



# Information on COVID-19 and ventilation at home

Ventilation and air cleaning can help reduce exposure to COVID-19. Ventilation alone will not protect people from the virus and other public health measures, including vaccination, social distancing, face masks where recommended, good respiratory and hand hygiene, and cleaning and disinfection of surfaces and objects, must still be implemented.

The aim of ventilation in your home is to bring as much fresh air inside as possible. The outdoor air will dilute the indoor air and, therefore, reduce the number of virus particles in your home. You can bring in fresh outdoor air by using either natural or mechanical ventilation or a combination of these.

**Natural ventilation** involves opening windows and doors and letting outdoor air flow through your home. It is best to try to get cross-ventilation when you can. Cross-ventilation can be created by opening windows or doors on opposite sides of the room or space (and keeping internal doors open). This is more effective than single side ventilation, which is a single opening in a room or opening doors and windows only on one side of the house.



Single side ventilation



Cross ventilation

**Mechanical ventilation** includes any exhaust fans or air conditioning systems in the home. Not all air conditioning systems provide fresh air or ventilation. Some air conditioning systems just cool down or warm up and recirculate the air that is in your home. Therefore, these will not provide adequate ventilation. Roof-mounted evaporative air conditioners and some all-in-one window/wall-mounted air conditioners do provide fresh outdoor air. Check your system's manual to find out how it operates so you can confirm if it provides dilution ventilation by bringing in outdoor air and apply the appropriate settings.

You can also use portable fans to blow air from inside to outside. Exhaust fans in bathrooms, kitchens (e.g. stove tops) and toilets should be operated to remove indoor air while these rooms are occupied.

## Air purifiers

Filters and air cleaners can also be used to reduce the concentration of viral particles in your home.

You may want to use a portable air cleaner/purifier. It can be difficult to choose one that is suitable for a particular setting. However, make sure you buy one that uses HEPA filters (not HEPA-like or HEPA-style). Also make sure it is large enough for the area you will use it in. Read more information about [portable cleaners \(external link\)](#).

Portable air purifiers with HEPA filters would be useful on days of high outdoor air pollution, for example if there is heavy bushfire smoke, particularly if anyone in the home is highly susceptible to the health effects of air pollution, and you want to avoid introducing outdoor air or on days of extreme heat or cold, if you only have air conditioners using recycled air and the need for efficient temperature control reduces the ability to use natural ventilation.

## Isolating household members

**The information below must read in conjunction with any legal Direction pertaining to conditions for isolation in a suitable premise and does not replace advice given directly to an individual(s) by the Department of Health's Public Health Operations team.**

If a household member is known to be infected with COVID-19 and is isolating at home, additional measures can help reduce the risk to other household members. The infected person should be isolated in a separate room, with separate ventilation from other rooms or by making sure that air is flowing **into** the room from the rest of the house. This can be achieved by increasing exhaust airflow in the room e.g. install an exhaust fan temporarily in a window. Other factors to consider include:

- choose a room with a connected private bathroom and run the bathroom exhaust fan continuously at highest possible speed
- seal any door grills or gaps that allow mixing of air between the isolation room and the rest of the house. For example, hanging plastic sheets between the isolation room and the rest of the house can impede airflow around doors but can be easily moved to allow necessary movement of people.
- portable room heaters or coolers with no, or low, fan speed should be used instead of air from a central system, so that air is not blown out into other parts of the home.
- continuously operate a portable HEPA unit in the isolation space.
- as a precaution, wear appropriate personal protective equipment (disposable gloves and mask) when handling filters with any discarded filters, gloves and masks and place waste in a sealed bag before placing in general rubbish bin.

**Further information** on ventilation is provided in [Information on COVID-19 and building ventilation \(external link\)](#) which includes links to additional information sources on air cleaning from organisations such as the [United States Environmental Protection Agency \(external link\)](#) and the [Chartered Institution of Building Services Engineers \(external link\)](#).

**Last updated 06 February 2022 EHD V1**

**This document can be made available in alternative formats on request for a person with disability.**

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