

RECOMMENDATIONS FOR CLINICAL DENTAL CARE IN THE COVID-ERA

A READY RECKONER

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DISCLAIMER: These recommendations are based on guidelines and protocols given by the World Health Organization (WHO), American Dental Association (ADA), Australian Dental Association and the Indian Dental Association (IDA). They have been modified to fit the Indian dental scenario.

Irrespective of the risk level or profile mentioned in this document, for the next 100 days -every patient walking through the door should be assumed to be COVID positive and precautions taken as such.

Risk to Dentists due to Covid-19

Coronavirus has existed for a long time. Its recent strain COVID-19 has exhibited a very high degree of virulence. According to current evidence, COVID-19 virus is primarily transmitted between people through respiratory droplets and contact routes. Droplet transmission occurs when a person is in close contact (within 1 m) with someone who has respiratory symptoms (e.g., coughing or sneezing) and is therefore at risk of having his/her mucosae (mouth and nose) or conjunctiva (eyes) exposed to potentially infective respiratory droplets.

Taking this into account, dentists are at highest risk for exposure to this virus since we work in close proximity to the patient's oral cavity. Saliva and aerosols along with splatter have a huge role in spreading this virus.

Our main aim is to protect ourselves from this occupational hazard by minimizing our exposure to the above-mentioned factors.

PATIENT RISK CRITERIA

Low Risk - Patients under 60 years of age who have not had any COVID related symptoms in the past 14 days, no contact with COVID infected patients. Most dental procedures can be performed.

Moderate Risk - Patients over 60 years of age. Have recovered from a recent bout of fever, cold, cough in the past 14 days and are currently exhibiting no symptoms. Dental procedures except aerosol producing procedures can be done until they move into a low-risk category.

High risk - Patients of any age group who are suffering from the following symptoms

These include, but not limited to,

- a. Fever in excess of 100 degrees F in the past 14 days
- b. Sore throat
- c. Dry Cough
- d. Malaise

or have revealed having come in contact with COVID infected patients.

Dental procedures should not be done on high risk patients until their general symptoms subside and they can be categorized into Low or Medium risk patients. The following will help classify what constitutes a dental emergency.

Dental emergencies

- Uncontrolled bleeding
- Cellulitis or a diffuse soft-tissue bacterial infection with intra-oral or extra-oral swelling that potentially compromises the patient's airway
- Trauma involving facial bones, potentially compromising the patient's airway

Dental urgencies

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

- Abscess, or localized bacterial infection resulting in localized pain and swelling
- Tooth fracture resulting in pain or causing soft tissue trauma
- Dental trauma with avulsion/luxation
- Dental treatment required prior to critical medical procedures
- Final crown/bridge cementation if the temporary restoration is lost, broken or causing gingival irritation
- Biopsy of abnormal tissue

Non-urgent dental treatments that can be postponed

- Initial or periodic oral examinations and recall visits, including routine radiographs
- Routine dental cleaning and preventive therapies
- Orthodontic procedures other than those to address acute issues (e.g. pain, infection, trauma) or other issues critically necessary to prevent harm to the patient
- Extraction of asymptomatic teeth
- Restorative dentistry including treatment of asymptomatic carious lesions
- Aesthetic dental procedure

1. PATIENT PHONE CALL

- a. A patient who calls with a dental issue, should be asked in detail about the problem.
- b. If the patient is not of record, he should be asked to contact their dentist. In case he does not have a primary dentist provider - proceed further with questioning.
- c. Medical History - a thorough medical history with specific history about any COVID related symptoms should be asked.
- d. If the patient is deemed to be a high-risk patient, he/she should be referred to a general physician or a hospital for further investigations to rule out COVID infection.

- e. If it is determined that the patient is a moderate or low-risk patient, they can be scheduled for a dental procedure at an appointed date and time.
- f. They should be instructed that it would be preferred if they came alone to the appointment. If unable to, then only 1 person can accompany them to the dental appointment.
- g. They should also be instructed to wear a mask and come to their appointment. If accompanying person is also present then he/she must also wear a mask.

2. RECEIVING THE PATIENT

- a. The clinic door should be kept locked under all circumstances. The patient can arrive and ring the bell or call the front desk from the door. This will help avoid random people from entering the clinic premises.
- b. Footwear should be removed outside the main premises and a shoe/foot cover should be provided.
- c. The front desk personnel will then take the body temperature of the patient and their accompanying person with an infra-red non-contact thermometer (IRT) and ensure that they do not have a body temperature exceeding 100 degrees F.
- d. The patient and the accompanying person will be given hand sanitizers.
- e. Patient details should be noted down verbally by the front desk personnel. Do not allow them to use the clinic tablet for recording details. Do not provide pen or paper to record details. If a pen is used for any reason, it must be sanitized immediately by wiping down with 70% ethanol (spirit)
- f. Remove all reading material from waiting areas.
- g. Do not hesitate to politely tell patients from touching unnecessary areas in the waiting room.

3. GETTING THE OPERATORY READY

- a. The operatory should be cleaned and sanitized before seeing the patient (further info below)
- b. Barrier tapes should be present on all surfaces that contact is expected from any of the personnel in the operatory. These are, but not limited to, light handles, dental chair arm rests, dental chair console, controls near the spittoon, computer keyboard and mouse.

THE ROLE OF THE SPITTOON/CUSPIDOR

A spittoon or cuspidor has been attached to dental chairs for ages. It is responsible for a lot of splatter which can spread potentially infective agents into the dental operatory thus putting the dentist and other clinic personnel at risk. The time is now right to get rid of this attachment. Having worked on chairs with and without spittoons, we believe that its absence does not make much of a difference. Rather, time can be saved by not having the patient get up every few minutes to expectorate. The saliva and other fluids can be eliminated from the patients mouth by asking them to suck on the saliva ejector like a straw.

If the spittoon cannot be removed from the chair, cover it with a cling wrap or barrier tapes and inform the patient about its non-functionality.

4. SEATING THE PATIENT

- a. The patient should be asked to keep all their belongings such as mobile phones, spectacles, car keys etc in their bags or give it to their accompanying person. The clinic staff should not touch any patient belongings once inside the operatory.
- b. The patient is then given a mouthwash (preferably 1.5% hydrogen peroxide or 0.2% povidone) and asked to rinse with it for about 30 seconds before suctioning it out with a saliva ejector. The spittoon/cuspidor usage should be avoided as it promotes splatter.
- c. The patient is given eye protection goggles before the dentist starts his examination
- d. A thorough examination is done by the dentist while taking Universal precautions
- e. If X-rays need to be taken, a barrier film should be used with RVG. In case of manual E-speed film radiographs, the X-ray cover should be appropriately disposed after processing of the film and the developing console should be sanitized.

PROCEDURE BASED RECOMMENDATIONS

1. Aerosol generating procedures
 - a. Restorative dentistry
 - b. Oral Prophylaxis using Ultrasonic devices
 - c. Implant Dentistry

d. Fixed Prosthodontics

e. Oral Surgical procedures where a high-speed handpiece is expected to be used

For the above procedures, the use of the following is mandatory

a. Rubber Dam (wherever applicable)

b. Hi-Vac Suction in conjunction with saliva ejector

2. Non-Aerosol generating procedures (possibility of saliva smear)

a. Examination and Consultation

b. Removable Prosthodontics

c. Non-surgical Extractions

d. Orthodontics

e. Oral Prophylaxis using hand scalers

f. Biopsies

INFECTION CONTROL

(A) PERSONAL PROTECTIVE EQUIPMENT FOR Dental Health Personnel (DHPs) during AEROSOL GENERATING PROCEDURES

- Headcap
- Protective goggles/ loupes
- face shield/visor
- mouth mask (double) - (N 95 respirator) + outer disposable mask - cover nose and mouth.
- Coveralls with hood
- foot cover
- Double gloves

(B) PERSONAL PROTECTIVE EQUIPMENT FOR NON AEROSOL GENERATING PROCEDURES

- Headcap
- Protective goggles/ loupes
- face shield/visor
- mouth mask (double) - (N 95 respirator) + outer disposable mask - cover nose and mouth.
- Gown
- foot cover
- Double gloves

Procedure to wear and discard your PPE

Wash your hands thoroughly until your forearm using soap and water. The following order should be followed by while wearing PPE

1. Inner gloves
2. Gown
3. Headcap and Foot covers
4. N-95 Respirator and Facemask
5. Goggles/Loupes and Face shield
6. Outer Gloves

To remove PPE after procedure – the following order should be followed

1. Gloves (outer)
2. Goggles/Loupes and Face shield
3. Gown
4. Head and Foot covers
5. N-95 Respirator and Facemask

6. Gloves (inner)

Preferably, the PPE should be removed and discarded in a dirty section of the clinic which can be cleaned later. All staff must remove the PPE in the same area of the clinic.

If possible – the operatories should be separated for aerosol and non-aerosol producing procedures.

5. DISINFECTION OF OPERATORY POST PROCEDURE

It is important to note that the virus can survive on plastic and stainless steel for almost 3 days. Therefore, all dental instruments must be sterilized with utmost care and protocol as soon as the procedure is completed and the patient is dismissed from the operatory.

Barrier tapes should be removed and disposed into the hazard disposal bag. The parts of the chair that were covered with the barrier tape must be wiped down with 70% Ethanol (spirit) or Sodium Hypochlorite (taking care of the fact that it may affect upholstery).

Countertops (marble/granite) may be wiped clean with a solution of 10g of Bleaching powder mixed in 1 liter of water. Wooden countertops (sunmica) maybe wiped clean with 70% Ethanol (Spirit). These disinfectants effectively reduce Coronavirus infectivity within 1 minute.

Benzalkonium Chloride based disinfectants (Lizol) are believed to be slightly less effective.

6. DISMISSING THE PATIENT

Once the patient exits the operatory, payment for the procedure should ideally be done through a non-contact mode.

If a Credit or debit card is used for payment, the card should be wiped with 70% alcohol (spirit) and then used.

Post-operative instructions maybe messaged or emailed to the patient.

Prescriptions for the patient can be sent to their mobile phone or the patient maybe requested to call from the medical store directly.

LIST OF MUST-HAVE EQUIPMENTS IN THE CLINIC

1. Class B Autoclave
2. Ultrasonic bath
3. Fumigation device
4. Air Purifiers with HEPA filter

GENERAL SAFETY OF THE DENTAL CLINIC

1. Clean and disinfect doorknobs, light switches, cabinet handles, front desk area **FREQUENTLY** with 70% Ethanol (Spirit) or Sodium Hypochlorite.
2. Wipe down all hard surfaces of the waiting area regularly with disinfectant wipes.
3. Laboratory personnel, Medical Representatives and all other visitors should be tested for temperature with an IRT. Preferably block a separate day and time in the week for visitors including medical representatives.
4. Any laboratory personnel should be asked to leave their belongings outside the main door and only bring in the respective clinic's work/package into the premises. The package should be disinfected upon receipt with Soap water and the contents should be thoroughly disinfected (Spirit wipedown, Betadine)
5. There should be a 15minute gap between appointments in order to allow for the operatory to be disinfected and readied for the next appointment.
6. The clinic should be fumigated at the end of each clinic session.

The circumstances that we are currently facing are rather unprecedented. All advisories have been put across with the sole intention of ensuring the safety of individuals. Although it may seem impractical and rather difficult to adapt to, the present times require absolute attention to such detailing and more will always seem less! The main objective of this document is to safeguard ourselves and the health of our patients from the novel coronavirus. Please feel free to add any other recommendations or guidelines that you may come across or deem beneficial to the welfare of your practice, patients and society at large.

PATIENT RISK	PROCEDURES ALLOWED	PROCEDURES TO BE AVOIDED	PROTECTIVE GEAR
LOW	ALL	NONE	HEADCAP GOGGLES MOUTH MASK GOWN GLOVES
MODERATE	EXAMINATION AND CONSULTATION, ORTHODONTICS, REMOVABLE PROSTHODONTICS, MINOR ORAL SURGERY, HAND SCALING, BIOPSIES	RESTORATIVE DENTISTRY, FIXED PROSTHODONTICS, IMPLANT DENTISTRY, SURGICAL EXTRACTIONS, PROPHYLAXIS WITH ULTRASONIC DEVICES	HEADCAP GOGGLES MOUTH MASK COVERALLS WITH HOOD DOUBLE GLOVES
HIGH	DON'T	SEE (Refer to a safer facility)	THIS PATIENT

Over the next 100 days

- a. Treat every patient as a moderate risk patient
- b. Do not treat High risk patients at all
- c. No aerosol producing procedures unless it is an emergency
- d. Strict monitoring of staff and self for symptoms
- e. Update and upgrade to higher levels of protection