



Rabies Situational Assessment

Summary Report

Situational Assessment
Southwestern Public Health
Last Updated: 2024-07-15

Rabies Situational Assessment

What is the Situation?

Phase 1: Indicator Table

Using epidemiological data from a variety of sources, describe the overall health status of your population as it relates to this program or topic area. Indicators and population subgroups are identified by using data that shows statistically significant or clinically relevant differences from their age/sex counterparts, Ontario and/or our peer health units.

The rate of rabies in Ontario has remained at zero cases since 1967. Southwestern Public Health (SWPH) has a statistically significant higher number of Emergency Department (ED) visits for injuries due to dog bite or another animal compared to the provincial average for Ontario and other health units that are mainly rural for the past several years (2019-2021).

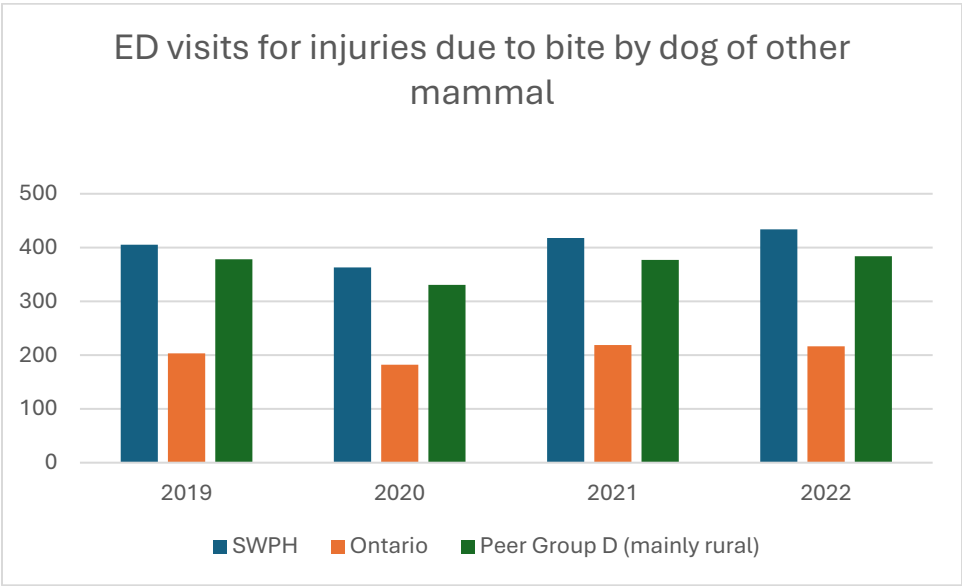
From the Hedgehog database, information collected for the same period, there were 455 animal bite investigations reported to SWPH. In 2021, 402 of these cases were domestic animals, which suggests that the highest number of animal bites which cause an ED visit are from owned domestic animals, such as cats and dogs.

Based on the above summary, state the most significant health concern in this program or topic area. Describe the subgroup(s) that is/are experiencing this health concern. State which indicator has been selected to move forward with to complete the next phases of the situational assessment.

Even though the number of rabies cases remains at zero, SWPH has almost double the number of ED visits related to dog or other mammal bites than the rest of Ontario (Figure 1). Therefore, it is important to better understand and address the cause.

The indicator that we chose to move forward with into phase 2 of the situational assessment was the rate of ED visits due to dog or another mammal bites.

Figure 1. ED visits, age-standardized rate per 100,000 population



Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Health equity snapshot quick reference guide. Toronto, ON: King’s Printer for Ontario; 2024

What is Influencing the Situation?

Phase 2a: Risk and Protective Factors/ Force Field Analysis and Phase 2b: Environmental Scan

Using the results from the Force Field Analysis and the Environmental Scan, summarize each level of influence in Table 1 below (public policy, community, organizational, interpersonal, and individual factors), and describe the factors that are making the situation above better or worse and include existing and missing interventions in the SWPH region.

Public Policy: (local, provincial, and federal policies and laws that regulate or support health actions)

See Table 1 for the results from phase 2a.

There were many risk or protective factors for rabies identified at the public policy level. Protective factors at this level include municipal by-laws and muzzle orders for known aggressive dogs¹, and Canadian Food Inspection Agency (CFIA) policies pertaining to importing of animals from high-risk endemic countries.^{2,3,4} Risk factors at the policy level include a lack of consistency in healthcare setting for reporting animal bites.^{5,6,7} In addition, there is a lack of policy about the translocation of racoons.^{8,9}

Community: (formal or informal social norms that exist among individuals, groups, or organizations, can limit, or enhance healthy behaviours)

Protective factors at the community level include community collaboration on prevention and protection measures (i.e. by-law officials working with public health to create breed-specific by-laws) with a range of stakeholders including local police, Ontario Provincial Police, municipal by-law, and local veterinarians.¹⁰ Risk factors at the community level include domestic animals acquired during the pandemic not being properly socialized due to COVID-19 restrictions.^{11,12} Furthermore, dog parks have been noted as a source of unwanted dog bites.¹³

Organizational: (rules, regulations, policies, and informal structures that constrain or promote healthy behaviours)

There were no risk factors identified at the organizational level. Protective factors at the organizational level include increasing education within the region to raise awareness on reducing exposure to wild animals, especially during the spring and summer months.^{14,15} In addition, evidence suggests that low-cost domestic animal rabies clinics increase vaccination rates in pets.¹⁶ Finally, teaching school-aged children about rabies has been noted as a protective factor.¹⁷

Interpersonal: (social connections, relationships, and interactions with other people, which can provide social support or create barriers to interpersonal growth that promotes healthy behaviour)

Risk factors at the interpersonal level include humans attempting to intervene when their dog gets into altercations with another dog.¹⁵ A protective factor at this level pertains to animal owners making friends, family, and visitors aware of their pet's behaviour and habits to reduce the risk of a bite.¹⁵

Individual: age, race, gender, factors that influence behaviour such as knowledge, attitudes, beliefs, and personality)

A risk factor at the individual level includes the location of the incident. Incidents or bites in the home are generally more severe than in public places.¹⁵

TABLE 1 ENVIRONMENTAL SCAN AND ASSOCIATED RISK OR PROTECTIVE FACTORS FOR RABIES

Level of Influence	Protective Factor	Risk Factor	Existing Interventions in the SWPH Region
Public Policy	Muzzle orders on dangerous dogs or known aggressive breeds ⁽¹⁾		By-laws (Municipal officers within SWPH region) City of St. Thomas BY-LAW NO. 71-2011A By-Law to provide for the registering, licensing, restricting and prohibiting the running at large of Dogs, Cats and Animal within the City of St. Thomas/Animal Control Bylaw. - BY-LAW NO. 09-06 OF THE CORPORATION OF THE

			<p>TOWN OF AYLMER Being a By-Law to provide for the registering, licensing, restricting and prohibiting the running at large of animals and dogs within the Town of Aylmer</p> <p>- Corporation of the Township of Malahide By-Law No. 05-71 Being a by-law to provide for the Regulation, restriction and prohibition of the keeping and running-at-large of dogs in the Township of Malahide</p> <p>- 2023-011: Dog Control By-law-</p> <p>Municipality of Bayham- The Corporation of the</p> <p>Municipality of Central Elgin BY- LAW 1139 Being a By- law to Prohibit the Running at Large of Dogs; For Imposing a Fee on the Owners of Dogs; For Regulating the Disposal of Dogs Running at Large; and For Other Matters relating to Dogs</p> <p>- The Corporation of the Municipality of West Elgin By-Law No. 2020- Being a by-law to put in place regulations associated with the control, licensing and registration of animals within the Municipality of West Elgin</p> <p>- The City of Woodstock – Muzzle Order (Chapter 0202)</p> <p>- Exotic Animals Prohibition (Chapter 0224)</p> <p>-The Town Of Tillsonburg By –law 2021-013 Dangerous Dogs</p> <p>- Animals Running at large</p> <p>-Muzzle Orders</p> <p>Town of Ingersoll By-Law 01-3990 Animals running at large</p> <p>Town of Norwich By-Law 15-2017 and 09-2021</p> <p>-running at large</p> <p>-muzzle order</p> <p>-dangerous dogs</p> <p>Township of South-west Oxford By-law 76-2017 animals running at large; dangerous dogs, muzzle orders</p>
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			Township of Blandford Blenheim By-Law 2275-2021 animals running at large; dangerous dogs, muzzle order Township of Zorra By-law 2015-43 animals running at large; dangerous dogs, muzzle order Township of East-Zorra Tavistock By-law 2001-54 animals running at large; dangerous dogs, muzzle order
	CFIA policies enforcing legislation on terrestrial animals from highly endemic countries ⁽²⁾		Health of Animals Act (CFIA)
	Laws have been implemented to stop the importation of dogs from endemic countries ^(3,4)		Health of Animals Act (CFIA) Notice to industry: New measure prohibiting the entry of commercial dogs from countries at high risk for dog rabies - Canadian Food Inspection Agency (canada.ca)
		Risk assessments are not being conducted in accordance with Ministry of Health Guidelines ^(6,7)	Annual reminder letters to stakeholders (SWPH environmental health team, rabies leads) Newsletters are sent to health care providers.
		Canadian Border Agency issues with translocation of raccoons ^(8,9)	Ministry of Natural (MNR) Resources Annual rabies baiting program
Community	Collaboration between stakeholders, including local police, OPP, Municipal By-Law ⁽¹⁰⁾		Rabies Awareness Month: Education sessions and resource sharing with stakeholders (SWPH environmental health team, rabies leads)
	Low-cost rabies clinics for domestic animals ⁽¹⁶⁾		Low-cost rabies clinics/voucher programs (vet clinics and SWPH environmental health team)
		Domestic animals obtained during COVID-	

		19 pandemic are not well socialized due to community restrictions ⁽¹²⁾	
		Community dog parks are a source of bites ⁽¹³⁾	
Organizational	Increased education to public during spring/summer months on how to reduce risk when exposed to wild animals ⁽¹⁴⁾		Rabies Awareness Month and Rabies Awareness Day (SWPH communications team and environmental health team, rabies leads) Education campaigns geared towards public and avoid exposure during animal mating/'peak' season (SWPH communications team and environmental health team, rabies leads)
	School-aged children receive short lessons on rabies ⁽¹⁷⁾		
Interpersonal	Animal owners making friends/family/visitors aware of their pet's behaviour/traits ⁽¹⁵⁾		
		Humans get bit when their pet gets into an altercation with another pet ⁽¹⁵⁾	
Individual	Well-trained pets will likely not bite their owners ⁽¹⁵⁾		
		Home locations of incident have a higher rate of severity than public places ⁽¹⁵⁾	

Decision

The force field analysis revealed many risk factors at all levels concerning potential rabies virus transmission. There were no risk or protective factors found that were not already being

addressed by SWPH or other organizations within our area related to preventing rabies virus exposure.

Based on the information collected during phases 1 and 2a, the decision is to stop the situational assessment for rabies and to conduct an evidence review on reducing dog bites in 2025.

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