

RETURN TO WORK GUIDELINES FOR THE ORAL HEALTH PROFESSIONS OF NOVA SCOTIA

College of Dental Hygienists of Nova Scotia

Denturist Licensing Board of Nova Scotia

Nova Scotia Dental Technicians Association

Provincial Dental Board of Nova Scotia

Phase/ Stage 3 in effect June 19, 2020

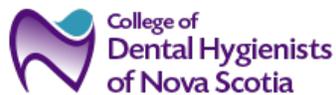


TABLE OF CONTENTS

i. Letter to Registrants

1. ***Covid-19 Reopening Plan and Protocols for Dental Hygienists in all Practice Settings -Stage 3: Comprehensive Care — Emergency, Urgent, And Non-Urgent Care:***
College of Dental Hygienists of Nova Scotia
2. ***Guidelines on Return to Practice – Phase 3 Comprehensive Treatment:*** Denturist
Licensing Board of Nova Scotia
3. ***Covid -19 Guidance:*** Nova Scotia Dental Technicians Association
4. ***COVID-19 Reopening Plan for Dental Clinics - Phase 3 Comprehensive Care:***
Provincial Dental Board of Nova Scotia
5. **Appendices**

Dear Registrant,

The four provincial oral health regulators, the College of Dental Hygienists of Nova Scotia (CDHNS), the Denturist Licensing Board of Nova Scotia (DLBNS), the Nova Scotia Dental Technicians Association (NSDTA), and the Provincial Dental Board of Nova Scotia (PDBNS), are pleased to provide a coordinated action plan and profession-specific protocols and guidance related to the safe resumption of care for the five oral health professions in Nova Scotia.

Like Premier Stephen McNeil and Dr. Robert Strang (Chief Medical Officer of Health, CMOH), the oral health regulators are committed to a phased-in approach, with a slow and steady progression towards relaxing restrictions.

The purpose of this document: To provide a comprehensive package that consolidates standards, guidance, and expectations regarding provision of oral health care to Nova Scotians. It is focused on delivery of care that will begin on **June 19, 2020** – Phase/Stage3: Comprehensive Care – delivery of emergency, urgent and elective (non-urgent) care. Until that time, the Phase/ Stage 2 document, updated on June 6, 2020, remains in effect and must be followed.

Intended audience: This document is for dental health care providers (DHCPs): registered dental assistants, registered dental hygienists, registered dental technicians, denturists, and dentists.

The direction in this document pertains to the delivery of care in community /private practice settings. These include, but are not limited to, private practice clinics, private mobile or community-based practices, and school-based practices.

DHCPs employed by hospitals, health authorities, and long-term care facilities are still bound by their regulatory body and should refer to any additional guidance provided by their employers, e.g. Nova Scotia Health Authority.

Objectives: To continue to minimize the risks and control the transmission of SARS-CoV-2 during provision of oral health care by DHCPs.

Updates: As new evidence/data arises, these documents will be revised as necessary. All DHCPs are expected to remain current and comply with the most current version of the Protocols.

Roles and Responsibilities of each regulated professional: You must comply with the requirements of your regulatory body, including the relevant legislation and scopes of practice. If you have any questions regarding scope of practice, or the standards or protocols outlined in the profession-specific document, please contact your regulatory body directly. *The contact information is found at the end of the profession specific section.*

Document lay out: There are five sections within this document, one for each regulatory body, which includes the profession-specific protocols and guidance for each profession. There is a separate Table of Contents for each of the four sections. The fifth section has all of the relevant appendices that are referred to in the profession-specific documents.

Education: The oral health regulators will provide registrants with educational resources and educational sessions regularly to ensure registrants are competent in the provision of care

during the phased/staged return to practice. This is in addition to the resources included in the Appendices.

Sincerely,



Mr. Christian Hall, RDT, BComm
President, NSDTA



Ms. Stacy Bryan, RDH, MALead
Registrar, CDHNS



Shannon O'Neill, RDH, BA, Cert. Public Health
Chair, CDHNS



Ms Maureen Hope
Registrar, DLBNS



Loretta Beals
Chair, DLBNS



Dr. Martin Gillis, DDS
Registrar, PDBNS



Dr. Daniel Albert, DDS
Chair, PDBNS

**COVID-19 REOPENING PLAN AND PROTOCOLS
FOR DENTAL HYGIENISTS IN ALL PRACTICE SETTINGS
STAGE 3: COMPREHENSIVE CARE — EMERGENCY, URGENT,
AND NON-URGENT CARE**

Updated: Mar 4, 2022

Effective: Mar 7, 2022

These Protocols are current as of March 4, 2022 and will be updated as needed.

Table of Contents

1. Introduction	1
1.1 Providing Oral Health Services During the Pandemic.....	1
1.2 Differences between the CDHNS Document and the PDBNS Document.....	1
1.3 Dental Hygienists' Roles and Responsibilities	2
2. Stage 3: Provision of Dental Hygiene Care.....	3
2.1 Aerosol Generating Procedures (AGP) and Non-Aerosol Generating Procedures (NAGP)	3
2.2 Additional Considerations for All Procedures.....	4
3. Reception Area Considerations.....	4
4. Before the Appointment (Client Pre-Screening).....	4
4.1 COVID-19 Symptoms	5
4.2 COVID-19 Symptoms <i>or</i> Requirement to Self-Isolate	5
4.3 No COVID-19 Symptoms <i>and</i> No Self-Isolation Requirement	6
4.4 Management of Clients Who Have Had COVID-19.....	6
4.5 Daily Assessment for Staff	6
5. During the Appointment.....	7
5.1 Clients	7
5.2 Staff.....	7
6. After the Appointment.....	7
6.1 Client Is Leaving	7
6.2 Client Follow-Up	8
6.3 Handling Packages and Items	8
7. Personal Protective Equipment (PPE)	8
7.1 Eye/Face Protection.....	9
7.2 Gowns/Lab Coats	11
7.3 Masks and Respirators (N95).....	11
7.4 Masks and Respirators for AGPs.....	13
7.5 Facility Requirements	13
7.5.1 Ventilation	14
7.5.2 Environmental Cleaning	14
7.5.3 Waste Management.....	14
7.6 Safe Management of Reusable Linens (Laundry)	14
8. Infection Prevention and Control Measures.....	14
8.1 Considerations	14
9. Education and Training on Infection Prevention and Control Protocols	15
10. References	16
11. Revision Log (Effective March 7, 2022).....	17

1. Introduction

1.1 Providing Oral Health Services During the Pandemic

As we progress throughout this pandemic, we continue to apply what we have learned during this pandemic, as well as tracking new and emerging issues, including the emergence of genetic variants of SARS-CoV-2. “Viruses constantly change through mutation”¹, therefore constant evaluation of their effects on healthcare will be monitored.

Stage 3: Effective June 19th, 2020, **non-urgent** (elective) dental hygiene care was permitted. **To provide these services, the protocols outlined in this document must be followed.**

This document provides protocols for Stage 3—providing emergency, urgent, and non-urgent (elective) oral health care. It is appropriate to provide needed care that—if left untreated—would become a more significant burden on our healthcare resources and significantly compromise client health. **The need for oral health care must be weighed against the risk of COVID-19 exposure to clients and dental healthcare providers (DHCP) and non-clinical staff.**

CDHNS registrants are expected to adhere to the following protocols in conjunction with appropriate clinical judgment on making decisions when providing dental hygiene services or providing supportive care along with the oral health care team (e.g., in a dental or denturist practice).

This is a fluid document that will be updated as new evidence-based information becomes available, including when the dental hygiene community proceeds to a subsequent stage of provision of clinical care. **You are expected to follow the current protocols at all times.**

Refer to Section 11 for the Revision Log table. Only the most recent edits for the Stage 3 document are tracked.

1.2 Differences between the CDHNS Document and the PDBNS Document

The majority of dental hygienists provide clinical dental hygiene services in dental practice settings (e.g., community dental clinics). As much as possible, the CDHNS Protocols are congruent with the Provincial Dental Board of Nova Scotia’s (PDBNS) document entitled *COVID-19 Reopening Plan for Dental Clinics – Phase 3: Comprehensive Care*.

The wording in this CDHNS document has been revised to align with dental hygiene practice and other practice settings that dental hygienists may provide care, such as dental hygiene practices and educational institutions. Some changes you may notice that do not affect the original intent of the PDBNS document are as follows:

- To minimize confusion between the NS government’s phases and the oral health field phases, the CDHNS has chosen to use the term “**Stage**” rather than “Phase” when referring to the changes in resumption to practice.
- The terms *client* and *patient* are used interchangeably.
- Sections have been reordered for chronological sequencing; some wording has been revised to improve clarity or to provide additional insights.
- As needed, clarification is provided around dental hygiene scope of practice.

Protocols that differ significantly between this CDHNS document and the PDBNS document are identified by red text. **At all times, regardless of practice setting, dental hygienists are expected to comply with the CDHNS Protocols.**

1.3 Dental Hygienists' Roles and Responsibilities

Dental hygienists in Nova Scotia who are returning to practice are expected to follow the most current protocols and guidance provided by the CDHNS. **If you fail to abide by these protocols, it may be considered professional misconduct and you may be subject to discipline, including licensing sanctions.** You are reminded of the general principles:

- You are a regulated health care professional.
- It is your responsibility to comply with your regulatory body, the CDHNS. This includes adherence to relevant legislation (including the *Dental Hygienists Act and Regulations*), the Standards of Practice ([Code of Ethics [CDHA 2012], Practice Standards [CDHA, 2010], these Protocols, and all CDHNS policies).
- As a dental hygienist, your focus is on the public, and “your primary accountability is to the client” (CDHA, 2012, p. 2).²
- You must maintain current knowledge of infection prevention and control (IPC), including protocols to reduce and mitigate the risk of spread of the novel coronavirus and the disease, COVID-19.

In accordance with the [CDHA Code of Ethics](#), you are accountable for your own actions. Page 2 states, “Accountability pertains to taking responsibility for one’s actions and omissions in light of relevant principles, standards, laws, and regulations. It includes the potential to self-evaluate and be evaluated. It involves practising competently and accepting responsibility for behaviours and decisions in the professional context”.⁵

The CDHNS recognizes that you may not always be in a decision-making role. You should not return to practice if the protocols outlined in this document cannot be followed; e.g., appropriate and required PPE is not available. Both the employer and the employee have responsibilities under the Occupational Health and Safety (OHS) legislation:

<https://nslegislature.ca/sites/default/files/legc/statutes/occupational%20health%20and%20safety.pdf>

<https://www.novascotia.ca/just/regulations/rxam-z.htm#ohs>

Know the legislation and comply with it. For example, according to 7 (A) (2) of the Regulations, “before any work is undertaken, an employer must ensure that the necessary information, instruction, training, supervision, facilities and equipment are provided to implement any part of a policy, procedure, plan or code of practice applicable to a workplace.”

As you apply your professional judgment, consider the following: the client’s condition and risk factors, the incidences of COVID-19 cases in your region, workplace configuration and the availability of Personal Protective Equipment (PPE), and access to necessary cleaning and disinfecting supplies.

Any directives or orders from the DHW or the CMOH take precedence over any statements in this document.

Each practice setting/treatment facility is required to develop their own site-specific work plan. This document should serve as the template for this plan. Provincial government inspectors may be performing spot checks of practices to assess compliance. The guidelines set out in the site-specific work plan apply to all DHCs and other staff members working at the site.

2. Stage 3: Provision of Dental Hygiene Care

Exercise appropriate clinical judgment to manage each client's oral health care needs.

During Stage 3, do not treat clients who present with symptoms outlined in Section 4.1, have been advised to isolate, or have been diagnosed with COVID-19, in community dental/dental hygiene practices, unless your facility can meet the airborne precautions outlined in Section 4. You may:

- (1) Defer treatment until testing has been completed and comes back negative or resolved, or client is otherwise cleared by Public Health, or
- (2) Refer client to a facility that has the necessary infrastructure to provide care using airborne precautions (See Section 4)

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

Aerosol generating procedures (AGPs) are procedures which can generate aerosols that consist of small droplet nuclei in high concentration and present a risk for airborne transmission of pathogens that would not otherwise be spread by the airborne route (e.g., Coronavirus, influenza). These types of procedures are thought to be associated with a higher risk of disease transmission in COVID-19 positive clients.

Consider acceptable NAGP treatment options over AGP procedures. It is up to each clinician to determine the appropriate procedure needed for each client. Perform AGPs when the anticipated benefits of such services outweigh the risks to the client, the health professional, and the greater community.

Examples of AGPs for dental hygienists are listed below. Not all RDHs may be competent to use some of the equipment or techniques listed. If this is the case, you must restrict yourself until you are competent to perform it, in accordance with any relevant CDHNS Standards or Policies.

- three-way ("tri") air-water syringe
- ultrasonic and sonic devices
- high-speed handpiece (use within RDH scope of practice)
- slow-speed handpiece in the presence of water/saliva
- lasers
- micro-abrasion
- air polishers

Non-aerosol generating procedures (NAGPs) are procedures with a lower likelihood of generating aerosols. This includes procedures like hand scaling, administration of local anesthetic, topical anesthetic, and non-injectable anesthetic.

Use techniques to minimize the risk of aerosol generation (e.g., four-handed dentistry, high volume evacuation). The CDHNS supports the use of four-handed dentistry, including use of high-volume evacuation, by a licensed dental assistant during dental hygiene procedures that may require it. This is also of importance when a client is compromised and at more risk (e.g., swallowing issues and/or at risk of aspiration).

2.2 Additional Considerations for All Procedures

As noted in section 2.2, **consider acceptable NAGP treatment options over AGP procedures.** Consider the following strategies to minimize the potential for aerosol exposure to the dental hygienist and the client:

- Select the appropriate PPE based on the procedure being performed (*see* Section 7)
- Follow the proper donning and doffing of PPE (*see* Appendix A)
- Use a preprocedural mouth rinse
- Use rubber dam isolation and/or other isolation techniques
- Use high-volume evacuation suction (**Note:** *This is mandatory for procedures like powered instrumentation*)
- Use the four-handed dentistry technique (**Note:** In accordance with the Dental Assistant Regulations (Sections 6 and 7), the dentist must be on-site for a DA to assist the RDH with any intra-oral procedures listed in their Regulations.)
- Perform hand scaling versus ultrasonic/sonic scaling, if possible, for dental hygiene therapy
Note: The decision to use powered instruments versus hand-scaling for dental hygiene periodontal debridement is based on variety of factors, e.g., evaluation of the client's specific oral health needs, any complicating dental or medical health factors, the amount and tenacity of deposits, periodontal pocket depths, and choosing the most effective therapy to obtain the desired client outcomes.
- Use the three-way air water syringe only when necessary; and minimize simultaneous use of air and water
- Review previous protocols and practices in your practice setting to see whether they can be revised to minimize risk and/or repeated need for donning and doffing PPE (e.g., can a runner be integrated into the practice workflow to perform certain procedures?)

3. Reception Area Considerations

- Promote physical distancing between clients
- Arrange seating in the reception to allow for physical distancing of two metres when possible
- Remove all magazines, toys, and non-essential items from reception/waiting area and operatories to prevent contamination

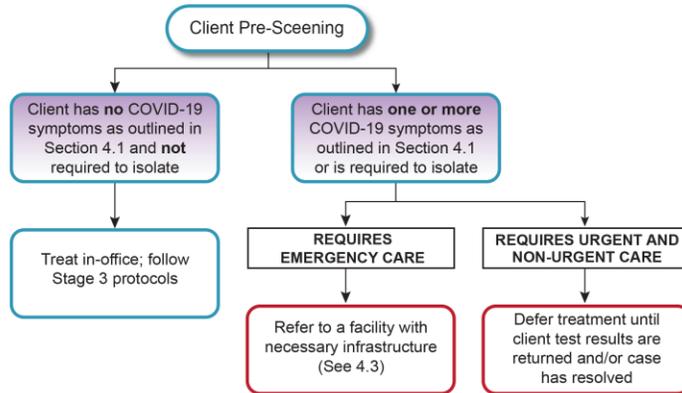
4. Before the Appointment (Client Pre-Screening)

To protect clients and DHCPs from possible virus transmission, pre-screen clients via remote communications, at a minimum, prior to entering the clinic on the day of the appointment. Pre-screening questions must include:

- COVID-19 symptoms
- Requirement to isolate
- Underlying medical risk factors
- Nature of the chief complaint

Section 4.1 lists the COVID-19 symptoms.

Refer to the decision-making flowchart on the next page.



4.1 COVID-19 Symptoms

In the past 48 hours, has the client had, or is currently experiencing:

- A fever (greater than 38°C) or fever-like symptoms — chills or sweats
- Cough (New or worsening)

OR

Two or more of the following symptoms (new or worsening)

- Sore throat
- Runny nose/nasal congestion
- Headache
- Shortness of breath

It is also important to screen for clients who may be under self-isolation requirements. Ensure that your screening includes a question that asks “Have you been advised to isolate for any reason?”

Please see Appendix C for a client screening tool. **Important Note:** Answering “yes” to a screening question does not necessarily mean a client fails that question. It is up to the office/practitioner to question further and apply the criteria set out by [government](#).

4.2 COVID-19 Symptoms or Requirement to Self-Isolate

If the client responds **YES** to having a new or worsening cough or a fever greater than 38 degrees (or fever-like symptoms, i.e., chills or sweats) **or** experiencing **any two** of the other COVID-19 symptoms, **or** if they respond **YES** to the requirement to isolate, follow these protocols:

- 1) Confirm if client has been tested for COVID-19.
 - a) If no, direct client to complete the [online assessment](#) or contact 811 for direction re: testing.
 - b) If yes, determine when results will be confirmed and use this information to develop your triage plan.
- 2) Assess whether the oral health condition falls under an emergency or urgent care.
 - a) **Emergency Care**
 - i) Refer client to a facility that has the infrastructure to provide oral health care using **airborne precautions** (i.e., operatories with floor to ceiling walls and doors, appropriate negative pressure ventilation, and PPE).

b) Urgent or Non-Urgent Care

- i) Defer treatment until client has completed 14 days of self-isolation or has been informed by Public Health, they are no longer a risk.
- ii) Client should be managed pharmacologically, if appropriate, by the client's dentist or physician.
- iii) Continue to monitor these clients to ensure their oral health conditions do not become an emergency.

4.3 No COVID-19 Symptoms and No Self-Isolation Requirement

If the client has either **no** COVID-19 symptoms **or** responds **YES** to **only one** of the following COVID-19 symptoms (sore throat, runny nose/nasal congestion, headache, and shortness of breath), **and** if the client responds **NO**, they are not required to isolate, treat the client in your practice setting using the protocols outlined in this document.

Always factor in the client's underlying medical risk factors to determine if it is appropriate to treat a client in your practice setting versus referring to a specialist or to a facility that has the infrastructure to provide oral health care using airborne precautions i.e., operatories with floor to ceiling walls and doors, appropriate negative pressure ventilation and PPE.

For dental hygiene practice owners, if the client presents with conditions that are not within your scope of practice, refer the client to a community dental practice and provide all relevant information and any additional assessments (e.g., radiographs).

4.4 Management of Clients Who Have Had COVID-19

People with COVID-19 who have [ended home isolation](#) can receive dental hygiene care. In Nova Scotia, discontinuation of home isolation for clients with COVID-19 occurs at the direction of NS Public Health, the guidelines for which can be found [here](#).

Absence of a cough is not required for those known to have a chronic cough or for those who are experiencing reactive airways post-infection.

Clients who have tested positive for COVID-19 and have not yet ended home isolation should not be treated unless life threatening, and if so, they should be referred to the appropriate centre that can provide the necessary care using **airborne precautions**.

4.5 Daily Assessment for Staff

All DHCPs and office staff **must** screen themselves daily for symptoms and requirement to isolate, as outlined in Appendix B.

- DHCPs and other staff members who develop the symptoms, as outlined in Appendix B, must exclude themselves from the workplace and complete the [online assessment](#) or contact 811.
- If a member of the office tests positive for COVID-19, they must remain out of the workplace until determined to be recovered by Public Health.
- DHCPs and other staff who are required to isolate must exclude themselves from the workplace until cleared following the criteria specific to Health Care Workers, if applicable.

Consider using a chart to record the screening results (see Appendix B). *Always ensure that the privacy of each employee is maintained when documenting these results.* **Important Note:** Answering "yes" to a

screening question does not necessarily mean a staff member fails that question. It is up to the office/practitioner to question further and apply the criteria set out by [government](#).

5. During the Appointment

The movement of clients and staff, as well as their in-person contact, must be carefully managed, as outlined below.

5.1 Clients

- Have clients notify the office (e.g., call from their vehicle) once they have arrived and direct them when it is appropriate to enter the clinic.
- Ensure provincial physical distancing requirements (2 metres; numbers of gatherings) are followed in reception/waiting areas.
- Review screening questions again prior to allowing clients entry into the clinic.
- Have accompanying individuals wait outside of the office (exception being a legal guardian or a caregiver, who should also be screened).
- Encourage client to bring their own non-surgical or surgical masks to the appointment; if they do not have a mask, provide one for them for use during their visit.
- Ensure client performs hand hygiene (washes their hands or uses hand sanitizer) upon initial entry to the practice, proceeding directly to the operatory, if possible.
- Have the client perform hand hygiene before they leave the practice.
- Record contact information for clients and any individual who may accompany the client to the appointment.

5.2 Staff

- Any staff not working in client care areas (e.g., receptionists) or who do not have direct client contact must wear a non-surgical or surgical/procedural mask at all times in the workplace even if a physical barrier (e.g., plexiglass) is in place.
- All staff providing direct client care or working in client care areas must wear a surgical mask at all times and in all areas of the workplace. This includes involvement in direct client contact and in cases where they cannot maintain adequate physical distancing (2 metres) from clients and co-workers.
- Use of staff common areas (e.g., staff rooms) must be scheduled to enable staff to maintain physical distancing.
- Follow all appropriate IPC protocols before, during, and after the appointments (e.g., in non-clinical areas, such as the reception area, all touchable surface areas are to be cleaned and disinfected regularly with a [Health Canada-approved surface cleaner](#)).

6. After the Appointment

6.1 Client Is Leaving

As the client is leaving:

- Try to have paperwork completed before the client arrives at reception.
- Choose a touchless payment method, if possible.
- After the client leaves, clean and disinfect all client contact surfaces.

6.2 Client Follow-Up

Even when DHCP screen clients for respiratory infections, inadvertent treatment of a client who is later confirmed to have COVID-19 may occur. To address this, DHCP or other staff members should request that the client inform the office if they develop symptoms or are diagnosed with COVID-19 within two days following the dental/dental hygiene appointment.

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

6.3 Handling Packages and Items

- A physical distance of at least 2 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, proper PPE (i.e., surgical/procedure mask and gloves) 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.
- As a precautionary measure, treat all received items as contaminated. Increased caution should be used when handling items that have had direct client contact. These items must be thoroughly disinfected or sterilized, as appropriate, before proceeding.
- 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 "cleaned".

7. Personal Protective Equipment (PPE)

According to the Canadian Centre for Occupational Health and Safety (CCOHS), there are several ways to control workplace hazards, including the risk of exposure to viruses such as the novel coronavirus:

- **Elimination (including substitution):** Remove the hazard from the workplace, or substitute (replace) hazardous materials or machines with less hazardous ones e.g., screening.
- **Engineering Controls:** Includes designs or modifications to practices, equipment, ventilation systems, and processes that reduce the source of exposure.
- **Administrative Controls:** Controls that alter the way the work is done, including timing of work, policies and other rules, and work practices such as standards and operating procedures (including use of four-handed dentistry, training, housekeeping, equipment maintenance, and personal hygiene practices).
- **Personal Protective Equipment (PPE):** Equipment worn by individuals to reduce exposure such as contact with chemicals or exposure to noise.

These methods are known as the "hierarchy of controls", with PPE being the lowest in that hierarchy. PPE should never be the only method used to reduce exposure, except under very specific circumstances, because PPE may "fail" (stop protecting the worker) with little or no warning. For example, "breakthrough" can occur with gloves, clothing, and respirator cartridges. (Canadian Centre for Occupational Health and Safety, 2020) ³

This document provides other methods to help reduce workplace exposure risks, such as elimination (e.g., pre-screening, deferral or referral of care), engineering and administrative controls—and in this document, we are focusing on the new risk, the novel coronavirus.

Historically, the use of personal protective equipment (PPE) in the oral health field was intended to protect DHCPs against bloodborne pathogens. Use of PPE only forms part of our profession's **standard precautions**, formerly known as universal precautions. **Standard precautions** include:

- Hand hygiene
- Use of PPE
- Respiratory hygiene/cough etiquette
- Sharps safety
- Safe injection practices
- Cleaning and disinfecting environmental surfaces.⁴

When a pathogenic outbreak occurs within a community or healthcare facility, transmission-based precautions should be implemented in addition to standard precautions. **Transmission-based precautions** include contact, droplet, and airborne precautions, depending on the route of transmission of the pathogen.³ Some pathogens such as SARS-Cov2, which causes the disease known as COVID-19, are spread primarily via droplets but may also be transmissible via airborne/aerosol spread. In the oral health field, the latter occurs primarily during an AGP.

Research is currently ongoing to determine the relationship between AGPs and transmission of the COVID-19 virus. Until such studies have been completed, transmission-based precautions should be implemented in addition to standard precautions. This will ensure the safety of the public and of DHCPs.

Use PPE in combination with administrative and engineering controls. Select PPE based on your point of care assessment, which includes “the setting, target audience, risk of exposure (e.g., type of activity) and the transmission dynamics of the pathogen (e.g., contact, droplet, or aerosol). The overuse or misuse of PPE will have a further impact on supply shortages.”⁵

Effective use of PPE includes properly removing (doffing) and disposing of contaminated PPE to prevent exposing both the wearer and other people to infection.⁶ Doffing PPE is one of the areas that is a high risk of cross-contamination if done inappropriately. **Ensure you know how to properly don and doff your PPE.**

DHCPs must always use appropriate PPE, particularly during a global pandemic such as COVID-19. PPE requirements differ based on the health status of the client, as well as the nature of the procedure (AGP vs NAGP). There are several types of PPE recommended to mitigate risk during the provision of oral health care. These include eye/face protection (e.g., goggles, face shields, and safety glasses), respiratory protection (e.g., surgical masks and fit-tested respirators, such as N95s), disposable or reusable gowns, and gloves.

7.1 Eye/Face Protection

Eye protection has always been recommended as part of standard precautions for the practice of dentistry. **Goggles and/or face shields are recommended to be used when treating clients during the global COVID-19 pandemic.** They must be used for treating all clients, regardless of the type of procedure being performed (AGP vs. NAGP). Goggles have the advantage of forming a protective seal around the eyes, which prevents droplets from entering around or under them. The disadvantages of

goggles are that they do not provide splash or spray protection to other areas of the face, they tend to fog, and they may become uncomfortable with extended use.^{7,8}

The advantages of face shields are that they provide a barrier for the entire face to aerosols, droplets, and splatter; they are more comfortable; and they are easy to don and doff. The disadvantage of face shields is that they lack a peripheral seal. There are different types of face shields which may be used depending on the clinical situation. For instance, a full-face shield would be indicated during an AGP, whereas a visor attached to a surgical mask would be considered acceptable for NAGPs. The CDC suggests that the bare minimum for eye protection is safety glasses that have extensions to cover the side of the eyes, but these should only be used if access to a higher level of protection is not available.

The DHCP may choose what type of eye protection to wear. The important concept—regardless of whether goggles, a face shield, or a combination of both are used—is that the PPE must protect the eyes of the DHCP from splatter, droplets, and aerosols that may be generated during the provision of oral health care.

Want to know more about selecting appropriate eye protection? Visit <https://www.ccohs.ca/oshanswers/prevention/ppe/glasses.html>

Eye protection (goggles and/or face shield) must be removed and reprocessed after each client encounter that involves an AGP and/or more frequently if it becomes visibly soiled or difficult to see through. If eye protection is being used for more than one client without being cleaned and disinfected between uses, i.e., no AGP involved, the eye protection must not be touched. If they are, the eye protection is considered contaminated and **must be removed and cleaned and disinfected prior to any subsequent use.**

If a disposable face shield is reprocessed, rather than disposed after a single use, it should be dedicated to one DHCP. Eye protection must be discarded if damaged (e.g., the face shield can no longer fasten securely to the provider, if visibility is obscured, or if reprocessing does not restore visibility). The DHCP should take care not to touch their eye protection. If they touch or adjust their eye protection, they must immediately perform hand hygiene. The DHCP should leave the client care area if they need to remove their eye protection.

Cleaning and Disinfecting Eye/Face Protection

Adhere to recommended manufacturer instructions for cleaning and disinfecting eye/face protection and ensure that the disinfectant solution is approved by Health Canada (<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>). When manufacturer instructions for cleaning and disinfection are unavailable, consider the following:

- While wearing clean gloves, carefully wipe the inside of the eye protection, followed by the outside, using a clean cloth saturated with neutral detergent solution or cleaner wipe.
- Carefully wipe the outside of the eye protection using a wipe or clean cloth saturated with a Health Canada approved disinfectant solution.
- Wipe the outside of the eye protection with clean water or alcohol to remove residue.
- Fully dry (air dry or use clean absorbent towels).
- Remove gloves and perform hand hygiene.

If an item is labelled single-use disposable, it is not to be reused. Other items are reusable and may be reprocessed, in accordance with Manufacturer's Instructions.

7.2 Gowns/Lab Coats

Gowns/lab coats are long-sleeved garments that are intended to be **client-specific** items of protective clothing. Gowns/lab coats are worn over regular clinic clothing, such as uniforms or scrubs, during AGPs or during procedures likely to generate splatter or droplets of blood, body fluids, secretions, or excretions. **They must be removed prior to seeing the subsequent client.** ^{9,10,11}

It is strongly recommended that gowns that tie at the back are used during AGPs rather than lab coats. If lab coats must be selected, in addition to long sleeves, preferable features include closures (snaps, buttons) that can be fastened and secured.⁹

Gowns/lab coats can be disposable and made of synthetic fibre or a washable cloth gown. Washable cloth gowns/lab coats are also referred to as “reusable linens”. If resources are limited and disposable PPE items are not available, use reusable items (e.g., a washable cloth gown) and launder properly after each use, or send to an appropriate external laundering facility. See details in Safe Management of Reusable Linens (Laundry).

7.3 Masks and Respirators (N95)

Surgical masks, also known as medical masks, are affixed to the head with straps and cover the user’s nose and mouth. They provide a physical barrier to fluids and particulate materials. The mask is considered a device by the FDA when it is intended for medical use and meets certain fluid barrier protection standards and Class I or Class II flammability tests. ASTM level 1, 2, and 3 masks all satisfy that definition. Cloth or homemade masks do not meet the definition of a surgical mask and are not considered PPE. Table 1 outlines the ASTM mask standards. The main difference between ASTM levels is their resistance to penetration by synthetic blood at different velocities to simulate different types of bleeding.

Table 1: ASTM Standards - Designation: F2100 – 19 Standard Specification for Performance of Materials Used in Medical Face Masks

Characteristic	Level 1 Barrier	Level 2 Barrier	Level 3 Barrier
Bacterial filtration efficiency, %	≥95	≥98	≥98
Differential pressure, mm H ₂ O/cm ²	<5.0	<6.0	<6.0
Sub-micron particulate filtration efficiency at 0.1 micron, %	≥95	≥98	≥98
Resistance to penetration by synthetic blood, minimum pressure in mm Hg for pass result	80	120	160
Flame spread	Class 1	Class 1	Class 1

Surgical masks are not designed to provide a seal and do not prevent leakage of air around the edge of the mask during breathing. This is a major limitation for protection against small-particle aerosols (droplet nuclei) when compared to respirators. Respirators include filtering facepiece respirators (FFR), such as N95s, elastomeric half-face respirators, and powered air purifying respirators (PAPRs).

Commercial and surgical grade N95 respirators are of similar structure and design. Both types of respirators should comply with NIOSH standards. However, only the surgical grade N95 will comply with both NIOSH and FDA standards. The main difference between the two grades is that commercial N95 respirators are not tested for fluid resistance of any type. Therefore, surgical grade respirators are preferred for patient care.

There are several classes of filters for NIOSH-approved filtering facepiece respirators. Ninety-five percent is the minimal level of filtration that will be approved by NIOSH. Examples include N95, Surgical N95, N99, N100, R95, R99, P95, P99, and P100. The N, R, P designations refer to resistance to oil which is not applicable to dentistry and is different than resistance to fluid. Always check to ensure that your respirator is fluid resistant, and, if it is not, create fluid resistance by adding a surgical mask or full-face shield as mentioned above.

If surgical N95 respirators are not available and there is a risk that the worker may be exposed to high velocity droplets or splatters of blood or body fluids, a face shield or surgical mask must be worn over the commercial N95 respirator to provide the fluid resistance necessary. NIOSH and FDA standards are recognized by Health Canada. During pandemic times, with limited supply of PPE, non-NIOSH respirators produced in other countries with similar standards have been deemed acceptable by the CDC. See link below for a list of acceptable alternatives (P2, P3, PFF2, PFF3, KN/KP95, KN/KP100, FFP2, FFP3, DS/DL2, DS/DL3, Special, 1st) <https://blogs.cdc.gov/niosh-science-blog/2020/04/23/imported-respirators/>. If commercial respirators are used as an alternative to NIOSH-approved N95 respirators, they must be fit-tested and used with a face shield or surgical mask to protect against fluid penetration.^{12,13,14}

Table 2: Adapted from: World Health Organization. "Rational use of Personal Protective Equipment for Coronavirus Disease 2019 (COVID-19)." (February 27, 2020)

Setting	Staff	Clients Procedure/Activity	Type of PPE
Client room	Dental Health Care Provider (DHCP)	Providing direct care (NAGP)	Surgical mask ^{*,13,14,15} Eye/Face protection ^{7,8} Protective clothing (scrubs) Gloves
		Aerosol-generating procedures (AGP)**	Fit-tested N95 respirator or equivalent, as approved by Health Canada) or surgical mask AND face shield ^{13,14,15} Eye/Face protection ^{7,8} Gown/lab coat ^{9,11,16} Gloves
	Disinfecting treatment rooms for NAGPs	Surgical mask ^{*,13,14,15} Eye/Face protection ^{7,8} Protective clothing (scrubs) Gloves	

Setting	Staff	Clients Procedure/Activity	Type of PPE
	Disinfecting treatment rooms for AGPs		Surgical mask*,13,14,15 Eye/Face Protection 7,8 Protective clothing (scrubs) Gloves
	Visitors	No visitors in room during AGP**	Non-Surgical or Surgical Mask
Reception	Front office staff	Arrival screening	Non-Surgical or Surgical Mask*,13,14,15 Maintain spatial distance of at least 2m when possible.

*ASTM I, II or III (Level II or III recommended for AGPs, if surgical mask is used with a face shield)

**PPE to be worn during an AGP includes legal guardian or caregiver, when essential that they are in the room if they cannot maintain the 2-metre distance from the client; if a 2-metre distance *can* be maintained, the legal guardian or caregiver must still wear a mask and pass all screening questions.

7.4 Masks and Respirators for AGPs

When performing AGPs, DHCPs use:

- a) a fit-tested N95 respirator (or Health Canada approved alternative) (Refer to [Health Canada's website](#) for the most up-to-date information.) or
- b) surgical mask AND full-face shield

Use your clinical judgment and complete a risk assessment when deciding to use an alternative to an N95 respirator.

7.5 Facility Requirements

Facility Requirements as outlined by in the PDBNS Interim Guidance Document:

- The PDBNS suggests placing a transparent barrier (plexiglass/plastic) at the reception desk to ensure separation between staff and clients during transactions, *or* that reception staff wear a surgical mask.
- At present, the PDBNS does not require dental practices to make major infrastructure changes, such as air filtration upgrades or changes to existing office designs (i.e., floor to ceiling walls and doors).
- The PDBNS is not recommending observing “settling times” based on air changes per hour (ACH) at present.

Since all clients who have symptoms, or are required to isolate, are either deferred until they are confirmed negative or recovered, or referred to facilities that have the necessary infrastructure to provide oral health care using airborne precautions (as outlined in Section 4), the CDHNS concurs with these decisions for dental hygiene practices as well. The CDHNS will continue to monitor incoming evidence and local epidemiology, along with all stakeholders. As necessary, these requirements will be revised.

7.5.1 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 contaminants from the workplace preventing staff exposure. Effective ventilation can reduce airborne hazards. Use of high evacuation ventilation is also strongly recommended as a best practice.

7.5.2 Environmental Cleaning

Routine practices, which include cleaning and disinfection of surfaces, are important to control the spread of COVID-19. In addition to this, any high touch surfaces that are visibly soiled should be immediately cleaned and disinfected.

This is a current list of products that meet Health Canada's criteria for use against SARS-CoV-2 (the virus that causes COVID-19): <https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>

7.5.3 Waste Management

COVID-19 is not a Category A infectious substance. Manage like any other general or sharp laboratory waste.

7.6 Safe Management of Reusable Linens (Laundry)

All linen used in the direct care of clients must be managed as 'infectious' linen. Linen must be handled, transported, and processed in a manner that prevents exposure to the skin and mucous membranes of staff and contamination of their clothing and the environment. Disposable gloves and a gown or apron should be worn when handling infectious linen.^{16,17}

Single bags of sufficient tensile strength are adequate for containing laundry, but leak-resistant containment is needed if the laundry is wet and capable of soaking through a cloth bag. Bags containing contaminated laundry must be clearly identified with labels, color-coding, or other methods so that staff responsible for laundry can handle these items safely. Dispose the used bags into the normal waste stream.

Laundry services for healthcare facilities are provided either on or off-premises using the following protocol:

- Separately from other linen;
- in a load not more than half the machine capacity; and
- at the maximum temperature the fabric can tolerate, then ironed or tumbled-dried.

DHCPs must change into and out of uniforms at work and not wear them outside the practice setting.

8. Infection Prevention and Control Measures

8.1 Considerations

- Review the NSDA IPAC document prior to returning to practice. (<https://nsdental.org/wp-content/uploads/2019/01/ClinicalResource-20181204-NSDA-InfectionPreventionControl.pdf>)
 - Remember that if there is any discrepancy between this document and the NSDA document, you must follow these protocols.

- Revisit your practice setting's IPAC protocols to determine if any updates or revisions are required, e.g., review these protocols, consider Canadian Standards Association Standards for community health care settings.
- The 2013 NSDA IPAC document is currently under review. For the time being, this will be the standard for dental and dental hygiene private practices until new IPAC Guidelines/Standards are adopted.
- Upon return to practice, waterlines must be purged by flushing them thoroughly with water for at least 2 minutes at the beginning of each day and for 30 seconds following each client. Before purging is carried out, handpieces and air/water syringe tips must be removed from the waterlines.
- Do not store disposables, supplies, gauze, tissue, and local anaesthetic in open areas of the treatment room. Clear the treatment areas of all items other than those necessary to carry out the treatment.
- Ensure that cleaning staff are fully-versed in the enhanced cleaning protocol for COVID-19 (refer to PPE table, Table 2).
- Regularly clean and disinfect high-touch surfaces in the front desk area, waiting room/reception area, and staff room using a Health Canada approved disinfectant.
(<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>).
- Emphasize hand hygiene as an important measure for preventing the transmission of microorganisms.
 - Hand hygiene can be performed using soap and running water or a hand sanitizer. The minimum time for hand washing is 20 seconds.
 - For alcohol-based hand sanitizers, follow the minimum times recommended by the manufacturer.
 - Use a 70% -90% alcohol-based hand sanitizer, as noted in the NSDA IPAC Guidelines.
- When placing instruments in an ultrasonic cleaner prior to the sterilization process, the lid must be kept on the unit to ensure that aerosols are not created.
- All DHCPs must practice social distancing when possible.

9. Education and Training on Infection Prevention and Control Protocols

Members are responsible for all aspects of dental hygiene in which the member practices, and for any individuals that are being supervised by the member.

- 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 hand washing practices and other routine infection control precautions.

The *Occupational Health and Safety Act, 1996* requires employers to take every reasonable action to protect the health and safety of workers. It also makes employers responsible for providing PPE, maintaining it in good condition and ensuring that the required PPE is worn by employees. Under this Act, employees also have the responsibility to use PPE required by law and the employer.

If members require any further clarification on any treatment decisions, they can contact the CDHNS at info@cdhns.ca.

10. References

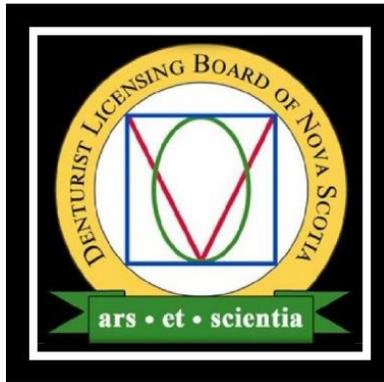
1. <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>
2. Canadian Dental Hygienists Association. (2012). *Dental Hygienists' Code of Ethics*. Ottawa: CDHA. Retrieved May 15, 2020 from http://cdhns.ca/images/Code_of_Ethics_EN_web_June_2012.pdf
3. Canadian Centre for Occupational Health and Safety. (2020). *Hazard Controls*. Retrieved May 15, 2020 from CCOHS: https://www.ccohs.ca/oshanswers/hsprograms/hazard_control.html
4. <https://www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care2.pdf>
5. https://apps.who.int/iris/bitstream/handle/10665/331695/WHO-2019-nCov-IPC_PPE_use-2020.3-eng.pdf
6. <https://www.fda.gov/medical-devices/general-hospital-devices-and-supplies/personal-protective-equipment-infection-control>
7. <https://www.ao.org/Assets/7231d8d7-0332-406b-b5b6-681558dd35d3/637215419697630000/goggles-vs-faceshields-pdf?inline=1>
8. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>
9. Lai MY, Cheng PK, Lim WW. *Survival of severe acute respiratory syndrome coronavirus*. *Clinical Infectious Diseases*, 2005, 41(7):67–71.
10. World Health Organization. “*Infection prevention and control of epidemic- and pandemic-prone acute respiratory infections in health care.*” 2014
11. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html>
12. U.S. Department of Health and Human Services Food and Drug Administration. *FDA Enforcement Policy for Face Masks and Respirators During the Coronavirus Disease (COVID-19) Public Health Emergency (Revised)*. April 2020. FDA
13. <https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/masks-respirators-covid19.html>
14. https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/default.html
15. https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Frespirators-strategy%2Fcrisis-alternate-strategies.html
16. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html#g6>
17. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html>

11. Revision Log (Effective March 7, 2022)

Changes made March 4, 2022 and in effect March 7, 2022.

Section	Change:
4	<p>Revised wording highlighted.</p> <p>To protect clients and DHCPs from possible virus transmission, pre-screen clients via remote communications, at a minimum, prior to entering the clinic on the day of the appointment. Pre-screening questions must include:</p> <ul style="list-style-type: none"> • COVID-19 symptoms • Requirement to Isolate • Underlying medical risk factors • Nature of the chief complaint <p>Section 4.1 lists the COVID-19 symptoms.</p> <p>Flowchart was revised to update the changes in all of Section 4.</p>
4.1	<p><i>New text added below bullets:</i></p> <p>It is also important to screen for clients who may be under self-isolation requirements. Ensure that your screening includes a question that asks “Have you been advised to isolate for any reason?”</p> <p><i>Moved text below from old Section 4.2:</i></p> <p>Please see Appendix C for a client screening tool. Important Note: Answering “yes” to a screening question does not necessarily mean a client fails that question. It is up to the office/practitioner to question further and apply the criteria set out by government.</p>
4.2	<p>COVID-19 Risk Factors: Deleted entire section and renumbered rest of sub sections in Section 4.</p>
New 4.2 (Old 4.3)	<p>Revised wording highlighted.</p> <p>Section Title Change: COVID-19 Symptoms <i>or</i> Requirement to Self-Isolate</p> <p>Revised intro text:</p> <p>If the client responds YES to having a new or worsening cough or a fever greater than 38 degrees (or fever-like symptoms, i.e., chills or sweats) or experiencing any two of the other COVID-19 symptoms, or if they respond YES to the requirement to isolate, follow these protocols:</p>
New 4.3 (Old 4.4)	<p>Revised wording highlighted.</p> <p>Section Title Change: No COVID-19 Symptoms <i>and</i> No Self-Isolation Requirement</p> <p>If the client has either no COVID-19 symptoms or responds YES to only one of the following COVID-19 symptoms (sore throat, runny nose/nasal congestion, headache, and shortness of breath), and if the client responds NO, they are not required to isolate, treat the client in your practice setting using the protocols outlined in this document.</p> <p>Always factor in the additional risk factors associated with a client’s underlying medical risk factors to determine if it is appropriate to treat a client in your practice setting versus</p>

Section	Change:
	referring to a specialist or to a facility that has the infrastructure to provide oral health care using airborne precautions i.e., operatories with floor to ceiling walls and doors, appropriate negative pressure ventilation and PPE.
New 4.5 (Old 4.6)	<p>Change highlighted below:</p> <p>All DHCPs and office staff must screen themselves daily for symptoms and requirement to isolate, as outlined in Appendix B.</p> <ul style="list-style-type: none"> • DHCPs and other staff members who develop the symptoms, as outlined in Appendix B, must exclude themselves from the workplace and complete the online assessment or contact 811. • If a member of the office tests positive for COVID-19, they must remain out of the workplace until determined to be recovered by Public Health. • DHCPs and other staff who are required to isolate must exclude themselves from the workplace until cleared following the criteria specific to Health Care Workers, if applicable.
Old 4.7	Deleted entire section.
7.5	<p>Revised text is highlighted.</p> <p>Since all clients who have symptoms, or are required to isolate, are either deferred until they are confirmed negative or recovered, or referred to facilities that have the necessary infrastructure to provide oral health care using airborne precautions (as outlined in Section 4), the CDHNS concurs with these decisions for dental hygiene practices as well. The CDHNS will continue to monitor incoming evidence and local epidemiology, along with all stakeholders. As necessary, these requirements will be revised.</p>
Appendix B and C	Updated to reflect the changes in Section 4.



Denturist Licensing Board of Nova Scotia

RE-OPENING PLAN FOR DENTURE CLINICS

COMPREHENSIVE CARE STAGE 3

Updated March 4, 2022

Effective March 7, 2022

**Denturist Licensing Board of Nova Scotia
Reopening Protocols on Return to Practice**

These Guidelines are current as of March 7, 2022 and will be updated and modified as needed.

Pursuant to the announcement of then Premier Stephen McNeil on May 27, 2020, effective **June 19, 2020**, all dental offices in Nova Scotia were authorized to provide Phase 3 **comprehensive** (emergent, urgent and non-urgent) dental treatment in their offices while following the provisions outlined in this document.

The following information is for registrants to use as a resource.

IMPORTANT: In addition to appropriate clinical judgment, Registrants are free to maintain additional measures they deem appropriate when making decisions to provide oral health treatment.

This is a fluid document that will be updated/modified as new evidence-based information becomes available.

Table of Contents

1.0	Procedures.....	1
1.1	Aerosol Generating Events (AGE's and Non-AGEs)	1
1.2	Additional Considerations for all Procedures.....	1
2.0	Procedures Before Appointment	1
2.1	Covid-19 Symptoms	1
2.2	Symptoms Present	2
2.3	Management of Patients Who Have Had COVID-19.....	2
2.4	Daily Assessment for Office/Clinic Staff	3
3.0	During the Appointment	3
4.0	After the Appointment	4
4.1	Patient Follow-up	4
5.0	Personal Protective Equipment	4
5.1	Eye/Face Protection.....	5
5.2	Lab Coats/Gowns	5
5.3	Masks and Respirators N95	6
5.4	Masks for AGPs	8
5.5	Facility Requirements	8
5.6	Safe Management of Linen (Laundry).....	8
6.0	Infection and Prevention and Control Protocols	9
6.1	Consideration.....	9
6.2	Long Term Care Facilities and In-Home Care	9
7.0	References	10

1.0 Procedures

1.1 Aerosol Generating Events (AGE's) and Non-Aerosol Generating Events Non-AGEs)

Aerosol generating procedures (AGPs) are procedures which can generate aerosols that consist of small droplet nuclei in high concentration and present a risk for airborne transmission of pathogens that would not otherwise be spread by the airborne route (e.g., Coronavirus, influenza). These types of procedures are thought to be associated with a higher risk of disease transmission in COVID-19 positive patients. Additional precautions, as outlined in this document, must be taken when performing AGPs. Examples of AGPs in dentistry would include the use of (a/an):

AGEs should be avoided whenever possible. Examples of AGE's would include the use of:

- High Speed Handpiece
- Slow Speed Handpiece/ Bench Lathe
- Patient Sneezing, Coughing, or Gagging
- Ultrasonic

Non-aerosol generating procedures (NAGPs) have a lower likelihood of generating aerosols

1.2 Additional Considerations for all Procedures

- Follow the proper donning and doffing of PPE (Appendix A)
- Consider using pre-procedural mouth rinses (PPMRS)

2.0 Procedures Before Appointment

- Promote physical distancing between patients.
- Remove all magazines/toys etc. from waiting area to prevent contamination; and
- Arrange seating in waiting room to allow for physical distancing of 2m
- Patients must wear a non-medical mask to their appointment or be provided with a mask (non-medical or surgical) when they arrive.

Pre-Screening

Patients **must** be pre-screened via remote communications, at a minimum, prior to entering the clinic on the day of the appointment. This is important to protect both patients and DHCPs from possible virus transmission. Pre-screening questions must include COVID-19 symptoms, underlying medical risk factors, and the nature of the chief complaint.

2.1 COVID-19 Symptoms

In the past 48 hours have you had, or are you currently experiencing:

- i. Either of the following:

- A fever or fever like symptoms (measured temperature greater than 38.0) or fever like symptoms: chills or sweats; **or**
- A new or worsening cough.

OR

ii. **Two** or more of the following symptoms (new or worsening):

- Sore throat;
- Nasal Congestion/Runny nose;
- Headache; and,
- Shortness of breath.

2.2 Symptoms Present or patient is required to isolate for any reason

This is indicated by a patient having:

- A fever (greater than 38°C) or fever like symptoms: chills or sweats OR a new or worsening cough OR two or more of the following symptoms (new or worsening) sore throat, runny nose/nasal congestion, headache, shortness of breath.

If the patient fails the screening **and** has not been tested for COVID-19, instruct the patient to complete an online assessment (<https://covid-self-assessment.novascotia.ca/en>) or, if unable to, call 811 to arrange for testing. Similarly, if the patient screens positive, **treatment should be deferred unless it is a true dental emergency**. If it is not a true dental emergency, the patient should be managed pharmacologically until such time as their COVID-19 status is known.

Patients who **inform you they are required to isolate, or** who screen positive for symptoms and are assessed and found to have a true dental emergency, should be referred to a facility that has the infrastructure to provide dental care using airborne precautions (i.e., operatories with floor to ceiling walls and doors, appropriate negative pressure ventilation, and PPE).

All border restrictions for domestic travellers entering Nova Scotia have been lifted as of Monday February 14, 2022. As of that date, there will be no isolation requirements or Nova Scotia Safe Check-in form. International travelers will continue to follow federal rules, the details of which can be found [here](#).

Up-to-date information on the isolation requirements for close contacts can be found on the Nova Scotia Health website [here](#).

2.3 Management of Patients Who Have Had COVID-19

People with COVID-19 who have ended home isolation can receive comprehensive dental care. In Nova Scotia, discontinuation of home isolation for patients with COVID-19 occurs at the direction of NS Public Health, the guidelines for which can be found [here](#).

Absence of a cough is not required for those known to have a chronic cough or for those who are experiencing reactive airways post-infection.

Clients who have tested positive for COVID-19 and have not yet ended home isolation should not be treated unless life threatening, and if so, they should be referred to the appropriate centre that can provide the necessary care using **airborne precautions**.

2.3 Daily Assessment for Office/Clinic Staff

All DHCPs and other staff should perform daily COVID screening using the same symptoms list for patients (see Appendix B). DHCPs and staff who develop a fever (greater than 38°C) or fever like symptoms: chills or sweats OR a new or worsening cough OR two or more of the following symptoms (new or worsening) sore throat, runny nose/nasal congestion, headache, shortness of breath, as outlined in Appendix B must exclude themselves from the workplace and contact 811. DHCPs and staff who are required to isolate must exclude themselves from the workplace until cleared following criteria specific to Health Care Workers, as applicable. Consider using a chart to record the screening results (see Appendix B). If a member of the office tests positive for COVID-19, they must remain out of the workplace until determined to be recovered by Public Health.

Important Note: Answering “yes” to a screening question does not necessarily mean a staff member fails that question. It is up to the office/practitioner to question further and apply the criteria set out by [government](#).

3.0 During the Appointment

It is recommended that denturists carefully manage patient and staff flow. This includes the following:

- Have patients notify your office once they have arrived and direct them when it is appropriate to enter the clinic.
- It is acceptable to use waiting rooms if social distancing measures are enforced.
- Review screening questions prior to allowing patients entry into the clinic.
- Accompanying individuals should wait outside of the office (exception being a legal guardian or a caregiver, who should also be screened).
- Ensure that the patient washes their hands or uses hand sanitizer upon initial entry to the office and proceeds directly to the operatory if possible. All staff providing direct patient care or working in patient care areas must wear a surgical mask at all times and in all areas of the workplace. This includes involvement in direct patient contact and in cases where they cannot maintain adequate physical distancing (2 meters) from patients and co-workers.
- Any staff not working in patient care areas (e.g., receptionists) or who do not have direct patient contact must wear a mask (surgical or non-surgical) at all times in the workplace even if a physical barrier (e.g., plexiglass) is in place.
- Use of staff common areas (e.g., staff rooms) must be scheduled to enable staff to maintain physical distancing.
- Inside the treatment area, remove all non-essential items for direct patient care.
- Have the patient wash their hands (or use hand sanitizer) before they leave the office.

- Record contact information for patients and any individual who may accompany the patient to the appointment.

4.0 After the Appointment

- Try to have paperwork completed before the patient arrives at reception.
- Choose a touchless payment method, if possible
- After the patient leaves, disinfect all patient contact services, including coat hangers, doorknobs, etc.
- Inform patients to notify the office if they develop signs/symptoms of COVID-19 within 48 hours following the appointment.

4.1 Patient Follow-Up

Even when DHCP screen for respiratory infection, inadvertent treatment of a patient who is later confirmed to have COVID-19 may occur. To address this, staff should request that the patient inform the dentist clinic if they develop symptoms or are diagnosed with COVID-19 within **2 days** following the appointment.

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

5.0 Personal Protective Equipment

Historically, the use of personal protective equipment (PPE) in dentistry was intended to protect DHCPs against bloodborne pathogens. Use of PPE only forms part of our profession's standard precautions, formerly known as universal precautions. **Standard precautions** now include:

- Hand hygiene;
- Use of PPE;
- Respiratory hygiene/cough etiquette;
- Sharps safety;
- Safe injection practices; and
- Clean and disinfect environmental surfaces.¹

When a pathogenic outbreak occurs within a community or health care facility, transmission-based precautions should be implemented in addition to standard precautions. **Transmission based precautions include contact, droplet, and airborne precautions depending on the route of transmission of the pathogen.** ² Some pathogens such as SARS-Cov2, which causes the disease known as COVID-19, are spread primarily via droplets but may also be transmissible via airborne/aerosol spread. In dentistry, the latter occurs primarily during an AGP. **Research is currently ongoing to determine the relationship between AGPs and transmission of the COVID-19 virus. Until such studies have been completed, transmission- based precautions should be implemented in addition to standard precautions. This will ensure the safety of the public and of DHCPs.**

Dental health care professionals must always use appropriate PPE, particularly during a global pandemic such as COVID-19. PPE requirements differ based on the health status of the patient, as well as the nature of the procedure (AGE vs non-AGE). There are several types of PPE recommended to mitigate risk during the provision of dental care. These include eye/face protection (goggles, face shields, safety glasses), respiratory protection (surgical masks, fit tested respirators), gowns (disposable, reusable) and gloves.

5.1 Eye/Face Protection

Eye protection has always been recommended as part of standard precautions for the practice of dentistry. Goggles and/or face shields are recommended to be used when treating patients during the global COVID-19 pandemic. They must be used for treating all patients, regardless of the type of procedure being performed (AGP vs. NAGP). Goggles have the advantage of forming a protective seal around the eyes, which prevents droplets from entering around or under them. The disadvantages of goggles are that they do not provide splash or spray protection to other areas of the face, they tend to fog, and they may become uncomfortable with extended use.^{3,4}

The advantages of face shields are that they provide a barrier for the entire face to aerosols, droplets, and splatter; they are more comfortable; and they are easy to don and doff. The disadvantage of face shields is that they lack a peripheral seal. There are different types of face shields which may be used depending on the clinical situation. For instance, a full-face shield would be indicated during an AGP, whereas a visor attached to a surgical mask would be considered acceptable for NAGPs. The CDC suggests that the bare minimum for eye protection is safety glasses that have extensions to cover the side of the eyes, but these should only be used if access to a higher level of protection is not available.

It is at the discretion of the DHCP as to what type of eye protection they choose to wear. The important concept - regardless of whether goggles, a face shield, or a combination of both are used - is that the PPE must protect the eyes of the DHCP from splatter, droplets, and aerosols that may be generated during the provision of dental care.

Extended use of eye protection is the practice of wearing the same eye protection for repeated close contact encounters with several different patients, without removing the eye protection between patient encounters. Extended use of eye protection can be applied to disposable and reusable devices. Eye protection must be removed and reprocessed if it becomes visibly soiled or difficult to see through. If a disposable face shield is reprocessed, it should be dedicated to one DHCP and disinfected whenever it is visibly soiled or is removed. Eye protection must be discarded if damaged (e.g. the face shield can no longer fasten securely to the provider, if visibility is obscured, or if reprocessing does not restore visibility). The DHCP should take care not to touch their eye protection. If they touch or adjust their eye protection, they must immediately perform hand hygiene. The DHCP should leave the patient care area if they need to remove their eye protection.

5.2 Lab Coats/Gowns

Gowns are long-sleeved garments that are intended to be patient-specific items of protective clothing

and must be removed prior to seeing the subsequent patient. Gowns are worn over regular clinic clothing, such as uniforms or scrubs, during AGPs or during procedures likely to generate splatter or droplets of blood, body fluids, secretions, or excretions. Gowns can be disposable and made of synthetic fibre or a washable cloth gown. If resources are limited and disposable PPE items are not available, use reusable items (e.g., disinfectable cotton gowns or lab coats) and disinfect properly after each use.^{5, 6, 7}

5.3 Masks and Respirators (N95)

Surgical masks, also known as medical masks, are affixed to the head with straps and cover the user’s nose and mouth. They provide a physical barrier to fluids and particulate materials. The mask is considered a device by the FDA when it is intended for medical use and meets certain fluid barrier protection standards and Class I or Class II flammability tests. **ASTM level 1, 2, and 3 masks all satisfy that definition.** Cloth or homemade masks do not meet the definition of a surgical mask and are not considered PPE. A table outlining the ASTM standards is provided below. The main difference between ASTM levels is their resistance to penetration by synthetic blood at different velocities to simulate different types of bleeding.

Table 1: ASTM Standards - Designation: F2100 – 19 Standard Specification for Performance of Materials Used in Medical Face Masks

Characteristic	Level 1 Barrier	Level 2 Barrier	Level 3 Barrier
Bacterial filtration efficiency, %	≥95	≥98	≥98
Differential pressure, mm H ₂ O/cm ²	<5.0	<6.0	<6.0
Sub-micron particulate filtration efficiency at 0.1 micron, %	≥95	≥98	≥98
Resistance to penetration by synthetic blood, minimum pressure in mm Hg for pass result	80	120	160
Flame spread	Class 1	Class 1	Class 1

Surgical masks are not designed to provide a seal and do not prevent leakage of air around the edge of the mask during breathing. This is a major limitation for protection against small-particle aerosols (droplet nuclei) when compared to respirators. Respirators include filtering facepiece respirators (FFR), such as N95s, elastomeric half-face respirators, and powered air purifying respirators (PAPRs).

Commercial and surgical grade N95 respirators are of similar structure and design. Both types of respirators should comply with NIOSH standards. However, only the surgical grade N95 will comply with both NIOSH and FDA standards. The main difference between the two grades is that commercial N95 respirators are not tested for fluid resistance of any type. Therefore, surgical grade respirators are preferred for patient care.

There are several classes of filters for NIOSH-approved filtering facepiece respirators. Ninety-five percent is the minimal level of filtration that will be approved by NIOSH. Examples include N95, Surgical N95, N99,

N100, R95, R99, P95, P99, and P100. The N, R, P designations refer to resistance to oil which is not applicable to dentistry and is different than resistance to fluid. Always check to ensure that your respirator is fluid resistant, and, if it is not, create fluid resistance by adding a surgical mask or full-face shield as mentioned above.

If surgical N95 respirators are not available and there is a risk that the worker may be exposed to high velocity droplets or splatters of blood or body fluids, a face shield or surgical mask must be worn over the commercial N95 respirator to provide the fluid resistance necessary. NIOSH and FDA standards are recognized by Health Canada. During the pandemic times, with limited supply of PPE, non-NIOSH respirators produced in other countries with similar standards have been deemed acceptable by the CDC.

See link below for a list of acceptable alternatives (P2, P3, PFF2, PFF3, KN/KP95, KN/KP100, FFP2, FFP3, DS/DL2, DS/DL3, Special, 1st) <https://blogs.cdc.gov/niosh-science-blog/2020/04/23/imported-respirators/>. If commercial respirators are used as an alternative to NIOSH-approved N95 respirators, they must be fit-tested and used with a face shield or surgical mask to protect against fluid penetration.^{8, 9, 10, 11}

Table 2: Adapted from: World Health Organization. "Rational use of Personal Protective Equipment for Coronavirus Disease 2019 (COVID-19)." (February 27, 2020):

Setting	Staff	Patients Procedure/Activity	Type of PPE
Patient room	Dental Health Care Provider (DHCP)	Providing direct care (NAGP)	Surgical mask* ^{9,10,11} Eye/Face protection ^{3,4} Protective clothing (e.g. scrubs) Gloves
		Aerosol-generating procedures (AGP)	Fit tested N95 respirator or the equivalent (as approved by Health Canada) OR surgical mask AND face shield ^{9,10,11} Eye/Face protection ^{3,4} Gown/lab coat ^{5,7,12} Gloves
	Disinfecting treatment rooms for NAGPs	Surgical mask* ^{9,10,11} Eye/Face protection Protective clothing (e.g. scrubs) Gloves	
	Disinfecting treatment rooms for AGPs	Surgical mask* ^{9,10,11} Eye/Face Protection ^{3,4} Protective clothing (e.g. scrubs) Gloves	
	Visitors	No visitors during AGPs **	Non-Surgical or Surgical Masks
Reception	Front office staff	Arrival screening	Non-Surgical or Surgical Masks* ^{9,10,11} , Maintain spatial distance of at least 2m

*ASTM I, II or III

**exception being a legal guardian or a caregiver, who should also be screened; and must then wear the PPE identified under the AGP row of this Table.

5.4 Masks and Respirators for AGP's

Dental healthcare providers use:

- a fit-tested N95 respirator (or Health Canada approved alternative) or
- surgical mask AND face shield

5.5 Facility Requirements

At present, the DLBNS does not require dental practices to make major infrastructure changes, changes to existing office designs (i.e. floor to ceiling walls and doors).

The DLBNS does suggest placing a transparent barrier (plexiglass/plastic) at the reception desk to ensure separation between staff and patients during transactions, or that you ensure that reception staff wear a surgical mask.

Ventilation is a common control for preventing exposure to toxic material. Well-designed and well-maintained ventilation systems can remove toxic vapours, fumes, mists or other airborne contaminant from the workplace preventing staff exposure. Effective ventilation can reduce airborne hazards. Use of high evacuation ventilation is strongly recommended as a best practice.

For waste with potential or known COVID-19 contamination, manage like any other general or sharps waste. COVID-19 is not a Category A infectious substance. Follow the waste management guideline in your region for COVID-19.

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 door step. If physical distancing cannot be maintained, proper PPE (i.e., surgical/procedure masks and gloves) 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. As a precautionary measure, treat all received items as contaminated. Increased caution should be used when handling items that have had direct patient contact. These items must be thoroughly disinfected or sterilized, as appropriate, before proceeding. 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 "cleaned".

5.6 Safe Management of Linen (Laundry)

All linen used in the direct care of patients should be managed as 'infectious' linen. Linen must be handled, transported, and processed in a manner that prevents exposure to the skin and mucous membranes of staff and contamination of their clothing and the environment. Disposable gloves and a gown or apron should be worn when handling infectious linen. ^{13,14,}

Single bags of sufficient tensile strength are adequate for containing laundry, but leak-resistant Containment is needed if the laundry is wet and capable of soaking through a cloth bag. Bags containing contaminated laundry must be clearly identified with labels, color-coding, or other methods so that staff responsible for laundry can handle these items safely. Those bags used should be disposed of into the normal waste stream.

Laundry services for healthcare facilities are provided either on or off-premises using the following protocol:

- separately from other linen
- in a load not more than half the machine capacity; and
- at the maximum temperature the fabric can tolerate, then ironed or tumbled-dried.

DHCPs must change into and out of uniforms at work and not wear them outside the office.

6.0 Infection Prevention and Control Protocols

6.1 Considerations

- We recommend reviewing the NSDA IPAC document prior to returning to practice. (<https://nsdental.org/wp-content/uploads/2019/01/ClinicalResource-20181204-NSDA-InfectionPreventionControl.pdf>)
- Ensure that cleaning staff are fully versed in the enhanced cleaning protocol for COVID-19 (refer to PPE table).
- Regularly disinfect high-touch surfaces in the front desk area, waiting room, and staff room using a Health Canada approved disinfectant. (<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>).
- Emphasize hand hygiene as an important measure for preventing the transmission of microorganisms. Hand hygiene can be performed using soap and running water or a hand sanitizer. The minimum time for hand washing is 20 seconds. For alcohol-based hand sanitizers, follow the minimum times recommended by the manufacturer.
- When placing instruments in an ultrasonic cleaner prior to the sterilization process, the lid must be kept on the unit to ensure that aerosols are not created.
- All DHCPs must practice social distancing when possible.
- Do not store disposables, supplies, gauze, tissue, and local anaesthetic in open areas of the treatment room. Clear the treatment areas of all items other than those necessary to carry out the treatment.
- Upon return to practice, waterlines must be purged by flushing them thoroughly with water for at least 2 minutes at the beginning of each day and for 30 seconds following each patient. Before purging is carried out, handpieces and air/water syringe tips must be removed from the waterlines.

6.2 Long Term Care Facilities and In-Home Care

Ensure that all protocols outlined in the guidelines for PPE as well as physical distancing are adhered to, when possible, and that appropriate screening for COVID-19 symptoms are carried out.

For example, if the patient is in a single-family dwelling, apartment, or relative's home, ensure that you obtain all of the necessary details to ensure that you can provide safe and effective care. Examples of considerations are below:

- Determine where the patient is located in the home in relation to any facilities you require, e.g., ready access to clean handwashing facilities.
- Determine the likelihood that you will need to provide services that generate AGPs. If so, ensure that your plan encompasses how you will protect the patient's furniture and other personal items from these aerosols (within the 6-foot radius).
- Are there other individuals in the house? Will they be in the home at that time? Do they need to provide assistance to you/the patient when you're providing care?

If you are providing care to a bedridden patient in a long-term care facility, or other community-based facility, **contact the facility directly to confirm that you are able to provide care.** Request a copy of their site-specific work plan prior to the visit. Typically, third party providers, including denturists, will be required to provide evidence that there is a written plan that will meet the facility's standards, in addition to the Denturist protocols. In addition to the above, you may need to determine if the patient is in a private, semi-private, or four-person room; does a staff member need to be with the patient while you're providing care?

7.0 References

1. <https://www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care2.pdf>
2. <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>
3. <https://www.aao.org/Assets/7231d8d7-0332-406b-b5b6-681558dd35d3/637215419697630000/goggles-vs-faceshields-pdf?inline=1>
4. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>
5. Lai MY, Cheng PK, Lim WW. Survival of severe acute respiratory syndrome coronavirus. *Clinical Infectious Diseases*, 2005, 41(7):67–71.
6. World Health Organization. "Infection prevention and control of epidemic- and pandemic-prone acute respiratory infections in health care." 2014
7. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html>
8. FDA Enforcement Policy for Face Masks and Respirators During the Coronavirus Disease (COVID-19) Public Health Emergency (Revised) U.S. Department of Health and Human Services Food and Drug Administration April 2020
9. <https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/masks-respirators-covid19.html>
10. https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/default.html
11. https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Frespirators-strategy%2Fcrisis-alternate-strategies.html
12. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html>
13. COVID-19: Guidance for infection prevention and control in healthcare settings. Version 1.0. Adapted from Pandemic Influenza: Guidance for Infection prevention and control in healthcare settings 2020
14. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html>

15. Long Y, Hu T, Liu L, Chen R, Guo Q, Yang L, Cheng Y, Huang J, Du L. Effectiveness of N95 respirators versus surgical masks against influenza: A systematic review and meta-analysis. J Evid Based Med. 2020 Mar 13
16. Radonovich LJ, Simberkoff MS, Bessesen MT, et al. N95respirators vs medical masks for preventing influenza among health care personnel: a randomized clinical trial. *JAMA*. 2019;322(9):824-833
17. Radonovich LJ, Simberkoff MS, Bessesen MT, et al. N95respirators vs medical masks for preventing influenza among health care personnel: a randomized clinical trial. *JAMA*. 2019;322(9):824-833

COVID-19 Guidance

INTRODUCTION

This document will guide Registered Dental Technicians in making the appropriate considerations for returning to practice. We have engaged with The Provincial Dental Board of Nova Scotia, the associations, the Department of Health and Wellness and our national counterparts to provide this guidance.

The directives from the Department of Health and Wellness and the Chief Medical Officer of Health take precedence over guidance in this document. The NSDTA relies on members to use their professional judgement in deciding whether they can return to practice. Considerations include incidences of COVID-19 cases in the area, workplace configuration and the availability of Personal Protective Equipment (PPE) and cleaning supplies. As the situation evolves and more is known about COVID-19, the NSDTA will update the guidance contained in this document.

Important Note: Dental laboratories are free to maintain additional safety measures, as they deem appropriate according to their own judgement.



Contents

INTRODUCTION	1
INFECTION PREVENTION AND CONTROL STANDARD	3
COMMUNICATION	3
WORKPLACE CONSIDERATIONS	3
Screening.....	3
Physical Distancing.....	3
Hand Hygiene.....	4
Clothing	4
Ventilation.....	4
Environmental Cleaning.....	4
Waste Management	4
PERSONAL PROTECTIVE EQUIPMENT	4
LABORATORY PROCEDURES	5
Handling Packages and Items	5
Aerosol Generating Medical Procedures	5
PATIENT CARE	6
Prior to the Appointment	6
The Appointment.....	8
TRAINING ON INFECTION PREVENTION AND CONTROL PROTOCOLS	8
RESOURCES	9
REVISION HISTORY	12



INFECTION PREVENTION AND CONTROL STANDARD

This document highlights considerations necessary during the COVID-19 pandemic.

COMMUNICATION

Changes to protocols upon the return of practice should be communicated to staff and clients. Signage should be posted that explains physical distancing and Personal Protective Equipment (PPE) requirements of the workplace. There should also be accessible signage (i.e., plain language, symbols, other languages where appropriate) to alert visitors of the signs and symptoms of COVID-19 and how to practice proper etiquette:

- Government of NS: <https://novascotia.ca/coronavirus/staying-healthy/-cough-sneeze>

WORKPLACE CONSIDERATIONS

The NSDTA recognizes that members practice in a variety of settings (e.g. clinical, education) and may not always be in a decision-making role. Members should not return to practice if these guidelines cannot be followed, or appropriate and required PPE is unavailable.

The Government of NS has specific guidelines for preventing the spread of COVID-19. However, many common practices can be applied such as removing unnecessary items at reception and limiting the sharing of stationary.

Screening

- All DHCPs and office staff **must** perform daily COVID-19 passive screening using **Appendix B** which includes the symptoms and **requirement to isolate** outlined below for patients. Records of this self-screening do not need to be kept.
- Staff who screen positive must complete the NS online assessment tool or call 811.
- Fitness to work must be monitored on an ongoing basis. Staff who exhibit symptoms while at work must immediately leave and not return until they are cleared by public health to do so.
- Consider using a chart to record staff screening records - please see Appendix B for staff screening tool.

Physical Distancing

- A minimum physical distance of two meters should always be maintained. Ways to ensure appropriate physical distancing include holding team meetings outdoors, 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 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 alcohol-based hand sanitizer (greater than 65% alcohol content).
- Hand hygiene should be performed according to NS Public Health guidelines: <https://novascotia.ca/coronavirus/Hshand-Washing-Poster.pdf> and posted in applicable areas.

Clothing

- Workplace and protective clothing, including gowns and lab-coats, must not be worn outside the workplace.
- Patient specific gowns or lab-coats must be worn when performing AGPs.
- Protective clothing worn for other procedures, besides AGPs, should be changed at least daily, or if it becomes visibly soiled or significantly contaminated by potentially infectious fluids or materials.

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. Use of high evacuation ventilation is strongly recommended as a best practice.

Environmental Cleaning

- Routine practices, which include cleaning and disinfection of surfaces, are important to control the spread of COVID-19. In addition to this, any high touch surfaces that are visibly soiled should be immediately cleaned and disinfected.
- This is a current list of products that meet Health Canada's criteria for use against SARS-CoV-2 (the virus that causes COVID-19): <https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>

Waste Management

- For waste with potential or known COVID-19 contamination, manage like any other general or sharp laboratory waste. COVID-19 is not a Category A infectious substance. Follow the waste management guideline in your region for COVID-19.

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. The use of PPE is always mandatory when providing laboratory services. Professional judgement 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. Steps to putting on and taking off PPE: <https://www.cdc.gov/hai/pdfs/ppe/PPE-Sequence.pdf>
- Use PPE appropriately to prevent unnecessary use of limited supplies and other PPE resources (e.g., N95 masks).
- N95 masks, or suitable alternatives, 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 below

LABORATORY PROCEDURES

Measures must be taken in the practice of dental technology to prevent the transmission of COVID-19. It is mandatory to perform hand hygiene before and after any contact with a dental prostheses, impressions, orthodontic appliances, other prosthodontics, materials, instruments, and equipment.

Handling Packages and Items

- A physical distance of at least 2 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, proper PPE (i.e. surgical/procedure mask and gloves) 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 received items belong to a patient who has screened positive or negative for COVID-19. If it is not clear, treat all received items as contaminated. Increased caution should be used when handling items that have had direct patient contact. These items must be thoroughly disinfected or sterilized, as appropriate, before proceeding.
- 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 "cleaned".

Aerosol Generating Medical Procedures

An aerosol-generating procedure is defined as an activity that creates either fine, solid, particulate matter or liquid droplets in the air. Currently, there is inadequate scientific research to assess the risk of aerosol-generating procedures in oral healthcare setting including dental laboratories. However, aerosols may be generated by high-speed, low-speed and other rotary handpieces, ultrasonic and other similar devices. Examples include polishing or grinding of patient dental prostheses or devices (i.e. have been in the patient's mouth) for the purpose of adjustment or repair.



It is strongly recommended that aerosol generating medical procedures be avoided when it is generated on dental prostheses, devices, or items that belong to patients who have screened or tested positive for COVID-19. If an aerosol will be generated on dental prostheses, devices, or items that belong to patients who have screened or tested positive for COVID-19 following requirements must be met:

- Enhanced PPE and precautions must be used (see Table 1 below) when engaging in aerosol generating procedures on dental prostheses, impressions, orthodontic appliances, other prosthodontics, materials, instruments, and equipment that have had direct patient contact (i.e. N95 mask or equivalent as per Health Canada, gloves, eye protection AND face shield, and protective gown). In the absence of an N95 mask, consider surgical mask and face shield as an alternative to an N95. The proper use of an N95 mask requires each person to be appropriately fitted prior to use.
- A dedicated space, such as a containment box, to prevent the spread of aerosols to other parts of the workplace.

PATIENT CARE

The risks to in-person care should be weighed against the benefits. Appointments should only be scheduled if there is a clean and dedicated patient area, and if PPE requirements can be met. The NSDTA recognizes that each practice setting is arranged and functions differently. Professional judgement must be used to make the necessary adjustments to enhance protection of patients and staff. When these guidelines cannot be met, the patient must not be seen.

Prior to the Appointment

- Non-essential items (e.g., magazines, dental equipment, etc.) should be removed from patient waiting area to minimize contamination and the potential to become a vehicle to spread the virus.
- Patients must wear a non-medical mask to their appointment or be provided with a mask (non-medical or surgical) when they arrive.
- Arrange seating in the waiting room to allow a physical distance of 2m between individuals.

Patients must be screened prior to receiving dental care. This is important to protect both patients and DHCPs from possible virus transmission. Screening must take place in the following ways:

- Patients must be pre-screened via remote communications, at a minimum, prior to entering the lab on the day of the appointment.

A notation **must** be entered into the patient's chart indicating COVID-19 screening was completed. It is not necessary to keep patient screening sheets if a notation has been made in the patient's chart. Screening questions **must** include COVID-19 symptoms and whether the patient is required to isolate (**see Appendix C**).



COVID-19 Symptoms

In the past 48 hours have you had, or are you currently experiencing:

- i. Either of the following:
 - A fever (greater than 38°C) or fever like symptoms: chills or sweats; or
 - A new or worsening cough.

OR
- ii. Two or more of the following symptoms (new or worsening):
 - Sore throat
 - Runny nose/nasal congestion
 - Headache
 - Shortness of breath.

It is also important to screen for patients who may be under self-isolation requirements. Screening questions should include the above symptoms as well as ensuring that patients are asked: “Have you been advised to be isolating for any reason”.

Important Note: Answering “yes” to a screening question does not necessarily mean a patient (or staff member) fails that question. It is up to the laboratory/technician to question further and apply the criteria set out by the [government of Nova Scotia](#).

Symptoms or Requirement to Isolate

This is indicated by a patient responding YES to:

- A fever (greater than 38°C) or fever like symptoms: chills or sweats OR a new or worsening cough OR two or more of the following symptoms (new or worsening) sore throat, runny nose/nasal congestion, headache, shortness of breath OR the requirement to isolate.

If the patient fails the screening **and** has not been tested for COVID-19, they should be directed to complete the [COVID-19 self-assessment](#) or contact 811 to arrange for testing. Similarly, **if the patient answers YES to the requirement to isolate, treatment should be deferred unless it is a true dental emergency.** If it is not a true dental emergency, the patient should be managed pharmacologically by the patient’s dentist or physician, until such time as their COVID-19 status is known. Patients who screen positive for symptoms and/or requirement to isolate and are assessed and found to have a true dental emergency, should be treated using airborne precautions or referred to a facility that has the infrastructure to provide dental care using airborne precautions (i.e., operatories with floor to ceiling walls and doors, appropriate negative pressure ventilation, and PPE).

Patient Care Following Screening

Patients with a positive screen for COVID-19 should not receive dental treatment. They should be directed to complete the [COVID-19 self-assessment](#) or contact 811 to arrange for testing.



If the patient has a true dental emergency, treat using airborne precautions or refer to a facility that can perform airborne precautions.

Management of Patients Who Have Had COVID-19

Patients can be treated with standard precautions once they have been deemed recovered by Public Health, the guidelines for which can be found [here](#). If they require emergency dental care before they are deemed to be recovered, they must be treated using airborne precautions or referred to a facility which can provide care using these precautions.

The Appointment

- A surgical/procedure mask should always be worn when providing direct patient care or working in patient care areas. This is in addition to the use of required PPE as part of droplet and contact precautions which include isolation gown, gloves, eye protection (goggles or face shield).
- Patients should be required to perform hand hygiene with either 70-95% alcohol-based hand rub or soap and running water upon initial entry to the workplace.
- Encourage patient to bring their own non-surgical or surgical masks to the appointment; if they do not have a mask, provide one for them for using during their visit.
- Record contact information for patients and any individual who may accompany the client to the appointment.
- Patients are recommended to gently gargle in the oral cavity for 30 seconds and in the back of the throat for 30 seconds with a pre-procedural mouth rinse prior to procedures, such as 1-3% hydrogen peroxide (15mL), povidine-iodine (PVP-I) 0.2-0.5% (9mL), chlorohexidine 0.12% (15mL), or cetylpyridinium chloride (CPC) 0.05% (15mL).
- Clean and properly disinfect (whenever possible sterilize) all instruments or devices which have had direct patient contact.

TRAINING ON INFECTION PREVENTION AND CONTROL PROTOCOLS

Members are responsible for all aspects of dental technology practice in the laboratory in which the member practices and which is being supervised by the member.

- 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 hand washing practices and other routine infection control precautions.

The *Occupational Health and Safety Act, 1996* requires employers to take every reasonable action to protect the health and safety of workers. It also makes employers responsible for providing PPE, maintaining it in good condition and ensuring that the required PPE is worn by employees. Under this Act, employees also have the responsibility to use PPE required by law and the employer.



RESOURCES

<https://novascotia.ca/coronavirus/working-during-covid-19/>

[https://novascotia.ca/coronavirus/alerts-notices/ - possible-exposures](https://novascotia.ca/coronavirus/alerts-notices/-possible-exposures)



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

Setting	Procedure	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	<ul style="list-style-type: none"> • Fit tested N95 mask (or equivalent as per Health Canada) • Gloves • Eye protection • Protective gown
	Aerosol generating procedures on a dental prosthesis or device that has had contact with a patient who has screened negative for COVID-19	<ul style="list-style-type: none"> • Fit tested N95 mask, (or equivalent as per Health Canada) or ASTM* level 1,2, or 3 procedure/surgical mask • Gloves • Eye protection • Protective 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 1,2 or 3 procedure/surgical mask • Gloves • Eye protection • Protective 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 1,2 or 3 procedure/surgical mask • Gloves • Eye protection
	Cleaning and disinfection of patient care area or dedicated area for aerosol-generating procedure	<ul style="list-style-type: none"> • ASTM level 1,2, or 3 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 1,2 or 3 procedure/surgical mask • Gloves • Eye protection • Protective 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 1,2 or 3 procedure/surgical mask • Gloves • Eye protection • Protective gown (optional)
Reprocessing area	Reprocessing of reusable Instruments	<ul style="list-style-type: none"> • ASTM level 1,2, or 3 procedure/surgical mask • Heavy-duty utility-gloves • Eye protection • Protective gown
Fabrication area	Fabrication process – for non-aerosol-generating procedures	<ul style="list-style-type: none"> • ASTM level 1, 2, or 3 procedure mask or maintain physical distancing • Protective clothing (e.g., lab coat, protective gown) • Additional PPE as required by the activity being performed (e.g., gloves, eye protection)

<p>Reception area</p>	<p>On-site screening</p>	<ul style="list-style-type: none"> • ASTM level 1, 2 or 3 procedure/surgical mask • Gloves • Eye protection • Protective gown <p>OR</p> <ul style="list-style-type: none"> • ASTM level 1,2, or 3 procedure mask and physical barrier <p>OR</p> <ul style="list-style-type: none"> • ASTM level 1, 2, or 3 procedure mask and maintain physical distancing
<p>Common and administration area</p>	<p>Administrative and other tasks</p>	<ul style="list-style-type: none"> • ASTM level 1,2, or 3 procedure mask or maintain physical distancing



REVISION HISTORY

Revision #	Date Effective	Key Changes
	Dec 7, 2021	<ul style="list-style-type: none"> Streamlined guidance document
1	Dec 20, 2021	<ul style="list-style-type: none"> Revert back to previous guidelines in light of changing epidemiology surrounding the Omicron variant, EXCEPT those sections highlighted in blue. <p>Workplace Considerations – Screening</p> <p>Patient Care – Prior to the Appointment, COVID-19 Symptoms, COVID-19 Risk Factors, Symptoms or Risk Factors Present, Patient Care Following Screening, Management of Patients Who Have Had COVID-19, and The Appointment</p> <p>The most notable changes from streamlined version are:</p> <p>Patients once must again be screening PRIOR to entering the lab on the day of their appointment.</p> <p>Physical distancing in waiting areas is once again required.</p>
2	Feb 14, 2022	<p>In Patient Screening section, as well as Staff Screening and Patient Screening Appendices B & C, respectively:</p> <ul style="list-style-type: none"> Have you traveled outside Canada in the past 14 days? Has anyone in your household traveled outside Canada in the past 14 days? <p>Previously, the guidance was for travel outside <i>Nova Scotia</i>.</p> <p>And Addition of: Important Note: Answering “yes” to a screening question does not necessarily mean a patient (or staff member) fails that question. It is up to the laboratory/technician to question further and apply the criteria set out by the government of Nova Scotia.</p> <p>In Management of Patients Who Have Had COVID-19: Patients can be treated with standard precautions once they have been deemed recovered by Public Health, the guidelines for which can be found here.</p>
3	Mar 7, 2022	<p>In Introduction, addition of: Important Note: Dental laboratories are free to maintain additional safety measures, as they deem appropriate according to their own judgement.</p>



Revision #	Date Effective	Key Changes
		In both Patient and Staff Screening sections, as well as Appendices B & C: "Risk Factors" have been removed and replaced only with "the requirement to isolate".





PROVINCIAL DENTAL BOARD
OF NOVA SCOTIA

**COVID-19 REOPENING PLAN FOR DENTAL CLINICS
PHASE 3 COMPREHENSIVE CARE**

Updated: March 4, 2022

Effective: March 7, 2022

1.0 Table of Contents

1.0 Dental Procedures.....	2
1.1 Aerosol Generating Procedures and Non-Aerosol Generating Procedures	2
1.2 Additional Considerations for All Procedures	2
2.0 Before the Appointment.....	2
2.1 COVID-19 Symptoms	3
2.2 Symptoms present or Patient is required to isolate for any reason	3
2.3 Management of Patients Who Have Had COVID-19	4
2.4 Daily Assessment for Office/Clinic Staff.....	4
3.0 During the Appointment.....	4
4.0 After the Appointment	4
4.1 Patient Follow-Up	5
5.0 Personal Protective Equipment.....	5
5.1 Eye/Face Protection	5
5.2 Lab Coats/Gowns	6
5.3 Masks and Respirators (N95)	6
5.4 Masks and Respirators for AGP’s	8
5.5 Facility Requirements.....	8
5.6 Safe Management of Linen (Laundry).....	9
6.0 Infection Prevention and Control Measures	9
6.1 Considerations.....	9
7.0 References	10

These guidelines are current as of March 7, 2022.

Pursuant to the announcement of then Premier Stephen McNeil on May 27, 2020, effective **June 19, 2020**, all dental offices in Nova Scotia were authorized to provide Phase 3 **comprehensive** (emergent, urgent and non-urgent) dental treatment in their offices while following the provisions outlined in this document. Each treatment facility is required to update their own site-specific work plan based on the changes contained within this document.

The following information is for registrants to use as a resource, in addition to appropriate clinical judgment, when making decisions to provide dental treatment. This is a fluid document that will be updated/modified as new evidence-based information becomes available.

IMPORTANT: Registrants and dental practices are free to maintain additional measures as they deem appropriate according to their own clinical judgement.

1.0 Dental Procedures

1.1 Aerosol Generating Procedures and Non-Aerosol Generating Procedures

Aerosol generating procedures (AGPs) are procedures which can generate aerosols that consist of small droplet nuclei in high concentration and present a risk for airborne transmission of pathogens that would not otherwise be spread by the airborne route (e.g. Coronavirus, influenza). These types of procedures are thought to be associated with a higher risk of disease transmission in COVID-19 positive patients. Additional precautions, as outlined in this document, must be taken when performing AGPs. Examples of AGPs in dentistry would include the use of (a/an):

- three-way air-water syringe;
- ultrasonic and sonic devices;
- high speed handpiece;
- slow speed handpiece in the presence of water/saliva;
- lasers;
- micro-abrasion; or
- air polishers.

Non-aerosol generating procedures (NAGPs) are procedures with a lower likelihood of generating aerosols.

1.2 Additional Considerations for All Procedures

- Follow the proper donning and doffing of PPE (see Appendix A);
- Consider using pre-procedural mouth rinses (PPMRs).

When possible:

- Use rubber dam isolation and/or other isolation techniques;
- Use high-volume suction to limit aerosols;
- Utilize four-handed dentistry.

2.0 Before the Appointment

- Promote physical distancing between patients;
- Remove all magazines/toys etc. from waiting area to prevent contamination;
- Arrange seating in waiting room to allow for physical distancing of 2 meters; and
- Patients must wear a non-medical mask to their appointment or be provided with a mask (non-medical or surgical) when they arrive.

Pre-Screening

Patients **must** be pre-screened via remote communications, at a minimum, prior to entering the clinic on the day of the appointment. This is important to protect both patients and DHCPs from possible virus transmission. Pre-screening questions must include COVID-19 symptoms, isolation requirements, underlying medical risk factors, and the nature of the chief complaint.

2.1 COVID-19 Symptoms

In the past 48 hours have you had, or are you currently experiencing:

- i. Either of the following:
- A fever (greater than 38°C) or fever like symptoms: chills or sweats; or
 - A new or worsening cough.

OR

- ii. Two or more of the following symptoms (new or worsening):
- Sore throat
 - Runny nose/nasal congestion
 - Headache
 - Shortness of breath.

2.2 Symptoms present or Patient is required to isolate for any reason

This is indicated by a patient having:

- A fever (greater than 38°C) or fever like symptoms: chills or sweats OR a new or worsening cough OR two or more of the following symptoms (new or worsening) sore throat, runny nose/nasal congestion, headache, shortness of breath.

If the patient fails the screening **and** has not been tested for COVID-19, they should be directed to complete the [COVID-19 self-assessment](#) or contact 811 to arrange for testing. **Treatment should be deferred unless it is a true dental emergency.** If it is not a true dental emergency, the patient should be managed pharmacologically until such time as their COVID-19 status is known.

Patients who inform you they are required to isolate, or screen positive for symptoms, and are assessed and found to have a true dental emergency, should be treated using airborne precautions or referred to a facility that has the infrastructure to provide dental care using airborne precautions (i.e., operatories with floor to ceiling walls and doors, appropriate negative pressure ventilation, and PPE).

All border restrictions for domestic travellers entering Nova Scotia have been lifted as of Monday February 14, 2022. As of that date, there will be no isolation requirements or Nova Scotia Safe Check-in form. International travelers will continue to follow federal rules, the details of which can be found [here](#).

Up-to-date information on the isolation requirements for close contacts can be found on the Nova Scotia Health website [here](#).

2.3 Management of Patients Who Have Had COVID-19

People with COVID-19 who have ended home isolation can receive dental care. In Nova Scotia, discontinuation of home isolation for patient with COVID-19 occurs at the direction of NS Public Health, the guidelines for which can be found [here](#).

Absence of a cough is not required for those known to have a chronic cough or for those who are experiencing reactive airways post-infection.

Patients who have tested positive for COVID-19 and have not yet ended home isolation should not be treated unless life threatening, and if so, they should be referred to the appropriate centre that can provide the necessary care using **airborne precautions**.

2.4 Daily Assessment for Office/Clinic Staff

All DHCPs and other staff should perform daily COVID screening using the same symptoms list for patients (see Appendix B). DHCPs and staff who develop a fever (greater than 38°C) or fever like symptoms: chills or sweats OR a new or worsening cough OR two or more of the following symptoms (new or worsening) sore throat, runny nose/nasal congestion, headache, shortness of breath, as outlined in Appendix B must exclude themselves from the workplace and contact 811. Are required to isolate must exclude themselves from the workplace until cleared following criteria specific to Health Care Workers, as applicable. Consider using a chart to record the screening results (see Appendix B). If a member of the office tests positive for COVID-19, they must remain out of the workplace until determined to be recovered.

3.0 During the Appointment

It is recommended that dentists carefully manage patient and staff flow. This includes the following:

- Have patients notify your office once they have arrived and direct them when it is appropriate to enter the clinic.
- It is acceptable to use waiting rooms if social distancing measures are enforced.
- Review screening questions prior to allowing patients entry into the clinic.
- Accompanying individuals should wait outside of the office (exception being a legal guardian or a caregiver, who should also be screened).
- Ensure that the patient washes their hands or uses hand sanitizer upon initial entry to the office and proceeds directly to the operatory if possible. All staff providing direct patient care or working in patient care areas must wear a surgical mask at all times and in all areas of the workplace. This includes involvement in direct patient contact and in cases where they cannot maintain adequate physical distancing (2 meters) from patients and co-workers.
- Any staff not working in patient care areas (e.g., receptionists) or who do not have direct patient contact must wear a mask (surgical or non-surgical) at all times in the workplace even if a physical barrier (e.g. plexiglass) is in place.
- Use of staff common areas (e.g., staff rooms) must be scheduled to enable staff to maintain physical distancing.
- Inside the treatment area, remove all non-essential items for direct patient care.
- Have the patient wash their hands (or use hand sanitizer) before they leave the office.
- Record contact information for patients and any individual who may accompany the patient to the appointment.

4.0 After the Appointment

- Try to have paperwork completed before the patient arrives at reception.
- Choose a touchless payment method, if possible.
- After the patient leaves, disinfect all patient contact surfaces.

- Inform patients to notify the office if they develop signs/symptoms of COVID-19 within 48 hours following the appointment.

4.1 Patient Follow-Up

Even when DHCP screen patients for respiratory infections, inadvertent treatment of a dental patient who is later confirmed to have COVID-19 may occur. To address this, DHCP should request that the patient inform the dental clinic if they develop symptoms or are diagnosed with COVID-19 within 2 days following the dental appointment.

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

5.0 Personal Protective Equipment

Historically, the use of personal protective equipment (PPE) in dentistry was intended to protect DHCPs against bloodborne pathogens. Use of PPE only forms part of our profession's standard precautions, formerly known as universal precautions. **Standard precautions** now include:

- Hand hygiene;
- Use of PPE;
- Respiratory hygiene/cough etiquette;
- Sharps safety;
- Safe injection practices; and
- Clean and disinfected environmental surfaces.¹

When a pathogenic outbreak occurs within a community or healthcare facility, transmission-based precautions should be implemented in addition to standard precautions. **Transmission-based precautions** include contact, droplet and airborne precautions, depending on the route of transmission of the pathogen.² Some pathogens such as SARS-Cov2, which causes the disease known as COVID-19, are spread primarily via droplets but may also be transmissible via airborne/aerosol spread. In dentistry, the latter occurs primarily during an AGP. **Research is currently ongoing to determine the relationship between AGPs and transmission of the COVID-19 virus. Until such studies have been completed, transmission-based precautions should be implemented in addition to standard precautions. This will ensure the safety of the public and of DHCPs.**

DHCPs must always use appropriate PPE, particularly during a global pandemic such as COVID-19. PPE requirements differ based on the health status of the patient, as well as the nature of the procedure (AGP vs NAGP). There are several types of PPE recommended to mitigate risk during the provision of dental care. These include eye/face protection (e.g., goggles, face shields, and safety glasses), respiratory protection (e.g., surgical masks and fit-tested respirators, such as N95s), disposable or reusable gowns, and gloves.

5.1 Eye/Face Protection

Eye protection has always been recommended as part of standard precautions for the practice of dentistry. Goggles and/or face shields are recommended to be used when treating patients during the global COVID-19 pandemic. They must be used for treating all patients, regardless of the type of procedure being performed (AGP vs. NAGP). Goggles have the advantage of forming a protective seal around the eyes, which prevents droplets from entering around or under them. The disadvantages of goggles are that they do not provide splash or spray protection to other areas of the face, they tend to fog, and they may become uncomfortable with extended use.^{3,4}

The advantages of face shields are that they provide a barrier for the entire face to aerosols, droplets, and splatter; they are more comfortable; and they are easy to don and doff. The disadvantage of face shields is that they lack a peripheral seal. There are different types of face shields which may be used depending on the clinical situation. For instance, a full-face shield would be indicated during an AGP, whereas a visor

attached to a surgical mask would be considered acceptable for NAGPs. The CDC suggests that the bare minimum for eye protection is safety glasses that have extensions to cover the side of the eyes, but these should only be used if access to a higher level of protection is not available.

It is at the discretion of the DHCP as to what type of eye protection they choose to wear. The important concept - regardless of whether goggles, a face shield, or a combination of both are used - is that the PPE must protect the eyes of the DHCP from splatter, droplets, and aerosols that may be generated during the provision of dental care.

Extended use of eye protection is the practice of wearing the same eye protection for repeated close contact encounters with several different patients, without removing the eye protection between patient encounters. Extended use of eye protection can be applied to disposable and reusable devices. Eye protection must be removed and reprocessed if it becomes visibly soiled or difficult to see through. If a disposable face shield is reprocessed, it should be dedicated to one DHCP and disinfected whenever it is visibly soiled or is removed. Eye protection must be discarded if damaged (e.g. the face shield can no longer fasten securely to the provider, if visibility is obscured, or if reprocessing does not restore visibility). The DHCP should take care not to touch their eye protection. If they touch or adjust their eye protection, they must immediately perform hand hygiene. The DHCP should leave the patient care area if they need to remove their eye protection.

Disinfection

DHCPs should adhere to recommended manufacturer instructions for cleaning and disinfection of their eye protection and ensure that the disinfectant solution is approved by Health Canada (<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>). When manufacturer instructions for cleaning and disinfection are unavailable, such as for single use disposable face shields, consider the following:

- While wearing gloves, carefully wipe the inside, followed by the outside, of the face shield or goggles using a clean cloth saturated with neutral detergent solution or cleaner wipe.
- Carefully wipe the *outside* of the face shield or goggles using a wipe or clean cloth saturated with a Health Canada approved disinfectant solution.
- Wipe the outside of the face shield or goggles with clean water or alcohol to remove residue.
- Fully dry (air dry or use clean absorbent towels).
- Remove gloves and perform hand hygiene.

5.2 Lab Coats/Gowns

Lab coats/gowns are long-sleeved garments that are intended to be **patient-specific items** of protective clothing and must be removed prior to seeing the subsequent patient. Lab coats/gowns are worn over regular clinic clothing, such as uniforms or scrubs, during AGPs or during procedures likely to generate splatter or droplets of blood, body fluids, secretions, or excretions. Gowns can be disposable and made of synthetic fibre or a washable cloth gown. Reusable items must be disinfected properly after each use.^{5, 6, 7}

5.3 Masks and Respirators (N95)

Surgical masks, also known as medical masks, are affixed to the head with straps and cover the user's nose and mouth. They provide a physical barrier to fluids and particulate materials. The mask is considered a device by the FDA when it is intended for medical use and meets certain fluid barrier protection standards and Class I or Class II flammability tests. ASTM level 1, 2, and 3 masks all satisfy that definition. Cloth or homemade masks do not meet the definition of a surgical mask and are not considered PPE. A table outlining the ASTM standards is provided below. The main difference between ASTM levels is their resistance to penetration by synthetic blood at different velocities to simulate different types of bleeding.

Table 1:

ASTM Standards - Designation: F2100 – 19 Standard Specification for Performance of Materials Used in Medical Face Masks

Characteristic	Level 1 Barrier	Level 2 Barrier	Level 3 Barrier
Bacterial filtration efficiency, %	≥95	≥98	≥98
Differential pressure, mm H ₂ O/cm ²	<5.0	<6.0	<6.0
Sub-micron particulate filtration efficiency at 0.1 micron, %	≥95	≥98	≥98
Resistance to penetration by synthetic blood, minimum pressure in mm Hg for pass result	80	120	160
Flame spread	Class 1	Class 1	Class 1

Surgical masks are not designed to provide a seal and do not prevent leakage of air around the edge of the mask during breathing. This is a major limitation for protection against small-particle aerosols (droplet nuclei) when compared to respirators. Respirators include filtering facepiece respirators (FFR), such as N95s, elastomeric half-face respirators, and powered air purifying respirators (PAPRs).

Commercial and surgical grade N95 respirators are of similar structure and design. Both types of respirators should comply with NIOSH standards. However, only the surgical grade N95 will comply with both NIOSH and FDA standards. The main difference between the two grades is that commercial N95 respirators are not tested for fluid resistance of any type. Therefore, surgical grade respirators are preferred for patient care.

There are several classes of filters for NIOSH-approved filtering facepiece respirators. Ninety-five percent is the minimal level of filtration that will be approved by NIOSH. Examples include N95, Surgical N95, N99, N100, R95, R99, P95, P99, and P100. The N, R, P designations refer to resistance to oil which is not applicable to dentistry and is different than resistance to fluid. Always check to ensure that your respirator is fluid resistant, and, if it is not, create fluid resistance by adding a surgical mask or full-face shield as mentioned above.

If surgical N95 respirators are not available and there is a risk that the worker may be exposed to high velocity droplets or splatters of blood or body fluids, a face shield or surgical mask must be worn over the commercial N95 respirator to provide the fluid resistance necessary. NIOSH and FDA standards are recognized by Health Canada. During pandemic times, with limited supply of PPE, non-NIOSH respirators produced in other countries with similar standards have been deemed acceptable by the CDC. See link below for a list of acceptable alternatives (P2, P3, PFF2, PFF3, KN/KP95, KN/KP100, FFP2, FFP3, DS/DL2, DS/DL3, Special, 1st) <https://blogs.cdc.gov/niosh-science-blog/2020/04/23/imported-respirators/>. If commercial respirators are used as an alternative to NIOSH-approved N95 respirators, they must be fit-tested and used with a face shield or surgical mask to protect against fluid penetration.^{8, 9, 10, 11}

Table 2: Adapted from: World Health Organization. "Rational use of Personal Protective Equipment for Coronavirus Disease 2019 (COVID-19)." (February 27, 2020):

Setting	Staff	Patients Procedure/Activity	Type of PPE
		Providing direct care (NAGP)	Surgical mask ^{*,9,10,11} Eye/Face protection ^{3,4} Protective clothing (e.g. scrubs) Gloves

Setting	Staff	Patients Procedure/Activity	Type of PPE
Patient room	Dental Health Care Provider (DHCP)	Aerosol-generating procedures (AGP)	Fit tested N95 respirator or the equivalent (as approved by Health Canada) OR surgical mask AND face shield ^{9,10,11} Eye/Face protection ^{3,4} Gown/lab coat ^{7,12,5} Gloves
	Disinfecting treatment rooms for NAGPs		Surgical mask ^{*,9,10,11} Eye/Face protection ^{3,4} Protective clothing (e.g. scrubs) Gloves
	Disinfecting treatment rooms for AGPs		Surgical mask ^{*,9,10,11} Eye/Face Protection ^{3,4} Protective clothing (e.g. scrubs) Gloves
	Visitors	No visitors during AGPs **	Non-surgical or surgical mask
Reception	Front office staff	Arrival screening	Non-surgical or Surgical Mask ^{*,9,10,11} Maintain spatial distance of at least 2m when possible.

*ASTM I, II or III

** exception being a legal guardian or a caregiver, who should also be screened. If a physical distance of 2 meters cannot be maintained, the legal guardian or a caregiver must wear the same PPE as the DHCP. If a 2-meter distance can be maintained, the legal guardian or caregiver must still wear a mask.

5.4 Masks and Respirators for AGP's

Dental healthcare providers use:

- a fit-tested N95 respirator (or Health Canada approved alternative) or
- surgical mask AND face shield

5.5 Facility Requirements

At present, the PDBNS does not require dental practices to make major infrastructure changes, such as air filtration upgrades or changes to existing office designs (i.e. floor to ceiling walls and doors). The PDBNS is not recommending observing “settling times” based on air changes per hour (ACH) at present. The PDBNS does suggest placing a transparent barrier (plexiglass/plastic) at the reception desk to ensure separation between staff and patients during transactions, **AND** that you ensure that reception staff wear a non-surgical or surgical mask.

A physical distance of at least 2 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, proper PPE (i.e. surgical/procedure mask and gloves) 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. As a precautionary measure, treat all received items as contaminated. Increased caution

should be used when handling items that have had direct patient contact. These items must be thoroughly disinfected or sterilized, as appropriate, before proceeding. 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 “cleaned and disinfected”.

5.6 Safe Management of Linen (Laundry)

All linen used in the direct care of patients must be managed as ‘infectious’ linen. Linen must be handled, transported, and processed in a manner that prevents exposure to the skin and mucous membranes of staff and contamination of their clothing and the environment. Disposable gloves and a gown or apron should be worn when handling infectious linen.^{13, 14}

Single bags of sufficient tensile strength are adequate for containing laundry, but leak-resistant containment is needed if the laundry is wet and capable of soaking through a cloth bag. Bags containing contaminated laundry must be clearly identified with labels, color-coding, or other methods so that staff responsible for laundry can handle these items safely. Dispose of the used bags into the normal waste stream.

Laundry services for healthcare facilities are provided either on or off-premises using the following protocol:

- separate from other linen;
- in a load not more than half the machine capacity; and
- at the maximum temperature the fabric can tolerate, then ironed or tumbled-dried.

DHCPs must change into and out of uniforms at work and not wear them outside the office.

6.0 Infection Prevention and Control Measures

6.1 Considerations

- We recommend reviewing the NSDA IPAC document prior to returning to practice. (<https://nsdental.org/wp-content/uploads/2019/01/ClinicalResource-20181204-NSDA-InfectionPreventionControl.pdf>)
- Ensure that cleaning staff are fully versed in the enhanced cleaning protocol for COVID-19 (refer to PPE table).
- Regularly disinfect high-touch surfaces in the front desk area, waiting room, and staff room using a Health Canada approved disinfectant. (<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>).
- Emphasize hand hygiene as an important measure for preventing the transmission of microorganisms. Hand hygiene can be performed using soap and running water or a hand sanitizer. The minimum time for hand washing is 20 seconds. For alcohol-based hand sanitizers, follow the minimum times recommended by the manufacturer.
- When placing instruments in an ultrasonic cleaner prior to the sterilization process, the lid must be kept on the unit to ensure that aerosols are not created.
- All DHCPs must practice social distancing when possible.
- Do not store disposables, supplies, gauze, tissue, and local anaesthetic in open areas of the treatment room. Clear the treatment areas of all items other than those necessary to carry out the treatment.
- Upon return to practice, waterlines must be purged by flushing them thoroughly with water for at least 2 minutes at the beginning of each day and for 30 seconds following each patient. Before purging is carried out, handpieces and air/water syringe tips must be removed from the waterlines.

7.0 References

1. <https://www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care2.pdf>
2. <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>
3. <https://www.aao.org/Assets/7231d8d7-0332-406b-b5b6-681558dd35d3/637215419697630000/goggles-vs-faceshields-pdf?inline=1>
4. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>
5. Lai MY, Cheng PK, Lim WW. Survival of severe acute respiratory syndrome coronavirus. *Clinical Infectious Diseases*, 2005, 41(7):67–71.
6. World Health Organization. “Infection prevention and control of epidemic- and pandemic-prone acute respiratory infections in health care.” 2014
7. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html>
8. FDA Enforcement Policy for Face Masks and Respirators During the Coronavirus Disease (COVID-19) Public Health Emergency (Revised) U.S. Department of Health and Human Services Food and Drug Administration April 2020
9. <https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/masks-respirators-covid19.html>
10. https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/default.html
11. https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Frespirators-strategy%2Fcrisis-alternate-strategies.html
12. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html>
13. COVID-19: Guidance for infection prevention and control in healthcare settings. Version 1.0. Adapted from Pandemic Influenza: Guidance for Infection prevention and control in healthcare settings 2020
14. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html>
15. Long Y, Hu T, Liu L, Chen R, Guo Q, Yang L, Cheng Y, Huang J, Du L. Effectiveness of N95 respirators versus surgical masks against influenza: A systematic review and meta-analysis. *J Evid Based Med*. 2020 Mar 13
16. Radonovich LJ, Simberkoff MS, Bessesen MT, et al. N95 respirators vs medical masks for preventing influenza among health care personnel: a randomized clinical trial. *JAMA*. 2019;322(9):824-833

Appendix A: Donning and Doffing PPE

GUIDE TO PUTTING ON PERSONAL PROTECTIVE EQUIPMENT

Droplet & Contact Precautions (Universal Masking)

1

Procedure/surgical mask



Process will depend on what face/eye protection is available

Scenario 1 - If goggles or full-face shield is available, leave mask on and proceed to Step 2.

Scenario 2 - If mask needs to be replaced with a mask with visor or N95, perform hand hygiene, remove original mask, and store as per guidance. Proceed to Step 2.

4

N95 Respirator (if applicable)



- Required for AGMPs for patients with unknown, novel or emerging pathogens.
- Refer to manufacturer for specific donning instructions.
- Perform a 'seal check' with each use.
- N95 respirators must be 'fit tested' prior to use.

2

Hand Hygiene



Perform hand hygiene.

Alcohol-based hand rub is preferred. Use soap and water if hand are visibly soiled.

5

Face/Eye Protection



- Put on mask with visor or goggles or full shield as available.
- Place over the eyes or face.
- Adjust to fit
- **NOTE:** Eyeglasses are not considered protective eyewear.

3

Long-sleeved gown



- Select level of gown based on fluid exposure risk.
- Make sure the gown covers from neck to knees to wrist.
- Tie at back of neck and waist.

6

Gloves



- Put on gloves.
- Pull the cuffs of gloves over the cuffs of the gown.

FOR NOVEL AND EMERGING PATHOGENS: Initiate Contact & Droplet Precautions and wear gloves, gowns, procedure/surgical mask and face/eye protection when within 2 metres of patient.



GUIDE TO REMOVING PERSONAL PROTECTIVE EQUIPMENT

Droplet & Contact Precautions (Universal Masking)

1 **Gloves**



- Outside of glove is contaminated.
- Use glove to glove, skin-to-skin technique.
- Discard in garbage

4 **Hand Hygiene**

Perform hand hygiene.
Alcohol-based hand rub is preferred. Use soap and water if hands are visibly soiled.

2 **Hand Hygiene**



Perform hand hygiene.
Alcohol-based hand rub is preferred. Use soap and water if hand are visibly soiled.

5 **Face/Eye Protection**



- Handle only by headband or earpieces.
- Carefully pull away from the face.
- Place non-disposable face/eye protection in designated area for disinfection & disposable items in garbage.

3 **Long-sleeved gown**



- Carefully unfasten ties. DO NOT rip off.
- Grasp the outside of the gown at the back by the shoulders and pull down over the arms.
- Turn the gown inside out during removal.
- Carefully fold into bundle.
- Place disposable gown in garbage or place non-disposable gown in laundry hamper.

6 **Mask OR N95 Respirator**



Scenario 1- LEAVE MASK ON if wearing full face shield and mask is not visibly soiled or mask integrity is affected by moisture/ humidity. Proceed to Step 7.



Scenario 2: If you wore goggles or wearing mask with visor, mask must be removed. Do not touch front of mask, allow to fall away from face & discard.

N95 must be removed outside of room.

7 **Perform Hand Hygiene**

8 **Exit Patient Room. Remove N95 (if applicable). Perform Hand Hygiene**

9 **If Applicable, Obtain New Mask or Apply Stored Mask**



Appendix B: COVID-19 Self-Screening Tool (Updated March 7, 2022)

If DHCPs or office staff have any of the following **new or worsening** signs or symptoms, or they are required to isolate, they must exclude themselves from work and they must complete the [online assessment](#), or contact 811, and arrange for COVID-19 testing. Throughout the shift, each individual is to monitor and if any symptoms develop during the shift, they are to exclude themselves from work at that time.

NAME: _____

DATE: _____

COVID-19 Signs and Symptoms

Signs or Symptom	Yes or No
In the past 48 hours, had or is currently experiencing one of the following symptoms	
Unexplained Fever (> 38 deg C)	
A new or worsening cough	
OR Two or more of the following symptoms (new or worsening)	
Sore throat	
Runny nose/nasal congestion	
Shortness of breath	
Headache	
Required to isolate for any reason?	

Appendix C: COVID-19 Patient Screening Tool (Updated March 7, 2022)**COVID-19 Signs and Symptoms**

Signs or Symptoms	Yes or No
Do you have either of the following? <ul style="list-style-type: none">• A fever (greater than 38°C) or fever like symptoms: chills or sweats; or• A new or worsening cough. OR:	
Do you have two or more of the following symptoms (new or worsening)? <ul style="list-style-type: none">• Sore throat• Runny nose/nasal congestion• Headache• Shortness of breath.	
Are you required to isolate for any reason?	