Radiation Safety in a Clinical Environment

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<th>Office of Accountability:</th>
<th>Director, Radiation Therapy Program</th>
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<td>Office of Administrative Responsibility:</td>
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<td>Approver:</td>
<td>Radiation Therapy Operations Committee</td>
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<td>Compliance with this policy extends to all members of the Radiation Therapy Program.</td>
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**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 appropriate corrective actions.

**POLICY**

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.

For women: 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 CancerControl/AHS Radiation Safety Department;
- Clinical faculty members must declare pregnancy in writing, immediately once known, to the CancerControl/AHS Radiation Safety Department.

The CancerControl Alberta/AHS Radiation Safety Department will forward quarterly dosimetry reports for all students and clinical faculty members directly to the Clinical Faculty or designate, with emphasis on any elevated doses.

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

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

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

• the PRD monitor is a personal monitor, issued to the named. Under no circumstances should the monitor be loaned to another person;

• ensure that the monitor is not dropped or accidentally placed in a position where it could be exposed to a level of radiation higher than the ambient level (i.e., left in the treatment room);

• take care that, outside lab and clinical hours, the PRD monitor is stored in the identified storage spot. Do NOT store in a locker or take offsite;

• report any problems with the monitor to the Clinical Faculty or designate, who will assist in reporting to the Radiation Safety Department. 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 Radiation Safety Department immediately;

  • If a lost monitor is found it should NOT be worn, it should be returned to the CancerControl/AHS Radiation Safety Department

• Clinical Faculty or designate, will support the CancerControl/AHS Radiation Safety Department with any investigation or follow-up of any unusual results.

• Clinical Faculty or designate, will co-ordinate with CancerControl/AHS Radiation Safety Department for Personal Radiation Dosimeter training, ordering, and renewing, for all students and clinical faculty members.

DEFINITIONS

| 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 |

RELATED LINKS

| APPROVER | STATUS | DATE |
| Radiation Therapy Operations Committee | Approved | |