

# Rabies Summary Guide for Veterinarians

For more information please contact the BCCDC

Public Health Veterinarian:

[publichealthvet@bccdc.ca](mailto:publichealthvet@bccdc.ca)



BC Centre for Disease Control  
An agency of the Provincial Health Services Authority

<b>Epidemiology</b>	<ul style="list-style-type: none"> <li>Caused by rabies virus (family Rhabdoviridae) - can infect all mammals</li> <li>In BC, bats are the only known reservoir. Estimated &lt;0.5% of bats in wild are infected although ~8% of tested bats are positive</li> <li>12 non-bat animal cases reported in BC between 1969-2022 (cats (5), skunk (5), beaver (1), horse (1))</li> <li>2 human rabies cases in BC due to bat exposures in 2003 and 2019</li> </ul>		
<b>Transmission</b>	<ul style="list-style-type: none"> <li>Via contact with infected saliva or neurologic tissue through a bite, scratch, fresh break in skin or intact mucus membranes</li> <li>Incubation period (IP) in animals: 2 weeks- months. Can transmit rabies up to 10 days before showing signs</li> </ul>		
<b>Zoonotic Implications</b>	<ul style="list-style-type: none"> <li>Local public health authorities are responsible for assessing and managing risk in potentially exposed persons</li> <li>Veterinarians should advise clients that rabies is zoonotic and encourage to contact a healthcare provider or local public health authority</li> <li>Discuss any human health concerns with local public health authorities (contact info in Appendix A of the <a href="#">Rabies Guidelines for Veterinarians</a>)</li> </ul>		
<b>Prevention</b>	<ul style="list-style-type: none"> <li>The rabies vaccine is recommended, but not required by law in BC. Vaccines available for cats, dogs, ferrets and livestock</li> </ul>		
<b>Clinical Presentation</b>	<ul style="list-style-type: none"> <li><b>Dumb form:</b> Throat and masseter muscles paralyzed, excessive salivation, inability to swallow. Progressive paralysis results in death.</li> <li><b>Furious form:</b> Aggression, loss of fear, unprovoked attacks, seizure, loss of muscle coordination. Progressive paralysis results in death.</li> <li>Bats usually exhibit the dumb form with loss of flight and daytime appearances.</li> </ul>		
<b>Euthanasia</b>	<ul style="list-style-type: none"> <li>Bats - Acceptable methods: volatile anesthetic overdose, cervical dislocation, anesthesia w/CO<sub>2</sub> followed by injectable barbiturate</li> </ul>		
<pre> graph LR     A[Domestic animal exposure] --&gt; B[Consult BCCDC public health vet: publichealthvet@bccdc.ca]     B --&gt; C[Rabies vaccine up-to-date]     B --&gt; D[Unvaccinated, partially vaccinated, status unknown]     C --&gt; E[Vaccinate w/in 7d of exposure]     E --&gt; F[No further action]     D --&gt; G[Vaccinate w/in 7 days or ASAP]     G --&gt; H[Suspect rabies source animal available for testing]     H --&gt; I[Ship to CFIA lab]     I --&gt; J[Animal is rabies +]     I --&gt; K[Animal is rabies -]     J --&gt; L[No further action]     K --&gt; M[Veterinary management - may incl. isolation and observation]     </pre>			
<b>Sample Submission to CFIA Lab</b>	<ul style="list-style-type: none"> <li>Small animals &lt;500g (eg. bats): entire carcass</li> <li>Most animals: submit head</li> <li>Large animals &gt;100kg: submit brain and cervical spinal cord</li> </ul>	<ul style="list-style-type: none"> <li>Use ice-packs if outside temperature &gt; 5°C</li> <li>To complete e-submission form first disable PDF from opening directly in browser and <a href="#">download form</a></li> <li>See <a href="#">CFIA guidance for completing submission form</a></li> <li>Include <a href="mailto:rabies@bccdc.ca">rabies@bccdc.ca</a> as 'other email address'</li> </ul>	<ol style="list-style-type: none"> <li>Place specimen in 1<sup>st</sup> leak-proof bag &amp; close tightly</li> <li>Attach label with sample ID to inner bag</li> <li>Wrap bag in absorbent material</li> <li>Place 1<sup>st</sup> bag in 2<sup>nd</sup> leak-proof bag</li> <li>Place bags and completed sample submission form in shipping box and seal</li> </ol>
<b>Shipment</b>	Ship with a <u>courier</u> as <i>exempt animal species</i> or <i>category B</i> depending on risk ( <b>Purolator</b> is most familiar with the lab)	R-UNIT, LETHBRIDGE LABORATORY CANADIAN FOOD INSPECTION AGENCY TOWNSHIP ROAD 9-1 LETHBRIDGE, AB T1J 3Z4	Contact for Lethbridge Rabies Lab 403-382-5559 <a href="mailto:cfia.rabieswest-rageouest.acia@canada.ca">cfia.rabieswest-rageouest.acia@canada.ca</a>
<b>Helpful Hints</b>	<ul style="list-style-type: none"> <li>You must <b>download the e-submission form</b> to your desktop and open it directly on the computer and not in the browser samples can be refrigerated or frozen. Testing will be delayed if the sample is still frozen when it arrives at the lab.</li> </ul>		