

MAMNUAL OF PERSONAL PROTECTIVE EQUIPMENT FOR SAMPLE COLLECTION AND LFD TESTS FOR RABIES DIAGNOSIS

PURPOSE

Safety is of paramount importance when working inside the laboratory and especially with highly infectious diseases. The lyssavirus is one of these, therefore, requiring a certain level of safety for the person/s who are handling and testing tissue samples for its diagnosis.

Personal protective equipment (PPE) is applied when collecting samples (removing head and straw sampling method) and perform lateral flow devices (LFDs) of the brain by straw method or processing for the immunochromatographic test.

EQUIPMENT AND TOOLS

- ✓ Disposable gown/(Autoclavable gown if disposable gown not available)
- ✓ Surgical (medical) mask
- ✓ Face shield/goggles
- ✓ Headcover
- ✓ Double latex gloves
- ✓ Rubber boots
- ✓ Waterproof apron (optional)

SAFETY REQUIREMENTS

- Pre-exposure immunization should be given. Unimmunized individuals should not treat rabies suspected (or probable) animal and enter the facility where rabies diagnostic work is conducted.
- Each individual must ensure that his/her PPE is in good operating condition before wearing it.
- Wear appropriate PPE, including disposable gown, surgical mask, Face shield, head cover, gloves and a lab coat. Use an appropriate disinfectant for material and sample decontaminations (e.g., sodium hypochlorite with recommended manufacturer dilutions, 70% alcohol -

ethanol or isopropanol).

- Eye protection (e.g., safety glasses, goggles, or face shields) must be worn. All staff should wash the eyes immediately if there is an accidental splash in the eyes
- When you perform the procedures such as removing head and LFD test in the indoor room such as an operation room, please make sure the ventilation. Do not perform closed room (no ventilation). Consider using natural ventilation, opening windows or perform outdoor.
- Protective gloves must be worn while using any hazardous materials. It should be removed immediately after handling biohazard bags and before handling anything else (e.g., moving biohazard/trash cart) or disinfect the gloves with alcohol or other disinfectant before handling other materials/equipment/surfaces. Gloves are redonned before disposing of the biohazard bag.

HOW TO PUT ON AND REMOVE PPE

1. Each worker must wear a clean uniform/scrub each day.
2. Gather all the necessary items of PPE beforehand.
3. Put on surgical(medical) mask
4. Put on rubber boots. Closed toe/heel shoes must be worn at all times by all individuals who are occupying or entering a laboratory/technical area.
5. Put on gloves
6. Place the disposable gown over the glove
7. Put on face shield / goggles
8. Put a head cover
9. Put on 2nd gloves over cuff of gown.
10. If available, put waterproof apron*

Caution: Remove 2nd gloves if they become torn or damaged. Perform hand hygiene (alcohol on the 1st glove) before putting on new gloves.

*A waterproof apron is to protect the technician/worker from soiling the disposable gown and preventing his/her uniform beneath from becoming wet or contaminated.

Figure 1. Wearing disposable gown, rubber boots, face mask, face shield, gloves and head cover



Figure 2. Wearing disposable gown, waterproof apron, rubber boots, face mask, eye glasses, gloves and head cover



**STEPS TO
REMOVE
PPE**

1. Perform hand hygiene on the end gloves (ex: 70% alcohol on the 2nd glove)
2. Remove waterproof apron if you wear
3. Remove 2nd gloves. Perform hand hygiene on the 1st gloves
4. Remove face shield, head cover
5. Remove gown and roll inside-out and dispose of it safely and perform hand hygiene on the 1st glove (Pictures)
6. Remove 1st glove and perform hand hygiene
7. Remove and mask.
8. Remove rubber boots
9. Perform hand hygiene

**DOFFING
PPE**



REFERENCE

Modified from *Clinical Management of Patients with Viral Haemorrhagic Fever: A pocket Guide for the Front-line Health Worker*. World Health Organization, 2014
World Health Organization. (2013). WHO Expert Consultation on Rabies.

DIVISION OF COMPARATIVE MEDICINE UNIVERSITY OF SOUTH FLORIDA
Standard operating procedure Use of Personal Protective equipment, Animal care Personnel