



Common questions about COVID-19 and air conditioning and refrigeration systems

Given the current coronavirus (COVID-19) pandemic, people are understandably concerned about how the disease is spread and whether air conditioning, refrigeration or other related HVAC&R systems could play a role.

AIRAH has compiled some of the most frequently asked questions and will continue to update these as more information becomes available.

Links to further resources are also provided on the [AIRAH Coronavirus Information Page](#).

Can COVID-19 be transmitted through air conditioning systems?

At this stage, there is no evidence that COVID-19 can be spread through air conditioning systems.

Although we are still learning about the disease, the World Health Organization (WHO) notes that it is mainly spread through contact with respiratory droplets.

When a person with COVID-19 coughs or exhales, these droplets land on objects and surfaces around the person. Other people catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth.

People can also catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs out or exhales droplets. The WHO recommends staying more than one metre away from a person who is sick.

What actions are required for workplace air conditioning systems?

Although the current information indicates COVID-19 is not transmitted through air conditioning systems, these systems can help control the spread of the disease.

In line with guidance from SafeWork NSW, AIRAH recommends that employers should seek confirmation from their building owner that the air conditioning system is properly designed and maintained according to Australian Standard AS 1668.2-2012. *The use of ventilation and air conditioning in buildings, Part 2: Mechanical ventilation in buildings.*

All internal spaces should be well ventilated with flow of fresh air if possible.

Also, research suggests that keeping relative humidity between 40 and 60 per cent will create conditions in which the virus is least viable.

The [following interview](#) with ASHRAE presidential member William Bahnfleth contains useful information about the effectiveness of filters, UV and other HVAC technologies in controlling COVID-19.

Should special filters be installed in offices to help control the spread of the disease?

At this stage, for office and similar environments, WorkSafe NSW does not recommend installing special air filters to air conditioning systems. AIRAH supports this advice.

Do I need to disinfect my home air conditioner?

There is no indication at this stage that home air conditioning systems can spread the disease. Although AIRAH recommends regular maintenance and cleaning of air conditioning equipment, there is no special cleaning or disinfecting requirement because of the coronavirus.

If you suspect that the surface of an air conditioning unit has been infected – by someone coughing on it, for example – use a simple disinfectant to clean the surface.

Is refrigerated or frozen food at risk of carrying COVID-19?

According to the Centres for Disease Control and Prevention (CDC), there is currently no evidence to support transmission of COVID-19 associated with food. It says that “there is likely very low risk of spread from food products or packaging that are shipped over a period of days or weeks at ambient, refrigerated, or frozen temperatures”.

The CDC recommends that before preparing or eating food it is important to always wash your hands with soap and water for 20 seconds for general food safety. It also recommends washing your hands throughout the day after blowing your nose, coughing or sneezing, or going to the bathroom.

How easily can coronavirus spread inside a plane?

The WHO said there was “very little risk” of any communicable disease being transmitted on an aircraft.

The risk is like that which you would face in any other public place.

This is no different from any other situation in which people are close to each other, such as on a train or bus or in a theatre.

But transmission of coronavirus can occur between passengers who are seated in the same immediate area of an aircraft.

The WHO said this could occur when an infected person coughed, sneezed or had direct contact with another person.

Health authorities advise passengers seated within two rows of a confirmed case of coronavirus to self-isolate and seek medical attention if symptoms present.

Do I need to wear a mask?

The WHO says you do not need to wear a mask if you are healthy.

You should, however, wear one if you are taking care of a person with suspected COVID-19 or if you are coughing and sneezing.

How long can the virus last on surfaces?

According to the WHO, coronaviruses (including preliminary information on the COVID-19 virus) may persist on surfaces for a few hours or up to several days. This may vary under different conditions (e.g. type of surface, temperature or humidity of the environment).

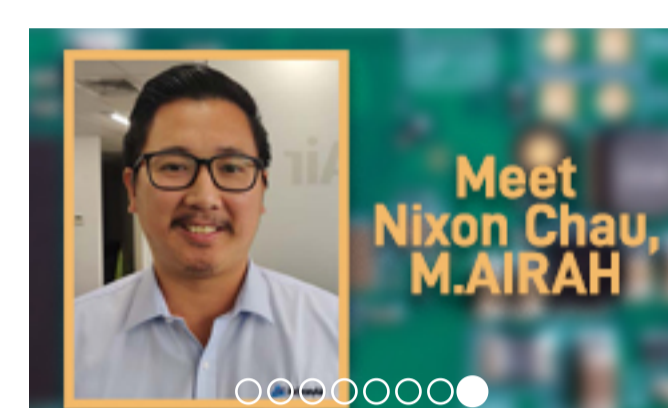
The most recent information, reported in USA Today, has found that viable virus could be detected up to three hours later in the air, up to four hours on copper, up to 24 hours on cardboard, and up to two to three days on plastic and stainless steel. The study has not yet been peer-reviewed and has not been corroborated by the WHO or CDC.

The WHO recommends cleaning surfaces that may be infected with simple disinfectant to kill the virus and protect yourself and others. Clean your hands with an alcohol-based hand rub or wash them with soap and water. Avoid touching your eyes, mouth, or nose.

Got a question?

Please send your HVAC&R related questions to airah@airah.org.au and we will work with our AIRAH subject matter experts to answer.

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