

FACE MASKS

July 10, 2020

OHIO

Businesses/Employers - COVID-19 Checklist: June 23, 2020 | COVID-19

<https://coronavirus.ohio.gov/wps/portal/gov/covid-19/checklists/english-checklists/Businesses-Employers-COVID-19-Checklist>

Employers have been ordered to:

Comply with state regulations on facial coverings.

Allow customers, visitors, vendors, and other visitors to wear face coverings except for certain documented legal, life, health, safety, or security considerations.

Require all employees to wear face coverings unless they are prohibited by law or regulation; in violation of documented industry standards; not advisable for health reasons; in violation of the business's documented safety policies; or there is a functional/practical reason not to wear one. They also are not required for employees who work alone in an assigned work area.

Director's Order for Facial Coverings in Butler, Cuyahoga, Franklin, Hamilton, Huron, Montgomery, and Trumbull Counties in Level 3 Public Health Advisory: July 8, 2020

<https://coronavirus.ohio.gov/static/publicorders/Directors-Order-Facial-Coverings-reader.pdf>

7. *Facial Coverings (Masks). Except as provided herein, all individuals, in Butler, Cuyahoga, Franklin, Hamilton, Huron, Montgomery, and Trumbull Counties shall wear facial coverings at all times when:*
- a. *In any indoor location that is not a residence;*
 - b. *Outdoors and unable to consistently maintain a distance of six feet or more from individuals who are not members of their household; or*
 - c. *Waiting for, riding, driving, or operating public transportation, a taxi, a private care service, or a ride sharing vehicle. This does not apply to private or rental vehicles where members of a family are sharing a vehicle. This does not apply to vehicles engaged in direct travel through a county that does not stop in that county.*

The requirement to wear a facial covering shall continue for a county identified in this Order until that county no longer is designated at level 3 or level 4 in the Public Health Advisory System pursuant to Section 4 above. The requirement to wear a facial covering does not apply when:

- a. *The individual is under ten years of age;*
- b. *A medical condition, including those with respiratory conditions that restrict breathing, mental health conditions, or disability contraindicates the wearing of a facial covering;*
- c. *The individual is communicating or seeking to communicate with someone who is hearing-impaired or has another disability, where the ability to see the mouth is essential for communication;*
- d. *The individual is alone in an enclosed space, such as an office, and which space is not intended for use or access by the public;*
- e. *The individual is actively engaged in exercise in a gym or indoor facility so long as six or more feet of separation between individuals exists;*
- f. *The individual is actively participating in athletic practice, scrimmage, or competition that is permitted under a separate Department of Health order;*
- g. *The individual is actively engaged in a public safety capacity, including but not limited to law enforcement, firefighters or emergency medical personnel;*
- h. *The individual is seated and actively consuming food or beverage in a restaurant or bar;*

- i. Facial coverings are prohibited by law or regulation;*
- j. Facial coverings are in violation of documented industry standards;*
- k. Facial coverings are in violation of a business's documented safety policies;*
- l. Individual is actively participating in broadcast communications; or*
- m. Individual is an officiant of a religious services.*

By the way, Legislative and Judicial officials are exempt from this order!

FEDERAL GOVERNMENT

The CDC has made recommendations for and against the use of face masks.

CDC Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19), May 2020

Encourage workers to wear a cloth face covering at work if the hazard assessment has determined that they do not require PPE, such as a respirator or medical facemask for protection.

CDC recommends wearing a cloth face covering as a measure to contain the wearer's respiratory droplets and help protect their co-workers and members of the general public.

Cloth face coverings are not considered PPE. They may prevent workers, including those who don't know they have the virus, from spreading it to others but may not protect the wearers from exposure to the virus that causes COVID-19.

Remind employees and customers that CDC recommends wearing cloth face coverings in public settings where other social distancing measures are difficult to maintain, especially in areas of significant community-based transmission. Wearing a cloth face covering, however, does not replace the need to practice social distancing.

See the OSHA COVID-19 guidance for more information on how to protect workers from potential exposures, according to their exposure risk. Plans should consider that employees may be able to spread COVID-19 even if they do not show symptoms.

See the OSHA COVID-19 webpage for more information on how to protect workers from potential COVID-19 exposures and guidance for employers, including steps to take for jobs according to exposure risk.

OSHA guidance for employers

<https://www.osha.gov/Publications/OSHA3990.pdf>

<https://www.osha.gov/SLTC/covid-19/>

Take steps to limit spread of the respiratory secretions of a person who may have COVID-19. Provide a face mask, if feasible and available, and ask the person to wear it, if tolerated. Note: A face mask (also called a surgical mask, procedure mask, or other similar terms) on a patient or other sick person should not be confused with PPE for a worker; the mask acts to contain potentially infectious respiratory secretions at the source (i.e., the person's nose and mouth).

OSHA definition of cloth face coverings:

<https://www.osha.gov/SLTC/covid-19/covid-19-faq.html#cloth-face-coverings>

- May be commercially produced or improvised (i.e., homemade) garments, scarves, bandanas, or items made from t-shirts or other fabrics.
- Are worn in public over the nose and mouth to contain the wearer's potentially infectious respiratory droplets produced when an infected person coughs, sneezes, or talks and to limit the spread of SARS-CoV-2, the virus that causes Coronavirus Disease 2019 (COVID-19), to others.
- Are not considered personal protective equipment (PPE).
- Will not protect the wearer against airborne transmissible infectious agents due to loose fit and lack of seal or inadequate filtration.

- Are not appropriate substitutes for PPE such as respirators (e.g., N95 respirators) or medical face masks (e.g., surgical masks) in workplaces where respirators or face masks are recommended or required to protect the wearer.
- May be used by almost any worker, although those who have trouble breathing or are otherwise unable to put on or remove a mask without assistance should not wear one.
- May be disposable or reusable after proper washing.

WHO

On June 5, the World Health Organization revised its guidelines about when people should wear cloth masks. Previously, the organization had recommended that only those with symptoms of COVID-19, the respiratory disease caused by the novel coronavirus, or those caring for them, wear cloth masks over the nose and mouth.

The new guidelines recommend that everyone who comes in close contact with others in crowded or close quarters, such as on a bus or in a store, wear a cloth mask composed of at least three different layers of material.

FACE MASK SPECIFICS

Design or type

Face shields

Can only protect you from being struck by direct spray of fluids.

Provides no protection against infection for the wearer or others.

Cloth masks

Cloth face coverings are designed to prevent the spread of your respiratory droplets to another person.

Respiratory droplets are $>5-10\mu$ in diameter whereas droplets $<5\mu$ in diameter are referred to as droplet nuclei or aerosols. Cloth masks will not block aerosols.

Cloth face coverings are recommended as a simple barrier to help prevent respiratory droplets from traveling into the air and onto other people when the person wearing the cloth face covering coughs, sneezes, talks, or raises their voice.

Surgical masks

Surgical masks are designed to protect the wearer against the inhalation of respiratory droplets or liquids released by a patient.

Surgical masks are meant for one-time use only, and should be properly disposed of immediately after use.

N95 masks

N95 masks are designed to block particulates. They are rated by what percentage of particles 0.3μ or larger are blocked. Most N95 masks do not work in the presence of water or oil aerosols.

They are designed to only protect the wearer against external contaminants.

Well-fitted, sealed masks have valves that allow unfiltered exhaled breath to escape. In retail masks, the exhaled breath escapes around the edges of the mask.

APR masks (air purifying respirators)

APR masks are designed to block particulates ($100\% > .3\mu$) and organic vapors (carbon filters). APR masks have canister filters attached. APR masks must be fitted to the user, and the user must be properly trained in their use.

Use of face masks

Effectiveness

Face masks will not stop the virus. The holes in masks are too large to stop a virus; it is like using a chain link fence to stop mosquitoes.

Face masks will only reduce the distance that respiratory droplets are projected when breathing, coughing, sneezing, or talking. If two people are wearing masks, the viral particles can travel about 5 feet away from each individual. When an infected person is not wearing a mask, those particles can float through the air 30 feet or more and stay alive for up to 30 hours.

WHO now recommends a cloth mask of at least three layers of different materials. The outermost layer should be made of a fabric that is at least somewhat water resistant. That can be a fabric that is a combination of cotton and polyester, nylon or rayon. The middle layer should either be a polypropylene — a spunbond material used in some reusable grocery bags, mattress covers and craft projects — or three-ply disposable facial tissues like Kleenex. Finally, the innermost layer should be a wicking material to draw moisture away from the face. One hundred percent soft cotton works well here.

Cautions

CDC recognizes that wearing cloth face coverings may not be possible in every situation or for some people. In some situations, wearing a cloth face covering may exacerbate a physical or mental health condition, lead to a medical emergency, or introduce significant safety concerns.

Certain people should not wear face masks...

Don't put masks on anyone who has trouble breathing, or is unconscious or otherwise unable to remove the mask without help.

Don't put masks on children under 2 years of age.

Don't use masks when exercising

Wearing a mask when exercising can reduce your oxygen intake and absorption by up to 25%

Here are a few pointers for using a cloth mask:

Don't touch your mask while wearing it.

If you accidentally touch your mask, wash or sanitize your hands.

Remove the mask by untying it or lifting off the ear loops without touching the front of the mask or your face.

Wash your hands immediately after removing your mask.

Regularly wash your mask with soap and water in the washing machine. It's fine to launder it with other clothes.

Treat your mask like your toothbrush. Don't share it with anyone, and keep it in a plastic Ziploc bag when not in use. When you remove it, do so in a way that doesn't spread germs from the front of the mask to your face, and wash your hands after touching the mask.

REFERENCES

Respiratory virus shedding in exhaled breath and efficacy of face masks. <https://www.nature.com/articles/s41591-020-0843-2>

Visualization shows exactly how face masks stop COVID-19 transmission. <https://www.livescience.com/face-mask-visualization-droplets-covid-19.html>

Testing whether uncertified N95 masks are effective. <http://news.mit.edu/2020/mit-lincoln-laboratory-tests-verify-if-uncertified-n95-masks-are-effective-0513>

Transmission of SARS-CoV-2: implications for infection prevention precautions. <https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions>

COVID-19: How much protection do face masks offer?. <https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/coronavirus-mask/art-20485449>

New Study Details the Best Types of COVID-19 Face Masks. <https://www.healthline.com/health-news/best-materials-for-covid19-face-masks>

Yes, Wearing Masks Helps. Here's Why. <https://www.npr.org/sections/health-shots/2020/06/21/880832213/yes-wearing-masks-helps-heres-why>

5 Questions: Stanford scientists on COVID-19 mask guidelines. <https://med.stanford.edu/news/all-news/2020/06/stanford-scientists-contribute-to-who-mask-guidelines.html>

Still Confused About Masks? Here's the Science Behind How Face Masks Prevent Coronavirus. <https://www.ucsf.edu/news/2020/06/417906/still-confused-about-masks-heres-science-behind-how-face-masks-prevent>

Fact check: No, N95 filters are not too large to stop COVID-19 particles. <https://www.usatoday.com/story/news/factcheck/2020/06/11/fact-check-n-95-filters-not-too-large-stop-covid-19-particles/5343537002/>

Mechanical filter respirator. [https://en.wikipedia.org/wiki/Mechanical_filter_respirator#U.S._standards_\(N95_and_others\)](https://en.wikipedia.org/wiki/Mechanical_filter_respirator#U.S._standards_(N95_and_others))

The ADA and Face Mask Policies. <https://www.adasoutheast.org/ada/publications/legal/ada-and-face-mask-policies.php>