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What is the OAHN Public Health Report?

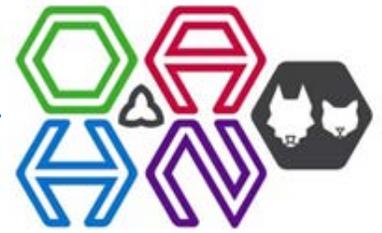
The [Ontario Animal Health Network \(OAHN\)](#) was created to achieve coordinated preparedness, early detection, and response to animal disease in Ontario, through sustainable cross-sector networks. OAHN is actually a “network of networks” with individual networks for different species/sectors, each 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)
- Alternative species (e.g. rabbits)
- Fish (aquaculture)
- Poultry (e.g. chickens)
- Small ruminants (sheep, goats)
- Swine (pigs)
- Wildlife

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 frequently discussed and often included in our 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, and highlights pertinent topics from the last 12 months from the OAHN companion animal and other species networks.





Brucella in breeding kennels (Q4 2018 - Q2 2019)

In late 2018 and early 2019, *Brucella canis* was diagnosed in a number of breeding and rescue dogs in Ontario. This led to OAHN funding a project to look more closely at the prevalence for *B. canis* in commercial dog breeding operations in southwestern Ontario. The results should be available by the end of 2019. To assist veterinarians, OAHN produced a [Brucella canis factsheet](#) on clinical aspects, diagnostics and recommendations for infected and at-risk dogs.

[Infection typically causes reproductive problems in male and female dogs](#), but the bacteria sometimes infect other tissues as well. [Infection can also be spread to people](#), particularly through contact with placental tissues and fluids. Signs in people are often non-specific, but more severe infections can occur in a small percentage of cases. Treatment can be very challenging.



Antimicrobial stewardship resources (Q1-2 2019)

Antimicrobial stewardship - in all species, including humans - is becoming ever more important as resistant bacterial infections become increasingly common. OAHN is currently producing a series of infographics to help highlight published antimicrobial use guidelines for feline and canine respiratory, urinary and skin infections. Veterinary staff can access these tools by signing up for OAHN and logging in to the [Resources page on the OAHN website](#).

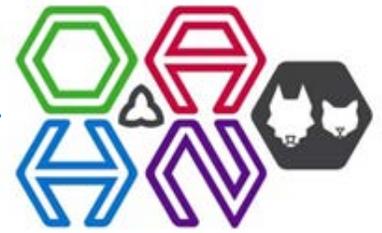
This year OAHN also highlighted the new open-access website on farmed animal antimicrobial stewardship (FAAST), which hosts a plethora of news, tools and resources for farm animal owners and veterinarians to help curb antimicrobial resistance. Visit www.amstewardship.ca.



Reminder: Tick tracking on petsandticks.com

Owners who find ticks on their pets can report them online to the [PetTickTracker](#) on petsandticks.com. The site has an [easy online submission process](#) that helps with more real-time mapping of tick data. You can also access the [2017](#) and [2018 PetTickTracker maps](#) on the site.

Animal owners can 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.



DÉJÀ VU: Raccoon roundworm (Q1 2019)

Inflammation of the brain caused by larval migration of the raccoon roundworm *Baylisascaris procyonis* was reported in a puppy from Toronto in Q1 2019. A similar case was reported 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.



UPDATE: H3N2 Canine Influenza (CIV) (Q4 2018)

The [first known cases of Influenza A \(H3N2\) in dogs in Canada](#) were identified in Ontario in Q1 2018 in three different regions. An [additional cluster was identified in one of these same areas](#) in Q4 2018, and like the others associated with imported rescue dogs from Asia. Both outbreaks were successfully controlled primarily through voluntary testing and confinement of affected dogs. [A report on the investigation and response](#) has been published ([Weese et al. EID 2019](#)). As a novel influenza A virus, CIV in dogs is reportable to local public health as of January 1st, 2018.

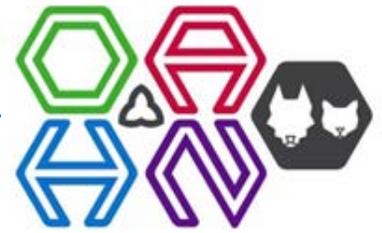


OAHN is also still recruiting individuals and groups involved in canine importation in Ontario to participate in our study looking at pathogen shedding in recently imported dogs from Asia. Please contact the project lead, [Dr. Scott Weese](#), for more information.

UPDATE: *Echinococcus multilocularis* (Q1 2019)

In 2016-2017 OAHN co-sponsored a study on the prevalence of the fox tapeworm, *Echinococcus multilocularis*, in wild canids in Ontario. The [complete study results](#) have now been published ([Kotwa et al. EID 2019](#)). Infection by this zoonotic parasite in animals and people is now reportable in Ontario. More information about *E. multilocularis* can be found at [emultiontario.com](#). Also check out the updated version of the popular OAHN infographic [Emerging Risk: *Echinococcus multilocularis* in Ontario](#).





Bovine: *Salmonella* Dublin (Q1-2 2019)

Between January and July 2019, *Salmonella* Dublin was identified in laboratory submissions from 17 cattle premises in Ontario. Infected calves are typically less than 6 months old and present with pneumonia or septicemia that is unresponsive to treatment. Antimicrobial sensitivity results indicate all Ontario isolates are multi-drug resistant. *Salmonella* Dublin is a zoonotic pathogen. Infection control precautions are especially important for anyone handling infected calves. The consumption of unpasteurized milk or under-cooked meat is also a risk.



Poultry: AMR in small poultry flocks (Q3 2019)

Small poultry flocks are becoming increasingly popular not only as a source of food but also as pets, yet not all small flock owners are aware of proper antimicrobial use practices and safe food handling protocols. This trend could contribute to antimicrobial resistance (AMR). To more closely examine the prevalence of AMR in small flocks in Ontario, OAHN funded a study using veterinary lab submissions from Oct-2015 to Sep-2017. A pooled cecal sample from each submission was cultured for *E. coli*, *Salmonella* and *Campylobacter*, followed by antimicrobial susceptibility testing.

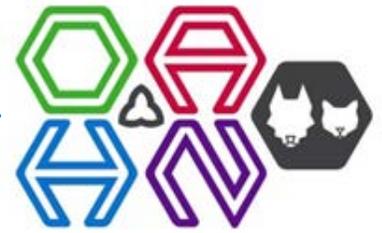


The [results of the *Campylobacter* testing](#) were recently published ([Varga et al. PLOS ONE 2019](#)). There was a low prevalence of resistance to macrolides and quinolones, but a high prevalence of resistance to tetracycline. These results can be used as a benchmark to measure changes in AMR in enteric bacteria of Ontario small poultry flocks

Small ruminant: Abortion work-ups (Q3-4 2018)

The [OAHN small ruminant network producer report](#) for the latter half of 2018 highlighted the many important steps and considerations for working up cases of abortion in sheep and goats. Many of the infectious agents involved in these cases are zoonotic, so it is also critical to follow infection control precautions to reduce the risk of contracting a serious disease. These include use of disposable gloves and sleeves, attention to hand hygiene, and proper disposal of fetuses and placental tissues.





Rabies Update

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! 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](#).

Confirmed rabies cases in Ontario, Dec 2015 - Sep 2019:						
	2015	2016	2017	2018	2019	Total
Raccoon-variant	10	255	119	65	20	469
Fox-variant	1	3	10	7	0	21
Bat-variant	0	29	20	31	~23	-



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). [Click here for the 2019 baiting schedule](#). Over 5.3 million oral ORV baits have been distributed since December 2015, and the MNRF has performed over 15 800 dRIT screening tests as part of their surveillance efforts.

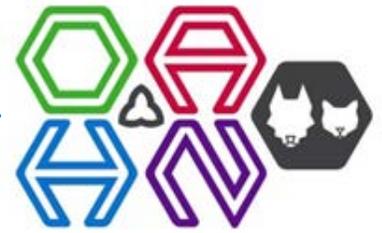
Highlights:

- Q3 2018: Updates to the [Rabies Immunization Regulation 567](#) came into effect on July 1st, 2018, making vaccination requirements for domestic animals standard across all Ontario health units.
- Q1 2019: [Raccoon-variant rabies was diagnosed in a domestic dog](#) for the first time during the current outbreak. The dog from Wainfleet had prior exposure to wildlife and was not currently vaccinated for rabies.
- Q2 2019: As of March 31, 2019, killed rabies vaccines for small animals with a 1-year duration of immunity claim are [no longer offered for sale in Canada](#).

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:

- Chronic diarrhea in dogs and cats
- Risks of feeding raw / homemade diets
- Ticks and tick-borne diseases, including Lyme disease
- Emergence of *Echinococcus multilocularis* in Ontario, 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 open-access OAHN infographics, designed to help companion animal veterinarians educate clients and staff about various infectious disease topics:

- [Ticks and Lyme Disease in Ontario: What's the real risk? UPDATED 2019](#)
- [Brush UP on managing Lepto patients](#)
- [Emerging risk: *Echinococcus multilocularis* in Ontario UPDATED 2019](#)
- [Using the best medicine and reducing antibiotic use](#)

Infographics from other species networks:

- [Avian Influenza for small flock owners](#)
- [Help reduce antibiotic use in horses](#)

Meet the OAHN companion animal network team:

Eastern ON

Dr. Ryan Llera

Southern ON

Dr. Emma Webster

Northern ON

Dr. Hailey Bertrand

Animal Health Lab

Dr. Kris Ruotsalo

Dr. Marg Stalker

Ontario Vet College

Dr. Scott Weese

Dr. Shauna Blois

OMAFRA

Dr. Maureen Anderson

Dr. Tim Pasma

Network coordinator

Dr. Kate Todd

Other useful links

[Worms & Germs Blog](#)

[Animal Health Lab](#)

[OMAFRA Rabies Page](#)

[OAHN Podcasts](#)

[OAHN Instagram](#)

