Fairview Dental Centre

1190 West 8th Avenue Vancouver, BC V6H 3Z5 (604)-736-3545

Covid-19 Safety Manual

June 2020

STAKEHOLDERS

Internal

All Staff, Dentists and Hygienists.

External

All Patients, trades and sales that enter the office spaces.

OVERVIEW

This document is the process manual for Fairview Dental Centre pertaining to enhanced actions against potential spread and infection of Covid-19. This manual is to be used in addition to standard infection and prevention control guidelines.

CDSBC Infection and Prevention Control Guidelines

https://www.cdsbc.org/CDSBCPublicLibrary/Infection-Prevention-and-Control-Guidelines.pdf

Additional Resources

BCDA Return to Practice Office Manual

https://bcdental.us4.list-manage.com/track/click?u=c588b11e9028d39245564a508&id=5d3b78f7 11&e=8734103c4f

BCCDC PPE Recommendations

 $\underline{\text{http://www.bccdc.ca/health-professionals/clinical-resources/covid-19-care/infection-control/personal-protective-equipment}$

BCCDC - COVID-19: Infection Prevent and Control Guidance for Community - Based Allied Health Care Providers in Clinic Settings

http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19_IPCGuidelinesCommunityBasedAlliedHCPsClinicSettings.pdf

WorkSafeBC - Health Professionals: Protocols for Returning to Operation https://www.worksafebc.com/en/about-us/covid-19-updates/covid-19-returning-safe-operation/he alth-professionals

INFECTION CONTROL

All the modifications for dentistry are based on reducing the risk of spreading infection from pre-appointment triage to physical distancing to personal protective equipment (PPE). The COVID-19 illness is especially challenging because infected people may not have any symptoms and do not know they are infected. For this reason PPE measures must be followed in full because each works together with the others to reduce the risk of the spread of infection.

The infection control measures are presented as follows:

- Office preparation
- Staff preparation
- Before the appointment
- During the appointment
- Clinical practices and protocols

Office Preparation

The following protocols are to be observed until public health officials declare physical distancing and other measures are no longer required.

Reception and Waiting Area

- Minimize contact and maintain social distancing among staff and patients
 - Plexiglass has been installed as a physical barrier in reception and waiting areas
 - Seating in waiting room area has been minimized and all shared items removed
 - o Patients are encouraged to stay outside prior to appointment
 - Patient accompaniment is not allowed at this time unless necessary
 - o Patient check in and check out process limited to one person in the area at a time
 - o Only one staff member allowed to have lunch at a time due to space
- Staff sharing of stationary and workstations is discouraged

- Desktops and exposed surfaces to be decluttered, stationary and other equipment should be kept in drawers whenever possible.
- Clean and disinfect surfaces with detergent or soap and water if visibly soiled, then
 proceed with disinfection. Disinfect frequently touched surfaces including chairs, tables,
 door handles, light switches, clothes hangers, bathrooms and fixtures, staffroom surfaces,
 lab areas etc.
- Hand washing instructions posted and ensure adequate supply of soap and disposable towels
- Post clear signage on entrance door, waiting room, reception, operatories and washrooms regarding physical distancing, hand hygiene, respiratory etiquette etc.
- Alcohol hand sanitizer at entrance for patients to use before entering any further, and bottles of the hand sanitizer also on both reception desks so that patients will use it after coming back out from operatories just before they do the administrative paperwork and payments.

Clinical Areas

- Sterilization room to be cleaned regularly with appropriate PPE
- Only patients and necessary attendants allowed in clinical areas

Common Staff Areas

- Encourage physical distancing
- Disinfect touch surfaces often

Receiving Deliveries

Minimize transmission risk with procedures such as:

- Consider wearing gloves when collecting and/or accepting mail or packages
- Screen delivery personnel
- Consider sanitizing the exterior of boxes delivered
- Consider sanitizing all surfaces that were touched by delivery items

Related Appendices:

Appendix A - BCCDC Coronavirus Prevention Poster

Appendix B - BCCDC Physical Distancing Poster

Appendix C - BCCDC Surgical Mask Removal Poster

Appendix D - BCCDC Handwashing Poster

Appendix E - BCCDC Environmental Cleaning and Disinfectant Poster

Appendix F - CDSBC Infection Prevention and Control Poster

Staff Preparation

The post-COVID-19 dental office is not the same as the pre-COVID-19 dental office. Staff need to understand the risk of infection and disease and feel that they are working in a safe environment. 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. The dental office has changed, and dental office staff should be prepared to adopt infection prevention measures wholeheartedly.

Before resuming work, staff must be oriented to workplace modifications and new office policies and protocols. They must also receive training on safe work procedures including the risks and symptoms of COVID-19, appropriate use of PPE, and safe handling of cleaning supplies.

There should also be a process in place whereby staff can raise safety concerns and have them addressed. This point person could be the dentist, office manager or another employee assigned the role of worker health and safety rep.

Daily Staff Screening

The health of the dental office staff is paramount and must be monitored for the continued health of the dental team. Daily staff screening focuses on this principle and includes a daily log confirming that they are not experiencing and symptoms of COVID-19.

Related Appendices:

Appendix G - FDC Return to Work Screening Form

Appendix H - FDC Staff Daily Screening Form

Hand Hygiene

Strict hand hygiene is of paramount importance. 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 depending on the procedure, following established PPE protocols

Splatter and Aerosols

Dentistry is potentially challenged in infection control because so many procedures create splatter and aerosols. Splatter is made of larger particles and droplets that fall quite quickly. Aerosols are tiny droplets and particles that can float in the air for a longer time. Eventually, these tiny droplets settle or are cleared from the air. The time settling or clearing depends on the ventilation of the office.

Splatter

Covidence controlling splatter, particularly splatter that includes saliva, is extremely important in preventing Covidence shows that SARS-Cov-2 is very contagious with droplets. Uncontrolled splatter "gets everywhere" - on the patient's face and clothes, on the dentist's or hygienist's face, hands, sleeves, clothing and on the floor. This splatter is easily transported, especially on clothing, to other areas of the office, including washrooms, front desk, break room etc. This is one way the virus spreads and infects people. Evidence is beginning to show that healthcare workers are becoming infected not in the procedure room, but outside of the procedure room. When outside the treatment areas, safety measures such as plexiglass barriers and/or PPE as specified in the CDSBC's guidelines should be in place. During the COVID-19 pandemic, splatter must be minimized through the choice of procedures, and any splatter must be controlled with high volume evacuation (HVE) and careful handling of splattered PPE, clothing and surfaces. Absolute care is needed to ensure any splatter is not carried outside the procedure area. Splatter is the most common infectious risk in the dental office with an infectious virus.

Aerosol Generating Procedures (AGPs)

Dental aerosols are generated with many procedures, as shown in Table 1. Aerosols that may contain SARS-Cov-2 from an infected patient occur when saliva is aerosolized along with products of the procedure. This occurs with aerosol procedures, from the use of an ultrasonic scaler, rotary handpiece, triplex syringe, or air abrasion unit, where the saliva cannot be prevented from entering the procedure area and becoming aerosolized. If these procedures are required, they must be performed with measures to mitigate the impact of aerosols.

For many procedures, potentially infectious aerosols may be minimized with the following steps:

- Have the patient rinse with 1% hydrogen peroxide (H2O2) for 60 seconds
- Apply a sealed rubber dam to isolate the procedure area, then swab exposed procedure area with H2)2 prior to beginning treatment
- Use of HVE

When the above steps are followed, and the treatment proceeds with use of high-speed instruments and other aerosolizing procedures, the aerosols created will only contain tooth debris and no infectious saliva, minimizing the risk of infectious aerosols. Using HVE will minimize risk of infectious aerosols and is expected to be suitable for patients in the low risk category for COVID-10. Research is currently underway to quantify the risks of this approach.

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 suction devices 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 High Speed Handpiece	Minimal airborne contamination if a rubber dam is used
Tooth Preparation with Air Abrasion	Bacterial contamination is unknown; extensive contamination with abrasive particles has been shown

Clothing and Office Environment

In the highly infective COVID-19 environment, all dental office staff should be wearing scrubs at work. Scrubs and shoes should only be worn in the office and should be put on when entering the office at the start of the day and removed at the office at the end of the day. In addition:

- Movement between the clinical area and the front office should be minimized
- In clinical areas:
 - Keep surfaces clear of items as much as possible
 - Cover keyboards, computer mice etc. with clear plastic barriers and change between patients
 - Minimize paperwork. Cover paper charts with clear barriers

Clearing the Air (of Aerosols)

Research is ongoing with respect to transmission of COVID-19 through dentally generated aerosols and as information becomes available, it will be incorporated into this manual. If air can have contaminants in it following a dental procedure, how does it become safe again?

Aerosol contaminants are removed in the following ways:

- 1. They settle out of the air and land on surfaces, including clothing
- 2. They are evacuated and either removed from the space completely, by air exchange

The air changes per hour (ACH) in a space can be affected by many factors including the physical layout of the office, the ventilation systems, the height of the ceiling and the presence of windows that can be opened etc. ACH in a dental office can be determined by HVAC/ventilation professionals and can be modified if needed. Because our office does not have an existing HVAC system and relies only on radiant heating, Fairview Dental Centre has installed an air filtration system that will be operating at 1200 cu ft/min (300 cu ft/min per operatory) to help in ACH.

Refer to the guidance from the CDSBC on aerosol management. Avoid AGP when possible and reduce aerosols at source with HVE.

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is a key line of defence for dental office staff in preventing infection. In a pandemic environment, all dental office staff should be using the appropriate PPE. The necessary PPE is indicated by the CDSBC, BCCDC and Worksafe BC and it is based on the dental care being provided, or functional task in the dental office (e.g. reception, room cleaning, etc). It is also based on the risk level for the patient as determined by the pre-appointment and appointment arrival screening questionnaires. Table 2 provides a general guide for PPE in the dental office.

It is important to remember that dentists, assistants and hygienists must still follow all standard precautions as outlined in the CDSBC's Infection Prevention and Control Guidelines. Any additional measures, specific to COVID-19 are supplemental to these requirements.

According to the BCCDC, "Where there is low incidence and prevalence of COVID-19, additional PPE over and above that required for normal precautions is not recommended". This assumes the patient also screens negative for COVID-19 risk.

Enhanced precautions, such as a fit-tested N95 respirator, goggles/face shield, and gown are only required for AGPs on patients with suspected or confirmed COVID-19. (However, these high-risk cases would most likely not be treated in a typical community dental practice.)

Appropriate personal protective equipment must be used for the safe delivery of in-person care. However, all dentists must also act to conserve PPE through its judicious use.

TABLE 2: Use of Personal Protective Equipment for COVID-19

Setting	Staff or Patients	Procedure/Activity	Suggested PPE
Patient room Disi treat Love	Dentist/Hygienist/ Dental Assistant	Low Risk Non-aerosol-generating procedures (NAGP) AGPs when: Patient screens negative Low incidence & prevalence of COVID-19 cases	 Mask Protective eyewear (face shield, safety glasses, or goggles) Scrubs Gloves Consider long sleeved gown with AGP
		Increased Risk	 Fit-tested N95 respirator Protective eyewear (face shield or goggles— not regular glasses) Scrubs Gloves Long sleeved gown Consider referral
	Disinfecting treatment rooms – Low Risk		 Mask Protective eyewear (face shield, safety glasses, or goggles) Scrubs Gloves Replace gown if gown worn for procedure
	Disinfecting treatment rooms – Increased Risk		 Mask Protective eyewear (face shield or goggles - not regular glasses) Scrubs Gloves Replace long sleeved gown
Reception	Front office staff	Arrival screening	 Plexiglass screen Or Mask Protective eyewear Gloves Long sleeved gown

Related Appendices:

Donning PPE Please see Appendix I - BCCDC Donning Poster

Doffing PPE Please see Appendix J1 - BCCDC Doffing Poster

Doffing PPE N95 Please see Appendix J2 - BCCDC Doffing AGMP Poster

Before the Appointment

Before an appointment, the patient must be contacted, and a pre-appointment Patient Wellness Form completed.. The purpose of this screening form is to:

- 1. Determine the patient's risk level for being infected with COVID-19.
- 2. Determine if the patient falls into one of the vulnerable population groups with respect to COVID-19.
- 3. Explain the changed office protocols to the patient. Advise them to bring their own mask to wear within the office.

In this new COVID-19 pandemic environment, patient screening cannot be emphasized enough. You need to ask the right questions to find out if the patient coming to your office may be infected but asymptomatic. It's about knowing who's in your chair and where they've been.

Determining Patient COVID-19 Risk

Pre-appointment screening or triage is critically important in assessing the risk the patient may have a COVID-19 infection. Below are typical screening questions to ask the patient before the appointment:

- 1. Are you aware if you are COVID-19 positive or are you waiting for a test result?
- 2. Do you have a fever or have felt hot or feverish anytime in the last two weeks (14 days)?
- 3. Do you have any of the following symptoms: Dry cough? Shortness of breath? Difficulty breathing? Sore throat? Runny nose? Post-nasal drip?
- 4. Have you experienced a recent loss of smell or taste?
- 5. Have you been in contact with any confirmed COVID-19 positive patients, or persons self-isolating because of a determined risk for COVID-19?
- 6. Have you returned from travel outside of Canada in the last 14 days?
- 7. Have you returned from travel within Canada from a location known affected with COVID-19?
- 8. Is your workplace considered high risk? (e.g. routine close contact with many people)

 When screening results indicate a patient may be more likely to have COVID-19, defer appointments for 14 days or more if possible, treat with enhanced PPE or refer to appropriate facilities for care.

Some people are more vulnerable to developing severe Covid-19.

The guestions below help assess if a patient is more vulnerable:

- 1. Are you over the age of 70?
- 2. Do you have any of the following:serious respiratory disease, serious heart conditions, immunocompromised conditions, severe obesity, diabetes, chronic kidney disease or those undergoing dialysis, liver disease and pregnancy?

For more vulnerable patients, defer treatment whenever possible.

Related Appendices:

Appendix K - FDC Patient Wellness Form

Appendix L - FDC Patient Risk Acknowledgement Form

During the Appointment

When Patients Arrive:

- Have patient wash hands or disinfect with hand sanitizer
- Consider providing patient with a level 1 STM mask if risk of COVID-19 infection is more than low
- Complete patient arrival screening:
 - Appointment Arrival Screening Questionnaire
 - Take patient's temperature and record result
 - If patient screening indicated "moderate" or "higher" risk, isolate patient and consult with dentist on next steps
- Have patient complete and sign Patient Acknowledgement of COVID-19 Risk Form
- Ask patient to respect physical distancing with all staff and patients
- Limit patient time in the waiting room. Ideally, take patient to operatory immediately

When Patient is Seated in Operatory:

- Chair-side staff, wash hands and don mask before entering operatory
- No hand-shaking or physical contact
- Wash hands and donn gloves in room

- Review overall health history, confirming that the screening questions were asked during check-in and review if necessary
- Remove mask only outside operatory
- Limit movement out of operatory as much as possible
- Clean operatory while wearing PPE
- Wash hands after doffing PPE
- Ensure PPE is donned and doffed appropriately

As the Patient is Leaving:

- Have the patient wash or disinfect hands with hand sanitizer at front desks.
- Pens for signing: clean in one bin, used in another. Pens to be disinfected and returned to clean pen bin regularly
- Point of sales terminal patients encouraged to interact with tap whenever possible and/or use back side of pen to enter pin to minimize contact. POS terminal must be cleaned regularly. We will have plastic coverage of the keypad which allows for disinfection
- Non assignment of dental insurance plans is the ideal goal to minimize further
 administrative time required, as the current pandemic has resulted in significantly more
 staff time that previously was unnecessary for everyday tasks.

Clinical Practices and Protocols

During a pandemic, public health officials will work with the CDSBC to determine what level of dental care may be provided at a given time. At all times, dentists are expected to use their professional judgment based on the particular situation. There are many variables to consider, which change constantly (patient-to-patient, clinic-to-clinic, day-to-day) as the pandemic changes. Figure 1 illustrates the ongoing need for professional judgment, as is always the case in providing dental care.

Public Health COVID-19 Patient Alert Level Patient Risk Vulnerability Level 5 COVID-19 +ve **Pre-existing** Level 4 Probable conditions Level 3 Moderate Age Level 2 Low Level 1 Treatment Approach **Professional Judgement Regulatory Expectation PPE** Air filtration **Medical Emergency** Aerosol Ventilation **Dental Emergency** Non-Aerosol Closed with door Routine/elective Open concept Necessary Clinic Attributes Urgency of Care **Procedures**

Figure 1: Professional Judgment in Treatment Approach Considerations

Emergent vs. Urgent vs. Elective Care

The terms "emergent", "urgent" and "elective" are more typically used in the medical/physician setting, however, during pandemic with communication from public health officials, these terms become commonplace in dentistry. Table 3 below shows "equivalency" of terms between medical and dental providers.

Table 3: Medical and Dental Terminology

"Medical" Term	Dental Term
Emergent, Emergency	Medical emergency Life-threatening emergency
Urgent	Dental emergency Essential dental care
Elective	Elective Routine Non-urgent care

Aerosol Generating Procedures (AGP)

The following measures should be considered for AGPs

- Limit AGPs as much as possible
- Have patient complete a pre-procedural rinse with 1% hydrogen peroxide, or similar, for 60 seconds. Have patient spit rinse back into cup provided, not the sink.
- Use rubber dam and HVE wherever possible
- Where possible, increase air circulation (exchanges) and ventilation in operatories (e.g. by opening window or maintaining efficient HVAC systems).
- Low risk, use standard precautions
- Increased risk, use enhanced precautions
- For more information on Dental aerosols see: 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.

Other Measures

Cleaning Protocols for Common Areas

Waiting Area - require periodic regular cleaning throughout the day based on usage Reception Desks - require full wipedown at end of each shift including high touch surfaces such as phone, computer, printer, stationary etc.

Washrooms - require cleaning after each use by a patient or staff

Staff Area - require cleaning after each use by staff for lunch, wipe down staff table and chairs Lab Area - requires full wipedown at end of each shift

Communication Plans

All workers have received a copy of this manual for review and had time to address questions. Workers have been trained in office with all new implementations and protocols. Signage has been posted throughout the office and a complete copy of this manual is kept in the office for reference at any time. This manual is also accessible at our website www.fairviewdentalcentre.com

Monitoring and Updating

These policies and procedures will be monitored on an ongoing basis and any new arising areas of concern will be addressed and added to this manual in the future.