



Editorial

How do SARS and MERS compare with COVID-19?

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While the planet is firmly within the grip of the COVID-19 pandemic, we take a glance back at SARS and MERS and their underlying pathogens, which also are coronaviruses. Three new coronaviruses have emerged since the turn of the century.

Coronaviruses are an outsized family of enveloped RNA viruses that mostly infect birds and mammals. In humans they will cause mild infection within the upper tract, just like the cold, but also more serious lower tract infections.

These infections can manifest as bronchitis, pneumonia, or a severe respiratory disease, like severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), or coronavirus disease 19 (COVID-19).

But how similar are the SARS, MERS, and COVID-19 coronaviruses? And the way do the diseases compare?

The coronavirus that causes SARS is named SARS-CoV. Consistent with the planet Health Organization (WHO), the primary cluster of SARS cases occurred in China's Guangdong in November 2002.

Research has identified horseshoe bats because the natural reservoir of SARS-CoV. Civets and animals in wet markets also likely contributed to the virus crossing from animals into humans.

The organization was first notified, of quite 100 deaths thanks to a replacement communicable disease, on February 10, 2003. Subsequent day, the Chinese health ministry made a politician report of 300 cases and five deaths thanks to an acute respiratory syndrome.

On March 12, 2003, the WHO issued a worldwide alert, warning of primary atypical pneumonia spreading among hospital staff.

A mere 3 days later, the WHO coined the name SARS and put out an emergency travel advisory, asking travelers to be conversant in the symptoms of the condition. They also proposed that the disease was spreading throughout the planet by people using air transportation.

Later in March, the WHO recommended that airports in areas with cases of SARS screen passengers.

From April of that year onward, the WHO issued variety of warnings, asking people to postpone about essential visit affected areas. These areas included, at various times, Hong Kong, Toronto, several areas of China, and Taiwan.

The WHO officially declared the SARS epidemic to be contained on July 5 of that year. Since then, there are four small outbreaks of SARS.

Of these, three involved people that worked with the SARS virus in laboratory settings and purchased the virus accidentally. The fourth incidence has been mostly attributed to infection from an animal source.

There are no reported cases of SARS since then, although the WHO warn that "These events demonstrate that the resurgence of SARS resulting in an epidemic remains a definite possibility and doesn't leave complacency."

MERS occurs as a results of infection with the coronavirus MERS-CoV.

On September 20, 2012, the Program for Monitoring Emerging Diseases reported a completely unique coronavirus isolated from sputum samples of a 60-year-old man from Saudi Arabia, who had died 3 months earlier.

Within subsequent month, the amount of confirmed MERS cases rose to nine, with five fatalities. The earliest case dated back to April 2012.

Across the world, 27 countries have reported cases of MERS since 2012, but around 80% of cases have occurred in Saudi Arabia.

MERS-CoV may be a zoonotic virus, meaning that the majority cases of infection pass from animals to humans. consistent with the WHO, direct or indirect contact with dromedary camels is that the commonest route of infection.

Transmission among people is rare, and it mostly occurs among relations or in healthcare settings.

The MERS-CoV virus is analogous to European bat coronaviruses.

The coronavirus SARS-CoV-2 is that the pathogen that causes COVID-19. The virus features a close resemblance to SARS-CoV.

The first cases of COVID-19 were reported in Wuhan, China, in December 2019.

On January 5, 2020, the WHO published the primary news of an epidemic of unknown cause. By the top of January, the organization had declared COVID-19 to be a public health emergency of international concern.

The name COVID-19 was officially coined, by the WHO, on February 11. Exactly 1 month later, the organization declared an epidemic.

To date, cases of COVID-19 are reported on every continent except Antarctica. Governments across the planet have responded with varying degrees of social distancing measures during a bid to curb the spread of the virus.

As the numbers of infections and deaths from COVID-19 still rise, researchers are working to spot suitable treatments and vaccines to curb the pandemic.

Each of the three new coronaviruses that has emerged since the turn of the century has caused respiratory illness outbreaks, but each has also displayed unique features.

SARS and MERS have significantly higher case fatality rates than COVID-19. Yet COVID-19 is more infectious - the underlying SARS-CoV-2 virus spreads more easily among people, resulting in greater case numbers.

Despite the small letter deathrate, the general number of deaths from COVID-19 far outweighs that from SARS or MERS.

There are no cases of SARS for over a decade. But MERS is an ongoing public health concern.

One factor that would contribute to the extent of injury that any new coronavirus can cause is globalization.

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