



## **Covid 19 Safety Plan**

This safety plan outlines the policies, guidelines, and procedures they have put in place to reduce the risk of COVID-19 transmission.

All of us must review our understanding of the risk of infection and ensure we are working in an environment that is safe.

First level protection: We have a limit of 30 people in our Dental Department. We have implemented workers and others at least 2 metres apart by revising work schedules, limiting the number of patients in our waiting room, conducting virtual meetings, rescheduling work tasks, occupancy limits for our common areas including meeting rooms, change rooms, washrooms and elevators, and limiting the number of visitors in our workplace.

Second level protection: We have installed plexiglass barriers to keep employees physically distant from coworkers and patients. Reception staff are to wear level 3 masks, face shields, isolation gowns, and gloves.

Third level protection: All instruments are sterilized after each patient. All equipment and counters are cleansed after each patient. Disposable products are used single use. Daily, weekly, monthly spore tests are conducted for each equipment. Each load of instruments is tested with biological indicators and logged.

Fourth level protection: All employees will use full PPE when generating aerosols. P100 Respirators and or level 3 masks, goggles, face shields, gloves and isolation gowns are used for every patient. Staff have been mask test fitted.

### ***Daily Screening***

- A log confirming that staff are not experiencing any symptoms of COVID-19
- Each employee is to have their temperature taken twice per day

### ***Hand Hygiene***

- Staff must wash or disinfect hands thoroughly:
  - Upon entry into the dental office
    - Before and after any contact with patients
    - After contact with contaminated surfaces or equipment
  - In-between procedures and after removing PPE, follow established Donning and Doffing protocols
  - After using the washroom
  - After handling office materials
  - Before and after handling shared tools and equipment
  - Posters are clearly posted for visible reminders
  - Hand sanitizer supplied upon entering the building, in the waiting area, reception area, and in every dental operator

### ***OFFICE PREPARATION***

Protocols must be followed such as hand washing, physical distancing, occupancy limits until measures are no longer required.

### ***Reception and Waiting Area***

- Minimise contact at reception
- Only Reception staff is permitted to inhabit the reception desk area
- Plexiglas barriers are in place
- All unnecessary items removed from the waiting area (i.e. no magazines or newspapers)
- Sharing of pens, telephones, staplers, and other items is discouraged between staff and patients alike
- Only one patient is allowed to wait in our waiting area
- Patients encouraged to pay over the telephone
- Patients to wait outside until given permission to enter the office by Reception staff and/or Usher
- One person can accompany the patient into the office only if the patient is:
  - A minor
  - Infirm (medically, physically, mentally, psychologically)
  - Incapable of understanding
- Temperature of patient taken upon entry to office
  - to ensure no fever present

Patient is to be provided with Isopropyl alcohol-based hand sanitizer and then don the mask we provide them

- Patient is to leave immediately for medical evaluation and will be given a choice to be seen by our Medical Department or given Vancouver Health link information and to Call 811 and given information for BC COVID-19 Self-Assessment Tool
  - If temperature is high
- Disinfect the areas after patient contact which includes thermometer, door handles, hand rails, elevator buttons, pens and clipboards.
- Occupancy limit posters and physical distance stickers clearly posted
- Phone system and POS system is barrier filmed and cleansed after each use

### ***Clinical Area***

- Sterilisation room to be cleaned regularly
- Follow CDSBC, BCDA, and BC-CDC regulations and manufacturers' instructions for testing and maintenance sterilisation equipment
- Consult the manufacturer's instructions for proper product recommendations
- Patients and Reception staff are not allowed to enter the sterilisation room

### ***Dental Operatories:***

- Appointments are to be staggered and lengthened
- Keep surfaces clear and barrier film used for all items and equipment as much as possible
- Use sealed containers for stored items; spray/ wipe the lid of the container with isopropyl alcohol upon opening and closing
- Lids of all containers are to be closed as much as possible and especially when the high speed handpiece is being used
- Cover keyboard and mouse with plastic barriers and change between patients
- Minimise use of paper
- Pre-operative mouth-rinse provided to patient, directed to expectorate in the cup and use saliva ejector or use bathroom sink, wash hands.
- Pre-operative Panoramic images are preferred to intra-oral radiographs
- HVE to be on fully and close as practicable to the high speed handpiece when it is active
- Shock the dental unit water lines if they have not been used in while
- Clean operatory while wearing PPE -First wipe
- Fogging the operatories with hypochlorous acid via sprayer
- Clean operatory while wearing PPE-second wipe 15 minutes later
- Floor is mopped with bleach
- All equipment is wiped down and disinfected
- Only patients and necessary attendants are allowed in clinical areas with DDS and CDA
- During treatment DDS and the accompanying CDA are to only leave the room for radiographs
- Mouth rinse provided

### ***Common Staff Areas***

- Encourage physical distancing
- Limit the number of people in the staff room, staggered breaks
- Disinfect touched surfaces after every use
- Posters clearly posted outside of common areas stating occupancy

### ***Washroom***

- Posted hand-washing instructions
- Ensure adequate supply of soap and disposable towels
- Occupancy limit of one person posted

### ***Receiving Deliveries***

- Wear gloves when collecting and/or accepting the post or packages
- Wipe the exterior of delivered boxes with a paper towel moist with soap and water or a sanitising wipe
- Leave all delivered items untouched for fifteen minutes
- Discard packaging immediately and wash hands
- Clean all surfaces that were touched by delivery personnel with a damp soapy cloth or sanitising wipes

### ***Clean and Disinfect***

- Wipe surfaces with detergent or soap and water prior to initial disinfection
- Disinfect touched surfaces after each and every employee uses furniture and or equipment including chairs, tables, door handles, light switches, clothes hangers, bathroom countertops and fixtures, staff-room surfaces, etc...

### ***Local Health Department Contact Information***

- Vancouver Health link Call 811 and BC COVID-19 Self-Assessment Tool

## ***AEROSOLS***

### ***Aerosol Generating Medical Procedures (AGMPs)***

Aerosols are generated by high speed handpieces, ultrasonic devices, and tri-syringes. We are to limit their use as much as possible. The risk from potentially infectious aerosols can be minimised by:

- Following proper Donning and Doffing of PPE
- 1.5% Hydrogen Peroxide or 0.2% Povidone Iodine mouth rinse use by all patients prior to/ upon entry to the operatory
- All teeth, isolated under the rubber dam, are to be wiped with a gauze dampened with NaOCl and then another wet with alcohol
- Rubber dams are to be used for every patient
- High volume suction (HVE) is to be used liberally
- Surgical handpiece is preferred to electrical handpiece
- Water spray from handpiece is to be minimised
- Ultrasonic use is to be minimised
- 'Vulnerable' patients are to be seen first thing in the morning
- Air purifiers units are to be on at all times during the work day

These steps, combined with four-handed dentistry, Air purifying Units, and HVE will minimise the risk of infectious aerosols. Staff are to wear proper PPE and face shields. This protocol is to be followed all patients as we assume everyone is at risk of being an asymptomatic carrier of COVID-19. Patients with symptoms of COVID-19 will not be treated without a separate team meeting in order to properly plan, prepare, and execute an enhanced protocol.

**Table 1: Dental devices and procedures known to produce airborne contamination**

Device and/or procedure	Contamination
Ultrasonic and Sonic Scalers	Considered the greatest source of aerosol contamination; use of a high-volume evacuator will reduce the airborne contamination by more than 95%
Air Polishing	Bacterial counts indicate that airborne contamination is nearly equal to that of ultra-sonic scalers; available HVE will reduce airborne contamination by more than 95%
Air-Water Syringe	Bacterial counts indicate that airborne contamination is nearly equal to that of ultra-sonic scalers; high-volume evacuator will reduce airborne bacteria by nearly 99%
Tooth Preparation with Air Turbine Handpiece	Minimize airborne contamination with rubber dam or other isolation types and HVE
Tooth Preparation with Air Abrasion	Bacterial and viral contamination is unknown; extensive contamination with abrasive particles has been shown

From: Harrel SK, Molinari J. *Aerosols and splatter in dentistry: A brief review of the literature and infection control implications.* J Am Dent Assoc. 2004;135:429-437. [https://jada.ada.org/article/S0002-8177\(14\)61227-7/pdf](https://jada.ada.org/article/S0002-8177(14)61227-7/pdf)

### **Clothing**

Clinical staff are to wear scrubs. Both scrubs and work shoes should be donned and offed at the office. Only freshly laundered clothing donned in the office and not worn outside is permitted in the clinical environment. For each patient a new level 3 isolation gown must be used. Dental Clinic currently has 60 reusable level 3 isolation gowns and plenty of disposable isolation gowns for both staff and patients. Every second day we send out our gowns to be laundered. Clinical shoes are to be stored in air-tight plastic bags and lightly sprayed with isopropyl alcohol prior to donning and after doffing. CDA are to minimise, to almost nil, their entry to the reception or waiting room areas. Movement between the clinical area and the front of the office is to be minimal for everyone.

Disposable and donned gowns are to be worn by DDS and the CDA for treatment appointments. Gowns are to be properly doffed upon the completion of treatment and post-op cleansing of the operatory. Pediatric clients along with parents are completely donned with full PPE.

### **Gowns**

- Reusable gowns are used to minimize waste, at the moment both reusable and disposable gowns are available for all clinical staff and their liberal use is encouraged
- Disposable and reusable gowns are to be worn for each treatment appointment
- Are to be properly doffed upon the completion of treatment and post-op cleansing of the operatory
- Used gowns are to be put directly into the clinical waste bin without haste

## Personal Protective Equipment (PPE)

Table 2: Use of Personal Protective Equipment (PPE) for Coronavirus Disease 2019 (COVID-19)\*

Setting	Staff or Patients	Procedure/Activity	Required PPE
Operator	Dentist/ Assistant/ Hygienist	<u>Low risk</u> Non-aerosol-generating medical procedures (NAGMP)	<ul style="list-style-type: none"> <li>• Level 2 or 3 mask</li> <li>• Face shield or appropriate protective eyewear</li> <li>• Scrubs</li> <li>• Gloves</li> <li>• Lab coat or gown if contact with patient</li> </ul>
		<u>Moderate and High risk</u> Aerosol-generating medical procedures (AGMP)  <b>High risk patients should not be treated in a general dental office</b>	<ul style="list-style-type: none"> <li>• N95 or equivalent respirator (fitted), with appropriate protective eyewear or, a Level 3 mask and Face shield</li> <li>• Scrubs</li> <li>• Cap/bouffant</li> <li>• Lab coat (with cuff) or gown</li> <li>• Gloves</li> </ul>
	Disinfecting operator for all procedures	Follow ADA&C IPC Standards	<ul style="list-style-type: none"> <li>• Level 1 mask minimum</li> <li>• Appropriate protective eyewear</li> <li>• Gloves</li> </ul>
Reception	Front office staff	Arrival screening	<ul style="list-style-type: none"> <li>• Level 1 mask minimum or Plexiglas separation</li> <li>• Appropriate protective eyewear</li> <li>• Scrubs</li> </ul>

\* Adapted from World Health Organization. "Rational use of Personal Protective Equipment for Coronavirus Disease 2019 (COVID-19)." February 27th, 2020: 1-7.

### Masks

- Health Canada has expanded equivalent alternate standards including non-medical N95 respirators, commercial-grade N95 respirators, and respirators approved under standards used in other countries that are similar to NIOSH-approved N95 respirators. See Government of Canada, Optimizing the use of masks and respirators during the COVID-19 outbreak, <https://www.canada.ca/en/health-canada/services/drugs-healthproducts/medicaldevices/masks-respirators-covid19.html#a4>
- There is evidence a Level 3 mask with a face shield is equivalent to a fitted N95 mask. See: Radonovich LJ Jr, Simberkoff MS, Bessesen MT, Brown AC, Cummings DAT, Gaydos CA, Los JG, Krosche AE, Gibert CL, Gorse GJ, Nyquist AC, Reich NG, Rodriguez-Barradas MC, Price CS, Perl TM. N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel: A Randomized Clinical Trial. JAMA. 2019 Sep 3;322(9):824-833. doi: 10.1001/jama.2019.11645.
- Counterfeit masks/respirators are an increasing problem. For information on verifying the authenticity of a mask, see: <https://www.cdc.gov/niosh/npptl/usernotices/counterfeitResp.html>
- Respirator masks are available for all clinical staff and are to be used during treatment
- Respirator masks are to be stored in air-tight plastic bags in a closed cupboard
  - Isopropyl alcohol is to be sprayed on the mask when storing and removing from storage
  - A cut section of a Level 1 or 2 mask is to be fitted into the respiratory to ensure exhalation is filtered too
- Level 3 masks are sufficient for examination but a face shield is encouraged as is the use of the HVE

### ***Clearing the Air (of Aerosols)***

Lightly fogging the operatories with hypochlorous acid via sprayer, spray bottles and humidifiers used as an adjunct procedure after each patient.

- Air purifying units in the operatories are to be on at all times during the day while considering
- Aerosol generation will be minimised and use of the HVE units is encouraged
- Aerosol contaminants are removed in the following ways:
  - Those that settle onto hard surfaces are cleansed
  - Those that land on gowns are eliminated by disposal in Clinical bin.
  - Evacuated or neutralised by Air purifying units, HVE, fresh air flow, and HVAC filtration system

### ***BEFORE THE APPOINTMENT***

Pre-appointment screening, via the telephone or e-mail, is completed

Forms are emailed to patient prior to their appointment, so that they can review protocols and guidelines

- Determine the patient's risk of being infected with COVID-19
- Identify 'vulnerable' people with respect to COVID-19
- Provide information regarding the new COVID-specific procedures and protocols
- Provide the patient with the medical history and COVID questionnaires which are to be completed and signed prior to an appointment being booked.

### ***Determining Patient COVID-19 Risk***

All patients are to be screened at least twice; once over by telephone and possibly e-mail and again upon arrival to the office. Below are typical screening questions:

1. Do you have a fever or have felt hot or feverish anytime in the last 14-21 days?
2. Do you have any of the following symptoms?
  - New cough or worsening cough
  - New shortness of breath or worsening shortness of breath
  - Recent difficulties with breathing
  - Sore throat or painful swallowing
  - Flu-like symptoms or a runny nose
  - Recent diarrhea
3. Have you experienced a recent loss of smell or taste?
4. Have you been in contact with anyone confirmed to have COVID-19, or a person self-isolating because of a possible risk for COVID-19?
5. Have you returned from travel outside of Canada in the last 14 days?
6. Have you returned from travel within Canada from a location known affected with COVID-19 in the last 14 days?
7. Is your workplace considered high risk (i.e. routine close contact with many people, old folks home, meat packing plant, etc...)?

Table 3 shows the risk of a COVID-19 infection based on "yes" answers to the questions above. Appropriate clinical judgment must be used to carefully assess each individual and their particular situation.

**Table 3: COVID-19 Risk Level from Screening Questionnaire**

COVID-19 Risk Level	Screen Questions Answered "Yes"
COVID-19 Positive	Question: 1
Probable Risk	Questions: 2, 3,4
Moderate Risk	Questions: one of 5, 6 or 7
Low Risk	Questions: None

If patients with a risk level higher than "low" are treated, the following strategies will be considered:

- Defer appointment for a fortnight or more
- End-of-day appointments for higher risk patients
- Morning appointments for examinations and treatment of low risk and 'vulnerable' patients
- Special treatment days for higher risk patients (i.e. fewer appointments with longer intervals)
- Patients with any symptoms or high risk factors require an extensive re-review by DDS and a special staff meeting to confirm the customised and enhanced protocols for any possible appointments

### ***Vulnerable Patients***

The risk of COVID-19 transmission for vulnerable patients can be reduced by scheduling them as first appointment of the day, right after lunch, or on separate days. Some people are more vulnerable to becoming infected and for the infection to have serious consequences:

- Over the age of 65?
- Have any of the following:
  - Heart disease
  - Lung disease
  - Kidney disease
  - Diabetes
  - Any degree of immunocompromised

### ***DURING THE APPOINTMENT***

- Patients are to wait outside the building
- Upon arrival patient must stand on the clearly marked X and call the office to let us know they arrived
- Usher/Clinical staff conduct the following
  - Give patient hand sanitizer
  - Give patient mask to don on
  - Take patient's temperature
  - Ask screening questions
  - Open all doors for patient to enter building
  - Press all buttons for Patient to take the elevator to second floor department
  - Have Patients read and sign consent forms
  - Open door to dental department
  - Usher straight into dental operatory
- Patient only enters the office after Reception staff has confirmed admittance is permitted
- Temperature of patient taken upon entry to office – If no fever present

- Patient is to be provided with Isopropyl alcohol-based hand sanitizer, pair of gloves, and don the mask we provide for them.
  - If temperature is high
- Patient is to leave immediately for medical evaluation
- Re-review screening questions
  - If patient screening indicates “moderate” or “higher” risk, isolate patient and consult with DDS
- Patient to complete and sign the Consent Forms
- Patient informed to respect physical distancing with no handshakes or physical contact
- Patient straight into operatory unless unable then time in waiting room is to be minimised

Before interacting with the patient, the assistants to wash hands and don gloves, mask, face shield, etc...

- Ideally, the patient is taken forthwith towards the operatory
- Mouth rinse of 1.5% Hydrogen peroxide is provided upon entry to the operatory
- Overall medical history and COVID questionnaire re-reviewed
- CDA’s are to limit movement out of the operatory as much as possible

#### ***Upon Completion of Appointment***

- Patient to don their mask and wash hands prior to returning to the front of the office
- Post treatment/estimate summary communicated via Tracker to Reception staff
- Patient is instructed to review pain medication hand-out
- Clean operatory while wearing PPE -First wipe
- Fogging the operatories with hypochlorous acid via sprayer
- Clean operatory while wearing PPE-second wipe 15 minutes later
- Following proper doffing procedures, remove contaminated mask outside operatory
- Then don a new level 1 mask
- A touchless payment method is preferred
- After patient leaves, disinfect all patient contact surfaces, including clothes hangers, door knobs, pens/stylus, etc...

#### ***CLINICAL PRACTICES AND PROTOCOLS***

At all times, staff are encouraged to advise Dental Administrator and DDS if they have any reservations or concerns regarding any and all matters concerning protocols, safety issues, patient care, WorkSafe issues, and the like. There are many variables to consider and a team working together will be more effective than any individual. There is an ongoing need to complete a point-of-care risk assessment prior to providing dental care. Guidelines to consider when providing point-of-care:

- Regulatory Expectations
  - Public Health Alert Level
  - Clinic Attributes
  - Appropriate Clinical Judgment
  - COVID-19 Patient Risk
  - Patient Vulnerability
  - Urgency of Care
  - Planned Procedures
  - Provider and Staff Risk Factors

These guidelines will aid us in assessing the task, the patient, and the environment prior to each patient interaction. DDS is keen to re-review his clinical judgment at any time and encourages all staff to voice any concerns or questions.

### ***Emergent vs. Urgent vs. Non-Urgent Care***

#### **EMERGENCY DENTAL PROCEDURES**

- Oral-facial trauma
- Significant infection
- Prolonged bleeding
- Pain not managed by over-the-counter medications
- Management of known/high risk malignancy

#### **URGENT DENTAL PROCEDURES**

- Conditions that require immediate attention to relieve pain and if left untreated may significantly compromise patient dental health, such as:
  - Severe dental pain from pulpal inflammation
  - Pericoronitis or third-molar pain
  - Surgical post-operative osteitis ○ Dry socket dressing changes
  - Abscess, or bacterial infection resulting in localised pain and swelling
  - Tooth fracture resulting in pain or causing soft tissue trauma
  - Dental trauma with avulsion/luxation
  - Dental treatment required prior to critical medical procedures
  - Final crown/bridge cementation

#### **Other urgent dental care:**

- Active sleep apnea management
- Extensive dental caries or defective restorations causing pain or that can lead to pain
- Suture removal
- Denture adjustment on radiation/oncology patients
- Denture adjustments or repairs when function impeded
- Replacing temporary filling on endo access openings in patients experiencing pain or an endodontically treated tooth with a high fracture potential
- Pre-surgical clearance for medical procedures
- Managing active orthodontic cases

**Non-Urgent Care is any care that is not listed above**