

PUBLIC HEALTH

Exposure to bats: updated recommendations

Bryna Warshawsky MDCM, Shalini Desai MD

Previously published at www.cmaj.ca

Since the mid-1990s, Canada and the United States have recommended the testing of bats or the use of rabies postexposure prophylaxis after discovery of a bat in the same room as a child, a cognitively impaired person or a sleeping person.^{1–3} These recommendations were based on case reports from the United States in which a strain of bat rabies virus was isolated from people who had had no obvious exposure to a bat.²

Canadian researchers have since determined that rabies is extremely rare when there is no obvious contact with a bat. A case of rabies related to bedroom exposure (the presence of a bat in the room of a sleeping individual with no recognized physical contact with the bat) has been estimated to occur in Canada once every 84 years.⁴ This rate is very low even though bedroom exposures to bats occur fairly often (about 10 per 10 000 people annually) and are reported for post-exposure management less than 5% of the time.⁵ The researchers estimated that more than 2.6 million people would need to be treated to prevent 1 case of rabies related to a bedroom exposure.

The National Advisory Committee on Immunization is therefore now recommending the testing of bats or the use of rabies postexposure prophylaxis only when *both* of the following conditions apply:

- There has been direct contact with a bat (i.e., the bat has touched or landed on a person) *and*
- A bite or scratch from a bat or exposure of a wound or mucous membranes to saliva from a bat cannot be ruled out.

A full discussion of these changes is available in the committee's updated recommendations on managing bat exposures to prevent human rabies.⁶ Clinicians can also consult with their local public health office for assistance in determining the risk associated with a particular exposure to a bat.

This article has been peer reviewed.

From the Middlesex-London Health Unit (Warshawsky), London, Ont.; and the Centre for Immunization and Respiratory Infectious Diseases, Public Health Agency of Canada (Desai), Ottawa, Ont.

CMAJ 2009. DOI:10.1503/cmaj.091293



Jon Hall/mammalwatching.com

More than 2.6 million people would need to be treated to prevent 1 case of rabies after bedroom exposure to a bat.

Competing interests: None declared.

REFERENCES

1. National Advisory Committee on Immunization. *Canadian immunization guide*. 7th ed. Ottawa (ON): Public Health Agency of Canada; 2006. p. 285–98.
2. US Centers for Disease Control and Prevention. Human rabies, Alabama, Tennessee and Texas, 1994. *MMWR Morb Mortal Wkly Rep* 1995;44:269–72.
3. US Centers for Disease Control and Prevention. Human rabies, Washington, 1995. *MMWR Morb Mortal Wkly Rep* 1995;44:625–7.
4. De Serres G. *Rabies post-exposure prophylaxis after bat exposure*. Presented at a meeting of the National Advisory Committee on Immunization; Ottawa; 2008 Feb. 4.
5. De Serres G, Skowronski DM, Mimault P, et al. Bats in the bedroom, bats in the belfry: re-analysis of the rationale for rabies post-exposure prophylaxis. *Clin Infect Dis* 2009;48:1493–9.
6. National Advisory Committee on Immunization. Recommendations regarding the management of bat exposures to prevent human rabies. *Can Commun Dis Rep* 2009;35(ACS-7):1–28. Available: www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/acs-dcc-7/index-eng.php (accessed 2009 Nov. 25).