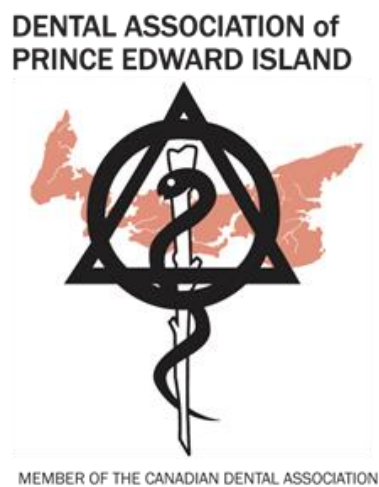


Return-to-Practice Office Manual

Adapting the Dental Office to the COVID-19 Pandemic



Version 1.0
May 10, 2020

TABLE OF CONTENTS

INTRODUCTION	1
Public Health, Outbreak Level and Dentistry	1
Infection Control	1
OFFICE PREPARATION	2
Reception and waiting area	2
Clinical Areas	2
Common staff areas	3
Receiving deliveries	3
STAFF PREPARATION	3
Daily Screening – Dentists and Staff	3
Hand Hygiene	3
Splatter and Aerosols	4
Table 1: Dental devices and procedures known to produce airborne contamination.....	5
Personal Protective Equipment (PPE)	5
Table 2: Use of Personal Protective Equipment (PPE) for Coronavirus Disease 2019 (COVID-19)*	6
Table 3: Air changes/hour (ACH) and time required for airborne-contaminant removal by efficiency .	7
BEFORE THE APPOINTMENT	8
Determining Patient COVID-19 Risk.....	8
Table 4: COVID-19 Risk Level from Screening Questionnaire	8
Vulnerable Patients	9
DURING THE APPOINTMENT	9
CLINICAL PRACTICES AND PROTOCOLS	10
Figure 1: Professional Judgement in Treatment Approach Considerations	10
Sample Decision Trees.....	10
Decision Tree 1: Scheduled Restorative/Endodontic Appointment.....	11
Decision Tree 2: Routine Hygiene Appointment	12
Emergent vs. Urgent vs. Elective Care.....	13
Table 5: Medical and dental terminology	13
Non-Aerosol Generating Procedures (NAGP) and Aerosol Generating Procedures (AGP)	14
APPENDIX 1: PUBLIC HEALTH OUTBREAK AND MODIFICATIONS TO DENTISTRY	15
APPENDIX 2: GLOSSARY OF TERMS AND ACRONYMS.....	20

RESOURCES..... 22

- Dental Office Return to Work Screening Form.....23**
- Dentist & Office Staff Daily Screening Form23**
- Patient Screening Form23**
- READ BEFORE ENTERING CLINIC23**
- Patient Acknowledgement COVID-19 Pandemic Emergency Dental Risk23**
- Return to Practice Checklist.....23**

INTRODUCTION

In March 2020, dental offices across Canada stopped providing oral health treatments and services except for emergency care with the arrival of the novel coronavirus SARS-CoV-2 and the illness it causes, COVID-19. As the pandemic becomes contained and dental offices will be authorized to re-open in a staged manner, measures must be taken to protect patients, dental office staff, dentists and the community at large from the transmission of the coronavirus.

This document provides considerations for Canadian dental offices, specific to the COVID-19 pandemic. It is designed for use by Canadian dentists and the dental team and should be read in conjunction with relevant provincial, territorial and local legislation, regulations and policies.

The document is informed by the best available scientific evidence and expert opinion available at this time and is subject to revision as additional information and data becomes available. Where evidence is lacking, recommendations err on the side of caution. As new evidence becomes available, the document will be updated accordingly.

Public Health, Outbreak Level and Dentistry

When an outbreak such as the 2020 pandemic occurs, public health officials (typically the provincial chief medical officer) classify the outbreak in stages or levels, and each stage or level will have different measures aimed at controlling the outbreak. As the outbreak comes under control, the declared outbreak level changes, and the control measures change. Sometimes there is a resurgence of an outbreak, and public health will go back to stricter measures.

During an outbreak, as part of the containment measures used by public health officials, the practise of dentistry may be restricted. The exact restrictions may change depending on the outbreak level as declared by public health officers. They also depend on the nature of the outbreak—how the sickness is transmitted, the severity of the illness, etc.

Appendix 1, *Public Health Outbreak and Modifications to Dentistry*, is an example of the modifications required of dentistry based on the public health level of alert.

The information that follows is a general guide to current adjustments to the practise of dentistry based on current knowledge of the COVID-19 pandemic. The modifications to dentistry may change depending on the outbreak level in your community/region/province. Since outbreaks can be quite local, the modifications may be for one different community compared to another community. How dentistry is modified will depend on many factors, and you can expect changes as the level of outbreak changes, as declared by public health officials.

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, infection control 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 should be observed until public health officials declare physical distancing and other measures are no longer required.

Reception and waiting area

- **Minimize contact at reception.**
 - Maintain physical distancing.
 - Consider adding a plexiglass screen for reception or encourage physical distancing with furniture, etc.
 - If one patient is paying for services, can another patient enter the clinical area and still maintain physical distancing?
 - Focus patient activity at the front desk to a limited area. Disinfect the area after patient contact.
 - Consider limiting the number of patients that are in the waiting room at one time
 - Create an area for patient screening/temperature taking/hand sanitizing
- **Discourage staff sharing.** Do not share pens, phone headsets, staplers, etc.
- **Remove fabric surfaces.** For cloth chairs in the waiting room, an appropriate barrier covering is an option.
- **Promote physical distancing.** Reduce seating in the waiting area, ideally chairs are two metres (2m) apart.
- **Remove unnecessary items.** Remove magazines, brochures, toys, etc.
- **Consider posting notices.** Promote hand hygiene, physical distancing and cough etiquette.
- **Clean and disinfect.** Clean surfaces with detergent or soap & water prior to initial disinfection. Disinfect touch surfaces at least twice daily, including chairs, tables, door handles, light switches, clothes hangers, bathroom countertops and fixtures, staff-room surfaces, lab areas, etc.
- **Minimize the number of people at the office.** Only child and infirm patients to be accompanied.
- **Update contacts.** Know how to contact the local health department.
- **Prepare washrooms.** Post hand-washing instructions, ensure adequate supply of soap and disposable towels, make a trash can available.

Clinical Areas

- Sterilization room to be cleaned regularly.

- Follow IPAC regulations and manufacturers' instructions for testing sterilizers after a prolonged time out of service.
- Shock your dental unit water lines if you are returning from an extended break in practice. Consult the manufacturer's instructions for proper product recommendations.
- 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:

- Wear gloves when collecting and/or accepting mail or packages.
- Wipe entirely the exterior of every box delivered with a paper towel and soap & water solution or sanitizing wipe depending on your supplies.
- Boxes remain untouched for 15 minutes prior to being opened.
- Clean all surfaces that were touched by deliveries with soap and water mix or sanitizing wipes.

STAFF PREPARATION

The post-COVID-19 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 an environment that is safe. 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.

Daily Screening – Dentists and Staff

The health of the dentists and dental office staff is paramount and must be monitored for the continued health of the dental team. Daily dentist and staff screening focuses on this principle and includes a daily log confirming that they are not experiencing any symptoms of COVID-19. This includes each individual having their temperature taken twice per day. A sample daily log is included in the Resources section.

Hand Hygiene

Strict staff 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 long time. Eventually, these tiny droplets settle or are cleared from the air; the time settling or clearing takes depends on the ventilation of the office.

Splatter

Controlling splatter, particularly splatter that includes saliva, is extremely important in preventing COVID-19 transmission. Credible scientific evidence 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 the washroom, the front desk, the break room, etc. This is one way the virus spreads and infects people. Evidence is beginning to show that health care workers are becoming infected not in the procedure room, but outside of the procedure room. In addition to goggles, mask and gloves, a face shield is needed, sleeves must be tucked into gloves. Use a gown for appointments with AGP and if the COVID-19 risk of the patient is more than low risk (more on Personal Protective Equipment (PPE) below). 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.

“Splatter is the most common infectious risk in the dental office.”

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 ultrasonic scaling and other aerosol procedures where the saliva cannot be prevented from entering the procedure area and becoming aerosolized. If these procedures are required, they must be performed in a closed operatory with full precautions and aerosol management capabilities.

For many procedures, potentially infectious aerosols can be virtually eliminated as follows:

- Have the patient rinse with hydrogen peroxide (H₂O₂) or a sodium hypochlorite solution—this will reduce viruses in the mouth.
- Apply a sealed rubber dam to isolate the procedure area.
- Soak the exposed procedure area with H₂O₂ prior to beginning treatment.

When 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. This management combined with 4-handed dentistry using HVE will

minimize risk of infectious aerosols, and is expected to be suitable for patients in the low risk category for COVID-19. 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 Air Turbine 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

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 and Office Environment

In the highly infective COVID-19 environment, all dental office staff should consider wearing scrubs at work. Scrubs and shoes should be only 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 the 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.

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is a key line of defense 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 provincial dental regulator, and it is based on the dental care being provided, or function 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. There may be differences in your province.

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

Setting	Staff or Patients	Procedure/Activity	Suggested PPE
Patient room	Dentist/ Assistant/ Hygienist	<u>Low risk</u> Non-aerosol-generating procedures (NAGP)	<ul style="list-style-type: none"> • Level 2 or 3 mask • Face shield or goggles • Scrubs • Gloves • Lab coat or gown if contact with patient
		<u>Intermediate and High risk</u> Aerosol-generating procedures (AGP) with rubber dam	<ul style="list-style-type: none"> • N95 or equivalent respirator (fitted) • Face shield or goggles • Cap/bouffant • Lab coat (with cuff) or gown • Gloves
	Disinfecting treatment rooms for non-aerosol- generating procedures (NAGP)	Can disinfect immediately	<ul style="list-style-type: none"> • Level 1 mask minimum • Eye protection • Gloves
	Disinfecting treatment rooms for aerosol- generating procedures (AGP)	Wait to disinfect – follow provincial regulations	<ul style="list-style-type: none"> • Level 1 mask minimum • Eye protection • Gloves
Reception	Front office staff	Arrival screening	<ul style="list-style-type: none"> • Level 1 mask minimum • Eye protection • Gloves • Scrubs

* Adapted from World Health Organization. "Rational use of Personal Protective Equipment for Coronavirus Disease 2019 (COVID-19)." February 27th, 2020: 1-7; and College of Dental Surgeons of Saskatchewan. "CDSS Alert – COVID-19 Pandemic: IPC Interim Protocol Update, April 27th, 2020."

Notes about Masks

- N95 masks are available in commercial (or standard or non-medical) grade and medical (or surgical or procedure) grade. Medical masks meet requirements for fluid resistance. 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-health-products/medical-devices/masks-respirators-covid19.html>.
- 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>

Clearing the Air (of Aerosols)

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, or the air is HEPA filtered and returned.
3. The contaminants are neutralized (e.g. using ultraviolet light).

How long does it take for aerosols to be removed from the air? Table 3 is a standard reference table from the Centers for Disease Control and Prevention (CDC). Table 3 shows that the key factor is the number of air changes per hour (ACH). Depending on the ACH, it can take from over three hours (180 minutes) to less than 10 minutes.

Note: The area where the AGP occurred must not be cleaned until the appropriate settling time of the aerosol occurs.

Table 3: Air changes/hour (ACH) and time required for airborne-contaminant removal by efficiency

ACH	Time (mins.) required for removal 99% efficiency	Time (mins.) required for removal 99.9% efficiency
2	138	207
4	69	104
6 ⁺	46	69
8	35	52
10 ⁺	28	41
12 ⁺	23	35
15 ⁺	18	28
20	14	21
50	6	8

+ Denotes frequently cited ACH for patient-care areas.

<https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>

The 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.

However, before making any changes to the dental office, which can be very expensive, refer to the guidance from the provincial regulator on aerosol management. Avoid AGP when possible and reduce aerosols at source with high volume evacuation.

BEFORE THE APPOINTMENT

Before an appointment, the patient must be contacted, and a pre-appointment screening completed. The purpose of the screening 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.

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.

“It’s about knowing who’s in your chair and where they’ve been.”

Dr. Aaron Burry
Canadian Dental Association

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. Screen patients at least twice—one or two days before the appointment and when the patient arrives. Below are typical screening questions to ask the patient before the appointment:

1. Do you have a fever or have felt hot or feverish anytime in the last two weeks (14 days)?
2. Do you have any of the following symptoms: Dry cough? Shortness of breath? Difficulty breathing? Sore throat? Runny nose?
3. Have you experienced a recent loss of smell or taste?
4. Have you been in contact with any confirmed COVID-19 positive patients, or persons self-isolating because of a determined 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? (e.g. routine close contact with many people)

Table 4 shows the risk of a COVID-19 infection based on “yes” answers to the questions above. Additional judgment must be used to carefully each individual and their particular situation.

Table 4: COVID-19 Risk Level from Screening Questionnaire

COVID-19 Risk Level	Screen Questions Answered “Yes”
COVID-19 Positive	Question: 1
Probable Risk	Questions: 2 and/or 3, and 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 in the dental office, consider strategies to minimize the risk of infection for other patients. Strategies include:

- Defer appointment for 14 days or more.
- End-of-day appointments for higher risk patients.

- Special treatment days for higher risk patients.
- Fewer appointment times with longer intervals on certain days.

Vulnerable Patients

Some people are more vulnerable to becoming infected and for the infection to become serious. The questions below help assess if a patient is more vulnerable:

1. Are you over the age of 60?
2. Do you have any of the following: heart disease, lung disease, kidney disease, diabetes or any auto-immune disorder?

The risk of COVID-19 transmission for vulnerable patients can be reduced by scheduling them as first appoint of the day, right after lunch or on separate days.

DURING THE APPOINTMENT

When patients arrive:

- Have patient wash hands (ideally) or disinfect hands with hand sanitizer.
- Consider providing patient with a level 1 mask if the risk of a 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 indicates “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 (see Resources).
- Ask patient to respect physical distancing with all staff and patients.
- Limit patient time in waiting room. Ideally, take the patient to the operatory immediately.

When patient is seated in operatory:

- Chair-side staff don mask before entering operatory.
- No hand-shaking or physical contact.
- Wash hands and don gloves, face shield, etc. in-room.
- Review overall health history, confirming that the screening questions were asked during the check-in procedure, and review if necessary.
- Complete procedures.
- Have the patient don their mask if provided.
- Following proper doffing procedures, remove mask only outside operatory.
- Limit movement out of operatory as much as possible.
- Clean operatory while wearing PPE.

As the patient is leaving:

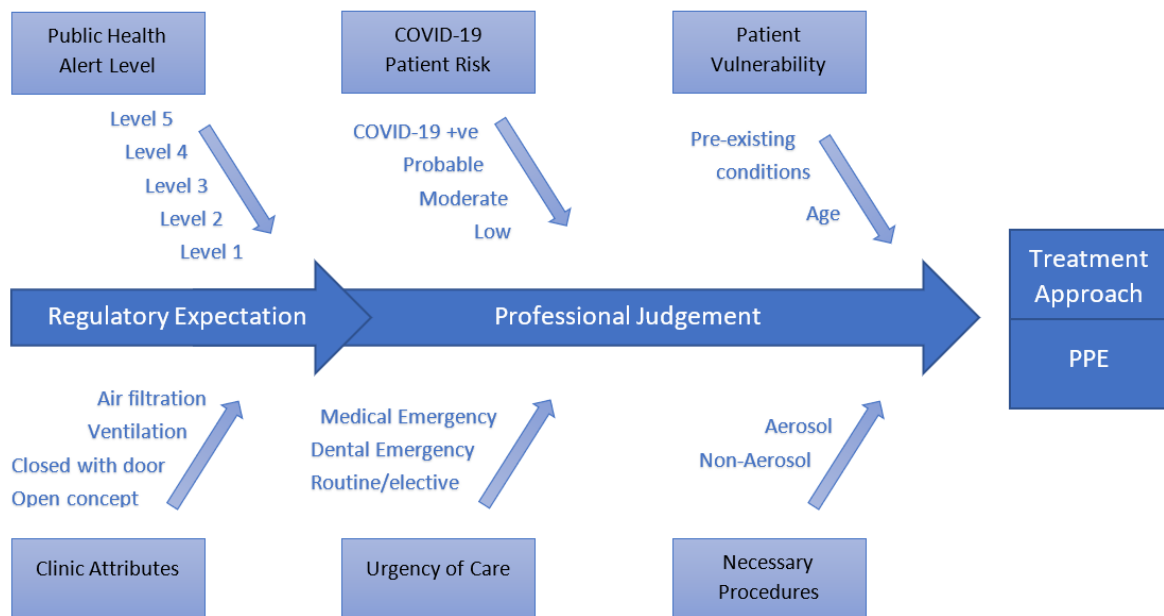
- Try to have paperwork completed before patient arrives at reception.
- Choose a touchless payment method, if possible.
- After patient leaves, disinfect all patient contact surfaces, including clothes hangers, door knobs, etc.

- Have the patient wash or disinfect their hands before leaving the office.

CLINICAL PRACTICES AND PROTOCOLS

During a pandemic, public health officials will work with the provincial dental regulator 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.

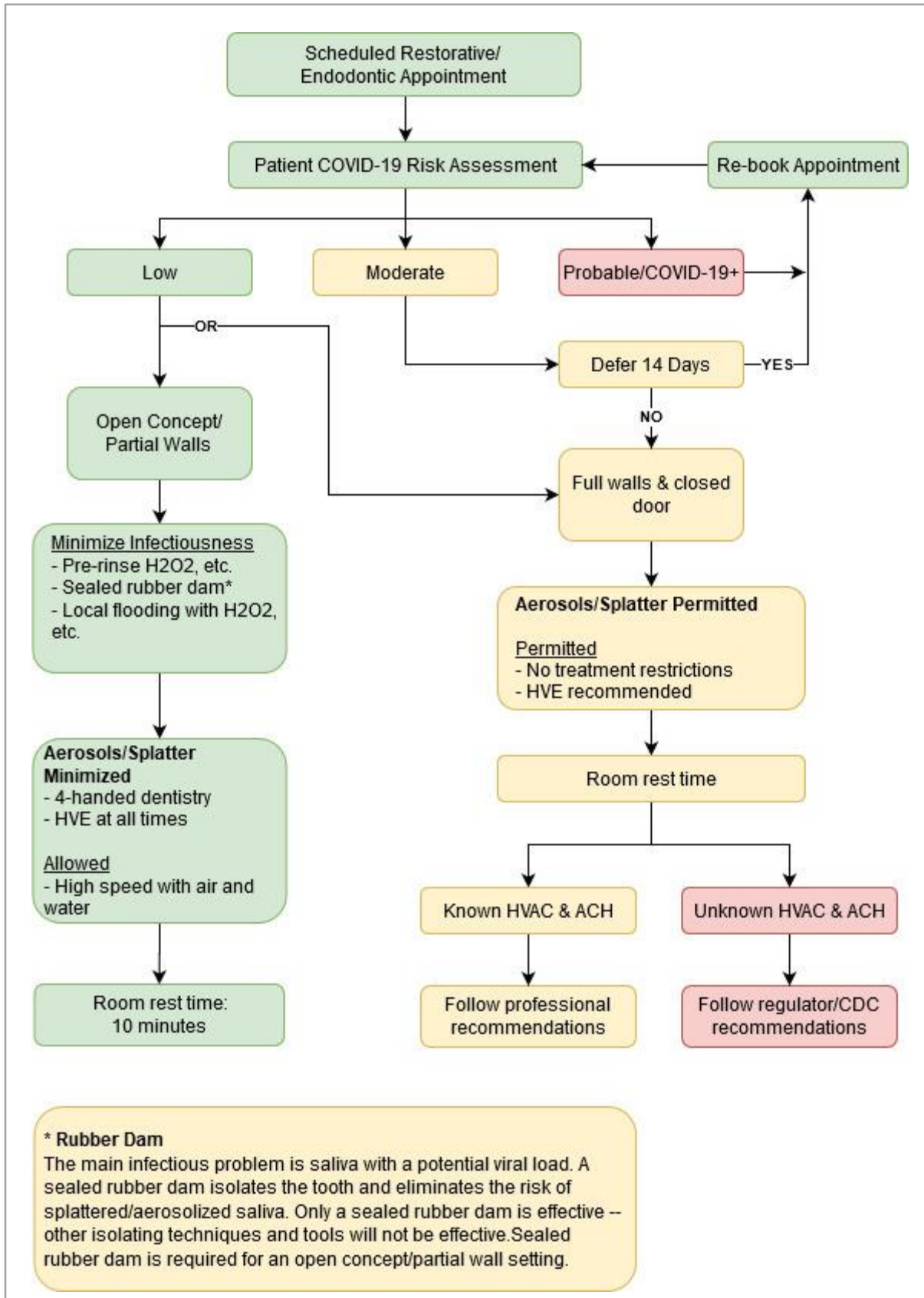
Figure 1: Professional Judgement in Treatment Approach Considerations



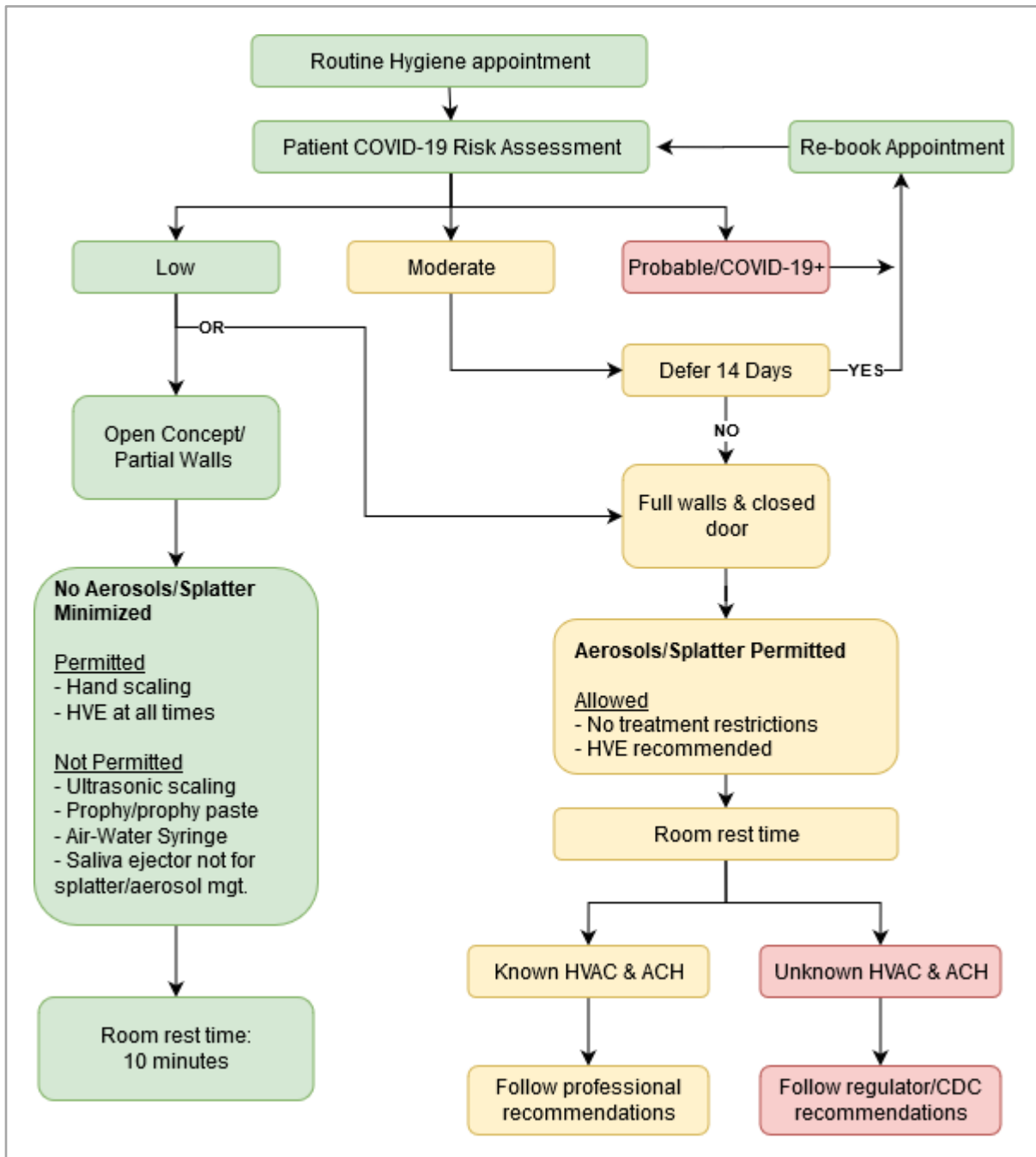
Sample Decision Trees

Below are sample decision trees to help select the appropriate treatment choices based on many of the variables listed above. There may be more specific guidance from the provincial dental regulator that takes precedence, and as always, professional judgement is expected.

Decision Tree 1: Scheduled Restorative/Endodontic Appointment



Decision Tree 2: Routine Hygiene Appointment



Emergent vs. Urgent vs. Elective Care

The terms “emergent”, “urgent” and “elective” are more typically used in the medical/physician setting, however, during a pandemic with communication from public health officials, these terms become commonplace in dentistry. Table 5 below shows “equivalency” of terms between medical and dental providers.

Table 5: 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

The dental regulator will provide guidance on the definitions of emergent, urgent and elective care. The sample list below is from: RCDSO, *Guidance on emergency and urgent care during COVID-19 - Updated April 24, 2020*. <https://www.rcdso.org/en-ca/rcdso-members/2019-novel-coronavirus/covid-19---guidance-on-emergency-and-urgent-care->

In dentistry, **emergency care** is provided for a potentially life-threatening condition that requires immediate treatment, including:

- oral-facial trauma
- cellulitis or other significant infection, especially if compromising the patient’s airway
- prolonged bleeding
- pain that cannot be managed by over-the-counter medications

In dentistry, **urgent care** is the management and treatment of conditions that require immediate attention to relieve pain and/or risk of infection, including:

- severe dental pain from pulpal inflammation
- pericoronitis or third-molar pain
- surgical post-operative osteitis, dry socket dressing changes
- abscess or localized bacterial infection resulting in localized pain and swelling
- tooth fracture resulting in pain, pulp exposure or causing soft tissue trauma
- dental trauma with avulsion/luxation
- final crown/bridge cementation if the temporary restoration is lost, broken or causing gingival irritation
- biopsy of a suspicious oral lesion or abnormal oral tissue
- replacing a temporary filling in an endodontic access opening for patients experiencing pain
- snipping or adjusting an orthodontic wire or appliance piercing or ulcerating the oral mucosa
- treatment required before critical medical procedures can be provided

In dentistry, **non-urgent care** is the provision of routine or non-urgent procedures, including:

- recall examinations and routine radiographs
- routine dental cleanings and preventive therapies

- orthodontic procedures other than those to address acute issues (e.g. pain, infection, trauma)
- extraction of asymptomatic teeth
- restorative dentistry, including treatment of asymptomatic carious lesions
- cosmetic dental procedures, including teeth whitening

Non-Aerosol Generating Procedures (NAGP) and Aerosol Generating Procedures (AGP)

The provincial dental regulator will provide specific guidance on protocols related to NAGPs and AGPs. General guidelines include:

- Limit AGPs as much as possible
- Limit AGP procedures to a single treatment room or area
- Provide enhanced room cleaning and disinfection
- 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.
- For more 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](https://jada.ada.org/article/S0002-8177(14)61227-7/pdf).

APPENDIX 1: PUBLIC HEALTH OUTBREAK AND MODIFICATIONS TO DENTISTRY

The following interim guidance is designed to facilitate discussions within the dental profession in Canada, and between the dental profession and public health officials. It is a support tool that provides context for modifications to dental practice and discussions with provincial or territorial medical offices in response to a respiratory infection outbreak (COVID-19). It outlines 5 levels of public health response and provides corresponding modifications to dental practice.

At the outset of a pandemic, there may be a rapid movement to a higher level of public health response. Chart 1 summarizes the levels, which are intended to be:

1. Proportionate, pre-planned response to the possible escalation of COVID-19 based on the evolving community context.
2. Staged restrictions of dental services to reduce transmission risks for COVID-19.
3. Avoidance of likely burden on medical primary care and emergency services, should access to urgent dental care cease.

The levels are colour-coded based on an example of a public health classification for the reopening of businesses¹, educational facilities, health care systems, recreational activities, and cultural events, which will be guided by four distinct public health alert levels:

- Red: This phase aims to “flatten the curve” and contain the virus as quickly as possible.
- Orange: This phase balances the reopening of social and economic settings, while preventing a resurgence of transmission.
- Yellow: This phase further increases the reopening of social and economic settings after the ability to control transmission has been demonstrated.
- Green: In this phase, a vaccine is available, or measures have become apparent that protect people from the virus.

The CDC has provided specific guidance that serves as a North American reference for dentistry during the COVID-19 outbreak.² The Pandemic Severity Guide provides reference and comparison between cyclical seasonal respiratory flu versus respiratory infections with high mortality rate, complicated by situations where an effective vaccine is not readily available.³

Questions related to this document can be directed to: Dr. Aaron Burry, Associate Director Professional Affairs, aburry@cda-adc.ca

¹ https://www2.gnb.ca/content/gnb/en/news/news_release.2020.04.0226.html

² <https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html>

³ CDC Pandemic Severity Index Chart

Category	Case Fatality Rate (CFR)	Example
1	Less than 0.1%	Seasonal flu and swine flu
2	0.1-0.5%	Asian and Hong Kong Flu
3	0.5%	
4	1.0-2.0%	

SUPPORT TOOL: MODIFYING PRACTICE RELATED TO RESPIRATORY INFECTION OUTBREAK (COVID-19)

Public Health Level	Examples of Public Health Response Efforts that Affect Dentistry	Modifications for Dentistry
<p>Level 5 Restrictions</p>	<p>Uncontrolled pandemic</p> <p><u>Typical characteristics</u></p> <ul style="list-style-type: none"> • Pandemic is out of control and not responding to public health intervention. • Public hospital system is overwhelmed by the number of hospital admissions and deaths. • Temporary hospitals have been set up. • Military and other forces are called in to assist. • Temporary morgues are required. 	<p>Dental treatment is suspended</p> <p>No dental treatment is performed without expressed permission from the public health authorities in support of the hospital system. It is performed in very limited ways in coordination with the health care system.</p>
<p>Level 4 Restrictions</p>	<p>Declared state of emergency</p> <p><u>Typical characteristics</u></p> <ul style="list-style-type: none"> • Significant number of new cases continue to rise in this community and/or in adjacent communities and likely underreporting of total number of individuals who are infected due to volume of testing needed and inability to process all potential cases. • Major outbreak, community spread, and significant day-over-day increases in cases and hospitalizations reported. <p><u>Typical examples of measures and response</u></p> <ul style="list-style-type: none"> • Declared province-wide state of emergency. • Stay-at-home orders are in effect. • Directives to close all nonessential services. • Modifications to how essential services can be accessed. 	<p>Emergency dental care is suspended except for:</p> <ul style="list-style-type: none"> • Treatment that does not respond to pharmacological management • Treatment that is referred to specific centres or offices <p>Examples include:</p> <ul style="list-style-type: none"> • Swelling of the face, neck or mouth • Dental trauma causing change in the position of teeth, soft tissue damage and/or significant pain • Significant bleeding • Difficulty opening the jaw and/or swallowing • Referral from a specialist medical practitioner for assessment or management of a patient receiving urgent medical care for medically necessary dental care • Orofacial, dental or mucosal pain causing loss of sleep or impacting diet • Ulcers persisting for > 3 weeks

Public Health Level	Examples of Public Health Response Efforts that Affect Dentistry	Modifications for Dentistry
<p>Level 3 Restrictions</p>	<p>Active management of a community outbreak</p> <p><u>Typical characteristics</u></p> <ul style="list-style-type: none"> • New cases reported daily with an increase in cases day-to-day and confirmed community spread. • Public health emergency has been declared. • Significant number of hospitalizations and reported deaths. <p><u>Typical examples of measures and response</u></p> <ul style="list-style-type: none"> • Imminent declaration of an official state of emergency likely. • Recommendation to work from home. • Consideration of closure of nonessential services. 	<p>Emergency dental care - All elective treatment is suspended</p> <p>Dental treatment is curtailed to assist in supporting public health efforts to reduce community spread and support stay-at-home advisories.</p> <p>Pre-screening protocol for COVID-19 and dental care needs completed for all patients prior to their appointment. Measures to support social distancing in the office are implemented.</p> <p>Dental treatments that do not generate aerosols are limited to:</p> <ul style="list-style-type: none"> • Management of patients with acute dental pain (e.g. endodontic treatment under rubber dam, or extraction) • Management of significantly damaged upper front teeth (e.g. due to trauma, with restorative treatment provided under rubber dam) • Soft tissue pathology (e.g. ulcers) • Management of complex medically compromised patients with dental concerns that may compromise their systemic disease • Management of those at a higher risk of rapid progression of dental disease due to socioeconomic or cultural factors • Management of patients referred by a medical practitioner for medically necessary dental care

Public Health Level	Examples of Public Health Response Efforts that Affect Dentistry	Modifications for Dentistry
<p>Level 2 Restrictions</p>	<p>Confirmed outbreak</p> <p><u>Typical characteristics</u></p> <ul style="list-style-type: none"> Local Public Health has reported multiple cases and is experiencing a growth in contact tracing. There is still a potential to contain the outbreak as new cases remain limited. Expansion in COVID-19 testing. <p><u>Typical examples of measures and response</u></p> <ul style="list-style-type: none"> Enhanced notification related to an increase in the number of infections. Opening of testing centres. Public closures of schools and restrictions of visitors to long-term care (LTC) homes are being considered, among other measures. If the situation is improving, school resumption is being considered or may be delayed if closures are already in place. Consideration of other restrictions or, if improving, consideration of lifting other restrictions. 	<p>Deferral of aerosol based treatments and enhanced screening and scheduling</p> <p>Pre-screening protocol for COVID-19 and dental care needs completed for all patients prior to their appointment. Measures to support social distancing in the office are implemented.</p> <p>Defer all treatments likely to generate aerosols, which may include the use of:</p> <ul style="list-style-type: none"> high-speed handpieces without the use of rubber dam ultrasonic scalers surgical handpieces <p>All surgical interventions should be undertaken using enhanced transmission-based precautions.</p> <p>Elective dental implant treatment should be delayed.</p> <p>Defer, unless it cannot be avoided, urgent dental treatment for people who meet criteria for COVID-19 or confirmed as a COVID-19 case. Schedule such patients at the end of the day when other patients are not in the dental office and minimal staff will be present.</p>
<p>Level 1 Restrictions</p>	<p>Anticipated outbreak</p> <p><u>Typical characteristics</u></p> <p>Local Public Health anticipates an imminent presence of a first case or new case(s) with no specific evidence of local community spread OR there have been no new positive cases for a four-week period. Local Public Health enhanced operations are in place.</p> <p>Typical examples of measures and response:</p>	<p>Pre-screening and initiating treatment deferral</p> <p>Institute pre-screening protocols to assess whether individuals could potentially meet the epidemiological or clinical symptom criteria for a COVID-19 risk.</p> <p>Suggested response for a patient whose screening indicates they are <i>not suspected of COVID-19</i>:</p> <ul style="list-style-type: none"> Defer initiating non-urgent treatment that cannot be completed within an existing appointment and/or ensure that the patients undergoing treatment can be appropriately deferred for a 6-month period, in the event a follow-up is delayed No other specific restrictions for range or scope of treatment

Public Health Level	Examples of Public Health Response Efforts that Affect Dentistry	Modifications for Dentistry
	<ul style="list-style-type: none"> • There are no specific restrictions announced in the community.⁴ • A public health emergency has not been declared, but is anticipated. • Cases are reported in other communities or countries that could affect the public health jurisdiction. • Public Health has issued cautions and personal measures such as social distancing. • Public Health is moving to an increased state of readiness. 	<p>Suggested response for a patient whose screening confirms a risk of COVID-19 or is confirmed as a COVID-19 case:</p> <ul style="list-style-type: none"> • Defer all dental care for at least 14 days or until negative COVID-19 test results • Limit emergency care to pharmacological approaches and non- aerosol treatment, if required • Enhanced transmission-based precautions for emergency care
No restrictions	<p>No evidence of outbreak and/or 6 months has passed since last detected cases and there is no longer an imminent risk of a recurrent outbreak.</p>	<p>No modifications to practice. General infection control measures and personal protective equipment (PPE) as recommended or mandated in the jurisdiction are in place.</p>

⁴ Community will vary in Canada. For example, the Province of Prince Edward Island (PEI) could be considered a single community, whereas in British Columbia or Ontario there may be a range of communities and geography with medical offices overseeing different geography.

APPENDIX 2: GLOSSARY OF TERMS AND ACRONYMS

ACH means **air changes per hour**. The movement of a volume of air in a given period of time; if an office has one air change per hour, it means that the air in the office will be replaced in a one-hour period. Adapted from: http://www.caslab.com/Air_Changes_Per_Hour_ACH_Meaning/

AGP means **aerosol generating procedures**. Aerosol generating procedures are any procedure carried out on a patient that can induce the production of aerosols of various sizes, including droplet nuclei.

Adapted from:

<http://ipac.vch.ca/Documents/Acute%20Resource%20manual/Aerosol%20Generating%20Medical%20Procedures.pdf>

HVAC means heating, ventilation, and air conditioning. Technology related to the indoor temperature and air quality.

HVE means **high volume evacuation**. A high-volume evacuator is a suction device that draws a large volume of air over a period of time.

Infirm patient means a patient who is physically limited or in ill health. In this context, an infirm patient may need extra assistance to receive dental care, including, but not limited to, moving from one room to another and being physically stabilized in the operator.

NAGP means **non-aerosol generating procedures**. Any procedure carried out on a patient that does not produce aerosols.

PPE means **personal protective equipment**. Equipment worn to minimize exposure to hazards that cause serious injuries and illnesses. In the context of a pandemic, it is equipment worn to prevent transmission of a virus or bacteria.

- **N95 or KN95 (fitted)**: a respirator, which is a particulate-filtering facepiece that can be breathed through, that meets the U.S. National Institute for Occupational Safety and Health N95 classification of air filtration, meaning that it filters at least 95% of airborne particles. To work properly, these masks must be fitted to the wearer. The KN95 is a Chinese equivalent.
- **Level 1 or 2 or 3 masks**: The American Society for Testing and Materials defines mask levels and which level should be used during different dental procedures. Level 1 masks are considered as a low barrier and designed for procedures with a low amount of fluid, blood, aerosol exposure or spray. Level 2 masks are a moderate barrier. Level 3 masks are considered a high barrier and were designed for procedures with a moderate or high amount of fluid, blood, aerosols or spray exposure, such as implant placement, complex oral surgery, and crown preparation.
- **Eye protection (glasses, goggles or face shield)**: safety glasses allow air in and around the eye area while safety goggles fit tight against the face, offering protection against particulate in the

air and splashes. Face shields provide further protection, especially from splatter, and can also be worn over spectacles or goggles.

- Scrubs: garments designed to be simple, easy to launder, and cheap to replace. Originally used by surgeons and other operating room personnel, who would put them on during the process of sterilizing themselves before entering the operating room.
- Lab coat (with or without cuff) or gown: a garment intended to be worn by health care personnel during surgical procedures to protect both the patient and health care personnel from the transfer of microorganisms, body fluids, and particulate matter. Cuffs provide greater protection to arms and wrists.
- Cap/bouffant: a loose cap, typically secured around the head with elastic, used to contain hair.

NOTE:

The terms “aerosol” and “splatter” in the dental environment were used by Micik and colleagues in their pioneering work on aerobiology. In these articles, **aerosols** were defined as particles less than 50 micrometers (μm) in diameter. Particles of this size are small enough to stay airborne for an extended period before they settle on environmental surfaces or enter the respiratory tract. The smaller particles of an aerosol (0.5 to 10 μm in diameter) have the potential to penetrate and lodge in the smaller passages of the lungs and are thought to carry the greatest potential for transmitting infections.

Splatter was defined by Micik and colleagues as airborne particles larger than 50 μm in diameter. Micik and colleagues stated that these particles behaved in a ballistic manner. This means that these particles or droplets are ejected forcibly from the operating site and arc in a trajectory similar to that of a bullet until they contact a surface or fall to the floor. These particles are too large to become suspended in the air and are airborne only briefly.

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)

RESOURCES

The following websites and pages contain several resources that can be printed as stand-alone documents/posters for your dental office.

Additional online resources:

- **Government of Canada**
Coronavirus disease (COVID-19): Awareness resources
<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/awareness-resources.html>
- **Infection Prevention and Control Canada**
Coronavirus (COVID-19) Posters, Graphics and Videos
<https://ipac-canada.org/posters-graphics-and-videos.php>
- **Canadian Centre for Occupational Health and Safety**
Hand washing and other posters
<https://www.ccohs.ca/outbreaks/>



Dental Office Return to Work Screening Form

Each employee/dentist at the office must complete this form upon return to work.

Name Signature Date

Risk Assessment Screening Questions

1. Do you have any of the following symptoms which are new or worsened if associated with allergies, chronic or pre-existing conditions: fever, cough, shortness of breath, difficulty breathing, sore throat, and/or runny nose?	YES	NO
2. Have you returned to Canada from outside the country (including USA) in the past 14 days?	YES	NO

In the past 14 days, at work or elsewhere, while not wearing appropriate personal protective equipment:

3. Did you have close contact* with someone who has a probable** or confirmed case of COVID-19?	YES	NO
4. Did you have close contact* with a person who had acute respiratory illness that started within 14 days of their close contact* to someone with a probable** or confirmed case of COVID-19?	YES	NO
5. Did you have close contact* with a person who had acute respiratory illness who returned from travel outside of Canada in the 14 days before they became sick?	YES	NO
6. Did you have a laboratory exposure to biological material (i.e. primary clinical specimens, virus culture isolates) known to contain COVID-19?	YES	NO

<https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-daily-fitness-for-work-screening-protocols.pdf>

If you answer “NO” to all of the above, you can proceed to work. If you develop symptoms, please complete a new questionnaire.

If you answer “YES” to any of the above, you are not permitted to attend work at this time and you must self-isolate and contact a medical office to determine if you require COVID-19 testing.

*Close contact includes providing care, living with or otherwise having close prolonged contact (within 2 meters) while the person was ill, or contact with infectious bodily fluids (e.g. from a cough or sneeze) while not wearing recommended personal protective equipment.

**Probable case is a person with clinical illness who had close contact to a lab-confirmed COVID-19 case, while not wearing appropriate personal protective equipment, OR a person with clinical illness who meets the COVID-19 exposure criteria, AND in whom laboratory diagnosis of COVID-19 is inconclusive. Clinical illness of a probable case is new onset/exacerbation of following symptoms: fever (over 38 degrees Celsius), cough, shortness of breath (SOB)/difficulty breathing, sore throat or runny nose. Exposure criteria for a probable case is a person who, in the 14 days before onset of illness: had any history of travel outside of Canada; OR had close contact with a confirmed or probable case of COVID-19; OR is a close contact of a traveler with acute respiratory illness who returned from outside Canada in the previous 14 days; OR had a laboratory exposure to biological material (e.g. primary clinical specimens, virus culture isolates) known to contain COVID-19.



Date: _____

All dentists and office staff must confirm their absence of symptoms and have temperature taken each day. If symptoms are present, further investigation is needed by the managing dentist.*

Name: _____		Signature: _____		
• Fever > 38° C	YES NO	• Difficulty breathing	YES NO	AM Temperature _____
• Cough	YES NO	• Flu-like symptoms	YES NO	
• Sore throat	YES NO	• Runny nose	YES NO	PM Temperature _____
• Shortness of breath	YES NO			

Name: _____		Signature: _____		
• Fever > 38° C	YES NO	• Difficulty breathing	YES NO	AM Temperature _____
• Cough	YES NO	• Flu-like symptoms	YES NO	
• Sore throat	YES NO	• Runny nose	YES NO	PM Temperature _____
• Shortness of breath	YES NO			

Name: _____		Signature: _____		
• Fever > 38° C	YES NO	• Difficulty breathing	YES NO	AM Temperature _____
• Cough	YES NO	• Flu-like symptoms	YES NO	
• Sore throat	YES NO	• Runny nose	YES NO	PM Temperature _____
• Shortness of breath	YES NO			

Name: _____		Signature: _____		
• Fever > 38° C	YES NO	• Difficulty breathing	YES NO	AM Temperature _____
• Cough	YES NO	• Flu-like symptoms	YES NO	
• Sore throat	YES NO	• Runny nose	YES NO	PM Temperature _____
• Shortness of breath	YES NO			

Name: _____		Signature: _____		
• Fever > 38° C	YES NO	• Difficulty breathing	YES NO	AM Temperature _____
• Cough	YES NO	• Flu-like symptoms	YES NO	
• Sore throat	YES NO	• Runny nose	YES NO	PM Temperature _____
• Shortness of breath	YES NO			

Name: _____		Signature: _____		
• Fever > 38° C	YES NO	• Difficulty breathing	YES NO	AM Temperature _____
• Cough	YES NO	• Flu-like symptoms	YES NO	
• Sore throat	YES NO	• Runny nose	YES NO	PM Temperature _____
• Shortness of breath	YES NO			

Name: _____		Signature: _____		
• Fever > 38° C	YES NO	• Difficulty breathing	YES NO	AM Temperature _____
• Cough	YES NO	• Flu-like symptoms	YES NO	
• Sore throat	YES NO	• Runny nose	YES NO	PM Temperature _____
• Shortness of breath	YES NO			

* Provincial regulations may require use of a provincial form and protocol. How “yes” answers are handled may be dictated by provincial regulation and may change with the public health alert level of the pandemic. A cautious approach is recommended.



Use this form to screen patients before their appointment and when they arrive for their appointment.

Staff screener: _____

Patient Name: _____ Patient age: _____

Who answered: Patient Other (specify) _____

Contact Method: Phone email Other _____

Identify yourself and explain the purpose of the call, which is to determine whether there are any special considerations for their dental appointment. Have the patient answer the following questions.

Screening Questions	Pre-Screen	In-Office
1. Do you have a fever or have felt hot or feverish anytime in the last two weeks? Patient temperature at appointment: _____. If elevated, provide mask to patient.	YES NO	YES NO
2. Do you have any of these symptoms: Dry cough? Shortness of breath? Difficulty breathing? Sore throat? Runny nose?	YES NO	YES NO
3. Have you experienced a recent loss of smell or taste?	YES NO	YES NO
4. Have you been in contact with any confirmed COVID-19 positive patients, or persons self-isolating because of a determined risk for COVID-19?	YES NO	YES NO
5. Have you returned from travel outside of Canada in the last 14 days?	YES NO	YES NO
6. Have you returned from travel within Canada from a location known affected with COVID-19?	YES NO	YES NO
7. Is your workplace considered high risk?	YES NO	YES NO

Patient Vulnerability

8. Are you over the age of 60?	YES NO	YES NO
9. Do you have any of the following? Heart disease, lung disease, kidney disease, diabetes or any auto-immune disorder?	YES NO	YES NO

- Any “yes” response for questions 1-7 must be discussed with the managing dentist immediately.
 - Tell the patient when they arrive at the office, they will be asked to: sanitize their hands; answer the questions again; have their temperature taken; complete a form acknowledging the risk of COVID-19.
- Advise the patient:
 - Only patients are allowed to come to the office.
 - If possible to wait in their car until their appointment, call the office when they arrive.



READ BEFORE ENTERING CLINIC

In response to covid-19, additional steps have been taken to further enhance your safety and the safety of our staff. Only individuals being treated are allowed to enter the clinic. Accompanying persons are not permitted to enter, with the exception of caregivers.

Delivery personnel are to contact the facility staff prior to entering.

Please review the following questions to confirm your fitness to enter the facility.

- 1. Do you currently have any of the following symptoms?**
 - Severe Cough**
 - Muscle pains**
 - Significant Nasal congestion**
 - Fever > 38 Degrees C**
 - Shortness of breath**
 - Headache**
 - Runny nose**
 - Reduced or lost sense of smell**
- 2. Have you failed to use physical distancing in the last two weeks?**
- 3. Have you come into contact with anyone that has any of the above symptoms in the last two weeks?**
- 4. Have you come into contact with anyone suspected of having Covid-19 in the last 2 weeks?**
- 5. Have you come into contact with anyone diagnosed with COVID-19 in the past 2 weeks?**

If you have answered “yes” to any of the above questions,

DO NOT ENTER THE FACILITY.

Call our phone number below and you will be given the appropriate direction.

Only enter the clinic if you answered “No” to all the questions above.

Call us if you have any questions: () _____.



Patient Acknowledgement COVID-19 Pandemic Emergency Dental Risk

Please read the patient acknowledgement below, and initial or sign in all areas indicated.

I understand the novel coronavirus causes the disease known as COVID-19 and that it is currently a pandemic. I understand the novel coronavirus virus has a long incubation period during which carriers of the virus **may not show symptoms and still be contagious**. For this reason, it is recommended to stay home and avoid close contact with other people when at all possible. _____ (initial)

I understand the federal and provincial governments have asked individuals to maintain social distancing of a least 2 metres (6 feet) and I recognize it is **not possible to maintain this distance while receiving dental treatment**. _____ (initial)

I understand that oral surgery/dental procedures can create water and/or blood spray, which is one important way that the novel coronavirus can spread. The ultra-fine nature of the spray can linger in the air for minutes to sometimes hours, which can transmit the novel coronavirus. _____ (initial)

I understand that due to the visits of other patients, the characteristics of the novel coronavirus, and the characteristics of dental procedures, **that I have an elevated risk of contracting AND SPREADING the novel coronavirus simply by being in the dental office**. _____ (initial)

I have been made aware that the Province/Territory of _____ has, under the current pandemic, mandated that **only emergency dental care is allowed**. Dental visits must be limited to only the essential treatment of ongoing bleeding, trauma, significant infection not responding to antibiotics and pain killers, or to alleviate severe pain that does not respond to antibiotics and pain killers. I confirm that I meet one of more of these criteria. _____ (initial)

I confirm and accept that emergency treatment provided may not necessarily be representative of the care that would be expected or provided under normal circumstances, and will be very limited to only simple emergency care. For example, a tooth would be removed rather than a root canal of filling done in this emergency situation. _____ (initial)

I confirm that I do NOT have any TWO OR MORE or the following symptoms of COVID-19: fever, new or worsening cough, sore throat, runny nose or headache. _____ (initial)

I confirm that I have not tested positive for COVID-19. _____ (initial)

I confirm that I am not waiting for the results of a test for COVID-19. _____ (initial)

I confirm that this is not currently a period where I required to self-isolate for 14 days.
_____ (initial)

I verify the information I have provided on this form is truthful and accurate. I knowingly and willingly consent to have emergency surgical/dental treatment completed during the COVID-19 pandemic.

SIGNATURE OF PATIENT _____ Date _____



Are you ready?

- All staff are briefed on changed protocols.
 - Reception modified to limit contact.
 - Waiting area updated.
 - Washrooms well supplied.
 - All staff completed Return to Work Screening Form.
 - Daily Employee Screening Log binder available.
 - Surface disinfection schedule established. Disinfection supplies readily available in all areas
 - Patient greeting/screening process established, staff assigned.
 - Plan to limit movement in office, especially between clinical and non-clinical areas, is ready.
 - All staff understand PPE expectations. Competent in donning and doffing PPE.
 - Dental equipment tested and water lines shocked if needed.
 - Sterilizers all appropriately tested before returned to service.
-