

Isolating for COVID-19 at home

If you have **tested positive** for coronavirus (COVID-19) or **have symptoms and are awaiting test results you must isolate immediately** at home or at another suitable location.

Isolation means not having any form of contact that could infect others.

The risk of infection to the carer and other household members can be reduced by following simple guidelines.

It is very important to:

- **Start isolating immediately** - an infected person can spread infection days before any symptoms appear. Symptoms vary between people and can be similar to a cold or the flu. Symptoms can include: fever, cough, feeling of being unwell or exhausted, as well many other symptoms. Also between 20- 40% of people do not have symptoms but are still infectious.
- **Make sure no member of the household leaves the home** - even if other household members test negative, they must not leave the home till a minimum of 14 days with a negative day 11 Covid test and no symptoms , or as advised by DHS
- **Be prepared** - Know what to do and have basic items already available at home. Be ready so you can take immediate steps to isolate if you have symptoms or are COVID-19 positive.

If someone in your home is suspected of having COVID-19 they should isolate immediately.

- This means they should remain in a room alone, door closed and if possible have their own bathroom. The infected person is a mini virus factory, shedding virus into the air and onto surfaces. They need to be isolated as much as possible within the house.
- If there is only one bathroom, the window should be left open at all times to maximise ventilation of this space, and the surfaces should be considered as contaminated. The toilet lid should be closed for flushing.
- They will have to eat, sleep and generally carry on life in their isolation room.
- Good ventilation of the room is important as it flushes out large and small airborne droplets and provides clean air. Leave windows open as much as practical.
- Food should be left at their door (knock and leave). Afterwards, the plates and utensils should be treated as infectious and put through the dishwasher.

- They should not be allowed into any other rooms of the house, or outside the house other than to a backyard or a well ventilated balcony.
- They should maintain a distance of at least 2 metres at all times from other people. In this case, everyone should be wearing masks and should turn away to sneeze cough.
- If some physical contact is required in the home, for example when caring for children, keep contact to the minimum, wash hands afterwards, clean surfaces with diluted bleach and keep windows open if possible.
- Pets should not be allowed into the infected person's room as, in theory, they may transport virus on their fur. There are reports of very rare cases of household pets contracting coronavirus.
- If the infected person is moved to medical facilities, their house or room is still potentially contaminated for a further 4-7 days.

Refer to our guide “ *Reducing Covid -19 Infections at home* “ for more detailed information.

The whole household should be under lockdown because there is a real risk that other household members may already be infected but not be showing symptoms.

- A person can become infectious, at one or even perhaps two days, before they start to show symptoms. Symptoms usually appear 5-6 days after infection, but this can be up to 12-14 days later. Remember 20-40% of people with Covid feel well and have no symptoms.
- The isolation of the entire household is therefore one of the most important strategies in stopping the virus from spreading in the community.
- Thus the whole family should not go out of the house. This will require a range of wide range of support: food supplies, medical, and other support for at least a fortnight.
- Surfaces, including floors and door handles, where possible, need to be routinely cleaned with water and detergent or other cleaning solution (and then decontaminated with an agent such as freshly prepared diluted household bleach.
- Wash hands regularly and thoroughly (20 seconds with soap and water or 70%-based alcohol based sanitiser), particularly after being in the room of an infectious person or handling anything they may have touched.
- Wear disposable or washable gloves whenever handling items that may carry virus to limit spread and also when using cleaning agents to protect your hands from harsh chemicals.
- The good news is that if everyone does their best only 20% of family members will catch Covid-19 from the infected family member.

Provided the symptoms are mild, it is possible to care for someone with COVID-19 at home and to do so relatively safely.

- In some situations, it may be preferable for one family member to be the designated carer, in order to limit the risk of wider transmission.
- If both parents are infected and their children need to be sent to others for temporary care, it is better if at all possible to send children to a young adult and not grandparents who are at greater risk (because the children may be infected and not showing symptoms but can still transmit disease),

Prepare NOW by having a plan and essential items

Make a plan to provide food, medical communication and other necessities for at least three weeks

Discuss your plan with family and friends and agree to check on each other regularly

Make plan for dealing with the boredom, stress and anxiety of isolation .

Make sure you have the following essential items at home:

- Disposable gloves, or failing that, dishwashing gloves
- Masks (If available, disposable surgical masks, P2 respirators)
- Bleach, cleaning detergent and disinfectant, bucket and mop, cleaning cloths
- Laundry liquid
- Tissues
- Thermometer to check temperatures
- Soap for hand washing
- Hand moisturiser if required

These guidelines are written on the presumption of adults in a nuclear family. Many people live alone or in other domestic arrangements and will have to adapt this advice to their situations.

Reducing COVID-19 infection at home

needs simplification

Coronavirus can spread between people in many different ways:

Contact with contaminated surfaces or hands. Virus picked up by touching surfaces or by shaking hands is transferred to mucus membranes of the face (eyes, nose or lips), passing on the infection. An infected person will have virus on their hands after blowing or wiping their nose, or they can transfer virus to surfaces by coughing or talking which creates droplets of mucus or saliva which settle onto the surfaces. High-touch surfaces in the home or workplace can be contaminated, including table tops, door handles, phones, keyboards, light switches, toys, bedding etc.

Large droplets sprayed out while coughing and talking can be directly inhaled by a person or sprayed onto the person. This requires close contact between people. Once generated these droplets are generally considered to only remain airborne for a few minutes at most, during which time they can be inhaled from the air, after that, large particles settle onto surfaces, contaminating them. They probably only travel a few metres or less in that time.

Very small droplets (termed aerosols). These are generated when speaking, coughing, singing or even breathing. Such aerosols behave more like smoke than a spray and can transmit infection over both short distances and also over longer distances as they stay airborne and can travel many metres with airstreams. The proportion of transmission that occurs via aerosols is currently uncertain, but is the most likely explanation for “super-spreader events” where many people in a room become infected without close contact.

Faecal-oral route. This method of transmission is also possible (although probably uncommon) as some COVID-19 patients have large amounts of this virus in their stools, especially if they have diarrhoea. Droplets or aerosols containing virus can be generated by toilet flushing, which creates a spray from the water and faeces. Close the lid before flushing and avoid bidets etc

All these routes can be important at different times and circumstances. Addressing all routes is necessary to minimise infection and spread.

MINIMISING THE RISK OF INFECTION

Minimising the transmission of the virus within the home means addressing all the known routes. Studies of effective approaches in hospitals during the SARS (a different coronavirus) pandemic are instructive and are used as the basis for approaches at home. These approaches were: the use of mask or respirator, wearing gowns, thorough cleaning of surfaces, wearing gloves and hand washing at least 10 times per day. While each had some effect, a combination of them was most effective.

Masks and respirators (P2)

Surgical masks were originally designed to prevent doctors infecting their patients. They come in a wide variety of shapes and are held on with loops around ears or tie at the back. They do not seal tightly to the face and are more comfortable to wear for long periods. They are good for filtration of large droplets and less useful for filtering small aerosols. They operate both to protect the person wearing them from exposure, and also help prevent the transmission of virus from an infected person. Some studies of infection rates for health care workers for other viruses do not show differences in protection between wearing surgical masks and P2 respirators, other studies favour P2 respirators.

Respirators (called P2 in Australia, N95 in the US and FFP2 in Europe) P2 should be reserved for high-exposure situations ie healthcare workers.

It is possible to make your own mask from several layers of cotton, gauze or dry electrostatic wipes.. There are many examples of how to make these on the web. Three layers of various fabric mixes can be almost as effective as surgical masks. They have the advantage of being washable and reused easily.

Wearing gowns. In a hospital context, medical staff would put on a gown before entering the room and remove it on leaving and then washing their hands. You will have to use your imagination here, perhaps a cotton coat, slippers or thongs and a headscarf that can be easily laundered as it will become contaminated. Use only for this purpose and preferably store in an enclosed space close to the entry door.

Thorough cleaning: Laboratory studies show that this coronavirus can be infectious for up to three days on plastic and stainless steel and up to one day on cardboard or paper. However, viruses can be more stable in human mucus than buffers as used here, and stability also changes with temperature and humidity, so longer times may apply. If possible, flat, frequently touched surfaces in the room should

be cleaned regularly. The WHO recommends cleaning with soap (or detergent) and water and then decontaminating with an agent such as bleach; advice varies from 1:35 to 1:100 dilution of 5% sodium hypochlorite, 0.5% hydrogen peroxide solution or 70% alcohol solution.

If the infected person moves from their room to the bathroom, afterwards decontaminate surfaces that have been touched on the way and in the bathroom.

Wearing gloves: It is normal in infection control to use disposable gloves when handling any potentially infectious material and reduce virus transfer and exposure. If not available, use washing-up gloves. Treat the outside of the gloves as potentially contaminated after using, requiring disposal or cleaning with soap and water or disinfectant. There is a low risk of allergy from prolonged use of latex examination gloves.

Frequent hand washing: In the case of influenza and colds, hand washing at least 10 times per day typically provides around 20% reduction of disease transmission, and this effect is likely to be greater for coronavirus. However, while hand washing might prevent individual infections, it will not stop all spread through a community as there are multiple routes of infection. Hand washing should be done with soap or detergent and warm water and should be for at least 20 seconds each time using vigorous hand-to-hand action. It takes this amount of time for the soap molecules to loosen the grip of the virus on the skin and penetrate the coat of the virus. Dry your hands on a clean paper towel or use individual hand towels kept in bedrooms.

Hand washing should be performed after any possible exposure to contamination, visiting the person or shared bathroom, handling objects they have handled, before preparing foods, after mask removal, and in many other situations; you will have to use common sense based on activities. There is no advantage in using specialised “antibacterial” or medicated soap. Hand cream or moisturiser after washing to replace lost oils as such frequent washing may assist skin problems

If soap and water is not available, alcohol sanitiser is a good alternative. This should contain around 70% alcohol to be effective. There are some incorrect articles on the web about making your own alcohol sanitiser. If you absolutely must, then at least take the advice of the WHO site.

Handling contaminated material: Because the infected person will be generating virus aerosols through coughing, talking and blowing their nose at least, it is important that any contaminated items are safely collected and disposed of, including masks and tissues.

Tissues should be immediately put in a lined container and disposed of in the garbage. If no tissues are available, use soft toilet paper and flush down the toilet, or bag and put in garbage. The infected person should wash their hands in warm soapy water or use an alcohol sanitiser after each handling of tissues.

Infection control practices in hospitals would use regular changes and laundry of bedding and clothing to remove virus on these surfaces. This should definitely be done if there is any soiling of clothing and bedding. Wear a mask and gloves while handling contaminated clothing and bedding in a plastic bag. Laundry with normal detergent on hot wash cycle is effective at removing virus; dry in the sun or on the hottest setting that can be used with the items.

Increase ventilation: Open windows in all rooms as frequently as possible. There are numerous studies showing lower rates of virus and bacterial transmission in well-ventilated hospital wards, dormitories and houses. It's likely that good circulation of outside air flushes out the important droplets and aerosols as well as providing cleaner air for anyone else present in the room.

Eye protection: There is some data that some viruses at least, can enter the body via droplets sprayed into the eyes, as well as by wiping fingers on the eyes. In hospitals, some form of goggles or eye shields are frequently used. It would seem prudent to find an equivalent, like wrap-around sunnies or goggles when direct exposure to an infectious person was likely.

Visiting the room: It may sound harsh, but, where practical, members of a family should avoid all direct contact with an infectious person, that is, being in the same room. This also applies to home visitors as much as possible. If people do want to talk and socialise at home, this should be done outside the house in the backyard or on an open balcony, maintaining a 2m distance between people and both wearing masks. Sit upwind of the infected person; droplets can travel in plumes.

These restrictions could be distressing and a challenge to family dynamics and it will raise anxiety for everyone. It means the infectious person will have to eat alone and only be visited in situations where the visitor is directly providing necessary care. Talk through a window, and communicate using phone calls and other digital methods, it is important to keep a close observation of the person, and keep their spirits up and provide reassurance. Remember any items that have been in the room, books, furniture, eating utensils etc, will potentially carry virus and could be a source of infection for a few days afterwards.

Any person entering the room should have a mask and should wash their hands, or use an alcohol-based sanitiser immediately on leaving.

Sleep and rest: Getting a lot of sleep is important, as is extended rest and not returning to any strenuous activity or stress for an extended period. The body is vulnerable to additional infections and needs time to heal properly.

Diet: There are many articles in the popular press about boosting your immune system or particular foods with health-giving properties. There is not much in the medical literature about this, other than the obvious advice about the extra importance of a healthy well-balanced diet at times like this. Vitamin D and zinc have some evidence for Covid. If you live by yourself, make a plan for a friend, Meals on Wheels or use an online shopping service to deliver food and other necessities to your door while you are isolation.

How long for: People with confirmed coronavirus infection should remain under home isolation precautions until the risk of secondary transmission to others is thought to be low. This could be two to three weeks. The decision to discontinue home isolation precautions should be made on a case-by-case basis, in consultation with your doctor or whoever is providing professional advice.