

Standards of Practice



IONIZING RADIATION

Dental hygienists on the general and courtesy registers are authorized to **order** and/or **apply** any form of ionizing radiation in medical radiography. Authorization to perform this **restricted activity** is for the purpose of ordering **dental X-ray imaging procedures** and/or applying ionizing radiation for dental X-ray imaging procedures as a part of the practice of dental hygiene. This does not include the ordering and/or applying ionizing radiation for any other medical diagnostic purpose or for any form of dental or medical radiation therapy.

STANDARD STATEMENT

The dental hygienist orders and/or applies ionizing radiation safely and appropriately for the purposes of dental X-ray imaging procedures.

PERFORMANCE EXPECTATIONS

The dental hygienist who orders ionizing radiation must...

1. Protect the client from excessive radiation exposure in accordance with applicable **legislation**, policies, and guidelines, including [Safety Code 30](#).
2. Base the order on the clinical history and clinical assessment of the client, professional judgment, and consideration of current, **evidence-informed** prescribing guidelines.
3. Justify that the results of the ordered procedure could inform their dental hygiene treatment decision to a degree that the benefits outweigh any risks.
4. Confirm that there are no previous images available which would avoid the need for additional dental X-ray imaging procedures.
5. Document the clinical rationale for the order and specify the information required from the dental X-ray imaging procedure (clinical objective).
6. Keep the number of ordered dental X-ray imaging procedures to a minimum, consistent with the clinical objective for the order.
7. Only prescribe a higher X-ray dose imaging procedure if the clinical objective cannot be satisfactorily met by other lower dose dental X-ray modalities.
8. Provide the client with enough information regarding the procedure to provide **informed consent**, including but not limited to:
 - a) Clinical rationale for the selection of the procedure;
 - b) How the results will be used by the dental hygienist;
 - c) Risks and benefits;
 - d) Cost; and
 - e) Possible consequences of not proceeding with the procedure.
9. Interpret ordered images and document all radiographic findings. If the dental hygienist does not fully interpret the image, they must consult with or refer to another health professional to obtain a complete imaging report that includes all abnormal, atypical, or unhealthy findings.
10. Explain the relevant radiographic findings to the client, provide the necessary follow-up, and refer the client to an appropriate health professional when required.

The dental hygienist who applies ionizing radiation must...

11. Only apply ionizing radiation when there is a client-specific order from an authorized health professional.
12. Consult with the ordering health professional and take reasonable steps if an order is unclear, incomplete, outdated, illegible, inappropriate, or unsafe.
13. Protect the client and others from radiation in accordance with applicable legislation, policies, and guidelines, including [Safety Code 30](#).
14. Maintain records of retakes to facilitate a radiation quality assurance program.

The dental hygienist who owns ionizing radiation equipment must...

15. Ensure radiation equipment is inspected and registered according to applicable legislation and provide evidence of current registration to the College.
16. Ensure that a radiation protection program is developed, implemented, and maintained for the facility.
17. Fulfill the responsibilities of a dental X-ray equipment owner as described in Safety Code 30.

CLIENT EXPECTATION

The **client** can expect that the dental hygienist discusses the risks and benefits of dental X-ray imaging procedures and safely takes x-ray images only when necessary for detecting or diagnosing oral health conditions.

GLOSSARY

APPLY

To expose a client to ionizing radiation for the purpose of a dental X-ray imaging procedure.

DENTAL X-RAY IMAGING PROCEDURE

A technique that uses dental X-ray equipment in dental radiography, including the use of intra-oral (conventional, transportable, and hand-held) or extra-oral (panoramic, cephalometric and cone-beam computed tomography) modalities.

EVIDENCE-INFORMED

A formalized process which involves identifying, searching for, and interpreting the result of the best available evidence to inform decision-making processes.

INFORMED CONSENT

Receiving the client's permission to proceed with a proposed service following a process of decision-making leading to an informed choice. Informed consent involves ongoing communication between the parties involved. In the case of a minor or others who do not have the capacity to provide informed consent, the agreement must come from a legal guardian or substitute decisionmaker legally authorised to act on behalf of a client.

LEGISLATION

Federal or provincial acts, regulations or codes.

ORDER

To prescribe a dental X-ray imaging procedure for a client.

RESTRICTED ACTIVITY

An activity named as a restricted activity in Schedule 7.1 to the *Government Organization Act* [will be updated with Bill 46 amendments].