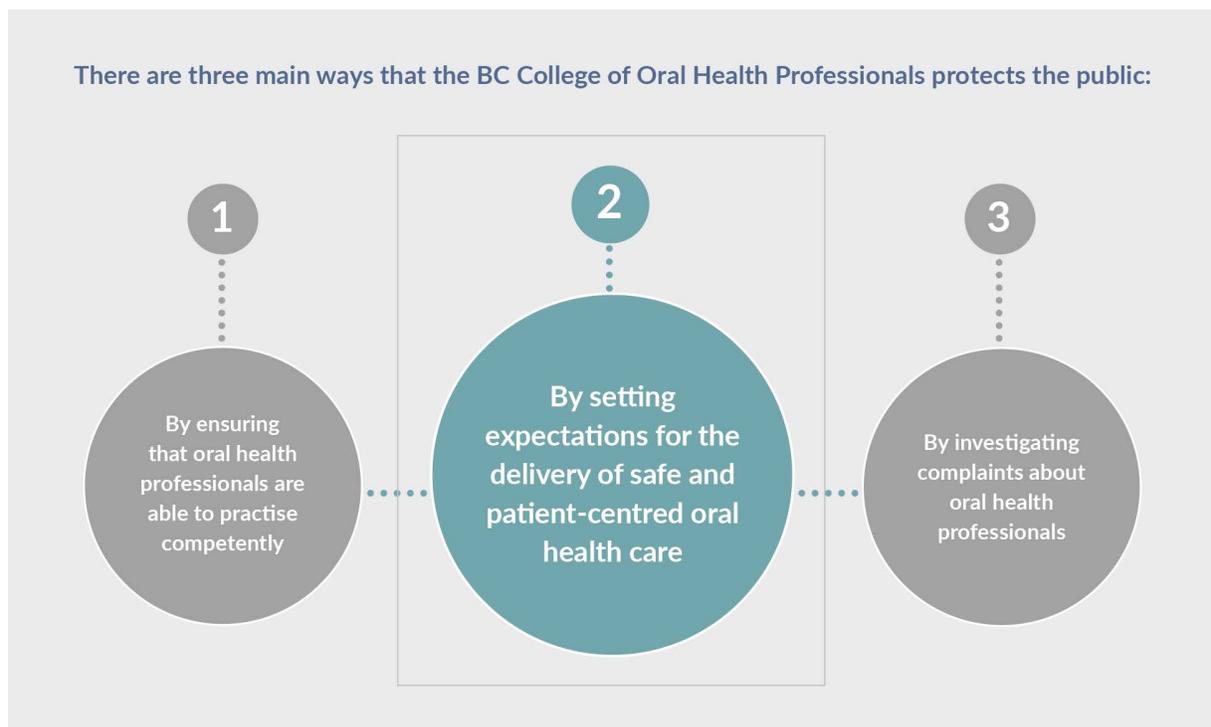


Expectations for clinical and ethical practice

Interpretation Guidelines: Radiation Protection Program and Safety

Applies to Dental Hygienists

There are three main ways that the BC College of Oral Health Professionals protects the public:



The British Columbia College of Oral Health Professionals (BCCOHP) was created on September 1, 2022 through the amalgamation of four health regulatory colleges: the College of Dental Hygienists of BC, the College of Dental Surgeons of BC, the College of Dental Technicians of BC, and the College of Denturists of BC. All current requirements for standards of clinical and ethical practice issued by the four colleges remain in place upon amalgamation. This document was created by the College of Dental Hygienists of British Columbia and will be updated to reflect the amalgamation.

Radiation Protection Program and Safety

May 5, 2020 Update: The CDHBC Interpretation Guidelines are under review. The content of these guidelines remains in place at this time; however, they need to be applied in the context of the new Dental Hygienists Regulation and CDHBC Bylaws. Readers are welcome to contact the CDHBC office if they have questions about the application of these guidelines in the interim time.

PURPOSE

To provide guidelines around the Radiation Protection Program for dental hygienists who own their own radiography equipment.

BACKGROUND

Radiography equipment and the exposure of dental x-rays poses a small but inherent safety risk to both the client and the operator. As such, the CDHBC [Practice Standard 2](#) states that “a dental hygienist must practice safely.” Policy 2.2 further states, “Dental hygienists must use potentially hazardous materials (such as radiation and disinfectants) safely, according to manufacturer’s recommendations and government guidelines...” Policy 2.5 states, “When dental hygienists are responsible for radiography equipment, dental hygienists must comply with all aspects of the Radiation Protection Program.”

The owner of dental x-ray equipment is responsible for ensuring that ionizing radiation is kept As Low As Reasonably Achievable (ALARA). As part of the Radiation Protection Program, any registrant who owns radiation-emitting equipment is required to comply with federal and provincial safety regulations as outlined in the following documents:

- [Radiation Emitting Devices Act](#)
- [Health Canada Safety Code 30](#)
- [Food and Drug Act](#)
- [BC CDC Dental Fact Sheet](#)
- [Work Safe BC Occupational Health and Safety Regulations Part 7 Division 3](#)

Federal regulations outline the standard for the construction and function of all dental x-ray equipment. Provincial regulations outline the requirements for room design, protection of clients, and protection of workers, including quality assurance related to ionizing radiation.

Any registrant who owns dental x-ray equipment is ultimately responsible for being familiar with all regulations pertaining to radiation safety. As well, the registrant who owns the x-ray equipment is responsible for implementing and maintaining radiation safety within their practice. This relates to radiation safety for staff and clients.

To ensure compliance with safety regulations, a dental hygienist must have radiographic equipment inspected upon initial installation and at regular intervals by an appropriate government agency.* This is to ensure that: radiography equipment is installed appropriately; a quality assurance radiation program has been implemented and is being maintained; and radiographic equipment is functioning properly.

Monitoring radiation exposure is considered a component of radiation safety. [Safety Code 30](#) provides general information on personal dosimeter monitoring. In BC, regulations for personal monitoring fall within the [Occupational Health and Safety Regulations](#). [WorkSafe BC](#) has published guidelines for wearing personal dosimeters.** It is important to be familiar with these requirements. If questions arise related to these guidelines, they should be directed to WorkSafe BC.

POLICY

Any registrant who owns their own dental x-ray equipment must ensure they understand and implement a Radiation Protection Program within their practice setting. This includes complying with all federal and provincial regulations.

Registrants who own their own dental x-ray equipment must:

- Ensure dental x-ray equipment is inspected upon installation and prior to initial use, and on regular intervals thereafter.
- Send a certificate of inspection to the College upon renewal of registration.
- Ensure a quality assurance program is in place and maintained.
- Keep the client's dose of ionizing radiation to a minimum by adhering to the principle of ALARA.
- Comply with the Worksafe BC requirements stipulating that the owner of the x-ray equipment must:
 - "(a) maintain and make available to the Board,
 - (i) for at least 10 years, records of radiation surveys, and
 - (ii) for the period that the worker is employed plus 10 years, records of exposure monitoring and personal dosimetry data, and
 - (b) make the records available to workers."

**The BCCDC-appointed dental radiation equipment surveyor is contracted to Innovative Biomedical Engineering: 1-250-898-9089*

***Information on how and where to obtain a dosimeter can be found at Health Canada [National](#)*

Dosimetry Services. Additionally the [BC Centre for Disease Control](#) has a list of approved dosimetry service providers.

REFERENCES

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Added to Handbook: November 2015