



COLLEGE OF REGISTERED
DENTAL HYGIENISTS
OF ALBERTA

COVID-19 - Protecting Yourself and Preparing Your Workplace

**A resource for CRDHA registrants navigating occupational health and safety during the
COVID-19 Pandemic**

Table of Contents

Introduction	1
Section A Identifying and Controlling Hazards as Part of Your Health and Safety Program	2
Step 1: Identify the Hazard(s)	2
COVID-19.....	2
Step 2: Identify the Task(s)	2
Step 3: Identify Risk Level	3
Chart: Dental Hygiene Activities Associated with Exposure Risk Levels	3
Step 4: Identify Hazard Controls	4
Step 5: Communicate the Results of the Hazard Assessment	5
Implementation	5
Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)	5
Example: Formal Risk Hazard Assessment for Dental Hygiene Activity.....	17
Example: Communication of Administrative Policies Based on Hazard Assessment	20
Section B Occupation Health and Safety (OHS) Legislation	22
OHS Legislation	22
Who is Responsible?	22
Health and Safety Committees and Representative.....	24
Role of the Government of Alberta OHS Officers	24
Additional Resources	25

Introduction

Dental workers may be exposed to a variety of workplace hazards while performing their functions. The type and degree of exposure is dependent upon the type of services, the type of patients or clients, and the specific tasks performed. Occupational Health and Safety (OHS) Alberta has identified COVID-19 as a biological hazard for both respiratory and droplet transmission. A key element for all dental hygiene settings is the development of an effective health and safety program to manage risks of exposure to both the client and staff.

This document is divided into two sections:

- **Section A** provides guidance for the development of a Health and Safety Program, focusing on the hazard assessment and practice-specific policy development
- **Section B** focuses on the legislative requirements under OHS that all dental and dental hygiene workplaces must comply with

This document is current as of June 24, 2020 and is subject to change as new information becomes available.

Please note that this resource does not discuss all requirements under the OHS Act, Regulations and Code. This is not a definitive guide to the legislation and does not exempt readers from their responsibilities under applicable legislation. In case of inconsistency between this resource and the OHS legislation or any other legislation, the legislation is considered correct.

Section A

Identifying and Controlling Hazards as Part of Your Health and Safety Program

Hazard identification, assessment, and control is the foundation of a Health and Safety Program and is a requirement under the Alberta OHS Code. The process involves several steps:

Step 1: Identify the Hazard(s)

- Identify hazards and risk factors that have the potential to cause harm

Step 2: Identify the Task(s)

- Identify all of the tasks or activities that will be evaluated by the hazard assessment

Step 3: Identify Risk Level

- Assess each activity for the risk of exposure to the hazard

Step 4: Identify Hazard Controls

- Determine appropriate ways to eliminate the hazard, or control the risk when the hazard cannot be eliminated;

Step 5: Communicate the Results of the Hazard Assessment

- Ensure workers are aware of the results and receive appropriate training

Step 1: Identify the Hazard(s)

SARS-CoV-2, the virus responsible for COVID-19, has been identified by OHS as a biological hazard and as such dental practices must have a plan to implement identified controls and confirm they are effective.

It is never too late to create a safety management program in your practice setting.

COVID-19

To better prepare for the hazard assessment, familiarize yourself with the hazard identified. The focus of this resource is to protect you and your workplace from the biological hazard of the novel coronavirus, SARS-CoV-2, which is responsible for COVID-19. The research on the behaviour of this virus is rapidly evolving, however current research indicates that transmission is thought to be spread primarily through respiratory droplets when an infected person talks, coughs, or sneezes or by contact transmission.

COVID-19 is quite contagious with risk of asymptomatic or pre-symptomatic spread and may cause serious complications for those individuals who are over 60 years old, immunocompromised, and/or with underlying health conditions. Although not considered to be an airborne-spread disease, such as measles, there are circumstances whereby the virus may become aerosolized to much smaller particles (<5 µm). These aerosols can be inhaled or come in contact with mucous membranes which may lead to infection. which could lead to infection. Aerosols can be produced through common dental hygiene procedures.

Step 2: Identify the Task(s)

Begin the hazard identification process by listing all work-related tasks and activities that may put anyone in the workplace at risk of exposure to SARS-CoV-2. When identifying tasks, look at all the ways that the virus may be transmitted (clinical area, shared staff areas, reception areas, bathrooms, etc.).

Each practice setting will have unique considerations based on the physical layout of the facility so the risks will be specific to your practice setting. For example, mobile dental hygiene practitioners may practice in a variety of settings and will have to consider the specific characteristics associated with each environment. Do a walk through of the environment to identify hazards associated with the risk of COVID-19 in your practice.

Step 3: Identify Risk Level

Once you have identified the activities that are affected by the biological hazard of SARS-CoV-2, proceed by assessing the risk level for each specific procedure or task. The following table was adapted from Occupational Safety and Health Administration (OSHA) and addresses general risk of exposure for dental and dental hygiene practices.

Chart: Dental Hygiene Activities Associated with Exposure Risk Levels

Lower (caution)	Medium	High	Very High*
<ul style="list-style-type: none"> ▪ Performing administrative duties in non-public areas of dental or dental hygiene facilities, away from other staff members. 	<ul style="list-style-type: none"> ▪ Providing non-aerosol generating procedures, to well clients (i.e., to members of the general public who are not known or suspected COVID-19 patients). ▪ Working at busy staff work areas within a dental facility. 	<ul style="list-style-type: none"> ▪ Performing aerosol-generating procedures on well clients. ▪ Providing emergency dental care, not involving aerosol-generating procedures, to a known or suspected COVID-19 client. ▪ Entering a known or suspected COVID-19 client's room or care area. 	<ul style="list-style-type: none"> ▪ Performing aerosol-generating procedures on known or suspected COVID-19 patients. ▪ Collecting or handling specimens from known or suspected COVID-19 patients.

Adapted from OSHA <https://www.osha.gov/SLTC/covid-19/dentistry.html>

*In Alberta, dental hygienists are not seeing clients that fall in this risk category.

The following are a list of common clinical procedures or pieces of equipment that may put the oral healthcare provider at high risk of SARS-CoV-2 exposure in a dental hygiene practice setting according to the chart above. This list is not exhaustive of all the tasks that may put you at risk. The list you include in your hazard assessment will be specific to your practice setting.

- Powered instrumentation
- Air polisher
- High speed handpiece
- Polishing and low speed handpiece
- Air-water syringe

Step 4: Identify Hazard Controls

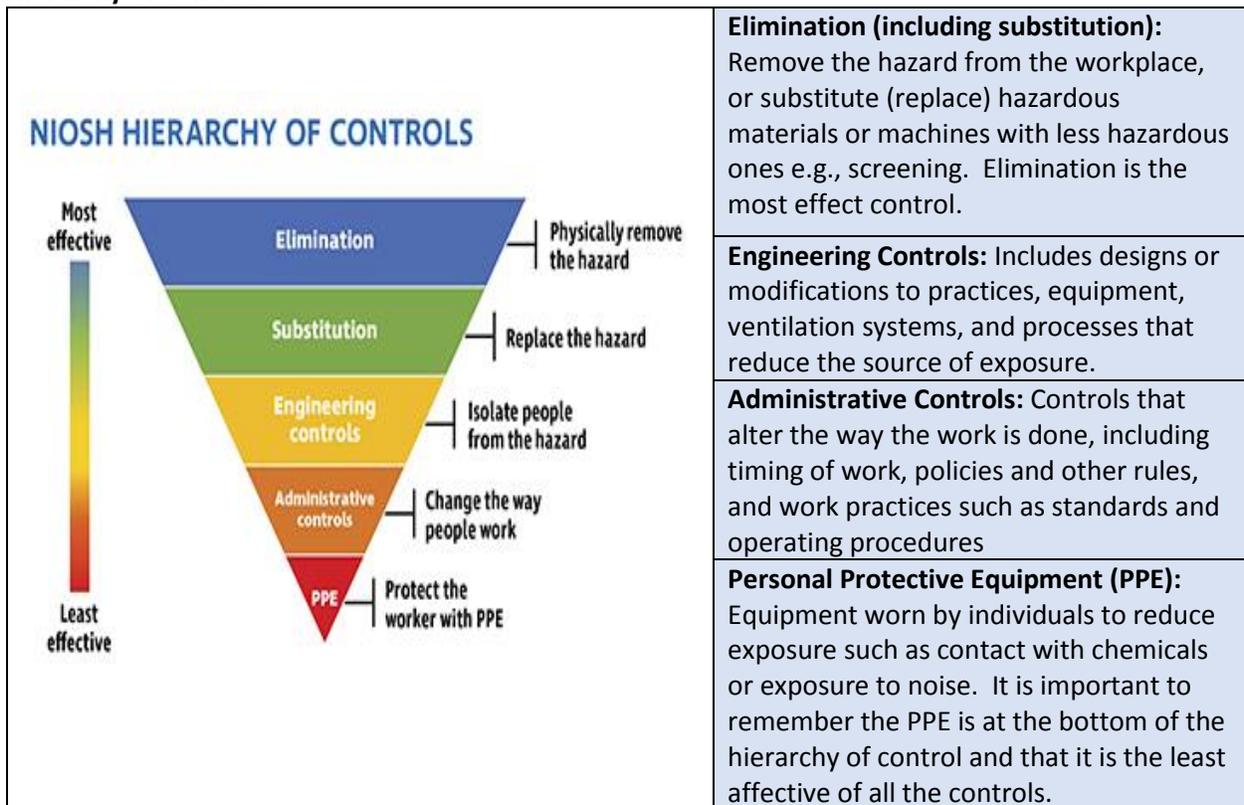
Once the hazard has been identified and the level of risk has been assigned to each procedure or task, the next step in the hazard assessment is to identify the appropriate levels of controls to mitigate the risk.

According to the Canadian Centre for Occupational Health and Safety (CCOHS), there are several ways to control workplace hazards, including the risk of exposure to viruses such as the novel coronavirus. One strategy is to use the National Institute of Occupational Safety and Health (NIOSH) hierarchy of controls. The hierarchy is a strategy that originates from the “NIOSH Prevention Through Design” national initiative to determine how to implement effective hazard control solutions. The hierarchy, commonly depicted as an inverted triangle, is divided into five sections:

1. Elimination
2. Substitution
3. Engineering controls
4. Administrative controls
5. Personal protective equipment

The control methods on the top of the triangle are considered by NIOSH to be more effective, while the methods at the bottom are considered less effective.

Hierarchy of Controls



Source: <https://www.assp.org/news-and-articles/2020/03/31/how-to-apply-the-hierarchy-of-controls-in-a-pandemic>

Elimination/substitution is the most effective control to reduce the risk of transmission of SARS-CoV-2. If elimination/substitution is not possible and you must perform the activity, proceed with identifying appropriate controls to further minimize risk (engineering, administrative, PPE).

Step 5: Communicate the Results of the Hazard Assessment

Make sure all affected workers are aware of and understand the hazards and follow or use the controls. The methods used to communicate the information to the workers will depend on your practice setting. Some effective methods may include:

- worker orientation/training sessions
- development of policy and procedure documents
- discussing both the hazards and the controls during safety meetings
- using regular internal communication channels or resources (for example, health and safety committee/health and safety representative, newsletters, intranet forums)

Employers are required by OHS legislation to prepare a report with the results from hazard assessments. This report must include what is being done to eliminate or control the hazards identified.

Implementation

The following examples demonstrate how to implement the steps of the hazard identification, assessment, and control into dental hygiene practice.

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

The following chart has been developed as an example that identifies:

- Common dental hygiene activities
- Risk level associated with each activity (for COVID-19) determined using the chart “Dental Hygiene Activities Associated with Exposure Risk Levels” (pg 3)
- Options for the different types of controls (engineering controls, administrative controls, PPE)

This chart is not exhaustive of all legislative requirements under OHS. It would be inappropriate to use this chart “as is” in your hazard assessment, but you may refer to this example as you work through your formal hazard assessment

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
High Level of Risk Activities					
Powered instrumentation (e.g. ultrasonic scaler) Risk level = HIGH	<ul style="list-style-type: none"> • Aerosol production that may create airborne transmission of SARS-CoV-2 • Spray, spatter that may provide for droplet/contact transmission 	<ul style="list-style-type: none"> • Eliminate by deferring treatment • Substitute with hand instrumentation 	<ul style="list-style-type: none"> • High volume evacuation • 4-handed dentistry technique • Determine aerosol clearance by identifying air changes per hour (ACH) for facility • Take into consideration facility layout considerations (e.g. floor-to-ceiling walls, doors to operatories that close) 	<ul style="list-style-type: none"> • Policy and staff training to guide practitioners to appropriate use of HVE • Staff training for Point-of-Care Risk Assessment (PCRA) to assist practitioners in determining risk in specific client case presentation • Policy and staff training to leave operatory undisturbed for time required for ACH before cleaning and disinfection, and for enhanced cleaning and disinfection to include all surfaces after AGP 	<ul style="list-style-type: none"> • N95 mask or equivalent <ul style="list-style-type: none"> ○ If N95 mask is unavailable, use a Level 3 surgical mask with a face shield • Protective clothing (gown or alternative) • Bouffant/head covering • Gloves • Eye protection • Shoe covers

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
Air polisher Risk level = HIGH	<ul style="list-style-type: none"> • Aerosol production that may create airborne transmission of SARS-CoV-2 • Spray, spatter that may provide for droplet/contact transmission 	<ul style="list-style-type: none"> • Eliminate by deferring treatment • Substitute with selective polishing using a low speed handpiece 	<ul style="list-style-type: none"> • HVE • Determine ACH • Facility layout considerations 	<ul style="list-style-type: none"> • Staff training for PCRA • Policy and staff training to address substitution with low speed handpiece for polishing • Policy to use HVE if air polisher necessary • Policy and staff training to leave operator undisturbed for time required for ACH before cleaning and disinfection, and for enhanced cleaning and disinfection to include all surfaces after AGP 	<ul style="list-style-type: none"> • N95 mask or equivalent <ul style="list-style-type: none"> ○ If N95 mask is unavailable, use a Level 3 surgical mask with a face shield • Protective clothing (gown or alternative) • Bouffant/head covering • Gloves • Eye protection • Shoe covers

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
High speed handpiece Risk level = HIGH	<ul style="list-style-type: none"> Aerosol production that may create airborne transmission of SARS-CoV-2 Spray, spatter that may provide for droplet/contact transmission 	<ul style="list-style-type: none"> Eliminate by deferring treatment Substitute with manual instrument if possible 	<ul style="list-style-type: none"> HVE 4-handed dentistry technique Rubber dam ACH Facility layout considerations 	<ul style="list-style-type: none"> Staff training for PCRA Policy and staff training for utilizing HVE with 4-handed dentistry technique and rubber dam during use Policy and staff training to leave operatory undisturbed for time required for ACH before cleaning and disinfection, and for enhanced cleaning and disinfection to include all surfaces after AGP 	<ul style="list-style-type: none"> N95 mask or equivalent <ul style="list-style-type: none"> If N95 mask is unavailable, use a Level 3 surgical mask with a face shield Protective clothing (gown or alternative) Bouffant/head covering Gloves Eye protection Shoe covers

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
<p>Low speed handpiece (e.g. full mouth polishing)</p> <p>Risk level = HIGH</p>	<ul style="list-style-type: none"> • Aerosol production that may create airborne transmission of SARS-CoV-2 • Spray, spatter that may provide for droplet/contact transmission 	<ul style="list-style-type: none"> • Eliminate by deferring treatment • Substitute with hand instrument • Use selective polishing instead of full mouth polishing 	<ul style="list-style-type: none"> • HVE • 4-handed dentistry technique • ACH • Facility layout considerations 	<ul style="list-style-type: none"> • Staff training for PCRA • Policy and staff training to not use combination of air-water syringe to rinse • Policy and staff training to use HVE and 4-handed dentistry technique • Policy and staff training to leave operatory undisturbed for time required for ACH before cleaning and disinfection, and for enhanced cleaning and disinfection to include all surfaces after AGP 	<ul style="list-style-type: none"> • N95 mask or equivalent <ul style="list-style-type: none"> ○ If N95 mask is unavailable, use a Level 3 surgical mask with a face shield • Protective clothing (gown or alternative) • Bouffant/head covering • Gloves • Eye protection • Shoe covers

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
Air- water syringe Risk level = HIGH	<ul style="list-style-type: none"> • Aerosol production that may create airborne transmission of SARS-CoV-2 (when using combined air and water) • Creation of droplets, spray when using water or air individually 	<ul style="list-style-type: none"> • Eliminate use of combined air and water • Substitute rinsing with a monojet syringe instead 	<ul style="list-style-type: none"> • HVE • ACH 	<ul style="list-style-type: none"> • Staff training for PCRA • Policy and staff training to avoid use of combination air and water • Policy and staff training to use HVE with air or water individual use • Policy and staff training to leave operatory undisturbed for time required for ACH before cleaning and disinfection, and for enhanced cleaning and disinfection to include all surfaces after AGP 	<ul style="list-style-type: none"> • N95 mask or equivalent <ul style="list-style-type: none"> ○ If N95 mask is unavailable, use a Level 3 surgical mask with a face shield • Protective clothing (gown or alternative) • Bouffant/head covering • Gloves • Eye protection • Shoe covers

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
Lasers Risk level = HIGH	<ul style="list-style-type: none"> Risk of aerosol production if initiated tip results in laser plume 	<ul style="list-style-type: none"> Eliminate by deferring treatment Substitute with hand scaling 	<ul style="list-style-type: none"> HVE Ventilation to address laser plume ACH 	<ul style="list-style-type: none"> Staff training for PCRA Policy and staff training for client criteria and selection for laser use Staff training on laser plume and avoiding its creation Policy and staff training to leave operatory undisturbed for time required for ACH before cleaning and disinfection, and for enhanced cleaning and disinfection to include all surfaces after AGP 	<ul style="list-style-type: none"> N95 mask or equivalent <ul style="list-style-type: none"> If N95 mask is unavailable, use a Level 3 surgical mask with a face shield Protective clothing (gown or alternative) Bouffant/head covering Gloves Eye protection Shoe covers

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
Medium Level of Risk Activities					
Intra-oral radiographs Risk level = MEDIUM	<ul style="list-style-type: none"> Potential initiation of gag reflex, introducing spatter, spray, or aerosols into environment 	<ul style="list-style-type: none"> Eliminate by deferring radiographs Substitute with use extra-oral radiographs if needed 	<ul style="list-style-type: none"> ACH Facility layout considerations 	<ul style="list-style-type: none"> Staff training for PCRA Policy for client criteria and indications for radiographs Policy and staff training to assess client for risk of gag response Staff training on strategies to decrease gag reflex If aerosols are produced, policy and staff training to leave operatory undisturbed for time required for ACH before cleaning and disinfection, and for enhanced cleaning and disinfection to include all surfaces after AGP 	<ul style="list-style-type: none"> Determine PPE on level of risk <ul style="list-style-type: none"> Mask Protective clothing Gloves Protective Eyewear

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

<p>Taking impressions</p> <p>Risk level = MEDIUM</p>	<ul style="list-style-type: none"> • Potential initiation of gag reflex, introducing spatter, spray, or aerosols into environment 	<ul style="list-style-type: none"> • Eliminate by deferring treatment if possible 	<ul style="list-style-type: none"> • ACH • Facility layout considerations 	<ul style="list-style-type: none"> • Staff training for PCRA • Policy and staff training for client criteria and indications for taking impressions • Policy and staff training for assessing client for risk of gag response • Staff training for strategies to reduce gag reflex • If aerosols are produced, policy and staff training to leave operatory undisturbed for time required for ACH before cleaning and disinfection, and for enhanced cleaning and disinfection to include all surfaces after AGP 	<ul style="list-style-type: none"> • Determine PPE on level of risk <ul style="list-style-type: none"> ○ Masks ○ Protective clothing ○ Gloves ○ Protective Eyewear
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Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
Handling impressions Risk level = MEDIUM	<ul style="list-style-type: none"> Risk of contact transmission if impression is contaminated 	<ul style="list-style-type: none"> Eliminate by deferring impressions if possible 	<ul style="list-style-type: none"> Dedicated area to clean and disinfect impressions Facility layout considerations 	<ul style="list-style-type: none"> Staff training for PCRA Policy and staff training on safe cleaning and disinfection practices for impressions Policy and staff training on safe handling practices for lab materials 	<ul style="list-style-type: none"> Level 1-3 surgical mask Protective clothing Gloves Eye protection
Environmental cleaning and disinfection Risk level = MEDIUM	<ul style="list-style-type: none"> Contact transmission through contact with contaminated surfaces If AGP performed, aerosols may be present for airborne transmission 	<ul style="list-style-type: none"> Not able to substitute or eliminate 	<ul style="list-style-type: none"> ACH Facility layout considerations 	<ul style="list-style-type: none"> Staff training for PCRA Policy to wait for time required by ACH for aerosols to be cleared before cleaning and disinfection Staff training on cleaning and disinfection, including manufacturer's instructions for use 	<ul style="list-style-type: none"> Refer to manufacturer's instructions for use <ul style="list-style-type: none"> Level 1-3 surgical mask Gloves Eye protection Protective clothing (if required)

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
Intra-oral non-aerosol generating procedures (e.g. hand scaling, administering local anaesthetic, fluoride application, etc.) Risk level = MEDIUM	<ul style="list-style-type: none"> Potential increase in saliva production may promote droplet transmission Aerosolization may occur if gagging, coughing, vomiting occurs 	<ul style="list-style-type: none"> Eliminate by deferring treatment Substitution is dependant on procedure 	<ul style="list-style-type: none"> ACH Facility layout considerations Saliva ejector 	<ul style="list-style-type: none"> Staff training for PCRA Policy and staff training for when to use saliva ejector and how to prevent back flow Policy for how to address potential aerosolization, including following ACH for aerosol clearance 	<ul style="list-style-type: none"> Refer to manufacturer's instructions for use <ul style="list-style-type: none"> Level 2-3 surgical mask Gloves Eye protection Protective clothing
Orofacial myology exercises Risk level = MEDIUM	<ul style="list-style-type: none"> Potential of introducing spatter, spray into environment 	<ul style="list-style-type: none"> Eliminate by deferring treatment Substitute in-person session with remote appointments to assess exercises 	<ul style="list-style-type: none"> Physical distance between client and practitioner Physical barrier (e.g. plexiglass) between client and practitioner 	<ul style="list-style-type: none"> Staff training for PCRA Policy and staff training on physical distancing during orofacial myology appointments 	<ul style="list-style-type: none"> Level 1-3 surgical mask dependent on procedure and risk Protective clothing (gown or alternative) Gloves Eye protection

Example: List of Dental Hygiene Activities (Including Risk Level and Hazard Controls)

Tasks that May Result in Transmission of Biological Hazard (SARS-CoV-2)	Risks Associated with Task Related to COVID-19	Elimination/ Substitution	Engineering Controls	Administrative Controls	Personal Protective Equipment
Oral hygiene instruction (OHI) (intra-oral) Risk level = MEDIUM	<ul style="list-style-type: none"> Potential of introducing spatter, spray into environment 	<ul style="list-style-type: none"> Eliminate by deferring treatment Substitute by demonstrating OHI using props extra-orally 	<ul style="list-style-type: none"> Physical distance between client and practitioner if possible 	<ul style="list-style-type: none"> Staff training for PCRA Policy and staff training for minimizing intra-oral instruction by demonstrating extra-orally 	<ul style="list-style-type: none"> Level 1-3 surgical mask dependent on procedure and risk Protective clothing (gown or alternative) Gloves Eye protection
Low Level of Risk Activities					
Distributing oral health aids Risk level = LOW	<ul style="list-style-type: none"> Risk of contact transmission if aids are kept within operatory 	<ul style="list-style-type: none"> Eliminate by not providing oral health aids Substitute by storing and distributing oral health aids in non-clinical area 	<ul style="list-style-type: none"> Store oral health aids in area that will not be exposed to droplets or aerosols 	<ul style="list-style-type: none"> Policy for hand hygiene before distributing oral health aids Policy for safe storing of aids to prevent contamination 	<ul style="list-style-type: none"> Level 1-3 surgical mask

Example: Formal Risk Hazard Assessment for Dental Hygiene Activity

Taylor is about to return to practice for the first time since the state-of-emergency was called in Alberta. The CRDHA just released Version 3 of the Return to Work Guidelines and Taylor is looking to incorporate these guidelines into their practice.

Taylor is uncertain about the risks associated with generating aerosols when using instruments like the ultrasonic scaler and low speed handpieces. The CRDHA guidelines indicate that if AGPs are to be used, the health benefit to the client must outweigh the risk of exposure of aerosols to the environment. Taylor recognizes it is the worker's legislated responsibility under OHS to participate in identifying the risks for SARS-CoV-2 specific to their workplace. SARS-CoV-2 is a new biological hazard that their workplace has not previously had to address.

Taylor works with the practice owner/employer to complete a formalized hazard assessment for the use of the ultrasonic scaler to develop specific policy for their office. This policy will be communicated to all staff members and will provide for consistency within the office to minimize the risks associated with the use of the ultrasonic scaler.

Step 1: Identify the hazard

- Biological hazard: SARS-CoV-2 transmission through aerosols

Step 2: Identify task

- Use of ultrasonic scalers for debridement

Step 3: Identify risk level

- High

Step 4: Identify controls

- Elimination
- Substitution
- Engineering controls
- Administrative controls
- PPE

Step 5: Communicate results of the hazard assessment

- Disseminate policies and procedures through staff meeting
- Staff training

*The next page provides an example of how to put these steps into a hazard assessment and control table

Formal Hazard Assessment

The following form is for example purposes only and was adapted from “Hazard Assessment and Control- a handbook for Alberta employers and workers” (<https://ohs-pubstore.labour.alberta.ca/bp018>) which includes the following disclaimer: “Completing this form alone will not necessarily put you in compliance with the legislation. It is important and necessary that you customize this document to meet the unique circumstances of your work site. Further, it is essential that this document is not only completed, but is used, communicated, and implemented in accordance with the legislation. The Crown, its agents, employees or contractors will not be liable to you for any damages, direct or indirect, arising out of your use of this form.”

Job/position/work type: Registered Dental Hygienists			Date of assessment: June 1, 2020
Assessment performed by: Taylor Jones			Reviewed/revised: By Management
Tasks	Hazards (potential health and safety hazard)	Controls (List the controls for each hazard: elimination, engineering, administrative, personal protective)	Date implemented
Use of Ultrasonic Scaler	Biological hazard: exposure to respiratory infectious disease through aerosolization of droplet nuclei of SARS-CoV-2. Risk level= HIGH	Elimination: Defer treatment Substitution: Use of hand scaling techniques on all patients Administration: Policy for determining whether to perform Aerosol Generating Procedures (AGPs) During COVID-19*	June 20, 2020
		Engineering: HVE and use of four handed dental hygiene techniques Administration: Policy to use HVE and four handed dentistry to mitigate the risk of aerosols during ultrasonic use	
		Engineering: Air changes per hour (ACH) Administration: Policy to wait 21 minutes after AGP to clean and disinfect the operatory based on clinic's HVAC assessment and the recommendation of the HVAC specialist	
		Engineering: Waterlines and Suction Lines Administration: Policy run waterlines for 2 minutes at the start of each day. Run water lines for 20 seconds between clients. Suction lines must be aspirated with water or enzymatic solution between clients to reduce likelihood of infectious material backflow.	
		Administration: Policies to address minimizing risk of transmission: <ul style="list-style-type: none"> • Policy: Pre-screening and point of care screening of clients • Policy: Client booking • Policy: Staff screening • Policy: Enhanced environmental cleaning and disinfecting • Policy: Pre procedural mouth rinse • Policy: Hand hygiene 	

		<p>Administration: Staff training</p> <ul style="list-style-type: none"> • Donning and doffing of PPE • Training on the new administrative controls for using ultrasonic instruments 	
		<p>Administration: Policy for personal protective equipment usage during AGPs*</p> <p>PPE: For aerosol generating procedures:</p> <ul style="list-style-type: none"> • N95 mask or equivalent. <ul style="list-style-type: none"> ○ If N95 mask is unavailable, use a Level 3 surgical mask with a face shield • Protective clothing (gown or alternative) • Bouffant/head covering • Gloves • Eye protection • Shoe covers 	

*These policies are included in the following example (Example: Communication of Administrative Policies Based on Hazard Assessment)

Example: Communication of Administrative Policies Based on Hazard Assessment

The following is based on information from the previous example.

Daisy Chain Oral Health Clinic

June 20, 2020

To all team members,

At Daisy Chain Oral Health Clinic preventing the transmission of infectious diseases is a top priority. The safety and health of our team members and the public comes first. Management is committed to doing everything possible to reduce risk, prevent injuries and to maintain a safe and healthy environment. Please sign each policy to indicate that you have read the policy and understand your responsibility.

To this end:

POLICY: For determining whether to perform Aerosol Generating Procedures (AGPs) During COVID-19
<ol style="list-style-type: none">1. Staff will avoid AGP by substituting with non-AGP whenever possible2. Point of care risk assessment is done for every client to determine whether the benefit of providing ultrasonic instrumentation outweighs the risk of generating aerosols.<ul style="list-style-type: none">• At Daisy Chain Oral Health Clinic, a hazard assessment has been completed and the risk of aerosol transmission has been minimized through controls such as:<ol style="list-style-type: none">i. the facility layout (operatories with floor-to-ceiling walls and doors that close)ii. the air changes per hour of the clinic (20),iii. policy for client screeningiv. policy for pre-procedural rinsev. policy for use of HVE and 4-handed dentistryvi. policy for minimizing individuals present in the clinicvii. policy for staff screening3. If AGP is determined necessary, documentation and rationale for providing treatment will be part of each client’s record.
All personnel will be held accountable for implementing this program.
Date Approved:
Date Revised:
Signature:

POLICY: For personal protective equipment usage during AGPs

1. All staff will be provided PPE identified based on the level of risk specific to the generation of aerosols.
2. Supervisors at Daisy Chain Oral Health Clinic are responsible for ensuring that team members are trained in appropriate donning and doffing techniques.
3. All workers at Daisy Chain Oral Health Clinic are required to demonstrate donning and doffing techniques.
4. All records of training will be documented in team member's personnel file.

All personnel will be held accountable for implementing this program.

Date Approved:

Date Revised:

Signature:

Section B

Occupation Health and Safety (OHS) Legislation

OHS Legislation

In Alberta, workers are protected by the OHS Legislation which consists of laws that help protect the health and safety of workers at work.

- Employers are responsible for ensuring the health and safety of all workers at their work site.
- Workers are responsible for ensuring the health and safety of themselves and other workers while conducting their work at the work site.

Alberta’s OHS legislation is divided into three parts:

1. [Occupational Health and Safety \(OHS\) Act](#)
2. [Occupational Health and Safety \(OHS\) Regulation](#)
3. [Occupational Health and Safety \(OHS\) Code](#)

The OHS Act	The OHS Regulation	The OHS Code
<ul style="list-style-type: none">• Sets minimum standards to protect and promote the health and safety of workers throughout Alberta.• Defines the obligations of employers and workers.• Establishes the authority and powers of government officials to enforce the law.• Specifies maximum penalties.• Establishes broad rules of procedure in the case of a workplace incident.• Creates the authority of the Regulation and Code	<ul style="list-style-type: none">• Establishes broad provisions (rules) that apply to all Alberta workplaces. These provisions reflect government policies and are the minimum requirement to ensure the protection of Alberta workers.• Contains specified administrative processes.	<ul style="list-style-type: none">• Contains detailed technical requirements for creating safe and healthy workplaces. In some cases, the provisions specify an “objective” requirement — which allows the use of options. In other cases, the provisions specify precisely what is required—these provisions must be met in order to remain in compliance.• Contains references to recognized technical Standards (such as Canadian Standards Association – CSA).

Who is Responsible?

Legislative responsibility is shared by both the employer and the worker. A worker is anyone engaged in an occupation and includes those who are volunteers or self-employed. An employer is defined by OHS as a person who employs or engages one or more workers (including workers from a temporary staffing agency) and can include a person designated to represent an employer or a person responsible for overseeing workers health and safety in an organization.

Under the OHS Act, Section 2 (1), employers are responsible for ensuring the health and safety of all workers at the work site. Specific requirements are outlined throughout the OHS Act, Regulation and Code depending on the work that is to be done. Workers also have responsibilities under the OHS legislation. The responsibilities of employers and workers are outlined throughout the OHS Act, Regulation and Code and include, but are not limited to the following:

Employers Responsibilities	Workers Responsibilities
<ul style="list-style-type: none"> ● Protect the health, safety and welfare of your workers, other workers at your work site and other persons at or in the vicinity of the work site ● Ensure workers are supervised by supervisors who are competent and familiar with relevant OHS legislation that applies to the work performed ● Work with a Health and Safety Committee (HSC) or a Health and Safety (HS) representative, as applicable, to share health and safety information and resolve issues in a timely manner ● Resolve health and safety concerns in a timely manner ● Ensure workers are appropriately trained in work practices and procedures, how to safely use equipment and how to select and use personal protective equipment that they require. ● Identify hazards, conduct a written hazard assessment and implement controls ● Inform workers of any hazards on the job site ● Ensure that all equipment used at a worksite is properly maintained and safe for use ● Ensure that workers are adequately trained in the use of safe operating procedures, including any procedures designed to minimize the workers exposure to a harmful substance ● Monitor workers who may be exposed to certain hazards such as biological, chemicals or noise, in some cases specific health examinations may be required 	<ul style="list-style-type: none"> ● Take reasonable care to protect the health and safety of themselves and other workers while performing their duties ● To not perform work they are not competent to do unless they are under the supervision of a competent worker ● Immediately report to their employer any equipment that is unsafe or not functioning properly ● Follow health and safety work procedures developed by their employer ● Use safety devices and wear personal protective equipment, ● Participate in and apply training provided by the employer regarding safe operations of equipment or harmful substances they may be exposed to ● Wear personal protective equipment required by their employer ● Refuse to do work that may put them or another worker in “imminent danger”

Reference: OHS Regulation, Sections 12, 13, 15; OHS Code, Part 35

Health and Safety Committees and Representative

The purpose of the Health and Safety Committees (HSC) or Health and Safety (HS) representative is to encourage worker and employer participation in decisions and provide input on OHS matters at the workplace.

Health and Safety Committees	Health and Safety Representative
<p>A group of worker and employer representatives working together to identify and solve health and safety concerns at the work site</p> <ul style="list-style-type: none">• Larger employers (with 20 or more full-time and part-time workers) must establish Health and Safety committees	<p>An individual worker representative who promotes health and safety awareness and works with the employer to address health and safety concerns at the work site.</p> <ul style="list-style-type: none">• A Health and Safety representative is required for employers that have 5 to 19 full and part-time workers in total.

Role of the Government of Alberta OHS Officers

OHS Officers are employees of the Government of Alberta. The role of the OHS Officer is to ensure that employers meet minimum legislated standards to provide healthy and safe worksites as outlined in the OHS Act, Regulation and Code.

Officers may:

- conduct inspections of worksites;
- investigate serious incidents and worker fatalities;
- enter any work site at any reasonable hour, interview persons at the work site, require the production of records, or take samples or photographs at the worksite;
- write orders, stop work or stop the use of equipment if there are unsafe or unhealthy conditions at that site.

Additional Resources

<p>Government of AB OHS. Hazard Assessment and Control- a handbook for Alberta employers and workers. https://ohs-pubstore.labour.alberta.ca/bp018</p> <ul style="list-style-type: none">• How to carry out hazard assessments and control workplace hazards to meet legislated requirements. Includes template for formal hazard assessment and controls.
<p>Government of Alberta OHS. Handbook of Occupational Hazards and Controls for Dental Workers. https://open.alberta.ca/publications/handbook-of-occupational-hazards-and-controls-for-dental-workers</p> <ul style="list-style-type: none">• This document focuses on hazards and controls in dental offices and clinics.
<p>Government of Alberta OHS. Health and Safety Program. https://www.alberta.ca/health-safety-program.aspx</p> <ul style="list-style-type: none">• Overview of a health and safety program as a coordinated system of procedures and processes used to improve OHS and prevent injury and illness in the workplace.
<p>Government of AB OHS. Health and safety committees and representatives: OHS information for employers, prime contractors and workers. https://open.alberta.ca/publications/health-and-safety-committees-and-representatives</p> <ul style="list-style-type: none">• Gives information about joint work site health and safety committee (HSC) or health and safety (HS) representative requirements at Alberta work sites.
<p>Government of Alberta OHS. Employer's guide to occupational health and safety. https://open.alberta.ca/publications/9781460138519</p> <ul style="list-style-type: none">• The safety bulletin provides information to help both employees and employers understand the OHS Act and their roles in ensuring health and safety at the work site.
<p>Government of Alberta OHS. Guide to Occupational Health and Safety: Employer. https://ohs-pubstore.labour.alberta.ca/li009</p> <ul style="list-style-type: none">• Explains the Occupational Health and Safety Act as it applies to employers, and addresses the employer's role in ensuring health and safety at the work site.
<p>Government of Alberta OHS. Guide to Occupational Health and Safety: Worker. https://ohs-pubstore.labour.alberta.ca/li008</p> <ul style="list-style-type: none">• Explains the Occupational Health and Safety Act as it applies to workers, and addresses the worker's role in ensuring health and safety at the work site.
<p>Government of Alberta OHS. OHS Complaints and Incidents. https://www.alberta.ca/ohs-complaints-incidents.aspx</p> <ul style="list-style-type: none">• Alberta OHS helps prevent worker injuries and illnesses by providing measures and information for taking action.

Occupational Health and Safety (OHS) Act.

http://www.qp.alberta.ca/1266.cfm?page=O02P1.cfm&leg_type=Acts&isbncIn=9780779800865&display=html

- The purposes of this Act are
 - (a) the promotion and maintenance of the highest degree of physical, psychological and social well-being of workers,
 - (b) to prevent work site incidents, injuries, illnesses and diseases,
 - (c) the protection of workers from factors and conditions adverse to their health and safety,
 - (d) to ensure that all workers have
 - (i) the right to be informed of work site hazards and the means to eliminate or control those hazards,
 - (ii) the right to meaningful participation in health and safety activities pertaining to their work and work site, including the ability to express health and safety concerns,
 - (iii) the right to refuse dangerous work, and
 - (iv) the ability to work without being subject to discriminatory action for exercising a right or fulfilling a duty imposed by this Act, the regulations or the OHS code.

Occupational Health and Safety (OHS) Regulation.

http://www.qp.alberta.ca/1266.cfm?page=2003_062.cfm&leg_type=Regs&isbncIn=9780779776221&display=html

- Establishes broad provisions (rules) that apply to all Alberta workplaces. These provisions reflect government policies and are the minimum requirement to ensure the protection of Alberta workers. Contains specified administrative processes

Occupational Health and Safety (OHS) Code. <http://www.qp.alberta.ca/ohscode.cfm>

- Sets out the minimum technical requirements for health and safety in Alberta's workplaces.

Occupational Safety and Health Administration (OSHA). COVID-19- Control and Prevention- Dentistry Workers and Employers. <https://www.osha.gov/SLTC/covid-19/dentistry.html>

- American organization that provides guidance for OHS for dentistry workers and employers.

Occupational Safety and Health Administration (OSHA). Guidance on Preparing Workplaces for COVID-19. <https://www.osha.gov/Publications/OSHA3990.pdf>

- OSHA developed this COVID-19 planning guidance based on traditional infection prevention and industrial hygiene practices. It focuses on the need for employers to implement engineering, administrative, and work practice controls and personal protective equipment (PPE), as well as considerations for doing so.

American Society of Safety Professionals. How to Apply the Hierarchy of Controls in a Pandemic.

<https://www.assp.org/news-and-articles/2020/03/31/how-to-apply-the-hierarchy-of-controls-in-a-pandemic>

- Identifies the hierarchy of controls, emphasizing that PPE is the lowest control on the hierarchy and is the least effective control. "The hierarchy of controls is a foundational concept for solving OSH challenges,"

College of Physicians and Surgeons of Alberta. A Physician's Guide to Occupational Health and Safety Responsibilities. <https://sppcn.pcnpmo.ca/physicians/Documents/Guide%20to%20OHS%20-%20A%20PhysiciansGuide.sflb.pdf>

- Reviews OHS legislation in healthcare setting.

College of Dental Hygienists of Nova Scotia. Return to Work Guidelines for the Oral Health Professions of Nova Scotia. http://pdbns.ca/uploads/publications/COVID-19_Return_to_Work_Guidelines_for_NS_Oral_Health_Professions_-_Stage_3-Effective_June_19_2020_FINAL.pdf

- Information about COVID-19 and dental hygiene practice.