Coronavirus Disease 2019 (COVID-19)

Considerations for Wearing Masks

Help Slow the Spread of COVID-19

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What you need to know

- People age 2 and older should wear masks in public settings and when around people who don't live in their household.
- Wash cloth some protection to you and are also intended to protect those around you, in case you are unknowingly infected with the virus but not showing symptoms.
- A mask is NOT a substitute for social distancing. Masks aren't right for everyone in what kinds of masks people can wear.
- Wash your hands with soap and water for at least 20 seconds before putting on a mask, and hand sanitizer after touching or removing your mask.
- Masks may not be necessary when you are outside by yourself away from others, or with other people who live in your household. However, some localities may have ordinances requiring masks in public, and state mandates should always be followed.
- CDC is still studying the effectiveness of different types of masks and fabrics and recommendations as new scientific evidence becomes available.

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Evidence for Effectiveness of Masks

Your mask helps protect those around you

COVID-19 spreads mainly from person-to-person through respiratory droplets. Respiratory droplets travel into the air when you cough, sneeze, talk, shout, or sing. These droplets can then land in the mouths or noses of people who are nearby or may be inhaled into the lungs.

Masks are a simple barrier to help prevent your respiratory droplets from reaching others. Studies show that masks reduce the spray of droplets when worn over the nose and mouth.

You should wear a mask, even if you do not feel sick. This is because several studies have found that people with COVID-19 who never develop symptoms (asymptomatic) and those who are not yet showing symptoms (pre-symptomatic) can still spread the virus to other people. The main function of a mask is to block droplets from a person's mouth and nose. If you are not sick and not showing symptoms, it is especially important to wear a mask when you are unable to stay at least 6 feet apart from others. This is because COVID-19 spreads mainly among people who are in close contact with one another (within about 6 feet).

Your mask offers some protection to you

A cloth mask also offers some protection to you too. Mask wearers may be less likely to touch their noses and mouths with their hands, which is a key way that COVID-19 spreads. Masks may also reduce the amount of COVID-19 you inhale if others around you are infected with the virus.

Who should or should not wear a mask

Masks should not be worn by:

- Children younger than 2 years old
- Anyone who has trouble breathing
- Anyone who is unconscious, incapacitated or otherwise unable to remove the mask without assistance

Cloth face coverings or masks may be difficult for some people with sensory, cognitive, or behavioral issues. If they are unable to wear a mask properly or cannot tolerate a mask, they should not wear one, and adaptations and alternatives should be considered.

Who should not wear a mask

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Types of masks

Some masks work better to help stop the spread of COVID-19 outside of healthcare settings. Medical masks and N-95 respirators should be reserved for healthcare workers.

Recommended

Non-medical disposable masks

Masks that fit properly (snugly) around the nose and chin with no large gaps around the sides of the face

Masks that are made of multiple layers of fabric

Masks made with breathable fabrics (such as cotton)

Masks made with tightly woven fabrics (i.e., fabrics that do not let light pass through when held up to light source)

Masks with two or three layers

Masks with inner filter pockets

Not Recommended

Masks that do not fit properly (large gaps, too loose or too tight)

Masks made from materials that are hard to breathe through (such as plastic or leather)

Masks made from fabrics known fabrics or that are knitted, i.e., fabrics that let light pass through

Masks with two or three layers

Masks with evaporative valves or vents

Cloth masks

The more effective fabrics for cloth masks are:

- Tightly woven fabrics, such as cotton and cotton blends
- Breathable
- Two or three layers

Less effective fabrics for cloth masks are:

- Loosely woven fabrics, such as loose knit fabrics
- Difficult to breathe through (like plastic or leather)
- Single layer

CDC is currently studying the effectiveness of various cloth mask materials. We will update this guidance as we learn more.

Non-medical disposable masks

Disposable face masks are single-use masks. They are sold online and through large retail stores. These are not the same as surgical or other medical masks.

You may prefer using disposable masks in situations where you are around other people, but they are not recommended for long-term use. Disposable masks find its close to your face without large side gaps and completely covers your nose and mouth. Some disposable masks are made of multiple layers and need to change out every or wear masks.

Masks with exhalation valves or vents

CDC **does not recommend** using masks with exhalation valves or vents. Because this type of mask may not protect you from spreading COVID-19 to others, The hole in the middle of the mask allows for easier exhalation and makes it hard to reach others. Research on the effectiveness of these types of masks is ongoing.

Surgical masks and respirators

Do not use surgical masks and respirators that are meant for healthcare workers. Currently, surgical masks and respirators are in short supply and need to be reserved for healthcare workers and other medical first responders to prevent supply shortages.

Clear masks or cloth masks with a clear plastic panel

Clear masks or cloth masks with a clear plastic panel are an alternative type of mask for people who interact with:

- People who are deaf or hard of hearing
- Young children or students learning to read
- Students learning a new language
- People with disabilities
- People who need to see the proper shape of the mouth for making appropriate vowel sounds, e.g., in singing

If you use this type of mask, make sure:

- You can breathe easily
- Excess moisture does not collect on the inside of the mask
- You remove the mask before sleeping, since the plastic part could form a seal around your mouth and increase suffocation risk

Clear and transparent masks have limited availability in the healthcare supply chain. Research is ongoing to determine if masks made of these materials can be a safe and effective option for people who need to see a person's mouth and face to understand speech or read lips.

Other Types of Face Protection

CDC does not consider face coverings made from gaiters or bandanas to be a substitute for masks. Do NOT put a plastic face shield or a medical mask on toddlers or infants.

Face shields and goggles are primarily used to protect the eyes from droplets and splashes. Face shields can also cover and protect the nose and mouth. Face shields have gaps below and alongside the face, where your respiratory droplets may escape and reach others. Face shields may block more droplets than most protections but have limited protection in people around you. However, wearing a mask may not be feasible in every situation for some people.

Face shields and goggles

For example, people who interact with those who are deaf or hearing impaired may find that a face shield is better than a mask when communicating. If you must wear a face shield instead of a mask:

- Choose a face shield that wraps around the sides of your face and extends below your chin to a hooded face shield. This is based on the limited available data that suggests these types of face shields may offer better or preventing spread of respiratory droplets.
- Wash your hands before and after removing the face shield. Avoid touching your eyes, nose, and mouth when removing.
- Clean and disinfect reusable face shields according to the manufacturer's instructions. If following CDC face shield cleaning instructions. If you use a disposable face shield, wear it once and throw it away according to the manufacturer's instructions.

Mask adaptations and alternatives

CDC says that wearing masks may not be possible in every situation or for some people. Those who cannot wear a mask are urged to prioritize virtual engagement when possible. For in-person activities, CDC recommends that people who cannot wear a mask should explore other more feasible options to reduce the spread of COVID-19 if you cannot wear a mask.

Situations where wearing a mask may not be possible

- Make sure to maintain physical distance from others who cannot wear a mask.

Dining

- CDC recommends wearing a mask while dining in a restaurant except when actively eating or drinking.

Water activities

- Do not wear a mask when doing activities that may get your mask wet. Wet swimming at the beach or pool. A wet mask can make it difficult to breathe and may not work as well when it is wet.

High intensity activities

- Masks should be used in public settings, but if you are unable to wear a mask because of difficulty breathing during high intensity activities, choose a location with greater ventilation and air exchange (for instance, outdoors versus indoors) and where you can keep at least 6 feet apart from other people.
- If you are able to wear a mask, remove your mask if it gets moist from sweat and replace it with a clean mask.
- Opt for an activity that does not require using mouth guards or helmets. Wearing a mask with these types of protective equipment is not safe if it makes it hard to breathe.
- Supervise children who are wearing a mask while playing sports.

Certain groups of people who may find it difficult to wear a mask

Some children 2 years and older, and people of any age with certain disabilities

Appropriate accommodations can be made to make face coverings safe for children and for people of any age with certain disabilities, including cognitive, intellectual, developmental, sensory, and behavioral disorders.

When deciding if children and people with certain disabilities should wear a mask, determine if they can safely:

- Use a mask correctly
- Avoid frequent touching of the mask and their face
- Limit sucking, drooling, or having excess saliva on the mask
- Remove the mask without assistance

If children and people with certain disabilities are unable to wear a mask properly or cannot tolerate a mask, they should not wear one.

These caring for children and people with certain disabilities who may not be able to wear a mask should:

- Ask their healthcare provider for advice about their wearing a mask
- Ensure proper mask use and fit
- Consider more frequent mask cleaning or swapping, when they may fall asleep (such as in a car seat or stroller) or in situations where continued supervision is not possible.
- Consider prioritizing wearing a mask when it is difficult to keep at least 6 feet from others (for example, during a typical drop off and pick up, or when standing in line at schools or stores)

Masks should **not** be worn by:

- Children younger than 2 years old
- Anyone who has trouble breathing
- Anyone who is unconscious, incapacitated, or otherwise unable to remove the mask without assistance

People who are or hard of hearing, and those who will interact with people who are hearing impaired

If you interact with people who rely on reading lips, you may have difficulty communicating while wearing a mask.

- Consider wearing a clear mask or a cloth mask with a clear panel
- If you are not able to get a clear mask, consider using written communication, closed captioning, or using background noise to make communication easier for people who wearing a mask that blocks their lips.

People with certain underlying medical conditions

Most people with underlying medical conditions can and should wear masks.

- If you have respiratory conditions and are concerned about wearing a mask safely, discuss your condition and weigh the benefits and potential risks of wearing a mask.
- If you have asthma, you can wear a mask. Discuss with your healthcare provider if you have any concerns about wearing a mask.

Outdoor workers

- If you work in setting where masks could increase the risk of heat-related illness or cause safety concerns (for example, stops getting caught in machinery)
- Discuss with your occupational safety and health professional about what would be suitable.
- Consider wearing masks when in close contact with other people, like during group meet-or-craft meetings, and remove masks when social distancing is maintained. Some localities may require wearing masks in public outdoors, and these requirements should be followed.

Mask use and carbon dioxide

Wearing a mask does not raise the carbon dioxide (CO_2) level in the air you breathe

Wearing a mask does not cause you to breathe in more of the toxic CO_2 completely escapes into the air through and around the sides of the cloth mask when you breathe out or cough. CO_2 is small enough to easily pass through any cloth mask material. In contrast, the virus that causes COVID-19 is much larger than CO_2, so it cannot pass **as easily** through a properly designed and properly worn cloth mask.

Recent studies

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