## **Introduction**

## A. Preamble

- This manual is based on the guidelines obtained from:
  - o CDSBC Transitioning Oral Healthcare to Phase 2 of the COVID-19 Response Plan
  - o BCDA Return-to-Practice Office Manual Phase 2 COVID-19 Plan
  - o WorkSafeBC COVID-19 Safety Plan
- Important notes:
  - o All team members must read the CDSBC document fully
  - o All team members must read this policy manual fully
  - o Protocols are augmented to fit our practice specifically
  - o This document is a living document that will updated as necessary
- Contributors:
  - o Dr. Robert Varda
  - Magalie Tremblay (outside consultation)

## **B. Definitions**

- AGP: aerosol-generating procedure
- COVID-19: disease caused by SARS-CoV-2
- COVID-19 form: COVID-19 Screening and Consent form
- HVE: high volume evacuation
- OHCP: oral health care provider
- PPE: personal protective equipment
- SARS-CoV-2: severe acute respiratory syndrome coronavirus 2

# I. Staff Protocols related to COVID-19

#### A. COVID-19 Awareness

- Purpose:
  - Staff should be aware of the biology of the SARS-CoV-2 virus
  - Staff should be aware of the local epidemiology of the SARS-CoV-2 virus
  - o Staff should understand the risk of infection of disease
  - Staff should have and be able to maintain a safe work environment
  - $\circ$  Staff should be able to raise safety concerns and have them addressed

## - Biology of SARS-CoV-2:

- SARS-CoV-2 is a novel coronavirus that causes the disease COVID-19
- Incubation & latent symptoms
  - The incubation period is on average 5-6 days, but can be up to 14 days with or without symptoms
  - During the asymptomatic period some infected persons may be contagious
- Transmission of COVID-19 is primarily via:
  - Direct contact with infected persons
  - Close contact through respiratory droplets
  - Indirect exposure through contact with contaminated objects and surfaces
- Typical symptoms on COVID-19 include:
  - Dry cough

- Sore throat
- Shortness of breath
- Headache
- Fever
- Runny nose/post-nasal drip

## - Local epidemiology of SARS-CoV-2:

• Staff can access the latest epidemiology in British Columbia from the BCCDC at http://www.bccdc.ca/health-info/diseases-conditions/covid-19/data

## - Risk of infection of disease:

- COVID-19 is understood to be highly infective and easily transmissible
- Risk of transmission increases with proximity and exposure time
- Until the pandemic recedes, effective therapy is available, or a vaccine is developed and administered to the vast majority of the population, COVID-19 remains a risk for everyone, especially vulnerable populations
- Staff should

## - Safe work environment:

- The dental office has been numerous changes detailed within this manual to maintain a safe environment
- Staff will be oriented to workplace modifications and new office policies and protocols
- Staff will receive training on safe work procedures including the risks and symptoms of COVID-19, appropriate use of PPE, and safe handling of cleaning supplies
- Staff should be prepared to adopt infection prevention measures wholeheartedly

## - Ability to raise safety concerns:

- Edgemont Dental Care runs under the principle that we operate as a team with each member holding equal importance
- Staff can, and are encouraged, to raise safety concerns to the dental care team

## **B. Dental-specific Risks: Lack of Physical Distancing**

- Purpose:
  - To understand the principle behind physical distancing in the prevention of disease transmission
  - To understand the inability of maintain physical distancing during the provision of dental care

## - Physical distancing

- The logic behind physical distancing is to prevent the transmission of disease
- The six feet distance is based on the range of droplets expressed during talking
- Inability to maintain physical distancing in dentistry
  - As physical distancing cannot be maintain during the provision of dental care, appropriate PPE must be worn as detailed later in this manual

## C. Dental-specific Risks: Splatter and Aerosols

- Purpose:
  - $\circ$  To understand the infection potential of splatter and aerosols in dentistry.
  - Splatter is made of larger particles and droplets that fall quite quickly.
    - Credible scientific evidence shows that SARS-CoV-2 is very contagious with droplets.
    - Uncontrolled splatter spreads easily onto the patient, practitioner, and operatory
    - This splatter is easily transported, especially on clothing, to other areas of the office

- Aerosols are tiny droplets and particles that can float in the air for a10-180 minutes depending on the ventilation of the office.
  - Dental aerosols are generated during dental procedures that utilize ultrasonic scaler, rotary handpiece, triplex syringe, or air abrasion units
- If these procedures are required, they must be performed with measures to mitigate the impact of aerosols

#### - Protocol:

- Screening patients for COVID-19
- For many procedures, potentially infectious aerosols may be minimized using:
  - 1% hydrogen peroxide (H2O2) for 60s.
  - Rubber dam
  - Swab exposed procedure area with H2O2 prior to beginning treatment
  - High volume evacuation
- Use of appropriate PPE

## **D. Street and Work Attire**

- **Purpose:** 
  - To reduce the risk of person-to-person disease transmission
- Protocol:
  - Morning:
    - Arrive in clean scrubs and street shoes
    - Change into work shoes
    - Street clothes and shoes can be stored in staff room
  - Evening:
    - Team members must change into street clothes and shoes before leaving
    - Work shoes can be stored in operatories?
    - Work clothes should be bagged and laundered at home

## **E. Daily Staff Screening**

**Purpose:** 

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- $\circ$  To reduce the risk of person-to-person disease transmission
- Protocol:
  - The health of the staff is paramount and must be monitored
  - Staff must self-assess for symptoms including: dry cough, shortness of breath, fever, or any other flu-like symptom
  - o Temperature should be assessed twice a day

## F. OHCP Illness Protocol

- Purpose:
  - $\circ$  To reduce the risk of person-to-person disease transmission
  - According to the PHO/CDSBC guidelines, no OHCP should work will exhibiting symptoms of illness
- Protocol:
  - $\circ~$  If a staff member is exhibiting symptoms of COVID-19 at home:
    - Inform the office and do not come to work
    - Contact 811 to arrange for further guidance
  - If a staff member is exhibiting symptoms of COVID-19 at work:
    - Immediately perform hand hygiene

- Do not remove mask
- Inform the office
- Leave as soon as it is safe to do so
- Contact 811 to arrange for further guidance
- If a staff member is exposed to someone with COVID-19:
  - Inform the office and do not come to work
  - Self-isolate for 14 days and monitor for symptoms
  - Contact 811 to arrange for further guidance

## **G. OHCP Foreign Travel Protocol**

- Purpose:
  - $\circ$  To reduce the risk of person-to-person disease transmission
- Protocol:
  - If a staff member has travelled outside of Canada:
    - Inform the office and do not come to work
    - Self-isolate for 14 days and monitor for symptoms

## H. Hand Hygiene

- **Purpose:** 
  - To reduce the risk of person-to-person disease transmission
  - Strict staff hand hygiene is of paramount importance
- Protocol:
  - Staff must wash or disinfect hands thoroughly (refer to How to wash hands sign)
  - Hand hygiene is to be performed:
    - 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
  - Locations:
    - Staff room
    - Clinic
    - Steri-center
    - Washroom
    - Mechanical room

# **III. Office Changes related to COVID-19**

#### A. Risk Assessment

- Purpose:
  - $\circ$  To identify areas where people gather and bare-hand touch-points

#### - Identification of gathering locations:

- Reception
- Staff room
- Steri-center

## - Identification of areas of bare-hand touch-points:

- Reception
- Staff room

o Washroom

#### - Control measures for maintaining physical distancing:

- o Reduced patient flow
  - No double-booking in dentist column
  - 20 minute gaps between appointments
- Elimination of:
  - Sterilization assistant position
  - Sales rep visits

## - Maximum Office Capacity:

- Five staff members
- o Four patients

## - Signage:

- Information signs are important to convey key guidelines
- We have intentionally limited our signage to the bare minimum in terms of wording and number of signs to maintain clarity and focus
- Numerous studies suggest that signs with verbose wording, or excessive number of signs, overwhelm the reader resulting in general disregard

## **B. Reception Changes**

## **Physical Changes**

- De-clutter environment
  - Remove all unnecessary potential touch-points, including: magazines, toys, beverages, advertising
- Added equipment:
  - COVID-19 Screening and Consent form station
    - Location: waiting room screening table
    - Contents: thermometer, COVID-19 screening forms
  - Front desk:
    - Plexi-glass barrier
    - Hand sanitizer at POS device
    - Disinfectant wipes container
- Signage
  - o Front door sign
    - Location: front door
    - Statement: "Please knock and await permission to enter. Thank you for your understanding."
  - Cough etiquette sign
    - Location: waiting room screening station
    - Statement: cough etiquette
  - Floor signs
    - Location: front desk (green line), hallway (green X)
    - Statement: standing positions
  - Chairs signs
    - Location: every other chair
    - Statement: "Please do not use this chair. Thank you."
- Seating
  - Goal is no visitors loitering/sitting in reception area
  - Limiting seating (2 out of 5 chairs) for exceptional circumstances only

#### **Infection control**

- Task: disinfect door handles, light switches, countertop, pen, point of sale machine, keyboard, mouse, chairs, thermometer, plexi-glass barrier
- Frequency: hourly or after every patient
- Provider: admin

#### **Maximum Occupancy**

- Three

## C. Staff room

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#### Physical changes

- Added equipment:
  - Disinfectant wipes container
- Signage:
  - Physical distance sign
    - Location: corkboard
    - Statement: "Maintain physical distance"
  - o Hand-washing sign
    - Location: sink
    - Statement: "How to wash hands"

#### **Infection Control**

- Task: disinfect door handles, light switch, countertop, faucet, table, chair
- Frequency: after use
- Provider: person that used room

#### **Maximum Occupancy**

- Two

#### **D. Server Room Changes**

#### **Physical changes**

- Added equipment:
  - Disinfectant wipes container

#### **Infection Control**

- Task: disinfect door handle, light switch, desktop
- Frequency: after use
- Provider: person that used room

#### **Maximum Occupancy**

- One

#### E. Washroom Changes

#### **Physical Changes**

- Added equipment:
  - Disinfectant wipes container
- Signage:
  - Hand-washing protocol
    - Location: sink
    - Statement"Employees only"

## **Infection Control**

- Washroom (staff use only)
  - Task: wipe down faucet, light switch, door handles
  - Frequency: after use
  - Provider: person that used washroom

#### **Maximum Occupancy**

- One

## F. Dentist Office

#### **Physical Changes**

- None

## **Infection Control**

- Task: disinfect door handle, light switch, desktop, keyboard, mouse

## **Maximum Occupancy**

- Two

## **G.** Clinic Changes

## **Physical Changes**

- De-clutter environment
  - Remove all paper/objects from countertop
  - Stored mirror, remote control, headphones, headrest pillow
- Added equipment:
  - Dentsply PureVac HVE in hygiene operatories
    - No ultrasonics scalers without use of PureVac HVE
  - Bottle water system in rear delivery units in all operatories
    - Allows better cleaning of DUWL
  - Surgically Clean Air Jade (SCA5000C) unit per operatory (144-294 CFM)
  - 1.5% hydrogen peroxide container
  - Hand-sanitizer spray bottles
  - Laundry bins
- Signage
  - Infection Control posters detailing steps including doffing PPE, cleaning, disinfection, and sterilization (see Appendix 1)

## **Infection control**

- Task: see Section VI L-P
- Frequency: after every patient
- Provider: OHCP

#### Maximum occupancy

- Eight to nine

## **H. Mechanical Room Changes**

## **Physical Changes**

- Complete renovation (pending)
- DentalEZ MC-202 Barracuda
  - Double horsepower of outgoing unit
- LG washer/dryer combo (pending)
- Signage:

- Hand-washing protocol
  - Location: sink
  - Statement: How to wash hands

## **Infection Control**

- Task: wipe down faucet, light switch, door handles, table, chair
- Frequency: after use
- Provider: person that used staff room

## Maximum occupancy

- Two

## **<u>I. HVAC</u>** (in progress)

- Building management to assess HVAC and upgrade to MERV 13 filters
- Discussion made of HVAC germicidal UV unit

# IV. Personal Protective Equipment (PPE)

- **Purpose:** 
  - To prevent disease transmission as physical distancing cannot be maintained
- General office protocol:
  - Reception: Level 1 surgical mask and eyewear OR behind plexi-glass shield
  - Staff room/Server room/Dr. Varda's office: mask and eyewear are optional
  - Clinic proper: Level 3 surgical mask and safety glasses should be worn at all times

## - Non-aerosolized procedure protocol:

- Procedures: screening, exams
- PPE required:
  - Level 3 surgical mask
  - Safety glasses/Loupes
  - Gloves

## - Aerosolized procedure protocol:

- Procedures: everything else
- PPE required:
  - Level 3 surgical mask
  - Safety glasses/Loupes
  - Gloves
  - Face-shield
  - Gown

# V. Pre-appointment Screening

## A. Reminder Call Screening

- Purpose:
  - Screening is the most effective way of protecting our patients and dental team.
- Protocol:

- Statement: "Screening is the most effective way of protecting our patients and dental team. So I will be asking you several questions."
- Screening questions:
  - Are you aware you are COVID-19 positive or are you waiting for a test result?
  - Have you had contact with someone with COVID-19?
  - Have you been asked to self-isolate?
  - Have you experienced symptoms such as dry cough, shortness of breath, fever, loss of smell or taste, or any other symptoms?
  - Have you travelled outside of British Columbia within the last 14 days?
  - Is your workplace considered at high-risk (e.g. hospital or care-home)?
- Vulnerability screening questions:
  - Are you over age 70?
  - Do you have any of the following conditions, including: serious cardiovascular disease (heart attack, stroke), serious respiratory disease (moderate/severe asthma, COPD, etc.), uncontrolled diabetes, immunocompromised conditions, kidney disease, or liver disease
- Decision tree:
  - If no concerns, maintain scheduled appointment
  - If there are concerns, reschedule appointment accordingly

## - Provider:

• Admin (CDA, RDH, if needed)

## **B. COVID-19 Screening and Consent Form**

- Purpose:
  - Screening is the most effective way of protecting our patients and dental team.
  - Consent is required due to risk of nosocomial infection
- Protocol:
  - COVID-19 Screening and Consent Form (Google Form) link will be sent via Intiveo
  - o Patients are to complete form prior to their dental appointment

# VI. Streamlined Patient Flow Protocol

#### A. Altered Scheduling

- Purpose:
  - To reduce the risk of person-to-person disease transmission
- Protocol:
  - Schedule must reflect extra needed for infection control procedures
  - Consider specialized time (first appointment in the morning) for at risk patients (elderly, immunocompromised)
- Provider:
  - o Admin

## **B. Setup of Operatory**

- Purpose:
  - Setup equipment and sundries for procedure
  - Ensure all needed supplies are placed on countertop to limit opening of drawers/cabinets

#### - Protocol:

- Setup equipment and sundries as needed for procedure
- COVID-19 amendments
  - Prepare 1/4 dixie cup of 1.5% hydrogen peroxide by sink
  - Alcohol-based hand sanitizer spray bottle

## - Provider:

o OHCP

## - Anticipated issues:

o None

## **<u>C. Controlled Guest Entry</u>**

- **Purpose:** 
  - $\circ$  To reduce the risk of person-to-person disease transmission
  - To limit entry of patients into the office to maintain social distancing

## - Protocol:

- o OHCP presents wearing mask, safety glasses, gloves and waits behind screening station
- o Patient reads front door sign and knocks on door
- OHCP gesturing for the patient to open the door and greets patient
  - Patient advocates must wait outside, unless they have office business
- Temperature screening:
  - Statement: "As part our screening process, I will be taking your temperature using a touchless forehead thermometer."
  - Screening decision tree:
    - If temp <37.5C, proceed to operatory sink for mouth-rinse
    - If temp >37.5C, patient must leave office immediately and call 811

## Provider:

o OHCP

#### - Anticipated issues:

• If OHCP not ready, admin acknowledges guest by raising hand in stop motion to acknowledge patient not to come in

## **D.** Operatory Step #1: Mouthrinse

- Purpose:
  - To reduce viral/bacterial load of oral cavity and pharynx.
- Protocol:
  - Statement: "Next we will have you rinse with hydrogen peroxide. This rinse helps reduce the viral load in the mouth. Please gargle for 60 seconds and spit back into the cup. Sorry about the taste."
  - o Patient rinses/gargles for 60 seconds and spits rinse back into cup
  - Patient then pours cup into drain and discards cup into waste bin
- Provider:
  - o OHCP

#### E Operatory Step #2: Hand-Sanitizer

#### - Purpose:

• Hand hygiene is the single most important means to prevent COVID-19 infection.

## - Protocol:

- Spray hand-sanitizer into patient's hands
- o Instruct patient to rub hands together to cover all surfaces of their hands
- Ask patient to sit

## - Provider:

o OHCP

## F. Operatory Step #3: Review COVID-19 Screening and Consent Form

## **Purpose:**

- Screening is the most effective way of protecting our patients and dental team.
- Consent is required due to risk of nosocomial infection

## Protocol:

- Check COVID-19 Data spreadsheet to verify completion of form
  - If complete, review answers
  - If not complete, provide patient with COVID-19 form
- Ask patient if they have had any changes in their health in the past 24 hours
- Decision tree:
  - If no concerns, proceed with appointment
  - If there are concerns, reschedule appointment accordingly

## - Provider:

o OHCP

## G. Don PPE

- **Purpose:** 
  - To prevent infection of team members as social distancing cannot be maintained
- Protocol:
  - At this stage, OHCP would be wearing mask, safety glasses, and gloves
  - Don additional PPE if needed for procedure (non-AGP vs. AGP)
    Perform donning in clinic hallway
  - Once COVID-19 form complete, take form out of clipboard and leave clipboard/pen on countertop
  - Place COVID-19 form into plastic folder
- Provider:
  - o OHCP
- Anticipated issues:
  - Don't forget to place COVID-19 form into plastic folder

## H. Perform Procedure

- **Purpose:** 
  - To provide dental treatment while reducing risk of aerosols
- Protocol:
  - Use rubber dam and HVE whenever possible

- Perform procedure
- Limit aerosols, if possible
- Ensure all drawers/cabinets are fully closed (limit opening and closing)
- Cannot leave operatory during/after an AGP until PPE is removed!

#### - Provider:

o OHCP

## **I. Interruptions**

- Purpose:
  - To manage interruptions during an AGP procedure
  - o Best attempt should be made to perform recall exams before restorative procedures start

#### - Protocol:

- Step into clinic hallway
- Remove face-shield by lifting from the shield itself (not the head-band)
- Remove gloves
- Perform hand hygiene
- Remove gown
- Hang up gown
- Perform hand hygiene
- At this stage, you still have on eyewear and mask

## - Provider:

- o OHCP
- Anticipated issues:
  - Time constraints

#### J. Dismissal of Patient from Operatory

- **Purpose:** 
  - Enter completed treatment into practice management software
  - To reduce time spent in the waiting room
- Protocol:
  - Statement: "Treatment has been complete. Give me a moment to enter the completed treatment into the computer"
  - Enter completed treatment into Cleardent
  - Schedule next recall
  - Patient will be dismissed from operatory and asked to proceed un-escorted to the hand-sanitizer station (X)
  - OHCP stays in operatory
- Provider:
  - o OHCP
- Anticipated issues:
  - Other patient at hand-sanitizer station

#### K. Checkout at Front Desk

#### - Purpose:

• To collect payment and schedule appointments.

#### - Protocol:

- Collect payment via electronic means (POS, phone, or CC on file)
  - Cash is not acceptable
  - Cheques are discouraged
- o Schedule next restorative appointment

#### - Provider:

o Admin

#### - Anticipated issues:

- Crowded waiting room
- Interruptions, per usual (consider going non-assignment to relieve admin)

#### L. Cleaning of Operatory

**Purpose:** 

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- To perform cleaning of operatory
- To conserve PPE

#### - Protocol:

- Keep all PPE on
- Place all instruments into cassette
- Place all spent sundries into headrest cover
- Leave all reusable sundries on countertop
- Perform cleaning of operatory using HOCl and paper towel

#### - Provider:

- o OHCP
- Anticipated issues:
  - HOCl may potentially damage upholstery

#### M. Doff PPE

- **Purpose:** 
  - To remove contaminated PPE in a safe manner.
  - Note: Doffing PPE is the single most likely time for exposure.

#### - Protocol:

- Step into clinic hallway
- Remove face-shield by lifting from the shield itself (not the head-band)
- o Remove gloves
- Perform hand hygiene
- Remove gown pulling gown away from you and rolling into a ball
- Place gown on top of instrument cassette
- Perform hand hygiene
- Remove loupes & don safety glasses
- Put on gloves
- Provider

- o OHCP
- Anticipated issues:
  - o Inside of gown sleeves are contaminated

#### **N. Instrument Sterilization**

- **Purpose:** 
  - To sterilize instruments and cassettes

#### - Protocol:

- o Take instrument cassette, headrest cover, and gown to sterii-center
- Discard headrest cover into waste bin
- Discard gown into laundry bin
- Perform sterilization
- Remove gloves
- Perform hand hygiene
- Provider:
  - o OHCP
- Anticipated issues:
  - o None

#### **O. Disinfection of Operatory and Reprocessing PPE**

- **Purpose:** 
  - To disinfect operatory
  - To reprocess reusable PPE

#### - Protocol:

- Return to operatory after 10 minutes
- Put on gloves
- Use disinfectant wipes to clean:
  - Reusable sundries (then store)
  - HOCl mister
  - Chair, delivery unit, countertops, cabinets, etc.
- Face-shield reprocessing:
  - Use 70% isopropyl alcohol spray

#### - Provider:

o OHCP

#### - Anticipated issues:

- Unclear scientific evidence regarding time required to clear aerosols
- Note: 10 minutes is based on SCA Jade purifying air at 250CFM in 4 minutes

#### P. Laundering of Gowns

- Purpose:
  - To laundry soiled gowns
  - o Gowns will be placed into washer/dryer every evening
- Protocol:

- Wear level 3 surgical mask, safety glasses, and gloves
- o Take laundry bin into mechanical room
- Load gowns into washer/dryer
- Load soap
- Set to "Wash + Dry" cycle
- Provider:
  - o OHCP
- Anticipated issues:
  - May forget to perform, but there are plenty of extra gowns

## **VII. Other Considerations**

#### **A. Receiving Deliveries**

- Purpose:
  - $\circ$  To reduce the risk of person-to-person disease transmission
  - o To minimize transmission risk when receiving deliveries
- Protocol:
  - Consider screening delivery personnel
  - o Deliveries should be left in the hallway or waiting room
  - Wear gloves when handling mail or packages
  - Sanitize exterior of deliveries
  - o Sanitize all surfaces that were touched by delivery items

#### **B. External Service Providers**

- Purpose:
  - To reduce the risk of person-to-person disease transmission
- Protocol:
  - Screen external service providers
  - External services providers must wear PPE

# **Appendix I: Infection Control Protocol**

- 1) Place all instruments into cassette
- 2) Place all disposables into headrest cover
- 3) Perform cleaning of operatory
- 4) Remove face-shield
- 5) Remove gloves
- 6) Perform hand hygiene
- 7) Remove gown, roll into ball, place on cassette
- 8) Perform hand hygiene
- 9) Remove loupes & don safety glasses
- 10) Put on gloves
- 11) Take cassette, headrest cover & gown to steri-center
- 12) Discard headrest cover into bin & gown into laundry
- 13) Perform sterilization
- 14) Remove gloves
- 15) Put on gloves
- 16) Perform disinfection of operatory
- 17) Remove gloves
- 18) Perform hand hygiene

# Appendix II: COVID-19 Screening/Consent Form

Note: Could be added directly to this manual due to header/footer format.