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PET CITY

## Hazmat Suits and 500 Shelter Cats: Rare Flu Forces New York Quarantine



At a quarantine center in Queens for cats exposed to a rare strain of avian flu, workers must wear full protective gear at all times, even

## By Andy Newman

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In an industrial corner of Queens on Monday, on the second floor of a cavernous warehouse, in a gated-off area known as Pod C, a worker in a hazmat suit, goggles and a respirator mask sat on the floor of a metal cell.

She held a colored string with a ball dangling from it. With the other hand, she petted a cat. "Psswsswss," the woman said through the mask. The cat arched its back against her latex-gloved hand.

All around her, other workers in hazmat suits attended to other cats, playing, feeding them, changing their litter. A bigger room downstairs held hundreds more, many of whom had the sniffles.

This scene, like something out of a post-apocalyptic cat video, is now playing daily at a temporary quarantine center the American Society for the Prevention of Cruelty to Animals opened on Dec. 29 to house the entire feline population of New York City's shelter system, some 500 cats.

In November, cats at the shelters started getting sick at an alarming rate. The culprit turned out to be a strain of bird flu that had never before been seen in cats, and had not been found in any animal in 10 years.

The virus, a mild form of the flu strain H7N2, is usually not life-threatening to cats; the main symptoms are runny nose and eyes, congestion, coughing and lip smacking. It is only slightly transmissible to humans, and causes only mild illness, according to the federal Centers for Disease Control and Prevention.

But an unfamiliar disease in a new population is a serious thing. The outbreak is also by far the biggest influenza outbreak ever observed in cats.

"Any time influenza viruses start to behave in an unusual way, there's a concern about what might happen," said Aleisha Swartz, a doctor on loan from the University of Wisconsin veterinary school's shelter medicine program, which is managing medical care at the quarantine center. "There's this virus that popped up, and if we didn't respond, it could have become widespread in cats all over the place."



Most of the cats at the quarantine center are housed in group kennels so they can socialize. Alex Wroblewski for The New York Times

While a few cats that were adopted from the shelters during the outbreak had also contracted the virus, it seems to have been contained.

In some ways, the center, with its grids of cells and multiple levels of security to thwart escape attempts, feels like a prison. Inmate No. A1099603 is an orange-and-white tabby named Aries. A sign on his cage says, "Moved from J12 to I45 due to fighting/roughhousing."

In other ways, it is a giant infirmary. Caretakers note symptoms on the Medical and Behavior Concerns Board ("bloody nose," "not eating/seems weak"). In makeshift doctors' offices off the main cage areas, patients are examined and medications dispensed.

The center is staffed by professional animal-crisis workers, who have converged on Queens from all over the country — they are being put up at a hotel nearby — and by local A.S.P.C.A. volunteers. Each morning, about four dozen responders file into the warehouse, on a side street in the Long Island City neighborhood opposite a cold-storage facility and a cement plant. They gather in an open office beneath a chart that lays out the chain of command, get their marching orders, suit up and pass through a plastic-lined portal into the hot zone.

Kristi Heytota, a staffing coordinator for JetBlue in New York who took five days off to help at the center, spent Monday morning scooping out litter boxes and lining the group kennels with fresh paper. Her assignment, which also included feeding the cats, was "tough, but very rewarding," she said.

Justine Matthews, also on kibble duty, said, "It's just what we have to do to get these guys well." She was visiting from the San Diego Humane Society.

During the day, the cats keep pretty quiet. "But they have a nice ruckus overnight," said Tim Rickey, the A.S.P.C.A. field-investigations official who set up the quarantine center. "We come in and the place is destroyed."

How H7N2, last seen in 2006 in poultry-market birds in the city and elsewhere, found its way into a cat in 2016 remains an epidemiological mystery.

In mid-November, at the flagship city shelter in East Harlem, a cat named Mimi fell ill with a respiratory infection that turned into fatal pneumonia. Robin Brennen, the veterinary director of Animal Care Centers of NYC, which operates the shelters, ordered tests from a lab. The result came back: a canine influenza virus, H<sub>3</sub>N<sub>2</sub>.

That did not make sense to Dr. Brennen. H3N2 spreads quickly in dogs, and none of the dogs at the shelter had it. "I thought that was bizarre," she said, "and that was when I called in Dr. Newbury." Sandra Newbury is the director of the shelter medicine program at the University of Wisconsin, which works with shelter systems all over the country. She ordered further tests.



Barbara Kirch, a veterinarian from North Carolina who is helping at the quarantine center, examines a flu patient named Genie. Alex Wroblewski for The New York Times

At the same time, the flu was spreading quickly and had made its way to the shelters in Brooklyn and on Staten Island. But Animal Care Centers of NYC felt obliged to keep taking in stray and unwanted cats. "We're an open-admission shelter," Dr. Brennen said. "Our responsibilities to our city contract still exist."

Gradually, though, Animal Care Centers was able to slow the influx to a trickle. Some cats bound for the shelter were farmed out to private rescue groups, while others were housed in mobile adoption vans. Some cat owners looking to surrender their pets were even persuaded to keep them.

On Dec. 12, the virology group at the Wisconsin Veterinary Diagnostic Laboratory identified the virus as H7N2.

By then every cat at the shelter was presumed to have been exposed to the virus, which can live on some surfaces for days. The only way to break the cycle of infection, Dr. Brennen said, was to find a place to store 500 sick and exposed cats, and decontaminate the shelters.

She contacted the A.S.P.C.A., which organizes animal-crisis response centers all over the country. The organization found the warehouse, shipped in supplies and personnel and moved the cats out to Queens. Dogs and rabbits at the same shelters were not infected and were allowed to stay.

The virus, which is contagious for up to three weeks, is gradually ebbing at the quarantine center. "What we expect to see over the next week or two is a rolling wave of

everybody starting to go negative," Dr. Newbury said. Soon, cats will start being released to shelters and adopters.

A corner of the second floor is devoted to critical-care cases. One of them is a 5-monthold calico named Freya. For days she sat hunched, unmoving.

"I called it the toaster position," said Mary Lummis, a visiting veterinarian from North Carolina. On Monday, she said, one of Freya's caregivers got her to eat some food. "She's turned a corner and we're like, 'Yippee!"

The Wisconsin researchers, in the meantime, have discovered something else: Mimi was not the earliest H7N2 case. A gray-striped kitten named <u>Alfred</u> had been brought to a shelter in the Bronx in late October, gotten sick shortly after being adopted, and died on Nov. 12.

"Alfred is Patient Zero," Dr. Brennen said.

No one has been able to figure out where Alfred might have picked up H7N2.

"That's to me the scary part," Dr. Brennen said. "Weird."