



2023 Veterinary Alert # 9

Raccoon Oral Rabies Vaccine (ORV) to Be Used in New York City to Help Control Raccoon Rabies

- The New York City Department of Health and Mental Hygiene in coordination with the United States Department of Agriculture (USDA), and the NYC Department of Parks and Recreation, will vaccinate raccoons by distributing oral rabies vaccine (ORV) baits in parts of Brooklyn, Queens, and Manhattan from October 30 through mid-November.
- ORV will be done using the Raboral V-RG™ bait, which contains a liquid vaccinia-rabies glycoprotein (V-RG) recombinant virus vaccine; it does not contain the rabies virus.
 - The baits are generally not harmful to dogs or cats, but a pet may vomit after eating a large number of them.
 - Exposures to humans could potentially occur through direct contact with the liquid vaccine; affected skin should be washed thoroughly with soap and warm water.
- Veterinarians may receive questions from pet owners regarding ORV.

October 30 2023

Dear Colleagues,

The raccoon variant of the [rabies virus](#) has been present in New York City (NYC) since 1992. This variant is most efficiently transmitted among raccoons with occasional spillover to other animals. To date this year, [12](#) animals (4 raccoons from Queens, 1 cat and 4 raccoons from Staten Island, 1 bat from Manhattan, 1 skunk from Brooklyn, and 1 skunk from the Bronx) have tested positive for rabies in NYC. Oral rabies vaccination (ORV) has routinely been used as a strategy to control rabies among raccoons. The NYC Department of Health and Mental Hygiene (NYC Health Department), in coordination with the United States Department of Agriculture, Cornell University, and the NYC Department of Parks and Recreation began an ORV program to vaccinate raccoons in NYC in 2014. The ORV program has occurred every year (except 2019) in Brooklyn, Queens, and Staten Island, with Manhattan added in 2020.

ORV will be done using the Raboral V-RG™ bait, which contains a liquid vaccinia-rabies glycoprotein (V-RG) recombinant virus vaccine. A low-flying helicopter was used to distribute the vaccine over several parks, wooded areas, and less-populated sections of Staten Island in May of this year. The bait will be distributed by hand-tossing and using fixed bait stations strategically placed in several parks and wooded sections of Brooklyn, Queens, and Manhattan. The baiting will begin on October 30 and run through mid-November.

The baits are generally not harmful to people, pets, or wildlife. It is not possible to get rabies from the vaccine. Raccoons are attracted to the brown fish-scented bait, each containing a small packet of pink liquid vaccine coated with an attractant made of fishmeal, fish oil, and wax. Each labeled bait contains approximately 2 milliliters of rabies vaccine. The baits are not harmful to dogs or cats, but a pet may vomit after eating a large number of them. In the event a pet encounters a bait, pet owners should not attempt to remove the bait from the animal's mouth to avoid being bitten.

It is not harmful for people to touch an intact bait; however, because of the offensive odor, gloves are recommended. There is a very low risk of human infection with the vaccinia virus after contact with the pink liquid vaccine. **People**

who handle damaged bait should wear gloves or use a plastic bag. Damaged baits can be bagged and disposed of in regular trash. People who have direct skin contact, particularly with the pink liquid vaccine inside the bait, should wash the area with soap and water and call the Poison Control Center at 212-764-7667 (212-POISONS).

Despite the millions of ORV doses distributed across the United States, there have only been two documented human infections with vaccinia virus due to exposure to ORV, both of whom were exposed to liquid vaccine while attempting to take bait away from their dogs (one was bitten).^{1,2} Exposure may cause skin lesions similar to those caused by smallpox vaccination and may similarly be spread person-to-person through contact with such lesions. Persons at risk are those who have atopic dermatitis or other active exfoliative skin conditions and those with immune deficiencies or immunosuppressive conditions.

Veterinarians in New York City should be on the alert over the coming weeks and be aware that they may receive questions from pet owners regarding ORV in Brooklyn, Queens, or Manhattan.

VETERINARIANS MAY ADVISE CLIENTS AS FOLLOWS:

- It is not possible for a person or pet to get rabies from the vaccine because the vaccine does not contain the rabies virus; however, it does contain attenuated vaccinia virus.
- It is not harmful for people to touch an intact bait, but gloves are highly recommended.
- Anyone who has direct skin contact with the pink liquid vaccine should immediately wash the affected skin with soap and water or an alcohol-based hand sanitizer and call the Poison Control Center at 212-764-7667 (212-POISONS).
- The bait packets have a strong fishmeal smell that is not attractive to people or most other animals.
- A label clearly identifies each bait packet that reads: "Rabies Vaccine Live Vaccinia Vector. Do Not Disturb" and a toll-free number, 877-722-6725; callers will be routed to the Poison Control Center.
- Bait found near residences or in parks, but not in the open, should be left alone; baits out in the open where pets or children are more likely to encounter them should be thrown into deeper cover under trees or bushes while wearing gloves or using a plastic bag; dispose of damaged baits in regular trash.
- The baits are generally not harmful to dogs, cats, or other pets, but a pet may vomit if they eat a large number of them. **Do not try to remove a packet from an animal's mouth.**
- People who see raccoons should **not** try to trap the raccoons themselves. Call a licensed trapper instead.

For information regarding rabies and baiting, visit:

- New York City Health Department: <https://www1.nyc.gov/site/doh/health/health-topics/rabies.page>
- New York State Department of Health: <https://www.health.ny.gov/diseases/communicable/zoonoses/rabies>

To view prior Veterinary Alerts, visit <https://www1.nyc.gov/site/doh/providers/resources/zoonotic-vectorborne-publications.page>

As always, we greatly appreciate your partnership and cooperation.

-Asha Abdool, MPH, Renee King MPH, Christina Ng MPH, Kevin Lovingood MPH, Ryan MacDonald MPH, Marc Paladini MPH, Stephanea Roeser MPH, Sally Slavinski, DVM, MPH, DACVPM
Zoonotic and Vector Borne Disease Unit, Bureau of Communicable Disease, ZIVDU@health.nyc.gov

-Mario Merlino, Assistant Commissioner Bureau of Veterinary and Pest Control Services Division of Environmental Health

¹ Human infection due to recombinant vaccinia-rabies glycoprotein virus. N Engl J Med. 2001 Aug 23;345(8):582-6.

² Human vaccinia infection after contact with a raccoon rabies vaccine bait—Pennsylvania, 2009. MMWR 2009;58:1204–7.

*-Visit our webpage for more information and resources for veterinarians: [Zoonotic and Vector-borne Diseases: Information for Providers](#)
-If you do not receive these alerts via email and would like to be added to the distribution list, please email zivdu@health.nyc.gov*