

## 2024 Veterinary Alert #1

Canine Distemper Virus Circulating Among Raccoons and Skunks in the Greenwood Heights, Sunset Park and Windsor Terrace Sections of Brooklyn

- Canine distemper virus (CDV) has been circulating among raccoons and skunks in the Greenwood Heights, Sunset Park, and Windsor Terrace sections of Brooklyn since November 2023. CDV testing on a subset of reported dead animals detected the virus in three raccoons and one skunk.
- Veterinarians should ensure their patients are properly vaccinated to prevent potential infection with CDV.
- Raccoons are highly susceptible to CDV, as are mustelids, such as ferrets, minks, and skunks.
- Dogs and raccoons infected with CDV may have a clinical presentation similar to that of rabies.

Please share with your colleagues in veterinary medicine and your staff.

January 17, 2024

Dear Veterinary Colleagues,

Canine distemper virus (CDV) has been circulating among raccoons and skunks in the Greenwood Heights, Sunset Park and Windsor Terrace sections of Brooklyn since November 2023. To date there have been reports of dead animals (eight raccoons and one skunk) and sick animals (three skunks and two raccoons) in these areas. Testing done on a subset of dead animals by the Cornell University College of Veterinary Medicine detected CDV in three raccoons and one skunk. Two raccoons and two skunks were submitted to the New York City (NYC) Department of Health and Mental Hygiene (Health Department) Public Health Laboratory and were negative for rabies virus.

CDV is common among raccoons in the US. The virus is likely being transmitted regularly among raccoons in NYC without causing large outbreaks. When the virus is introduced into a large, dense population of raccoons, it can spread rapidly and cause widespread illness. Several large outbreaks of CDV occurred among raccoons in multiple parks in 2018 (see Veterinary Alerts <u>#3</u>, <u>#6</u> and <u>#7</u> from 2018); there was also an outbreak in <u>2022 in Brooklyn</u> and, more recently, at Inwood Hill Park in Manhattan in October 2023.

CDV is a paramyxovirus and is related to human measles virus. It is most often identified in dogs and other canines, but can also affect mustelids such as ferrets, minks, as well as skunks and raccoons. It is a highly contagious, systemic viral disease with potential gastrointestinal, respiratory, and neurological complications. Infection is spread primarily via respiratory secretions from infected animals, and the virus can be shed for several months.

Clinical illness in dogs can vary depending on their age and immune status. Mild illness can include fever, anorexia, fatigue, upper respiratory illness, and oculo-nasal discharge that may mimic "kennel cough." Severe systemic manifestations are most common in younger dogs with inadequate immunity. Dogs may go on to develop lower respiratory illness, vomiting, and watery or bloody diarrhea.

Dogs that develop vesicular or pustular skin lesions rarely go on to develop central nervous system (CNS) disease, whereas dogs that develop hyperkeratosis of the nasal planum and digital pads usually have CNS involvement. CNS illness may develop concurrently or one to three weeks after recovery from systemic illness and is typically progressive. Signs may include myoclonus, ataxia, paresis, hyperesthesia, and seizures with "chewing-gum"-like behavior. Infected

dogs with minimal clinical illness that develop CNS signs months to years later are described as having old dog encephalitis (ODE). For additional information on CDV diagnostic options, see <u>2018 Veterinary Alert #6</u>.

Ensure your patients are properly vaccinated to prevent potential infection with CDV. Infection can be prevented in dogs through routine administration of canine distemper vaccine to puppies starting at 6 to 8 weeks of age, at 2 to 4-week intervals until 16 weeks of age. The vaccine is usually given as part of a combination canine vaccine. Booster protocols for older dogs may vary from annually to every three years.

CDV is not thought to be transmissible to humans, although general precautions should always be taken when handling any suspicious animals. The virus is sensitive to lipid solvents and most disinfectants and can be killed using routine disinfection. It is inactivated by ultraviolet light, heat, and desiccation, and is relatively unstable outside the host, although it has been known to survive in affected tissues or secretions for up to 3 hours at room temperature.

Dogs, raccoons and skunks infected with CDV may have a clinical presentation similar to that of rabies. Remember to consider rabies for any animal presenting with an acute, rapidly progressive neurologic illness. Rabid animals have been reported regularly in NYC. For the most recent rabies activity in NYC, visit <u>nyc.gov/health/rabies</u>.

As always, we appreciate your continued collaboration with our efforts to monitor public health issues in New York City.

Sincerely,

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Zoonotic and Vector-borne Disease Bureau of Communicable Disease ZIVDU@health.nyc.gov 347-396-2600

*Visit our webpage for information and resources for veterinarians: <u>Zoonotic and Vector-borne Diseases:</u> Information for Providers* 

If you do not receive these alerts via email and would like to be added to the distribution list, email <u>zivdu@health.nyc.gov</u>

Report animal diseases to the NYC Department of Health and Mental Hygiene:

- Online through a secure web-based reporting platform
- Call 347-396-2600
- Fax the Animal Disease Case Report form to 347-396-2753

**Report upon suspicion:** Anthrax, brucellosis, glanders, influenza (novel with pandemic potential), mpox, plague, Q fever, rabies, SARS, tularemia

**Report upon laboratory diagnosis:** Arboviral encephalitides, carbapenem-resistant organisms, leptospirosis, psittacosis, Rocky Mountain spotted fever, salmonellosis, tuberculosis

Report within 24 hours any outbreak or suspected outbreak of any disease, condition, or syndrome, of known or unknown etiology, which may pose a danger to public health.