Chemists have produced antiviral materials and coatings which can be used for surfaces and PPE to reduce transmission.

When a person infected with COVID-19 coughs, sneezes, talks, or even breathes, they can propel droplets containing the virus into the air.

Larger droplets can contaminate surfaces. Contact with these surfaces was thought to be a key mode of COVID-19 transmission but recent research suggests it's less significant.

Droplets smaller than 5 µm dry and form aerosols (particles suspended in air). They can travel greater distances and lead to the virus being spread through the air.

On 6 July 2020, aerosol scientists published an open letter calling for recognition of the airborne transmission of SARS-CoV-2. We now know that surface transmission plays a lesser role than initially thought.

Ventilation reduces airborne transmission. Additionally, filtration technologies help destroy the virus in the air in buildings.

Silver and copper destroy viruses by damaging their structure or genetic material.

Polymers can deactivate viruses or modify surface properties to combat them.

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How is it helping?

Limiting infections
Better understanding of how the virus spreads helps us take action to prevent its transmission, so we can reduce the number of infections.

Making activities safe
Knowing how the virus spreads helps us know what activities are safe, or how we can modify activities to make the risk of transmission lower.

Improved technology
Funding for new antiviral technology against SARS-CoV-2 may also produce solutions that protect us against other viruses in the future.