ANIMALS SUBMITTED by region

503 ANIMALS TOTAL

* Numbers correct as of Apr 15, 2019

REGION TOTALS
Pacific 121
Prairie 65
Central Canada 267
Atlantic 50
North 0

CAUSE OF DEATH category

PLEASE NOTE: An additional 128 cases submitted to CWHC in this quarter are still pending cause of death determination: 62 birds, 61 mammals, and 5 other species. ‘Other’ diagnoses include neoplastic, metabolic, and degenerative diseases as well as those cases where no cause of death could be determined.

SELECTED disease counts

RABIES
Examined 360
Positive 4

WHITE NOSE SYNDROME
Examined 115
Positive 0

AVIAN INFLUENZA
Examined 221
Positive 1

PLEASE NOTE: The Al viruses detected were of low-pathogenicity and North-American lineage. Both live bird samples and dead animal submissions are included.

CHRONIC WASTING DISEASE
Examined 308
Positive 34

BOVINE TUBERCULOSIS
Examined 308
Positive 0

CANINE DISTEMPER
Examined 207
Positive 15

PLEASE NOTE: The cases reported above represent the data that are currently available in the CWHC database and should be considered preliminary. These data do not include all diagnostic testing for the selected pathogens carried out in Canada; additional testing is performed by other agencies and organisations. Examined refers to any candidate species for this disease. Testing is not always performed, unless the disease is suspected during necropsy or histological examination. Numbers are correct as of April 15, 2019.

For more information visit www.cwhc-rscf.ca/quarterlyreport

To learn more about your CWHC Region, visit www.cwhc-rscf.ca/canadas_regional_centres.php

For provincial totals, visit www.cwhc-rscf.ca/quarterlyreport
HIGHLIGHTS

Carbamate insecticide toxicity in a coyote in Ontario
In December 2018, a coyote was found having a generalized (grand mal) seizure in the middle of a residential neighbourhood in Burlington, ON. After rabies infection was ruled out, the coyote was brought to us at the Canadian Wildlife Health Cooperative Ontario/Nunavut region for post-mortem examination.

Aside from the trauma associated with euthanasia, the only finding on post-mortem examination was a blue-green material throughout the stomach and intestines. There was no evidence of anticoagulants in the screen; however, LC/MS detected methomyl in the gastrointestinal tract material. Based on the amount of blue-green material in the gastrointestinal tract and the severe clinical signs noted, it is suspected this was a deliberate poisoning.

Methomyl is a carbamate insecticide, which is a broad-spectrum agent used to kill insect pests and is commonly used as a fly bait. Methomyl is highly toxic to both mammals and birds and can be quickly absorbed through the skin, lungs, and gastrointestinal tract. In acute cases, methomyl will cause central nervous symptoms (predominantly seizures) and respiratory arrest.

FEATURED project

TOXOPLASMA GONDII: A CAT PARASITE IN ST. LAWRENCE BELUGA WHALES
In a scientific article published last fall in the journal Diseases of Aquatic Organisms, researchers report the detection of Toxoplasma gondii DNA in the tissues of 44% of the beluga carcasses tested.1 The samples used in this study were obtained from the St. Lawrence belugas mortality surveillance program managed by the CWHC-Quebec Regional Center. Males had a higher infection rate than females and this parasite was more frequent in calves and juveniles compared to adults.

Of the 15 animals in which T. gondii was detected in the study cited here,1 infection by T. gondii was determined to be the cause of death in only one animal. The other cases were either asymptomatic infections or significant infections but that could not be detected at post-mortem examination. This project demonstrates that the St. Lawrence beluga is highly exposed to a parasite that can potentially be pathogenic. Since the beginning of the St. Lawrence beluga mortality monitoring program in 1983, we have documented seven cases of beluga strandings caused by fatal T. gondii infections, which represents 4% of strandings for which the cause of death has been determined. Although this number seems small, it is undoubtedly an underestimation of the actual number of mortalities associated with this parasite in this population.

Furthermore, it is well known that T. gondii can also cause sub-clinical (non-lethal) effects in intermediate hosts, such as behavioral changes, which may also contribute to diminishing the animals ability to survive and to reproduce. Therefore, although the impact of this parasite on St. Lawrence belugas is difficult to assess, its presence certainly does not help the recovery of this threatened population.