3.02 Isolation of Patients with an Emerging Infectious Disease (EID) or a Possible EID

Purpose: To provide instructions for isolation of patients with an EID or a possible EID including proper use of personal protective equipment (PPE).

Audience: All healthcare workers (HCWs).

Policy Statement:

I. Isolation for patients with an EID or possible EID

A. Patients with an EID or a possible EID will be isolated using All Barrier Precautions (ABP).

B. All Barrier Precautions include Standard Precautions, Airborne Precautions and Contact Precautions for SARS and avian (H5N1) influenza and Standard Precautions, Droplet Precautions and Contact Precautions for swine influenza.

C. All Barrier Precautions include the following:

1. Personal Protective Equipment (PPE)
   - **a. N-95 Mask for SARS and avian influenza and surgical mask for swine influenza**
   - b. Goggles
   - c. Gown
   - d. Gloves
2. Powered Air Purifying Respirators (PAPRs) will be worn when performing high risk procedures.
   - a. Endotracheal intubation
   - b. Endotracheal tube suctioning without using a closed system suctioning device
   - c. Bronchoscopy
   - d. Aerosolized medication treatments

II. Procedures for using All Barrier Precautions

A. All HCWs must don PPE prior to entering the isolation room

1. **N-95 Mask for SARS and avian influenza and surgical mask for swine influenza**
2. Goggles
3. Disposable gown
4. Disposable gloves

B. Donning PPE

1. All rings, watches, bracelets, pagers, or any other personal items, should be removed prior to entering the room. Think ahead regarding where you want to place these items, whether it be in your pocket, locker, etc.
2. **Place the N-95 mask on and check it for a good seal on your face. For surgical masks, tie the strings snuggly behind your head so the mask is flush against your face.**
3. Place goggles over your eyes and make sure they fit snuggly on your face.
4. Don the disposable gown and make sure that it is secured behind your neck and around your waste.
5. Don a pair of nonsterile, disposable clean gloves and pull them up over the cuffs of the sleeves on the gown. Check gloves for holes and replace non-intact gloves immediately.

C. Removing PPE

1. PPE must be removed in such a manner as to avoid touching the outside of the mask, goggles, gown and gloves, because the outside surfaces of these barriers may be contaminated with infectious secretions from EID patients. Remove gloves, goggles and gown prior to leaving the room. The mask will be removed after you leave the room as below.
2. Remove gloves without touching the outside of the gloves (this should be done slowly and carefully) and dispose of in regular trash.
3. Remove goggles carefully without touching the front of the goggles. The goggles will be disposed of in the regular trash.
4. Untie the strings and remove the gown so that the outside of the gown is now on the inside and dispose of in the regular trash.
5. **Exit the room, wash your hands with an antiseptic soap or apply an alcohol hand rub and then remove the N-95 mask by carefully bringing the lower strap forward over the head, then grasp the upper strap with both hands on the sides of the face (without touching the mask itself) and bring the mask away from the face by holding the strap and discard the mask in the regular trash. For surgical masks, untie the bottom strings. Then untie the top strings and grasp the strings on both sides of your head and move the mask forward away from your face**

without touching the outside of the mask and discard the mask in a regular trash can.

6. Again wash hands with an antiseptic (foam) soap and water or, alternatively, apply an alcohol hand rub.
7. Unlike tuberculosis, N-95 masks for EIDs will not be reused, because the outside of the mask may be contaminated.
8. At this time, watches, rings, bracelets, pagers, etc. may be replaced.
9. Do not touch face or eyes while wearing or removing PPE. This includes not inadvertently reaching up to adjust your goggles or mask.
10. Do not inadvertently touch surfaces in the patient's room before exiting.

D. Pictorial demonstrations for the proper methods of removing PPE and double-bagging trash and linens can be viewed on the Department of Healthcare Epidemiology Web Site http://www.utmb.edu/hce or click on Healthcare Epidemiology under Clinical on the UTMB Home Page, followed by clicking on EID and then the Instructions for all Healthcare Providers. The procedures for donning and removing ABP equipment should be practiced so that the procedures will be "second nature" during response to an epidemic.

E. Protection of HCWs caring for EID patients on mechanical ventilation

1. All ventilators are equipped with HEPA filters on the expiratory limb of the ventilator circuit.
2. All patients with an EID will be suctioned only with the closed suction catheter device.
3. **For suctioning the endotracheal tube or oropharyngeal secretions, the HCW will wear an N-95 mask for SARS and avian influenza or a surgical mask for swine influenza, goggles, gown, and gloves.**

F. Protection for HCWs during endotracheal intubation and bronchoscopy will include a PAPR, gown and gloves. (See policy 3.08 Protection During the Conduct of High-Risk Respiratory Procedures in Patients with an Emerging Infectious Disease [EID]).

III. Discontinuation of isolation for patients on All Barrier Precautions

A. For SARS, patients will be isolated until 10 days after resolution of fever given that respiratory symptoms are absent or resolving. For avian influenza, patients will be isolated for 14 days after onset of symptoms. For swine influenza, patients will be isolated for 7 days or for 24 hours after they are free of fever without the use of fever-reducing medications, whichever is longer after onset of symptoms. Patients who are immunosuppressed should be isolated for the duration of hospitalization (for SARS, avian influenza and swine influenza).

B. Patients who are discharged from the hospital before they meet criteria for discontinuation of isolation will be moved through the hospital as any infectious patient with an EID.

1. Patients will be covered by a sheet and will wear a surgical mask whether transported by stretcher or wheelchair.
2. When patients are transported by elevator, all other passengers will be asked to exit the elevator.
3. If the patient is moved by EMS, the ambulance crew will be notified ahead of time that the patient is still considered infectious.

IV. Carrying out isolation precautions for EID patients

A. Wear PPE for All Barrier Precautions (ABP) as above.

B. Doors to all patient rooms must be kept closed except for entry or exit.

C. HCWs assigned to work with patients with an EID or a possible EID will work only with those patients.

V. Movement of patient care devices and specimens used for monitoring and diagnosis in and/or out of patient rooms

A. Reusable monitoring devices must be thoroughly cleaned and disinfected between uses on patients.

B. When collecting laboratory specimens, the lids for specimen containers should be applied tightly and the containers should be decontaminated in the room using a hospital grade disinfectant and then placed in a specimen bag.

C. The specimen bag must be folded so that it will more easily fit into the second specimen bag held by an HCW outside the door.