

INTER AMERICAN UNIVERSITY OF PUERTO RICO

PONCE CAMPUS
HEALTH SCIENCES DEPARTMENT
RADIOLOGIC TECHNOLOGY PROGRAM

SAFETY POLICY FOR THE RADIOLOGY PROGRAM

Introduction

Radiological protection is an essential part of accident control measures to be followed in a Radiology Department during the performance procedures and studies specialized with ionizing radiation. This document establishes safety rules and procedures to be followed by the students of the Program in the different clinical stages where they handle the ionizing radiation.

I. Cardinal Points of Protection

As general knowledge base a student admitted to the Program must know the protection Cardinal Points of Protection (Distance, Time and Shielding). These are discussed in the course RATE 1100 Radiological Protection.

II. Protection of the Student

The students of the Program must continue the following rules when they handle the ionizing radiation.

- a. Maintain the most distance from the beam of radiation.
- b. Use the appropriate shields when the X-ray room.
- c. Expose from behind the wall reinforced in the exposition room.
- d. Always use the dosimeter and keep the limit of exposure as the recommendations from NRC (.1 Rem x year) for the general public and (5 Rem x year) for any person who works with radiation. If the student exceeds the limits he/she will be removed for a period of time (as determined by the case).
- e. Students should know their reading or monthly exposure reading) and review record of readings (LANDAUER) with Clinical Coordinator
- f. Recognize barriers of primary and secondary protection.
- g. Any incident must be reported to the Program Coordinator or Clinical Coordinator.

III. Patient Protection

The protection of the patient must be observed at all times following the shielding, immobilization and repetition of radiographies; not only for the patient but also for the accompanying person. The student must give specific instructions as they complete the radiological procedure and select the techniques using the caliper or assistance of a licensed radiological technologist and follow the technical factors of exposure.

IV. Analysis of Radiographies and Policies for Repetition

- a. Every radiography completed by a student must be supervised by a licensed Technologist or by his clinical instructor. This way it is guaranteed that it is completed following quality standards established by the center of practice and in turn by ALARA. Watching at all times the use of low radiology doses to the patient.
- b. A student has up to three opportunities to repeat a radiography if the error or the cause is not known; according to the standards of X-ray criticism established in the Department or X-ray unit. If the error is determined during the first evaluation it must be reproduced by following all optimal characteristics on the second occasion, finishing this way the procedure or image. In the event that a student does not complete the procedure precisely, they should be attended by the licensed Technologist in his charge.

V. Policy in Case of Pregnancy

Pregnancy declaration is a voluntary decision of the student. For the protection of the embryo/fetus, the student can discuss with the Program Coordinator or Faculty member any suspected or confirmed pregnancy. Independently, of the student's decision to declare pregnancy, we recommend the student consults their physician. Once the student declares their pregnancy in writing, the student must sign the *Voluntary Declaration of Pregnancy Policy*. The Program Coordinator, Clinical Coordinator or Clinical Instructor will explain the safety rules to be followed.

- a) The student must be removed of the exposure area during the pregnancy period in 90 % of the cases. The student can complete their schedule in the areas of not exposed to ionizing radiation such as file, reception, dark or digital development room, etc.
- b) The Program will provide the dosimeter for the abdominal-pelvic area and will be monitored during the pregnancy.
- c) Cardinal point of protection must be followed in 100 % of the cases during the first trimester always emphasizing the protection of the embryo/fetus.
- d) The student has the option to obtain a leave of absence during the pregnancy period and her space will be guaranteed once the academic semester according to their level is available. This means that the time needed to complete the program will increase to accommodate the time the student is out on maternity leave. If the student decides to be released on maternity leave it will be documented in the student's record.