

2023 Veterinary Alert #4: Update on Rabid Skunk in Brooklyn

- This Health Alert is a follow up to a Veterinary Health Alert # 3, dated April 27, 2023.
- Rabies variant sequencing was performed on specimens from a skunk collected from Greenwood Heights, Brooklyn, that tested positive for rabies on April 18, 2023.
- Sequencing revealed the skunk was infected with a rabies virus variant consistent with big brown bat (*Eptesicus fuscus*), suggesting the skunk was infected following exposure to a rabid bat, not a raccoon.
- This finding eliminates concerns that there is unrecognized transmission of the raccoon rabies virus variant among raccoons in the Greenwood Heights area of Brooklyn.
- Animal rabies surveillance is ongoing across New York City and is used to identify individual rabid animals, identify areas with evidence of sustained transmission of the rabies virus among raccoons, and spillover events to other species, as occurred with this skunk.
- For current information on rabies and animals testing positive for rabies in NYC, visit <u>nyc.gov/health/rabies</u>.

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

May 18, 2023

Dear Colleagues,

This Health Alert is a follow up to a <u>Veterinary Health Alert # 3</u>, dated April 27, 2023. Additional testing using variant sequencing was performed on specimens from a skunk from Greenwood Heights, Brooklyn, that tested positive for rabies on April 18, 2023. The variant sequence results revealed the skunk was infected with a variant of big brown bat (*Eptesicus fuscus*) rabies virus. This suggests the skunk was exposed to a rabid bat, not a rabid raccoon, eliminating the concern that unrecognized transmission of the raccoon rabies virus variant is occurring among raccoons in the Greenwood Heights area of Brooklyn. A sick raccoon found near the skunk and collected on the same day tested negative for rabies and for canine distemper virus.

Species-specific variants of the rabies virus have adapted to certain species that serve as rabies virus reservoirs. These variants are transmitted primarily between members of the same species and, with the exception of bats, occur in geographically distinct regions. Raccoons are the primary rabies reservoir species in New York City (NYC) and along the Atlantic Coast. Occasionally, rabid raccoons transmit the virus to other mammals; this is called a spillover event. In NYC, spillover events are most often the result of raccoons transmitting the virus to skunks and stray cats. Variants of bat rabies virus is uncommon in NYC, with only 47 rabid bats reported since 1992, compared to more than 600 rabid raccoons. Bats very rarely transmit rabies to other mammals, and this is the first documentation of a spillover event of bat to mammal transmission in NYC.

While awaiting the final variant typing results, pre-emptive oral rabies vaccine baiting was conducted on April 27, 2023 in the area where the skunk was found. Enhanced surveillance will be done in the area to monitor sick raccoons and skunks for rabies as well as canine distemper virus.

For more information, please see:

- <u>Rabies Prevention and Reporting for Veterinarians</u>
- Management guidelines for animals that bit a person and dogs and cats exposed to rabies vector species

As always, we greatly appreciate your partnership and cooperation.

Sincerely,

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