COVID-19 and great apes
Advisory for conservation teams operating in great ape habitat during the COVID-19 pandemic

Section on Great Apes, IUCN SSC Primate Specialist Group
Effective: until further notice

This advisory is intended for conservation field staff working in great ape habitat who are not required to observe apes as part of their job, such as antipoaching patrols.

Risk of spreading the SARS-CoV-2 virus to great apes
Disease is one of the greatest threats to great apes because they are highly susceptible to many human diseases, including respiratory infections that may be fatal. Although COVID-19 has not yet been observed in great apes, scientific evidence suggests that great apes are likely susceptible to infection with SARS-CoV-2, the virus that causes COVID-19. For this reason, and particularly during the current pandemic, any human activity in great ape habitat could put great apes at risk.

It is crucial that field teams and managers be aware that anyone who has been in contact with SARS-CoV-2 (knowingly or unknowingly) may carry and transmit the virus to other people or great apes. Even outwardly healthy people could be infected and transmit the virus to others without ever showing symptoms. COVID-19 virus testing facilities are not readily accessible in some range countries, particularly in rural areas, and diagnostic tests to determine past exposure and possible immunity are not yet widely available. Furthermore, without laboratory testing, clinical cases of COVID-19 may not be distinguished from pneumonia or other respiratory illnesses. If and when a vaccine against COVID-19 becomes available, this vaccination should become a requirement for anyone visiting great apes and all personnel working in great ape habitat.

Saliva, sweat, nasal secretions, sputum, urine and faeces from infected people may contain the virus, and contamination of objects with bodily fluids may be an important source of virus transmission. SARS-CoV-2 can remain viable on some surfaces for a number of days. If infective fluids end up in the environment, great apes could become infected by walking on or touching contaminated surfaces while travelling or foraging. In other words, transmission of SARS-CoV-2 from humans to apes may not require direct contact or even close proximity.

It is, therefore, strongly recommended that during the COVID-19 pandemic all non-essential activities in great ape habitat be reduced to a minimum (essential staff only, spending shorter
periods of time in ape habitat). Each project should carefully evaluate disease risk\(^1\) at the site level, taking into account great ape population size and density, local human population densities, levels of poaching and other threats to wildlife and – most importantly – whether any confirmed or suspected cases of COVID-19 have been recorded in neighbouring villages/towns or in any areas from which humans are travelling to great ape habitat. At some sites, the risks to wildlife from poaching and other illegal activities may make the ongoing presence of antipoaching patrols essential.

**RISK LEVEL 1 (low risk):** no known incidence of COVID-19 in-country. This is the baseline level of disease risk transmission. Guidance to be followed: implement IUCN guidelines for disease prevention in great ape populations\(^2\) at all times.

**RISK LEVEL 2 (medium-to-high risk):** COVID-19 has been recorded in-country. If the conclusion of a site-specific risk analysis is that essential conservation activities must continue, then all field staff should adhere to the measures detailed below.

**Fieldwork Preparation**

1) Know your local risk context: monitor local government updates on the COVID-19 pandemic, and share relevant and reliable information with all staff in a timely fashion.

2) Train staff: inform and educate all staff about COVID-19 prevention, including frequent handwashing with soap and social distancing (see [NHP COVID Hub](https://www.nationalgreatape.org/covid-19)).

3) Personal health and contact history: no person who is ill, who has been in contact with anyone who is sick, or has travelled from a location where COVID-19 has been confirmed in the preceding 14 days, should be allowed in great ape habitat. Before entering ape habitat to work, all personnel must be checked for symptoms of disease, including daily checks of body temperature to screen for fever (body temperature above 38°C).

4) Biosecurity supplies: Purchase and maintain sufficient supplies of face coverings (disposable or cloth), soap and sanitizer (disinfectant spray such as chlorhexidine, gel or wipes). These items should be distributed to all field staff as part of their field rations. If biodegradable soap can be obtained, this is preferable to non-biodegradable soap to minimise water pollution.

5) Implement IUCN guidelines for disease prevention in great ape populations\(^2\) at all times.

**Hygiene & Sanitation In The Field**

Ensure that all field staff wear dedicated, clean clothing and footwear upon entering great ape habitat. Dedicated clothing and footwear should be cleaned between each use and kept on site – never carried off site.

---

\(^1\) We define **risk** as confirmed or suspected viral activity in proximity to the site (either in the community, or carried to the field site by a person coming in from elsewhere). Tools are being **developed** to help great ape projects to perform disease risk analysis.

\(^2\) IUCN guidelines for disease control in great ape populations are available in English, French & Bahasa Indonesia: [https://portals.iucn.org/library/node/45793](https://portals.iucn.org/library/node/45793)
Avoid respiratory droplet spread. If there is a need to cough or sneeze, cover mouth and nose (with a tissue, handkerchief or the crook of the elbow rather than hands), even while wearing a face covering. Disinfect/wash hands frequently and after sneezing. Reinforce that spitting and nose blowing/clearing on the ground spreads disease.

Waste removal: Do not discard any waste in the environment. Prohibit smoking in ape habitat due to the risk of disease transmission via contaminated cigarette butts. Waste generated during overnight camping (e.g., sardine cans) must be carried out and disposed of safely, or burned in the campfire and then buried along with campfire remains before the team moves on. Bury faeces at least 30-cm deep and cover well.

**RISK LEVEL 3 (high risk perceived):** COVID-19 has been recorded in the region. If the conclusion of a site-specific risk analysis is that the level of threat from illegal activities outweighs the health risk and that some essential activities should continue (e.g., patrols), then – until all field staff can be vaccinated against COVID-19, or tested for COVID-19 antibodies or the disease at regular intervals – every effort must be made to prevent the transmission of COVID-19 to great apes. In addition to the precautions detailed for Risk Level 2, at least one but preferably both of the following additional measures should be implemented.

**Quarantine**
Impose a 14-day quarantine for any member of staff who has travelled from outside the immediate project area upon arrival at the project base (or whose family member or another individual residing in their household has done so). Personnel should remain on site and be supplied by others using safe social distancing practices.

**Face Covering (cloth masks)**
A face covering should be worn at all times in great ape habitat (except inside tents), i.e. anywhere in a group’s or a community’s home range where an ape could pass hours or even a few days after a patrol. Face masks must be worn correctly, covering both the nose and mouth.

Each team member should be issued an appropriate supply of face coverings, taking into account that cloth coverings should be washed daily. Never discard used coverings in the forest. When a patrol is camping in the forest, cloth coverings must be washed in the evening, using soap and water, ensuring that a good lather is built up and the cloth is washed in the same careful way as when handwashing. Single-use masks should be burned in the campfire, or soaked in alcohol or 10% dilute bleach, then carried out and disposed of in specific bins provided.

If face coverings are not available for purchase, they can be made using local materials. For easy-to-follow guidance on making and using cloth masks, please visit the [Leendertz Lab](https://www.leendertz.de/) website³.

**RISK LEVEL 4 (high risk confirmed):** if COVID-19 is confirmed among field staff and/or in close proximity to the field site, suspend all field activities.

---

³ Further guidance is available on the following websites:
- [Non Human Primate COVID-19 Information Hub](https://www.primatehub.org/coronavirus/)
- [Centers for Disease Control and Prevention (CDC)](https://www.cdc.gov)
- [World Health Organization (WHO)](https://www.who.int)
- [Best Practices for great ape conservation](https://www.primatehub.org/coronavirus/)