

Policy Title: X-ray Safety

Category:	<input type="checkbox"/> Institutional - Board <input type="checkbox"/> Academic - Administrative <input checked="" type="checkbox"/> Institutional - Administrative <input type="checkbox"/> Employment - Administrative		
Approved by:	<input type="checkbox"/> Board <input checked="" type="checkbox"/> President		
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Policy Sponsor:	Dean, Clinics	Date last reviewed:	April 1, 2021
Date of Mandatory Review (expiry date):	April 2026	Date of last revision of Procedures:	April 1, 2021

1. POLICY

CMCC endeavors to ensure the safety of all employees, students and patients involved with the use of X-ray equipment on its premises.

1. Safety Precautions:

- a. All X-ray equipment is to have proper labels and warning signs posted/installed in conspicuous locations.
- b. Access is to be controlled to X-ray areas at all times and limited to authorized persons.
- c. Installation of appropriate structural and/or shielding devices is to be provided to limit the dimension of the X-ray beam.

2. Personal Protection:

- a. Each employee who works with the X-ray equipment is to be provided with a suitable personal dosimeter.
- b. Each student who works with the X-ray equipment during the X-ray taking clerkship (CE 4408) is to follow the instructions and direction of the course instructors in order to minimize any potential exposure/harm.
- c. Each patient who is being X-rayed is to be provided with appropriate protection for the particular diagnostic imaging view.

2. PURPOSE

To protect those involved in the use of X-ray equipment.

3. SCOPE

All employees, students and patients involved in the use of X-ray equipment.

4. INFORMATION AND COMPLIANCE PLANS (not a comprehensive list)

- CCO Standard 006 – Ordering and Interpreting Radiographs
- CMCC Occupational Health and Safety Statement
- Council on Chiropractic Education Canada (CCEC) Program Standards for the Doctor of Chiropractic Degree Program – Canada
- Council on Chiropractic Education (CCE) Accreditation Standards
- Healing Arts Radiation Protection Act, 1990 (H.A.R.P.)
- Occupational Health and Safety Act, 1990, Regulation 861
- Owners' Instructions for equipment used at CMCC
- X-ray equipment in Medical Diagnosis Part A: Recommended Safety Procedures for Installation and Use – Safety Code 20A

5. RELATED POLICIES (not a comprehensive list)

- Health and Safety

6. DEFINITIONS

N/A

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Policy Revision History (dates):	December 2006 August 2017 April 2021

-----END OF POLICY-----

7. PROCEDURES

CMCC Responsibilities

1. To Employees:
 - a. A current list of all employees working with X-ray equipment is to be maintained by Human Resources.
 - b. The clinic X-ray staff are to retain an X-ray employee's personal dosimeter records for a period of at least three years .
2. To Interns:

- a. All students are to follow the direction of the CMCC x-ray technologists.
- b. All pregnant interns are to notify the x-ray technologists prior to any entry into the x-ray area.

Supervisor Responsibilities

1. The employee's supervisor is to endeavor to ensure that the personal dosimeter provided to an X-ray employee is read accurately to measure the *dose equivalent* received by the employee and provide a record of their radiation exposure to the employee.
2. The employee's supervisor is to verify that the *dose equivalent* is reasonable and appropriate in the circumstances and notify an inspector of any *dose equivalent* that does not appear reasonable and appropriate.

Employee Responsibilities

1. When new, to complete an orientation of the X-ray equipment which includes the following:
 - a. work procedures in using the X-ray equipment;
 - b. limits of the dose equivalent that may be received by the employee; If the employee is female, limits of the *dose equivalent* for pregnant X-ray employees.
2. To use the personal dosimeter provided to them as instructed by their supervisor.
3. To position the patient as required to provide optimum image quality while using minimum radiation.
4. To use radiation protection devices and other patient protection devices as required.
5. To ensure the intended area will be displayed optimally on the radiograph.
6. To ensure the radiograph taken creates an image and data that are sufficiently accurate and clear for the indicated diagnostic or therapeutic purpose.

Student Responsibilities

1. To complete all required coursework prior to entering into the X-ray area in clinic for the completion of the clerkship.
2. To follow the direction and instruction of the X-ray technologists and only use the X-ray equipment under the direct supervision of a CMCC X-ray technologist.

Accidental Overexposure

1. At the time that an overexposure has been determined, the employee is to be removed from the area of risk to another area of responsibility where the employee is to be no longer at risk of further exposure. When the employee's exposure has returned to within the acceptable annual limits, they may return to their former area of responsibility.

2. Where, within a period of three months, an employee receives a dose in excess of the annual limits, the supervisor is to investigate the cause of the exposure and provide a written report of the findings of the investigation and of the corrective action taken to the Health and Safety Committee or Health and Safety representative and send a copy to the Ministry of Labour, as outlined in the *OH&S Act*.
3. Where an accident, failure of any equipment, or other incident occurs that may have resulted in an employee receiving a dose in excess of the annual limits, the supervisor is to notify immediately (i.e., telephone, fax, email) the Joint Health and Safety Committee or Health and Safety representative and the Ministry of Labour, as outlined in the *OH&S Act*.
4. All incidents of this nature are also to be reported internally within 24 hours through a General Incident Report.
5. CMCC is to, within 48 hours of the accident or failure, send to the Ministry of Labour (Director) a written report of the circumstances of the accident or failure.

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8. ATTACHMENTS

None.