

Canadian
Animal
Health
Surveillance
System



CAHSS

The latest news and updates from the Canadian Animal Health Surveillance System



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LETTER FROM CAHSS



DR. THERESA BURNS
CAHSS COORDINATOR



I am writing this message while on flood alert in my home of Yarrow, BC, and while serious flooding in the farming areas to the west of us, as well as other regions of BC is ongoing. This event is an example of an emergency that affects human and animal health and welfare in a profound way that is hard to imagine until one is in the middle of it. It brings home to me the importance of building connections so that we can collectively react and respond to changing situations, whether on a local, regional or national scale. This is the fundamental purpose of CAHSS and our surveillance partners, as well as the NFAHWC and its other divisions and projects, and it is a privilege to support the good work that is being done every day to enhance communication and information sharing to support animal and human health and wellbeing.

NFAHWC UPDATES

National Farmed Animal Health and Welfare Council Annual Forum

Council welcomed animal health professionals across the country to our annual Forum event. This year the event was broken into 2 separate days with two intertwined themes. Forum session 1 took place on October 26, 2021, and focused on inspiration from around the globe on topics such as public private partnerships, One Health operationalization, and the global burden of disease. Forum session 2 took place November 23, 2021, and asked participants to provide feedback on their organization’s activities on topics related to animal health and welfare, as well as identifying priority areas for the future. Forum session 2 is part of the Council project to document the Plant and Animal Health Strategy, as well as look for priority areas for the Animal Health Canada initiative.

All Council divisions and projects have been undertaking the development of new communication strategies. Division and project leads have been working collaboratively to develop sustainable strategies that communicate their key work areas effectively. Stay tuned for more!



CAHSS HIGHLIGHTS



Episode 9: Importing Dogs, Importing Disease?

When we bring dogs from far away into Canada, it is essential that we consider infectious organisms they may also bring into our country as "tag-alongs". This a veterinarian and molecular-parasitology researcher (who is devoted to tackling zoonotic parasites) shares details on which infections should be top of mind when importing dogs, and describes a cautionary tale of an imported parasitic disease.

Leishmania infantum.

[LISTEN NOW →](#)

Sustainability Planning Sub-Committee

A CAHSS Steering Group sub-committee is guiding work on developing a medium and long term sustainability plans for CAHSS. We will be looking for input on the new sustainability plan over the next few months.

Latest Episodes on Animal Health Insights CAHSS’s podcast Animal Health Insights has reached over 300 episode downloads. Our podcast host, Dr. Kate Todd has interviewed different guests that work and support animal health in Canada. Our latest episodes include Leishmaniasis risk in dogs imported from outside of Canada, and Chronic Wasting Disease surveillance. Listen to our podcasts on most audio podcast apps, or visit <http://cahss.podbean.com>.

CAHSS HIGHLIGHTS

Presentation at AAEV

CAHSS staff Dr. Doris Leung presented virtually at the American Association of Extension Veterinarians (AAEV) on October 24, 2021. The presentation was on the utility of web-based resources to advance animal health surveillance, with Dr. Leung briefly demonstrating the variety of CAHSS tools that could be of practical use for extension veterinarians in North America.



MDSAH Project

The **Minimum Dataset for Animal Health (MDSAH) project** is led by CAHSS staff along with contractor Dr. Harold Kloeze. It is focused on developing a recommended minimum dataset needed for high quality animal health surveillance. This project is to update a **2011 publication** (Kloeze et al., 2011), where input from provincial epidemiologists in Canada allowed for the development of fifteen core elements. The project will leverage new collaborations available within the CAHSS animal health surveillance community, including users and producers of surveillance data in the private and public sectors. CAHSS network groups will be invited to provide input on the project, and an expert group will provide insight on how genomics data can be integrated into animal health surveillance.

Abattoir Project

This project is currently underway and is led by CAHSS staff along with the contractor Nortak. The primary goal is to use of condemnation data from provincial abattoirs for syndromic surveillance. It is hoped that this previously underutilized data source will provide new, valuable information for provincial veterinary epidemiologists and others that work to support surveillance based work in Canada. This will complement the **Federal abattoir condemnation dashboard** that can be accessed on the portal side of the CAHSS website

CANADIAN ANIMAL HEALTH SURVEILLANCE SYSTEM
MINIMUM DATA SET FOR ANIMAL HEALTH SURVEILLANCE (MDSAH) PROJECT

Led by the Canadian Animal Health Surveillance System, this project will update the minimum data set work with considerations of a changing surveillance environment in Canada.

BACKGROUND
 In Canada, animal health laboratories are critical sources of data and information for animal health surveillance. The minimum data set project for animal health (MDSAH) will update the work completed in 2011 to develop a recommended minimum set of animal health laboratory data elements required for surveillance in Canada.
 The 2011 project resulted in publication of a minimum dataset anticipated to allow meaningful analysis of collated results from the various public sector provincial, academic and federal animal health laboratories for the purposes of disease detection and characterization, syndromic surveillance, and disease control. The original project was directed by public sector animal health epidemiologists from the FPVT community in Canada, with input from laboratorians and decision makers.

CORE ELEMENTS OF MINIMUM DATA SET FOR ANIMAL HEALTH SURVEILLANCE

- Unique Identifier
- Premises identification
- Date submitted
- Geographic location
- Species
- Farm type
- Group type
- Total population of tested species
- Number sick
- Number dead
- Tests performed
- Disease agent
- Test result
- Disease classification by submitter
- Final laboratory diagnosis (Kloeze et al., 2011)

WHAT IS NEW ABOUT THE MDSAH PROJECT

- The project will leverage new collaborations within the expanded animal health surveillance community to gain focused input from current users and producers of animal health surveillance data and information about what should be included in a current minimum dataset.
- The project will engage an expert technical group to gain insight on how genomics data is produced by diagnostic laboratories and how it might be effectively used for animal health surveillance.

ANTICIPATED RESULTS

- An updated recommended minimum data set for animal health surveillance.
- A preliminary report examining how to incorporate genomics data into animal health surveillance.
- The project will run from May 2021 to March 2022.

For more information about the project, please contact us at cahss@protonmail.ca. For more information on the Canadian Animal Health Surveillance System, visit cahss.ca

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FEDERALLY INSPECTED SLAUGHTER DATA

Red Meat - Canada | Red Meat Monthly Trends | Poultry - Canada | Poultry Monthly Trends

Red Meat - Regional | Red Meat Yearly Trends | Poultry - Regional | Poultry Yearly Trends

EN/FR | User Guide | i

FACES OF ANIMAL HEALTH

CAHSS aims to feature our members who work in animal health and surveillance in Canada. If you would like to nominate a CAHSS member to be featured in our next newsletter, email cahssinfo@ahwcouncil.ca.

DR. ASHLEY WHITEHEAD

DVM, BSC, DVSC, DACVIM-LA

Organization/ Role: University of Calgary Faculty of Veterinary Medicine, Associate Dean Clinical Programs, Senior Instructor

CAHSS Role/ Network: Co-Chair Steering Committee, Equine Network Leadership Group



What is currently on your radar with animal health/ surveillance? Education of the public - Animal owners often get shamed in their communities and on social media if they experience a disease outbreak that could cause risk to other animals. While the outbreak is likely not the owner's fault, it often causes them to keep the outbreak secret, which causes so much more harm. One positive from COVID-19 is that it has started to change some of the stigma associated with outbreaks. Everyone is tracking numbers to see where things stand. It's a huge benefit to disease surveillance in animals. People are realizing that it helps to share information. It means owners know the risk to their animals when it comes to certain activities in certain areas and can make better decisions which ultimately impacts Canadian economy along with border and food security.

Fun question: When you are not working on animal health issues, what do you like to do (hobby)?

Riding horses, pottery, and keeping my multitude of animals out of trouble (being a vet they seem to get in a lot of trouble - most recently my dog ate a dead porcupine).

Fun question: If you could go to any country or special event (once it feels okay to do so), where would you go and why?

Option 1: Be a contestant on Amazing Race Canada. My husband and I have been training for this since our second date. We have done the walk on the outside of the CN Tower, eaten crickets, traveled to South Africa, learned to dance for our wedding, and since COVID we have been practicing our puzzle skills at home. Since I may not be exciting enough to get cast on TV (who wants to see a disease surveillance nerd on the small screen), I do have an option 2: Ireland on a castle-to-castle horseback riding tour. Combine my love of adventure, horses, and history.

AROUND THE NETWORKS FEATURE

Our commodity group and topic-focused networks are going strong. A few highlights of network activities are provided below:

Fish Health Tracking App Launch

The fish health tracking app is now live and is available on desktop and mobile, visit: <https://cwhc.wildlifesubmissions.org/>. The app is a project with partnership from CAHSS, CFIA, and CWHC; with direction from the CAHSS finfish network. The app encourages citizen science, where anglers and members of the public can report field observations of fish health to a centralized database to enhance early detection of new and foreign disease, and to also identify changes in locally present endemic aquatic diseases. We would like to thank the Finfish steering committee for their time and dedication in allowing this pilot project to happen.



Companion Animal Network Updates

The first meeting for the new CAHSS Companion Animal network was held on October 25, 2021. Information about different companion animal surveillance initiatives and programs was shared at the cross-Canada roundtable. There were representatives from academia, private practice, public and private laboratories, the Canadian Veterinary Medical Association (CVMA), and the Public Health Agency of Canada (PHAC). A few goals of the network are to create a network page on the CAHSS website and to create a surveillance stakeholder map in upcoming months.



Smallholder Updates

From October 26 to November 16, 2021, CAHSS hosted a four part Smallholder swine course geared towards veterinarians and veterinary professionals. The course instructor, Dr. Sue Burlatchensko from Ontario provided participants with practical information on the general health of a pig, approaches to a sick pig in terms of diagnostics and treatment options, different types of infectious disease to look out for, and other helpful tips that veterinarians can disseminate back to smallholder producers. The overarching goal is to connect smallholders to veterinary services, so that unusual animal health events do not go undetected or undiagnosed.

AROUND THE NETWORKS FEATURE

Equine Network

CAHSS hosted the Equine Herpes Myeloencephalopathy (EHM) and Equine Herpes Virus 1 (EHV-1) seminar with Dr. Nicola Pusterla (UC Davis) and Canadian experts on November 2, 2021 with over 120 participants from across Canada. Dr. Pusterla provided an update on EHM, with Canadian equine experts, Drs. Alison Moore, Ashley Whitehead, Debbie Parsons, and Kathleen MacMillan providing participants with a summary of what is currently occurring with EHV-1 in Canada. Moreover, there were two cases of EHM caused by EHV-1 in Quebec, you can read more about this on our disease alerts page at: <https://cahss.ca/cahss-tools/disease-alerts>.



AMU/AMR infographics

With consultation from several experts in the field, CAHSS produced an infographic describing [Cross-Canada Surveillance Snapshot of antimicrobial use \(AMU\) and antimicrobial resistance \(AMR\) initiatives.](#)



REGIONAL NETWORKS & OTHER SURVEILLANCE NETWORK UPDATE



Community for Emerging and Zoonotic Diseases (CEZD)

The Community for Emerging and Zoonotic Diseases (CEZD) released their Annual Report for 2020-21; with key highlights noted in a one page Infographic.

CEZD members have provided their support to review the health conditions dictionary in preparation for the implementation of 'disciplines', which will allow CEZD to direct signals to species and syndrome specific experts. Dr. Linda Vrbova, Dr. Logan Flockhart, Dr. Ana Ulmer-Franco, and Dr. Erin Leonard have been instrumental in supporting the CEZD Core Team in reviewing over 530 health conditions (and all of their synonyms), as well as assessing the species and syndrome categories into which each belongs.

Moreover, CEZD is closely monitoring the Avian Influenza outbreaks in Europe and Asia as these have been ongoing for some time at a level not previously experienced.

REGIONAL NETWORKS & OTHER SURVEILLANCE NETWORK UPDATE

Atlantic Canadian Animal Health Network (AtCAHN)

AtCAHN members meet every 3 months on a rotational schedule hosted by province. Members gather to discuss any issues around animal surveillance and roundtable on provincial disease observations and projects. Several surveillance projects have been underway in the Atlantic including sampling PEI bats for a rabies surveillance project as well as sampling skunks for skunk adenovirus to determine how common it is in the wild populations. NS conducted a field necropsy course for veterinarians located greater than 200 kms from the lab in hopes of improving disease surveillance and quality of samples submitted. Finally NB is submitting samples from white tailed deer to the CFIA to aid in the federal chronic wasting disease surveillance program. Sampling is occurring from October to December 2021. Our next meeting is in November with PEI chairing the meeting.

Ontario Animal Health Network (OAHN)

OAHN is pleased to announce that **Dr. Tanya Rossi** has joined OAHN as the Animal Health Network and Data Manager. Tanya graduated from OVC with a DVM in 2009, and practiced mixed large animal practice for two years before returning to the University of Guelph to earn a PhD in Epidemiology. Her research has focused on chronic, and infectious disease in large animals (particularly equines), and work on vaccine safety and COVID-19 surveillance at PHAC. She also has a strong interest in diagnostic test validation, and surveillance systems. She is excited to work with the OAHN expert networks and hopes to contribute her own expertise to this important initiative.



Throughout the summer and fall, OAHN has been very busy creating new animal health resources, and finishing up many research projects. In addition, we held our quarterly species-specific meetings and created the resultant veterinary and owner/producer reports which reflect what is being seen in veterinary practice, labs, and abattoirs throughout Ontario. New resources include: a **Bovine Anaplasmosis fact sheet**; an infographic on **Lyme Disease in Horses**; poultry fact sheets on **Fowl Adenovirus**, **Inclusion Body Hepatitis**, and **Avian Reovirus**; and the **Companion Animal Expert Network Public Health Update 2021**. Completed projects include: **Mid-season treatments for Varroa mites, residue testing in Honey** (Bee Network); **Investigation of ovine herpesvirus-2 as the cause of an idiopathic fatal vasculitis syndrome in Ontario sheep** (Small Ruminants Network); **Prevalence of seroconversion to SARS-CoV-2 among dogs, cats and ferrets in close contact with humans with confirmed or probable COVID-19** (Companion Animal Network); and **Investigation of an elevated number of condemnations for septicemia in veal** (Bovine Network - login needed to view). We are looking forward to a busy and productive winter which will see many new publications around our ongoing research projects, and more resources to help veterinarians, pet owners, and industry members.

Visit <http://oahn.ca> and navigate to your species of interest to find all of the information on these latest projects and more.

REGIONAL NETWORKS & OTHER SURVEILLANCE NETWORK UPDATE

Réseau d'alerte et d'information zoosanitaire (RAIZO)

RAIZO had several animal health events to manage since August. The apiculture network ended the season with 12 active infestation small hive beetle sites, which is an improvement from the 27 hives infested due to the introduction of a contaminated shipment of hives in 2020. The poultry network was involved in the management of a case of infectious laryngotracheitis (ILT) on a commercial farm and is currently addressing the emergence of reovirus in turkeys. The bovine network has issued disease alert notices for two cases of Salmonella Dublin in dairy farms in October and November, and is working on the upcoming launch of a PISAQ awareness campaign on bovine leukosis. The equine network has managed a herpesvirus outbreak involving interprovincial transport and the communications with the affected province. The finfish network works to promote a PISAQ campaign on biosecurity measures for fish farmers. As for the small ruminant network, a first case of Salmonella Dublin infection in goats has been detected in a farm in Quebec. Finally, the swine network has hosted African swine fever (ASF) preparedness exercises in the event of an outbreak of ASF in Canada.

Western Canadian Animal Health Network (WeCAHN)

Thanks to Prairie Diagnostic Services and the Manitoba Veterinary Diagnostic Services Laboratory kindly collating historical data, the WeCAHN species/sector (beef, dairy, poultry, and small ruminant) networks are studying western Canadian time trends for some commonly diagnosed diseases. For example, increasing diagnosis of Inclusion Body Hepatitis in broilers has been identified in 2021. Additionally, each individual network discussed increased diagnoses of diseases associated with heat and drought, seen over the summer, including pneumonia and gastrointestinal disease.

The beef network is currently prioritising surveillance outcomes for monitoring by the network, with study of emerging diseases, supported by some specific data sources such as outbreak investigations from the veterinary colleges, being of particular interest.

October saw the first meeting of the WeCAHN small ruminant network. Initial discussion highlighted the importance in identifying resources for practitioners trying to serve small ruminant clients, including some pathology resources which are being shared at the [WeCAHN website](#).



WeCAHN Small Ruminant Network

WHAT IS COMING UP?

Our steering group is continuing to meet regularly, with the next meeting scheduled for early December. CAHSS Network meetings for each of our 10 networks are already on the schedule for the November 2021 to June 2022. If you are interested in attending a new network, please email cahssinfo@ahwcouncil.ca.

CAHSS is working with CSHIN on a swine influenza planning meeting in January. Check out our CAHSS Events Page for listings of other animal health events across Canada.

GET INVOLVED - JOIN CAHSS

Already a member? Please update your member profile under "My profile" to ensure all information is up to date and accurate. Updated information allows CAHSS staff to email you about upcoming meetings, resources of interest and relevant disease alert notifications. In your member profile, make sure to check disease alert subscription and check off all animal species you are interested in receiving alerts for. If you have any questions please email cahssinfo@ahwcouncil.ca.

