



NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
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Commissioner

2022 Veterinary Alert # 8

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

- **Rabies** has been circulating among raccoons in New York City since 1992. To date in 2022, 18 animals with rabies have been reported.
- The New York City Department of Health, in conjunction 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 Staten Island, Brooklyn, Queens, and Manhattan.
 - Bait stations and hand distribution will be used in Brooklyn, Queens, and Manhattan from September through October.
 - A low-flying helicopter will be used to distribute ORV baits in Staten Island.
- 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 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.

September 12, 2022

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, [eighteen \(18\)](#) animals (7 raccoons from Queens, 1 cat, 1 raccoon and 2 bats from Staten Island and 2 skunks and 5 raccoons from Bronx) have tested positive for rabies. Oral rabies vaccination (ORV) has routinely been used as a strategy to control rabies among raccoons. The NYC Health Department, in coordination with the United States Department of Agriculture (USDA), 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 for 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 will be used to distribute the vaccine over several parks, wooded areas, and less-populated sections of Staten Island and the Gateway National Recreation Area in Brooklyn and Queens. The bait will be distributed by hand-tossing and using fixed bait stations strategically placed by federal workers in several parks and wooded sections of Brooklyn, Queens, and Manhattan. The baiting will begin on September 12th and run through mid-October.

The baits are not harmful to people, pets, or wildlife. 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 bait from the animal's mouth to avoid being bitten.

It is not harmful for persons to touch an intact bait. However, because of the offensive odor gloves are recommended. There is a risk, although very low, of human infection with the vaccinia virus after contact with the pink liquid vaccine (you cannot contract rabies from the vaccine). Persons who handle damaged bait should wear gloves or use a plastic bag. Damaged baits can be bagged and disposed of in regular trash. Persons 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 cases of human infection 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, Manhattan, or Staten Island.

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 persons to touch an intact bait, but gloves are highly recommended.
- Instruct anyone who had direct skin exposure to the pink liquid vaccine to 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 to 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, 1-877-722-6725; 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 it should be tossed 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 not harmful to dogs or cats, 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.**
- Residents who see raccoons should NOT try to trap the raccoons themselves. Call a licensed trapper instead.

For information regarding rabies and baiting, visit the NYC and NYS Health Department websites:

New York City Health Department: <https://www1.nyc.gov/site/doh/health/health-topics/rabies.page>

New York State DOH: <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,

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-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](#)
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