

COVID 19: GUIDANCE FOR REGISTERED DENTAL TECHNOLOGISTS

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College of Dental Technologists of Ontario
Ordre des Technologues Dentaires de l'Ontario

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INTRODUCTION

This document will guide Registered Dental Technologists (RDTs) in making the appropriate decisions that will minimize the risk of exposure to and transmission of COVID-19. It should be considered in conjunction with the College's Standards of Practice and Practice Advisories. Health care providers are also required to comply with the CMOH's [COVID-19 Operational Requirements: Health Sector Restart](#). The College will continue to update this document as the situation evolves and more is known about COVID-19 and its variants.

This document has been informed by the best available evidence and the need for consistent guidance for oral health care professionals. It aligns with the directives of the Chief Medical Officer of Health (CMOH), the Ministry of Health (MOH), and other relevant public health authorities. Where professional consensus is lacking or the available evidence is unclear, the College's guidance takes a precautionary approach that prioritizes the safety and well-being of patients, visitors, RDTs and staff.

System Partnership

We have engaged with the multiple stakeholders including other health regulatory bodies, the Association of Dental Technologists of Ontario, various government agencies, dental technologists and the Canadian Alliance of Dental Technology Regulators to respond to the COVID-19 pandemic.

Ontario's Oral Health Regulators Collaboration

Ontario's oral health regulatory Colleges are committed to working together to provide consistent guidance for the safe and effective provision of oral healthcare during the COVID-19 pandemic.

This ongoing collaboration involves the College of Dental Technologists of Ontario (CDTO), College of Dental Hygienists of Ontario (CDHO), the Royal College of Dental Surgeons of Ontario (RCDSO), and the College of Denturists of Ontario (CDO). This means that oral healthcare providers can be assured that their regulatory Colleges have reviewed and agreed upon consistent expectations for overlapping areas of practice (e.g., use of PPE), and that these expectations are reflected consistently in each College's updated guidance materials.

Building upon the work undertaken to date, Ontario's oral health regulatory Colleges will continue to work together to produce clear and consistent guidance and to promote safe and high-quality care for patients.

PRINCIPLES

The following principles will underpin our COVID-19 guidance:

1. The health and safety of patients/clients, the public and practitioners is our top priority.
2. Guidance will be based on best available evidence and data. In the absence of clear evidence, prioritize caution and safety.
3. Continuity of care must be preserved. Patients/clients of record should have reliable access to their oral healthcare providers to ensure they get the guidance and support they need.
4. Patient/client for access to oral healthcare must be balanced with the risks of spreading COVID-19.
5. Technology should be used to assess risks and triage patient/client needs remotely.
6. Communication with patients/clients is critical. Risks or changes to care related to COVID-19 must be highlighted.

INFECTION PREVENTION AND CONTROL STANDARD

This document highlights additional considerations necessary during the COVID-19 pandemic. It builds upon the foundation of the College's [Infection Prevention and Control Standard](#). Refer to this standard for specific guidance in areas such as routine practices and procedures for reprocessing instruments.

COMMUNICATION

Changes to protocols during the COVID-19 pandemic should be communicated to staff, clients, patients and visitors. Signage should be posted that explains physical distancing and PPE requirements of the workplace. There should also be accessible signage (i.e., plain language, symbols, other languages where appropriate) that explains the signs and symptoms of COVID-19 and how to reduce the risk of spread. Some examples of signage:

- Government of Ontario's [COVID-19 Symptoms for Patients and Visitors](#)
- Public Health Ontario's [Cover Your Cough](#)

WORKPLACE CONSIDERATIONS

The College recognizes that RDTs practice in a variety of settings (e.g., dental laboratories, dental offices) and may not always be in a decision-making role.

RDTs are advised to familiarize themselves with guidelines issued by the [Government of Ontario](#) and their employers for preventing the spread of COVID-19. Many practices can be applied across workplaces such as removing unnecessary items at reception and limiting the sharing of stationary.

Patient Screening

The MOH has developed guidance to support [COVID-19 screening](#) for patients. These screening questions are subject to change (i.e., symptoms may be updated) and thus important to ensure that the most recent screening questions are being used. At the present time, the MOH's screening protocols do not provide specific guidance for patients who have been vaccinated against COVID-19, however, should they be updated, the College's guidance will be updated accordingly.

- The person who conducts the on-site screening (screener) for patients and essential visitors (e.g., a parent accompanying a young child or a patient who requires accommodation) should ideally be behind a physical barrier (e.g., plexiglass) to be protected from contact or droplet spread. If a physical barrier is not available, a physical distance of at least two meters should be maintained.
 - Screeners who do not have a barrier and cannot maintain physical distancing must wear a procedure/surgical mask and eye protection (e.g., goggles or face shield) (see Table 1).

Staff Screening

Fitness to work must be assessed on an ongoing basis. RDTs and staff should self-monitor for COVID-19 symptoms prior to each shift by using [COVID-19 screening for businesses and organizations](#). These screening questions are subject to change and thus important to ensure that the most recent screening questions are being used.

- RDTs and/or staff who screen positive for COVID-19 must:
 - Immediately self-isolate and contact their health care provider or Telehealth Ontario at 1-866-797-0000 to get advice or an assessment, including if they need a COVID-19 test.
 - Follow the [most current self-isolation and return to work guidance from the Ministry of Health](#) prior to returning to work.

- Each RDT should maintain a record of daily screening results for themselves, the individuals they supervise, visitors and patients. This information is private and should be kept confidential but made available to health authorities if requested. Important data includes roles of persons working in the workplace, dates and times persons working in the workplace were present, and names of patients and visitors by date and time (see the [College's COVID-19 FAQ](#)).

Potential Exposure Guidance

- Patients and visitors should be advised to inform staff if they experience any symptoms of COVID-19 within the next 14 days.
- If a patient or a visitor reports symptoms of or testing positive for COVID-19 within 14 days of having attended an appointment, staff are advised to contact their local public health unit for further guidance.

Physical Distancing

- A minimum physical distance of two meters should always be maintained. Ways to ensure appropriate physical distancing include staggering shift times, limiting the number of individuals present at one time, and using ground markings and barriers to manage traffic flow.
- If physical distancing cannot be maintained or if a proper physical barrier (e.g., plexiglass) is not in place, an appropriate mask and eye protection must always be worn.

Hand Hygiene

- Places of practice must have sufficient supplies and effective access to perform frequent hand hygiene. This can be done using sinks supplied with soap and water, or with 70-90% alcohol-based hand rub.
- Hand hygiene should be performed according to [Public Health Ontario's Guidelines](#) and posted in applicable areas.
- Ensure that patients and staff have access to tissues and a hands-free waste receptacle (e.g., operated with a foot pedal) that is lined with garbage bags.

Clothing

- Workplace and protective clothing, including gowns and lab coats, should not be worn outside the workplace.
- Protective clothing should be changed at least daily, and if it becomes visibly soiled or significantly contaminated by potentially infectious fluids or materials.
- Clothing should be changed at work and placed into a bag. If the workplace does not supply uniforms and laundry, consider setting up a decontamination station at home.

Ventilation

- Ventilation is a common control for preventing exposure to toxic material. Well-designed and well-maintained ventilation systems can remove toxic vapors, fumes, mists or other airborne contaminate from the workplace preventing staff exposure. Effective ventilation can reduce airborne hazards.

Environmental Cleaning

Routine practices, which include cleaning and disinfection of surfaces, are important to control the spread of COVID-19.

- All common areas should be regularly cleaned. In addition, physical barriers (e.g., plexiglass) are to be included in routine cleaning (e.g., daily).

- Any [frequently touched surfaces](#) (e.g., doorknobs, elevator buttons, light switches, toilet handles, counters, hand rails, touch screen surfaces) should be cleaned and disinfected twice per day. If they are visibly soiled, they should be immediately cleaned and disinfected.
- This is a [current list of products](#) that meet EPA’s criteria for use against SARS-CoV-2 (the virus that causes COVID-19).

PRACTICE CONSIDERATIONS

The following guidance reflects the CMOH’s [COVID-19 Operational Requirements: Health Sector Restart](#) document which specifies actions based on whether a patient has screened or tested positive or negative for COVID-19. If RDTs are not able to screen the patient, they should coordinate with their client (i.e., dentists) for documentation of the screening results.

Personal Protective Equipment

Personal protective equipment (PPE) is critical to the health and safety of all healthcare workers, as well as the patients you care for. Professional judgement and a personal risk assessment should be used to determine the appropriate PPE for the activity being performed.

- PPE is only effective when it is in good condition and put on (donned) and removed (doffed) correctly. See [Public Health Ontario’s guidelines](#).
- Use PPE appropriately to prevent unnecessary use of limited supplies and other PPE resources (e.g., N95 masks or [the equivalent, as approved by Health Canada](#)).
- N95 masks should be reserved for aerosol-generating procedures on dental prostheses, devices or items that belong to patients who have screened or tested positive for COVID-19 (see Table 1). The proper use of an N95 mask requires each person to be fit-tested and seal-checked.
- Medical masks (procedure or surgical) can function as source control (being worn to protect others) or as PPE (to protect the wearer). See [Public Health Ontario’s Universal Use of Mask](#).
- Eye protection (e.g., goggles or face shields) can protect the eyes from splashes, sprays and droplets.
- Isolation gowns are required if skin or clothing will come in contact with the patient. Gowns must be changed after each patient use. Also, as part of routine practices and a personal risk assessment, a gown is worn when it is anticipated that a procedure or care activity is likely to generate splashes or sprays of saliva, blood, body fluids, secretions, or excretions. See [Health Canada personal protective equipment against COVID-19: Medical gowns](#) and [Medical Isolation Gowns for COVID-19 in Health Care Settings](#).

Table 1. Use of Personal Protective Equipment (PPE) by Setting and Procedure for COVID-19.

Setting	Procedure	Minimum Required PPE
Patient care area or dedicated area for aerosol-generating procedures	Aerosol-generating procedures on a dental prosthesis or device that has had contact with a patient who has screened positive for COVID-19 in a dental laboratory	<ul style="list-style-type: none"> • Fit-tested and seal-checked N95 respirator (or equivalent as per Health Canada) • Gloves • Eye protection • Isolation gown
	Aerosol-generating procedures on a dental prosthesis or device that has had contact with a patient who has screened negative for COVID-19 in a dental laboratory	<ul style="list-style-type: none"> • Fit-tested and seal-checked N95 respirator, (or equivalent as per Health Canada) or ASTM* level 2 or 3 procedure/surgical mask • Gloves • Eye protection • Isolation gown (optional)
	In-person care (non-aerosol-generating procedures) when the patient has screened positive for COVID-19	<ul style="list-style-type: none"> • ASTM level 2 or 3 procedure/surgical mask • Gloves • Eye protection • Isolation gown
	In-person care (non-aerosol-generating procedures) when the patient has screened negative for COVID-19	<ul style="list-style-type: none"> • ASTM level 2 or 3 procedure/surgical mask • Gloves • Eye protection • Isolation gown (optional)
	Cleaning and disinfection of patient care area or dedicated area for aerosol-generating procedures	<ul style="list-style-type: none"> • ASTM level 1 procedure mask • Gloves • Eye protection
Receiving items area	Disinfection of received contaminated (or potentially contaminated) items when the patient has screened positive for COVID-19	<ul style="list-style-type: none"> • ASTM level 2 or 3 procedure/surgical mask • Gloves • Eye protection • Isolation gown
	Disinfection of received contaminated (or potentially contaminated) items when the patient has screened negative for COVID-19	<ul style="list-style-type: none"> • ASTM level 2 or 3 procedure/surgical mask • Gloves • Eye protection • Isolation gown (optional)
Reprocessing area	Reprocessing of reusable Instruments	<ul style="list-style-type: none"> • ASTM level 2 or 3 procedure/surgical mask • Heavy-duty utility-gloves • Eye protection • Isolation gown
Fabrication area	Fabrication process – for non-aerosol-generating procedures	<ul style="list-style-type: none"> • ASTM level 1 procedure mask or maintain physical distancing • Protective clothing (e.g., lab coat, isolation gown) • Additional PPE as required by the activity being performed (e.g., gloves, eye protection)
Reception area	On-site screening	<ul style="list-style-type: none"> • Minimum ASTM level 1 procedure mask • Maintain physical distancing • Physical barrier recommended
Common and administration area	Administrative and other tasks	<ul style="list-style-type: none"> • ASTM level 1 procedure mask or maintain physical distancing

*ASTM is an international standards organization.

Handling Packages and Items

- A physical distance of at least two meters should be maintained in the handling of packages. Consider contactless shipping and receiving methods such as leaving the package on a doorstep. If physical distancing cannot be maintained, appropriate PPE should be worn.
- Dispose of all single-use shipping materials (e.g., plastic bags) that have contacted the received items. If the items are reusable, properly disinfect (whenever possible sterilize) them according to manufacturer's instructions.
- Communicate effectively with dental practices to know whether a received item belongs to a patient who has screened positive or negative for COVID-19.
 - If it is not clear, treat the received item as COVID-19 contaminated.
- Increased caution and appropriate PPE (see Table 1) should be used when handling items that have had contact with a patient who has screened or tested positive. These items must be thoroughly disinfected or sterilized, as appropriate, before proceeding. See [additional precautions](#) in the Health Canada Interim Guidance document, for more details.
- Clean and disinfect the area for receiving incoming cases immediately after decontamination of each case.
- Clean and properly disinfect (whenever possible sterilize) items before sending them out. Package and label to indicate "disinfected".

Aerosol-Generating Procedures

An aerosol-generating procedure is defined as an activity that creates either fine, solid, particulate matter or liquid droplets in the air. Aerosols may be generated when using high-speed, low-speed and other rotary handpieces, ultrasonic and other similar devices on dental prostheses, devices or items (e.g., impressions) that have had direct patient contact. Examples include polishing or grinding of a patient's denture for the purpose of adjustment or repair.

While there is currently inadequate scientific research to assess the risk of aerosol-generating procedures in dental laboratories, the College has adopted a precautionary approach that prioritizes safety. If an aerosol will be generated on prostheses, devices or items that belong to patients who have screened or tested positive for COVID-19, the following precautionary measures must be met in dental laboratories:

- A closed dedicated space, such as a containment box or a room with floor-to-ceiling walls with a closed door, to prevent the spread of aerosols to other parts of the workplace.
- The use of additional precautions as set out below, and enhanced PPE (see Table 1), such as a fit-tested and seal-checked N95 respirator or equivalent [as per Health Canada](#), gloves, eye protection and isolation gown. Where aerosols are contained and there is no exposure (e.g., containment box), enhanced PPE may not be required.
- Delay the cleaning and disinfecting of the dedicated space and ensure it remains empty for 138 minutes unless the rate of air change for the dedicated space is known and is higher than 2 Air Changes per Hour (ACH). The time it takes for a 99.0% dilution of any aerosols is assumed to be 138 minutes based on 2 ACH. For ventilated spaces (e.g., containment box with a suction unit), this time may be reduced and must be calculated based on ACH. Use Table 2 to determine the length of time necessary to achieve 99.0% removal of airborne contaminants. For example, an operating theatre in a hospital with 20 ACH may only require 14 minutes.
- Consult with an HVAC professional to assess the existing HVAC system and determine the actual ACH for the dedicated space. An HVAC professional may use the actual ACH to calculate the time required for 99.0% removal of any aerosols (See Table 2).
- Limit the number of people exposed to the aerosols during and after the procedure.

Table 2. Time Required for Removal or Settling of Aerosols by Air Changes per Hour (ACH).

Air Change per Hour (ACH)¶	Time (mins.) required for removal 99.0% efficiency*
2	138
4	69
6	46
8	35
10	28
12	23
15	18
20	14
25	12
30	10
35	8
40	7
50	6

Adapted from: Centers for Disease Control and Prevention, 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. Available at: <https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>

PATIENT CARE

The risks of in-person care should be weighed against the benefits. Professional judgement must be used to make the necessary adjustments to increase protection of patients and staff. When these guidelines cannot be met, the patient must be referred to another practitioner.

Prior to the Appointment

- Maintain a clean and dedicated patient waiting and care area.
- Non-essential items (e.g., magazines, toys, dental equipment) should be removed from patient waiting and care areas to minimize contamination and the potential to become a vehicle to spread the virus.
- Patients and essential visitors (e.g., a parent accompanying a young child or a patient who requires accommodation) should be screened over the phone for COVID-19 using the [screening questions](#) developed by the MOH. These screening questions are subject to change (i.e., symptoms may be updated). It is important to ensure that the most recent screening questions are being used.
 - If the patient screens positive, the appointment should be deferred. If the essential visitor screens positive, they should not be permitted to attend with the patient until symptoms have resolved.
 - The patient or essential visitor who screens positive should be advised to seek direction from their primary care provider or Telehealth Ontario at 1-866-797-0000.
- Notify patients of policies that limit transmission of COVID-19 including:
 - Requiring individuals accompanying them to wait outside of the workplace unless they are essential.
 - Requiring patients and essential visitors to wear a face-covering (e.g., a procedural/surgical mask, cloth covering, other appropriate face covering) prior to entering the workplace.

The Appointment

Patient Arrival Process

- Patients and essential visitors who arrive without a face covering must be provided one or be required to schedule a new appointment.
- Patients should be required to perform hand hygiene with either 70-90% alcohol-based hand rub or soap, and running water upon initial entry to the workplace.
- Patients and essential visitors must be screened for COVID-19 using the [screening questions](#) developed by the MOH before entering the patient care area. The screener should use proper precautions and PPE as set out in the section on [Patient Screening](#) under Workplace Considerations and Table 1.
 - RDTs are not required to take or record temperatures as part of routine screening. however, they may choose to do so using a no-contact infrared thermometer.
- If a patient or an essential visitor screens positive for COVID-19:
 - They should be advised to self-isolate immediately and contact their primary care provider or Telehealth Ontario at 1-866-797-0000 to determine next steps or visit an assessment center to be tested.
 - In-person care must not be provided, except for emergency or urgent care, that cannot be delayed. An RDT must also be able to meet the additional precautions and requirements set out below.
 - When in-person care cannot be avoided, the patient's appointment should be scheduled at the end of the day to decrease the risk to other patients. The patient must wear or be provided with a procedure/surgical mask (minimum ASTM level 1) prior to entering the workplace and must immediately be placed in a patient care area with the door closed. Where a patient care area is not available and/or physical distancing cannot be maintained, patients must be instructed to return outside (e.g., to their vehicle or a parking lot if available and appropriate) and informed they will be notified when a room becomes available.

In-Person Care

- PPE that is appropriate for the anticipated procedure or activity (see Table 1) should always be worn when providing direct patient care or working in patient care areas.
 - For a patient who has screened or tested positive for COVID-19, in-person care must not be provided, except for emergency or urgent care, that cannot be delayed. If an RDT proceeds with in-person care, enhanced PPE must be used (see Table 1).
- RDTs must ensure that patient care areas are cleaned and disinfected between each patient appointment.
- Given the lack of direct evidence, the use of pre-procedural oral rinses is not currently required or recommended by the College; however, RDTs may choose to use them at their own discretion. See Public Health Ontario's [COVID-19 in Dental Care Settings](#) document for more information concerning the use of oral rinses.

After the Appointment

- Patients should be asked to perform hand hygiene with either 70-90% ABHR or soap, and running water before leaving the workplace.
- Patients and essential visitors should be advised to inform staff if they experience any symptoms of COVID-19 within the next 14 days (see the section on [Potential Exposure Guidance](#) under Workplace Considerations).

- Clean and properly disinfect (whenever possible sterilize) all instruments or devices which have had direct patient contact as soon as possible.
- After every patient visit, patient-contact surfaces (i.e., areas within two meters of the patient) should be disinfected as soon as possible and before another patient is seen.

TRAINING ON INFECTION PREVENTION AND CONTROL PROTOCOLS

RDTs have a responsibility to ensure that the [Infection Prevention and Control Standard](#) is fully met in the practice in which they work. Where RDTs delegate these responsibilities, RDTs remain accountable.

- Maintain current knowledge of infection prevention and control and keep up to date on COVID-19 information.
- Educate staff on COVID-19, how it spreads, risk of exposure, including those who may be at higher risk (i.e., have underlying health conditions) and procedures to follow including reporting, proper handwashing practices and other routine infection control precautions.

Employers, who may be RDTs, have duties under the [Occupational Health and Safety Act, 1990](#) to protect the health and safety of workers.

RESOURCES

[College of Dental Technologists of Ontario's Standards and Practice Advisories](#)

[Centers for Disease Control and Prevent \(CDC\) Guidance for Dental Settings](#)

[Ministry of Health COVID-19 Guidance for Health Sector](#)

- [Ministry of Health: COVID-19 Operational Requirements: Health Sector Restart.](#)
- [Ministry of Health: COVID-19 Patient Screening Guidance Document.](#)
- [Ministry of Health: COVID-19 Screening Tool for Businesses and Organizations \(Screening Workers\).](#)
- [Ministry of Health: Management of Cases and Contacts of COVID-19 in Ontario \(Version 11.0\).](#)
- [Ministry of Health: COVID-19 Quick Reference Public Health Guidance on Testing and Clearance.](#)

[Ontario Government COVID-19 Resources](#)

- [Ontario Government: COVID-19 Public Health Measure and Restrictions.](#)
- [Ontario Government: Reopening Ontario \(Steps 1-3\)](#)

[Public Health Ontario's COVID-19 Resources](#)

- [Public Health Ontario: COVID-19 in Dental Care Settings.](#)
- [Public Health Ontario: Considerations for Community-Based Health Care Workers on Interpreting Local Epidemiology.](#)
- [Public Health Ontario: Open Operatory Dental Setting Infection Control Practices and Risk of Transmission during Aerosol-Generating Procedures.](#)
- [Public Health Ontario: COVID-19 Transmission Through Large Respiratory Droplets and Aerosols... What We Know So Far](#)

REVISION HISTORY

Revision #	Date Effective	Key Changes
1	May 22, 2020	<ul style="list-style-type: none"> Initial guidance document
2	June 3, 2020	<p>Updated to reflect CMOH's guidance in the COVID-19 Operational Requirements: Health Sector that the approach to care is based on whether a patient screens or tests negative or positive for COVID-19</p> <ul style="list-style-type: none"> Additional guidance in the Patient Care section based on a patient screening or testing negative or positive for COVID-19 Addition of Table 1 in the section of Personal Protective Equipment, which sets out the use of PPE by setting and procedure based on a patient screening or testing negative or positive for COVID-19 Edit section on Aerosol-Generating Procedures, guidance now applies only when it is on a dental prosthesis/device or an item that has had direct contact with patients who have screened or tested positive for COVID-19 Additional guidance in the Screening section to include CMOH recommendation that staff conducting screening of patients and essential visitors are ideally behind a physical barrier
3	July 29, 2021	<p>Updated to reflect current evidence, the direction of public health authorities and Ontario's Oral Health Regulatory Colleges ongoing collaboration including</p> <ul style="list-style-type: none"> Minor amendments to ensure overall consistency with the guidance of Ontario's other oral health regulators, including CDHO, CDO and RCDSO Removed 'Return to Practice' from the title Reduced the percentage target for aerosol removal from 99.9% to 99.0% which shortens the delay time required following AGPs (see Table 2) More latitude to administer aerosol-generating procedures with proper precautions as outlined in this guidance "RDTs' duty to report a COVID-19 positive patient" section is omitted according to Health Protection and Promotion Act: Duty to report disease