

## Reportable Zoonoses in Animals

Since 2015, the British Columbia Chief Veterinary Officer shares reports of selected zoonotic diseases in animals with the Provincial Health Officer or delegate (i.e. BCCDC). Fourteen zoonotic diseases, plus new or unusual diseases or clusters with potential public health significance, were identified for which the occurrence in animals is reported to the public health authorities to consider and possibly initiate a public health response. The reportable zoonoses include: anthrax, bovine spongiform encephalopathy, brucellosis, chlamydiosis (psittacosis in humans), influenza A in swine, avian influenza H5 and H7, plague, Q fever, rabies, trichinosis, tuberculosis, tularemia, West Nile virus, zoonotic viral hemorrhagic fevers. The Reportable Zoonoses Guideline<sup>1</sup> outlines the process for reporting and the recommended public health response. Summary guidelines for veterinarians are also available<sup>2</sup>. Separate guidelines dedicated to rabies for both public health professionals and veterinarians are also posted on the BCCDC website<sup>3</sup>.

Excluding rabies, 9 events of reportable zoonoses in animals were reported to public health in 2018 (Table 27.1). Diseases included anthrax, influenza (avian and swine), chlamydiosis, bovine tuberculosis<sup>4</sup>, and West Nile virus (WNV). The animal species affected included bison, cattle, pigeons, swine, wild waterfowl, and horses, which resided in three health authorities (Fraser, Interior, and Northern Health Authorities). The single case

of WNV in a horse in 2018 was locally-acquired and was detected in the Kootenay Region of the province. The number of WNV cases remained the same in 2017 and 2018; each with 4 cases per year. No new regions of the province were identified with cases in 2018.

For rabies, many suspect animal cases are identified each year. A total of 131 samples were submitted from BC to the Canadian Food Inspection Agency laboratory for rabies testing in 2018<sup>5</sup> and 119 were suitable for testing. Ten percent (10/99) of bat specimens were positive for rabies virus in 2018; no other species tested positive. The 5-year average for bats in BC testing positive for rabies is 13%. An increasing trend in the percent of bats testing positive for rabies has been noted in big brown bats from an average of 15% (2004-2013) to 32% (2014-2018).

Human exposure occurred in 60% (6/10) of positive bat cases and domestic animal exposure occurred in 20% (2/10) of positive bat cases. At least one rabies positive bat was detected within the boundaries of 4 out of 5 health authorities in BC (Figure 27.2). No positive bats were detected in Northern Health in 2018; however in previous years, all health authorities have had positive rabies cases in bats.

1. <http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%201%20-%20CDC/CompleteReportableZoonosesGuidelineFinalVers.pdf>

2. <http://www.bccdc.ca/health-info/disease-types/zoonotic-diseases/reportable-zoonoses>

3. <http://www.bccdc.ca/health-info/diseases-conditions/rabies>

4. <http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/bovine-tuberculosis/investigation-british-columbia/eng/1544220226249/1544220226495>

5. <http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/rabies/rabies-in-canada/eng/1519159995664/1519159996478>

27.1 Reportable zoonoses in animals, BC, 2018

Disease	Month	Species	Health Authority
Anthrax	October	Bison	Northern Health
Low pathogenic avian influenza	January	Wild waterfowl	Fraser Health
Chlamydiosis	October	Pigeon	Fraser Health
Rabies	Various	Bats (10)	All areas
Swine Influenza (H1N1-09)	January	Swine	Northern Health
Swine Influenza (H1N1)	December	Swine	Fraser Health
Bovine Tuberculosis ( <i>Mycobacterium bovis</i> )	November	Cattle	Interior Health
West Nile virus	September	Horse (1)	Interior Health
West Nile virus	August	Raven (2)	Interior Health
West Nile virus	September	Blue jay (1)	Interior Health

27.2 Number of bats tested for rabies in British Columbia in 2018

