Government of India Ministry of Environment, Forest and Climate Change National Tiger Conservation Authority

F. No. 15-38/2010-NTCA (Part)

Dated the April 6, 2020

To,

The Chief Wildlife Warden(s)
All Tiger Range States

Subject : Incident of COVID-19 in captive tiger

Reference : Article titled "Tiger tests positive fo Coronavirus at Bronx Zoo, first known case in the world

dated April 5, 2020 in the National Geographic (enclosed)

Sir.

Reference is invited to the subject and article cited above. In this context, I am directed to inform that owing to the communicable and zoonotic nature of the said disease, following actions need to be taken to avert the disease in wild tigers in India;

- 1. Tigers may be observed for symptoms consistent with COVID 19 such as respiratory signs of nasal discharge, coughing and laboured breathing through direct observation to the extent possible besides through camera trap images for visible symptoms
- 2. It should be ensured that personnel handling tigers in human-tiger negative interactions and translocation operations be ascertained to be Corona virus negative. They should take due precaution as advised by the Ministry of Health and Family Welfare, GoI from time to time. (https://www.mohfw.gov.in)
- 3. Diligence needs to be exercised while handling post mortem cases to record location, age and sex of the animal while collecting samples for Corona virus diagnosis in consultation with the State Veterinary officials while safeguarding oneself through appropriate Personal Protective Equipment (PPE)
- 4. As Coronaviruses are known to affect gastrointestinal system in felines, requisite correlation may be made for characterizing the virus type in consultation with the State Veterinary Department
- 5. Differential diagnosis with feline infectious rhino-tracheitis needs to be made as similar respiratory symptoms may be observed
- 6. For COVID 19 diagnosis as well as differential diagnoses and characterization as highlighted above, samples may be sent to ICAR approved laboratories as per enclosure.

It is hence, requested to gear up front line staff as well as Veterinary officials engaged in monitoring tiger mortality in areas under your jurisdiction to detect the disease and prevent any spread in tigers in the wild. Being a notifiable disease, any positive case needs to be reported immediately to the NTCA for onward transmission to Authorities concerned.

Enclosed: As above

Yours faithfully,

(Dr. Vaibhav C. Mathur)

Assistant Inspector General of Forests (NTCA)

E-mail: <u>aig3-ntca@nic.in</u> Mobile: +91 9958615040

F. No. 15-38/2010-NTCA (Part) Copy to:

- 1. NTCA Regional Offices, Bengaluru, Nagpur and Guwahati with a request to monitor the situation
- 2. The Field Director(s), All Tiger Reserves
- 3. The Member Secretary, Central Zoo Authority
- 4. The Director, Indian Veterinary Research Institute, Izzatnagar, Bareilly (directorivri@gmail.com)
- 5. Centre for Wildlife, Indian Veterinary Research Institute, Izzatnagar, Bareilly (cwlincharge@gmail.com)

Tiger tests positive for coronavirus at Bronx Zoo, first known case in the world

PUBLISHED April 5, 2020 4-5 minutes

A tiger at the Bronx Zoo in New York City has tested positive for the virus that causes COVID-19, and six other big cats are exhibiting symptoms consistent with the illness, the U.S. Department of Agriculture announced Sunday afternoon.

"It's the first time, to our knowledge, that a [wild] animal has gotten sick from COVID-19 from a person," says <u>Paul Calle</u>, chief veterinarian for the Bronx Zoo. The Malayan tiger, named Nadia, likely contracted the coronavirus from an infected—but unknown—asymptomatic zookeeper. "It's the only thing that makes sense," Calle says. The zoo has been closed to visitors since March 16.

Several domestic animals had previously tested positive for SARS-CoV-2, the virus that causes COVID-19, including a <u>Pomeranian</u> and <u>a German shepherd</u> in Hong Kong, a <u>domestic cat in Belgium</u>.

Cats, both wild and domestic, are susceptible to <u>feline coronavirus</u>, but until recently, it was unknown whether they could contract SARS-CoV-2. A <u>new Chinese study</u> has found that cats may be able to infect each other, and scientists are <u>rushing to learn what other species</u> may be able to be infected by it.

A world first at the Bronx Zoo

After developing a dry cough in late March, the four-year-old Malayan tiger, Nadia, was tested for the virus on April 2, according to Calle. Nadia's sister, two <u>Siberian tigers</u>, and three <u>African lions</u> have also had coughs and a loss of appetite, though they have not been tested. The zoo has the seven cats under veterinary care and expects them to recover, Calle says, though the Wildlife Conservation Society, the nonprofit that runs the Bronx Zoo, cautioned in a news release that it's unknown how the disease might progress in animals.

When Nadia started showing symptoms, the veterinary team did a number of diagnostic tests and blood work. "Considering what's going on in New York City, we of course did the COVID testing," Calle says. The team took samples at the zoo, after sedating Nadia. They sent the samples for testing to the New York State Diagnostic Laboratory at Cornell University and the samples University of Illinois College of Veterinary Medicine Veterinary Diagnostic Laboratory. It is not the same type of test that health care providers give to people, says Calle, "so there is no competition for testing between these very different situations."

According to the USDA and the Centers for Disease Control and Prevention, there is currently <u>no</u> <u>evidence that domestic or captive wild animals can spread the novel coronavirus to people</u>. (It's believed the virus infecting humans <u>likely developed</u> from a very closely related coronavirus found in bats.)

What's next?

This is all completely new, Calle says, so there are many unanswered questions, including whether tigers and lions are more susceptible to coronavirus than other animals. None of the zoo's other big cats, including snow leopards, cheetahs, a clouded leopard, an Amur leopard, and a puma are showing symptoms.

Zookeepers around the country have been <u>making extra efforts to protect great apes</u> in their care, as great apes can <u>easily catch respiratory illnesses from humans</u>. Experts have <u>warned</u> that they may be particularly susceptible to coronavirus.

The Bronx Zoo team is going to be sharing the diagnostic information widely with the zoo and scientific community, Calle says. "I suspect that there are other cases, and now that we're sharing this information I have a hunch other likely cases will turn up."

<u>John Goodrich</u>, chief scientist and tiger program director at Panthera, a global big cat conservation organization, is concerned for wild tiger populations. "Big cats like tigers and lions are already facing a litany of threats to their survival in the wild. If COVID-19 jumps to wild big cat populations and becomes a significant cause of mortality, the virus could develop into a very serious concern for the future of these species."



INDIAN COUNCIL OF AGRICULTURAL RESEARCH KRISHI BHAVAN, NEW DELHI - 110001 ANIMAL SCIENCE DIVISION

<u>Dr. Jyoti Misri</u> Principal Scientist (Animal Health) F.No. AS/10/8/2020/ASR-IV(COVID-19)

Dated: 05th April, 2020

То

Dr. R.K. Singh
 Director & Vice-Chancellor
 ICAR-Indian Veterinary Research Institute
 Izatnagar, Bareilly, U.P. – 243122

Dr. V.P. Singh
 Director
 ICAR- National Institute of High Security Animal Diseases
 Anand Nagar, Bhopal, M.P.- 462021

Dr. Yash Pal
 Director
 ICAR- National Research Centre on Equines
 Hisar, Haryana – 125001

Subject: COVID-19 testing by ICAR Institutes - reg.

Dear sir,

Kind reference to the above cited subject. Experts from ICMR, Cabinet Secretariat and ICAR convened various meetings to initiate measures for critical preparedness, readiness and responsive action to contain the spread of COVID-19 in India. In view of the Advisory issued by ICMR (enclosed), approval of the Competent Authority is conveyed for the following three Animal Health Institutes to initiate COVID-19 testing at their respective Institutes, while following all Bio-containment and safety measures required to handle this high risk pathogen as per the National/ICMR Guidelines:

- 1. National Institute of High Security Animal Disease (NIHSAD), Bhopal, MP.
- 2. National Research Centre on Equines (NRCE), Hisar, Haryana.
- 3. Centre for Animal Disease Research and Diagnostic (CADRAD), Indian Veterinary Research Institute (IVRI), Izatnagar, Bareilly, UP.

This issues with the approval of Secretary (DARE) & DG, ICAR.

Yours faithfully

(Jyoti Misri)

Encl: As above.

Copy to:

1. Senior PPS to Secretary (DARE) & DG, ICAR

2. PPS to DDG(AS), ICAR