2.19 Nuclear Medicine

Purpose
To provide guidelines for safe practices in the Nuclear Medicine Department.

Audience
All UTMB employees, contract workers, volunteers, and students who work in Nuclear Medicine

Personnel
- Universal blood and body fluid precautions shall be used for all patients.
- Hands shall be washed before and after patient contact. Hands shall be washed before and after using restrooms, and after removing gloves.
- Food and beverages are permitted in designated areas only.
- All healthcare providers, including those who perform nuclear medicine procedures, shall receive training and routine inservice education on proper infection control procedures.
- Written infection control policies and procedures specific for nuclear medicine shall be promulgated, made accessible, and disseminated in departments where nuclear medicine procedures are performed. These policies shall outline procedures to be followed in the event of a potential emergency (e.g., an administration error).

Patient Care
- All doses and syringes shall be examined for identification and radioassayed.
- All syringes shall be labeled with appropriate identifying information, including the patient's name and the pharmaceutical; a unique identification number shall also be used.
- A system shall be implemented for administration of biologic products (e.g. labeled cells that are similar to the system used for administering blood). Such a system requires that two persons be present to crosscheck all labeling of products to be injected, the prescription, and patient identification. At no time shall two labeling procedures be done simultaneously.
- Contaminated and used syringes shall be disposed of safely and appropriately. Disposal containers for syringes shall be located as close as practical to the location of syringe use.
- All procedures shall be documented; documentation shall include, at a minimum, the date, name and amount of radiopharmaceutical, and route of administration. The name or identifying information of the
person administering the dose and the exact time of administration shall be recorded either in the patient record or departmental record.

- An administration error (e.g., administration involving the wrong patient or radiopharmaceutical) shall be immediately reported to supervisory personnel and/or the physician in charge. Recommendations for the management of persons after a blood exposure in a health-care setting shall be followed. All administration errors and narrowly avoided errors in administration shall be carefully evaluated to determine whether additional precautions are necessary to prevent similar administration errors.

- Isolation Patients: The Nuclear Medicine Department shall be notified prior to transporting patients who are in isolation. The department shall comply with the appropriate isolation procedures (see policy: Isolation).

**Equipment and Supplies**

- Instrument Decontamination: The camera detector shall be cleaned with alcohol between each patient study. Paper towels shall be placed between the velcro straps and the patient’s head.

- Xenon Ventilation Lung Scans: Disposable masks, filters, and mouth pieces shall be used and discarded after each use.

- Linen: Linen contaminated with radiopharmaceuticals shall be placed in a plastic bag in a shielded storage area until the radiation level has reached a safe level. Linen shall be bagged in a laundry bag and sent to the laundry (see policy: Universal Precautions).

- Blood Volume and Schilling Samples: Vials containing blood and urine shall be placed in a sharps container and labeled with date and type of radioactivity present. Containers shall be sent to Radiation Safety for disposal.

**References**