

# The Incidence of COVID-19 Among Canadian Dentists

## Canadian Association for Dental Research Roundtable

### PARTICIPANTS

Dr. Walter Siquiera, University of Saskatchewan  
Dr. Paul Allison, McGill University  
Dr. Sreenath Madathil, McGill University

#### Additional Research Contributors:

Dr. Mary McNally, Dalhousie University  
Dr. Carlos Quinonez, University of Toronto  
Dr. Michael Glogauer, University of Toronto

### INTRODUCTION

- Dentists are considered a high-risk group for acquiring COVID-19 due to:
  - Their proximity to patients during treatment
  - The types of procedures they perform
  - The potential for cross-contamination in the dental office
- There is currently no available data or literature to evaluate the incidence rate of COVID-19 in Canadian dentists
- It is not known what dental procedures are high risk

### AIMS OF STUDY

- To estimate the risk of both symptomatic and non-symptomatic COVID-19 among Canadian dentists as they return to work
- To investigate whether the risk of contracting COVID-19 differs based on the type of dental procedure being performed and the type of PPE being used
- To collect data that will inform evidence-based practice guidelines in the future
- To capture any changes over the course of the study that reflect the dynamic nature of the pandemic

## STUDY DESIGN

### QUESTIONNAIRE

- Through the dental organizations and associations across the country, invitations were sent out to all dentists in Canada to participate in the study
- A very positive response resulted in a desired sample size of approximately 700 dentists
- Participating dentists were asked to complete a baseline questionnaire:
  - Background
  - Social demographics
  - Office type
  - Number of patients treated
  - Types of treatments performed
  - Types of PPE used
  - COVID symptoms or COVID+ diagnosis
  - Contact with COVID+ individuals at work or home
- Each month the dentist will be asked to complete a shorter version of the same questionnaire:
  - Treatments performed
  - Number of patients treated
  - COVID symptoms (and if so, what?)
- Over 12 months it will be established how many dentists in the study become infected with COVID.
- The study is being carried out in both English and French

### SALIVA TESTING

- Saliva samples will be collected from 200-250 dentists on a monthly basis for 12 months
- The saliva will be analyzed using an RNA-based method
- The analysis will identify if the dentist has SARS-CoV-2 in their saliva
- Infection rates among dentists will then be compared with infection rates in the local/provincial community

### PROGRESS AND NEXT STEPS

- The study has been well supported by key dental organizations across the country who sent out the invitations to participate

- There was a very positive response from dentists which quickly yielded the required sample size
- Next step is to ensure the system for collecting monthly data and saliva works
- The hope is that after a few months the process will become routine

## RESULTS

- Results will be made available to all participants through the regular email channel
- Results will be communicated to supporting organizations and regulatory bodies every 2 months throughout the study so they can account for them in changing directives and protocols
- Results will be published in scientific publications and possibly through the CDA Oasis platform
- The study is an open data project. In future, de-identified data will be available to the wider research community for further analysis

## PARTICIPATING BODIES

- Provincial Dental Board of Nova Scotia
- Dental Association of Prince Edward Island
- Association des Chirugiens Dentists du Québec
- Ontario Dental Association
- Manitoba Dental Association
- College of Dental Surgeons of Saskatchewan
- School of Dentistry, Alberta
- College of Dental Surgeons of British Columbia
- Newfoundland & Labrador Dental Association
- Canadian Institutes of Health Research
- Réseau de Recherche en Santé Buccodentaire et Osseuse
- COVID-19 Immunity Task Force