COVID-19 DENTAL PRACTICE GUIDELINES





INTRODUCTION

These guidelines are to be used only as reference material. EMS reinforces the strict adherence to clinical guidelines released by official local governments¹. EMS further recommends all clinicians to review the latest clinical guidelines from World Health Organization² and Center for Disease Control and Prevention³.

Aerosols are common in dental procedures. Nearly all dental instruments used in common treatments generate aerosols: low- and high-speed handpieces, turbines, sonic- and ultrasonic devices, air water syringes, and air polishing devices^{4,5,6} This document was developed as a recommendation/guideline to ensure additional safety of the clinician, patient, prevent infection amongst colleagues and prevent any cross contamination in the dental practice during the interim phase of COVID-19.

COVID-19 - IMPORTANT FACTS:

Incubation period (asymptomatic patient): 5-14 days⁷

Humans have been faced with numerous viruses like influenza (SARS-CoV / Mers-CoV) causing serious respiratory problems in the past, however COVID-19 has been the most challenging virus. Neither vaccines nor medications are available today.

The possible transmission routes in dental offices are^{7,8,9}:

- > Airborne transmission via droplets and aerosols. Aerosols differ from droplets and spray mist. Due to their smaller particle size (<50 μ m), they can be carried several meters away and can be detected in the room air for up to 30 minutes¹⁰
- > Transmission through direct contact
- > Transmission through contact with contaminated surfaces



8-STEP SAFETY PROTOCOL FOR DENTAL PRACTICES

01 DENTAL PRACTICE MANAGEMENT

- > Public areas should be frequently cleaned with a detergentbased product and disinfected with an approved disinfectant or >60% alcohol-based wipes or 0.1% sodium hypochlorite solution, including door handles, chairs, and desks.
- > The number of patients in the waiting room should allow proper social distancing (1.5m)
- > Remove unnecessary items in the waiting room including toys and magazines.
- > Some studies recommend pre-check triages to measure and record the temperature of every staff and patient with a contact-free thermometer as a routine procedure⁷.

02 PATIENT MANAGEMENT

A questionnaire should be used to screen patients with potential infection of COVID-19 before they come to the $clinic^{1,11}$.

Ask the patients if they have:

- > Returned from overseas or interstate travel in the past 14 days
- > Felt unwell, including but not limited to symptoms of COVID-19 such as fever, cough, sore throat or shortness of breath
- > Had any contact with a confirmed or suspected case of COVID-19 in the past 14 days
- > Patients should be invited to disinfect their hands entering the office.
- > When entering the surgery ask the patient to wash their hands (to conserve ABHR) in the surgery hand washing sink, prior to sitting in the dental chair.

Additional Patient recommendations¹²:

- **1.** Come alone (when possible) and respect appointment time, no early or late arrivals.
- 2. Leave coats, jackets, bags and backpacks in the waiting room.
- 3. Respect the social distance inside the waiting room.
- 4. Respect coughing and sneezing etiquette
- 5. Keep cell phones and tablets outside the clinical area.
- 6. Do not exchange handshakes with doctors and other operators.







8-STEP SAFETY PROTOCOL

03 CLINICIAN MANAGEMENT

Hand hygiene has been considered as the most critical measure for reducing the risk of contamination.

Perform hand hygiene regularly by hand washing with liquid soap or applying an alcohol-based hand gel that is approved for clinical use (EN1500 compliant)

- > Before entering the office
- > Before wearing gloves
- > After removing gloves

> After touching clinical surfaces or equipment. Follow the WHO 5 moments of hand hygiene.



👤 Never touch your face with your hands without washing them first.

The use of personal protective equipment, including masks, gloves, non- woven disposable clothing, goggles and face-shield, is recommended to protect yourself from potentially infected aerosol, blood and secretions. Refer to the ADA guidelines to know the level of precaution and PPE needed based on the patient's risk level¹.

Do not remove mask inside the operating area. The virus can remain suspended in droplets <50 microns for 30 minutes¹⁰.

04 PRE-PROCEDURAL MOUTHRINSE

It is well documented that the use of a pre-procedural mouth rinse with a CHX solution for 30 - 60 seconds reduces the bacterial load in the aerosols by up to 70%^{13,14}. However, CHX shows low effectiveness against corona viruses^{7,8}. Hydrogen peroxide (H2O2) at a concentration of 0.5% or more is proven to effectively kill viruses^{15,16} along with CPC which efficiently kills viruses in addition to bacteria¹⁷. As a result, EMS recommends a preprocedural rinse first with H2O2 (at least 0.5%) followed by BacterX[®], containing Chlorhexidine Digluconate (CHX) 0.1% plus Cetylpyridinium Chloride (CPC) 0.05%, (without alcohol, preferably). Australian Dental Association Guidelines recommend rinsing with each for 20-30 seconds¹.

05 AEROSOL MANAGEMENT

The use of a high-volume suction system with a suction volume of at least 300l/min can effectively reduce aerosol formation. A skilled suction technique in combination with Optragate[®] supports reduction of aerosols very well^{4,18}. Four-handed dentistry allows optimal suction¹². Please watch our video showing how to use high volume suction correctly while using AIRFLOW[®] and PIEZON[®] handpieces and PS instrument for GBT.1







FOR DENTAL PRACTICES

06 SURFACE DISINFECTION

COVID-19 can persist on surfaces for a few hours or up to several days depending on the surface material 20 .

- > Wipe all dental equipment (chair, handles, devices, cords, etc.) with 65-75% ethanol or a disinfection wipe with proven efficacy, before and after every treatment.
- > Leave the alcoholic solutions to act for at least 1 minute before drying.
- For the cleaning and disinfection of EMS devices use only neutral detergents such as IC-100 wipes (4153) (Clean wipes) by Alpro Medical GMBH. To disinfect, use a TGA approved disinfectant such as PlastiSept eco wipes (4623) by Alpro Medical GMBH.

07 STERILISATION

AIRFLOW[®] and PIEZON[®] handpieces and all instruments must be sterilized after each treatment as per the official EMS IFU document and the Infection Control Guidelines in your state and/ or country.

08 OTHER RECOMMENDATIONS

We recommend watching Prof. Laurence Walsh AO's webinar on the issues around the transition to level 1 restrictions and what that means for regular dental practices.2

The SofaCON Virtual Dental Summit was launched in April to support dental professionals during COVID-19 and beyond. The Summit is available to watch on-demand.³

You will find Prof Walsh's webinar and the Virtual Dental Summit on the final page via link and QR Code.

The new Corona virus strain, SARS-CoV-2, will be with us for a long time – and so will biofilm.

We hope that you will soon be able to offer your patients a good feeling with the EMS Guided Biofilm Therapy protocol!

Stay healthy!

May 19, 2020









INFOGRAPHIC: INTERIM GUIDANCE TO MINIMISE RISK OF COVID-19 TRANSMISSION





REFERENCES



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3. CDC's guidances of COVID-19: www.cdc.gov/coronavirus/2019-ncov/index.html

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GET STARTED

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«How to use high volume suction correctly while using AIRFLOW[®] and PIEZON[®] handpieces and PS instrument for GBT» EMS HQ Switzerland



«The transition to level 1 restrictions and what that means for regular dental practices» Professor Laurence J. Walsh AO of The University of Queensland



«The SofaCON Virtual Dental Summit on-demand webinars - supporting dental professionals during COVID-19 and beyond»

https://professional.airflowdentalspa.com.au/covid-19/

