# 3.04 Imaging Studies for Patients with an Emerging Infectious Disease (EID)

Purpose: To prevent transmission of EIDs or possible EIDs to other patients and Healthcare Workers (HCWs) in Radiology.

Audience: HCWs in the Department of Radiology.

Policy Statement:

I. The Department of Radiology will be called by a member of the staff on the unit where the patient is hospitalized each time that an EID patient is being transported for an imaging study. The caller will be informed by the person in the Department of Radiology as to where the patient should be transported.

II. EID precautions in the Department of Radiology (including CT, MR, US, NM, IR, and BI)

   A. All Barrier Precautions (ABP) will be followed.

   B. The department will store personal protective equipment (PPE) in each area.

      1. Goggles
      2. **N-95 masks for SARS and avian influenza and surgical masks for swine influenza**
      3. Gloves
      4. Gowns
      5. Alcohol hand rub

   C. Prior to arrival of the patient, personnel will don goggles, gown, gloves and an N95 mask or surgical mask, as appropriate.

   D. After the study has been completed and the patient moved out of the room by the person from transportation, Radiology personnel will remove gloves, followed in order by goggles and gown while still in the room and discard these items in the trash. After leaving the room, hands should be washed with an antimicrobial soap and water or an alcohol had rub should be applied to the hands. Then the mask will be removed and discarded in a trash can. Hands will then be washed with antimicrobial soap and water or an alcohol rub applied to the hands.

   E. Dirty linen will be placed in a color-coded laundry bag prior to transport. Color-coded laundry bags will be available in each area.

F. The room will be closed to other patients until after it has been cleaned. The Environmental Services EID team should be called to clean the room after which it may be used for other patients (See Policy 3.12 Environment Cleaning and Disinfection and Equipment Cleaning and Disinfection in Rooms Where Patients with an Emerging Infectious Disease [EID] are Hospitalized or Have Been Hospitalized or Treated).

III. Imaging studies in an EID patient's room using portable equipment.

A. All Barrier Precautions will be followed.

B. Imaging studies in an EID patient's room may be done only with equipment that can be adequately decontaminated after the study.

**C. The technologist will don a lead apron, an N-95 mask for SARS or avian influenza or a surgical mask for swine influenza, goggles, gown and gloves prior to entering the room.**

D. Procedure for taking an x-ray in a patient room:

1. Before the portable x-ray machine is moved into the patient's room, the patient's nurse will don a lead apron if available and ABP PPE, enter the room, and move furniture/equipment so as to create space for the x-ray machine beside the patient's bed.
2. The x-ray technologist will place the cassette into a plastic bag and then don a lead apron and ABP PPE.
3. When the x-ray technologist is ready to enter the room, the nurse inside will open the door, the machine will be moved in as quickly as possible, and then the door promptly closed.
4. The nurse will assist the x-ray technologist in placing the cassette under the patient and positioning the patient for the x-ray.
5. If the nurse is not wearing a lead apron, he/she will remove the ABP equipment following proper technique and exit the room.
6. After the x-ray is taken, the x-ray technologist will remove the cassette from beneath the patient and then remove it from the bag and drop it into a clean bag held by a person outside the room who is wearing an N-95 mask or a surgical mask, as appropriate (see above), and gloves.

7. The bag will be labeled with an ABP sticker for transport to radiology.
8. Prior to leaving the room, the technologist will remove gloves, goggles and gown.
    a. Still wearing the mask, the technologist will exit the room with the machine.
    b. Hands will be washed with an antimicrobial soap and water or an alcohol rub will be applied to hands. Then the mask will be removed, taking care to avoid touching the outside of the mask. The hands will then be washed with an antimicrobial soap and water or an alcohol rub applied to the hands.
    c. The technologist will then don a second pair of gloves and a gown and disinfect all surfaces of the equipment with a hospital grade disinfectant.
    d. The second pair of gloves and the gown will be removed and hands washed with an antiseptic soap and water or an alcohol hand rub will be applied to the hands.
    e. The x-ray technologist will place the bagged cassette on the x-ray machine and push the machine back to the Radiology Department.
    f. After arrival at the Radiology Department, the x-ray technologist will don gloves, remove the cassette from the bag and disinfect it with a hospital grade disinfectant.
    g. Gloves will be removed and hands washed with an antiseptic soap or an alcohol hand rub will be applied to the hands.