

July 23, 2020

Ms. Colleen Geiger
President and Chief Executive Officer (acting)
Public Health Ontario
480 University Avenue, Suite 300
Toronto, Ontario
M5G 1V2

Dear Colleen:

Re: Risk of COVID-19 in Dental Health Care Settings

The Ontario Provincial Infectious Diseases Committee on Infection Prevention and Control (PIDAC) recently discussed the high risk of COVID-19 transmission in dental health care settings, particularly as it relates to aerosol-generating dental procedures (AGDP).

Although droplet transmission is the main source of COVID-19 spread, aerosol transmission can occur during aerosol-generating procedures involving the respiratory tract.¹ Dental health care professionals frequently perform AGDP. Aerosol-generation occurs with high speed drilling and is associated with the use of commonly used dental instruments including dental drills or handpieces, air-water syringes and ultrasonic scalers.² Dental health care staff are in close proximity to the upper airway for prolonged periods during these AGDP. All of these factors create a substantial risk for COVID-19 transmission within the dental health care setting and dental health care professionals are widely considered to be one of the professional groups at highest risk for COVID-19.

Dental practices have been instructed to screen all patients for COVID-19 symptoms before each appointment and reschedule symptomatic patients except for emergency cases. In addition, the local incidence of COVID-19 must be considered to guide the risk mitigation strategies used. This is of relevance as dental patients may have COVID-19 and be infectious despite the absence of symptoms.³ Hence, if the incidence in the local community is not low, the following additional measures are essential for **all dental patients undergoing an AGDP regardless of symptoms**:

- AGDP should be conducted in a well-ventilated, enclosed private room with the door closed.*
- All staff in the room should wear an N95 respirator in addition to other required personal protective equipment (i.e., gown, gloves, eye protection).
- Consideration should be given to other risk reduction strategies including the use of rubber dams, high volume intra-oral and extra-oral suction, and peroxide oral pre-rinse.

* Ideally, the room should meet Canadian Standards Association guidance for minimum air-exchanges per hour for a procedure room.⁴

As dental practices re-open, guidance from the Ministry of Health, Public Health Ontario and public health units must be explicit in requiring dental practices and dental health care professionals to take appropriate precautions when AGDP are performed and COVID-19 incidence is not low. We do not believe this has been made clear to dentists and dental practices based on currently available guidance documents and communications, and is not clear in the guidance provided by the Royal College of Dental Surgeons of Ontario (RCDSO).⁵ Furthermore, in the June 15 “COVID-19 Operational Guidance: Health Sector Restart” document, the personal protective equipment table (page 13) indicates that N95 respirators are required when aerosol-generating medical procedures are performed on symptomatic (“screen positive”) patients but not for similar procedures in patients who screen negative.⁶ This is inappropriate for AGDP in settings where COVID-19 incidence is not low, given the risk of transmission from asymptomatic individuals, and we believe this table is being misapplied to dental health care settings and should be corrected.⁶ This table should be revised to indicate that N95 respirators are required for asymptomatic (“screen negative”) patients when the incidence of COVID-19 in the local community is not low; without this change the RCDSO is unlikely to revise their guidance.

We acknowledge that Ontario does not yet have a robust COVID-19 surveillance system to allow dental practices to determine the incidence of COVID-19 within their local community and that there is not a clear definition of “low” and “not low” COVID-19 incidence. However, Ontario Ministry of Health guidance on the management of surgical patients has stratified practices based on low and not low risk⁷ and until clearer definitions are developed, a similar approach should be taken with dental practices. In areas where COVID-19 incidence is not low, these precautions, including the use of N95 respirators and private rooms, should be adopted to protect dental staff and patients during AGDP.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matthew P. Muller', written in a cursive style.

Matthew P. Muller, MD, PhD, FRCPC

Chair, Ontario Provincial Infectious Diseases Advisory Committee on Infection Prevention and Control (PIDAC)

On behalf of PIDAC

References:

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