Raccoon dogs linked to coronavirus pandemic

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<u>In news</u>— A new analysis of genetic data collected from the Huanan Seafood Market in Wuhan, China, has linked coronavirus to raccoon dogs.

Key findings-

- An international team of experts said that agenetic data collected from the Huanan Seafood Market in Wuhan, China, has linked coronavirus to raccoon dogs, adding evidence to the belief that the pandemic might have originated from the infected animals sold at the site.
- The genetic data was gathered from swabs taken from in and around the market back in January 2020, shortly after the Chinese government had shut down the market because of suspicions that it was linked to the outbreak of a new virus.
- A previous analysis of the same data was published in 2022, showing that it contained both Covid and human DNA.
- Moreover, Chinese researchers at the time denied that the samples consisted of any animal DNA.
- The new findings have now proved them wrong and have revealed that the Covid-positive samples were rich in DNA from raccoon dogs.
- However, they don't prove that these animals or any other animals were responsible for triggering the pandemic.

About Raccoon dogs-

- They are neither dogs nor raccoons. They belong to the canid family and are closely related to foxes.
- They are the only canids that hibernate during the

winter. There are two species of raccoon dogs:

- Nyctereutes procyonoides, the common raccoon dog (the species that was in the Wuhan market) and
- Nyctereutes p. viverrinus, the Japanese raccoon dog.
- These animals, weighing around 16 pounds on average, are omnivores and relish food sources such as rodents and berries.
- Although they appear svelte in the summer, they pack on the pounds for winter, when their fur also becomes thicker.
- They are monogamous, often living in pairs.
- Raccoon dogs are originally from East Asia and are commonly found in parts of China, Korea and Japan, where they are known as tanuki.
- They are also found in Europe, where they were first brought in by fur traders in the 1920s.
- Today, raccoon dogs are considered to be a threat to the local ecosystem in Europe and an EU report declared them "one of the most successful alien carnivores in Europe."
- However, in Japan, tanuki is revered. In folklore, tanuki are fun-loving tricksters who could shape-shift and are often associated with good financial luck.
- They are often depicted with giant scrotums that they can expand and shape into useful objects such as umbrellas and fishing nets.
- For decades, these animals have been farmed for their fur.
- Every year, according to the Humane Society of the United States, millions of them are killed in China, which is a leading producer of raccoon dog pelts.
- To meet the huge demand, sellers raise raccoon dogs in small and crowded facilities while transporting them in small cages, often stacked with those of other animals.
- This serves as a perfect breeding ground for the spread of different diseases.
- According to a study, raccoon dogs and related mammals

sold for food at a live animal market in China in 2003 were found to carry a coronavirus similar to the virus found in humans during a SARS coronavirus outbreak at the time.

- A 2022 study after taking samples from about 2,000 animals of 18 different species in China found that wild animals known to be consumed by humans, including raccoon dogs, carried 102 different viruses from 13 viral families 21 of those posed a high-risk to humans.
- It also added that raccoon dogs specifically carried four canine coronaviruses that were genetically similar to those found in humans.