



SPRING 2011

HALDIMAND-NORFOLK HEALTH UNIT

# VETERINARY NEWSLETTER

Pets, Pests and Public Health. A newsletter for Haldimand and Norfolk veterinarians.

## Working Together in Rabies Investigations

Although not as prevalent as in the past, rabies continues to be a risk to the health of our local residents. Bat rabies in particular continues to be a threat in Haldimand and Norfolk, while sporadic wildlife cases have appeared in neighbouring counties and raccoon rabies has been reported at the nearby borders of our country. For the latest rabies information and statistics in Ontario, please visit the Ministry of Natural Resources' Rabies Reporter site at: [www.mnr.gov.on.ca/en/Business/Rabies/2ColumnSubPage/196811.html](http://www.mnr.gov.on.ca/en/Business/Rabies/2ColumnSubPage/196811.html)

As a reportable disease, everyone is legally responsible to forward all relevant information regarding possible rabies exposure incidents to public health authorities. This is explained in section 2 (1) of Ontario Regulation 557, Communicable Disease – General, under the Health Protection and Promotion Act, which states;

“a physician, registered nurse... or any other person who has information concerning any animal bite or other animal contact that may result in rabies in persons shall as soon as possible notify the medical officer of health and provide the medical officer of health with the information.”



This information is crucial to the success of the Haldimand-Norfolk Health Unit's (HNHU) investigation and, in doing so, preventing human rabies cases.

To provide this information, the Health Unit has attached the Report of Animal Bite/Contact with Animal Suspected of Rabies which is to be completed in as much detail as possible and faxed to our Simcoe office at 519-426-9974 (Note: please destroy currently used forms). The information gathered from the victim and, if applicable, animal owner is essential to the success of the Health Unit's investigation. Incomplete or inaccurate information can result in undue risk to the victim, delay in locating the animal and taking the appropriate action.

Upon receiving a report of an animal contact, a Public Health Inspector will assess the incident and determine the appropriate course of action. Many variables are considered when assessing and investigating a contact incident. These variables include but may not be limited to the following:

- health status/symptoms of the animal
- provoked/unprovoked attack
- wild/domestic animal
- vaccinated/unvaccinated animal
- animal involved has had contact with wildlife

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**Rabies Investigations** *(Continued from page 1)*

- location/severity of the wound
- animal available/unavailable for quarantine

**Treatment Requirements**

It is the responsibility of the attending primary care provider to determine if, and what type of, PEP is warranted. For assistance in determining if treatment is needed, see the attached Ministry of Health and Long Term Care's Guidelines for Management of Suspected Rabies Exposures. Note: the guidelines are also available on our website at:

[www.hnhu.org/images/stories/a\\_z\\_directory/Environmental\\_Health\\_Team/2010\\_guide\\_rabies.pdf](http://www.hnhu.org/images/stories/a_z_directory/Environmental_Health_Team/2010_guide_rabies.pdf)

The Haldimand-Norfolk Health Unit will provide PEP upon the primary care provider's request and will be available for further consultation.

**Provincial Offence**

As per Ontario Regulation 567- Rabies Immunization, all cats and dogs over the age of three months in Norfolk and Haldimand counties must have an up-to-date rabies immunization. Failure to do so can result in a set fine of \$85.00 found under Schedule



40.1 of the Health Protection and Promotion Act.

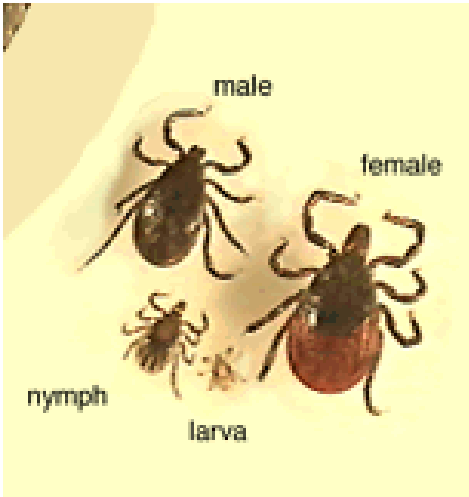
The Haldimand-Norfolk Health Unit would like to thank all veterinary staff for their continued participation in rabies investigations. This disease could not be controlled without your assistance.



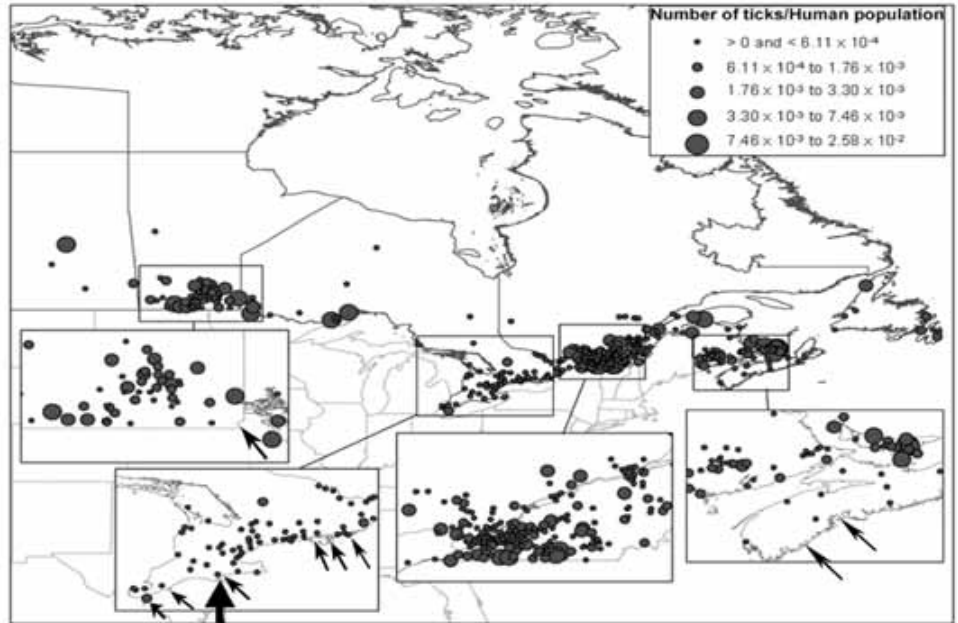
**Quick Points**

- If a domestic dog or cat can be identified and confined, it is observed for 10 days from the date of the bite/scratch.
- A dog or cat can transmit the rabies virus 10 days prior to the onset of symptoms. If the dog or cat was rabid at the time of the bite/scratch, it will be dead or show signs of rabies within the 10 day confinement period (i.e. 10 days following the time of the bite/scratch). Note: This does not apply to other animals including wild animals and livestock.
- The vaccination status of the animal is a factor in determining its confinement requirements.
- If the dog or cat involved is alive and healthy at the end of the 10 day period, it will be released upon approval from a public health inspector.
- If the dog or cat dies during the 10 day period, its brain will be sent for testing and the Health Unit will recommend that the victim contact their primary care provider to discuss rabies post-exposure prophylaxis (PEP).
- If it is a wild animal that has been captured, it may be euthanized and specimens sent for rabies testing.
- If it is a domestic or wild animal that has already been killed after contact with the victim, the carcass should be stored in a cool, dry place making sure it is handled in a manner as to avoid infection and await pick up for rabies testing.
- If a public health inspector is unable to locate, identify and properly assess the animal involved, the inspector will recommend that the victim contact their primary care provider to discuss rabies post-exposure prophylaxis (PEP).

# Tick Talk



**Ixodes scapularis (Deer) ticks collected in passive surveillance in eastern Canada (1990-2003)**



Number of ticks/Human population (PHAC, 2008)

Lyme disease continues to be a growing public health concern in Haldimand and Norfolk counties. In the past 3 years, the percentage of deer tick submissions testing positive for Lyme disease in Haldimand and Norfolk has risen from 5% to 17%. Most of these positive specimens have been obtained from the known endemic areas of Turkey Point and Long Point. Unfortunately, having established colonies for a long period of time, ticks from these areas have a greater infection rate and the expansion of their habitat has yet to be identified.

In Ontario, substantial deer tick populations can be found in Point Pelee National Park; Rondeau Provincial Park; Long Point; Turkey Point; Prince Edward Point National Wildlife Area and St. Lawrence Islands National Park in the Thousand Islands region of eastern Ontario. (PHAC, 2011) However, there is also a low risk of coming into contact with deer ticks almost anywhere in Canada below the 50th parallel as migratory birds transport infected ticks over large geographic distances.

Human infection rates are typically higher from adult ticks compared to the other stages (nymphs and larvae). Despite the lower rates of infection, people are most likely to acquire Lyme

disease from a nymph because this stage is so small and thus more likely to go unnoticed and feed for a sufficient amount of time for the Lyme disease bacterium to be transmitted (24-36 hours). (PHAC, 2011)

In Ontario, there has been an overall increase in the number of confirmed human cases testing positive for Lyme disease. Contributing to this problem, Lyme disease is often difficult to diagnose because its signs and symptoms mimic those of many other diseases. For this reason, early detection is critical in preventing human infection and that is where you can help...

## Deer Tick Testing for Lyme Disease

The Haldimand-Norfolk Health Unit is currently accepting ticks for identification. Should the tick be identified as a possible carrier of Lyme disease (i.e. blacklegged/deer tick) and it has been taken off of a human, it will be

## Confirmed Human Cases Testing Positive for Lyme disease

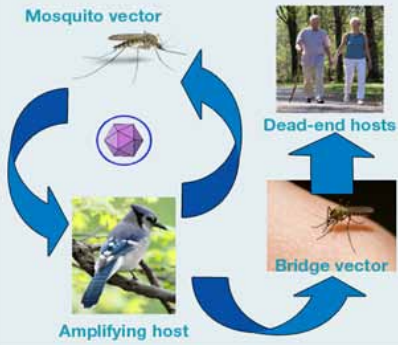
	Haldimand-Norfolk	Ontario
<b>2000</b>	0	44
<b>2001</b>	0	23
<b>2002</b>	0	27
<b>2003</b>	2	26
<b>2004</b>	0	32
<b>2005</b>	0	38
<b>2006</b>	1	38
<b>2007</b>	1	65
<b>2008</b>	3	57
<b>2009</b>	3	77
<b>2010</b>	3	TBD

sent away for testing. The HNHU is requesting your continued assistance with this submission process. We have attached our Tick Submission form that is to be completed by the applicant and submitted along with the specimen to be identified and, possibly, tested.



# Eastern Equine Encephalitis

## Transmission cycle of EEEV



In 2009, two horses in Haldimand were diagnosed with Eastern Equine Encephalitis (EEEV). It was determined that both cases were not travel related although mosquito surveillance performed by the HNHU did not reveal any samples containing *Culiseta melanura*; a

major vector of the disease.

Sporadic cases of EEEV in equine continue to be found in Ontario. EEEV has been found in horses that reside in the province or that have become infected while travelling. Transmission appears to be most common around freshwater, hardwood swamps and coastal plains including such areas in the Great Lakes region as well as the Atlantic and Gulf Coast states.

In the past couple years, the Ministry of Health and Long-Term Care has increased provincial surveillance efforts of the disease including mosquito trapping and testing in conjunction with the West Nile virus program.

The HNHU will continue to provide such surveillance and would appreciate any information on local animal cases diagnosed with EEEV. With this information, the HNHU can determine the appropriate course of action to prevent or mitigate the potential hazard (e.g. larvacide area acquired if case is not travel related). Should you experience a case of EEEV, please contact us at 519-426-6170.

### Equine Confirmed Positive for EEE

	Haldimand-Norfolk	Ontario
2001	0	2
2002	0	1
2003	0	11
2004	0	2
2005	0	0
2006	0	0
2007	0	0
2008	0	4
2009	2	2
2010	0	3

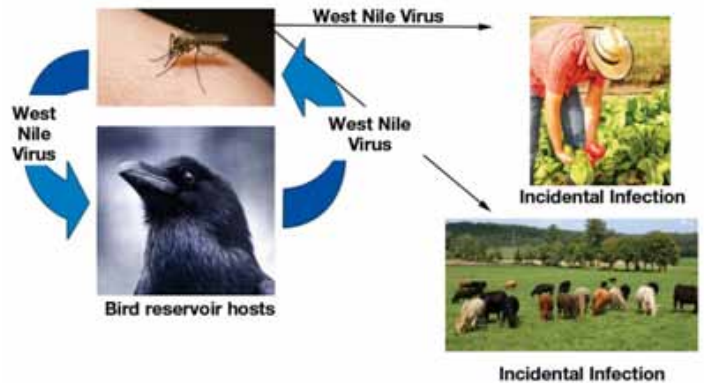
# West Nile

West Nile activity has significantly decreased in the past few years. Both positive mosquito pools and, correspondingly, human cases are on the decline.

	Trapped Mosquito Pools Testing Positive for WNV		Probable and Confirmed Human WNV Illness Cases		
	Haldimand-Norfolk	Ontario		Haldimand-Norfolk	Ontario
2000 & 2001	No Testing	No Testing	2000	0	0
2002	6	598	2001	0	0
2003	1	137	2002	3	394
2004	0	69	2003	0	89
2005	1	291	2004	0	14
2006	0	182	2005	0	101
2007	1	51	2006	0	42
2008	1	62	2007	0	17
2009	0	14	2008	0	4
2010	0	56	2009	0	3
			2010	0	1

Unfortunately, West Nile virus (WNV) is now considered endemic in Ontario. With this in mind, continued vigilance is needed to combat infection. As a rural area, surveillance and breeding site abatement will continue, but public awareness and education about the mosquito-acquired disease is considered the cornerstone of the HNHU's program.

## West Nile Virus Transmission Cycle



Simcoe:  
 P.O. Box 247, 12 Gilbertson Drive  
 Simcoe, ON N3Y 4L1  
 519.426.6170 or 905.318.6623

Caledonia:  
 282 Argyle Street South  
 Caledonia, ON N3W 1K7  
 905.318.5367

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