

16. Fearneyhough MG, Wilson PJ, Clark KA, Smith DR, Johnston DH, Hicks BN, et al. Results of an oral rabies vaccination program for coyotes. *J Am Vet Med Assoc.* 1998;212:498–502.
17. Sidwa TJ, Wilson PJ, Moore GM, Oertli EH, Hicks BN, Rohde RE, et al. Evaluation of oral rabies vaccination programs for control of rabies epizootics in coyotes and gray foxes: 1995–2003. *J Am Vet Med Assoc.* 2005;227:785–92. DOI: 10.2460/javma.2005.227.785
18. Nunley G. The coyote in the Edwards Plateau of Texas—an update. In: Shelton M, editor. Special issue: predation. *Sheep and Goat Research Journal.* 2004;19:23–8.
19. United States Department of Agriculture. Animal damage control program: final environmental impact statement. Vols. 1, 2 and 3. Washington: The Department; 1994.
20. Sterner RT, Smith GC. Modelling wildlife rabies: transmission, economics and conservation. *Biol Conserv.* 2006;131:163–79. DOI: 10.1016/j.biocon.2006.05.004
21. Slate D, Chipman RE, Rupprecht CE, Deliberto T. Oral rabies vaccination: a national perspective on program development and implementation. In: Timm RM, Schmidt RH, editors. Proceedings of the Twentieth Vertebrate Pest Conference; 2002 Mar 4–7; Reno, Nevada, USA; 2002. pp. 232–40.
22. Slate D, Rupprecht CE, Rooney JA, Donovan D, Lein DH, Chipman RB. Status of oral rabies vaccination in wild carnivores in the United States. *Virus Res.* 2005;111:68–76. DOI: 10.1016/j.virusres.2005.03.012
23. Krebs JW, Mandel EJ, Swerdlow DL, Rupprecht CE. Rabies surveillance in the United States during 2004. *J Am Vet Med Assoc.* 2005;227:1912–25. DOI: 10.2460/javma.2005.227.1912
24. Lucey BT, Russell CA, Smith D, Wilson ML, Long A, Waller LA, et al. Spatiotemporal analysis of epizootic raccoon rabies propagation in Connecticut, 1991–1995. *Vector Borne Zoonotic Dis.* 2002;2:77–86. DOI: 10.1089/153036602321131878
25. Russell CA, Smith DL, Childs JE, Real LA. Predictive spatial dynamics and strategic planning for raccoon rabies emergence in Ohio. *PLoS Biol.* 2005;3:e88. DOI: 10.1371/journal.pbio.0030088
26. Foroutan P, Meltzer MI, Smith KA. Cost of distributing oral raccoon-variant rabies vaccine in Ohio: 1997–2000. *J Am Vet Med Assoc.* 2002;220:27–32. DOI: 10.2460/javma.2002.220.27
27. Uhaa IJ, Data VM, Sorhage FE, Beckley JW, Roscoe DE, Gorsky RD, et al. Benefits and costs of using an orally absorbed vaccine to control rabies in raccoons. *J Am Vet Med Assoc.* 1992;201:1873–82.
28. Kreindel SM, McGill M, Meltzer MI, Rupprecht CE, DeMaria A. The cost of rabies postexposure prophylaxis: one state's experience. *Public Health Rep.* 1998;113:247–51.
29. Centers for Disease Control and Prevention. Rabies postexposure prophylaxis—Connecticut, 1990–1994. *MMWR Morb Mortal Wkly Rep.* 1996;45:232–4.
30. Chang HG, Eidson M, Noonan-Toly C, Trimarchi CV, Rudd R, Wallace BJ, et al. Public health impact of reemergence of rabies, New York. *Emerg Infect Dis.* 2002;8:909–13.
31. Shwiff SA, Sterner RT, Jay-Russell M, Parikh S, Bellomy A, Meltzer MI, et al. Direct and indirect costs of rabies exposure: a retrospective study in southern California (1998–2003). *J Wildl Dis.* 2007;43:251–7.
32. Nunan CP, Tinline RR, Honig JM, Ball DG, Hausefield P, LeBer CA. Postexposure treatment and animal rabies, Ontario, 1958–2000. *Emerg Infect Dis.* 2002;8:217–24.
33. Meltzer MI. Assessing the costs and benefits of an oral vaccine for raccoon rabies: a possible model. *Emerg Infect Dis.* 1996;2:343–9.
34. Kemere P, Liddel MK, Evangelou P, Slate D, Osmek S. Economic analysis of a large scale oral vaccination program to control raccoon rabies. In: Clark L, Hone J, Shivik JA, Watkins RA, Vercauteren KC, Yoder JK, editors. Human conflicts with wildlife: economic considerations. Fort Collins (CO): US Department of Agriculture; 2002. p. 109–15.
35. Shwiff SA, Kirkpatrick KA, Sterner RT. Economic evaluation of a Texas oral rabies vaccination program for control of a domestic dog–coyote rabies epizootic: 1995–2006. *J Am Vet Med Assoc.* 2008;233:1736–41. DOI: 10.2460/javma.233.11.1736

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# etymologia

## *Lyssavirus* [lis'ə-vi'rəs]

From the Greek *lyssa* (frenzy or madness) and Latin *virus* (poison). In Greek mythology, Lyssa was the goddess of rage, fury, and rabies, known for driving mad the dogs of the hunter Acteon and causing them to kill their master. Aristotle (4th century BCE) said, “Dogs suffer from the madness. This causes them to become irritable and all animals they bite to become diseased.” The disease in humans was characterized by hydrophobia, in which the sick person was simultaneously tormented with thirst and with fear of water. Hippocrates is believed to refer to rabies when he said that persons in a frenzy drink very little, are disturbed and frightened, tremble at the least noise, or are seized with convulsions.

Lyssavirus is a genus of the family Rhabdoviridae, which includes rabies virus and other related viruses that infect mammals and arthropods (e.g., Australian bat lyssavirus, Duvenhage virus, European bat lyssaviruses 1 and 2, Lagos bat virus).

**Source:** Steele JH, Fernandez PJ. History of rabies and global aspects. In: Baer GM. The natural history of rabies, 2nd ed. New York; CRC Press; 1991. Philadelphia: Saunders; 2007; Mahy B. The dictionary of virology, 4th edition. London: Academic Press; 2009. Dorland's illustrated medical dictionary, 31st edition.