

Consider COVID-19

Wildlife and human health *[Image:] Artwork of COVID-19 virus from electron microscope imaging.*

Wildlife contributes to food security and livelihoods of many local communities in the world. However, it is important to eat meat in a way that is safe for human health, as well as sustainable for animal populations. COVID-19, like Ebola, is caused by a virus which reached humans from other animals. COVID-19 probably originated in bats and may have infected other wild mammals before humans. Viruses and bacteria have come to humans from other species throughout our evolution. During evolution, this sometimes gave benefits. Thus, parts of our cells were originally independent bacteria. However, the adaptation process can be slow and dangerous.

The risk of death from COVID-19 is highest for humans more than 60-70 years old. Trying to save lives has stressed the medical services in countries with advanced economies and is starting to do so in emerging economies. There will be consequences for conservation. One effect will be widespread damage to livelihoods, with people compensating by using more resources, not always sustainably. However, there may also be beneficial effects for Climate Change, through more people learning to work more from home and using less fossil fuel for distant travel.

*Learn more about COVID-19 [\[language specific links to Wikipedia\]](#)
Find out about Climate Change [\[link to CC page on site\]](#)*

Enduring solutions *[Image:] Primates are good to watch and dangerous to eat.*

There are steps to take both for the future and immediately. We need to think very carefully, to avoid doing harm to the environment and to ourselves. For example, some people say that COVID-19 is a reason for humans not to eat other animals, or even associate with them. However, humans have adapted to viruses and bacteria from wild and domestic animals for millennia. Our bodies contain many micro-organisms, mostly useful to us. We associate with animals whatever we do, from grubs in the soil on which infants crawl to birds and mammals visiting our houses. Nonetheless, any food from the wild needs to be healthy and sustainably managed.

In this regard, we need to be especially careful with species closely related to us. Whereas epidemic disease seems not to start from cold blooded animals, like fish and reptiles, our risk is high for some diseases carried by primates and bats. It seems wise not to eat primates and to minimise contact with bats and their excreta. It is very foolish, as well as inhumane, to bring wild mammals live to food markets. However, should we ban association with other species to which we are already adapted, or which create no disease risk? No. This would be foolish too, especially when regulated and sustainable use encourages people to live with the species and conserve their ecosystems. Moreover, this is a time when harm to economies adds pressures for development that may damage the environment. Our nature needs all the support it can get from people who value the products of healthy ecosystems.

Learn why it is important for local communities to manage their environment [\[link to governance page\]](#)

Immediate solutions *[image:] COVID-19 hates soap!*

Immediately, the most important thing is not to spread the virus by infecting other people. Knowledge of COVID-19 biology tells us that if the virus cannot spread between people on moist surfaces or in water droplets, it goes locally extinct. So, each of us needs to:

- Wash hands and disinfect surfaces to prevent transfer of virus to eyes, nose or mouth;
- Keep distant from people, to reduce contact with virus in droplets they have breathed out;
- Not travel about or gather in groups, which increases both these risks.

Moreover, washing is wise whenever we interact closely with nature. This makes us safer from many microbes, parasites and natural toxins. When greater safety returns, we need also to learn useful social lessons. We see that societies can rapidly adjust to changes, which may be required to reverse climate change. We have also seen the cost of not heeding science-based warnings.

More advice on COVID-19 where you live [\[culture specific links to pages on Satellites\]](#)

Glossary

For Consider COVI-19 element 2, in the Resource Set of 'Editable Page Elements' it is important to be very precise with wording. Publications in Nature and other top level journals show (a) that bats are the most probable origin through similarity of long DNA sequences, but (b) that subsequent evolution before human-to-human transmission is unclear: although shorter sequences have some similarity to pangolin DNA they have not been compared with many other species and could have come to the virus via humans (in more than one way). For policy reasons, please stick carefully to: "COVID-19 probably originated in bats and may have infected other wild mammals before humans."

For Consider COVI-19 element 10, it is very important to be precise for the following two sentences, which have been carefully revised to reflect the best science and may influence policy. "Epidemic disease" spreads human-to-human, which seems not to be the case for any disease of the few diseases (e.g. Salmonella) humans can catch from cold-blooded species. Risk from bats is from excreta as well as coronaviruses, including Nipah virus from urine and rabies from faeces. Therefore please translate carefully (where red indicates most recent changes): "Whereas **epidemic disease seems not to start** from cold blooded animals, like fish and reptiles, our risk is high for some diseases carried by primates and bats. It seems wise not to eat primates and **to minimise contact with bats and their excreta**. It is very foolish, as well as inhumane, to bring wild mammals live to **food** markets."

Please be sure to stipulate mammals (not all animals) and food markets. One publication discussing the issue shows a group of falconers with trained birds of prey, which are not being teated inhumanely and are unlikely to be for food! (<https://theconversation.com/coronavirus-why-a-blanket-ban-on-wildlife-trade-would-not-be-the-right-response-135746>).

There is better written material summarising the issue at <https://www.illegalwildlifetrade.net/2020/04/15/position-statement-managing-wildlife-trade-in-the-context-of-covid-19-and-future-zoonotic-pandemics/>

An excellent webinar (Spanish as well as English from a CEM task force) is at

<https://www.natureserve.org/connect/pulse-planet/x-ray-pandemic>

and in Spanish too

<https://www.natureserve.org/connect/pulse-planet/rayos-x-de-una-pandemia>

Both are linked to our satellite now being rolled out globally:

<http://naturalliance-en.sycl.net>