

Appendix B: Overview of Health and Safety Regulation Relevant to Dental Practices

This section provides an overview of main regulations under the Occupational Health and Safety Act, outlining specific relevance to the dental industry. These regulations include:

- Control of Exposure to Biological or Chemical Agents (Regulation 833)
- Critical Injury (Regulation 834)
- Health Care Regulation 67/93
- Industrial Establishments (Regulation 851)
- Needle Safety (Regulation 474)
- WHMIS (Regulation 860)
- X-Ray Safety (Regulation 861)

Control of Exposure to Biological or Chemical Agents (Regulation 833)

www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900833_e.htm

Regulation 833 is designed to protect workers from being exposed to over 600 potentially hazardous biological or chemical agents. Employers must take every reasonable precaution to protect workers from exposure due to handling, storing, processing or using these agents in the workplace. For example, an employer may have to install hygiene facilities and implement specific engineering controls and safe work practices, and provide medical surveillance and other such measures to limit exposure of a worker to these hazardous agents. This regulation uses three types of exposure limits:

- Time-weighted average (TWA)
- Short-term exposure limit (STEL)
- Ceiling exposure limit (C)

Critical Injury (Regulation 834)

www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900834_e.htm

The definition of a critical injury is found in **Regulation 834** under the OHSA. It is defined as an event that:

- Places life in jeopardy
- Produces unconsciousness
- Results in a substantial loss of blood
- Involves the fracture of an arm or leg (but not a finger or toe)
- Results in the amputation of an arm, leg, hand or foot (but not a finger or toe)
- Involves burns to a major portion of the body, or
- Causes the loss of sight in an eye

Critical injury reports must be completed to fulfill reporting requirements specified by the Ministry of Labour and the WSIB. Section 5 of the Industrial Establishments Regulation 851 lists the information that must be included in the notice of critical injury.

When a critical injury occurs, the employer must notify a Ministry of Labour inspector immediately by telephone, and contact a member of the JHSC or the HSR. Together, they must conduct a thorough investigation. Section 51 of the OHSA requires that all critical injuries be investigated. A written report must be prepared and forwarded to the Ministry of Labour within 48 hours.

Industrial Establishments (Regulation 851)

www.e-laws.gov.on.ca/html/reg/english/elaws_regs_900851_e.htm

An **industrial establishment** is defined as *an office building, factory, arena, shop or office, and any land, buildings and structures appertaining thereto*. **Regulation 851** applies to dental practices.

Section 5 provides the prescribed information to report in the event of a critical injury and other reportable events. This regulation contains a number of safety standards that require compliance. Some provisions in this regulation may not apply to every workplace. However, employers in dental practices must be familiar with them and ensure that they comply with applicable provisions.

Some sections that may apply are:

- Fire – s.22
- Industrial hygiene (eye wash, ventilation, noise) – s.124
- Lighting – s.21
- Machine guarding – s.24
- Maintenance and repairs – s.72
- Material handling – s.45
- Premises – s.11
- Protective equipment – s.79

Needle Safety (Regulation 474/07)

http://www.e-laws.gov.on.ca/html/reg/english/elaws_regs_070474_e.htm

The needle safety regulation outlines requirements for the provision and use of safety-engineered needles. This regulation applies to dental offices where a worker is to use hollow-bore needles on patients. It requires conventional hollow-bore needles to be replaced with safety-engineered needles that are appropriate for the task.

The regulation allows for exceptions on a case by case basis where the use of a safety-engineered needle will result in a risk of harm to a person or to a worker, or where a safety-engineered needle is not available.

WHMIS

http://www.e-laws.gov.on.ca/html/reg/english/elaws_regs_900860_e.htm

The Workplace Hazardous Materials Information System (WHMIS), developed by the government, industry and labour groups, requires all employers to provide workers with the information they need to protect themselves from risks related to hazardous products.

The goal of the WHMIS is to reduce or eliminate injuries and illnesses resulting from exposure to hazardous materials in the workplace.

Regulation 860 places many responsibilities on the employer. It requires the appropriate labelling of all hazardous materials in a workplace. Material safety data sheets (MSDSs) must be made available for each controlled product, and workers must receive regular WHMIS training that includes both general and site-specific components.

Although this regulation doesn't clearly define the frequency of this training, section 42(3) of the OHSA states that an employer has a responsibility to ensure that training and instruction are provided to a worker exposed or likely to be exposed to a hazardous material or agent, and to ensure familiarity at least annually.

WHMIS 2015

In 2015, WHMIS adopted new international standards for classifying hazardous chemicals and providing information on labels and safety data sheets. The amendments to federal WHMIS legislation (Hazardous Products Act and Hazardous Products Regulations) came into force in 2015. Ontario is in the process of amending their WHMIS requirements to reflect the federal changes, however, the new WHMIS Regulation has not been introduced or come into force.

During the transition from WHMIS 1988 to WHMIS 2015, employers must ensure that workers are trained on:

- Products with WHMIS 1998 labels and MSDSs for as long as they are still used in the workplace; **and**,
- Products with WHMIS 2015 labels and safety data sheets, as soon as practicable after these products enter the workplace and, in some cases, before they are used.

Consumer Products

It is important to note that consumer products (those used for personal, family or household purposes) are partially exempt from the WHMIS requirements. The employer still has the responsibility to ensure that all workers who may come in contact with consumer products receive training in how to:

- Read consumer product labels
- Recognize consumer product symbols
- Properly use, handle, store and dispose of the products

X-Ray Safety (Regulation 861)

http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900861_e.htm

Regulation 861 applies to all workplaces where an X-ray machine is present. Only a portion of this regulation affects X-ray machines used in clinical (i.e. for the irradiation of human for diagnostic or therapeutic purpose) settings. The sections pertinent to dental practices include requirements regarding:

- Designation of an X-ray worker – s.9
- Dose limits – s.10
- Safety practices – s.11
- Personal dosimeters for X-ray worker – s.12
- Overexposure reporting requirements – s.13
- Further action required following overexposure – s.14

X-ray sources operating at energies above 10 million electron volts (10 MeV) are subject to licensing under the **Nuclear Safety and Control Act** (Canada). X-ray devices operating at less than 10 MeV in the healthcare sector, such as machines used for dental X-rays, are governed by the **Healing Arts Radiation Protection** (HARP) Act.