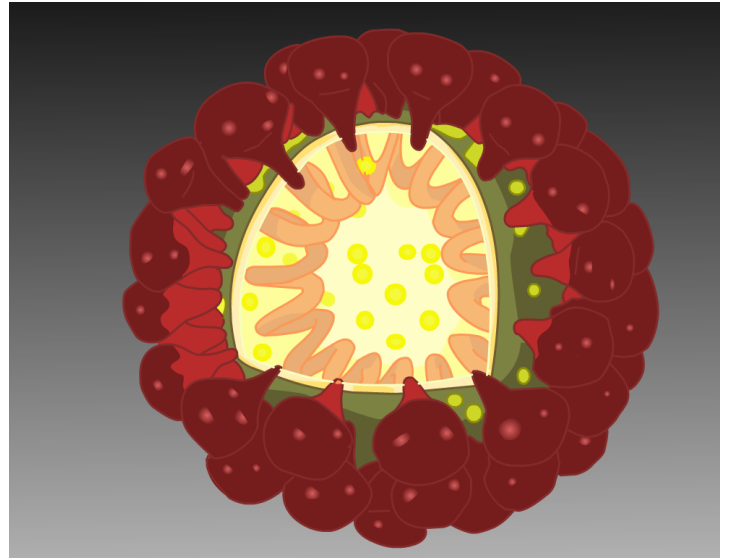




## Related Reading - Coronavirus

In December of 2019, doctors in China diagnosed a number of pneumonia cases in a group of people who had visited a seafood and live animal market in the city of Wuhan. The culprit turned out to be a virus. Scientists identified it as a new strain of coronavirus, and named it **SARS-CoV-2**. It's related to another coronavirus, named SARS-CoV, which began making people sick in 2003. That first virus was quickly brought under control. But the new SARS-CoV-2 was just getting started, and no one knew exactly what to expect.



What happened in Wuhan? Did the virus jump the species barrier from animals to humans? Or did it have something to do with the city's Institute of Virology, where researchers routinely handle infectious agents? Rumors swirled that this new coronavirus was a science experiment gone wrong.

Fortunately, there was a way to find out—by studying the virus's genetic code. Just like living organisms, viruses carry a sequence of genetic information that's unique, like a fingerprint. Studying it helped scientists determine where SARS-CoV-2 came from.

So, coronavirus particles were collected from infected individuals and from samples at the virology institute. Comparison of their genetic fingerprints showed that they did not match. In other words, SARS-CoV-2 did not come from the virology institute.

The genetic code of SARS-CoV-2 revealed that the virus is very similar to one found in bats. Bats carry this other virus without getting sick, but that doesn't mean it wouldn't sicken humans. This information helped scientists confirm that the virus started out in bats and made it into the human population through a single person. Then it spread from human to human until thousands were infected.

Knowing the new coronavirus's genetic code doesn't only tell us about its origins. It also helps us track what it might do in the future. Viruses often **mutate**, or change their genetic information, as they spread through a population. Keeping tabs on SARS-CoV-2's genetic progress will buy precious time in any possible future outbreaks. Scientists will be more prepared to develop ways to contain the virus and make it less harmful.

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