

Fundamentals of Donning and Doffing PPE in Clinical Laboratories

PPE Plus Droplet Protection- Disposable Face Mask

Removing Gown First and Gloves Second

This video demonstrates the donning and doffing of the following PPE: Gown, Gloves, Disposable Face Mask, and Face Shield. The doffing portion of this video demonstrates removing the gown first and gloves second.

Donning PPE

Step 1:

- The first step is to remove personal items such as jewelry, watches, coats, jackets, cellphones, pens, or additional bags, and place them in a location outside of the laboratory.
- Then, tie back any long hair, if present.
- Next, gather your solid front wrap-around gown with tight knit cuffs, a single pair of gloves, a disposable face mask (also known as a surgical mask) or an N-95 respirator, and disposable face shield.
- The decision whether to use a disposable face mask or an N-95 respirator will depend on the laboratory site-specific and activity-specific risk assessment.
- Note: This scenario will demonstrate donning and doffing a disposable face mask.
- Make sure you have the right size gown and gloves
- And don't forget to visually inspect all of your PPE for rips, tears, loose or missing straps, and replace any defective PPE you find.

Step 2:

- Next, pull on the gown, fastening it securely behind your neck and back or side.
- Do not tie in a knot or fasten so tightly that you cannot easily remove it later.
- Make sure that the gown fits well to allow for easy movement.
- Street clothing should not be exposed.

Step 3:

- Next, put on your disposable face mask with the ear loops behind your ears. ensuring a snug fit against your face.
- With the index finger of both hands, press down on each side of the flexible nose piece so that the top of the face mask fits snugly against your nose and cheeks.

Step 4:

- Put on the disposable face shield.
- Stretch to expand the elastic strap and place it behind your head with the foam resting just above your eyebrows.
- Adjust the strap so that it fits snugly against your face.
- Face shields must cover your forehead, extend below your chin, and wrap around the side of your face.

Step 5:

- And finally, put on your gloves.
- First, pull the gown's knit cuff down around the palm of your hand and then pull the glove over (not under) the cuff.
- This helps ensure your sleeves won't slip out and the knit cuff won't be exposed to hazardous materials during work.
- Ensure there are no punctures or tears in the gloves prior to beginning work.

Doffing PPE

The following steps describe one method and sequence of doffing PPE. Other methods and sequences may vary based on the laboratory site-specific and activity-specific risk assessments, the procedures being conducted, and the PPE worn.

Step 1:

- The first step of doffing your PPE is removing your gown.
- To do this, untie the gown at your waist, grasp the gown's shoulders and pull the gown forward, releasing the neck closure.
- Pull the gown off your shoulders and away from your body, rolling the gown inside out as you go.

Step 2:

- Before completely pulling off the gown sleeves, carefully pull the gown sleeves from under your gloves and remove your arms, leaving your gloves on.
- Roll the gown inside-out into a bundle. Taking care to prevent the potentially contaminated outside of the gown from touching your street clothes.
- Dispose of the bundle into the biohazard waste container.

Step 3:

- Next, slowly and gently remove your gloves. These steps describe one method of removing gloves to avoid contaminating your hands. Other methods may be used based on your institutional preferences.
 - Make an "L" with your thumb and first finger.
 - Then, place your fingers perpendicular to your wrist and pinch. Be careful to not touch the cuff of the coat with your dirty glove.
 - Next, pull the glove completely off – it should be inside out
 - Grab the inside-out glove with your bare hand (the one the glove just came off of) and then pinch the other glove at the wrist.
 - Then, pull the pinched glove up high away from the wrist.
 - Pull the glove off making sure the gloved hand is flat and you don't touch the outside of the contaminated glove with your clean hand.
 - Last, discard the gloves into the biohazard waste container.
- Remember- Do not reuse the gloves.
- NOTE- Vary colors between the inside of the outside of the glove so we can tell the difference.

Step 4:

- Apply alcohol based hand sanitizer with at least 60% ethanol or 70% isopropanol (ABHS) to your hands, wash with soap and water, or don a new pair of gloves.
- Tilt your head slightly forward to take off your face shield.
- Grasp the straps above the ears and gently lift the face shield away from your face, taking care to avoid touching the shield itself which may be potentially contaminated.
- Then, discard the disposable face shield in the biohazard waste container.

Step 5:

- To remove your disposable face mask, remove the ear loops, taking care to avoid touching the potentially contaminated exterior surface of the face mask.
- Pull the mask away from your face and dispose of it in the biohazard waste container.

Step 6:

- Last, wash your hands with soap and water.
- Lather the backs of your hands, between your fingers, and under your nails. Scrub for at least 20 seconds.
- Washing hands with soap and water is the best method. However, if soap and water are unavailable, an alcohol-based hand sanitizer (ABHS) containing at least 60% ethanol or 70% isopropanol can be used as a temporary solution until soap and water are available.

Additional Considerations

- Closed shoes (with solid and impermeable uppers) should be worn in the laboratory.
- PPE will vary, based on a laboratory-specific and activity-specific risk assessment.
- Donning and doffing areas should be physically separated from each other to avoid contamination of clean PPE and personal belongings with potentially contaminated PPE.
- Donning and doffing procedures vary per institution. Follow institutional policies and procedures.
- For additional training and workforce development resources, please visit [cdc.gov/labtraining](https://www.cdc.gov/labtraining) and click on the Job Aids button.