Guidance on Face Coverings and Respirator Use During the COVID-19 Pandemic

What is considered a face covering?

Any of the masks described below are acceptable for use as face coverings for persons in research labs, office areas and other settings. Although the Governor of Virginia's Executive Order 63 includes bandanas among usable face covering options, coverings that fit close to the face with no loose edges are the safest choice to use in labs/research spaces, shops and similar spaces.

<table>
<thead>
<tr>
<th>Disposable dust mask</th>
<th>Disposable pleated mask (nonmedical-grade)</th>
<th>Reusable cloth face mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Typically has only one strap but may have two.</td>
<td>• Typically has two straps that either go around your ears or may go behind your head.</td>
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</tr>
<tr>
<td>• Manufactured.</td>
<td>• Manufactured.</td>
<td>• Manufactured or handmade.</td>
</tr>
<tr>
<td>• Typically used for protection from breathing sawdust, etc.</td>
<td>• Typically used for protection from breathing household allergens, pollen, etc.</td>
<td>• Should have several layers of fabric for added filtration.</td>
</tr>
</tbody>
</table>

Why wear face coverings at work?

Wearing a face covering helps protect the people around you from potential coronavirus exposure when you wear a face covering. When they wear face coverings, it helps protect you from potential exposure to the coronavirus. This is because some people with COVID-19 have no signs or symptoms and do not feel sick (or may not yet feel sick with symptoms) but can still pass the virus on to others. Wearing face coverings can help prevent viral spread by containing most of the respiratory droplets we produce when we speak, cough, sneeze,
and laugh. You don’t need to be fitted or specially trained to wear a face covering.

**What protection does a face covering provide to the person wearing it?**

Face coverings are not respirators. They do not protect the wearer from exposure to the coronavirus, so it is important that you don’t get a false sense of security from wearing a face covering. You should still follow physical distancing rules when wearing a face covering (limiting contact and staying 6 feet away from others), wash your hands often, and avoid touching your face to lessen your chances of exposure.

**Why not wear respirators or medical-grade surgical masks for COVID-19 protection?**

These personal protective equipment (PPE) items are in short supply. We can do our part to control COVID-19 by using face coverings so the limited supply of respiratory PPE can be provided to those who most need it in health care settings or where required for research or other work.

**Must everyone working in the lab/research space wear a face covering? Are there any exceptions?**

Face coverings (or respiratory protection if needed for a specific hazard) must be worn at all times while in labs/research areas and other spaces to mitigate the spread of the coronavirus. However, anyone with a medical condition for whom wearing a mask is not recommended by their medical provider or anyone who has trouble breathing is exempted, but should wear a face shield instead. Please avoid shaming anyone not wearing a face covering, as there could be reasons for their choice you don’t know about.

**Will face coverings be provided for employees?**

All persons must obtain a type of face covering that provides a good, comfortable fit before they return to campus. Some departments may provide face coverings for employees, but such provision could be made difficult due to shortages. Because cloth facemasks are washable, reusable and inexpensive to make, they are recommended. Visit [this link](#) for guidance in making your own cloth face covering.

**Can I wear the same face covering when going to the lab, working in the lab, and leaving the lab?**

Yes, provided it has not become contaminated with hazardous materials, torn or otherwise damaged. It is recommended that you have at least two masks at work in case one gets contaminated or damaged, then the other can serve as your back-up. Ideally, cloth face coverings should be washed and dried at home after a day's wear. Using several cloth masks in a rotation through the week avoids putting wear on a single mask from daily washing. Best practice for disposable face coverings: discard after a day's wear. If they must be reused due to shortages, see guidance below.
How could I contaminate my face covering while working in the lab?

You are likely to contaminate your mask with germs when you touch your mask with gloved or ungloved hands. Try to avoid touching your face covering while you are wearing it. In the event your cloth face covering becomes contaminated at work, please replace it with a back-up face covering and wash the contaminated mask when you get home. Replace a contaminated disposable face covering with a fresh one as soon as you can. In some cases, a face shield could be used to protect your face covering from contamination.

What is the right way to put on a face covering and have it fit properly?

1. Wash hands prior to touching face covering. Handle the face covering by straps only.
2. Make sure it fully covers the mouth and nose at all times.
3. Adjust until it fit snugly but comfortably against the sides of your face and over your nose.
4. Make sure it is secured in place using ties or ear loops to prevent slipping.
5. Make sure you have no difficulty breathing with the face covering in place.

How do I remove my face covering properly?

1. Wash hands prior to touching face covering. Handle the mask by straps only.
2. Avoid touching your face when removing; also avoid touching the outer surface of the face covering.
3. Put the mask in a labeled paper bag to store for re-use, or to take home to wash (if cloth mask).
4. Wash hands immediately after removing.

What if I want to remove my face covering temporarily, like for a lunch break?

- Do not slide your face covering onto your forehead, let it hang on one ear, or hang under your chin.
- Instead, remove it completely; handle by the straps only and avoid touching the face covering itself.
- Put the face covering in a paper bag with your name on it, or place it in a secure location where it can air out until you are ready to put it on again; do not put your mask in a closed plastic bag or container that will trap moisture.
- When you are ready to wear your face covering again, make sure the outer surface is facing out before you put it on. Follow the steps listed above for putting on a clean face covering, including washing your hands.

How do I clean my face covering?

- **Cloth face coverings:** Use a standard cycle in the washing machine and regular laundry detergent. Alternatively, you can wash your cloth face covering by hand using laundry detergent or dilute bleach solution. Follow washing with a heated cycle in the dryer, or allow the face covering to air dry. Make sure your face covering is completely dry before re-using, and that is still fits you appropriately after being washed.
• **Disposable face coverings**: Cleaning or decontaminating disposable face coverings (dust masks, pleated masks) is not recommended because they don’t hold up to these treatments.

**Can I re-use my disposable face covering over several days?**

When considering the re-use of a disposable face covering, always:

• Inspect the face covering for physical damage, and for proper fit; ensure that elastic straps still provide enough tension for the face covering to fit snugly on your face.
• Use clean or disinfected gloves when putting the face covering on and taking it off.
• Avoid touching or otherwise contaminating the interior surface of the face covering.
• Secure the face covering in a paper bag with your name on it when not the face covering is in use.
• Record time used and date on the paper bag, with each use.
• Never wear someone else’s used uncleaned face covering.

Contact EHS at 540-231-3600 for assistance in assessing your risks and determining the safest procedure to follow for your situation.

**What if I already wear required respiratory protection to do my work? How do face coverings fit in?**

The simple answer: Wear required respiratory protection when you are working with hazards to protect yourself. When you aren’t working with hazards, wear a face covering to help prevent spread of COVID-19. See the guidance table below for more details. Employees who are required to wear respiratory protection must be medically cleared, fit-tested and trained. Please contact ehsmedserv@vt.edu or call 540-231-3998 to learn more, or to schedule services.

**Conditions for Wearing Face Coverings and for Using Respirators**

<table>
<thead>
<tr>
<th>If your work involves:</th>
<th>Can I safely wear my face covering?</th>
<th>Do I need to wear a respirator?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No hazardous materials, and no mechanical risks (such as mask straps getting caught in equipment).</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hazardous materials which you use in chemical fume hoods, biosafety cabinets, or with other engineering controls, and you have no mechanical risks.</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Mechanical risks (mask straps could get caught in equipment).</td>
<td>Wearing a typical face covering may not be safe; review with you lab manager, PI or EHS to consider alternative safety measures.</td>
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<tr>
<td>Flames/heat sources, or flammable/pyrophoric chemicals.</td>
<td>To be determined by careful review of lab managers and EHS; may require a flame-resistant face covering as determined through a risk assessment with the PI. Contact EHS for assistance.</td>
<td></td>
</tr>
<tr>
<td>Use of a respirator (N95, N100, half-face or full-face elastomeric, PAPR) to prevent exposure to hazardous agents, particles, materials, fumes, and/or vapors.</td>
<td>No</td>
<td>Yes; use the respirator type that you normally wear for this work.</td>
</tr>
<tr>
<td>Use of disposable face coverings or respirators for product protection in clean room settings, for sensitive nucleic acid procedures, etc.</td>
<td>Use the disposable face covering or respirator type that is normally required for this work for product protection.</td>
<td></td>
</tr>
<tr>
<td>Use of disposable medical-grade surgical masks (animal surgery, necropsy, splash protection from biological fluids).</td>
<td>No; disposable medical-grade surgical masks are required here.</td>
<td>No</td>
</tr>
</tbody>
</table>

**NOTE:** N-95 respirators with exhalation valves allow unfiltered, exhaled air to be released and will not protect others near you against COVID-19. Others in your lab/research space will not be at risk if they are also wearing respirators with a higher level of protection (N95, N99, N100, HEPA). However, if all others are not wearing respiratory protection, **physical distancing must be maintained.**

Half-face and full-face elastomeric respirators and PAPRs also allow exhaled air to be released, unless units have stacked cartridges for HEPA filtration. If physical distances cannot be maintained in such instances, please contact EHS at 540-231-3600 for additional guidance.

**Are face shields an option?**

Recent studies show that face shields, used with or without a face mask, can reduce the transmission of the virus.
that causes COVID-19. A face shield should be worn if you do work that could cause your face mask to become contaminated. Shields also allow for better verbal communication, and those who are hearing impaired can read lips. Social distances, however, are still critical to reduce your risk of exposure.

**What things should I consider if I need to use a face mask in a lab or shop?**

- Although the Governor of Virginia’s Executive Order 63 includes bandanas among usable face covering options, coverings that fit close to the face with no loose edges are the safest choice to use in labs/research spaces, shops and similar spaces.
- Use disposable face covering unless there is a direct safety hazard or chemical incompatibility issue associated with wearing one. Consult with your supervisor/PI if use of your face covering presents safety concerns relative to conducting your job duties.
- A disposable face covering does not replace any other recommended or required personal protective equipment (PPE) for your duties or work space such as goggles, face shields, or respirators, and it should not interfere with the fit or function of PPE.
- If any hazardous materials contact the face covering, it must be disposed of immediately and replaced with a clean covering.
- Do not use a face covering when using open flames or flammable materials unless the covering is flame resistant, or use one made from natural fibers such as 100% cotton.
- Do not use a face covering if it could be entangled in machinery.
- If you cannot wear a face covering based on the work you are doing because it creates a greater hazard, wear a face shield if you can do so safely and assure that social distances can be maintained.

**I’m not required to wear a respirator for work. What if I want to wear a respirator voluntarily?**

- Employees who are provided a filtering facepiece respirator (N-95, N-100), or who choose to wear a filtering facepiece respirator they bring from home for an additional level of comfort and protection are called voluntary users. NOTE: Current shortages will impact availability of these respirators for voluntary users.
- There are no medical clearance or fit testing requirements for voluntary users of filtering facepiece respirators.
- If you voluntarily wear any other type of respiratory protection, even if you bring it from home, you must be medically cleared by EHS Occupational Health Services (just the same as if you were required to wear a respirator for your work), but you do not need to be fit tested.
- In addition, voluntary users of respirators must read and understand the following information:

  Respirators are an effective method of protection against designated hazards when properly selected and
worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard. You should do the following:

1. Read and heed all instructions provided by the manufacturer of your respirator regarding use, maintenance, cleaning and care, and warnings about the respirator’s limitations.

2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

4. Keep track of your respirator so that you do not mistakenly use someone else’s respirator.

5. If you have any questions, please contact Environmental Health and Safety at 540-231-3600.

Respirators are in short supply right now. What if I have to use a different brand, model or size respirator?

If you are provided a different brand, model or size of N95 or a different type of tight-fitting respirator, you must contact EHS to be fit tested to your new respirator before you use it. You do not need to be fit tested if you are wearing a PAPR.

Filtering facepiece respirators are in short supply right now, and I am required to use one for my work. What can I do to help conserve the supply of them?

- If there is a possibility of splashes or aerosols to be created by your work, wear a face shield to keep your respirator from becoming contaminated.
- Use mask rotation unless your work involves infectious agents. If you have access to five N95 masks, after each days’ use, inspect your mask to make sure it’s not soiled and that it is still intact and not damaged. It not, place the used mask in a clean paper bag and label the bag with the day used. The mask can be reused after the fifth day.
- The Battelle Critical Care Decontamination System has been located in Blacksburg on the campus of Virginia Tech. It is FDA approved to use vapor phase hydrogen peroxide to decontaminate non-cellulose
based N95 masks up to 20 times. Each department that desires to use this system should register here. Instructions are also provided at this website on how to access and send N95 respirators for disinfection.

If you have any additional questions, please contact Environmental Health and Safety at 540-231-3600.