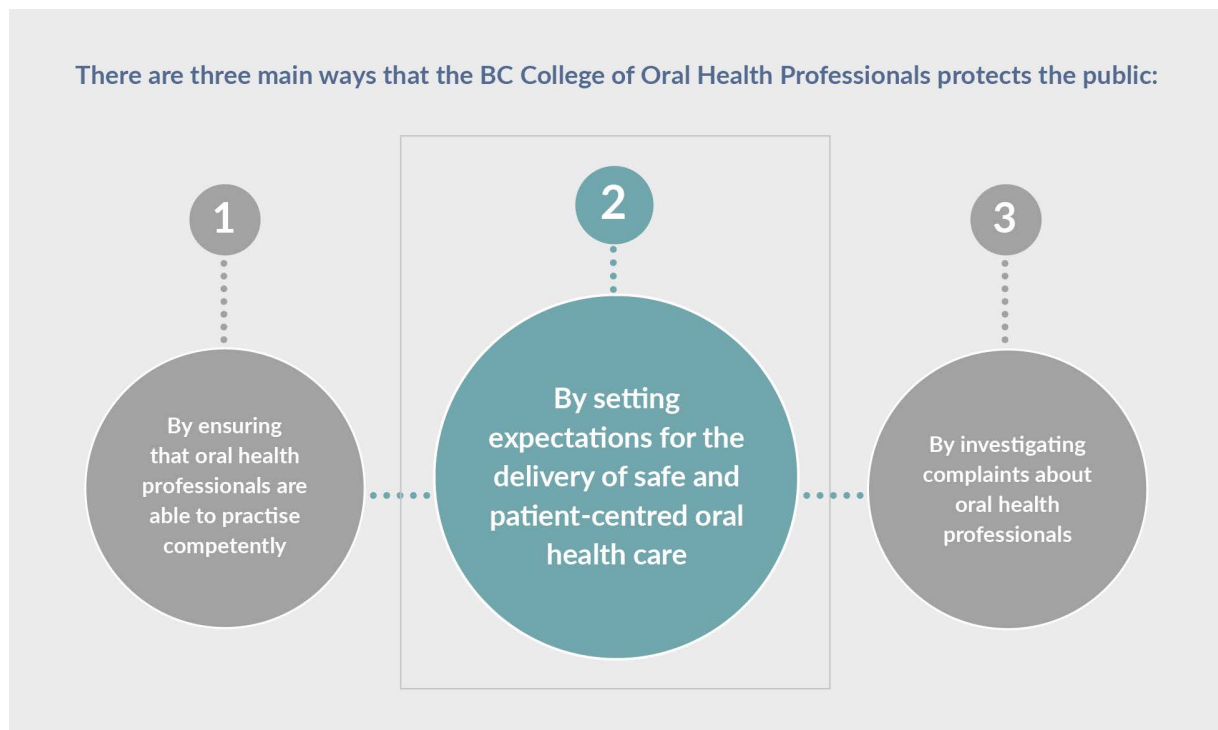


Expectations for clinical and ethical practice

Interpretation Guidelines: Dental Hygienists Infected with Bloodborne Pathogens: Standard for Reporting and Guidance for Prevention of Transmission of Infection

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.

Dental Hygienists Infected with Bloodborne Pathogens

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.

Standard for Reporting and Guidance for Prevention of Transmission of Infection

PURPOSE

This policy has been developed to:

- Articulate the CDHBC reporting requirements and provide guidelines for registrants who are infected with one or more blood-borne virus (BBV) type infections of hepatitis B virus (HBV), hepatitis C virus (HCV) or human immunodeficiency virus (HIV);
- Provide guidance on appropriate measures for preventing the transmission of infection;
- Provide recommendations for the management of dental hygienists infected with blood-borne pathogens; and
- Outline the reporting standards for a registrant who is infected with BBV.

BACKGROUND

Disease transmission from infected health-care workers to clients during exposure-prone procedures (EPPs) has been demonstrated in the literature. While the chance of transmission appears to be small, it is also recognized that dental hygienists perform invasive "exposure-prone procedures" that present the opportunity for the client to be exposed to the health care worker's blood. The risk of such transmission is diminished substantially through the strict use of Routine Practices for infection prevention and control.

Health Canada's definition of exposure-prone procedures (EPP) are those during which transmission of HBV, HCV, or HIV from a health care worker (HCW) to client is most likely to occur and include the following:

- *digital palpation of a needle tip in a body cavity, a hollow space within the body or one of its organs, or the simultaneous presence of the HCW's fingers and a needle or other sharp instrument or object in a blind or highly confined anatomic site, ...; or...*
- *major cutting or removal of an oral or perioral tissue, including tooth structures, during which there is a potential for the patient's open tissues to be exposed to the blood of an injured HCW*

CDHBC's Obligations

- Develop policies that encourage a safe working environment and maximize the use of measures to prevent BBV transmission. Some of these opportunities include but are not limited to 1) mandating the use of Routine Practices; 2) requiring registrants to report all occupational blood exposures to clients to the Registrar.
- Develop an interpretation guideline to define restrictions to practice for registrants infected with BBV.
- Conduct an individualized assessment of an infected registrant's practice and make recommendations about any necessary practice modifications.
- Endeavor to maintain the confidentiality of the affected registrant.
- Monitor, as necessary, the registrant's practice in consultation with the registrant and/or the registrant's physician.
- Inform registrants of this policy, related processes and encourage all registrants to know their own HIV, HBV and HCV status.
- Strongly encourage all registrants to obtain vaccination against HBV.

POLICY

A registrant who is infected with a BBV:

1. Is not routinely required to inform their clients of their status; however, they must notify the CDHBC Registrar of their sero-positive status. Notification must be in writing addressed in confidence to:

The Registrar of the College
of Dental Hygienists of BC
Personal and Confidential
Suite 300, 388 Harbour Road
Victoria BC V9A 3S1

2. Must cooperate with the assessment of his/her practice by a CDHBC appointed expert;
3. Must comply with the recommendations made by the Registrar; and
4. Must inform the Registrar immediately if he/she is no longer able to comply with the recommendations, or is unable to consistently provide dental hygiene care with a high standard of infection control and/or is putting his/her client's at risk.

Should a client be exposed to blood or bodily fluids of the infected registrant, the registrant must:

- Inform the client if they have been exposed to a blood-borne pathogen and follow the guidelines for blood and body fluid exposure (See the CDHBC Interpretation Guideline titled "Blood and Body Fluid Exposure Management").

Requirements for registrants infected with HBV, HCV or HIV are as follows:

A registrant infected with Hepatitis B

If performing non-EPPs an infected registrant can practice so long as they:

- Use Routine Practices, and double glove for all aspects of client care for which gloving is recommended routinely;
- Get tested for circulating HBV plasma viral load with the most sensitive DNA assay possible, no less than every six (6) months; and
- In conjunction with this testing, provide a written report to the Registrar from their physician outlining the HBV viral load status, along with any additional information about the registrant's viral burden level and/or specific practice recommendations.

If performing EPPs an infected registrant:

- Cannot perform EPPs if HBV plasma DNA is at or above 2000 IU/mL except on patients who are HBV immune.
- Can perform EPPs if plasma DNA is below 2000 IU/mL.
- Must double glove and use Routine Practices.
- Must get tested for circulating HBV plasma viral load with the most sensitive DNA assay possible, no less than every six (6) months and provide a written report to the Registrar from their physician outlining the viral load status, along with any additional information about their viral burden level and/or specific practice recommendations.

If at any time a REGISTRANT's HBV plasma DNA is above 2000 IU/mL, they must:

- Report this to the CDHBC Registrar immediately and cease performing EPPs.

If a REGISTRANT's HBV plasma DNA is below 2000 IU/mL they must:

- Provide the Registrar with medical evidence indicating that their HBV plasma DNA is below 2000 IU/ml, along with a history indicating how long the count has remained below 2000 IU/mL.

A registrant infected with Hepatitis C

If performing non-EPPs an infected REGISTRANT can practice so long as they:

- Use Routine Practices and double glove for all aspects of client care for which gloving is recommended routinely;

- Get tested for circulating HCV plasma viral load with the most sensitive DNA assay possible, no less than every six (6) months; and
- In conjunction with this testing, provide a written report to the Registrar from their physician outlining the HCV viral load status along with any additional information about the registrant's viral burden level and/or specific practice recommendations.

If performing EPPs an infected REGISTRANT:

- Cannot practice EPPs if they are HCV RNA positive.

If at any time an infected REGISTRANT is HCV RNA positive, they must:

- Report this to the Registrar and cease performing EPPs.

When the REGISTRANT has a sustained virologic response (SVR) defined as HCV RNA negativity in serum or plasma following completion of therapy, they may:

- Resume EPPs once an HCV RNA test using the most sensitive DNA assay possible, performed at least 12 weeks after completion of treatment is confirmed to be negative and they have reported these results to the Registrar; and
- They must get tested for circulating HCV plasma viral load with the most sensitive DNA assay possible, no less than every six (6) months and provide a written report to the Registrar from their physician outlining their continued HCV RNA serum negativity status.

A registrant infected with the Human immunodeficiency virus (HIV)

If performing non-EPPs procedures an infected registrant can practice so long as they:

- Use Routine Practices, and double glove for all aspects of client care for which gloving is recommended routinely;
- Get tested for circulating HIV plasma viral load with the most sensitive DNA assay possible, no less than every six (6) months; and
- In conjunction with this testing, provide a written report to the Registrar from their physician outlining the viral load status, along with any additional information about the registrant's viral burden level and/or specific practice recommendations.

If performing EPPs an infected REGISTRANT:

- Is not able to perform EPPs until they are on antiretroviral therapy (ART) and their HIV plasma viral load or pVL (HIV RNA in their plasma) is undetectable.
- Once they have provided the Registrar with medical evidence indicating that they are documented to have an undetectable pVL on Anti-Retroviral Therapy (ART), they may be permitted to perform EPPs using double gloves, with the proviso that their physician provides regular (every 6 month) confirmation to the Registrar that the registrant's pVL is persistently suppressed.

SUMMARY

Dental hygienists are required to protect the health and safety of their clients and this obligation includes preventing the transmission of blood-borne viruses (BBVs) from themselves to their clients. Dental hygienists who perform exposure-prone procedures should be encouraged and supported to undergo testing for BBVs; however the maintenance of confidentiality for registrants must also be respected. Any recommendations for the modification of a registrant's dental hygiene practice are based on an independent assessment of a registrant and consideration of context, pathogen, viral load, adherence to precautions, and experience and types of procedures provided by the registrant. This policy is intended to balance the rights of clients to be free from the danger of infection and the rights of an infected registrant to privacy and freedom from discrimination.

ACKNOWLEDGMENT

Portions of this policy have been adapted from the College of Dental Surgeons of BC's Blood-Borne Pathogen Policy.

REFERENCES

- BC Centre for Disease Control. BC Routine immunization schedule: Adults 18 years of age and older not immunized in childhood [Internet]. 2012 [updated 2012 Dec 13; cited 2013 Sept 12]. Available from: [BCCDC Adults 18 and Older Immunizers \(pdf\)](#)
- BC Centre for Disease Control. Communicable Disease Control Manual. Chapter I- Management of Specific Diseases: Hepatitis C [Internet]. 2012 [updated 2013 July; cited 2013 Sept 12]. Available from: [BCCDC CPS Hep Guidelines HCV \(pdf\)](#)
- BC Centre for Disease Control. Communicable Disease Control Manual. Chapter 1- Communicable Disease Control: Blood and Body Fluid Exposure Management [Internet]. 2010 [updated 2010 March; cited 2013 Sept 12]. Available from: [BCCDC EPI Guideline BBF \(pdf\)](#)
- Bell DM, Shapiro CN, Ciesielski CA, Chamberland ME. Preventing bloodborne pathogen transmission from health-care workers to patients: the CDC perspective. *Surg Clin North Am.* 1995 Dec; 75(6):1189-203.
- Corden S, Ballard AL, Ijaz S, Barbara JA, Gilbert N, Gilson RJ, et al. HBV DNA levels and transmission of hepatitis B by health care workers. *J Clin Virol.* 2003 May; 27(1):52-8.
- Division of Nosocomial and Occupational Infections. Bureau of Infectious Diseases. Laboratory Center for Disease Control. Health Protection Branch. Health Canada. Proceedings of the Consensus Conference on Infected Health Care Worker Risk for transmission of bloodborne pathogens. *Can Commun Dis Rep.* 1998 Jul; 24 Suppl 4:i-iii, 1-25; i-iii, 1-28.

- Enfield KB, Sharapov U, Hall K, Berg C, White-Comstock, MB, Xia G, et al. Transmission of hepatitis B virus to patients from an orthopedic surgeon. 5th Decennial International Conference on Healthcare-Associated Infections; 2010 March 18-20; Atlanta, Georgia. Available from: shea.confex.com
- Government of British Columbia. *Public Health Act*. Victoria: Queen's Printer Website; 2013. Available from: [Public Health Act \[SBC 2008\] Chapter 28](#)
- Government of British Columbia. *Public Health Act: Health Act Communicable Disease Regulation*. List of reportable communicable diseases in BC. Victoria: Queen's Printer; 2013. Available from: [Health Act Communicable Disease Regulation](#)
- Harpaz R, Von Seidlein L, Averhoff FM, Tormey MP, Sinha SD, Kotsopoulou K, et al. Transmission of hepatitis B virus to multiple patients from a surgeon without evidence of inadequate infection control. *N Engl J Med*. 1996 Feb 29; 334(9):549-54.
- Henderson DK, Dembry L, Fishman NO, Grady C, Lundstrom T, Palmore TN, Sepkowitz KA, Weber DJ. SHEA guideline for management of healthcare workers who are infected with hepatitis B virus, hepatitis C virus, and/or human immunodeficiency virus. *Infect Control Hosp Epidemiol*. 2010 Mar; 31(3):203-32.
- [Infection Prevention and Control Guidelines](#). Victoria: College of Dental Hygienists of British Columbia; 2012 July.
- Molyneaux P, Reid TM, Collacott I, McIntyre PG, Dillon JF, Laing RB. Acute hepatitis B in two patients transmitted from an e antigen negative cardiothoracic surgeon. *Commun Dis Public Health*. 2000 Dec; 3(4):250-2.
- Ngui SL, Watkins RPF, Heptonstall J, Teo CG. Selective transmission of hepatitis B after percutaneous exposure. *J Infect Dis*. 2000 Mar; 181(3):838-43.
- [CDHBC Practice Standards and Practice Standard Policies](#). Victoria: College of Dental Hygienists of British Columbia; 2013.
- CDHBC Interpretation Guidelines. [Blood and body fluid exposure](#). Victoria: College of Dental Hygienists of British Columbia; 2013.
- Shafran SD, Mock D, Wong DK. The Dentist with Blood-Borne Viral Infection: What are the Risks to Patients and What is an Appropriate Approach to the Dentist? Toronto: Canadian Dental Regulatory Authorities Federation (CDRAF); 2012 Oct.
- Spijkerman IJ, van Doorn LJ, Janssen MH, Wijkmans CJ, Bilkert-Mooiman MA, Coutinho RA, et al. Transmission of hepatitis B virus from a surgeon to his patients during high risk and low risk surgical procedures during 4 years. *Infect Control Hosp Epidemiol*. 2002 Jun; 23(6):306-12.
- The Incident Investigation Teams and Others. Transmission of hepatitis to patients from four infected surgeons without hepatitis B e antigen. *N Engl J Med*. 1997 Jan 16; 336(3):178-84.

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