# Rabies Summary Guide for Veterinarians

## Epidemiology
- Caused by rabies virus (family Rhabdoviridae) - can infect all mammals
- In BC, bats are the only known reservoir. Estimated 0.5% of bats are infected although 3-10% of tested bats are positive
- 11 non-bat animal cases reported in BC between 1969-2014 (cats (5), skunk (4), beaver (1), horse (1))
- 1 human rabies case in BC due to bat variant rabies virus in 2003

## Transmission
- Via contact with infected saliva or neurologic tissue through a bite, scratch, fresh break in skin or intact mucus membranes
- Incubation period (IP) in animals: 2 weeks- months. Can transmit rabies up to 10 days before showing signs

## Zoonotic Implications
- Local public health authorities are responsible for assessing risk in potentially exposed persons
- Veterinarians should advise clients that rabies is zoonotic and encourage them to consult their physician or local public health authority.
- When a veterinarian is aware that a suspect rabid animal has potentially exposed humans, they should contact the BCCDC to enable reporting to the health authority where the exposed human resides

## Prevention
- The rabies vaccine is recommended, but not required by law in BC. Vaccines available for cats, dogs, ferrets and livestock

## Clinical Presentation
- **Dumb form**: Throat and masseter muscles paralyzed, excessive salivation, inability to swallow. Progressive paralysis results in death.
- **Furious form**: Aggression, loss of fear, unprovoked attacks, seizure, loss of muscle coordination. Progressive paralysis results in death.
- Bats usually exhibit the dumb form with loss of flight and daytime appearances

## Euthanasia
- BATS - Acceptable methods: volatile anesthetic overdose, cervical dislocation, anesthesia w/CO₂ followed by injectable barbiturate

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### Diagram

1. Domestic animal exposure
   - Consult BCCDC public health vet: 604.829.2110
   - Rabies vaccine up-to-date
     - Unvaccinated, partially vaccinated, status unknown
     - Vaccinate w/in 7d or ASAP

2. Ship to CFIA lab
   - Animal is rabies +
     - No further action
     - Veterinary management, may incl. isolation and observation

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### Sample Submission to CFIA Lab
- Small animals <500g (eg bats): submit entire carcass
- Most animals: submit head
- Large animals >100kg: submit brain and cervical spinal cord

- Do not freeze sample, it delays testing
- Use ice-packs if outside temperature > 5°C
- Include rabies@bccdc.ca as ‘Intermediary party’

### Shipment
- Ship through courier as exempt animal species or category B depending on risk

### Reporting
- Rabies is a reportable disease to the CFIA and to the Chief Veterinary Officer (CVO) of BC
  - Veterinarians fulfill reporting requirements by submitting suspect animals for testing; the CFIA reports all BC animal samples that test positive for rabies to the BC CVO and the BCCDC
  - The BCCDC public health veterinarian should be informed of all suspect rabies cases to assist with risk assessment and management

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**For more information please contact the BCCDC**

**Public Health Veterinarian: 604.829.2110**

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**BCCDC Rabies Guidelines for Veterinarians available at [www.bccdc.ca/rabies](http://www.bccdc.ca/rabies)**

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