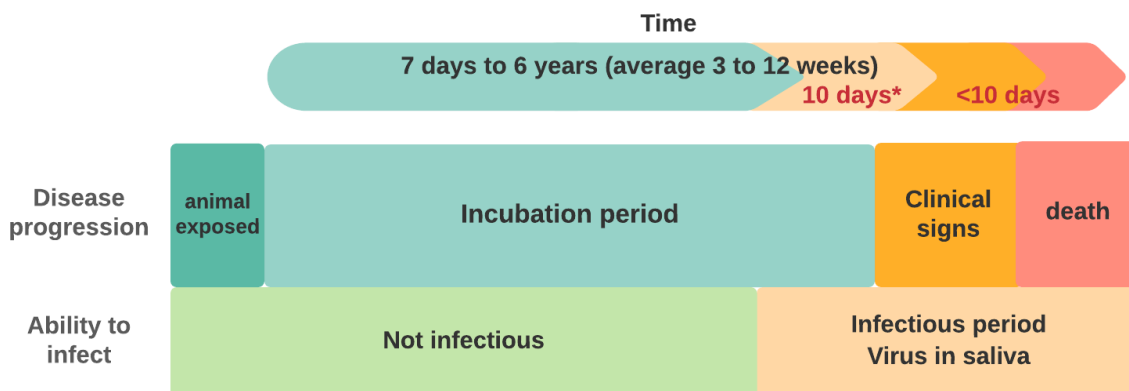


New Brunswick Veterinary Medical Association

GUIDANCE FOR DOMESTIC ANIMALS BITING A PERSON

Rabies causes fatal infections in both humans and animals. After a variable incubation period, the virus disseminates within the central nervous system resulting in severe neurological signs leading to death. Animals can shed virus in their saliva and transmit rabies through bites for several days as shown in Figure 1 (10 days for dogs, cats and ferrets) *before* the onset of clinical signs. Once clinical signs develop death occurs within ten days.

Figure 1: Rabies progression in animals and infectious period¹



*duration of presymptomatic viral shedding only known for cats, dogs, and ferrets

1.0 COLLECT INFORMATION ON DOMESTIC ANIMAL OWNER AND PERSON(S) BIT

Record contact information of domestic animal owner and the date, time, and geographic location of incident.

Request names and contact information of person(s) who were bitten (if known), including if anyone has been to the hospital.

¹ Reference: [BC Rabies Guidance for Veterinarians](#)

2.0 RISK ASSESSMENT

Assess risk that the domestic animal has rabies and **bit a person during the infectious period of rabies (i.e., virus is in saliva)**. Considerations include:

- prevalence of rabies and possibility of exposure,
- health and vaccination status of domestic animal, and
- circumstances of the bite.

ABILITY TO INFECT

Rabies virus is found in saliva for several days before onset of clinical signs (pre-symptomatic shedding) and during progression of clinical illness until death.

Risk assessment outcomes (high, medium, low) determine the appropriate risk management actions.

2.1 Prevalence of Rabies and Possibility of Exposure

Interactions between wild and domestic animals occur (i.e., fights and hunting), and may be unobserved for domestic animals that are allowed to roam outdoors off leash or are entirely unsupervised. In geographic areas with rabies variants, interactions with reservoir species in the previous six months increases the risk of exposure. Strictly indoor domestic animals may have interactions with bats that enter houses.

New Brunswick

- Bat variants occur throughout the province and the raccoon variant (maintained by raccoons and striped skunks) is found currently in the western region of New Brunswick. The Government of New Brunswick has information on their website about rabies and a map showing positive cases found in the province. The website link is: [Rabies \(gnb.ca\)](http://Rabies.gnb.ca)

Canada

- Bat variants are endemic throughout; and wild terrestrial carnivores are reservoirs for skunk, raccoon, and fox variants in different geographic areas.

The **importation of animals from or travel to countries with rabies** increases risk.

- Countries are considered rabies free: [Countries Recognized as Rabies Free for Domestic Cats and Dogs - inspection.canada.ca](http://CountriesRecognizedasRabiesFreeforDomesticCatsandDogs-inspection.canada.ca)
- Countries and political units are considered as being high-risk for canine variant rabies: [Countries at high-risk for dog rabies - inspection.canada.ca](http://Countriesathigh-riskfordograbies-inspection.canada.ca)

For additional information see section *Offending Animal Species and Prevalence of Rabies* *NBVMA Guidance for Domestic Animals Bitten by an Animal*

2.2 Circumstances of the bite

The biting behavior may be normal under the circumstances of the bite. Domestic animals with a history of behavioral issues may normally be aggressive. Cornered or injured animals may become aggressive and bite when approached or handled.

Provoked bites can occur when a person surprises, antagonizes, or threatens a healthy animal or enters its territory. Bites inflicted on a person attempting to feed or handle an apparently healthy domestic animal should generally be regarded as normal behavior.

Unprovoked bites should generally be regarded as abnormal behavior of the domestic animal and more likely to indicate the domestic animal is potentially rabid.

2.3 Health status²

The clinical course is usually a few days to about a week until death. Initial signs are nonspecific (fever, anorexia or increased appetite, dehydration, vomiting, diarrhea, excessive salivation).

Signs suggestive of neurological involvement can occur (i.e., fearfulness, restlessness, temperament changes such as unusual aggressiveness or uncharacteristic affection, dilation of the pupils, hyperreactivity to stimuli). After a few days, the disease can progress into one of two forms.

Paralytic (“dumb”) form is characterized by progressive paralysis, though may sometimes be preceded by a brief excitatory phase (i.e., occurs in pigs). Signs include paralysis of throat and masseter muscles (unable to swallow and profuse salivation), ataxia followed by ascending spinal paralysis and death. Laryngeal paralysis can cause changes in vocalization (i.e., abnormal bellow in cattle or hoarse howling in dogs). Facial paralysis can cause the lower jaw to drop. Animals may become somnolent or depressed. Biting is uncommon.

Furious form is characterized by restlessness, wandering, howling, polypnea, drooling and unprovoked attacks on other animals, people or inanimate objects. Affected animals often swallow foreign objects (i.e., sticks and stones). Cattle may appear unusually alert. Convulsions, especially during the terminal stages, may occur. Eventual progression to incoordination and ascending paralysis and death.

The most reliable clinical signs are behavioral changes and unexplained paralysis, but rabies should be a consideration in all cases of unexplained neurological disease.

CLINICAL SIGNS
Initially nonspecific (i.e., fever, anorexia).
Progression to neurological disease with behavioral changes (i.e., uncharacteristic quietness or aggression, excessive salivation) and ataxia, ascending paralysis, and death.

² Reference [Rabies and Rabies-Related Lyssaviruses \(iastate.edu\)](http://iastate.edu)

2.4 Vaccination status

Rabies is very rare in vaccinated animals. Animals are considered currently vaccinated if the initial licensed vaccine was administered in accordance with the label directions (at least 14 days previously) or booster vaccinations with a licensed vaccine have been administered in accordance with product recommendations.

3.0 RISK MANAGEMENT ACTIONS

Take appropriate risk management actions for domestic animals that **bit a person during infectious period of rabies** (rabies virus is in saliva).

3.1 High Risk

Risk assessment indicates:

- exposure to rabies did occur or possibly occurred in previous six months, **and**
- animal is currently exhibiting behavioral changes and unexplained paralysis or unexplained neurological disease in which rabies is a consideration.

Vaccination status should not *exclude rabies* from the differential diagnosis.

Actions to be taken:

- Discussion with owner
- Report suspect rabid animal
- Euthanasia and submit for testing

Discuss with Owner

- Potential health risks to themselves, their family, the public, and others domestic animals.
- Likelihood the domestic animal has rabies and could have transmitted rabies to the person(s) who were bit.
- That the person(s) who was bit needs to seek medical attention at an Emergency Room.
- Option for euthanasia of suspect rabid animal and the importance of rabies testing. If owner refuses, contact the Department of Agriculture, Aquaculture and Fisheries Field Veterinarian on call (Fredericton office) at the number provided.

Report Suspect Rabid Animal

- Immediately report suspect rabid domestic animal to the Field Veterinarian on Call with the Department of Agriculture, Aquaculture and Fisheries (DAAF).
- Provide name and contact information of owner and of person(s) who were bitten. DAAF will notify Public Health.

DEPARTMENT OF
AGRICULTURE, AQUACULTURE
AND FISHERIES FIELD
VETERINARIAN ON CALL

(506) 453-2210

Euthanasia

- Euthanize
- **Submit for rabies testing** (see *NBVMA Guidance For Rabies Testing*).

3.2 Medium risk

Risk assessment indicates:

- an exposure to rabies possibly occurred in previous six months, **and**
- animal is healthy

Actions to be taken:

- Discussion with owner
- Place animal under **Owner Observation Period** (10 days or 14 days depending on species of animal)
- Euthanasia

Discuss with Owner

- Potential health risks to themselves, their family, the public, and others domestic animals.
- Likelihood the domestic animal has rabies and could have transmitted rabies to the person(s) who were bit.
- Option for euthanasia or owner observation to rule out the possibility the animal has rabies and transmitted the virus when it bit a person(s).
- Discuss behavior modification, including referral to behavioral specialist (if required).
- Discuss the importance of rabies vaccination (if required).

Place Under Owner Observation Period

- Clarify the need for confinement to reduce the risk of rabies transmission to themselves, their family, the public, and other domestic animals.

- Discuss what clinical signs to look for and to immediately report to the veterinarian any changes in behavior, presentation of clinical signs or if the domestic animal bites a person(s) again.
- Determine length of observation period
 - **Dog/Cat/Ferret**
 - Place dog/cat/ferret under Owner Observation for **10 days after bite**.
 - Provide the “Owner Ten Day Observation” factsheet.
 - **Livestock** (horses, cattle, sheep, goats and pigs)
 - Place livestock under Owner Observation for **14 days after bite**³.
 - Provide the “Owner Fourteen Day Livestock Observation” factsheet.
- Determine end of observation period
- Contact the animal owner at end of the observation period to determine if animal has remained healthy.

OWNER OBSERVATION PERIOD

Confinement and observation to rule out possibility animal has rabies bit person during infectious period.

Dog/Cat/Ferret: 10 days

Note: If a person(s) bit went to an Emergency Room, following a physician recommendation for post exposure rabies treatment, dogs, cats, and ferrets can be placed under a **Public Health Ten-Day Observation Period**. Rabies treatment may be delayed pending the outcome of this public health observation period. This Public Health Ten-Day Observation Period will not be communicated to veterinarians unless owner informs you. Thus, an animal may be placed under two observation periods at the same time.

Euthanasia

Euthanasia may be requested because the domestic animal can not be safely observed due to the risk of biting again, animal welfare is a concern, or owner will not comply with **Owner Observation**.

- Rabies testing **is required** for euthanasia of dogs/cats/ferrets **within ten days** of the bite.
- Rabies testing **is not required** for euthanasia of dogs/cats/ferrets **ten days after** the bite.

3.3 Low Risk

Risk assessment indicates:

³ Reference [Management of Potential Rabies Exposures Guideline, 2020 \(ontario.ca\)](https://www.ontario.ca/gov/topics/management-of-potential-rabies-exposures-guideline)

- an exposure to rabies did not occur in previous six months, **and**
- animal is healthy

Actions associated with Low Risk include:

- Discussion with owner
- Place animal under **Owner Monitoring**
- Euthanize

Discuss with Owner

- Potential health risks to themselves, their family, the public, and others domestic animals.
- Likelihood the domestic animal has rabies and could have transmitted rabies to the person(s) who were bit.
- Option for euthanasia or monitoring animal to rule out the unlikely possibility animal has rabies and could have transmitted the virus when it bit a person(s).
- Discuss behavior modification, including referral to behavioral specialist (if required).
- Discuss the importance of rabies vaccination (if required).

Place Under Owner Monitoring

- Discuss what clinical signs to look for and to immediately report to the veterinarian any changes in behavior, presentation of clinical signs or if the animal bites a person(s) again.
- Determine length of monitoring period
 - o **Dog/Cat/Ferret**
 - Monitor for ten days after bite.
 - Provide owner with the “Owner Monitoring” factsheet
 - o **Livestock** (horses, cattle, sheep, goats and pigs)
 - Monitor for fourteen days after bite⁴.
 - Provide owner with the “Owner Monitoring” factsheet

Euthanasia

Euthanasia may be requested because the animal can not be safely monitored due to risk of biting again or animal welfare is a concern.

- Rabies testing **is not** required regardless of length of time after the bite.

⁴ Reference [Management of Potential Rabies Exposures Guideline, 2020 \(ontario.ca\)](#)

Factsheet: Owner Ten Day Observation Dog/Cat/Ferret

Date End of Observation(dd/mm/yyyy): _____

10 days after bite for dogs/cats/ferrets

Veterinarian Contact information: _____

Your dog/cat or ferret must be confined and observed in your home for ten days after the biting incident. Your pet needs to be confined for their health and the health of other animals and people around them.

It is important to:

Limit contact with people and other animals:

- Limit contact of your pet with other adults, children and other animals by having only one person care for the animal. If necessary, an alternate person can help.
- Keep your pet restricted to an area in your home or restricted to an area in a securely fenced in yard.
- Your pet is not allowed to roam freely outdoors. Your pet can leave the property for basic exercise and necessary veterinary care while under the control of an adult (e.g., kept muzzled if needed and on-leash or in a securely closed pet carrier).
- Do not share water bowls, food bowls, toys or bedding, or joint activities, such as playing and going for walks, between your pet under confinement and other animals.
- Do not leave your pet unsupervised for extended periods in a building/room/enclosure (indoor or outdoor) from which escape is possible.

Keep a record of contact with people and other animals:

If people or other animals accidentally come into contact with the pet under observation, record the date, name and contact information of the people and animal owners.

Report any signs of illness or changes in behavior:

Contact your veterinarian *immediately* if your pet appears ill or has a change in behaviour:

- Bites a person
- Sudden loss of appetite, lethargy, or excessive drooling (salivation)
- Changes in behaviour and/or temperament including abnormal aggression or abnormal quietness.
- Unusual irritability or hyperexcitability, or unusual nervousness and hiding from others.
- Abnormal vocalizations or changes in voice
- Sudden unexplained onset of lameness or problems walking

Factsheet: Owner Fourteen Day Observation Livestock

Date End of Observation (dd/mm/yyyy): _____

14 days for livestock (horses, cattle, sheep, goats and pigs)

Veterinarian Contact information: _____

Your livestock (**horses, cattle, sheep, goats and pigs**) must be confined and observed for 14 days after the biting incident. Your animal needs to be confined for their health and the health of other animals and people around them.

It is important to:

Limit contact with people and other animals:

- Limit contact of your animal with other adults, children and other animals by having only one person care for the animal. If necessary, an alternate person can help.
- Keep your animal restricted to an area with secure fencing.
- Do not share water and feed buckets, tools and grooming equipment between the animal under observation and resident animals on the farm.

Keep a record of contact with people and other animals:

While your animal is under observation, record if people or other animals come into contact with the animal under observation, record the date, name and contact information of the people and animal owners.

Report any signs of illness or changes in behavior:

Contact your veterinarian *immediately* if your animal appears ill or has a change in behaviour:

- Bites a person
- Sudden loss of appetite, lethargy, or excessive drooling (salivation)
- Changes in behaviour and/or temperament including abnormal aggression or abnormal quietness.
- Unusual irritability or hyperexcitability, or unusual nervousness and hiding from others.
- Abnormal vocalizations or changes in voice
- Sudden unexplained onset of lameness or problems walking

Factsheet: Owner Monitoring

Date End of Monitoring (dd/mm/yyyy): _____

10 days after bite for dogs/cats/ferrets

14 days for livestock (horses, cattle, sheep, goats and pigs)

Veterinarian Contact information: _____

Your animal must be **monitored** after the biting incident.

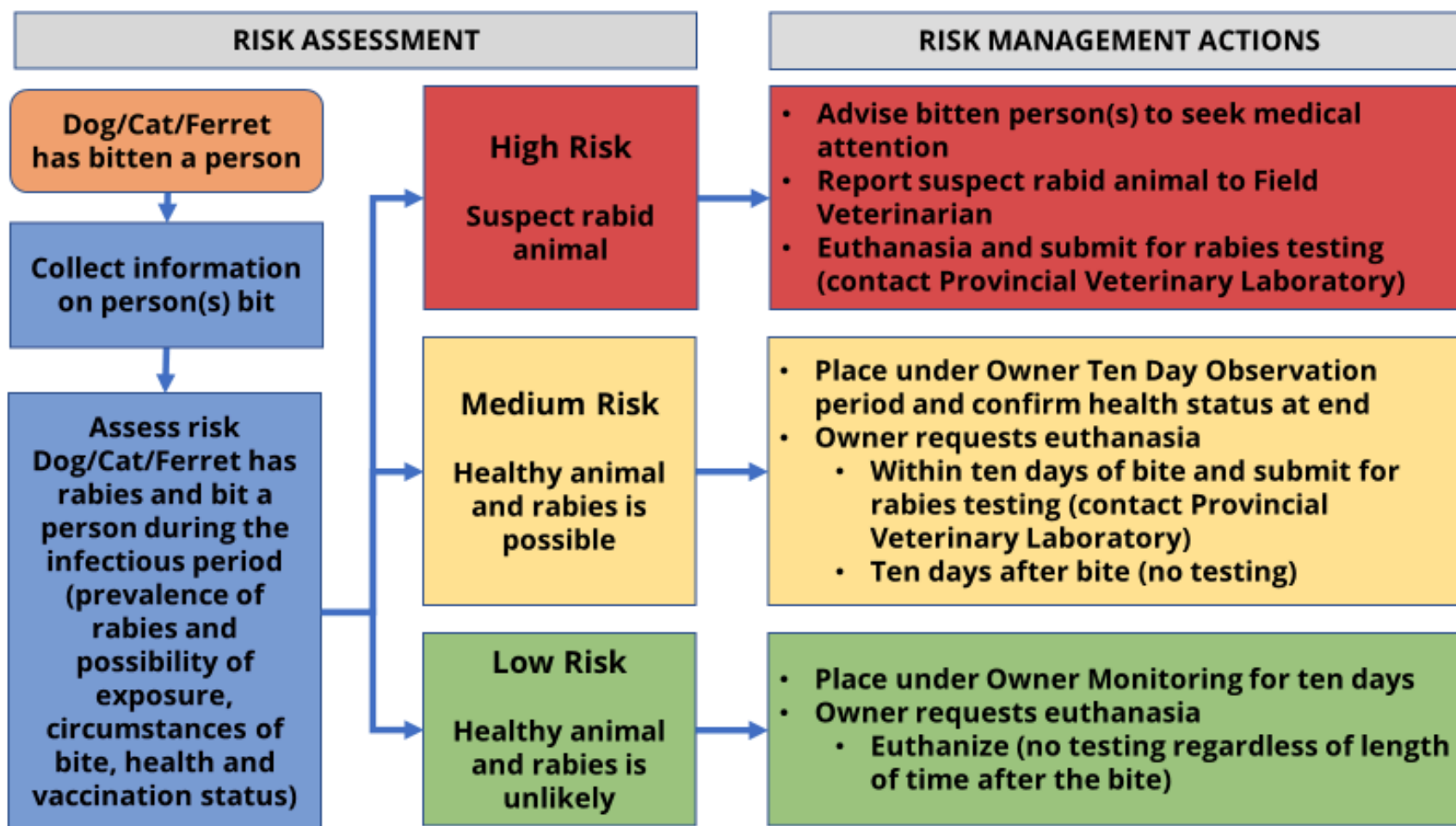
It is important to report any signs of illness or changes in behavior.

Contact your veterinarian *immediately* if your animal appears ill or has a change in behaviour:

- Bites a person
- Sudden loss of appetite, lethargy, or excessive drooling (salivation)
- Changes in behaviour and/or temperament including abnormal aggression or abnormal quietness.
- Unusual irritability or hyperexcitability, or unusual nervousness and hiding from others.
- Abnormal vocalizations or changes in voice
- Sudden unexplained onset of lameness or problems walking

Assess Risk Dog/Cat/Ferret that bit person has rabies and Management Actions

For more information refer to *NBVMA Guidance Domestic Animals Biting a Person*



Assess Risk Livestock that bit person has rabies and Management Actions

For more information refer to *NBVMA Guidance Domestic Animals Biting a Person*

