Preventing Wildlife Rabies Saves Lives and Money

Rabies is a deadly viral disease that affects the nervous system of mammals. Several variants of the rabies virus exist in the United States. Each variant is spread predominantly by one wildlife species, but all variants can infect and kill mammals, including humans. Every year, Federal, State, and local governments distribute approximately 9 million oral rabies vaccine (ORV) baits to reduce wildlife rabies and prevent disease transmission to people, livestock, and pets. Economists at Wildlife Services (WS)—a program within the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS)—have conducted cost-benefit analyses of these efforts showing that eliminating wildlife rabies saves lives and can save taxpayers millions of dollars each year.

Preventing Rabies

More than 90 percent of reported U.S. rabies cases occur in wildlife annually. Raccoons account for the most reported cases, but bats, skunks, foxes, and coyotes are also commonly infected. Wildlife species that are natural reservoirs of the rabies virus, such as raccoons, thrive in many environments and maintain the virus either at low levels or spread it quickly during outbreaks.



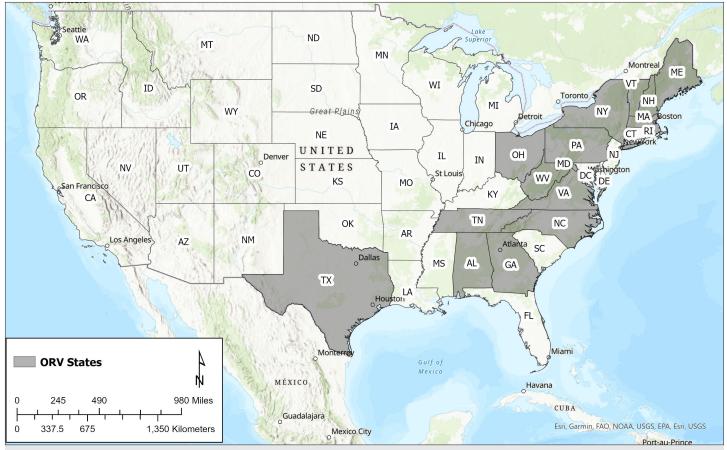
ORV baits, like those shown here, have been successfully used to vaccinate raccoons, skunks, and foxes against rabies.



Since 1995, WS has partnered with governmental and private cooperators to combat wildlife rabies. Each year, WS and cooperators distribute more than 8 million ORV baits in selected eastern States to create a zone to contain raccoon rabies and prevent its westward spread into populations beyond the Appalachian Mountains. Although raccoon vaccination is our largest rabies prevention effort, WS helped the Texas Department of State Health Services successfully eliminate canine rabies in coyotes in 2004. Management efforts using ORV baiting also reduced the spread and geographic distribution of a unique variant of the disease in gray foxes. In Arizona, WS works on a variety of collaborative rabies research projects focused on gray foxes, skunks, and bats, as well as free-ranging dogs on Tribal lands.

Economic Benefits of ORV Programs

Managing wildlife rabies in the United States costs hundreds of millions of dollars in public health investigations, rabies diagnostic testing, pre- or post-exposure prophylaxis (PEP), pet and livestock vaccinations, and public education efforts. Although our country's rabies prevention network is effective, about 55,000 people still receive PEP annually, resulting in over \$200 million in health care costs.



USDA distributes ORV baits in 13 eastern States, including Maine, New Hampshire, Vermont, New York, Massachusetts, Pennsylvania, Ohio, West Virginia, Virginia, North Carolina, Tennessee, Alabama, and Georgia. USDA also provides baits for distribution in Texas. For detailed information about current ORV zones, go to www.arcgis.com/apps/dashboards/e329fd002d03444eaa56adc64c7d2f0f.



The raccoon rabies virus variant is found throughout the eastern United States. Without the ORV program, raccoon rabies would spread far and fast with significant economic impacts. Economic models estimate that raccoon rabies, in the absence of management, would stretch west and south from central Wisconsin to the Texas-Louisiana border in 20 years and cost more than \$1.2 billion—an additional \$60 million per year. This information provides

an economic basis for decision making and serves as a guide for future ORV baiting campaigns in the United States and other countries.

Societal and environmental changes are leading to more interactions between people, pets, and wildlife, particularly in urban and suburban areas. We have made progress towards eliminating rabies in terrestrial wildlife, but there is still work to do. To eliminate rabies from our country, we need to prevent the disease in wildlife.

Learn More

For more information, contact:

National Rabies Management Program USDA, APHIS, Wildlife Services Kathy Nelson, Operations Staff Supervisor kathleen.m.nelson@usda.gov

Phone: 603-223-9623

www.aphis.usda.gov/national-wildlife-programs/rabies