



## College of Dental Hygienists of Manitoba Interpretation Guideline: Occupational Blood or Bodily Fluid Exposures

### Purpose

This interpretation guideline is intended as a reference to inform registrants of the College of Dental Hygienists of Manitoba (CDHM) about the risk of occupational blood or body fluids exposures and post exposure protocol while practicing in Manitoba. Applicable guidelines, legislation, and regulations are included.

### Background

- A bloodborne pathogen is one that can be transmitted to persons via blood or other bodily fluids that will vary depending on the type of body fluid, nature of the exposure (amount of fluid involved, infectious status of the host) and the pathogen in question.<sup>2,13</sup>
- Bloodborne infections dental healthcare workers are at risk of include but are not limited to; hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV).<sup>4,12,16</sup>
- Significant exposure to bloodborne viruses can occur through permucosal routes (through mucous membranes of the eye, nose, mouth), non-intact skin, and percutaneous (puncture of skin by needlestick, sharp object, or bite).<sup>2,7,13</sup>
- It has been reported that dental healthcare workers experience approximately three sharps injuries per year.<sup>17</sup>
- The implementation of vaccination of healthcare workers against HBV has served to significantly reduce the risk of occupational HBV infections.<sup>4,12-14,17,18</sup> Individuals who have been vaccinated for HBV and who have developed immunity are at virtually no risk of infection for HBV.<sup>13,15,17,18</sup>
- For susceptible individuals, the risk of infection from a single needle stick or cut exposure is much greater for HBV than HCV or HIV with risks being approximately 30%, 3% and 0.3% respectively.<sup>13,15,17,18</sup> These risks are much lower for dental hygienist to patient transmission.<sup>17</sup>
- Your workplace should have a current written policy in place for evaluating and reporting occupational exposures to blood and bodily fluids as well as any PEP protocols.<sup>17</sup>



## Requirements

### Prevention

- Every effort needs to be made to avoid direct exposure to blood or bodily fluid contamination through strict adherence of the Centre for Disease Control's (CDC) <sup>5,6</sup> current competent sterilization and disinfection practices.
- Use of Standard precautions, personal protective equipment, as well as efforts to avoid percutaneous injury<sup>2</sup> that include needle disposal at point of use and safe handling practices. <sup>1,16</sup>
- Due to the risk of transferring blood borne viruses such as HBV while performing dental procedures, it is strongly recommended that dental health care workers be immunized completely until baseline antibodies to hepatitis B surface antigen (anti-HBs) are  $\geq 10$  IU/L. <sup>7,14,15,17</sup>
- All dental hygienists practicing exposure-prone procedures (EPP) have professional and ethical obligations to know their own HIV, HBV and HCV serological status. <sup>3,8,17,18</sup> Routine practices and standard precautions for infection prevention and control must be adhered to at all times and in all settings. <sup>8,9,10,17,18</sup>
- It is not required for a registrant to inform their clients of their own health status. <sup>17,18</sup> However, they must declare any physical conditions that may interfere with their dental hygiene practice to the CDHM, as a requirement of licensing registration or renewal. The dental hygienist must follow all protocols and recommendations of the CDHM regarding a self-declared physical condition.
- Dental hygienists performing EPP who are infected with HIV, HBV, or HCV must be tested at appropriate intervals as determined by their level of risk, and following any exposure. <sup>17,18</sup>

### Post Exposure

- In the event that a dental hygienist has had a potential exposure to a bloodborne pathogen it is important to:
  - Wash the site of percutaneous injury with running water and wash any wound with soap and water. Thoroughly rinse any non-intact skin with running water. Antiseptic agents are not recommended. <sup>15</sup> Do not "milk" the wound as this promotes hyperemia and inflammation potentially increasing exposure to the pathogen. Flush exposed mucous membranes with water.
- Collect medical history data from the Source (if known) in order to provide additional information for risk assessment (to be determined by emergency medical staff). This includes the HIV antibody status of the Source. <sup>15</sup>



- Make every effort to proceed to the nearest emergency clinic within 2-4 hours of exposure for transmission risk assessment and blood testing. Post-exposure prophylaxis (PEP) may or may not be necessary<sup>15</sup>. If the time period between exposure to access to PEP is greater than 2 hours the effectiveness of the medication for HIV exposure is decreased.<sup>2</sup>
- Recent revisions to the Manitoba Health PEP protocol includes proceeding for PEP from nearest emergency clinic regardless of the infectious status of the Source.<sup>15</sup>
- Post-exposure blood testing will include testing for the presence of HIV, HBV and HCV based on the risk assessment and infectious status of the Source. If required, PEP would include antiretroviral therapy for HIV, active and/or passive immunization for HBV, and close follow up only for HCV.<sup>15</sup>
- In most cases the Source will be asked to voluntarily proceed for blood testing at their own care provider or attend at the nearest emergency clinic for blood testing as soon as possible<sup>2</sup> and to make arrangements for results to be followed up by their own care provider.<sup>15</sup>
- In Manitoba, dental hygienists working in private practice have no legal recourse for obtaining the Source blood sample according to the Testing of Bodily Fluids and Disclosure Act<sup>20</sup> and Testing of Bodily Fluids and Disclosure Regulation<sup>22</sup>
- Dental hygienists employed in healthcare facilities that have PEP protocols governed by the Winnipeg Regional Health Authority or Regional Health Authorities will follow the facilities' protocol. In such facilities the Occupational Health & Safety Department uses current and evidence-based protocols. Funding through Worker's Compensation Board post-exposure protocol medications past the 3-day starter kit (provided by emergency clinics province-wide) could be available, therefore compliance with employer PEP protocols important.
- In the event that a patient has had a potential exposure to a dental hygienist bloodborne infection; the hygienist must seek follow-up through their organizational process and the patient must be promptly informed of the nature of the exposure and the appropriate post-exposure protocol. However the identity and confidentiality of the dental hygienist should be protected to the greatest extent possible.<sup>17</sup>

### Documentation

Documentation<sup>1</sup> of the exposure should include:

- Date of the incident
- Name of exposed dental hygienist
- Source person's information (bloodborne pathogen status) and relevant chart number
- Description of the incident (procedures performed, extent of exposure and immediate actions taken)
- Follow-up actions taken.



### **Applicable Legislation**

College of Dental Hygienists of Manitoba (CDHM) Competencies, in particular;

Assessment #1, assess determinants of health

Assessment #4, assess health history

Assessment #6, compares to previous health history

Assessment #59, assess practice environment safety risks

Assessment #60, assess practice environment for emergency measures

Assessment #65-67

Implementation #22, applies principles of infection control

Implementation #56-57, applies risk management for client and practitioner health and safety

Implementation #66, manages hazardous materials and wastes

Implementation #67, advocates for practice policies that enhance safety

College of Dental Hygienists of Manitoba Practice standards, in particular;

1.1, 1.3, 1.5, 1.7, 1.9, 1.10, 1.12, 2.2, 2.3, 2.7

The Dental Hygienists Act

Dental Hygienists Regulation

Standards of practice 30(1)

College of Dental Hygienists of Manitoba Bylaws

Article XI: Code of Ethics

11.1 All dental hygienists will abide by the most recent version of the Canadian Dental Hygiene Association's Code of Ethics and any other ethical guidelines adopted by council.

Canadian Dental Hygienists Association Code of Ethics

Responsibilities for Principle of Integrity: Dental hygienists promote workplace practices and policies that facilitate professional practice in accordance with the principles, standards, laws and regulations under which they are accountable.

The Testing of Bodily Fluids and Disclosure Act

The Testing of Bodily Fluids and Disclosure Regulation

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



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