

College of Dental Hygienists of Manitoba Practice Guideline: Dental Radiography



This practice guideline is to inform registrants of the College of Dental Hygienists of Manitoba (CDHM) about the current regulations on prescribing and exposing dental radiographs, and protecting clients during radiographic imaging.

Prescribing and Exposing Dental Radiographs

The *Dental Hygienists Act* does not provide any legislative authority to registered dental hygienists to prescribe radiographs on an independent basis. A client-specific prescription by a dentist must be obtained before the registered dental hygienist may expose any necessary dental radiographs. Registered dental hygienists are required to determine in collaboration with a dentist if a radiographic examination is necessary and/or appropriate based upon the individual client's needs.

According to the *CDHM Competencies*, registrants of the CDHM have the ability to:

- Assess the need for radiographs for oral health care¹
- Assess the quality of dental radiographs (e.g. cone cut, overlap, poor developing, presence of artifacts, etc.)²
- Interpret dental radiographs for the purpose of dental hygiene diagnosis³
- Expose and process intra and extra-oral radiographs⁴

The following requirements must be met:

- The radiographs are performed with the principle ALARA (As Low As Reasonably Achievable), consistent with current requirements.⁵
- The radiographs are of sufficient quality to enable an accurate clinical assessment.⁶
- The radiographs are interpreted correctly.³

Registered dental hygienists should provide the following written evidence of the radiographic prescription and exposure in the client's chart:

- Informed consent or refusal to radiographs by the client
- Date of treatment
- Type of radiographs (e.g. PA or BW) exposed
- Number of radiographs exposed
- Provider of radiographic prescription

Radiation Protection for the Client

Evidence-based research indicates that dental radiographs pose a low risk to clients when best practices are followed. However, radiation of any amount poses a risk of damaging healthy human cells and tissues. The effects of radiation are cumulative; therefore even low amounts may be a potential risk to human health over time.⁵

As noted above, it is a requirement for registered dental hygienists to use the ALARA principle when exposing radiographs. Therefore, all registered dental hygienists are required to use a lead apron with a thyroid collar when exposing clients to radiation during the use of radiographic equipment.⁵

This practice guideline reflects current knowledge and is subject to periodic review and revisions with on-going research.

References

1. CDHM Dental Hygiene Competencies, (Assessment) #24, page 5.
2. CDHM Dental Hygiene Competencies, (Assessment) #25, page 5.
3. CDHM Dental Hygiene Competencies, (Assessment) #26, page 5
4. CDHM Dental Hygiene Competencies, (Implementation) #27, page 10.
5. Health Canada. Radiation protection in dentistry: recommended safety procedures for the use of dental x-ray equipment. Environmental Health Directorate, Health Protection Branch; 2000
6. Canadian Dental Association. CDA Position Statement on: Control of x-radiation in dentistry. 2005 February. Available from https://www.cda-adc.ca/_files/position_statements/xradiation.pdf

Bibliography available upon request.