

## Radiation Safety in a Clinical Environment

<b>Office of Accountability:</b>	Director, Radiation Therapy Program
<b>Office of Administrative Responsibility:</b>	Radiation Therapy Program
<b>Scope:</b>	Compliance with this procedure extends to all members of the Radiation Therapy Program (Students, Faculty and Staff)
<b>Review Date:</b>	January 2021 – With appropriate updates

### Purpose

Health Canada and CNSC require that all personnel working within radiation exposure environments are monitored with a personal radiation dosimeter. The primary objective of this is to ensure radiation exposure to individuals is as low as reasonably achievable, and within Canadian standard regulations for nuclear energy workers. Personal external monitoring devices are worn to record the cumulative whole body dose (measured in mSv) received from occupational exposures to external radiation. Information obtained when the dosimeters are read is useful for evaluating the effectiveness of protective measures and, when necessary, introducing of appropriate corrective actions.

### PROCEDURE

Students and Radiation Therapy Program Clinical Faculty members must receive appropriate hospital training and wear a Personal Radiation Dosimeter (PRD) at all times while in a clinical environment.

**Pregnancy:** If you become pregnant while in a clinical environment you must declare pregnancy in writing to the appropriate personnel. This information will remain confidential.

- Radiation Therapy students must declare pregnancy **in writing, immediately once known**, to **both** their Clinical Faculty or designate, **and** Cancer Care Alberta (CCA)/AHS Radiation Safety Office (AHS RSO);
- Clinical faculty members must declare pregnancy **in writing, immediately once known**, to the CCA/AHS RSO

The CCA/AHS RSO will forward quarterly dosimetry reports for all students and faculty members directly to the individual, with emphasis on any elevated doses and actions required.

### **Personal Radiation Dosimeter (PRD) – Best Practices**

The Radiation Therapy students and Radiation Therapy Program Faculty members must:

- take good care of their assigned PRD at all times;
- wear the PRD at all times while in a clinical environment. The PRD should be worn in the torso area between the neck and waist;

- the PRD is a personal monitor, issued to the named. Under no circumstances should the monitor be loaned to another person;
- ensure that the PRD is not dropped or accidentally placed in a position where it could be exposed to a level of radiation higher than the ambient level (ie: left in the treatment room);
- take care that, outside lab and clinical hours, the PRD is stored in the identified storage spot. Do NOT store in a locker or take offsite;
- report any problems with the PRD to the Clinical Faculty or designate, who will assist in reporting to the AHS RSO. For any occasions where over-exposure is suspected or if the monitor is lost contact the Clinical Faculty member immediately. The Clinical Faculty member will assist in contacting the AHS RSO immediately;
  - If a lost PRD is found it should NOT be worn, it should be returned to the CCA/AHS RSO
- Clinical Faculty or designate, will support the CCA/AHS RSO with any investigation or follow-up of any unusual results.
- Clinical Faculty or designate, will co-ordinate with CCA/AHS RSO for Personal Radiation Dosimeter training, ordering, and renewing, for all students and clinical faculty members.

**DEFINITIONS**

Any definitions listed in the following table apply to this document only with no implied or intended institution-wide use. [▲Top](#)

Personal Radiation Dosimeter (PRD)	A dosimeter which must be worn by the identified individual at all time in the clinical environment, which records whole body radiation dose
CNSC	Canadian Nuclear Safety Commission

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