

During the COVID-19 Pandemic:

Cloth Face Coverings & Infection Prevention in Home Care Guidance for Home Care Agencies and Aides

NOTE: During the pandemic, cloth face coverings are appropriate in home care only when:

- 1) the aide and client are not known to have COVID-19 and are not under investigation for COVID-19, and**
- 2) tasks performed by an aide do not risk the possibility of exposure to blood and body fluids**

See the Safe Home Care Project, UML website for more detailed guidance on PPE:

<https://www.uml.edu/research/shch/safe-home-care/fact-sheets.aspx>

How is the new coronavirus spread from one person to another?

The coronavirus (officially called SARS-CoV-2) lives in the human nose, mouth, lungs and other organ systems. When we breathe, talk, sneeze, cough or sing we spray a “cloud” of fluid droplets and smaller particles into the air around us (aerosol cloud). The larger droplets fall out of the air within minutes. The smallest particles may remain airborne for hours. – This is why wearing masks or face coverings and keeping at least 6 feet between people is recommended for social distancing during the pandemic.

For example, if we cough or sneeze and don’t cover our nose and mouth, the cloud can travel as far as several yards (see photo). The aerosol cloud consists of forcefully exhaled gases carrying mucus, saliva or other matter sprayed out of the mouth and nose and into the air. It includes a range of sizes from large droplets (some big enough to see) to very small particles (not visible).

The small particles can hang in the air for minutes or hours and may be breathed in by others in the room. If a person has COVID-19, the illness caused when infected with SARS CoV2, the virus gets released in the droplets and particles in his/her exhaled breath, cough or sneeze cloud. Infectious particles in the air can be inhaled, land on a nearby person’s face or on their hands or skin, and then enter their nose, mouth or eyes if they touch their face. If the infectious particles land on surfaces in the home like countertops, sinks, or toilets, the virus can live for hours or days. Someone can be exposed by touching these surfaces and then touching their eyes, nose or mouth.



Photo: Public Health Image Library, CDC.gov

How do we know who is infected with coronavirus?

We only know whether someone is infected with SARS-CoV-2 if they get a medical test. However, during this pandemic, if someone has symptoms such as fever, cough, or difficulty breathing, they are “symptomatic” and assumed to be infectious. The problem is that we can be infected with the virus and pass it on to others before we have these symptoms and some people never get symptoms. It is the home care aides and clients who may be infected but who do not display symptoms that are most challenging for coronavirus exposure prevention.

Safe Home Care Project

Research to Practice Fact Sheet

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Can face masks, like the ones doctors and nurses wear in hospitals, prevent the spread of coronavirus?

Surgical masks, also called medical masks or face masks (see photo), catch some but not all the droplets and particles in exhaled air, a cough or sneeze. They have been shown to be effective for capturing some of the cough or sneeze cloud primarily from the person who wears the mask (the “source”) and so they primarily protect the patients. Recent studies show that surgical masks do offer some protection to doctors, nurses, and other healthcare workers from large droplets sprayed from an infected patient’s cough or when infectious body fluids get splattered.



Photo: <https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/n95-respirators-and-surgical-masks-face-masks>

Surgical masks look like they are made with regular fabric, but instead they are manufactured with melted blown fibers that are tightly bound together so they capture the bigger droplets and some of the smaller droplets in a cough or sneeze cloud. These masks are relatively light and soft. However, they don’t seal well between the face and the edges of the mask and smaller droplets and particles can pass through the gaps.

Especially during the COVID-19 pandemic, there are more effective medical masks called respirators that healthcare workers in hospitals need to use during patient contact. We know how well surgical masks and respirators capture droplets and particles because they must pass lab tests before they are approved by the US government to be sold. There have been shortages of surgical masks and respirators and, as a result, cloth face coverings have been introduced for community settings.

What about cloth face coverings, can they be used in home care?

Because of the surgical/medical mask and respirator shortage, many thoughtful, caring citizens have been sewing homemade cloth face coverings and offering them for medical and personal care. At this time, there are few lab tests to tell us how much of a cough or sneeze cloud a cloth face covering can capture. Cloth face coverings are not a good substitute for medical masks or respirators – but there is now some research showing that homemade cloth face coverings are better than no mask at all.

When used with other safety practices described below, cloth face coverings, such as those made of multiple layers of tightly woven fabric, may be better than no mask at all for keeping some of the big droplets coughed, sneezed or talked out by a person who is wearing the cloth face covering (the “source”) from getting onto another person. Cloth face coverings may also capture some big droplets that could land near the mouth and nose of the person who gets the aerosol cloud sprayed on them or who has body fluids splattered on them. Face coverings are recommended for community settings, such as going to the grocery store or pharmacy. For direct care activities with a home care recipient who is not COVID-19 positive, symptomatic or under investigation, a medical mask is preferred.



Photo: Janna Danilova.iStock

Additionally, some people report that a cloth face covering serves as a reminder not to touch the face, which is a key infection prevention practice. If cloth face coverings are used it is important to remember that:

- All masks and face coverings, whether officially approved or handmade, need to be used with a larger set of safety practices.
- There are conditions when a mask or face covering could actually increase the risk of infection if not used properly (see below).

Should home care *CLIENTS* wear a cloth face covering when they are not symptomatic?

As with all care practices, before a client wears a cloth face covering, its use should be approved by the client, their family if involved in the care, and your agency. It may also require approval from their physician, elder services or others, so consult your employer. It is also important to be sure that the client does not have any difficulties breathing or wearing a cloth face covering. For example, some people feel claustrophobic.

If the client wears a cloth face covering, it may be most effective if worn at all times during the home care visit. This will not be possible during certain personal care tasks such as oral care or during activities such as eating and drinking. The cloth face covering may help capture large droplets that get sprayed out by the client during coughing, sneezing, talking, or from spittle. A cloth face covering will not stop all of the smaller particles from getting into the air.

Should home care *AIDES* wear cloth face coverings when they are not symptomatic?

The state of Massachusetts and many other states, cities, and towns now require the general public to wear cloth face coverings in both indoor and outdoor public places. Aides who are performing job tasks in these locations, such as grocery shopping for a client, will be required to wear a cloth face covering like everyone else.

Aides may be asked to wear a cloth face covering in the homes of their clients due to the concern that an aide may be infected with the coronavirus but not know it because they do not have symptoms (asymptomatic). The virus can be spread from the infected person to a non-infected person during this pre-symptomatic or asymptomatic period. Older people, the majority of home care clients, are particularly at risk of severe COVID-19 symptoms.

A cloth face covering worn by an aide will have the same effect as in the example above for the client— the cloth face covering may help to capture large droplets sprayed out during coughing, sneezing or talking so that the droplets do not land on the client or on surfaces in a client's home. A cloth face covering will not be able to stop all of the smaller particles from getting into the air.

What are some precautions to consider with a cloth face covering?

In some cases, cloth face coverings may *increase* the possibility of exposure to the virus.

- Cloth face coverings are often uncomfortable or do not fit well. If you touch the cloth face covering to adjust it with your hands or with gloves after your gloves have been in use in your client's home, you may transfer contamination, including live virus, to your cloth face covering.
- Air leaks around the edges of the cloth face covering, especially if it doesn't fit well. A cloth face covering should be snugly fit over the bridge of the nose and below the chin, but not stretched so tightly that the fabric is flat up against the nose and lips.
- Cloth face coverings can collect moisture from your exhaled breath which could promote the survival of virus from droplets on the cloth face covering.
- Facial hair can reduce how well the cloth face covering fits around the face, creating gaps that droplets and particles can pass through.

- Cloth face coverings may give a false sense of security and some people may be tempted to skip other important safety practices.

What are the safety practices that should be used with cloth face coverings?

It is important for you, your client and employer to remember that wearing a face covering, mask, or respirator is only part of a larger set of practices and personal protective equipment (PPE) used to protect yourself and your client. Use the following practices if cloth face coverings are worn:

- Wear a clean cloth face covering for every visit. If it is coughed, sneezed or splashed on during the client visit, change the cloth face covering.
- Used face coverings should not be shared.
- Make sure your cloth face coverings are clean and dry before use. Store them in a bag so they stay clean and dry for your client visits. Do not seal damp cloth face coverings in a plastic bag because the moisture could promote microbial growth.
- Removing your cloth face covering: If you are wearing gloves, first wash your gloved hands with warm water and soap for at least 20 seconds or use hand sanitizer to disinfect the gloves. Next, remove the used cloth face covering, and store it in a separate sealed bag labeled “Dirty”. Then remove the gloves and dispose of them in a trash container. At the end of the day, used cloth face coverings can be washed with hot water and soap, thoroughly dried, and stored in a clean bag for re-use.

Are there other ways besides exhaled breath, coughs, sneezes or talking that coronavirus can be spread in the home?

There is some evidence that coronavirus may also spread through contact with feces (poop). Along with the most common symptoms of fever, dry cough, and difficulty breathing, some people with COVID-19 also report diarrhea. Aides performing direct client care including bathing, toileting and dressing; changing bed linens; doing the laundry; and cleaning bathrooms should wear gloves and avoid getting splashed with feces or toilet bowl water.

What practices are most important for preventing the spread of coronavirus when taking care of home care clients?

Follow key practices for coronavirus prevention recommended by the US Centers for Disease Control and Prevention (CDC) including those listed below. For a complete list, consult the CDC website. (See resources at end of this factsheet.)

- Monitor your health daily for COVID-19 related symptoms including fever, cough, shortness of breath, fatigue, loss of smell or taste. (Contact your agency for more specific advice.)
- Avoid close contact whenever possible. Try to stay at least 6 feet apart when you are not performing direct personal care tasks.
- Cover your mouth and nose with a mask. Medical respirators and masks are most protective and should be used when available. Follow your agency’s guidelines for masks when caring for your client.
- Wear gloves. This is especially important if you are cleaning or performing care tasks (personal care, laundry, etc.) with potential for exposure to the client’s body fluids.
- Wash hands often with warm water and soap for at least 20 seconds after sneezing, touching surfaces that have not been disinfected or performing care tasks that require direct contact with the client.
- If water and soap are not available, use alcohol hand sanitizer (at least 60% alcohol).
- Cough or sneeze into a clean tissue, dispose of it and wash your hands immediately afterwards.
- Don’t touch your face.

- Disinfect hard surfaces such as countertops, sinks, toilets, and frequently touched objects such as door handles, light switches, water faucets & toilet handles.

How should surfaces in clients' homes be cleaned and disinfected?

Cleaning and disinfection of surfaces is one of the key practices in infection prevention. Cleaning refers to the removal of visible soil. Disinfection refers to killing all or most of the microorganisms on a surface, including coronavirus.

If surfaces are visibly dirty, clean them first with warm water and soap or other household cleaner before disinfection because the dirt can interfere with the disinfection of the virus.

Following cleaning, non-porous (hard) surfaces like ceramic and stainless steel in bathrooms and kitchens can be disinfected using a dilute bleach solution.

CDC recommends the following recipe for a disinfecting solution: *4 teaspoons of bleach per quart of water or 5 tablespoons (1/3rd cup) of bleach per 1 gallon of water*. This bleach solution will be effective for disinfection for up to 24 hours.

- Be careful not to get bleach on your skin or eyes or to breathe the fumes—bleach is corrosive to skin and eyes and is a strong respiratory irritant.
- Keeping the bleach and water mixture in a sealed spray bottle may increase the length of time the bleach solutions stays most effective, but it is best to mix a fresh solution each time the solution is needed.

If a ready-to-use disinfectant is preferred, it should be approved by the U.S. Environmental Protection Agency (EPA) and used as directed on the label (see link to the EPA approved list in the resources below).

Cleaning and disinfecting should be done in a well-ventilated room. Whenever possible, open the doors between rooms and open the window in the room where you are working at least a crack even in winter and turn on the bathroom fan. Ventilation will not only reduce the risk of irritation from cleaning product and disinfectant fumes but may also reduce the risk of spreading the virus by diluting virus airborne particles and droplets with more air.

Resources:

CDC Cleaning & Disinfecting –most useful for home care; has formula for bleach solution for home environmental surface, touch point disinfection:

https://www.cdc.gov/coronavirus/2019-ncov/prepare/cleaning-disinfection.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcommunity%2Fhome%2Fcleaning-disinfection.html

US EPA List of commercial disinfectants approved for human coronavirus – in case home care clients want to purchase ready-to-use products to disinfectant their home environmental surfaces:

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

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