

COMMITTEE OF THE WHOLE NOVEMBER 4, 2002

REPORT ON WEST NILE VIRUS

Recommendation

The Commissioner of Community Services in consultation with the Executive Director, Parks and Facilities and the Manager of Parks Open Spaces and Contracts recommends that:

1. One City of Vaughan staff person be assigned the responsibility of coordinating and evaluating an effective mosquito abatement and source reduction program in cooperation with the York Region Health Services, Public Works and Parks Staff.
2. A plan be formulated that identifies potential mosquito breeding sites in Vaughan and that contains specific abatement measures for each area.
3. 2 management and 8 unionized employees begin training with the Ministry of the Environment to obtain larvicide's application licenses for spring 2003.
4. The City of Vaughan Corporate Communications Department in cooperation with the York Region Health Services prepare and distribute information about the health risks, personal protection and abatement measures necessary to reduce the risk of exposure to West Nile Virus.
5. Staff is informed about the risks of West Nile Virus, it's symptoms and sources through the City of Vaughan's Health and Safety Division in cooperation with the Region of York Health Services before the spring of 2003.
6. The environmental impact and alternatives to larvicide's and other pesticide applications be fully investigated before any such abatement measures take place in Vaughan.
7. The Legal Department be directed to provide a report regarding the City's jurisdiction and options.
8. The Provincial Government be asked to fund any abatement program ordered by the York Region Health Services unit.

Purpose

The purpose of the above recommendations is to prepare the City of Vaughan with a proactive approach to the abatement of mosquitoes which may spread West Nile Virus and to inform the public of the risks.

Background - Analysis and Options

In August 2001 the first Canadian bird specimens were identified in Windsor and Oakville Ontario with positive tests for West Nile Virus. Since then there have been 9 confirmed and 17 probable human West Nile Virus infections in Canada up until September 2002. There have also been 5 positive infections and 32 presumptive cases of West Nile Virus in horses in Ontario in 2002 up until September.

According to page 4 of the York Region Health Services Department-Public Health Branch *West Nile Virus: York Region Contingency Plan, September 2002*:

"Most people who are infected with West Nile Virus will not have any type of illness. It is estimated that 20% of the people who become infected will develop West Nile fever: mild symptoms, including fever, headache, and body aches, occasionally with a skin rash on the trunk of the body and swollen lymph glands. The symptoms of severe infection (West Nile Encephalitis) include headache, high fever, neck stiffness, disorientation, coma, tremors, convulsions, muscle weakness and paralysis. It is estimated that less than 1% of persons infected with West Nile Virus will develop the more severe disease. Among

those with severe illness due to West Nile Virus, case-fatality rates range from 3% to 5% and are highest among the elderly.”

The key public message that the York Region Health Services Division wants to deliver is that:

*“The risk of being bitten by a West Nile Virus-infected mosquito is minimal, as is the risk of serious health effects from the virus in a normally healthy person. It is possible, however, with the ongoing spread of the virus in North America that human disease due to WNV will occur in Canada.”*¹

1 West Nile Virus (WNV)-Key Public Message, Region of York Health Unit, September 26th, 2002, Pg 1

In order to implement a coordinated WNV response the Canadian Government formed a federal-provincial National Steering Committee for West Nile Virus. In addition to Canada-US border surveillance for the disease the Steering Committee has requested that the Pesticide Management Regulatory Agency prepare a guide entitled “Municipal Mosquito Control Guidelines”.

The Ministry of Health and Long Term Care provided Public Health Units with a contingency plan template entitled “West Nile Virus: Surveillance and Prevention in Ontario, 2002” to help them design their own plans. The York Region Health Services Unit has identified the various responsibilities and responses they feel will be necessary at the Regional and local, municipal levels. (Appendix A).

York Region has identified the following key responsibilities for local municipalities:

- 1 Maintain inventory of potential mosquito breeding areas on Municipal property.
- 2 Reduce or eliminate mosquito-breeding areas on Municipal property.
- 3 Implement any control measures deemed necessary by York Region Health Services Department.
- 4 Obtain necessary licenses and approvals required approvals in order to implement control measures.
- 5 Assist York Region Health Services in promoting/educating their municipal staff regarding reduction of breeding areas and personal protection measures.

Conclusion

The spread of West Nile Virus is likely to continue in Canada. The training and licensing of staff to participate in an effective abatement program for mosquitoes, drafting and approval of stagnant water by-laws and the inventory of potential breeding sites will take many months to complete. It is therefore advisable to take a pro-active approach to the problem of the spread of West Nile virus by beginning this work in the fall of 2002.

Attachments

York Region Health Services Department-Public Health Branch *West Nile Virus: York Region Contingency Plan*, 8.0 Departmental Response, 8.1 to 8.3

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Respectfully submitted,

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Commissioner Community Services

8.0 DEPARTMENTAL RESPONSE

8.1 *Within York Region, York Region Health Services will:*

- ✓ Develop and promote educational materials emphasizing personal protection and source reduction
- ✓ Co-ordinate bird surveillance in York Region.
- ✓ Co-ordinate a larvae and an adult mosquito surveillance program, for identification purposes, in the area of positive West Nile Virus birds.
- ✓ Follow-up human cases of West Nile Virus.
- ✓ Disseminate information on West Nile Virus to the public through the media, the municipalities, the Region and health care professionals.
- ✓ Maintain data regarding emergence of WNV in other jurisdictions
- ✓ Establish an outbreak control and investigation team.
- ✓ Maintain an inventory of municipal maps identifying possible mosquito breeding areas.
- ✓ Keep medical community updated.
- ✓ Post updates on website.
- ✓ Determine and decide on steps necessary to reduce WNV risk to human health in consultation with the Ministry of Health and Long Term Care, the Ministry of the Environment and the Federal Government where appropriate.
- ✓ Respond to public inquiries.
- ✓ Ensure that control measures, that are deemed necessary, are being taken by the responsible agency.

8.2 **Regional Departments**

- ✓ Maintain inventory of potential mosquito breeding areas on Regional property.
- ✓ Reduce or eliminate mosquito-breeding areas on Regional property.
- ✓ Implement any control measures deemed necessary by York Region Health Services Department.

8.3 Municipal Departments

- ✓ Maintain inventory of potential mosquito breeding areas on Municipal property.
- ✓ Reduce or eliminate mosquito-breeding areas on Municipal property.
- ✓ Implement any control measures deemed necessary by York Region Health Services Department.
- ✓ Obtain necessary licences and required approvals in order to implement control measures.
- ✓ Assist York Region Health Services in promoting / educating their municipal staff regarding reduction of breeding areas and personal protection measures.