
CITY OF KELOWNA

MEMORANDUM

Date: April 30, 2003
File No.: 5280-01
To: City Manager
From: Environmental Manager
Subject: West Nile Virus Prevention & Control

RECOMMENDATION:

THAT Council receives the Environment Manager Report of April 30, 2003 as information.

AND THAT City staff be directed to work with the Health Region and RDCO in the implementation of the Interior Health Region Surveillance and Response Plan.

BACKGROUND:

West Nile virus has transferred across North America in 2002 and is anticipated to be found in the Okanagan some time in the summer of 2003. The Interior Health Region has been developing a communication and action plan to deal with the anticipated arrival of WNV.

What is it? West Nile Virus (WNV) is a mosquito borne virus that is normally transmitted between mosquitoes and birds. Humans can get infected through a bite from an infected mosquito. The virus was discovered in Africa in 1937 and recently was tracked across North America during the last mosquito season with identified bird and human infection in Ontario and 2 known dead birds near the Washington /B.C. border. The virus infects birds from the corvid family (crows, magpies, jays). The virus is expected to be identified in B.C. this year.

Health Risk and Symptoms: Very few mosquitoes carry the virus even in areas where the virus exists (1%) and therefore few people will get infected. As well most people infected with WNV will experience no symptoms at all. Less than 1% of those who become infected and get ill could become seriously ill. Only 20% of those infected will experience flu-like symptoms that last a week and typically include fever, headache, and body aches; a rash on the trunk of the body and swollen lymph glands may also be present. For unknown reasons people over 50 are more at risk for severe illness.

Surveillance Plan: The Interior Health Region is hiring summer students to monitor for the presence of WNV. They will collect mosquito specimens (trapping) to determine if species that carry WNV are present and also will be collecting dead birds. Areas that have a prevalence of mosquitoes of certain species will be considered for control upon detection of WNV. Interior Health will notify the City and the Region if there is detection of WNV. The public is not encouraged to collect dead birds but can notify the presence of dead birds at the 1-800 # yet to be supplied. There has been no recorded virus transmission to humans from birds (or dead birds).

Local Government Response and Actions: The City and RDCO will work with the Health Region in response to increased risk levels identified by Health. We will also notify Health when there are dead birds found on City or RDCO property (likely to be found in Parks near water). The RDCO will be continuing with their Mosquito Control Program for controlling nuisance outbreaks of mosquitoes (40 areas in Larvicide program). The larvicide used is BTI (Bacillus thuringiensis israelensis). It is a dead bacterial extract that the larvae stage of the mosquito has to ingest. The proteins in the ingested bacterium rupture the gut of the mosquito larvae. BTI has short lived properties and is non-toxic. The RDCO will monitor the effectiveness of its program. Mosquito nuisance areas decreased last year due to dry conditions. There needs to be stagnant water for 7 days or more for mosquitoes to thrive.

Communication Plan: Interior Health is taking the lead role with web site and brochure information as well as public meetings and PSAs. The City and RDCO however can also put the same information on our websites as well as contact numbers.

Information for this report was gathered from Interior and Fraser Valley Health as well as from the Region of Peel and from the City of Winnipeg.

The Interior Health Region web site address is www.interiorhealth.ca. Additional web site information is also at the BC Center for Disease Control Site at www.bccdc.ca.

It is anticipated that the level of response by the Health Region, RDCO and City will evolve subject to experience this year.

Mark Watt, B.Sc.
Environment Manager

John Vos, P.Eng
Director of Works & Utilities

cc: Interior Health Region and RDCO

Attachment: Interior Health Virus Information
(available on Interior Health Website above)