada
2005	23	101	238
2006	6	43	151
2007	3	18	2,401
2008	0	10	37
2009	2	4	14
2010	1	9	5
2011	6	81	124
2012	22	271	454
2013	5	57	114
2014	1	13	23
2015	1	34	84
2016	4	54	162
2017	20	159	202
2018	13	138	437
2019	1	19	43
2020	3	77	Not Available
2021	3	23	35
Total	111	1090	4489

Note (1): National WNV data make no distinction between confirmed and probable case count. Since 2002, both confirmed and probable cases have been included in analyses of WNV in Ontario.

Note (2): In addition to clinical cases, provincial analyses include asymptomatic infections. For comparability, the national counts reported here also include asymptomatic infections. National counts have been ascertained from the various sources listed below.

Source (Windsor-Essex and Ontario): Public Health Ontario. Surveillance of West Nile virus. Last updated 06 Nov. 2021. Accessed Mar 8, 2022.

Source (Canada-2005 to 2021): Public Health Agency of Canada: Surveillance of West Nile virus. Last updated 18 Nov. 2021 Accessed Mar 8, 2022.