

## N-95 Respirator Reuse and Decontamination Guidance

From the Vermont Department of Health and the Vermont State Emergency Operations Center

This guidance describes two practices for N-95 respirators. The first is N-95 respirator reuse. It allows for using the respirator for more than a single use as long as that is safe. The second is N-95 decontamination. This is the removal of coronavirus and other biological contaminants from the respirator so it may be reused. Guidance on N-95 respirator reuse has been provided for some time now (see <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/crisis-alternate-strategies.html> from the Centers for Disease Control and Prevention).

The guidance below is part of a new effort. This new effort starts with the storage of previously used N-95 respirators by users, the collection of the N-95 respirators at the site of use, the transportation of the respirators from the site of use to the facility where the decontamination will be accomplished. The N-95 respirator decontamination guidance here specifically addresses the first step what to do to store an N-95 respirator for pickup and transport for decontamination. Those latter steps are being developed by the State Emergency Operations Center (SEOC) and its partners.

### N-95 Respirator Reuse

Considering supply chain interruptions around personal protective equipment (PPE), it may be reasonable for health care providers and organizations to reuse and extend the use of N-95 respirator masks. While the decision to reuse a respirator should be based on an organizational assessment of risk, the Centers for Disease Control and Prevention (CDC) offers some guidance. The following is a summary:

- A respirator may be reused up to five times unless the manufacturer has more specific reuse recommendations.
- N95 respirators used during aerosol generating procedures or respirators that have been contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients should be immediately discarded and not reused.
- If a respirator is removed between uses, it should be hung in a designated storage area or kept in a clean, breathable container such as a paper bag between uses. To minimize potential cross-contamination, store respirators so that they do not touch each other and the person using the respirator is clearly identified. Storage containers should be disposed of or cleaned regularly.

*The outside surfaces of a used N-95 respirator should be considered contaminated.* Consider the following steps to prevent cross contamination:

- Always use clean gloves when inspecting, handling, donning, and performing a user seal check on a reused respirator.
- Avoid touching the inside of the respirator.
- Prior to reusing, inspect the integrity of the respirator, checking for obvious signs of damage.

- Discard gloves after the N95 respirator is donned and any adjustments are made to ensure the respirator is sitting comfortably on your face with a good seal.
- Clean hands with soap and water or an alcohol-based hand sanitizer after touching or adjusting the respirator.
- The CDC recommends using a cleanable face shield (preferred) or a surgical mask over an N95 respirator and/or other steps (e.g., masking patients, use of engineering controls), when feasible to reduce surface contamination of the re-used respirator.

The full CDC guidance on reusing respirators can be found at:

<https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html>

### **N-95 Respirator Decontamination**

There are several respirator decontamination techniques being evaluated by the State Emergency Operations Center (SEOC). While guidance on approved methods is still being formulated, it is reasonable for health care providers and organizations to safely save used N-95 respirators in anticipation of future disinfection opportunities.

If N-95 respirators are saved beyond a single shift of continuous reuse, please consider the following:

- Used N-95 respirators should be considered infectious and should not be handled without proper personal protective equipment (PPE).
- Masks stored together should not be reused before disinfection.
- Used masks should be stored in a marked hazardous materials container\* and isolated to prevent accidental contact transmission.

Future guidance on disinfection decontamination is anticipated and will be disseminated as soon as possible.

The user community from health care providers to first responders may begin to store their used N-95s in the manner described above. As used N-95 respirator pickup services are implemented the user community will be provided instructions on what steps are to be taken to get your N-95 respirators into the decontamination process. As N-95 respirators are decontaminated and returned for reuse, they will be redistributed to users based on their needs.

\*A marked hazardous materials container includes biological waste bags (double bagged for cross-contamination prevention, biological waste bins or cans lined with at least one plastic bag, or a biological waste cardboard box lined with at least one plastic bag.