

ATLANTIC CANADA ANIMAL HEALTH SURVEILLANCE NETWORK

Presentation for the
2018 National Farmed Animal Health and Welfare Council Forum

Dr. Nicole Wanamaker
Manager of New Brunswick's Veterinary Field Service



STATUS OF ANIMAL HEALTH SURVEILLANCE IN CANADA

- Impetus from Canadian Animal Health Surveillance Network's surveillance workshop
 - February 26-27, 2018
 - Hosted by the province of British Columbia with funding from Growing Forward 2
- Coordination of animal health surveillance strongest in Quebec (Réseau d'Alerte et d'Information Zoonitaire) and Ontario (Ontario Animal Health Network)
- Big gaps in the east and west



ATLANTIC CANADA ANIMAL HEALTH SURVEILLANCE NETWORK

- Inaugural teleconference meeting April 12, 2018
- Terms of reference developed – participants, structure, scope
- Participants
 - Chief Veterinary Officer of each Atlantic Province (Newfoundland/Labrador, Prince Edward Island and New Brunswick); Nova Scotia currently does not have a Chief Veterinary Officer and is searching for one (will be invited to participate)
 - Veterinary pathologists from each provincial veterinary laboratory in the Atlantic region (NL, NS, NB) and the Atlantic Veterinary College (AVC) in PE
 - Director of Diagnostic Services from the Atlantic Veterinary College
 - Veterinary pathologists from the Atlantic node of the Canadian Wildlife Health Cooperative
 - PE is in the process of hiring a veterinary epidemiologist (will be invited to participate)
- Structure
 - Teleconference to exchange information
 - Every 3 months to take into account seasonal changes, ebbs and flows
 - Informal

ATLANTIC CANADA ANIMAL HEALTH SURVEILLANCE NETWORK

- Scope
 - Diseases of domestic animals and wildlife, excluding fish and marine invertebrates
 - Emerging diseases
 - Vector-borne diseases
 - Zoonotic diseases
 - Laboratory issues that could affect surveillance
- Challenges/Needs
 - Resources for data collection, entry and compilation (all provinces)
 - Functional updated Laboratory Information Management System (NL, NB); AVC is updating their system and hopes to have a new one in place by January 2019
 - Travel budget (all provinces)
 - Quality management software (NB, NS, NL); AVC has software but it's dated
 - Regulatory updates regarding animal health (PE, NB)

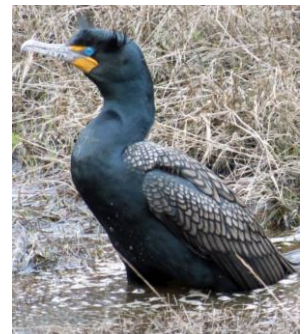
ANIMAL HEALTH SURVEILLANCE UPDATES FOR ATLANTIC CANADA: FARMED ANIMALS

- Bovine Respiratory Syncytial Virus (BRSV)
 - Associated with mortality in cattle of all ages in NS during the fall and winter of 2017; losses were striking in some herds
- Infectious Laryngotracheitis
 - Ongoing sporadic problem in back yard flocks in NS and NB
 - Controlled by depopulation and quarantine
- Bacterial Pneumonia in ranch mink in NS
 - *Pseudomonas*
 - *E. coli*
 - *Streptococcus*



ANIMAL HEALTH SURVEILLANCE UPDATES FOR ATLANTIC CANADA: WILDLIFE

- West Nile Virus
 - Detected in corvids in NB, NS and PE in September 2018
 - wild American Crows in NB and PE, captive Black-billed Magpies in NS
 - Last detected in Atlantic Canada in 2003 (NB, NS)
 - Never previously detected in PE
 - Prolonged hot dry summer weather during summer of 2018
- Avian Paramyxovirus (Newcastle Disease)
 - Detected in wild Double-crested Cormorants in NB, NS and PE between late August and October 2018
 - Velogenic (highly pathogenic) strain
 - Mainly affecting juvenile birds
 - Some affected birds from NB were co-infected with *Salmonella* (unnamed serotypes I:4,12:i:- and I:4,5,12:i:-) and/or West Nile virus



ANIMAL HEALTH SURVEILLANCE UPDATES FOR ATLANTIC CANADA: WILDLIFE

- Sarcoptic Mange

- Many cases detected in wild red foxes in urban areas in PE
- Cases also detected in NB



- Rabies

- Arctic Fox variant detected in a fox in Labrador
- No Raccoon variant cases detected in NB in 2018; 4 wildlife cases in 2017 (3 striped skunks from a single abandoned barn and 1 raccoon); 1 in 2016; 24 in 2015; 2 in 2014
- Oral rabies wildlife vaccination program in NB ongoing since August 2015
- Raccoon variant cases still occurring in nearby Maine close to border in at least three locations
- Bat variant cases – 4 rabid big brown bats in NB in 2018, 6 in 2017

ANIMAL HEALTH SURVEILLANCE UPDATES FOR ATLANTIC CANADA: COMPANION ANIMALS

- Cyanobacterial (Anatoxin) Toxicity

- Confirmed to have caused death in two dogs in central NB in 2018
- Clinical history of swimming or being on a beach near water shortly before death
- No evidence of cyanobacterial blooms; deaths of some dogs associated with consumption of mats of vegetation washed up on shore
- Anatoxins are one of the types of neurotoxins produced by Cyanobacteria (Cyanobacteria are often referred to as “blue-green algae” but are not algae)
- Sparked tremendous media and public interest and concern



- Canine Distemper

- Outbreak in feral and pet dogs in Labrador in 2018 has spread to animal shelters elsewhere in Labrador and in Newfoundland

SUMMARY

- Surveillance network has been started
- There are advantages to being small (e.g., communication, fewer contacts)
- And disadvantages (e.g., resources)
- Will evolve as resources become available and needs are identified
- Participants are enthusiastic, eager, and committed; recognize importance of surveillance