

## Risks of Covid-19 Infection from Human-Non-Human Wildlife in Present Scenario

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On the rise of Covid-19 virus globally, it is important to rise questions on human to non-human wildlife transfer of the disease in present scenario. Rhinolophid bats were considered as the most potential evolutionary source for Covid-19 virus but human-to-non-human wildlife transmission (zooanthroponotic potential) has happened on numerous events, in different nations, and including a few animal groups. In any case, almost certainly, further cases in animal life will arise since numerous Covids have an expansive host range [1]. Transmission of diseases caused mass mortality in wild populations of nonhuman primates earlier [2]. Rhesus macaques were used as biomedical tool in covid case studies at first in case of non-human wildlife and macaques were found to develop symptoms in response to infection that closely resembled infections of humans following the development of COVID-19. After recognizing the potential danger of this covid virus to non-human primates, the International Union for the Conservation of Nature (IUCN) [3], together with Great Apes section of the Primate Specialist Group, released a joint statement on several precautions that should be taken for researchers and caretakers while interacting with great apes in wild and laboratories. All pathogenic human coronaviruses have their origin in animals [4] but the impact of human-to-animal transmission of covid virus has not been extensively studied yet. In the rise of pandemic, it has now become critical to understand the wide range of animals (example: cats, ferrets, hamsters, non-human primates, minks, tree shrews, raccoon dogs, fruit bats, and rabbits) that are susceptible and permissive to this virus groups [5]. Ecology and evolution of human to non-human

wildlife transmission of covid-19 virus needs utmost attention of researchers and scientists of different fields of animal studies to understand host-host interactions and identify high risk species. Studying host-virus interactions in susceptible species will help in determining the long-term infection status of these animals, effect on long-term immunity and persistence. If we can predict risks of viral infection in susceptible animal species at their population level, then it might save thousand animal lives from deadly outcomes of covid attack and re-emergence of the disease in future.

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