



Published Date: 2021-11-08 15:19:54 CET

Subject: PRO/AH/EDR> COVID-19 update (381): animal, USA, zoo, hyena, 1st rep

Archive Number: 20211108.8699526

CORONAVIRUS DISEASE 2019 UPDATE (381): ANIMAL, USA, ZOO, HYENA, FIRST REPORT

\*\*\*\*\*

A ProMED-mail post

<http://www.promedmail.org>

ProMED-mail is a program of the

International Society for Infectious Diseases

<http://www.isid.org>

Date: Sun 7 Nov 2021

Source: The New York Times [edited]

<https://www.nytimes.com/2021/11/07/us/hyenas-covid-positive-denver-zoo.html>

Zoo and veterinary services officials announced on Friday [5 Nov 2021] that 2 spotted hyenas at the Denver Zoo have tested positive for the coronavirus, becoming the 1st known cases in the world among hyenas

The adult hyenas, 22-year-old Ngozi and 23-year-old Kibo have so far exhibited mild symptoms of COVID, including "a little bit of coughing and sneezing," and nasal discharge and lethargy, but they are believed to be "in good shape and improving," Jake Kubié, a spokesman for the Denver Zoo, said on Saturday [6 Nov 2021].

The hyenas are the latest in a number of infections confirmed among animals at the Denver Zoo, with positive test results returned for 11 lions and 2 tigers, which Mr Kubié said, "have either fully recovered or are on their way to recovery."

Samples were collected from a variety of species at the zoo, said the announcement from the National Veterinary Services Laboratories, which is part of the US Department of Agriculture. The samples were tested by the Colorado State University Veterinary Diagnostic Laboratory.

Coronavirus infections among animals in zoos and sanctuaries have affected several types of big cats, otters, and nonhuman primates, according to the US Centers for Disease Control and Prevention. The risk of these animals spreading the virus to people is considered to be low, the CDC says.

Early in the pandemic, a Malayan tiger that was 4 years old at the time was the 1st tiger to test positive for the virus at the Bronx Zoo. Other cases among zoo animals followed there and elsewhere. Recently, coronavirus infections were detected among tigers and lions at the National Zoo in Washington, where a lion was reported to have the delta variant; Sumatran tigers and snow leopards at a children's zoo in Lincoln, Nebraska; the world's oldest gorilla in captivity among others at the zoo in Atlanta; and even among vaccinated tigers at the San Diego Zoo.

This summer [2021], zoo animals started receiving an experimental COVID vaccine made by Zoetis, a veterinary pharmaceutical company in New Jersey.

Ngozi and Kibo, older adults in hyena years, were not vaccinated, and neither were the tigers or lions found to have been infected in Denver, but the zoo is working to prioritize its supply of the animal COVID vaccine and ordering more. "We have been able to vaccinate some of our animals, primates and great apes because we know they are most at risk, but we haven't had the supply to vaccinate all of our other animals," Mr Kubié said.

For now, Mr Kubié said, the zoo's staff is observing infected animals for any signs of worsening health, whether they are less active or lose their appetite, to administer antiviral or anti-nausea medication if needed.

[Byline: Víctor Manuel Ramos]

--

Communicated by:

Mary Marshall

<mjm2020@googlemail.com>

[Infection by SARS-CoV-2 had been confirmed so far in carnivores of 5 families, canids (dogs and raccoon dogs), felids (cats, tigers, lions, puma/cougar, and snow leopard), mustelids (ferrets and minks), viverrids (binturongs), and procyonids (coatimundis). These cases in hyenas bring to 6 the number of carnivore families reported infected by SARS-CoV-2, as hyenas belong to a separate family, Hyaenidae. - Mod.PMB

HealthMap/ProMED map of Colorado, United States: <https://promedmail.org/promed-post?place=8699526,40864>

## See Also

COVID-19 update (364): animal, USA (IL) zoo, coatimundi 20211026.8699258

COVID-19 update (354): animal, USA, zoo, wild carnivore 20211018.8699125

COVID-19 update (348): animal, USA, zoo, snow leopard, fatal, susp 20211013.8699020

COVID-19 update (265): animal, USA, zoo, snow leopard 20210802.8563564

COVID-19 update (254): animal, USA, zoo, snow leopard 20210726.8545843

COVID-19 update (230): animal, USA, zoo, vaccination 20210705.8496776

COVID-19 update (197): animal, India, zoo lion, fatal 20210607.8430529

COVID-19 update (159): animal, India, zoo, lion 20210504.8344580

COVID-19 update (33): animal, Sweden, zoo, tiger, lion 20210125.8134087

COVID-19 update (13): animal, USA, zoo, gorilla 20210112.8095510

2020

----

COVID-19 update (538): USA, animal, zoo, snow leopard 20201214.8017000

COVID-19 update (536): animal, USA (UT) wild mink, 1st case 20201213.8015608

COVID-19 update (525): Spain, animal, zoo, lion, human 20201208.8002466

COVID-19 update (469): USA (TN) zoo, tiger 20201104.7915683

COVID-19 update (356): South Africa (GT) animal, puma, zoo, OIE 20200813.7673666

COVID-19 update (143): USA (NY) animal, zoo, tiger, lion, tests 20200430.7284183

COVID-19 update (141): India, animal, wild tiger, susp, clarification, RFI 20200430.7281768

COVID-19 update (138): India, animal, wild tiger, fatal 20200428.7275765

COVID-19 update (135): Netherlands (NB) animal, farmed mink 20200427.7272289

COVID-19 update (130): USA (NY) zoo, tiger, lion, new cases 20200425.7266556

COVID-19 update (85): USA (NY) tiger, OIE 20200406.7191480

COVID-19 update (84): USA, tigers 20200406.7191352

COVID-19 update (76): China (HU) animal, cat, owned, stray, seropositive 20200403.7179946

COVID-19 update (75): China (Hong Kong) cat, OIE 20200403.7179945

COVID-19 update (70): China (Hong Kong) cat, pets & stock 20200402.7173286

COVID-19 update (58): Belgium, cat, clinical case, RFI 20200327.7151215

COVID-19 update (57): global, re-using PPE, DR Congo, more countries, WHO 20200327.7149046

COVID-19 update (56): China (Hong Kong) animal, dog, final serology positive 20200326.7146438

COVID-19 update (45): China (Hong Kong) animal, dog, 2nd case PCR positive 20200319.7112693

COVID-19 update (37): China (Hong Kong) animal, dog, prelim. serology negative 20200312.7081842

COVID-19 update (30): China (Hong Kong) dog, susp, serology pending 20200306.7057595

COVID-19 update (25): China (Hong Kong) dog, susp, OIE 20200302.7040373

COVID-19 update (22): companion animals, dog susp, RFI 20200229.7036661

COVID-19 update (17): China, animal reservoir, wildlife trade & consumption 20200225.7024245

COVID-19 update (11): animal reservoir, intermediate hosts, pangolin susp 20200220.7009213

COVID-19 update (08): companion animals, RFI 20200218.7002276

COVID-19 update (06): animal reservoir, intermediate hosts 20200217.6997782

Novel coronavirus (42): China, global, COVID-19, SARS-CoV-2, WHO 20200211.6979942

Novel coronavirus (40): animal reservoir, pangolin poss intermediate host, RFI 20200210.6972104

Novel coronavirus (28): China (HU) animal reservoir 20200201.6943858

Novel coronavirus (22): reservoir suggested, bats 20200129.6930718

Novel coronavirus (20): China, wildlife trade ban 20200127.6922060

Novel coronavirus (18): China (HU) animal reservoir 20200125.6915411

Novel coronavirus (15): China (HU) wild animal sources 20200123.6909913

Novel coronavirus (03): China (HU) animal reservoir suggested, RFI 20200114.6887480

Novel coronavirus (01): China (HU) WHO, phylogenetic tree 20200112.6885385

Undiagnosed pneumonia - China (HU) (07): official confirmation of novel coronavirus 20200108.6878869

.....sb/pmb/mj/ml

## ProMED-mail alerts



[Support](#)   [Privacy Policy](#)  
[Terms & Conditions](#)