



NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
Oxiris Barbot, MD
Commissioner

2020 Veterinary Advisory # 1: 2019 Summary of Animal Rabies in New York City and 2020 Update

- **In 2019, 24 animals from New York City tested positive for rabies**
- **Two raccoon rabies vaccination efforts were conducted in Manhattan in response to the first rabid raccoons reported in Manhattan since 2011**
- **Raccoon rabies vaccination efforts conducted in Brooklyn, Queens and Staten Island since 2014 were discontinued due to lack of funding**
- **On February 20, 2020, a rabid raccoon was identified in Queens**
- **For current information on rabies and animals testing positive for rabies in NYC, visit www.nyc.gov/health/rabies**

Please share with your colleagues in Veterinary Medicine and your staff

March 9, 2020

Dear Veterinary Colleagues,

This advisory is a summary of animal rabies testing data and raccoon vaccination activities in 2019 and a 2020 update. The most up-to-date rabies information is on our website at <https://www1.nyc.gov/site/doh/health/health-topics/rabies.page>. As in the past, urgent matters regarding rabies will be brought to your immediate attention via fax or email.

Between January 1 and December 31, 2019, there were 24 animals in NYC that tested positive for rabies at the NYC Department of Health and Mental Hygiene (DOHMH) Public Health Laboratory: 2 raccoons and 1 cat from the Bronx, 10 raccoons from Staten Island, and 9 raccoons, 1 skunk and 1 bat from Manhattan. Rabid raccoons have not been identified in Manhattan since 2011. In 2018, there was a total of 14 animals testing positive for rabies: 9 from the Bronx, 1 from Queens, and 4 from Staten Island.

In response to the Manhattan rabid raccoons and skunk that were collected from Inwood Hill and Highbridge Parks (Figure), rabies vaccination efforts were implemented in both parks and 5 other nearby parks, including the northern section of Central Park, to prevent further spread of the virus. Vaccination was administered using oral rabies vaccine (ORV) baiting and trap-vaccinate-release (TVR) in April and November through a collaborative effort by NYC DOHMH, U.S. Department of Agriculture (USDA) and the NYC Department of Parks and Recreation. No rabid raccoons have been reported in Manhattan since November 22, 2019.

A raccoon oral rabies vaccine (ORV) program conducted by the USDA, Cornell University, DOHMH and Parks since 2014 in Staten Island and parts of Queens and Brooklyn was discontinued in 2019 due to a lack of state funding. The program was part of a larger effort to eliminate raccoon rabies in 17 states.

In 2020, to date, 5 raccoons have tested positive for rabies: 2 in the Bronx, 2 in Staten Island, and 1 in Queens. Rabid animals are rare in Queens. Previously, there was one rabid raccoon identified in Queens in 2018, one in 2016, and one in 2010, all in different neighborhoods.

Raccoons are the primary rabies reservoir species in NYC and along the Atlantic Coast. Occasionally, rabid raccoons transmit the virus to other wild animals, usually skunks. Rabid raccoons pose the greatest risk of rabies for pets and other domestic animals. Rabid bats have also been found in all 5 boroughs but in much smaller numbers than terrestrial animals. Bats are the primary vector of human rabies infections in the US.

Dogs and cats are required to maintain vaccination against rabies. Indoor pets can be at risk for rabies if they escape outside or if a rabid bat enters the home. No rabid dogs have been reported in NYC since 1954, although dogs infected with the raccoon variant have been reported in neighboring areas outside NYC. Since 1992, 18 cats have tested positive for rabies; almost all were strays. Rabid cats were last reported from the Bronx: 1 each in 2019 and 2018 and 2 in 2017. Consider rabies for any animal presenting with a progressive neurologic illness, especially in a stray animal, an animal with a bite wound of unknown origin or exposure to a potentially rabid animal, or a dog from a country where the canine rabies variant is present.

Management guidelines for dogs and cats with a known exposure to a rabies vector species or any rabid animal

- Never vaccinated
 - Isolate in veterinary facility for up to 6 months at owner's expense or euthanize
- Currently vaccinated
 - Immediately give booster vaccine. Confine and observe in owner's home for 45 days
- Not currently vaccinated
 - Managed on case by case basis

Management guidelines for healthy dogs and cats that have bitten a person

- Confine and observe dog or cat for 10 days
 - If animal not currently vaccinated, do not vaccinate until end of 10-day observation period
 - If remains healthy, rabies post-exposure prophylaxis (PEP) not indicated for bite victim
 - If becomes ill, must be evaluated by veterinarian and the Health Department

What All Veterinarians Can Do

- **Educate** clients to:
 - Avoid contact with wild animals and stray animals
 - Make sure their dog or cat is up-to-date on its rabies vaccinations
 - Avoid leaving their pets outdoors unattended and feed them indoors
 - Avoid trying to separate animals that are fighting
 - Contact their veterinarian if their pet has been in contact with a raccoon, skunk, bat or any animal that might be rabid
- **Report** animal bites and suspect animal rabies cases to the Health Department's Veterinary Public Health Services (VPHS):
 - **VPHS Animal Bite Unit (ABU)** during business hours **646-364-1799**
 - **Poison Control Center** outside business hours **212-POISONS (212-764-7667)**
- **Questions?** Contact the NYC Health Department:
 - For questions on rabies exposures in pets, animal bites, and other animal-related issues
 - Veterinary Public Health Services (VPHS) 646-364-1783
 - For questions on rabies exposures in people, PEP, and other human-related rabies issues
 - Bureau of Communicable Disease 347-396-2600
 - After hours: NYC Poison Control Center 212-764-7667

As always, we greatly appreciate your partnership and cooperation.

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Table 1. 2019 Summary of NYC Animal Rabies Testing

SPECIES	BRONX		BROOKLYN		MANHATTAN		QUEENS		STATEN ISLAND		TOTAL NYC	
	# tested	# positive	# tested	# positive	# tested	# positive	# tested	# positive	# tested	# positive	# tested	# positive
Bat	5	0	9	0	15	1	7	0	2	0	38	1
Cat	20	1	30	0	39	0	29	0	22	0	140	1
Dog	10	0	6	0	13	0	12	0	2	0	43	0
Groundhog	0	0	0	0	1	0	0	0	4	0	5	0
Opossum	2	0	7	0	1	0	10	0	3	0	23	0
Raccoon	31	2	110	0	43	9	164	0	76	10	424	21
Skunk	9	0	0	0	5	1	9	0	2	0	25	1
Other*	6	0	5	0	5	0	2	0	1	0	19	0
Total	83	3	167	0	122	11	233	0	112	10	717	24

*Other includes 1 ferret, 3 mice, 1 rabbit, 1 rat, and 13 squirrels

Figure. Rabid Animals in Manhattan, 2019

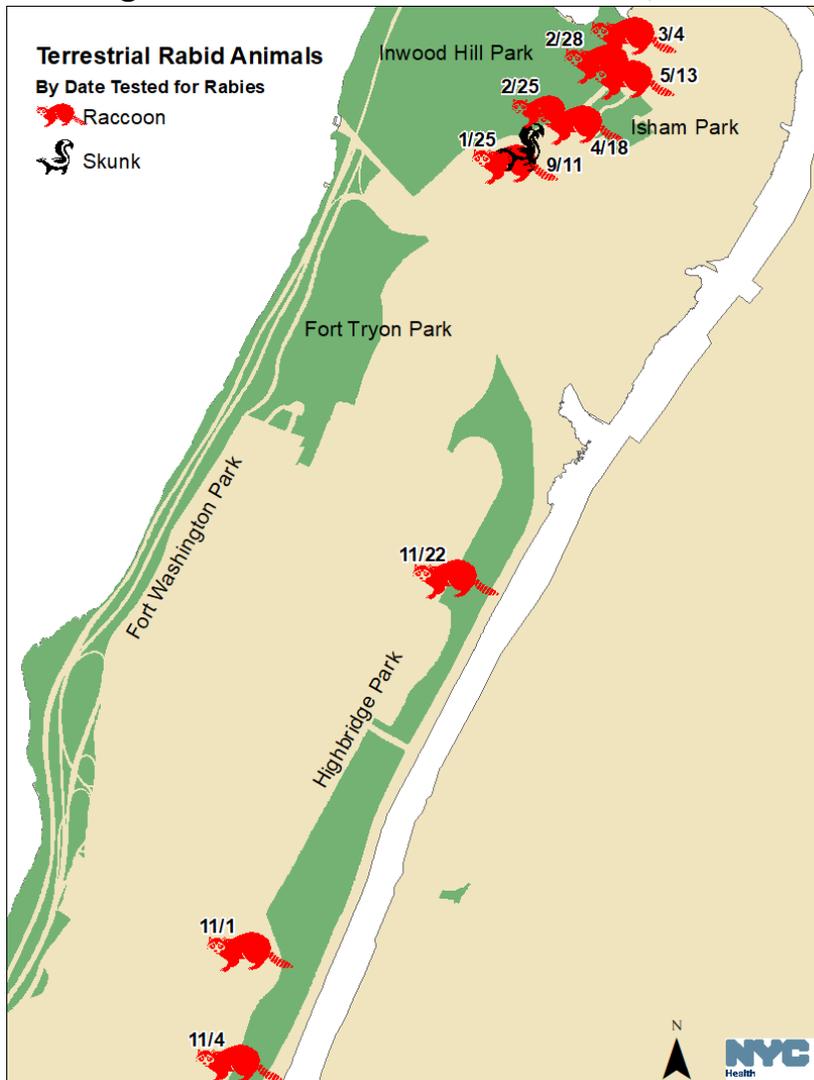


Table 2. NYC Laboratory-Confirmed Rabid Animals, 1992-2019

SPECIES	BRONX	BROOKLYN	MANHATTAN	QUEENS	STATEN ISLAND	TOTAL POSITIVE	TOTAL TESTED	% POSITIVE
Raccoon	211	9	154	12	195	579	8051	7.2
Skunk	49	0	1	0	5	55	391	14.1
Bat	16	7	14	4	6	47	1213	3.9
Cat	7	1	2	0	8	18	3661	0.5
Dog	0	0	0	0	0	0	2127	0
Opossum	2	1	0	1	3	7	676	1.0
Other*	2	0	0	0	1	3	1814	0.2
Total	287	18	171	17	218	709	17933	4.0

*Other includes 2 coyotes (1999 and 2010, Bronx) and 1 groundhog (2007, Staten Island).

Table 3. NYC Animal Rabies Testing by Year and Species, 2015-2019

ANIMAL	2015		2016		2017		2018		2019	
	# tested	# positive								
Bat	42	2	19	1	18	0	24	0	38	1
Cat	79	0	82	0	78	2	137	1	140	1
Dog	33	0	33	0	37	0	39	0	43	0
Deer	0	0	0	0	0	0	2	0	0	0
Groundhog	1	0	4	0	0	0	2	0	5	0
Muskrat	2	0	0	0	1	0	0	0	0	0
Opossum	24	0	7	0	4	0	19	1	23	0
Rabbit	1	0	0	0	3	0	0	0	1	0
Raccoon	405	4	120	4	104	12	333	10	424	21
Skunk	15	0	4	0	22	4	23	2	25	1
Squirrel	3	0	2	0	11	0	7	0	13	0
Other**	4	0	15	0	15	0	11	0	5	0
Total	609	6	286	5	293	18	597	14	717	24

**Other includes 23 rats, 9 mice, 7 chipmunks, 3 shrews, 2 lesser kudus, and 1 each cattle, coati, ferret, gopher, kangaroo, sea lion

Table 4. NYC Animal Rabies Testing by Year and County, 2015-2019

COUNTY	2015		2016		2017		2018		2019	
	# tested	# positive								
BRONX	62	1	54	2	94	18	107	9	83	3
BROOKLYN	108	1	65	0	46	0	126	0	167	0
MANHATTAN	83	0	59	1	77	0	164	0	122	11
QUEENS	322	0	76	1	51	0	147	1	233	0
STATEN ISLAND	34	4	32	1	25	0	53	4	112	10
Total	609	6	286	5	293	18	597	14	717	24