

Rabies Prevention and Control in WDGPH

Rabies Virology

- **Zoonotic disease of mammalian species – humans are incidental hosts**
- **Most severe acute viral infection of humans, with a case fatality rate of almost 100%.**
- **Transmitted by – a bite, scratch and infected saliva with mucous membrane**
- **Migration of virus to CNS via the peripheral nerves**

Human Cases in Canada / Ontario

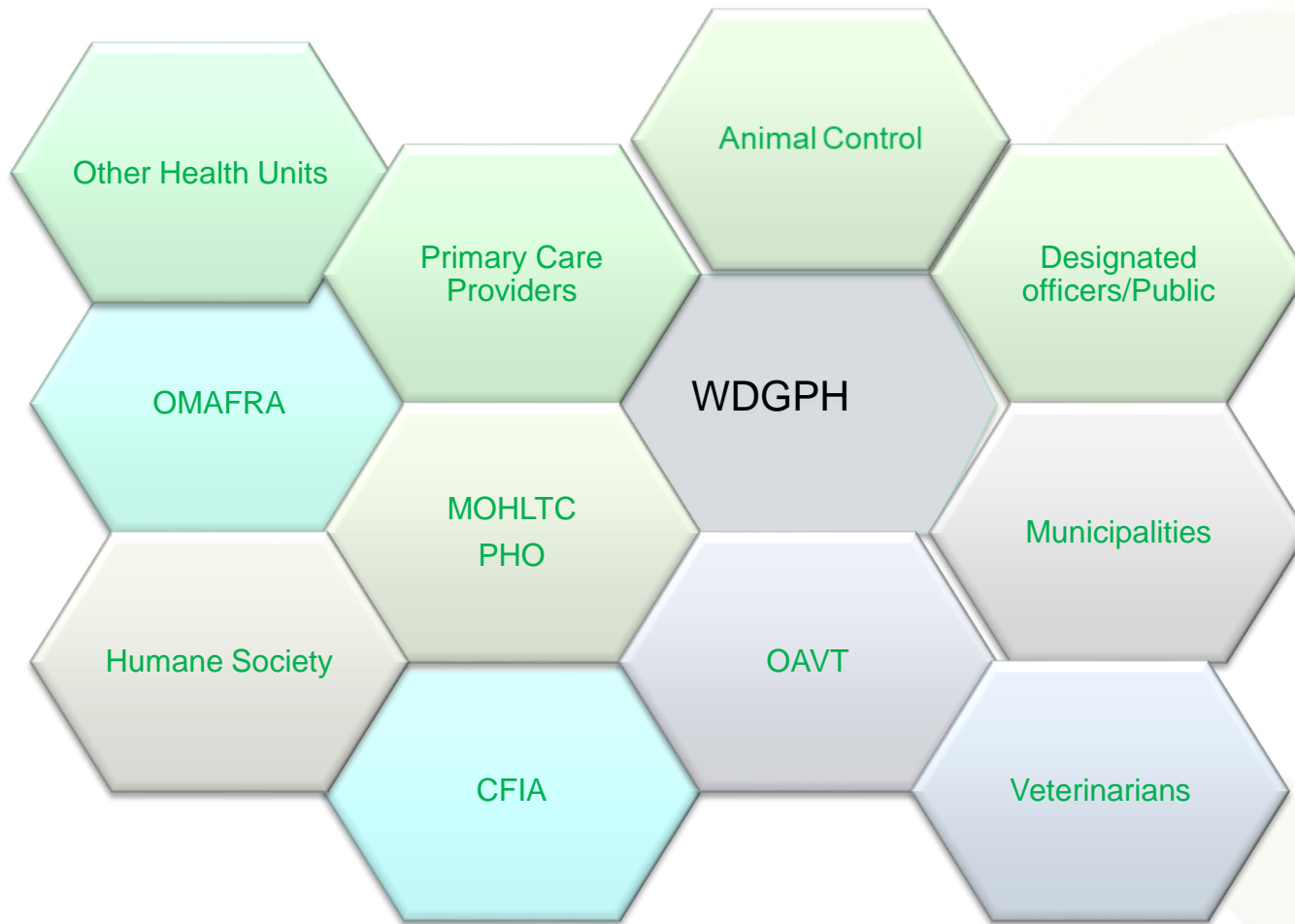
- Human rabies extremely rare disease in Canada. Between 1924 and 2024, 26 people in six provinces died of rabies; Quebec (12), Ontario (6), Saskatchewan (2), Alberta (2), British Columbia (3) and Nova Scotia (1).
- The recent case of human rabies that was acquired in Ontario occurred in Sep 2024 in Brant County and another human case occurred in 2012 that was acquired while travelling outside of Canada
- In Ontario, bats currently pose the biggest threat of transmitting the virus to humans.
- Dog exposures are the greatest risk for returning travelers and wildlife species eg bats, racoon, skunk and fox

Rabies Control Strategies

In Ontario, four main strategies have been used to prevent rabies cases in humans:

1. Public Health messaging informing people to avoid contact with wild animals.
2. Wildlife rabies control programs targeting skunks, raccoons and foxes. (note: no program for bat rabies)
3. Vaccinating bridge vectors such as dogs, cats, other pets, and farm animals.
4. Human Rabies Post-Exposure Prophylaxis (RPEP), and Pre-Exposure Prophylaxis

Partners In Rabies Control



Rabies Post-Exposure management approach

- Immediately clean the wound with soap and water. The wound should be flushed out for approximately 15 minutes.
- Suturing the wound is not advised.
- Viricidal can be applied (such as alcohol solutions or iodine-based solutions) (PHO, 2021)
- Tetanus prophylaxis and antibiotics as appropriate
- A course of four rabies vaccines as well as rabies immune globulin (RIG).
 - Decision based on risk assessment – Canadian Immunization Guidelines, and the Guidance Document for the Management of Suspected Rabies Exposures (Public Health Division, MOHLTC 2020)

Animal Exposure Reporting

- Rabies is a reportable disease in Ontario as per HPPA.
- When a suspected exposure to rabies occurs, the case must be reported to WDG Public Health, which is available 24/7.
- WDG Public Health will investigate, provide a risk assessment, and recommend rabies post-exposure prophylaxis, as needed.

How to Report Animal Exposure/Bite

- Fax completed Animal Exposure Reports (Animal Exposure Report) to Reportable Diseases fax line at 1-855-WDG-LINE (1-855-934-5463).
- Phone: 1-800-265-7293 ext. 4753 or 7006, to report animal exposure and any questions about rabies.

Duty to Report Animal Exposure

Ontario Regulation 557/90 (O. Reg 557/90) sets out the duty to report animal bite and contact information:

- A physician, registered nurse in the extended class, veterinarian, police officer or any other person who has information concerning either or both of the following shall, as soon as possible, notify the medical officer of health and provide the medical officer of health with the information, including the name and contact information of the exposed person:
 1. Any bite from a mammal.
 2. Any contact with a mammal that is conducive to the potential transmission of rabies to persons.

Animal Exposure Report



Animal Exposure Report

Complete and Fax ASAP to: 1-855-934-5463

Reporting Agency: _____ Date: _____

Phone Number: _____ Date of Incident: _____

Owner/Animal Information	Victim Information
Owner Name: _____	Victim Name: _____
Address: _____	Address: _____
Phone Number: _____	Phone Number: _____
Type of Animal: <input type="checkbox"/> Cat <input type="checkbox"/> Dog <input type="checkbox"/> Bat	DOB: _____ Sex: <input type="checkbox"/> M <input type="checkbox"/> F
<input type="checkbox"/> Other: _____	Weight: _____ kg/lb
Details of Incident: _____	Name of Guardian: _____
_____	Type of Exposure: <input type="checkbox"/> Bite <input type="checkbox"/> Scratch
_____	<input type="checkbox"/> Handling <input type="checkbox"/> Other <input type="checkbox"/> Unknown
_____	Location of Wound: _____

Check box if rabies post-exposure prophylaxis started at hospital

RIG	<input type="checkbox"/> Imogam® <input type="checkbox"/> HyperRAB® <input type="checkbox"/> KamRAB™	Lot:	Exp:	Number of Vials:
Vaccine	<input type="checkbox"/> IMOVAX® <input type="checkbox"/> RABAvect®	Lot:	Exp:	Number of Vials:

The information on this form is collected under the authority of the *Health Protection and Promotion Act* in accordance with the *Municipal Freedom of Information and Protection of Privacy Act* and the *Personal Health Information Protection Act*. This information will be used for the delivery of public health programs and services; the administration of the agency; and the maintenance of healthcare databases, registries and related research, in compliance with legal and regulatory requirements. Any questions about the collection of this information should be addressed to the Privacy Officer.

Key Takeaways

- **Rabies is a deadly disease**
 - Human rabies from dog and other animal exposures in returning travelers
- Rabies is presently rare in Ontario in domestic animals.
- Bat rabies remains a threat – 16.5 percent bat specimen submitted tested positive for rabies.
- Rabies post-exposure prophylaxis is based on risk assessment, in consultation with Public Health
- WDG Public Health provides consultation, rabies vaccine & RIG, follow up with animal exposures, and assistance with specimen testing
- Report all animal exposures to Public Health as soon as possible.



How to Contact Us



**Phone: 1-800-265-7293 ext. 4753 or
7006**

Email: PHI.Intake@wdgpublichealth.ca