Overview

Dental Clinics have unique considerations for their patients and staff. Follow these recommended actions to protect patients and Dental Clinic staff during resumption of workplace operations.

There is minimal data to help assess the risk of SARS-CoV-2 transmission during dental procedures. Therefore, it is unknown if using Standard Dental Precautions will provide sufficient transmission protection during dental treatments. Current guidelines for reducing the spread of SARS-CoV-2 revolve around three types of control mechanisms that work together to help protect workers and patients. The first is using engineering controls, which includes ventilation. The second mechanism is administrative controls, and the third is infection control, which includes the use of personal protective equipment (PPE), as well as cleaning, disinfection, and sterilization procedures. These latter controls are addressed in detail in the Centers for Disease Control (CDC) Guidance for Dental Settings (https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html) and American Dental Association (ADA®) “Return to Work Interim Guidance Toolkit.” This information should be reviewed by dental professionals, and then adjusted to suit their unique operations.

Engineering Controls

Engineering controls involve reducing or removing hazards from the workplace. In workplaces, where they are appropriate, these types of controls reduce exposure to hazards independent of worker interactions. Engineering controls for reducing risk of SARS-CoV-2 transmission include:

Install clear, non-sound proof barriers at check-in desk, which will protect reception but allow staff to talk with patients.

Avoid aerosol-generating procedures when possible. If aerosol-generating procedures must be performed, take precautions such as:

- Dental Health Care Providers (DHCP) in the room should wear appropriate PPE (see below).
- The number of DHCP present during the procedure should be limited to only those essential for patient care and procedure support.
- Visitors should not be present for the procedure.
Aerosol-generating procedures should ideally take place in an airborne infection isolation room (AIIR). Otherwise, limit aerosol-generating procedures to dental suites that are able to be closed to the surrounding area (i.e., close door). When required dental procedures necessitate emergency treatment in an AIIR, these patients may require transfer to a facility that can accommodate their care, as most dental treatment facilities do not have an AIIR. [Note that oral surgery rooms are normally designed for 20% positive pressure and do not meet the negative pressure requirement of an AIIR.]

Consider scheduling the patient at the end of the day.

Do not schedule any other patients at that time.

Ventilation systems should provide air movement in a clean-to-less-clean flow direction which will better protect staff and patients. Consult an HVAC professional to investigate increasing filtration efficiency and the ability to safely increase the percentage of outdoor air supplied through the system. Limit the use of demand-controlled ventilation during occupied hours and when feasible. These measures are further discussed in U.S. Army Public Health Center (APHC) TIP No. 98-113-0420, (Measures to Modify Building HVAC for Occupant Health and Comfort During the COVID-19 Pandemic) at https://ephc.amedd.army.mil/HIPECatalog/viewItem.aspx?id=1811.

Consider using local exhaust ventilation and/or portable high-efficiency particulate air (HEPA) filtration to help capture and control aerosols.

If the dental clinic has not been operational for an extended time, dental unit water lines may need to be shocked with disinfecting agents to eliminate bacterial contamination by following guidance from the dental unit manufacturer. The ADA provides guidance on dental unit water line maintenance as well as monitoring and cleaning at the ADA Oral Health Topics page: https://www.ada.org/en/member-center/oral-health-topics/dental-unitwaterlines.

Nitrous oxide must be dispensed through a disposable nasal hood and disposable tubing (or tubing that can be sterilized per manufacturer's instructions).

Patient placement

- Ideally, dental treatment should be provided in individual patient rooms whenever possible.
- For dental facilities with open floor plans, to prevent the spread of pathogens there should be:
  - At least 6 feet of space between patient chairs.
  - Physical barriers between patient chairs. Easy-to-clean floor-to-ceiling barriers will enhance effectiveness of portable HEPA air filtration systems (check to make sure that extending barriers to the ceiling will not interfere with fire sprinkler systems).
  - Operatories should be oriented parallel to the direction of airflow if possible.
- Where feasible, consider patient orientation carefully, placing the patient’s head near the return air vents, away from pedestrian corridors, and toward the rear wall when using vestibule-type office layouts.
Administrative Controls

Administrative controls are changes to the way people work. The aim of administrative controls is to change standard operating procedures to limit the risk of transmission. The following are examples of administrative controls:

**Pre-appointment screening:**
- Consider adding to appointment reminder calls a simple screening checklist that includes questions regarding:
  - Fever
  - Cough
  - Shortness of breath
  - Loss of taste or smell
  - Contact with anyone who may have any of the symptoms of COVID-19
  - Recent travel
- If patients have any risk factors for potentially having COVID-19, delay their non-essential appointment until such a time as they are no longer a risk of being a carrier or contagious.
- Post reminder signs on clinic entrance with checklist criteria. Signs should direct anyone with one or more risk factors to leave and call to re-schedule their appointment.
- Require that all patients follow the current face covering requirements while in the clinic, except during dental care.
- DHCP should request that the patient inform the dental clinic if they develop symptoms or are diagnosed with COVID-19 within 2 days following dental appointment.

**Monitor temperatures:**
- Screen employee’s temperature upon entrance into dental clinic. If employee’s temperature is >100.4 F, have them return home and call their medical provider for evaluation.
- Screen patient’s temperature upon entrance into dental clinic. If temperature is >100.4 F, reschedule patient’s appointment, and instruct them to contact their medical provider for evaluation.
- Utilize a touch-free, or easily disinfected thermometer to administer temperature screenings.
- Disinfect thermometer between uses.

**Increase social distancing in waiting area:**
Reduce the total number of seats in the waiting area to maintain the recommended social distancing.
- Remove items from waiting room that cannot be easily and repeatedly cleaned and disinfected, such as reading materials, toys, and other commonly touched items.

**Implement enhanced cleaning procedures:**
- Clean and disinfect the procedure room and equipment according to the U.S. Centers for Disease Control and Prevention (CDC) Guidelines for Infection Control in Dental Health-Care Settings—2003, using an U.S. Environmental Protection Agency (EPA) registered List-N disinfectant. These EPA List-N registered disinfectants have qualified under EPA’s emerging viral pathogens program for use against SARS-CoV-2. Until
Further evidence demonstrates a clear answer, the ADA is not making a recommendation on waiting for a specific time period to begin cleaning the operatory. Additional information can be found on the CDC Website Guidance for Dental Settings During the COVID-19 Response at: https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html

- Ensure that common areas are cleaned and disinfected routinely and correctly. Areas include but are not limited to:
  » Handrails
  » Door touch points
  » Chair arms
  » Check-in desk
  » Rest rooms

Increase frequency of proper handwashing. For areas without sink access, have 60% alcohol hand sanitizer available (waiting area).

Switch to touch-free patient check in and check out.

**Suggested changes to dental procedures:**

Dental practices should follow the ADA Interim Guidance Toolkit at: https://pages.ada.org/return-to-work-toolkit-american-dental-association?utm_campaign=covid-19-Return-to-Work-Toolkit. This includes but is not limited to:

- Avoid aerosol generating procedures whenever possible.
- Avoid the use of dental handpieces and air-water syringes.
- Practice hand scaling, and do not use ultrasonic scalers.
- Prioritize minimally invasive/atraumatic restorative techniques (hand instruments only).
- If aerosol generating procedures are necessary for emergency care, use:
  » Four-handed dentistry
  » High evacuation suction
  » Dental dams to minimize droplet spatter and aerosols

- Limit the number of DHCP present during procedures to only those essential for patient care and procedure support.

**Personal Protective Equipment**

The use of PPE is essential to help limit the potential transmission of SARS-CoV-2. Prior to use of any PPE, training must be competed to ensure that use does not pose a greater risk to DHCP. Current guidance states that the highest level of PPE protection available be used for both aerosol and non-aerosol procedures. The following are examples of PPE controls.

**Respiratory Protection**

- Front desk staff should wear appropriate face coverings at all times in the clinic.
- An N-95 respirator or equivalent should be used by all DHCP during aerosol-generating procedures. Any use of a respirator (N-95) requires users be enrolled into the installation’s Respiratory Protection Program, including medical clearance, being trained on their specific respiratory equipment and fit-tested prior to use.
• If only non-aerosol-generating procedures are to occur, DHCP should utilize a surgical mask as a face covering.

• Properly remove and discard disposable respirators and surgical masks after patient interaction.

• Perform hand hygiene (washing hands with soap and warm water for a minimum of 20 seconds or using a minimum 60% alcohol hand sanitizer) after removing the respirator or facemask.

**Eye Protection**

• Before entering the patient room or care area, put on appropriate eye protection (i.e., goggles or a full face shield that covers the front and sides of the face). When performing aerosol-generating procedures, a full face shield is required as it offers more protection against sprays and splatters. Eye protection should not be removed until after exiting the patient room.

• Personal eyeglasses and contact lenses are NOT adequate eye protection.

• Clean and sanitize reusable eye or face protection per manufacturer’s instructions.

**Gloves (disposable, medical grade)**

• Gloves should be put on prior to entering patient room and removed prior to exiting patient room.

• Ensure proper use of gloves during all procedures.

• Change gloves immediately if they become torn or heavily contaminated.

**Gowns**

• Utilize gowns to cover clothing.

• Gowns should be put on prior to entering patient room.

• Change gown between patient encounters or if it becomes soiled.

• Before leaving patient room/area, remove and discard the gown in a dedicated container for waste or linen.

• Discard disposable gowns after use.

• Launder cloth gowns after each use.

• If there are shortages of gowns, they should be prioritized for:
  » Aerosol-generating procedures.
  » Clinical procedures where splashes and sprays are anticipated.
Resources:
