



Recommended Practices and Personal Protective Equipment (PPE) for Dentists and Dental Clinics – Interim Guidance 01/06/20

Phase 1–2: No evidence of community spread

The following are interim guidelines for the use of PPE in the dental clinic. Given the current epidemiology of COVID-19 in Yukon, it is not recommended to assume and treat each patient as suspect for COVID-19. Rather, each patient encounter should be evaluated based on risk factors for COVID-19. The presence or absence of risk factors will direct the provider or staff member to the recommended PPE for that particular encounter. Please call and screen your patient 24 hours prior to their appointment, if feasible.

Risk factors for COVID-19:

- Presence of any of the following symptoms: fever and/or chills, cough, difficulty breathing, sore throat, hoarse voice, headache, runny nose, nasal congestion, gastrointestinal symptoms such as diarrhea or vomiting (not otherwise explained), fatigue/muscle aches or loss of sense of taste and/or smell **AND**
 - Symptom onset within 14 days of all international and out-of-Yukon travel OR
 - Symptom onset within 14 days of close contact of symptomatic travelers (close prolonged contact or direct contact with respiratory secretions)
- Presence of any of the following in a person without history of sick contact or travel: fever and/or chills, cough, difficulty breathing

The presence of any one of the above risk factors will indicate the need for augmentation of Routine Practices by use of Additional Precautions. Unless the procedure is urgent or emergent, delay procedure until symptoms have resolved, COVID-19 is ruled out or the self-isolation period is completed.

What are Routine Practices?

Routine Practices are the infection prevention and control (IPC) “practices for use in the routine care of all patients at all times in all healthcare settings and are determined by the circumstances of the patient, the environment and the task to be performed.”¹ Central to these Routine Practices is a point-of-care (POC) risk assessment. A POC risk assessment is performed by healthcare workers to determine which IPC measures are appropriate to assure safe patient care, given the symptoms of the patient and the intended interaction, and to protect the healthcare worker from exposure to infection (such as exposure to body fluids, respiratory secretions, sharps, etc).

Routine practices include, but are not limited to:

- Point-of-care risk assessment
- Hand hygiene (either soap and water or an alcohol-based hand sanitizer)
- Aseptic technique
- Patient placement and flow
- Appropriate use of PPE
- Management and cleaning of the patient care environment



The continuation of basic public health measures shown to reduce the risk of transmission and acquisition of COVID-19 is imperative to all interactions:

- Physical/social distancing
- Hand hygiene
- Respiratory etiquette

Additional measures can be put in place to help to create a safer environment for the patient and staff. Such environmental measures and visual cues include:

- Considering having all staff wear scrubs while at work
- Visual cues and signage at doors encouraging patients to call ahead if symptomatic
- Visual cues and signage re-enforcing good hand hygiene practices and respiratory etiquette
- Plexiglass barrier for administrative staff, screeners
- Duct tape on the floor or other visual cue indicating appropriate spacing between patients
- Remove unnecessary items from the waiting room, such as papers and magazines
- Staggering scheduled appointments in order to maximize capacity for physical distancing in the health center
- Limit the number of patients in your clinic and encourage patients to come alone, unless they require the presence of a parent or caregiver
- If performing an aerosol generating procedure (AGP) in a patient with the presence of risk factors, assure that procedure is performed in a closed room
- Ensure that the clinical space is thoroughly cleaned and disinfected between each patient and that high touch surfaces (doorknobs, light switches, arm rests on chairs, etc.) are cleaned at least twice a day.

Please note, this is a guidance on PPE and basic hygiene practices for staff and providers in dental clinics. For more detailed information regarding additional definitions of dental-related aerosol-generating procedures (AGPs) and other dental-related risk-mitigating practices, please refer to the Alberta Dental Association and College's document: "Guidelines for Stage 1: Alberta Relaunch for Dental Practices." <https://www.dentalhealthalberta.ca/covid-19-info/emergency-treatment-links/guidelines-for-stage-1-alberta-relaunch-for-dental-practicepathway-to-patient-care/>

The table on the next three pages indicates the appropriate PPE for patient care based on target personnel and activity. If there is an absence of COVID-19 risk factors, continue Routine Practices relevant for the intended interaction. For those who have the presence of risk factors for COVID-19 or are COVID-19 positive, it is recommended to delay non-urgent treatment until the patient no longer exhibits risk factors or is no longer infectious. For those who exhibit risk factors for COVID-19 or are COVID-19 positive and require urgent treatment that cannot be delayed, consider treating in the hospital setting if your clinic does not have appropriate PPE and/or measures to safely treat patients.

Please refer to the Guidance for Emergency and Urgent Dental Care for a list of conditions that require urgent or emergent treatment.

Please note, where there is low prevalence and incidence of COVID-19, additional PPE over and above that required for normal precautions is not required. The use of goggles/face shield, gloves, gowns and an N95 mask are only required for AGPs on patients with respiratory symptoms and/or the presence of risk factors for COVID-19.

¹ "Routine practices and additional precautions for preventing the transmission of infection in healthcare settings." 2017-09-05. <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/routine-practices-precautions-healthcare-associated-infections/part-a.html> Accessed 15-04-20.

Key: ■ Patients ■ Staff ■ Environmental Services

Target space	Target personnel	Activity/Interaction	Recommended practices
Screening/ triage area	Staff	Screening or greeting a patient, not involving direct contact	<ul style="list-style-type: none"> • Maintain at least 2 metres separation or • Behind plexiglass
	Patients with respiratory symptoms or risk factors for COVID-19	Being screened	<ul style="list-style-type: none"> • Hand hygiene • Surgical/procedural mask • Give tissues for respiratory hygiene and provide for safe disposal • Maintain at least 2 metres distance • Assure safe disposal of used tissues
	Patients without respiratory symptoms or risk factors for COVID-19	Being screened	<ul style="list-style-type: none"> • Hand hygiene • Procedural/surgical mask • Maintain at least 2 metres distance • Assure safe disposal into waste receptacle of used tissues
Office space	Staff	Tasks that do not involve patient contact	<ul style="list-style-type: none"> • Maintain at least 2 metres separation • Regular practices of respiratory etiquette and hand hygiene
Waiting room	Patients with respiratory symptoms and/or presence of risk factors for COVID-19*	Waiting for dental evaluation	<ul style="list-style-type: none"> • Hand hygiene • Surgical/procedural mask • Respiratory etiquette • Give tissues and provide for safe disposal • If possible, isolate in room or in a designated area. If not feasible, maintain at least 2 metres from other patients

*Patients with respiratory symptoms and/or risk factors for COVID-19 are encouraged to use the self-assessment test online, call 811 or contact their medical provider for further evaluation. Those in the community with symptoms and/or risk factors for COVID-19 are encouraged to call the community health centre for special arrangements.

Target space	Target personnel	Activity/Interaction	Recommended practices
Waiting room	Patients without respiratory symptoms and absence of risk factors for COVID-19	Waiting for dental evaluation	<ul style="list-style-type: none"> • Hand hygiene • Maintain at least 2 metres between other patients
Operatory	Dental providers	Performing a dental examination or non-AGP procedure on a patient with respiratory symptoms and/or risk factors for COVID-19	<ul style="list-style-type: none"> • Hand hygiene • Droplet and contact precautions: <ul style="list-style-type: none"> • Level 2 or 3 surgical/procedural mask • Lab coat with cuffed sleeves and high neck fastening or gown (gown preferred) • Gloves • Goggles or face shield
	Dental providers	Performing an AGP on a patient with respiratory symptoms and/or risk factors for COVID-19 ²	<ul style="list-style-type: none"> • Hand hygiene • Airborne + droplet/contact precautions: <ul style="list-style-type: none"> • N95 mask • Gown • Gloves • Goggles or face shield • Cap/bouffant • Allow for sufficient air changes before next patient • Preferable to do AGPs on patients with risk factors at end of day to ensure sufficient air changes.
	Dental providers	Performing a dental examination or procedure (including AGP) on a patient without respiratory symptoms and absence of COVID-19 risk factors	<ul style="list-style-type: none"> • Hand hygiene • Droplet and contact precautions: <ul style="list-style-type: none"> • Level 2 or 3 surgical/procedural mask • Lab coat with cuffed sleeves and high neck fastening or gown (gown preferred) • Gloves • Goggles or face shield

² AGP – For specific dental-related AGPs, please refer to the Alberta Dental Association and College’s document: “Guidelines for Stage 1: Alberta Relaunch for Dental Practices.” <https://www.dentalhealthalberta.ca/covid-19-info/emergency-treatment-links/guidelines-for-stage-1-alberta-relaunch-for-dental-practicepathway-to-patient-care/>

Target space	Target personnel	Activity/Interaction	Recommended practices
Operatory	Patient with respiratory symptoms and/or presence of risk factors for COVID-19	Undergoing urgent or emergent dental evaluation	<ul style="list-style-type: none"> • Hand hygiene • Surgical/procedural mask • Respiratory etiquette, provide tissues and place for safe disposal
	Patient without respiratory symptoms and absence of risk factors for COVID-19	Undergoing dental evaluation	<ul style="list-style-type: none"> • Hand hygiene
All patient care areas	Environmental services	Cleaning and decontamination of patient care areas, office areas, staff areas and waiting rooms	<ul style="list-style-type: none"> • Routine cleaning between each patient, any equipment shared between patients must be cleaned and disinfected or sterilized as per ADA&C IPC Standards. Office environment, staff areas and waiting room should be cleaned frequently throughout the day and at least twice a day**

** Additional information on appropriate cleaning practices in the medical offices can be found here: https://yukon.ca/sites/yukon.ca/files/covid-19_guidance_for_clinical_staff_in_family_physician_offices_final_march_30_2020.pdf

Environmental Changes to Support a Safe Working Environment

Many dental procedures create splashes and splatters in addition to the risk of aerosol generation (aerosol-generating procedure – AGP). These factors can make infection control particularly challenging in this setting. Splatters and splashes are larger droplets and particles and tend to fall quickly. In contrast, aerosols are tiny droplets or particles that can remain in air for a longer period. Eventually, these tiny droplets will settle or be cleared from the air. The time of setting or clearance depends on the ventilation of the office.

Dentists are encouraged to avoid AGPs on patients with COVID-19 or the presence of risk factors for COVID-19 whenever possible. However, this may not be the best approach for all patients. To further mitigate the risk AGPs may pose to the dentist and staff, the clinics can prepare an environment that prioritizes safety and best reduces the risk of infection. This is in addition to the proper selection and use of PPE, as previously explained.

- In rooms where you anticipate performing an AGP, minimize the contents of all operatories. This includes any unnecessary equipment, supplies and wall hangings.
- AGPs should be performed only in rooms that are capable of containing the aerosol: floor-to-ceiling walls, closed door (or other barrier that can be cleaned and disinfected).

Following an AGP, one must allow time to permit the clearance and settling of aerosols. During this period, the room should be left empty (fallow time). The length of time a room should be left empty (with the door closed) is determined by the air changes per hour (ACH). The aim is to achieve 99.9% removal of airborne contaminants, see table below.

Air changes per hour (ACH) and time required for airborne-contaminant removal by efficiency¹

ACH	Time (minutes) required for removal 99% efficiency	Time (minutes) 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.

¹United States Centers for Diseases Control and Prevention (CDC). Infection Control: guidelines for environmental infection control in health-care facilities (2003). Table B.1 Air changes/hour (ACH) and time required for airborne-contaminant removal by efficiency. Accessed 29 May 2020. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>

Dentists should consult an HVAC professional to assess the existing HVAC system and calculate the actual ACH for the dental practice. Dentists may use the actual ACH to calculate a fallow time using Table 2.

- Dentists should retain copies of any documentation supporting the HVAC assessment and any need for engineering controls.

Options to improve ACH (and further reduce the fallow time) may be explored, including:

- Consulting an HVAC professional to determine whether changes to the existing HVAC system are possible to improve ACH for the dental practice.
- If changes to the existing HVAC system are not possible or adequate, dentists may consider the use of an in-operatory air cleaner (e.g. HEPA filtration) to increase the effective air changes per hour (eACH) for a specific operatory.
- If an in-operatory air cleaner (e.g. HEPA filtration) will be used to increase the effective air changes per hour (eACH) for a specific operatory, the HVAC professional must also take into account several additional factors, including:
 - o any structural changes that may be necessary to contain the spread of aerosols (e.g., the addition of floor to ceiling walls or barriers),
 - o the type of unit being considered (e.g. fixed versus portable)
 - o the cubic feet of the operatory and airflow rate of the unit, and
 - o the optimal placement and operation of the unit².

Please note, if the rate of air changes for the office has not been confirmed by an HVAC professional, dentists should assume a rate of 2 air changes per hour and adhere to a minimum fallow time of 180 minutes following the AGP2 on a patient with respiratory symptoms and/or presence of risk factors for COVID-19.

The HVAC considerations are standard and need to either be followed by the ACH fallow time chart, or schedule the patient with respiratory symptoms and/or presence of risk factors for COVID-19 as the last visit of the day or referred to another operatory with appropriate physical barriers and HVAC.

Following AGPs, cleaning and disinfection of the room must only be performed after the necessary fallow period has been completed. Dentists are to ensure the room are cleaned and disinfected prior to treating a new patient.

Additional considerations for your clinical area

- Sterilization room to be cleaned regularly
- Follow the Alberta Dental Association and College's IPC 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 manufacturers' instructions for proper product recommendations.
- Only patients and necessary attendants allowed in clinical areas.

²Royal College of Dental Surgeons of Ontario. "COVID-19: managing infection risks during in-person dental care." 25 May 2020. Accessed 29 May 2020. https://az184419.vo.msecnd.net/rcdso/pdf/standards-of-practice/RCDSO_COVID19_Managing_In_Person_Care.pdf