

How to Use Personal Protective Equipment: A Quick Reference Guide for Frontline Clinical Providers

Frontline clinical providers should wear the following personal protective equipment (PPE) when treating individuals confirmed or suspected to be infected with COVID-19.



N95 RESPIRATOR



GOWN



GLOVES



FACE SHIELD/
EYE PROTECTION

How to properly use protective equipment

PPE TYPE	DONNING PPE	REMOVING PPE
N95 RESPIRATOR (AS AVAILABLE)	<ul style="list-style-type: none"> Secure ties or elastic band at middle of head and neck Fit flexible band to nose bridge Fit snug to face and below chin Fit-check respirator 	<ul style="list-style-type: none"> Front of respirator is contaminated – DO NOT TOUCH! Grasp ONLY bottom then top ties/elastics and remove Discard in waste container
GOWN	<ul style="list-style-type: none"> Fully cover torso from neck to knees, arms to end of wrist, and wrap around the back Fasten in back at neck and waist 	<ul style="list-style-type: none"> Gown front and sleeves are contaminated! Unfasten neck, then waist ties Remove gown using a peeling motion; pull gown from each shoulder toward the same hand Gown will turn inside out Hold removed gown away from body, roll into a bundle and discard into waste or linen receptacle
GLOVES	<ul style="list-style-type: none"> Use non-sterile for isolation Select according to hand size Extend to cover wrist of isolation gown 	<ul style="list-style-type: none"> Outside of gloves are contaminated! Grasp outside of glove with opposite gloved hand; peel off Hold removed glove in gloved hand Slide fingers of ungloved hand under remaining glove at wrist
FACE SHIELD / EYE PROTECTION	<ul style="list-style-type: none"> Put on face and adjust to fit 	<ul style="list-style-type: none"> Outside of goggles or face shield are contaminated! To remove, handle by “clean” head band or ear pieces Place in designated receptacle for reprocessing or in waste container

Wash hands or use an alcohol-based hand sanitizer immediately after removing all PPE!

N95 Respirator Usage and Care

N95 respirators must only be used by a single wearer. Use labels to reduce accidental usage of another person's respirator.



Existing CDC guidelines recommend a combination of approaches to conserve supplies while safeguarding health care workers in such circumstances.

- Minimize the number of individuals who need to use respiratory protection through administrative controls;
- Use alternatives to N95 respirators (e.g., other classes of filtering facepiece respirators, elastomeric half-mask and full facepiece air purifying respirators, powered air purifying respirators) where feasible;
- Implement practices allowing extended use and/or limited reuse of N95 respirators, when acceptable;
- Prioritize the use of N95 respirators for those personnel at the highest risk of contracting or experiencing complications of infection.

Extended use is favored over reuse because it is expected to involve less touching of the respirator and therefore less risk of contact transmission. A key consideration for safe extended use is that the respirator must maintain its fit and function.

Homeless shelter facilities should develop clearly written procedures to advise staff to take the following steps to reduce contact transmission:

- Discard N95 respirators following use during aerosol generating procedures.
- Discard N95 respirators contaminated with blood, respiratory or nasal secretions, or other bodily fluids.
- Discard N95 respirators following close contact with, or exit from, the care area of any patient co-infected with an infectious disease requiring contact precautions.
- Consider use of a cleanable face shield (preferred) over an N95 respirator and/or other steps (e.g., masking patients, use of engineering controls) to reduce surface contamination.
- Perform hand hygiene 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).

If reusing respirators is necessary because of limited supplies:

- 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. 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).
- Avoid touching the inside of the respirator. If inadvertent contact is made with the inside of the respirator, discard the respirator and perform hand hygiene as described above.
- 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.

Use masks not evaluated or approved by NIOSH or homemade masks as a last resort.