OFFICE MEMORANDUM

Sub: Precautions to be undertaken by zoos in the light of increasing number of cases of SARS CoV-2 – regarding.

The undersigned is directed to refer to the advisories from this office to zoos as under, for precautionary measures and animal collection monitoring for SARS CoV-2.

1. This office Circular F.No.25-1/2002-CZA(Vol.II)(Pt.) dated 10th June, 2020
2. This office Circular F.No.25-1/2002-CZA(Vol.II)(Pt.) dated 1st June, 2020
3. This office Circular F.No.25-1/2002-CZA(Vol.II)(Pt.) dated 14th May, 2020
5. This office Circular F.No.25-1/2002-CZA(Vol.II)(AK)/2469/B/2020 dated 6.04.2020
6. This office Circular F.No.25-1/2002-CZA(Vol.II)(AK)/2469/A/2020 dated 24.03.2020
7. This office Circular F.No.25-1/2002-CZA(Vol.II)(AK)/2469/2020 dated 23.03.2020
8. This office Circular F.No.19-115/93-CZA(53)(Vol.XIV)(Pt.)/2427/2020 dated 13.03.2020

2. In the light of the increase in the number of cases across the country, zoos are advised to revisit the guidelines issued by this office vide letter F.No.25-1/2002-CZA(Vol.II)(Pt.) dated 10th June, 2020. (Annexure I) and MHA order No.40-3/2020-DM-I(A) dated 23.03.2021 (Annexure II).

3. In the event of suspected cases kindly refer to this office advisory to zoos vide letter F.No.25-1/2002-CZA(Vol-II)(AK)/2469/B/2020 dated 6th April, 2020. The designated institutes authorised to take up SARS CoV-2 testing are mentioned below;

   a. National Institute of High Security Animal Diseases (NIHSAD), Bhopal, Madhya Pradesh
   b. National Research Centre on Equines (NRCE), Hisar, Haryana
   c. Centre for Animal Disease Research and Diagnostic (CADARD), ICAR-Indian Veterinary Research Institute (IVRI), Bareilly, Uttar Pradesh
   d. Centre for Cellular and Molecular Biology – Laboratory for Conservation of Endangered Species (CCMB-LaCONES). Hyderabad.

4. A copy of the Guidelines prepared by the CCMB-LaCONES for collection, preservation and transport of samples and information sheet is enclosed herewith for information and use of zoos (Annexure III).

5. Further, as a resource for reference of zoos, the website of World Organisation for Animal Health for working with free-ranging wild mammals in the era of the COVID-19 pandemic can be accessed at
This is for kind information and necessary action.

Yours’s faithfully

Encls. As above

To

The Chief Wildlife Warden of all States / Union Territories,

Copy forwarded for information / necessary action to:
1. PS to Hon’ble Minister (EF&CC), Government of India
2. PS to Hon’ble Minister of State (EF&CC), Government of India
3. PPS to the Secretary to the Government of India (EF&CC)
4. PPS to the Director General of Forests and Special Secretary
5. The Director, Centre for Cellular and Molecular Biology
6. The Director, Indian Veterinary Research Institute, Izatnagar
7. The Member Secretary of the concerned State Zoo Authority,
8. The Officer in-charge of all recognised zoos
9. DPA – CZA – to upload on website of the CZA.
S.O.P. recommended for consideration of zoos [Ref: This office letter F.No.25-1/2002-CZA(Vol.II)(Pt.) dated 10th June, 2020]

1. Guidelines issued from time to time by the Government of India and respective State Government with respect to work places and places of public gathering shall be strictly adhered to.
3. Zoos must ensure that there is no dilution of the Guidelines issued by the Government of India, under the Disaster Management Act, 2005, in any manner.

Relevant to captive animals:

1. Precautionary measures specific to the COVID-19 suggested by this office from time to time (available http://cza.nic.in/news/en) may be followed by zoos to ensure welfare of captive animals housed in zoos.
2. Zoos shall ensure compliance with generic precautionary measures specified in ‘Suggested Health Monitoring Protocol for Zoos’ circulated to zoos vide Circular No.25-1/2002-CZA(M) dated 18th November, 2004 and ‘Standards, Guidelines and Protocol on Disease Diagnosis and Cure of Wild Animals in Indian Zoos’ published by the Central Zoo Authority in collaboration with the ICAR – Indian Veterinary Research Institute, Izatnagar.
3. Norms specified for upkeep and healthcare of captive animals including disease surveillance measures prescribed in the Recognition of Zoo Rules, 2009 shall be strictly implemented.
4. Health Advisory Committee (of the respective State as well as zoo) may be actively consulted by zoos for advise on animal healthcare related matters. If required, may seek advise from the in-charge, National Referral Centre on Wildlife Healthcare, ICAR – Indian Veterinary Research Institute, Izatnagar.

Relevant to zoo personnel:

1. Based on requirement, staggered working hours and a duty roster chart may be adopted. Infection Control Supervisor may be designated and put in-charge for compliance of all norms.
2. Continued session may be conducted to personnel working in zoos to ensure that they are well equipped to prevent contracting infection.
3. Disinfection Schedule may be drawn and augmented to meet the requirement and shall be strictly implemented.
4. Exclusive deputation of personnel to monitor visitors’ behaviour, to ensure compliance with the norms specified for operation of the zoo.
5. Efficient waste disposal system and sanitation practices for maintaining hygienic and clean environment in zoos. Compliance with Waste Management Rules notified by the Government of India should be ensured. Colour coding for disposal of bio-medical waste should be strictly implemented. (Copy of Rules available at https://cpcb.nic.in/rules-3/).

Relevant to visitors

1. Number of visitors permitted at a given point of time may be roughly calculated using social distancing norms, crowd management, area of zoo etc. Morning and afternoon slots may be decided to stagger the visitors.
2. Encourage least contact purchase and checking of tickets through digital payments including online systems and contactless security screening.
3. Public spaces with a possibility of crowding such as in Children’s Park, Nocturnal Houses, Food Courts, Interpretation Centres with movie theatre may be closed or closely monitored to ensure least congregation and social distancing.

4. Separate entry and exit may be planned for visitors.

**Relevant to both zoo personnel and visitors:**

1. COVID appropriate behaviours suggested by the Ministry of Health and Family Welfare, Government of India shall be widely publicised for awareness among visitors and shall ensure strict adherence to the same.
2. Marking may be done in places of queue formation of visitors to ensure physical distancing.
3. Hygienic practices, Personal Protective Equipment / Face Mask / Face Shield as recommended by the Ministry of Health and Family Welfare, Government of India shall be used.
4. Maintenance of Visitor Register at point of entry to the zoo with details necessary for contact tracing by the concerned agency, in case of requirement.
5. Promotion of cashless transaction to the extent possible, for sale of entry tickets.
6. Usage of medical grade mask and alcohol-based sanitizers may be done judiciously.
7. Purchase of masks/face shield, hand sanitisers may be facilitated next to ticket counters from authorised vendors.
8. Thermal screening of zoo personnel and visitors may be mandatorily done at the point of entry.
9. Dos and Don’ts for visitors as well as zoo personnel may be prominently displayed at multiple locations in zoos.
10. Vehicles permitted by zoos should also adhere to norms for physical distancing as advised by the Government.
11. Visitors may be advised to minimise contact with surfaces and to specifically discourage from coming in contact with the stand-off barriers in zoos.

**Suggested resources:**

Zoos are advised to refer to following resources in this regard:

- To calculate carrying capacity of the zoo in respect of visitors and to manage the visitors – Guidelines for crowd management issued by the National Disaster Management Authority, (available at [https://ndma.gov.in/en/managing-crowd.html](https://ndma.gov.in/en/managing-crowd.html))
No. 40-3/2020-DM-I(A)
Government of India
Ministry of Home Affairs

North Block, New Delhi-110001
Dated 23rd March, 2021

ORDER

Whereas, an Order of even number dated 27.01.2021 was issued for containment of COVID-19 in the country, for a period upto 28.02.2021, which was further extended for a period upto 31.03.2021 vide an Order of even number dated 26.02.2021;

Whereas, in exercise of the powers under section 6(2)(i) of the Disaster Management Act, 2005, National Disaster Management Authority (NDMA) has directed the undersigned to issue an order with guidelines for containment of COVID-19 in the country;

Now therefore, in exercise of the powers, conferred under Section 10(2)(i) of the Disaster Management Act 2005, the undersigned hereby directs that guidelines for effective control of COVID-19, as annexed, will be in force upto 30.04.2021.

[Signature]
Union Home Secretary

and, Chairman, National Executive Committee (NEC)

To:
1. The Secretaries of Ministries/ Departments of Government of India
2. The Chief Secretaries/Administrators of States/Union Territories
   (As per list attached)

Copy to:
1. All Members of the National Executive Committee
2. Member Secretary, National Disaster Management Authority
Guidelines for effective control of COVID-19
[As per Ministry of Home Affairs (MHA) Order No. 40-3/2020-DM-I (A) dated 23rd March, 2021]

The coordinated effort of Central and State/UT agencies has resulted in a sustained decline in the number of active COVID-19 cases in the country, continuously for about 5 months. A fresh surge in COVID-19 cases, in some parts of the country, however, is a cause of concern. At this juncture, the substantial gains achieved against the spread of COVID-19 need to be consolidated, and the chain of transmission of the pandemic effectively broken, with a view to expeditiously restore complete normalcy.

With the last guidelines issued by Ministry of Home Affairs (MHA) on 27.1.2021, all economic and other activities have been opened up in a phased manner, with the stipulation that the prescribed Standard Operating Procedures (SOPs) be scrupulously followed. In order to ensure that the resumption of activities is successful, it is imperative to strictly enforce the Test-Track-Treat protocol in all parts of the country; ensure that COVID appropriate behaviour is scrupulously observed by everyone; and, the ongoing vaccination drive – the largest in the world – is scaled up rapidly, to cover all the target groups.

The following guidelines are issued to be effective from 1st April, 2021.

Effective enforcement of the Test-Track-Treat protocol

Test

1. With sustained effort, the capacity of total daily tests that can be conducted across the country has gone up substantially. There is need to ensure that the tests being conducted are uniformly distributed across all districts, with adequate testing to be done in districts reporting higher number of cases. The proportion of RT-PCR tests in the total mix should be scaled up, on best effort basis, to 70% or more. States and UTs, where the proportion of RT-PCR tests is less, should rapidly increase testing through this protocol, to reach the prescribed level.

Track

2. The new positive cases detected as a result of intensive testing need to be isolated/ quarantined at the earliest; and, their contacts have to be traced at the earliest, and similarly isolated/ quarantined. Containment Zones, accordingly, have to be demarcated, and prescribed containment measures implemented within such Zones.

3. Effective demarcation of Containment Zones, in vulnerable and high incidence areas, is key to breaking the chain of transmission and controlling the spread of the virus. Containment Zones shall be carefully demarcated by the district authorities, at the micro level, taking into consideration the guidelines prescribed by the Ministry of Health and Family Welfare.
(MoHFW) in this regard. The list of Containment Zones will be notified on the websites by the respective District Collectors and by the States/ UTs. This list will also be shared with MoHFW on a regular basis.

4. Within the demarcated Containment Zones, containment measures, as prescribed by MoHFW, shall be scrupulously followed, as under:
   i. Only essential activities shall be allowed in the Containment Zones.
   ii. There shall be strict perimeter control to ensure that there is no movement of people in or out of these zones, except for medical emergencies and for maintaining supply of essential goods and services.
   iii. There shall be intensive house-to-house surveillance by surveillance teams formed for the purpose.
   iv. Testing shall be carried out as per prescribed protocol.
   v. Listing of contacts shall be carried out in respect of all persons found positive, along with their tracking, identification, quarantine and follow up of contacts for 14 days (80% of contacts to be traced in 72 hours).
   vi. Surveillance for ILI/ SARI cases shall be carried out in health facilities or outreach mobile units or through fever clinics in buffer zones.
   vii. It shall be the responsibility of local district, police and municipal authorities to ensure that the prescribed Containment measures are strictly followed. State/ UT Governments shall ensure accountability of the officers concerned in this regard.

5. Quick isolation of COVID-19 patients shall be ensured in treatment facilities/ home (subject to fulfilling the home isolation guidelines).

6. Clinical interventions, as prescribed, shall be administered. Capacity building of health workers and professionals shall be an ongoing exercise, to be conducted at all levels, with a view to ensure that the prescribed clinical management protocol is understood clearly and administered accordingly.

7. The concerned agencies – of the Central and State/ UT Governments – shall ensure adequate availability of COVID dedicated health and logistics (including ambulatory) infrastructure, based on their assessment of the case trajectory.

8. Effective infection prevention and control practices shall be followed in treatment facilities and by health care workers and professionals.
COVID appropriate behavior

9. State/UT Governments shall take all necessary measures to promote COVID-19 appropriate behaviour. Strict enforcement of wearing of face masks, hand hygiene and social distancing must be ensured.

10. Wearing of face masks is an essential preventive measure. In order to enforce this core requirement, States and UTs may consider administrative actions, including imposition of appropriate fines, on persons not wearing face masks in public and work spaces.

11. Observance of social distancing in crowded places, especially in markets, weekly bazaars and public transport, is also critical for containing the spread of the infection. SOP issued by Ministry of Health and Family Welfare (MoHFW) to regulate crowds in market places, shall be strictly enforced by States and UTs.

12. SOPs for regulating travel in aircrafts, trains and metro rails are already in place, which shall be strictly enforced. States and UTs shall issue necessary guidelines for regulating travel in other modes of public transport, e.g., buses, boats etc., and ensure that these are strictly complied with.

13. The National Directives for COVID-19 Management, as specified in Annexure I, shall be strictly followed throughout the country.

Strict adherence to the prescribed SOPs

14. All activities have been permitted outside Containment Zones and SOPs have been prescribed for various activities. These include: movement by passenger trains; air travel; metro trains; schools; higher educational institutions; hotels and restaurants; shopping malls, multiplexes and entertainment parks; yoga centres and gymnasiums; exhibitions, assemblies and congregations, etc.

15. The SOPs, as updated from time to time, shall be strictly enforced by the authorities concerned, who shall be responsible for their strict observance.

Vaccination

16. Government of India has launched the world’s largest vaccination drive against COVID-19. The National Expert Group on Vaccine Administration for COVID-19 (NEGVAC) provides guidance on prioritization of population groups, procurement & inventory management, and vaccine selection delivery and tracking. The recommendations of NEGVAC are considered and finalized by the Central Government.

17. While the vaccination drive is proceeding smoothly, the pace is uneven across different States and UTs; and, the slow pace of vaccination in some States/UTs is a matter of concern. Vaccination against COVID-19, in the present scenario, is critical to break the chain of transmission. Therefore, all State/UT Governments should rapidly step up the pace of vaccination,
to cover all priority groups, as recommended by NEGVAC and approved by the Central Government, urgently and in an expeditious manner.

Local restrictions

18. States and UTs, based on their assessment of the situation, may impose local restrictions at district/sub-district and city/ward level, with a view to contain the spread of COVID-19.

19. There shall be no restriction on inter-State and intra-State movement of persons and goods including those for cross land-border trade under Treaties with neighbouring countries. No separate permission/approval/e-permit will be required for such movements.

Protection of vulnerable persons

20. Persons above 65 years of age, persons with co-morbidities, pregnant women, and children below the age of 10 years are advised to take necessary precautions.

Use of Aarogya Setu

21. Use of Aarogya Setu may continue on best effort basis on compatible mobile phones. This will facilitate timely provision of medical attention to those individuals who are at risk.

Strict enforcement of the guidelines

22. All the District Magistrates shall strictly enforce the above measures. For the enforcement of social distancing, State/UT Governments may, as far as possible, use the provisions of Section 144 of the Criminal Procedure Code (CrPC) of 1973.

23. Any person violating these measures will be liable to be proceeded against as per the provisions of Section 51 to 60 of the Disaster Management Act, 2005, besides legal action under Section 188 of the IPC, and other legal provisions as applicable. Extracts of these penal provisions are at Annexure II.

Union Home Secretary

and, Chairman, National Executive Committee
Annexure I

NATIONAL DIRECTIVES FOR COVID-19 MANAGEMENT

1. **Face coverings**: Wearing of face cover is compulsory in public places; in workplaces; and during transport.

2. **Social distancing**: Individuals must maintain a minimum distance of 6 feet (2 gaz ki doori) in public places.

   Shops will ensure physical distancing among customers.

3. **Spitting in public places** will be punishable with fine, as may be prescribed by the State/ UT local authority in accordance with its laws, rules or regulations.

   *Additional directives for Work Places*

4. **Work from home (WfH)**: As far as possible the practice of WfH should be followed.

5. **Staggering of work/ business hours** will be followed in offices, work places, shops, markets and industrial & commercial establishments.

6. **Screening & hygiene**: Provision for thermal scanning, hand wash or sanitizer will be made at all entry points and of hand wash or sanitizer at exit points and common areas.

7. **Frequent sanitization** of entire workplace, common facilities and all points which come into human contact e.g. door handles etc., will be ensured, including between shifts.

8. **Social distancing**: All persons in charge of work places will ensure adequate distance between workers and other staff.

***
Offences and Penalties for Violation of Lockdown Measures

A. Section 51 to 60 of the Disaster Management Act, 2005

51. Punishment for obstruction, etc.—Whoever, without reasonable cause —
(a) obstructs any officer or employee of the Central Government or the State Government, or a person authorised by the National Authority or State Authority or District Authority in the discharge of his functions under this Act; or
(b) refuses to comply with any direction given by or on behalf of the Central Government or the State Government or the National Executive Committee or the State Executive Committee or the District Authority under this Act,
shall on conviction be punishable with imprisonment for a term which may extend to one year or with fine, or with both, and if such obstruction or refusal to comply with directions results in loss of lives or imminent danger thereof, shall on conviction be punishable with imprisonment for a term which may extend to two years.

52. Punishment for false claim.—Whoever knowingly makes a claim which he knows or has reason to believe to be false for obtaining any relief, assistance, repair, reconstruction or other benefits consequent to disaster from any officer of the Central Government, the State Government, the National Authority, the State Authority or the District Authority, shall, on conviction be punishable with imprisonment for a term which may extend to two years, and also with fine.

53. Punishment for misappropriation of money or materials, etc.—Whoever, being entrusted with any money or materials, or otherwise being, in custody of, or dominion over, any money or goods, meant for providing relief in any threatening disaster situation or disaster, misappropriates or appropriates for his own use or disposes of such money or materials or any part thereof or wilfully compels any other person so to do, shall on conviction be punishable with imprisonment for a term which may extend to two years, and also with fine.

54. Punishment for false warning.—Whoever makes or circulates a false alarm or warning as to disaster or its severity or magnitude, leading to panic, shall on conviction, be punishable with imprisonment which may extend to one year or with fine.

55. Offences by Departments of the Government.—(1) Where an offence under this Act has been committed by any Department of the Government, the head of the Department shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly unless he proves that the offence was committed without his
knowledge or that he exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a Department of the Government and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any officer, other than the head of the Department, such officer shall be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

56. Failure of officer in duty or his connivance at the contravention of the provisions of this Act.—Any officer, on whom any duty has been imposed by or under this Act and who ceases or refuses to perform or withdraws himself from the duties of his office shall, unless he has obtained the express written permission of his official superior or has other lawful excuse for so doing, be punishable with imprisonment for a term which may extend to one year or with fine.

57. Penalty for contravention of any order regarding requisitioning.—If any person contravenes any order made under section 65, he shall be punishable with imprisonment for a term which may extend to one year or with fine or with both.

58. Offence by companies.—(1) Where an offence under this Act has been committed by a company or body corporate, every person who at the time the offence was committed, was in charge of, and was responsible to, the company, for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the contravention and shall be liable to be proceeded against and punished accordingly.

Provided that nothing in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he exercised due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company, and it is proved that the offence was committed with the consent or connivance of or is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also, be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation.—For the purpose of this section—

(a) “company” means anybody corporate and includes a firm or other association of individuals; and

(b) “director”, in relation to a firm, means a partner in the firm.
59. Previous sanction for prosecution.—No prosecution for
offences punishable under sections 55 and 56 shall be instituted except with
the previous sanction of the Central Government or the State Government,
as the case may be, or of any officer authorised in this behalf, by general or
special order, by such Government.

60. Cognizance of offences.—No court shall take cognizance of an
offence under this Act except on a complaint made by—

(a) the National Authority, the State Authority, the Central
Government, the State Government, the District Authority or
any other authority or officer authorised in this behalf by that
Authority or Government, as the case may be; or

(b) any person who has given notice of not less than thirty days in
the manner prescribed, of the alleged offence and his intention
to make a complaint to the National Authority, the State
Authority, the Central Government, the State Government, the
District Authority or any other authority or officer authorised as
aforesaid.

B. Section 188 in the Indian Penal Code, 1860

188. Disobedience to order duly promulgated by public servant.—
Whoever, knowing that, by an order promulgated by a public servant
lawfully empowered to promulgate such order, he is directed to abstain
from a certain act, or to take certain order with certain property in his
possession or under his management, disobeys such direction, shall, if such
disobedience causes or tends to cause obstruction, annoyance or injury, or
risk of obstruction, annoyance or injury, to any person lawfully employed,
be punished with simple imprisonment for a term which may extend to one
month or with fine which may extend to two hundred rupees, or with both;
and if such disobedience causes or trends to cause danger to human life,
health or safety, or causes or tends to cause a riot or affray, shall be
punished with imprisonment of either description for a term which may
extend to six months, or with fine which may extend to one thousand
rupees, or with both.

Explanation.—It is not necessary that the offender should intend to
produce harm, or contemplate his disobedience as likely to produce
harm. It is sufficient that he knows of the order which he disobeys,
and that his disobedience produces, or is likely to produce, harm.

Illustration

An order is promulgated by a public servant lawfully empowered to
promulgate such order, directing that a religious procession shall not
pass down a certain street. A knowingly disobeys the order, and
thereby causes danger of riot. A has committed the offence defined
in this section.

***
Guidelines for Collection, Packing and Transport of Wild Animal Samples for Covid-19 Test

In view of the pandemic outbreak of SARS-Cov-2 (COVID-19) and the incidences of transmission of COVID-19 from zoo animal keepers to zoo animals, particularly among carnivores, CSIR-CCMB has initiated a program to test wildlife for COVID-19. All zoo veterinarians and staff are well versed in sample collection, packing, and transport of samples for various investigations. Guidelines are given below for safe and efficient collection, packing and transport of zoo animal samples for COVID-19 test. IT IS IMPORTANT TO ADHERE TO THESE INSTRUCTIONS TO ENSURE PROPER TESTING OF SAMPLES.

Sample collection

1. Follow the appropriate biosafety protocols while sample collection and packing. Use appropriate personal protection equipment (PPE): Face Shield, Face mask, N-95 mask, head cover, goggles, hand gloves, shoe cover and coverall or gown.

2. Use proper sanitization/disinfection protocols when sick animals are handled for sample collection. Give sufficient time to sanitize the restraining devices (chute/cages), if the same devices are used to be for next animal.

3. Sample collection materials: (Please note Naso/Oral swab is mandatory, blood and saliva could be sent additionally)
   1. Sterile flocked polyester/nylon swabs. These swabs are used to facilitate and enhance the absorption of virus. Sterile Polyester swabs are available commercially. DONOT USE COTTON SWABS.
   2. Use Sterile Collection Vials for collecting discharges/secretions
   3. Avoid the collection of soiled samples (eg saliva/discharges from the floor).
   4. Label the sample vials/containers with sample ID, sample type, animal details, and name of the zoo).
   5. Samples should not be contaminated with blood.
   6. Blood should be collected in sterile EDTA vacutainers.
   7. For post-mortem samples: Collect the samples as early as possible after death of animal. Take deep throat swabs and nasopharyngeal swabs. Avoid sampling if the trachea or nasal passages are contaminated with stomach contents. Take a swab from the lung.
   8. Send the samples to testing laboratory as early as possible after collection. Send dry swabs, if the time to reach testing lab will take less than 24-48h. If it will take more than 48h send the samples in Viral Transport Medium (2-3ml). Viral Transport Medium is available commercially.

Sample Packing

Packing Material:
1. Adsorbent material to prevent the contamination from any leakage: Cotton/ tissue paper
2. Leak proof container (2nd): 50 ml centrifuge tubes/ plastic containers to place the swab collection vials/containers (1st container).
3. Cool packs: frozen gel packs
4. Leak proof container (3rd): plastic containers/cryo vial boxes
5. Outer box: thermocol box/ vaccine carrier/ice box/hard card board box to place the 3rd container (with 1st and 2nd) and ice packs.
6. Parafilm to seal the sample collection vials.
7. Cello tape (transparent) and Scissors
8. Permanent markers (micro tip marker for labelling sample details on sample vial/container; large tip markers for labelling outer box.

Packing of samples (VTM)

1. Samples collected beyond 48h should be send the samples in VTM (2-3 ml) 
2. After swab collection, place the swab into the same container provided with the swab and tight the cap (1st container). Please ensure that swab does not touch the outer surface of the container while keeping the swab into the container.
3. Seal the neck of sample tube with parafilm and wrap the tube with cotton/tissue paper
4. Place the 1st container in 50 ml centrifuge (2nd) tube and seal the neck with parafilm.
5. Keep the centrifuge tube in the sterile zip lock plastic cover
6. Place the sterile zip-lock cover with sample in a plastic container (3rd container)
7. Keep the 3rd container along with ice packs in thermocol box/ice box/card board box (outer box) and seal the outer container with cello tape properly.
8. Label the outer box with sender’s address and contact details, and consignee’s address and contact details.
9. Send the samples with person to the testing laboratory.

Packing of samples (dry swabs)

1. Samples (Dry Swabs) should reach the testing lab within 24-48h after collection
2. Follow steps, from 2 to 9 given above

Transport of Samples

Send the samples with authorized person to the testing lab. Samples should reach the testing laboratory within 24-48h after collection. If it takes more than 48h, preserve the samples in VTM (2-3 ml). Ensure that the sample is maintained at refrigeration temp (4-5°C) during the transport.

Note:
Please try to send dry swabs. Don’t add formalin/normal saline(any other medium to the samples until unless prescribed. Use isopropanol for sterilization of packing material eg.2nd, 3rd packing containers and the outer box. Use the abbreviations for labeling the samples vials. NP: Nasopharyngeal; OP: Oropharyngeal; NS: Nasal Swab; S: Saliva; B: Blood. Use the packing containers as 1st container: sample/swab holding container; 2nd container: 50 ml centrifuge tube / 3rd container: plastic container; Outer box: Thermocol box/cool box/vaccine carrier/ hard card board box.
# Check List for Sample Collection, Packing and Transport

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Points to remember</th>
</tr>
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<tbody>
<tr>
<td><strong>COLLECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Wear appropriate PPE</td>
<td>Face Shield, Face mask, N-95 mask, head cover, goggles, hand gloves, shoe cover and coverall or gown.</td>
</tr>
<tr>
<td>2.</td>
<td>Use appropriate collection material</td>
<td>Flocked polyester/nylon swabs</td>
</tr>
<tr>
<td>3.</td>
<td>Label the sample collection vials properly</td>
<td>Use permanent markers and cover the label with cello tape. Check the information provided in the sample information form with sample label.</td>
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<tr>
<td>4.</td>
<td>Collect samples aseptically</td>
<td>Avoid sampling of soiled samples</td>
</tr>
<tr>
<td>5.</td>
<td>Preferred samples: Dry swabs of NP, OP, NS, Saliva (Dry swab: without VTM)</td>
<td>Dry samples: If transit time is &lt;48h. Use VTM(2-3 ml), if transit time &gt;48h.</td>
</tr>
<tr>
<td>6.</td>
<td>Use EDTA coated vacutainers for blood</td>
<td>EDTA vacationers are purple in colour.</td>
</tr>
<tr>
<td>7.</td>
<td>Post-mortem samples: NP, OP, NS, Deep throat</td>
<td>Avoid sampling if air passages are contaminated with stomach contents</td>
</tr>
<tr>
<td><strong>PACKING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Wear appropriate PPE</td>
<td>Face Shield, Face mask, N-95 mask, head cover, goggles, hand gloves, shoe cover and coverall or gown.</td>
</tr>
<tr>
<td>2.</td>
<td>Seal the neck of the sample vial with parafilm and wrap with cotton/tissue paper (1&lt;sup&gt;st&lt;/sup&gt; or primary container)</td>
<td>Check the label information with the information provided in the specimen information form.</td>
</tr>
<tr>
<td>3.</td>
<td>Place the swab container/vial into the sterile 50 ml centrifuge tube (2&lt;sup&gt;nd&lt;/sup&gt; container)</td>
<td>Seal 2&lt;sup&gt;nd&lt;/sup&gt; container with parafilm.</td>
</tr>
<tr>
<td>4.</td>
<td>Place the 2&lt;sup&gt;nd&lt;/sup&gt; container (with sample container/vial) into sterile plastic container (3&lt;sup&gt;rd&lt;/sup&gt; container).</td>
<td>Label the outer box with zoo name and testing lab name.</td>
</tr>
<tr>
<td>5.</td>
<td>Keep the 3&lt;sup&gt;rd&lt;/sup&gt; containers along with ice packs in the outer box.</td>
<td>Seal the outer box with cell tape.</td>
</tr>
<tr>
<td>6.</td>
<td>Samples should accompany with specimen information forms</td>
<td>Check the specimen information forms the forms</td>
</tr>
<tr>
<td><strong>TRANSPORT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Samples should reach the testing laboratory within 24-48h after collection.</td>
<td>If it is &gt;48h, send the samples in VTM (2-3 ml).</td>
</tr>
<tr>
<td></td>
<td>Send the samples preferably with person to the testing lab.</td>
<td></td>
</tr>
</tbody>
</table>

*Note:*
Please try to send dry swabs. Don’t add formalin/normal saline/any other medium to the samples until unless prescribed. Use isopropanol for sterilization of packing material eg. 2<sup>nd</sup>, 3<sup>rd</sup> packing containers, and the outer box. Use the abbreviations for labeling the samples vials. NP: Nasopharyngeal; OP: Oropharyngeal; NS: Nasal Swab; S: Saliva; B: Blood. Use the packing containers as 1<sup>st</sup> container: sample/swab holding container; 2<sup>nd</sup> container: 50 ml centrifuge tube / 3<sup>rd</sup> container: plastic container; Outer box: Thermocol box/cool box/vaccine carrier/ hard card board box.

---SAMPLES WILL NOT BE OPENED AND WILL BE DESTROYED IF THEY ARE NOT IN PROPER CONDITION---
**Sample Information Sheet for Covid-19**

*(Only For Zoo Animals)*

Please fill the form and submit along with sample(s). If required enclose additional information with this form.

1. **Name & Address of the Zoo/Park:**

2. **Details of the animal**

<table>
<thead>
<tr>
<th>Species</th>
<th>Sex</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Animal I.D (Name/No)</th>
<th>Age</th>
</tr>
</thead>
</table>

3. **Nature of sample (tick appropriate box)**

| A. Live animal screening | B. Post-mortem* |

* sample collected immediately after death

4. **Clinical Symptoms:** Y/N; If yes, give date of recording:

<table>
<thead>
<tr>
<th>Anorexia</th>
<th>Cough</th>
<th>Vomition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>Dyspnoea</td>
<td>Diarrhoea</td>
</tr>
<tr>
<td>Any other specific symptoms:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. **Pre existing medical conditions please specify with date (eg. Bacterial, viral, parasitic diseases, tumors etc.)**

6. **Was the animal ever exposure to laboratory confirmed COVID-19 symptomatic or asymptomatic person (s) (animal keepers/attendants/doctors) or animals? Y/N**

7. **Investigation details, if done with date:**

8. **Treatment details, if given with date**

9. **Specimen details:**

   (i) **Date and time of Collection:**

   (ii) **Sample I.D:**

   (iii) **Sample Types**

<table>
<thead>
<tr>
<th>Nasopharyngeal swab*</th>
<th>Saliva swab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oropharyngeal swab</td>
<td>Nasal swab*</td>
</tr>
<tr>
<td>Deep throat swab*</td>
<td>Blood in EDTA®</td>
</tr>
<tr>
<td>Lung swab*</td>
<td></td>
</tr>
</tbody>
</table>

* Mandatory samples

# Pertains to post-mortem samples (without blood contamination)

@ Blood in EDTA will be accompanied with swab samples

10. **Name and contact details of the authorized persons:**

    1. **Name of the Veterinary Officer**
        - Mobile No
        - Mail I.D

    2. **Name of the Director/Curator**
        - Mobile No
        - Mail I.D

11. **The information provided above is as per our records.**

Date: **Authorized zoo personnel**