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What is the OAHN Public Health Report?

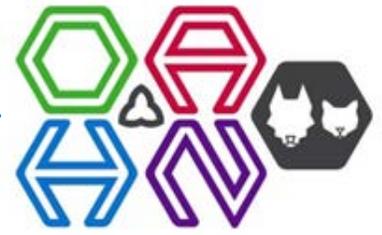
The [Ontario Animal Health Network \(OAHN\)](#) was created to achieve coordinated preparedness, early detection, and response to animal disease in Ontario, through sustainable cross-sector networks. OAHN is actually a “network of networks” with individual networks for different species/sectors, each of which involves collaboration among veterinarians, animal owners and other stakeholders in the field with laboratory, academic and government experts. Currently these networks include:

- Bees (apiculture)
- Bovine (cows)
- Companion animals (dogs, cats)
- Equine (horses)
- Fish (aquaculture)
- Poultry (e.g. chickens)
- Small ruminants (sheep, goats)
- Swine (pigs)

OAHN gathers information from each sector and available laboratory data throughout the year and sends out reports to veterinarians and other stakeholders as appropriate for each sector, highlighting trends and current animal health topics (particularly related to infectious disease) and helpful resources pertinent to each species. The goal is help veterinarians stay abreast of emerging issues, and to provide resources to help educate their clients and other animal owners.

OAHN recognizes that animal health is inextricably linked to human health in many ways, particularly when it comes to companion animals, with which people have the closest contact on a regular basis. Zoonotic diseases are a frequent topic of discussion and on reports. In order to help strengthen the link and communication between animal health and public health networks, this report was created especially for public health professionals in Ontario, highlighting pertinent topics from the last 4 quarterly reports from the OAHN companion animal network.





Avian chlamydiosis in Peel region (Q3 2017)

In August 2017, [avian chlamydiosis was confirmed in a pet cockatiel in Peel region](#). Infection with *Chlamydia psittaci* is a provincially immediately notifiable disease under the Animal Health Act (2009), so Ontario animal health labs report cases to OMAFRA. The bacterium can also infect humans, causing psittacosis or “parrot fever”, so cases are also reportable to public health.



Infected birds may show non-specific clinical signs, or no signs at all, but shed large numbers of the bacterium in feces and respiratory secretions. For more resources, visit the [Center for Food Security and Public Health](#).

Campylobacter linked to Petland puppies (Q3 2017)

Although no cases were reported in Canada, there was [an outbreak of campylobacteriosis in people in the US linked to puppies from Petland stores](#). By October 30th, 2017 there were 67 cases identified including Petland employees and other people in contact with the puppies. This is an excellent reminder of the biohazardous potential of pets, and especially young animals like puppies, and the importance of simple infection control measures like hand hygiene.



Imported problems: Leishmaniasis (Q3 2017, Q2 2018)

A dog imported to Canada from Turkey was found to have [leishmaniasis](#), a condition caused by a parasite transmitted by sandflies. This zoonotic parasitic infection is a big problem in dogs imported from certain regions such as the Mediterranean Basin, particularly Greece. While treatable, infected dogs are generally carriers for life and are prone to recurrent clinical disease. Direct transmission from dogs to people is possible, but rare.

The [Canadian Veterinary Medical Association recently released a helpful checklist of items for veterinarians](#) to consider discussing with clients before and after importing a dog. The checklist is available in both [English](#) and [French](#).

CANADIAN VETERINARY MEDICAL ASSOCIATION
L'ASSOCIATION CANADIENNE DES MÉDECINS VÉTÉRAIRES

VETERINARIAN'S DOG IMPORTATION CHECKLIST
Points to discuss before or after a client imports a dog(s) into Canada

Before a decision is made to import:

- Imported dogs may carry diseases, which are uncommon or exotic to Canada.
 - These diseases may be transmissible to other animals and/or people (i.e. zoonotic).
 - Some diseases may not be curable (e.g. leishmaniasis).
- Imported dogs may have unknown and unresolved behavioural issues.
- Transport can be lengthy and stressful and increase disease susceptibility.
- Importing dog means less likelihood that local dogs will be adopted.

Before dogs enter Canada:

- Examination by a qualified veterinarian in the country of origin.
- Rabies vaccination (as required by the Government of Canada).
- Other core vaccinations.
- Deworming, including tapeworms.
- Treatment for external parasites (e.g. fleas and ticks).
- Heartworm testing.
- Tests for diseases that may be present in country of origin, but not present or uncommon in Canada (e.g. Leishmania) in the Mediterranean basin and South America, Brucella canis in US (midwest).

After dogs enter Canada:

- Quarantine dogs for 30 days (minimum 14 days) in a house or a facility away from other animals and high-risk people (e.g. young children, elderly, compromised immune system).
- Monitor closely for signs of any illness and consult a veterinarian as needed.
 - **Rabies** risk may persist for up to six months.
 - Culture suspected bacterial infections due to risk of multi-drug resistant organisms.
- Examination by a veterinarian as soon as possible (even before going home).
- Repeat vaccinations or tests as needed.
- Behavioural assessment.
- Repeat heartworm test after six months.
- **Signs of illness:**

canadianveterinarians.net



Leptospirosis (Q4 2017)

Leptospirosis is caused by a bacterium often found in the urine of wild animals and rodents. The bacterium survives well in a cool, wet environment so fall is typically the peak time to see cases. At the end of 2017, [Ontario saw an unusually high number of dogs with lepto](#), and cases extended much farther into the winter season than expected. Lepto is a zoonotic disease, so in-clinic and at-home infection control measures are important

Raccoon roundworm - *B. procyonis* (Q4 2017)

Inflammation of the brain caused by larval migration of the raccoon roundworm *Baylisascaris procyonis* was confirmed in a dog in Q4 2017. This common raccoon parasite [uncommonly causes the same condition in people](#) when eggs from raccoon feces are accidentally ingested. People and pets should avoid areas known to be heavily contaminated with raccoon feces, and take [special precaution if cleaning up raccoon "latrines"](#) (or leave it to the professionals!).



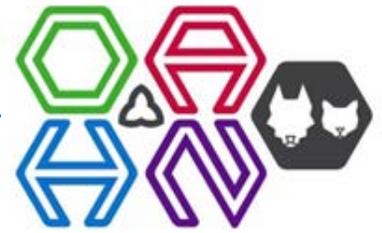
H3N2 Canine Influenza (CIV) (Q1 2018)

The [first known cases of Canine Influenza \(H3N2\) in Canada](#) were identified in Ontario in Q1 2018, ultimately affecting dogs in Windsor-Essex, Simcoe-Muskoka, and Northumberland regions. The cases were associated with rescue animals brought to Ontario from South Korea and China. Infection of people with H3N2 CIV has not been reported. The last positive dog was detected at the end of March 2018. As a novel influenza A virus, CIV in dogs is reportable to local public health as of January 1st, 2018.

Fox tapeworm - *Echinococcus multilocularis* (Q1 2018)

Another Ontario dog was diagnosed with alveolar echinococcosis (AE), a condition caused by the intermediate form of *Echinococcus multilocularis*, the fox tape worm. This is the sixth case of AE in a dog since the parasite was first detected in Ontario in 2012, in addition to 3 lemurs and a chipmunk. People (and sometimes dogs) become infected swallowing tapeworm eggs from the feces of infected canids such as foxes, coyotes and dogs. Canids usually become infected by eating small rodents affected with AE. Infections in animals and people are now reportable in Ontario. More information can be found at emultiontario.com.





Marijuana and pet safety (Q1 2018)

Legalization of marijuana in Canada is expected to take effect on October 17, 2018. Veterinarians in Ontario have already been reporting increased cases of marijuana toxicosis in pets over the last year. There was recently a [similar report about accidental intoxication of two dogs in Alberta](#), and US states where cannabis has been legalized have also reportedly seen more cases.



Currently there are no approved cannabinoid products for use in animals in Canada, and there isn't yet sufficient information on their effects on pets to use them safely or effectively on a routine basis, so veterinarians are currently unable to prescribe such products to pets. It's important for owners to contact their veterinarian if a pet is exposed to marijuana.

New tick in eastern US (Q2 2018)

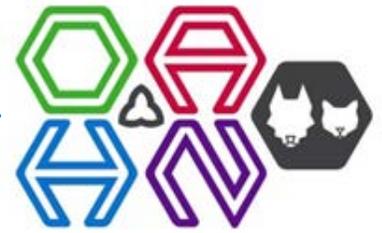
The longhorned aka East Asian aka bush tick (*Haemaphysalis longicornis*) was [first reported in the US in New Jersey in November 2017](#), and has since been [found in six states](#). There is concern it has now become established in the eastern US. The tick is primarily considered a livestock pest in East Asia, New Zealand and Australia, but can feed on other animals as well. It is currently unclear if this tick can transmit tick-borne pathogens already found in North America. This tick has also been implicated in transmission of a bunyavirus causing severe fever with thrombocytopenia syndrome (SFTS). (Image: nymph and adult female *H. longicornis*, [CDC Public Health Image Library](#))



Tick tracking: petsandticks.com

Owners who find ticks on their pets can now report them online to the [PetTickTracker on petsandticks.com](#). The new site has an [easy online submission process](#) that will hopefully help with more real-time mapping of tick data. You can also access [last year's PetTickTracker maps](#) on the site.

Animal owners can now also send in ticks for identification. Additional testing for tick-borne pathogens is not included, but submitted ticks may be used in subsequent research projects on pathogen prevalence in Ontario.



Rabies Update

Since 2015, Ontario has been experiencing a an outbreak of raccoon-variant rabies, centered around the greater Hamilton area and affecting five health units in total. There has also been a resurgence of fox-variant rabies in Perth County and Huron County, which has now extended into northern Waterloo Region and Wellington County. Rabies response and control in Ontario is a joint effort involving the public, animal owners, veterinarians, animal and wildlife control organizations, public health units, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and the Ministry of Natural Resources and Forestry (MNRF). It truly is a team effort to help protect people, domestic animals and wildlife from this deadly disease!

The MNRF distributes oral rabies vaccine (ORV) baits to help limit further spread of rabies in raccoons, skunks and foxes (there is currently no effective means of controlling rabies in bats). Baiting is done annually in late summer/fall within the rabies surveillance and control zone, which covers a 50 km radius around all positive cases. The baits are distributed by plane, helicopter or by hand depending on the area ([click here for the 2018 baiting schedule](#)). The baits are generally not harmful to pets or people, and there is an [information sheet](#) about the baits available on ontario.ca/rabies. Over 3 million oral ORV baits have been distributed since December 2015, and the MNRF has performed over 10 000 dRIT screening tests as part of their surveillance efforts.

Confirmed rabies cases in Ontario, Dec 2015 - Aug 2018:					
	2015	2016	2017	2018	Total
Raccoon-variant	10	255	119	43	427
Fox-variant	1	3	10	5	19
Bat-variant	0	29	20	~13	-

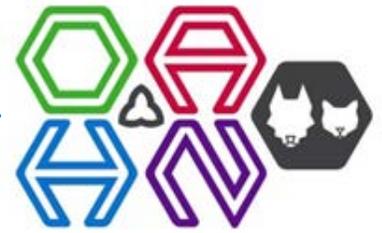


While terrestrial rabies case numbers are declining overall, it's important to remain vigilant and encourage rabies vaccinations for pets and avoidance of wild animals. The [OMAFRA rabies website](#) includes detailed information for veterinarians about rabies response in Ontario, including the [latest surveillance maps](#).

REMEMBER: Owners who have a concern about potential exposure of one of their animals to rabies should always be referred to their local veterinarian FIRST. Veterinarians seeking assistance with a rabies risk assessment or animal testing should contact OMAFRA at 1-877-424-1300.

Contact us!

Web: www.oahn.ca
 email: oahn@uoguelph.ca
 Twitter: [@OntAnHealthNet](https://twitter.com/OntAnHealthNet)
 Facebook: [@OntarioAnimalHealthNetwork](https://www.facebook.com/OntarioAnimalHealthNetwork)



OAHN podcasts

Created to help keep veterinarians and other interested individuals up to date on a variety of animal disease topics. Companion animal podcasts include:

- Updates on rabies response for veterinarians and the ongoing rabies outbreak in Ontario
- Ticks and tick-borne diseases, including Lyme disease
- Emergence of *Echinococcus multilocularis* in Ontario
- Risks of feeding raw meat diets, and more!

Other networks have covered other disease-specific topics (including influenza in swine and poultry), animal welfare issues and even producer mental health. Check out all the OAHN podcasts at oahn.podbean.com.

OAHN infographics

Check out these great OAHN infographics, designed to help veterinarians educate clients and staff about important infectious disease topics:

- [Ticks and Lyme Disease in Ontario: What's the real risk?](#)
- [Brush UP on managing Lepto patients](#)
- [Emerging risk: *Echinococcus multilocularis* in Ontario](#)
- [Using the best medicine and reducing antibiotic use](#)

Meet the OAHN companion animal network team:

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OMAFRA

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Dr. Melanie Barham

Other useful links

[Worms & Germs Blog](#)

[Animal Health Lab](#)

[OMAFRA Rabies Page](#)

[OAHN Podcasts](#)

