

COVID-19 OSHA & Infection Control

Checklist and Resources for Dental Settings



The following is a summary of some of the guidelines for dental settings. Content created by CAEK, Inc., and posted on July 6, 2020, <https://www.LayerCompliance.com/Customers/Dental>.

Summary guidance is subject to change as data concerning the virus is continually changing, and accordingly it is important for the user to review guidance from relevant federal, state, and local government authorities, such as the Centers for Disease Control and Prevention ([CDC](https://www.cdc.gov)), for up-to-date safety and infection control recommendations.

SARS-CoV-2, the virus that causes COVID-19, is thought to be spread primarily through respiratory droplets.

The Occupational Safety and Health Administration ([OSHA](https://www.osha-slc.com)) has placed dental healthcare personnel (DHCP) in “high” and “very high” risk categories for exposure to SARS-CoV-2 based on dentistry work tasks in certain situations. Dental settings have unique characteristics that warrant additional infection control considerations, according to the CDC. The CDC has provided recommendations for resuming non-emergency dental care during the COVID-19 pandemic using standard precautions and implementing additional precautions (e.g., contact, droplet, and airborne) based on the current level of COVID-19 community-transmission and patients’ COVID-19 status (e.g., suspected or confirmed).

This checklist is not a complete list of guidelines that may be applicable to your practice. The content on this page is not intended to replace your thorough assessment of the most recent OSHA, CDC and your State guidance for COVID-19; your review of regional COVID-19 information; your assessment of a patient's COVID-19 status; or comprehensive training for your staff on precautions to reduce risk of COVID-19 transmission.

Review Region-Specific Information and Recommendations*

- Review information for your region (e.g., State, County, City/Metro, etc.) on the current level of COVID-19 community-transmission and recommendations and/or health orders in effect for your region.
- Monitor local case counts and death trends for your community.
 - Trends of newly reported cases.
 - Exposure settings of newly reported cases from communal settings (e.g., healthcare facilities, long-term care facilities, schools, workplaces, etc.)
 - Trends of newly reported deaths, particularly in populations at higher risk for severe illness. <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>
- Based on your regions’ community-transmission level and recommendations or health orders in effect, review the framework for providing Non-COVID-19 clinical care during the COVID-19 Pandemic to assist you with deciding how to expand and prioritize dental procedures.
 - Deferral of in-person care highly likely to result in patient harm (dental emergencies).
 - Deferral of in-person care may result in patient harm.
 - Deferral of in-person care unlikely to result in patient harm. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/framework-non-COVID-care.html>

*This review may need to be done frequently as region-specific information changes.

PPE & Your Team

- Implement a process to continually assess your office's supplies of personal protective equipment (PPE).
 - Gloves.
 - Gowns or other protective clothing that covers personal clothing and skin (e.g., forearms) likely to be soiled with blood, saliva, or other potentially infectious materials.
 - Eye protection (goggles, protective eyewear with solid side shields, or a full-face shield).
 - Respirator (e.g., N95 or respirator that offers a higher level of protection such as other disposable filtering facepiece respirators, PAPRs, or elastomeric respirators, if available).
 - Surgical masks.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html>
- Assess your office's supplies of equipment that may be needed to implement COVID-19 precautions.
 - Non-medical facemasks or cloth coverings (used for universal source control, not PPE).
 - No-contact or skin-contact thermometer.
 - Receptacles for PPE disposal or laundry.
 - Hand hygiene supplies and stations (for patient and visitor use).
 - Respirator fit-testing kit/supplies.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-Settings.html#UniversalSourceControl>
- Determine what PPE is necessary and when PPE must be used based your assessment of OSHA guidance, CDC guidance, State and local guidance, and other risk factors, including, but not limited to the following.
 - Level of community-based transmission.
 - COVID-19 status of patient (e.g., symptom-based screening, testing-based strategy, suspected or confirmed case, home-isolation completed, etc.).
 - Procedure's level of risk (e.g., aerosol-generating, etc.).
 - OSHA guidance and hazard assessments for PPE.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#PPE>
<https://www.osha.gov/SLTC/covid-19/dentistry.html>
- If respirators are to be used in your office, implement an OSHA Respiratory Protection Program.

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134>
<https://www.cdc.gov/niosh/npptl/hospresptoolkit/training.html>
- Determine Contingency and Crisis PPE Optimization Strategies for each type of PPE.
 - Identify PPE supply chain.
 - Assess PPE inventory and understand utilization.
 - Identify sequential engineering and administrative controls, including reducing patient volume (e.g., canceling elective and non-urgent procedures), to be implement before extended or reuse strategies are implemented.
 - Train DHCP on the extended or reuse protocol, including doffing, storage, and re-donning of PPE that is to be reused.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#PPE>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>

PPE & Your Team, Cont.

- Verify that each team member is appropriately trained on donning and doffing PPE, is wearing the required PPE based on your PPE policy, and is adhering to procedure for changing PPE between uses (e.g., patients).
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#PPE>
- Ensure that all team members have received their seasonal flu vaccine and other immunizations recommended by the Advisory Committee on Immunization Practices (ACIP) for healthcare workers.
<https://www.cdc.gov/vaccines/adults/rec-vac/hcw.html>
- Monitor and manage DHCP.
 - Ensure DHCP are self-monitoring for fever and symptoms consistent with COVID-19, and they stay home if they are ill.
 - Screen DHCP for fever and symptoms consistent with a COVID-19 at the beginning of each shift.
 - DHCP who have a fever or other symptoms at the beginning of their shift, or develop a fever or symptoms during their shift, should be provided a facemask and sent home.
 - Instruct DHCP with COVID-19 symptoms to notify their primary healthcare provider to determine whether a medical evaluation is necessary.
 - Follow the CDC's guidance for criteria for returning to work for healthcare personnel with confirmed or suspected COVID-19.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#Monitor>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html>
- Verify all DHCP are adhering to strict, universal source control procedure and wear a facemask at all times while they are in the dental setting.
 - When available, DHCP use surgical masks over cloth coverings.
 - Cloth coverings are not worn in place of respirator or surgical mask if PPE is required (cloth coverings are not PPE).
 - DHCP are provided training on when, how, and where cloth face coverings may be used.
 - DHCP are trained to prevent self-contamination while using mask or cloth covering including, performing hand hygiene before and after touching their mask or cloth covering; changing mask or cloth coverings when they become soiled, damp, or hard to breathe through; and laundering cloth coverings daily or when they become soiled.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#UniversalSourceControl>
- Verify all team members are trained on preventing transmission of infectious agents and are adhering to strict hand hygiene procedure.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#Education>
<https://www.cdc.gov/oralhealth/infectioncontrol/safe-care-modules.htm>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/hand-hygiene.html>
- Consider changing from scrubs to personal clothing before returning home. Upon arriving home, take off shoes, remove and wash clothing (separately from other household residents), and immediately shower.
<https://jamanetwork.com/journals/jama/fullarticle/2763136>

Your Office

- Consult a heating, ventilation, and air conditioning (HVAC) professional to verify ventilation systems are properly maintained and configured for a healthcare setting.
 - Configure ventilation systems to provide air movement from clean to less clean (contaminated) flow direction.
 - Increase filtration efficiency to the highest level compatible with the HVAC system without significantly deviating from designed airflow.
 - Where feasible with equipment capacity and environmental conditions, safely increase the percentage of outdoor air supplied through the HVAC system.
 - Limit the use of demand-controlled ventilation (triggered by temperature setpoint and/or by occupancy controls) during occupied hours and when feasible, up to two hours post occupancy to assure that ventilation does not automatically change.
 - Run exhaust fans in bathrooms continuously during business hours.
 - Determine the air changes per hour (ACH) in each treatment room or treatment area.
 - Determine the filter efficiencies and number of filter beds for central ventilation and air conditioning system, based on average dust spot efficiency per [ASHRAE 52.1-1992](https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#EngineeringControls).
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#EngineeringControls>
<https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>

- Consider using a portable HEPA air filtration unit during and immediately following aerosol-generating procedures.
 - Select a HEPA air filtration unit based on its Clean Air Delivery Rate (CADR) and assess the unit's cubic feet per minute (CFM) rating for the treatment room/area.
 - HEPA units must be placed within the vicinity of the patient's chair but must not be behind DHCP.
 - DHCP must not be between the HEPA unit and the patient's mouth.
 - HEPA units must not pull air into or past the breathing zone of the DHCP.
 - Determine air changes per hour (ACH) based on total room size (individual treatment rooms with doors vs. open floor plan treatment areas) to calculate turnover time for treatment room.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#EngineeringControls>

- Consider the use of upper-room ultraviolet germicidal irradiation (UVGI) as an adjunct to higher ventilation and air cleaning rates.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#EngineeringControls>
<https://www.cdc.gov/niosh/docs/2009-105/default.html>

- Whenever possible, perform dental procedures in an individual treatment room (with the door closed).
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#EngineeringControls>

Your Office, Cont.

- ❑ For open floor plans, the following should be implemented to prevent the spread of pathogens.
 - ❑ At least 6 feet of space between patient chairs.
 - ❑ Easy-to-clean, floor-to-ceiling barriers between chairs, placed so that they do not interfere with sprinkler systems.
 - ❑ Orient the operatories (and physical barriers) parallel to the direction of airflow, consulting with HVAC professional if necessary.
 - ❑ Place the patient's head near the return air vents and away from pedestrian corridors where feasible.
 - ❑ Ensure barriers are easy to move so that they do not interfere with emergency evacuation or exits.
 - ❑ Comply with office leases, local building codes, permits, and other regulations based on the type of physical barriers installed.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#EngineeringControls>
- ❑ Consider installing physical barriers (e.g., glass or plastic windows) at reception areas to limit close contact between triage personnel and potentially infectious patients.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#FacilityConsiderations%20>
- ❑ If treatment care area must be vacant until airborne contaminants are removed, allow sufficient time based on the CDC's guidance for Airborne Contaminant Removal based on the treatment room's air changes per hour (ACH) rate, filter efficiency, and any other applicable air flow or filtration factor.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#EngineeringControls>
<https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>

Patient Flow Considerations

- ❑ Determine your patient triage and scheduling procedures, based on precautions implemented.
 - ❑ Emergency care or expanded care priorities based on current regional assessment of COVID-19 information and available PPE.
 - ❑ Maximum number of patients that can be seen at the same time based on office layout and the time needed to clear/clean air and complete the cleaning and disinfection process.
 - ❑ Additional time required for modified clinical techniques.
 - ❑ DHCP dedicated to one patient at a time.
 - ❑ Extra time, time of day, sole patient in office, and other precautions taken for patients who are at higher risk for serious illness from COVID-19 or that have a suspected or confirmed cases of COVID-19.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/framework-non-COVID-care.html>
[ADA: What Constitutes a Dental Emergency](#)
[ADA: Interim Guidance for Management of Emergency and Urgent Dental Care](#)
- ❑ When feasible, use teleconferencing/telehealth services to reduce in-office visits, triage patients, and prioritize care.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/framework-non-COVID-care.html>

Patient Flow Considerations, Cont.

- ❑ Screen patients for COVID-19 symptoms before their appointment to prevent symptomatic patients from coming into the office.
<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#Management>
- ❑ Establish a procedure to provide emergency dental care, when care is medically necessary and cannot be deferred, for a patient who has, or is suspected of having, COVID-19, based on the CDC's Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare. This may include, but is not limited to, the following.
 - ❑ When possible, aerosol-generating procedures should be deferred until they can be performed in an airborne infection isolation room (AIIR).
 - ❑ If available, procedure should be performed in an individual treatment room with a closed door.
 - ❑ DHCP in the room should wear PPE recommended by OSHA and the CDC, including N95 or higher-level respirator, such as disposable filtering facepiece respirator, powered air-purifying respirator (PAPR), or elastomeric respirator, as well as eye protection (goggles or a full-face shield), gloves, and a gown.
 - ❑ DHCP should be limited to those essential for patient care and procedure support.
 - ❑ Consider scheduling the patient for the end of the day.
 - ❑ Do not schedule any other patients at that time.
 - ❑ Report potential exposure to local health department if appropriate.<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#AdditionalPrecautions>
- ❑ Screen patients for COVID-19 symptoms upon check-in. If they are suspected or confirmed to have COVID-19, defer dental treatment if possible and do the following.
 - ❑ If the patient is not already wearing a facemask or cloth covering, give them a facemask to cover their mouth and nose.
 - ❑ If not acutely sick, send them home and instruct them to call their physician or a medical provider for treatment.
 - ❑ If the patient is acutely sick (e.g., trouble breathing, persistent pain or pressure in the chest, new confusion, inability to stay awake, bluish lips or face, or other serious symptom), refer them to a medical facility or call 911 and tell them that the patient may have COVID-19.
 - ❑ If emergency dental care is medically necessary and cannot be deferred, follow your established procedure based on the CDC's Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare.<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#Management>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>

Patient Flow Considerations, Cont.

- ❑ Restrict visitors from the office, including family members or friends of patients, unless the patient is a minor or requires assistance. Any companions that do enter the office should also be screened for signs and symptoms of COVID-19.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#Management>
- ❑ Patients and visitors should be wearing cloth coverings when they come into the office, to preserve facemasks for DHCP, and wear them while in the office. Patients may remove cloth coverings while in the treatment room but must put them back on before leaving the treatment room.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#Management>
- ❑ Print and place signage in the dental office for instructing patients on standard recommendations for hand hygiene, respiratory hygiene/cough etiquette, and social distancing.
<https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs.pdf>
- ❑ Ensure that there are supplies for hand hygiene and cough etiquette (e.g., alcohol-based hand rub with 60-95% alcohol, tissues, and no-touch receptacles for disposal) at entrances, waiting areas, and check-ins.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#FacilityConsiderations>
- ❑ Observe social distancing precautions in patient waiting areas.
 - ❑ Place chairs six (6) feet apart.
 - ❑ Consider asking patients to remain outside of the office (e.g. their vehicle) until their appointment and contact them on their mobile phone when the treatment room is ready.
 - ❑ Minimize overlapping dental appointments.<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#FacilityConsiderations>

Treatment Considerations

- ❑ Adhere to standard and transmission-based precautions that may be necessary to prevent transmission of COVID-19 from pre-symptomatic or asymptomatic patients.
<https://www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care2.pdf>
<https://www.cdc.gov/mmwr/PDF/rr/rr5217.pdf>
<https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html>
- ❑ Review dental treatment procedures to identify clinical techniques that may be implemented to reduce risk from respiratory droplets and aerosols, such as, but not limited to, the following.*
 - ❑ The use of preprocedural mouth rinses (PPMR), 1.5% hydrogen peroxide or 0.2% povidone. Although COVID-19 was not studied, PPMRs with an antimicrobial product may reduce the level of oral microorganisms in aerosols and spatter generated during dental procedures.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html>
<https://www.ncbi.nlm.nih.gov/pubmed/?term=32127517>

Treatment Considerations, Cont.

- The use of extra-oral dental radiographs as alternatives to intraoral dental radiographs, as the latter can stimulate saliva secretion and coughing. (“Extra-oral dental radiographs, such as panoramic radiographs or cone beam CT, [and] are appropriate alternatives”).
<https://pubmed.ncbi.nlm.nih.gov/32162995/>
<https://pubmed.ncbi.nlm.nih.gov/15311240/>
- The use of hand instruments and minimally invasive/atraumatic restorative techniques.
<https://pubmed.ncbi.nlm.nih.gov/32127517/>
- Alternatives to the use of air/water syringes (i.e., 3-in-1 syringes), as they may create droplets due to forcible ejection of air/water.
<https://pubmed.ncbi.nlm.nih.gov/15311240/>
- The use of rubber dams.
<https://pubmed.ncbi.nlm.nih.gov/2681303/>
<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5217a1.htm>
- The use of resorbable sutures (i.e. sutures that last 3 to 5 days in the oral cavity) to eliminate the need for a follow up appointment.
https://www.aaoms.org/docs/education_research/dental_students/joms_guide_to_suturing.pdf
- The use of high-volume evacuators.
<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5217a1.htm>
- Additional techniques that may be appropriate, based on your clinical judgement.
- Place only the clean or sterile supplies and instruments needed for the dental procedure in the operator; any supplies and equipment that are exposed but not used during the procedure should be considered contaminated and should be disposed of or reprocessed.

****Information on treatment and techniques is provided for review purposes only and is not intended to replace the licensed healthcare professional's clinical judgement for patient-care decisions.***

Other Infection Control

- Review current cleaning and disinfecting procedures. Using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label are appropriate for SARS-CoV-2 in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>
<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>
- Clean and disinfect reusable eye protection and launder cloth (reusable) gowns or protective clothing after each use.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#PPE>

Other Infection Control, Cont.

- Wait until sufficient time has elapsed for enough air changes to remove potentially infectious particles after completion of clinical care and exit of a patient, with suspected or confirmed COVID-19, before entering a room to clean and disinfect room surfaces.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html>
- Disinfect non-dedicated and non-disposable equipment (e.g., dental x-ray equipment, dental chair, and light) according to manufacturer's instructions after each patient.
<https://www.cdc.gov/mmwr/PDF/rr/rr5217.pdf>
- Hand pieces, if used, should be cleaned to remove debris, followed by heat-sterilization after each patient.
<https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>
<https://www.cdc.gov/oralhealth/infectioncontrol/faqs/dental-handpieces.html>
<https://www.cdc.gov/oralhealth/infectioncontrol/faqs/cleaning.html>
- High-touch surface, such as door handles, chairs, desks, elevators, and bathrooms should be cleaned and disinfected frequently.
<https://pubmed.ncbi.nlm.nih.gov/32127517>
- Surfaces that may be difficult to disinfect, such as magazines, books, and toys, should be removed from patient waiting areas.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinic-preparedness.html>

Exposure Planning

- Instruct patients to contact your office if they experience symptoms consistent with COVID-19, or are diagnosed with COVID-19, within 2 days following their dental appointment.
<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#Management>
- If a patient is confirmed to have, or is suspected of having, COVID-19 within 2 days of appointment, follow the CDC's Healthcare Personnel with Potential Exposure Guide.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>
- If an employee tests positive for COVID-19, and illness may have been caused by occupational exposure, report to OSHA if the illness results in a hospitalization or fatality to OSHA.
<https://www.osha.gov/memos/2020-05-19/revised-enforcement-guidance-recording-cases-coronavirus-disease-2019-covid-19>
- If either an employee or a patient test positive for COVID-19, follow your local health department's instructions for reporting COVID-19 cases in healthcare settings and provide information to health agency as requested for contact tracing.
<https://www.cdc.gov/coronavirus/2019-ncov/php/principles-contact-tracing.html>

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