



Managing N-95 Respirator Use During Limited Availability

Due to unprecedented demand for respiratory protection created by the COVID-19 pandemic, availability of respirators has been limited in the marketplace. This guidance is to update you on protocols for obtaining and safely extending the use of N95 respirators.

Should I store my used N95 respirator after use instead of discarding?

If you use respirators that meet the criteria described below you should store and not discard used respirators. Until product availability improves, some N95 respirators should be kept for possible disinfection and reuse. A respirator may be a candidate for reuse and should be stored in a paper bag or dry protected location if it meets the following criteria:

- Structurally sound (not torn, straps still in place, etc.)
- Free from liquid contact
- Used for patient healthcare or for general particulate protection such as allergens related to animal care
- Not used in a BSL-3 Lab. BSL-3 labs and laboratories conducting research with COVID-19 or related samples should consult with the Office of Biological Safety (OBS) about respirator reuse.
- Not used for toxic particulate such as lead, asbestos, silica, beryllium, etc. (Consult with EHS Environmental & Occupational Health (EOH) at eoh@uhs.wisc.edu with questions).

If the above criteria are met, respirators should be labeled as follows:

1. Label you're the strap of your N95 respirator with a permanent marker. Do not label masks belonging to others.
2. Write legibly on the elastic strap of each N95 respirator (as an alternative you can attach a piece of tape or identifier tag to the elastic strap)
3. Do not write on the face filtering part of the respirator as it will degrade filtering properties
4. Label all N95 respirators with your initials and date it was first stored

Respirators should be placed in a paper bag to facilitate ventilation. Care should be taken to store the masks such that inside portions of masks are not touching outside portions of the mask and to handle masks only by the straps. Hands should be washed immediately after handling a used mask.

How do I arrange to have my respirators safely decontaminated?

It is recommended that work units consult with EOH at eoh@fpm.wisc.edu if they are interested in pursuing respirator disinfection. EOH staff will discuss current N95 availability and the protocols for arranging respirator disinfection. Respirator users at UW-Madison should not disinfect their own respirators.

Is it safe to use disinfected respirators?

Disinfected respirators should only be used if other options have been exhausted. If respirators are properly selected and appropriate processes are used as described above, respirators can be safely

disinfected for limited reuse. Reuse should be limited to five reuse cycles. Do not use surface disinfectants such as ethanol or bleach to disinfect masks as they can affect mask integrity and function.

The CDC webpage discussing respirator disinfection can be found at:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>

There are several methods of disinfecting respirators. The most common tend to use vaporous hydrogen peroxide (VHP) and ultraviolet light. The FDA has issued specific emergency use authorizations for disinfection processes and CDC has published guidance on various methods of disinfection. It must be noted that not all respirators can be safely disinfected by all methods and some processes pose risk of hazardous exposures if not managed appropriately. The EHS Environmental and Occupational Health Unit is working on a VHP protocol and is currently pilot-testing the process. Other state agencies are also exploring disinfection processes that may be available for campus use.

Can time be used as a disinfection process?

Using storage time to extend respirator use may be used in some circumstances if COVID-19 is the primary concern for mask contamination. Instructions for doing so can be found at:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>

Can I still order new respiratory protection equipment?

While the supply chain continues to be limited, campus work units are able to request select types of personal protective equipment (PPE), such as N95 respirators, through the UW Madison Emergency Operations Center (EOC) Logistics Team web form at <https://shopuw.wisc.edu/eoc-ppe-request-form>

Requests will be evaluated against current priorities identified by campus administration and fulfilled as supplies allow. As time progresses it is more likely that priorities will broaden as supply chains open.

What if I'm not fit tested in the available model?

While the University has a supply of N95 respirators, it may not have the model you have been fit tested in. Fit testing a new respirator will depend on availability of that model. Occupational Medicine will prioritize fit testing in new models based on the nature of exposures.

Should I switch to cartridge or PAPR use?

If you have alternatives available such as powered air purifying respirators (PAPRs) or elastomeric cartridge respirators, it would be appropriate to shift to use of alternatives to extend available N95 inventory.

