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Donning and Doffing PPE

1. **Purpose:** Describes the proper procedure for donning (putting on) and doffing (taking off) Personal Protective Equipment (PPE). Basic PPE is required in all laboratory spaces and special equipment may be needed when handling toxic, hazardous, or infectious materials.
2. **Materials and Reagents**
 - Lab coat
 - Eye protection
 - Gloves
3. **Procedure: Donning PPE Order**
 - 3.1. Wash hands thoroughly with soap and water
 - 3.2. Lab Coat
 - 3.3. Face/eye protection
 - 3.4. Gloves
 - 3.4.1. Make sure the gloves are not so tight that they can tear, and not so loose that they expose skin.



- 3.4.2. Change gloves anytime they have become contaminated or potentially have become contaminated.
- 3.4.3. Always keep gloved hands away from face and items handled with bare hands.
- 3.4.4. Lab coat and gloves should overlap at the wrist to minimize skin exposure.
- 3.4.5. Sleeves can be added to cover any gaps between the coat and gloves.



Good coverage



Poor coverage



Sleeves

3.5. Specialized PPE can include

- 3.5.1. Face shield and cryoprotective gloves when working with liquid nitrogen
- 3.5.2. Chemical resistant lab coat (flammable)
- 3.5.3. UV eye protection
- 3.5.4. Double nitrile gloves when working with viruses

4. Procedure: Doffing PPE Order

4.1. Remove gloves

- 4.1.1. Avoid touching the outside of the gloves with bare hands. If double gloved for virus work, remove and dispose of the outer glove inside the biosafety cabinet.
- 4.1.2. Immediately dispose of the gloves in the biohazard waste container:



Container must have biohazard waste labels and red biohazard waste bag

4.2. Remove face/eye protection.

- 4.2.1. Place in a designated space for decontamination.
- 4.2.2. If disposable, immediately dispose of the face/eye protection in the biohazard waste container.

4.3. Remove lab coat.

- 4.3.1. Unfasten any button or snaps.
- 4.3.2. Remove by only touching the inside of the coat.
- 4.3.3. If disposable, place the coat inside of the biohazard container.
- 4.3.4. If reusable, place the coat in a designated storage area. Make sure to send reusable coats for regular laundering with the approved cleaning company.



4.4. Wash hands thoroughly with soap and water.

5. Considerations

5.1. The type of PPE required will vary for different procedures. If you are unsure of the necessary PPE for your procedure, ask the lab manager.

5.2. Ensure the PPE fits properly.

5.3. When removing PPE, it is helpful to treat all items as if they are contaminated.

6. Troubleshooting

Problem	Possible Cause	Solution
Gloves rip	Incorrect size	Increase glove size
Lab coat sleeves are short	Incorrect size	Increase lab coat size or use disposable sleeves to cover the exposed area of skin
Don't know which PPE to use	New protocol or new training required	Consult with a lab member or contact EH&S

