

# Considerations on the Reuse of Personal Protective Equipment (PPE)

Marc F. Stern, MD, MPH and Anne Spaulding, MD, on behalf of the National Sheriffs' Association

Personal Protective Equipment (PPE) items are, or may become, in short supply. Following are some considerations for dealing with this potential shortage. As with any health-related recommendation, staff should also check with their jail's medical director or local health authorities in case local conditions impact management of PPE.



## 1. MASKS

When supplies are limited, the Centers for Disease Control and Prevention (CDC) recognizes that users may need to find ways to stretch supplies. This has been practiced in previous outbreak situations. One important approach is to prioritize the use of N95 masks for higher risk activities and use a routine surgical facemask for other activities. For complete discussion, and some attendant risks, see the CDC guidance on Crisis/Alternate Strategies. If you

decide to stretch the use of masks, you should have your jail medical director (or local health authority) review the CDC's National Institute for Occupational Safety and Health (NIOSH) guidance on "Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare."

There are two common approaches: (1) **extended use** and (2) **reuse**. Extended use is where the wearer keeps the mask on for more than one patient contact. Reuse is where the wearer takes the mask off and then puts it back on later. Extended use is preferred over reuse, especially because the wearer is not touching the mask between patients. Some key guidelines for reuse by correctional staff (there are others listed at the CDC website):

- Do not reuse if contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients.
- Use 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 respirator.
- Hang used respirators in a designated storage area or keep them 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 (e.g., place name on bag). Storage containers should be disposed of or cleaned regularly.
- Clean hands with soap and water or an alcohol-based hand sanitizer before and after touching or adjusting the respirator (if necessary for comfort or to maintain fit).
- Use a pair of clean (non-sterile) gloves when donning a used N95 respirator and performing a user seal check. 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.

Some people are using homemade masks. There is no data on whether these masks work to protect you against infection or not, so you should not rely on them. They may work better than nothing or they may convey a false sense of security, placing the user at greater risk. If someone does use a homemade mask, the CDC recommends also using a face shield that covers the entire front and side of the face.

## 2. GLOVES



There is currently no specific guidance from the CDC about reusing gloves during the COVID-19 pandemic, but the CDC has generally recommended against reusing gloves. For one thing, it is very easy to contaminate the inside of the glove during removal and re-donning. As with masks, the first step in preserving the glove supply is to limit use to those situations in which glove protection is currently recommended. And as with masks, extended use may cause less internal glove contamination than reuse. It also may be helpful to cleanse the gloved hands with alcohol-based sanitizer, though,

again, there is no data about this and it is not something the CDC has specifically recommended.

## 3. GOWNS



As with masks, the CDC offers ideas for extended use and reuse of gowns and for other alternatives via the “Isolation Gowns” guidance. Washable gowns can be washed (warmest water and drying temperature recommended by the manufacturer is helpful). Some key guidelines for extended use or reuse (there are others listed at the CDC website):

- Do not extend use when going from a group of individuals isolated for one reason or infection to another. For example, a jail tier isolated for COVID-19 and another jail tier isolated for flu.
- Do not extend the use of, or reuse any gown if contaminated with blood, respiratory or nasal secretions, or other bodily fluid.



This project was supported, in whole or in part, by cooperative agreement number 2017CRWXK001 awarded by the U.S. Department of Justice, Office of Community Oriented Policing Services. The opinions contained herein are those of the author(s) or contributor(s) and do not necessarily represent the official position or policies of the U.S. Department of Justice. References to specific individuals, agencies, companies, products, or services should not be considered an endorsement by the author(s) or the U.S. Department of Justice. Rather, the references are illustrations to supplement discussion of the issues.