

<p>IN THIS ISSUE:</p> <ul style="list-style-type: none"> ▪ UPDATE: Domestically acquired case of human rabies ▪ REMINDER: Rabies reporting requirements ▪ REMINDER: Rabies post-exposure prophylaxis 	<p>FROM: Nicholas Brandon, MD, MA, MSc, CCFP, FRCPC Associate Medical Officer of Health</p>
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Key Messages:

- The first case of [domestically acquired human rabies \(bat exposure\) in Ontario](#) since 1967 has occurred.
- Rabies is a viral infection that causes inflammation of the brain and spinal cord, which is almost always fatal once symptoms present.
- All animal exposures/bites must be reported to the patient's local public health unit.
- The decision to administer rabies post-exposure prophylaxis (PEP) sits with the attending physician in consultation with their patient. Physicians can request PEP by contacting Peel Public Health at 905-799-7700.
- The vaccination schedule for PEP should be adhered to as closely as possible and it is essential that all recommended doses of vaccine be administered.

Domestically acquired case of human rabies

Rabies in Ontario and Peel Region

Rabies is a viral infection that causes inflammation of the brain and spinal cord. It is almost always fatal upon onset of symptoms.

Human rabies is an extremely rare disease in Canada due to effective public health prevention and control measures and the availability of publicly funded rabies vaccine. This is the first domestically acquired case of human rabies in Ontario since 1967. There have been no reported human cases of rabies in Peel.

Ontario continues to see rabies in its wildlife population, mostly in bats, but also in other mammals

like raccoons, skunks or foxes. In August, Peel Region reported that two bats tested positive for rabies.

In 2023, Peel Public Health investigated more than 1,400 human exposures to animals that could potentially transmit the rabies virus. Exposures can be from domestic pets, wildlife, or to animals while travelling.

Rabies reporting requirements

All animal exposures/bites which can transmit rabies must be reported to the patient's local public health unit as required under the *Health Protection and Promotion Act* and Ontario Regulation 557.

- High risk exposures include bats, foxes, skunks, and raccoons.
- Lower risk exposures include domestic pets (dogs, cats, and ferrets). Public Health will conduct a 10-day isolation period to rule out rabies, therefore the risk is lowered if the animal is available for observation.

Report the following information, as available:

- Demographics and other relevant information about the exposed person (including weight).
- Information about the animal involved, its location, its vaccination status, and its owner if applicable.
- Any details about the exposure incident.

Rabies in animals can only be confirmed by laboratory testing of the deceased animal.

Rabies post-exposure prophylaxis (PEP)

Guidance on whether a patient may require rabies PEP can be found in the [Management of Potential Rabies Exposures Guideline, 2020 \(gov.on.ca\)](#). Following

reporting of a potential rabies exposure, a Public Health Inspector will assist in the risk assessment of the exposure, and the need for rabies PEP. The decision to administer PEP sits with the attending physician in consultation with their patient.

Post-exposure management is intended to neutralize the rabies virus at the site of infection before the virus can enter the central nervous system. PEP includes vaccine and a dose of rabies immune globulin (RabIG) administered at separate distant sites on the patient.

The [vaccination schedule for PEP](#) should be adhered to as closely as possible and it is essential that all recommended doses of vaccine be administered. Whenever possible, an immunization series should be completed with the same product.

If administering RabIG into multiple wounds, each wound should be locally infiltrated with a portion of the RabIG using a separate needle and syringe.

- If administering into multiple wounds, RabIG can be diluted in a diluent permitted by the specific product labeling to provide RabIG in sufficient volume for thorough infiltration of all wounds.
- Administer rabies vaccine intramuscularly into the deltoid muscle in older children and adults or into the *vastus lateralis* muscle (anterolateral thigh) in infants.
- **Do not administer in the gluteal region as it may result in decreased vaccine response.**
- **Do not use the same syringe to administer RabIG and the vaccine.**

For immunocompromised persons or those taking antimalarial drugs:

- An additional fifth (5th) dose of vaccine is given, plus antibody titres done 7 to 14 days after completing the series.
- Immunosuppressive agents should not be administered during PEP unless essential for the treatment of other conditions.

For individuals previously immunized against rabies:

- Two (2) doses of rabies vaccine are administered on day 0 and day 3.
- **Do not administer RabIG.**

More information is available at:

- [Rabies Prevention and Control Protocol, 2022 \(gov.on.ca\)](#)
- Public Health Ontario, [Management of Patients with a Suspected Rabies Exposure](#)

For more information about rabies, reporting requirements and prophylaxis, contact Peel Public Health at 905-799-7700.