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

Physical Distancing and Hygiene

Strict adherence to appropriate physical distancing requirements throughout each phase of the recovery process is necessary. Virginia Tech will promote proper hygiene practices for the whole community. Community members are expected to:

Wear face coverings/masks when in public or common areas, including indoor spaces (e.g., classrooms, laboratories, meeting/conference rooms, dining halls, residence halls, student centers, library, hallways, lounges, and atria and other gathering points), unless physical distancing of six (6') feet is easily accomplished, such as in private offices or areas with greatly reduced occupancy, as well as cubicle areas where there are physical barriers between each occupant provided occupants don a face covering/mask upon standing. Exceptions to these requirements may be made after consultation with Environmental Health and Safety depending on the circumstances of your activity and precautions being taken.

Face shields are allowed in lieu of a face covering/mask under the following circumstances:

- Any person seeking to communicate with the hearing impaired and for which the mouth needs to be visible;
- Persons with health conditions that prohibit wearing a face covering. No person may be required to wear a face covering/mask when doing so would be contrary to his or her health or safety because of a medical condition;
- Lecturers in lieu of a face mask provided physical distances are maintained.

Should you wear a face covering/mask or do you need to wear a respirator for COVID-19?

Face coverings/masks: All persons on campus are expected to wear a face covering/mask as outlined in the requirements above. These masks slow the spread of the virus and help people who may have the virus and do not know it from transmitting it to others. Examples of face coverings/masks are shown below. N95 respirators and other types of respiratory protection are being reserved for those persons who have work-related hazard exposures where the use of respirators has been mandated either by the Institutional Biosafety Committee or Environmental Health and Safety.

What is considered a face covering/mask?

Any of the masks described below are acceptable for use as face covering/mask for persons in research labs, office areas and other settings. Although the Governor of Virginia’s Executive Order Sixty Three 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 Mask</th>
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</table>
| Typically has only one strap but may have two
  Manufactured
  Typically used for protection from breathing sawdust, etc. | Typically has two straps that go around your ears, or may go behind your head
  Manufactured
  Typically used for protection from breathing household allergens, pollen, etc. | Typically has two straps that go around your ears, or may tie behind your head
  Manufactured or hand-made
  Should have several layers of fabric for added filtration
  Washable; resusable |
Why wear a face covering/mask at work?

It helps protect the people around you from potential coronavirus exposure when you wear a face covering. And when they wear face coverings, it helps protect you from potential exposure. 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, laugh, etc. You don’t need to be fitted or specially trained to wear a face covering.

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

Face coverings/masks can offer some protection to the wearer, but they can’t provide the same level of protection from exposure to the coronavirus as a respirator. That’s why it is important that you don’t get a false sense of security from wearing a face covering. You should still follow social distancing rules when wearing a face covering/mask (limiting contact time and staying six feet away from other people), 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 PPE items are in short supply. We can do our part to control COVID-19 by using face coverings/masks 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.

Will face coverings/masks be provided for employees?

All persons must obtain a type of face covering/mask that provides a good, comfortable fit before they return to campus. Some departments may provide face covering/mask 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 facemask: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-to-make-cloth-face-covering.html

Can I wear the same face covering/mask when going to, working in, and leaving the lab, shop or other area?

Yes, provided it has not become contaminated with hazardous materials, torn or otherwise damaged. It is recommended that you have at least two face covering/masks at work in case one gets contaminated or damaged, then the other can serve as your back-up. Ideally, cloth face masks 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/mask while performing work?

You are likely to contaminate your mask with germs when you touch your mask with gloved or ungloved hands. Try to avoid touching your mask while you are wearing it. In the event your cloth mask becomes contaminated at work, please replace it with a back-up mask and wash the contaminated mask when you get home. Replace a contaminated disposable mask 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/mask and have it fit properly?

1. Wash hands prior to touching face covering. Handle the mask by straps only.
2. Make sure the mask fully covers mouth and nose at all times.
3. Adjust the mask until it fits 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 mask 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 mask.
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 mask 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 Masks:** Use a standard cycle in the washing machine and regular laundry detergent. Alternatively, you can wash your cloth mask by hand using laundry detergent or dilute bleach solution. Follow washing with a heated cycle in the dryer, or allow the mask to air dry. Make sure your clean mask is completely dry before using it, and make sure it still fits you appropriately after being washed.

**Disposable Masks:** Cleaning or decontaminating disposable masks (dust masks, pleated masks) is not recommended because they don’t hold up to these treatments.

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

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

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

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

If I am required to wear respiratory protection to do my work, how do face covering/mask fit in?

The simple answer: Wear required respiratory protection when you are working with those hazards to protect yourself. When you aren’t working with those hazards, wear a face covering to help prevent the spread of COVID-19. See the guidance table below for more details. Workers who are required to wear respiratory protection for work-related hazard exposures must be medically cleared, fit-tested and trained. (Contact ehsmedserv@vt.edu or call 1-3998 to learn more, or to schedule services.)
Conditions for Wearing Face Coverings and for Using Respirators

<table>
<thead>
<tr>
<th>When 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>
</tr>
<tr>
<td>Mechanical risks (mask straps could get caught in equipment)</td>
<td>Wearing a typical face covering may not be safe; review with your 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>Determined by careful review by 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, vapors, etc.</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 masks or respirators for product protection in clean room settings, for sensitive nucleic acid procedures, etc.</td>
<td>Use the disposable face mask or respirator type that is normally required in your work setting 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; face shields can provide a useful adjunct to respiratory protection.</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 work area will not be at risk if they are also wearing respirators with the same or higher level of protection (N95, N99, N100, HEPA). However, if all others are not wearing respiratory protection, social distances must be maintained.

Half-face and full-face elastomeric respirators and PAPRs also allow unfiltered exhaled air to be released. If social distances cannot be maintained when wearing these types of respirators, use stacked cartridges that include HEPA filtration, or contact EHS (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 Sixty Three 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, but what if I want to wear a respirator voluntarily?

• People 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 on use, maintenance, cleaning and care, and warnings regarding the respirators 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.

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 day’s use, inspect your mask to make sure it’s not soiled and that it is still intact and not damaged. It not, wash or disinfect your hands, remove the mask being careful to not touch the inner surfaces, and then place the used mask in a clean paper bag and label the bag with the day used. Wash or disinfect your hands again after removing the respirator. The mask can be reused after the fifth day. It is important to consult with the respirator manufacturer regarding the maximum number of donnings or uses they recommend for the N95 respirator model. If no manufacturer guidance is available, data suggest limiting the number of reuses to no more than five uses per device to ensure an adequate safety margin.
- 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 contact EHS at bmondy@vt.edu or 540-231-3600 for instructions on how to access and send N95 respirators for disinfection.

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