

Fundamentals of Donning and Doffing PPE in Clinical Laboratories

Basic PPE for Routine Laboratory Procedures

This video demonstrates the donning and doffing of the following PPE: laboratory coat, gloves, safety glasses with wrap around sides

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 laboratory coat with tight cuffs, gloves, and safety glasses with wrap around sides.
- Make sure you have the right size laboratory coat and gloves,
- And don't forget to visually inspect all of your PPE for rips, tears, or missing snaps.

Step 2:

- Next, put-on the laboratory coat and snap it completely.

Step 3:

- Then, put on your safety glasses,

Step 4:

- And finally, put on your gloves.

Doffing PPE

There are various strategies for establishing the sequence of doffing PPE. The strategy demonstrated in this video is to remove PPE from most contaminated to least contaminated.

Step 1:

- To doff your PPE, the first step is to slowly and gently remove your gloves.
- Start by making 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 now 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 cuff up high and away from the wrist.
- Pull the glove off, making sure the gloved hand is flat and you do not 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.

Step 2:

- Take care not to touch the potentially contaminated outside surfaces of your laboratory coat with your bare hands. The cuffs of the coat should be clean however, as the gloves extended over them during work.
- Next, unsnap your laboratory coat
- And grasp the sleeve cuff of one of the arms and pull off the laboratory coat. Do the same for the other arm.
- If you are reusing the laboratory coat, hang the laboratory coat in a designated area
- Please note, if there is visible contamination, or it is determined that the laboratory coat should be disposed of,
- With the the inside of the coat facing toward you, fold the coat away from you, and roll it inside out into a bundle.
- Then, dispose of it in the biohazard waste container.

Step 3:

- Next, remove your safety glasses by grasping the frame at the temples. This is an area where there is less potential for contamination.
- Place them in a designated area to be disinfected at the end of the shift.
- Remember to use gloves and cleaning products that meet the EPA's approval to clean your safety glasses, and follow the manufacturer's recommendations for contact time.

Step 4:

- 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.
- 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 procedure-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.