

## **Safety Code 30 – Radiation Protection in Dentistry**

Radiation Protection, a department of Medical Physics CancerCare Manitoba (CCMB), regulates the use of medical and dental x-ray units in Manitoba. Legislation covering this program falls under the authority of Manitoba Health:

- Manitoba Regulation 341/88R, an x-ray safety regulation under the *Public Health Act*.
- Updated legislation, Bill 37 *The Radiation Protection Act*.
- *The Radiation Emitting Devices Act*.

[Safety Code 30 \(2022\)](#): Safety Radiation Protection in Dentistry – *Recommended Safety Procedures for the Use of Dental X-ray Equipment* guides Radiation Protection CCMB for their protocols and requirements.

A radiation protection survey evaluates the radiation safety of a dental facility intended to ensure compliance with legislative requirements. Inspections by the department promote consistency in radiation doses and protection. *The new version (2022) of Safety Code 30 contains updates to radiation protection requirements and practices.* I encourage members to review the new [Code](#) for best practices. With the support of the Manitoba Dental Association, the following are recommendations Radiation Protection CCMB would like to seek compliance and/or implement change as part of the radiation protection survey:

### **1. Assessing the Need for Personal Dosimeters:**

Existing dental facilities wishing to discontinue monitoring radiation exposures with the use of personal dosimeters must request approval from Radiation Protection CCMB. After a minimum of one year of radiation monitoring, requests for discontinuation of personal dosimeters can be emailed to:

[CCMBMPX-rayCompliance@cancercare.mb.ca](mailto:CCMBMPX-rayCompliance@cancercare.mb.ca)

### **2. Dose Reduction: Rectangular Collimation and Film-Based Imaging**

As per Safety Code 30, “Rectangular collimation of the x-ray beam must be used, except in occlusal protocols, as it significantly reduces the dose to the patient compared to circular collimation. After-market adaptors are available for converting any round-headed collimator to rectangular collimation” and “For film-based imaging when the implementation of digital radiography is not practicable, E-speed film or faster must be used, and D-speed film must not be used.” (Health Canada, 2022)

**Rectangular Collimation recommendation will be inventory-dependent. The requirement will be a phased-in approach.**

**It will be required to use an E-speed film or faster by January 1, 2024.**

### **2. Cone Beam Computed Tomography (CBCT) Data Collection:**

As of January 2023, Radiation Protection CCMB has commenced requiring dental facilities equipped with CBCT x-ray units to provide patient dose-related information as part of our radiation protection surveys. Radiation Protection fillable audit forms will be emailed to facilities for completion. Once completed, *Radiation Protection CBCT Audit Forms* must be returned to Radiation Protection, which will then ensure compliance with Manitoba Regulation 341/88R. A radiation protection report will then be issued. Further information to follow.

Radiation Protection CCMB kindly asks for the support of MDA members to comply with these changes.

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