



Rumour: Is COVID-19 'airborne'?

There are numerous posts on social media, in many languages, concerned that could be an 'airborne' virus. But what is an airborne SARS-CoV-2 virus and what do we know about COVID-19 and its ability to survive and spread in the air?

As with a lot of the scientific information related to this virus, it's important to understand the terms being used by public health officials to be able to best explain them, and their implications to your audience.

Translators without Borders are identifying key terminology that people use to talk about COVID-19 as well as commonly-used technical terms to develop a multilingual, [plain-language glossary](#). This is another great tool to make sure your translations of terms are consistent with what other journalists are using.

Is the COVID-19 virus airborne?

This is a difficult question to answer. As with many elements of this new virus and disease, scientists are still conducting tests to find out more information. Based on the [current recommendations](#) from the WHO, the virus is not considered to be airborne. But experts working on respiratory illness and aerosols have their [doubts](#) and say gathering sufficient data to verify whether the virus is airborne could take several years.

[The World Health Organization](#) states that COVID-19 spreads mostly through direct contact with infected people and with infected large respiratory droplets, which are larger than 5-micrometers in diameter. Droplets are larger and heavier and thought to travel only short distances after someone coughs or sneezes before falling to the floor or onto other surfaces.

When public health officials say there isn't sufficient evidence to say that SARS-CoV-2 is airborne, they specifically mean that they do not believe that the virus is transported in tiny droplets, or aerosols, smaller than 5 micrometers in diameter.

The weight of the evidence suggests that the new coronavirus can exist as an aerosol only under [limited conditions](#).

What is an 'airborne' virus?

Airborne viruses are viruses that are capable of becoming suspended in the air, typically when an infected individual coughs or sneezes. They can then be inhaled by unsuspecting individuals resulting in new infections. Airborne viruses can affect both animals and humans.

There are many common airborne viruses that you would have heard of before. For example, the common cold is considered airborne, as is influenza (the flu), tuberculosis, and chicken pox to name a few.

What is an aerosol ?

An aerosol is a physics term meaning a liquid or solid (the virus) suspended in a gas (like air). An aerosol does not need to carry a virus. Fog is also an aerosol; it allows water droplets to be suspended in the air. Like fog, suspended particles can remain for hours or more, depending on factors such as heat and humidity.

The main difference between droplets and aerosols is that the former are heavy and large, so they can't stay in the air for long. The latter, called droplet nuclei by WHO, are smaller than 5-micrometres. They may remain in the air for long periods of time and can be transmitted to others over distances more than 1-metre.

Aerosols can also carry infectious viral particles. According to the [Harvard Medical School](#) aerosols are infectious viral particles that can float or drift around in the air. An aerosol is basically a tiny droplet of saliva that can hold the virus inside. Aerosols are emitted by a person infected with coronavirus – even if they have no symptoms – when they cough or sneeze.

Why are people worried about airborne viruses?

People are concerned when viruses are airborne as it significantly increases the risk of transmission to more people. A virus that is airborne tends to spread easily and may be harder to control.

Researchers in a laboratory study in March described how aerosolized coronavirus particles can remain active for up to three hours in the air. This could mean another person could potentially breathe in the particles hours after being expelled. However, there are limitations in this study as outdoor factors like humidity and other conditions could affect how long the virus stays active in its aerosolized form.

In one incident, several members in a Seattle choir practice contracted COVID-19 despite other members not having symptoms and maintaining their distance from each other in the performance. Two infected members later died.

However, if you were to sneeze or cough onto your hand or a surface, scientists also found that the coronavirus could stay up to four hours on copper, up to 24 hours on cardboard, and up to two to three days on plastic and stainless steel. For these reasons the cleaning of surfaces, washing hands, and social distancing in public places are regarded as good practices. For these reasons WHO has the following basic protective measures:



Wash your hands frequently

Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water.

Why? *Washing your hands with soap and water or using alcohol-based hand rub kills viruses that may be on your hands.*

Maintain social distancing

Maintain at least 1 metre (3 feet) distance between yourself and anyone who is coughing or sneezing.

Why? *When someone coughs or sneezes they spray small liquid droplets from their nose or mouth which may contain virus. If you are too close, you can breathe in the droplets, including the COVID-19 virus if the person coughing has the disease.*

Avoid touching eyes, nose and mouth

Why? *Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to your eyes, nose or mouth. From there, the virus can enter your body and can make you sick.*

Practice respiratory hygiene

Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately.

Why? *Droplets spread the virus. By following good respiratory hygiene you protect the people around you from COVID-19.*

So how can I report on this issue?

Use plain language to explain complex medical and scientific terms to your audience

If experts use terms you don't understand, ask them to explain the term in plain language to you to ensure their statements are not misinterpreted.

Keep up to date with the latest research on the topic

Information is changing rapidly, so you need to ensure your articles contain a date, and links to your original source material so your audience can verify for themselves if the information may be out of date.

Stick to the facts, and do not contribute to fear and panic

Avoid using terms that would exacerbate panic. Remember you are addressing an audience that is already anxious. Use fewer adjectives and focus more on the details. Refrain from using alarming adjectives like "deadly," "scary," or "killer."

Empower your audience to act

Try not to focus too much on what your audience can't control, ensure every article includes practical advice your audience can act on to protect themselves.