

Guidance to practice dentistry during COVID-19 outbreak

This is a guidance to practice dentistry during the COVID-19 outbreak which may be modified and adopted to any dental care setting based on the risk of spread of COVID-19 in the area concerned and availability of resources. This is supplementary to the circulars issued by the Ministry of Health during the COVID-19 outbreak and not a standard or regulation, thus does not create any legal obligation. Whenever you encounter any difficulties in interpreting the contents of this guidance, you may use your clinical judgement and current scientific knowledge.

Level of action	Functions	PPE Requirement for healthcare staff
Level 1	<p><u>Evaluation of risk of COVID-19 and receiving patients to clinics</u></p> <ul style="list-style-type: none"> ✚ Assess the risk of spread of COVID-19 in your practicing area. <ul style="list-style-type: none"> ✓ Follow the notifications of the Epidemiology Unit of the Ministry of Health and Presidential Task Force for COVID-19 and decide whether your area is a 'high risk', 'moderate risk' or 'low risk' for spread of COVID-19 ✚ Large gatherings should be avoided in waiting areas of clinics. <ul style="list-style-type: none"> ✓ Patients should be encouraged to take appointments over the phone and an appointment system should be maintained to treat patients in a spaced out manner. ✚ Patients will be encouraged & empowered to follow <ul style="list-style-type: none"> ✓ Social distancing – arrange seating accordingly ✓ Basic hygienic measures - handwashing with soap & water / sanitizer - provide facilities in hospital entrance / waiting rooms ✓ Wear a mask ✓ Respiratory etiquette when attending dental clinics. ✚ Discourage accompanying persons coming into the clinics ✚ Install temperature screening mechanisms at the entrance to the dental clinics / hospital 	<ul style="list-style-type: none"> • Eye protection • Surgical mask • Gloves

<p>Level 2</p>	<p><u>Triaging</u></p> <p>A. <u>Pre-screening area</u></p> <ul style="list-style-type: none"> ✚ A patient suspected / diagnosed with COVID-19 is not recommended to visit the dental clinic for routine dental care (unless it is an emergency). ✚ If a patient is suspected of COVID-19, report immediately to the infection control unit and direct for necessary medical attention. ✚ However, if a COVID-19 suspected patient presented with a dental emergency which need urgent dental attention, it should be attended to without any delay after seeking medical advice. ✚ Patients in need of urgent & emergency dental care (such as patients presenting with severe trauma, bleeding, swelling, pain) should be given priority and should be fast-tracked in the triaging process. <p><u>Identifying a suspected case of COVID-19</u></p> <p><u>Step 1 – Temperature check</u></p> <ul style="list-style-type: none"> ✚ The body temperature of the patient should be measured. A contact-free forehead thermometer is strongly recommended. ✚ If the temperature is above 37.3° C, patient will be directed for medical advice – infection control unit. ✚ If the temperature is below 37.3° C, patient will proceed to answer the questionnaire. <p><u>Step 2 - Questionnaire</u></p> <ul style="list-style-type: none"> ✚ The questionnaire will be used to screen patients with potential infection of COVID-19 before they proceed to the dental screening area. These questions should include the following: 	<ul style="list-style-type: none"> • Eye protection • Surgical mask • Gloves • Gown
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1. Felt unwell, including but not limited to symptoms of COVID-19 such as fever, dry cough, sore throat or difficulty in breathing?
2. Any history of close contact with a confirmed or suspected case of COVID-19?
3. Any contact with a person with fever/cough, sore throat or shortness of breath but not identified/tested for COVID-19?
4. Travel history to any country within last one month?
5. Living or Travelled / visited to a location designated as high risk of COVID 19?

- ❖ If the patient answers 'YES' to any of the above questions, advise them that you cannot provide routine dental care and reschedule the appointment for 30 days after their last travel overseas or contact with a COVID-19 case, or their symptoms have resolved and they are no longer considered a risk. Inform infection control unit.
- ❖ If the answer is 'NO' to all these questions and the temperature is **below 37.3° C**, the patient can proceed to the 'Dental Screening Area'

B. Dental Screening area

Evaluation of current dental complain - Every patient on screening will be further classified as 'Emergency' or 'Non-emergency'.

Emergency dental problems

- Severe dental pain from pulpal inflammation
- Pericoronitis or third-molar pain
- Surgical post-operative osteitis, dry socket dressing changes

	<ul style="list-style-type: none"> • Abscess, or localized bacterial infection resulting in localized pain and Intra / extra oral swelling • Tooth fracture resulting in pain or causing soft tissue trauma • Dental trauma with avulsion/luxation • Facial Trauma • Oral ulcers, severe facial pain • Excessive bleeding • Final crown/bridge cementation if the temporary restoration is lost, broken or causing gingival irritation • Replacing temporary filling on endo access openings in patients experiencing pain • Snipping or adjustment of an orthodontic wire or appliances piercing or ulcerating the oral mucosa • Any other condition that is deemed appropriate. <p>All other conditions will be considered as 'non-emergencies'</p>	
<p>Level 3</p>	<p><u>Treating the patient</u></p> <ul style="list-style-type: none"> ❖ If the patient is presenting with any <u>emergency</u> dental problem mentioned above, patient should be treated with extra caution with appropriate personnel protective equipment (PPE). Should avoid spatter or aerosol generating procedures to the maximum. ❖ If it is a <u>non-emergency</u>, consider the current risk level of spread of COVID-19 in your area. <ul style="list-style-type: none"> ▪ If risk level is high, discuss with the patient. Explain the patients the risks involved in undergoing dental treatment during COVID-19 outbreak. Try to reschedule the appointment after giving necessary advice e.g. oral hygiene instructions, dietary advice. If that patient insist that he should undergo treatment, treat the patient after obtaining written informed consent. Use appropriate PPE. 	<ol style="list-style-type: none"> 1. <u>PPE requirement for Healthcare workers for treating unsuspected patients</u> <ul style="list-style-type: none"> • Eye protection • Surgical mask • Gloves • Gown 2. <u>PPE requirement for Healthcare workers providing direct care to suspected /diagnosed COVID-19 patients</u> <ul style="list-style-type: none"> • NIOSH approved N95 mask or FFP2 standard, or equivalent • Impermeable gown

<ul style="list-style-type: none"> ▪ If the <u>risk level is low</u>, you may consider treating patient with the written informed consent of the patient. Appropriate PPE should be used. Should avoid spatter or aerosol generating procedures to the best. <ul style="list-style-type: none"> ✚ All members of the dental team should be trained to minimize spread of COVID-19 by adhering to strict infection control measures. ✚ Minimum exposure of members to patients and other members of the team should be planned. All members of the dental team should follow a rotatory roster to avoid unnecessary exposure. ✚ All emergency dental treatment should be carried out after proper history taking and examination. ✚ Written informed consent should be obtained prior to treatment in the prescribed form in patient’s language of communication (refer annex) ✚ Ensure adequate ventilation in the room ✚ Take extra-oral radiographs whenever possible; intraoral techniques may induce coughing ✚ Prior to commencing treatment, ask the patient to undertake a 20-30 second pre-procedural mouth rinse wherever possible with <ul style="list-style-type: none"> ✓ 0.1% hydrogen peroxide or ✓ 0.2% povidone iodine or ✓ essential oil mouth rinse (alcohol free) ✚ Reduce aerosol production as much as possible through use of hand instrumentation and high-speed suction, if possible, use rubber dam. 	<ul style="list-style-type: none"> • Gloves • Eye protection (goggles or face shield) • Surgical hood or cap • Covered shoes and fluid resistant shoe cover or boots <p>3. <u>PPE requirement for Healthcare workers doing aerosol generating procedures performed on suspected / diagnosed COVID -19 patients</u></p> <ul style="list-style-type: none"> • NIOSH approved N95 mask or FFP2 standard, or equivalent • Impermeable gown • Gloves • Eye Protection (goggles or face shield) • Apron • Surgical hood or cap • Covered shoes and fluid resistant shoe cover or boots <p>4. <u>PPE requirement for Healthcare workers on patient transit (e.g. to the ward or in-between departments/wards)</u></p> <ul style="list-style-type: none"> • Surgical mask • Gloves <p>5. <u>PPE requirement for Cleaners Cleaning after an aerosol generating procedure performed on COVID -19 patients</u></p> <ul style="list-style-type: none"> • Surgical masks
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		<ul style="list-style-type: none"> • Fluid resistant gown • Heavy duty gloves • Eye protection (if risk of splash from organic material or chemicals) • Boots or closed work shoes and shoe covers • Surgical cap or surgical hood (Masks and eye protection can be shared between rooms of confirmed cases or between rooms of suspected cases)
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Refer the annex 'Decision tree to be used in treating patients during COVID-19 outbreak'

Hand hygiene

- ✓ Dental professionals should wash their hands before patient examination, before dental procedures, after touching the patient, after touching the surroundings and equipment without disinfection, and after touching the oral mucosa, damaged skin or wound, blood, body fluid, secretion, and excreta.
- ✓ More caution should be taken by the dental professionals to avoid touching their own eyes, mouth, and nose.

Personal Hygiene

- ✓ Encourage to wear scrubs once in the clinic environment (Cloths worn from home removed and kept in a closed space until off duty to return home in order to prevent transmitting any nosocomial infection home or other places).

Disinfection of the clinic settings

a. Waiting room

- Remove unnecessary items in the waiting room including toys and magazines

- Adjust seating in waiting room to ensure social distancing of at least 1m between seats if possible
- Regularly wipe the surfaces with > 60% alcohol-based wipes or 0.1% sodium hypochlorite solution, including door handles, reception desks, phones.

b. Inside the clinic

After treating each patient, surrounding environment should be cleaned as follows.

- ✓ Dental chair, tray, dental stool, tabletops, light handles, Doorknobs – wipe with 70% alcohol or 0.5% hypochlorite
- ✓ Hand instruments - autoclave
- ✓ Reusable dedicated equipment- 70% alcohol

c. Public areas

Public areas should also be frequently cleaned and disinfected, including door handles, chairs, and desks.

- ✓ Elevators should be disinfected regularly. Those who use elevators should wear masks correctly and avoid direct contact with buttons and other objects.
- ✓ Toilets should be cleaned with 0.5% hypochlorite

Personal protective measures for the Healthcare workers

- All disposables to be changed between patients.
- All reusable to be disinfected appropriately between each patient.
 - ✓ Face shields / Goggles - soap & water or 0.1% hypochlorite
 - ✓ Gowns and masks if reusing – washing by machine with warm water (60-90°C) If machine washing not available, soak linen in 0.5% chlorine / Detergent for 30 minutes.
 - ✓ Boots - 0.5% hypochlorite

Dental Laboratory materials

- Impression Trays
 - ✓ Single-use trays - Discard after one use
 - ✓ Stock trays - disinfect by spray or immersion or Autoclave
 - ✓ Custom acrylic trays – disinfect by spray or immersion, then rinse
- Impression / Wax Bites/Rims, Bite Registrations
 - ✓ Rinse under running tap water to remove blood/saliva
 - ✓ Disinfect as appropriate - Iodophors, sodium hypochlorite (1:10 concentration), chlorine dioxide, phenols
 - ✓ Rinse thoroughly with tap water to remove residual disinfectant
 - ✓ Immersion disinfectants can only be used once before discarding
- Casts
 - ✓ Soak casts for 30 minutes in 0.5% concentration of sodium hypochlorite and saturated calcium dihydrate solution (SDS)
- Dispatch all materials to lab in sealable plastic bag

Management of medical waste

- The medical waste (including disposable protective equipment after use) should be transported to the temporary storage area of the medical institute timely. The reusable instrument and items should be pretreated, cleaned, sterilized, and properly stored in accordance with the Protocol
- The medical and domestic waste generated by the treatment of patients with suspected or confirmed COVID-19 infection are regarded as infectious medical waste. Double-layer yellow color medical waste package bags and “gooseneck” ligation should be used. The surface of the package bags should be marked and disposed.

27th April 2020

Annex - Decision tree to be used in treating patients during COVID-19 outbreak

