



EASY SAFETY MEASURES THAT WILL KEEP US SAFE



01 PATIENT

- Dental care and oral health are vital to overall health and well being.
- Limiting visits to dentists was difficult for both patients and doctors, but mandatory for pandemic control.
- To regain your confidence, we have worked on safety measures and improved the setups to help you attend the dental treatment securely.



02 DENTIST

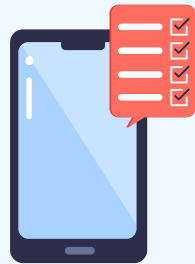
- Your role is crucial in orienting the patients and explaining to them how to prevent virus propagation and contagious diseases.
- Reinsure your patients that dentists are trained to work in high biological risk environment.

03 STAFF

- Considering each patient as potentially infected is the key for protection.
- By applying the proper PPE and complying with applicable and affordable security measures, dental personnel can reduce the risk of contracting and spreading the Covid-19 virus



04 PATIENT TRIAGE



STEP 1

Phone triage

[Click here to see the questions](#)



STEP 3

Organization of
clinical agenda
and waiting list



STEP 2

Assessment of
patient risk profile
& needs

[Click here to see
the Operators Management](#)

05 PATIENT ARRIVAL AT DENTAL OFFICE

Patient



01

Temperature registered with contactless thermometer



02

Remove bags, mobiles & coats



03

Hand rubbing with hydroalcoholic solution 70%



04

Repeat in-office triage



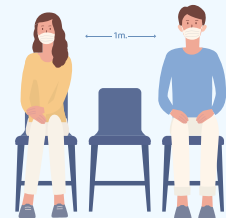
07

Mouth rinse with antiseptic for 1min



06

Put on shoe cover



05

If triage is OK patients, wearing masks, take their seats



06

Put on gloves



05

Put on goggles & shields

Clinical Staff



01

60" Hand washing, or hand rubbing with hydroalcoholic solution



02

Put on gown



03

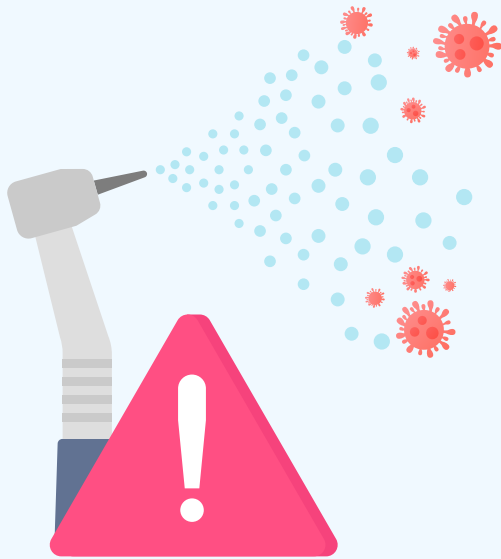
Put on cap



04

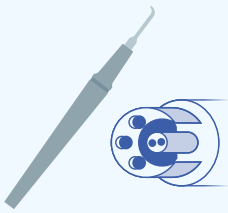
Put on FFP2/FFP3 with no valve or FFP2/FFP3 with valve + surgical mask

06 PATIENT TREATMENT



STEP 1
 If possible,
 avoid aerosol

STEP 2
 If aerosol production
 is inevitable, at least
 try to limit it



01

Possible use of
 decontaminating sprays



02

A simple hint to transform
 AGP into ADP
 (Aerosol Decontaminating Procedure):
 Add disinfectant to cooling
 water of dental chair



03

Use high-power
 suction



04

It is recommended to conduct
 AGPs after placing rubber dam and
 decontamination of the field.
 All procedures should be 4 handed.



05

Ventilate with an
 open window
 or Room Exhaust



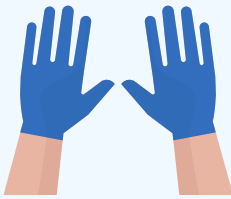
06

Surface disinfection
 with sodium hypochlorite
 or H₂O₂ or alcohol
[Click here for more details](#)

07 END OF TREATMENT

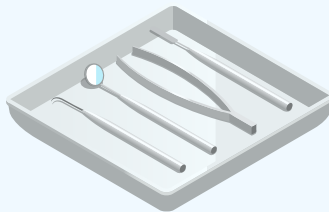
After each patient keep a delay of 15 min for room aeration and another 15 min for complete setup for the next appointment

STEP 1 Instruments After Use



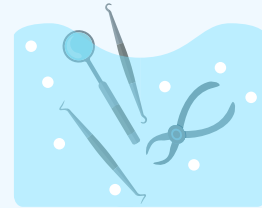
01

Wear thick gloves to remove tools from the surgical desk



02

Place inside a deep tray and transport to sterilization room



03

Soak in disinfectant filled container

STEP 2 Sterilization procedures



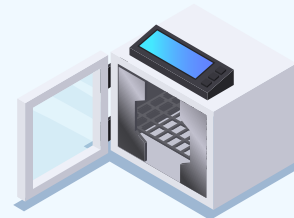
01

Pre-disinfecting to reduce microbial charge



02

Cleaning and inspecting for debris



03

Packing and Sterilizing

STEP 3 Waste disposal



01

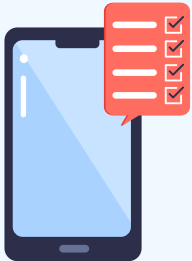
Wastes with infectious risk and soiled PPE will be placed in a container for hazardous wastes.



02

Unsoiled PPE can be placed in household waste bag. It should be kept 24h before discarding.

IMPORTANT REMARKS



Phone triage

- 1- Have you previously been infected by the SARS-CoV-2 virus? If yes, have you been declared healed from Covid-19 clinically or have tested negative with a nasopharyngeal swab?
- 2- Do you currently have any of the following symptoms: fever, cough, respiratory difficulty, conjunctivitis, diarrhoea, flu, lack of smell and taste?
- 3- Did you have any contact with SARS-CoV-2–infected patients in the last month?
- 4- Did you have any contact with subjects placed in quarantine, either self-imposed or organised by the health authorities, in the last month?

Following this questionnaire you can schedule your patients with high risks in particular appointments with extreme precautions



Assessment of patient risk profile & needs

OPERATORS MANAGEMENT

Inhalation of aerosols is a major mode of COVID-19 transmission. Additional risks have also been attributed to infectious droplets contaminating the conjunctival epithelium of the eye. Hence, PPE must be worn, to provide an efficient barrier, while conducting an aerosol generating procedure (AGP). It is recommended also to wear a particulate respirator that is at least as protective N95 or EUFFP2 (European Standard Filtering Face Piece 2) together with an INTRA-ORAL high volume suction.

OUTSIDE THE OPERATIVE AREA	
NON-AEROSOL GENERATING PROCEDURES	
AEROSOL GENERATING PROCEDURES	

PPE should be changed after each patient and autoclaved



1- SURFACE DISINFECTION

- Sodium hypochlorite 1%
- H₂O₂ 0.5-1%
- Alcohol 70%

2- AEROSOL PRE-DECONTAMINATION

IN-LINE DECONTAMINANT WATER BOTTLE SET

- Achieves intimate mix of decontaminant with aerosols
- Can be easily added on any unit

DECONTAMINANTS @ “LOG 6” AND HIGHER

- PVP-I or i2 (messy)
- CHX, CHG (0.2-0.3%)
- Dodecyl DBAC Cu+ (1%)
- Many QAC formulas
- Avoid chlorine, hypochlorite, aldehydes, phenols, H₂O₂ or any machine corrosive/toxic component
- Sealed goggles,
- Face shield
- Double layer mask (N95+ outer surgical mask)
- Possible Eyes irritation: cover patient
- Possible allergies and skin irritation, all reversible

WATER RETRACTION VALVE MODIFICATION

- Replacement by a simple air actuated water valve

3- AEROSOL POST-DECONTAMINATION

EXTERNAL, OVER-THE-PATIENT AIR SUCTION

- Optimally , 600-2000 L/min
- Noise level: <55 db
- Multilayers Hepa 13/14 filters
- Undetermined lifetime for filters
- Leaves untreated infective/cumulative residues in filters

AIR SANITIZER, STAND-ALONE

- Best type: Tall stand w/cascade filters and triple serpentine flow UVC
- > 2 m³ /minute (One full room air turn over/15 min)
- 2-3 turn overs are required

UVC 240-280 NM WAVELENGTH

- Requires ≈6-16 mj/cm²: (Power * Exposure Time)
- mW/cm²/second, measured at 2 cm from lamp.
- Power decreases with distance (1/d²)

AIR OZONATOR, DISINFECTS 90% OF AIR @2 GR/HR (3-5 PPM)

- Standalone Room's air volume decontamination
- Works in sealed rooms, high ozone debit
- Requires 2 – 3 hours
- Toxic during operation
- Requires full aeration after operation

ROOM EXHAUST, AIR EXTRACTOR, FORCED VENTILATION

- Preferably turbine type
- Low noise, Low depression, high volume

AIR CONDITIONING

- Add HEPA filters
- Open windows required

REFERENCES:

- 1• ADA: Return to Work Interim Guidance Toolkit. *June 2020*
- 2• CDC: Coronavirus disease.Guidance for Dental Settings: how to move forward with dental care during pandemic. *July 2020*
- 3• Guidance for Dental Settings Echoes. 4-European federation of periodontology. Suggestions for the management of a dental clinic during the Covid-19 pandemic. *June 2020*
- 4• OSHA: Department of labor. Guidance for dentistry workers and employers. *May 2020*
- 5• Association Dentaire Française: COVID-19 Guide pratique à partir des recommandations d'experts validées. *June 2020*

NB: The information presented will be modified according to the recommendations of WHO and the Lebanese Ministry of Health