Coronavirus Disease 2019 (COVID-19)

Guidance for Dental Settings
Interim Infection Prevention and Control Guidance for Dental Settings During the COVID-19 Response
Updated June 17, 2020

Key Points
- Dental settings have unique characteristics that warrant specific infection control considerations.
- Prioritize the most critical dental services and provide care in a way that minimizes harm to patients from delaying care and harm to personnel from potential exposure to COVID-19.
- Proactively communicate to both personnel and patients the need for them to stay at home if sick.
- Know the steps to take if a patient with COVID-19 symptoms enters your facility.

This guidance was updated on June 17, 2020 and complements the following CDC guidance documents:

- Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings
- Framework for Healthcare Systems Providing Non-COVID-19 Clinical Care During the COVID-19 Pandemic

Summary of Recent Changes
- The recommendation to wait 15 minutes after completion of clinical care and exit of each patient without suspected or confirmed COVID-19 to begin to clean and disinfect room surfaces has been removed to align with CDC Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings.
- The time period recommended for patients to inform the dental clinic if they develop symptoms or are diagnosed with COVID-19 following a dental appointment has been changed to 2 days to align with CDC's Healthcare Personnel with Potential Exposure Guidance.
- Clarifying language has been added to Engineering Controls.

Background
In response to the COVID-19 pandemic in the United States, in March, 2020, CDC recommended that dental settings should prioritize urgent and emergency visits* and delay elective visits and procedures to protect staff and preserve personal protective equipment and patient care supplies, as well as expand available hospital capacity. However, as the pandemic continues to evolve, and healthcare settings are responding to unique situations in their communities, CDC recognizes that dental settings may also need to deliver non-emergency dental care. Dental settings should balance the need to provide necessary services while minimizing risk to patients and dental healthcare personnel (DHCP). CDC has developed a framework for healthcare personnel and healthcare systems for delivery of non-emergent care during the COVID-19 pandemic. DHCP should regularly consult their state dental boards and state or local health departments for current local information for requirements specific to their jurisdictions, including recognizing the degree of community transmission and impact, and their region-specific recommendations.

Transmission: SARS-CoV-2, the virus that causes COVID-19, is thought to be spread primarily between people who are in close contact with one another (within 6 feet) through respiratory droplets produced when an infected person coughs, sneezes, or talks. Airborne transmission from person-to-person over long distances is unlikely. However, COVID-19 is a
new disease, and we are still learning about how it spreads and the severity of illness it causes. The virus has been shown to persist in aerosols for hours, and on some surfaces for days under laboratory conditions. COVID-19 may be spread by people who are not showing symptoms.

**Risk:** The practice of dentistry involves the use of rotary dental and surgical instruments, such as handpieces or ultrasonic scalers and air-water syringes. These instruments create a visible spray that can contain particle droplets of water, saliva, blood, microorganisms, and other debris. Surgical masks protect mucous membranes of the mouth and nose from droplet spatter, but they do not provide complete protection against inhalation of airborne infectious agents. There are currently no data available to assess the risk of SARS-CoV-2 transmission during dental practice. To date in the United States, clusters of healthcare personnel who have tested positive for COVID-19 have been identified in hospital settings and long-term care facilities, but no clusters have yet been reported in dental settings or among DHCP.

*The urgency of a procedure is a decision based on clinical judgement and should be made on a case-by-case basis. See the American Dental Association: What Constitutes a Dental Emergency.*

†Dental healthcare personnel (DHCP) refers to all paid and unpaid persons serving in dental healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials, including:

- body substances
- contaminated medical supplies, devices, and equipment
- contaminated environmental surfaces
- contaminated air

**Recommendations**

DHCP should apply the guidance found in the Framework for Healthcare Systems Providing Non-COVID-19 Clinical Care During the COVID-19 Pandemic to determine how and when to resume non-emergency dental care. DHCP should stay informed and regularly consult with the state or local health department for region-specific information and recommendations. Monitor trends in local case counts and deaths, especially for populations at higher risk for severe illness.

Regardless of the degree of community spread, continue to practice universal source control and actively screen for fever and symptoms of COVID-19 for all people who enter the dental facility. If patients do not exhibit symptoms consistent with COVID-19, provide dental treatment only after you have assessed the patient and considered both the risk to the patient of deferring care and the risk to DHCP of healthcare-associated disease transmission. Ensure that you have the appropriate amount of personal protective equipment (PPE) and supplies to support your patient volume. If PPE and supplies are limited, prioritize dental care for the highest need, most vulnerable patients first.

If your community is experiencing no transmission or minimal community transmission*, dental care can be provided to patients without suspected or confirmed COVID-19 using strict adherence to Standard Precautions. However, given that patients may be able to spread the virus while asymptomatic or pre-symptomatic, it is recommended that DHCP practice according to the below considerations whenever feasible. Because transmission patterns can change, DHCP should stay updated about local transmission trends.

If your community is experiencing minimal to moderate† or substantial transmission‡, dental care can be provided to patients without suspected or confirmed COVID-19 using the below considerations to protect both DHCP and patients and prevent the spread of COVID-19 in dental facilities.

Considerations for additional precautions or strategies for treating patients with suspected or confirmed COVID-19 are also included below.

*No to minimal community transmission is defined as evidence of isolated cases or limited community transmission, case investigations underway; no evidence of exposure in large communal setting.

†Minimal to moderate community transmission is defined as sustained transmission with high likelihood or confirmed exposure within communal settings and potential for rapid increase in cases.
Substantial community transmission is defined as large scale community transmission, including communal settings (e.g., schools, workplaces).

Patient Management

- Contact all patients prior to dental treatment.
  - Telephone screen all patients for symptoms consistent with COVID-19. If the patient reports symptoms of COVID-19, avoid non-emergent dental care and use the Phone Advice Line Tool for Possible COVID-19 patients. If possible, delay dental care until the patient has recovered.
  - Telephone triage all patients in need of dental care. Assess the patient's dental condition and determine whether the patient needs to be seen in the dental setting. Use teledentistry options as alternatives to in-office care.
  - Request that the patient limit the number of visitors accompanying the patient to the dental appointment to only those people who are necessary.
  - Advise patients that they, and anyone accompanying them to the appointment, will be requested to wear a cloth face covering or facemask when entering the facility and will undergo screening for fever and symptoms consistent with COVID-19.

- Systematically assess all patients and visitors upon arrival.
  - Ensure that the patient and visitors have donned their own cloth face covering, or provide a facemask if supplies are adequate.
  - Actively take the patient’s temperature.
  - If the patient is afebrile (temperature < 100.4˚F)* and otherwise without symptoms consistent with COVID-19, then dental care may be provided using appropriate engineering and administrative controls, work practices, and infection control considerations (described below).

- Ask patient to re-don their face covering at the completion of their clinical dental care when they leave the treatment area.

- Even when DHCP screen patients for respiratory infections, inadvertent treatment of a dental patient who is later confirmed to have COVID-19 may occur. To address this, DHCP should request that the patient inform the dental clinic if they develop symptoms or are diagnosed with COVID-19 within 2 days following the dental appointment.

*For the general population, fever is measured as a temperature ≥ 100.4˚F. Fever may be subjective or confirmed. If the patient has a fever strongly associated with a dental diagnosis (e.g., pulpal and periapical dental pain and intraoral swelling is present), but no other symptoms consistent with COVID-19 are present, care can be provided with appropriate protocols.

Facility Considerations

- Take steps to ensure patients and staff adhere to respiratory hygiene and cough etiquette, as well as hand hygiene, and all patients follow triage procedures throughout the duration of the visit.
  - Post visual alerts (e.g., signs, posters) at the entrance and in strategic places (e.g., waiting areas, elevators, break rooms) to provide instructions (in appropriate languages) about hand hygiene and respiratory hygiene and cough etiquette. Instructions should include wearing a cloth face covering or facemask for source control, and how and when to perform hand hygiene.
  - Provide supplies for respiratory hygiene and cough etiquette, including alcohol-based hand rub (ABHR) with 60–95% alcohol, tissues, and no-touch receptacles for disposal, at healthcare facility entrances, waiting rooms, and patient check-ins.
  - Install physical barriers (e.g., glass or plastic windows) at reception areas to limit close contact between triage personnel and potentially infectious patients.

- Place chairs in the waiting room at least six feet apart.

- Remove toys, magazines, and other frequently touched objects that cannot be regularly cleaned or disinfected from waiting areas.

- Minimize the number of persons waiting in the waiting room.
  - Patients may opt to wait in a personal vehicle or outside the dental facility where they can be contacted by mobile phone when it is their turn for dental care.
  - Minimize overlapping dental appointments.
Equipment Considerations

- After a period of non-use, dental equipment may require maintenance and/or repair. Review the manufacturer's instructions for use (IFU) for office closure, period of non-use, and reopening for all equipment and devices. Some considerations include:
  - Dental unit waterlines (DUWL):
    - Test water quality to ensure it meets standards for safe drinking water as established by the Environmental Protection Agency (< 500 CFU/mL) prior to expanding dental care practices.
    - Confer with the manufacturer regarding recommendations for need to shock DUWL of any devices and products that deliver water used for dental procedures.
    - Continue standard maintenance and monitoring of DUWL according to the IFUs of the dental operatory unit and the DUWL treatment products.
  - Autoclaves and instrument cleaning equipment
    - Ensure that all routine cleaning and maintenance has been performed according to the schedule recommended per manufacturer's IFU.
    - Test sterilizers using a biological indicator with a matching control (i.e., biological indicator and control from same lot number) after a period of non-use prior to reopening per manufacturer's IFU.
  - Air compressor, vacuum and suction lines, radiography equipment, high-tech equipment, amalgam separators, and other dental equipment: Follow protocol for storage and recommended maintenance per manufacturer IFU.
- For additional guidance on reopening buildings, see CDC's Guidance for Reopening Buildings After Prolonged Shutdown or Reduced Operation.

Administrative Controls and Work Practices

- DHCP should limit clinical care to one patient at a time whenever possible.
- Set up operatories so that only the clean or sterile supplies and instruments needed for the dental procedure are readily accessible. All other supplies and instruments should be in covered storage, such as drawers and cabinets, and away from potential contamination. Any supplies and equipment that are exposed but not used during the procedure should be considered contaminated and should be disposed of or reprocessed properly after completion of the procedure.
- Avoid aerosol-generating procedures whenever possible. Avoid the use of dental handpieces and the air/water syringe. Use of ultrasonic scalers is not recommended. Prioritize minimally invasive/atraumatic restorative techniques (hand instruments only).
- If aerosol-generating procedures are necessary for dental care, use four-handed dentistry, high evacuation suction and dental dams to minimize droplet spatter and aerosols. The number of DHCP present during the procedure should be limited to only those essential for patient care and procedure support.
- Preprocedural mouth rinses (PPMR)
  - There is no published evidence regarding the clinical effectiveness of PPMRs to reduce SARS-CoV-2 viral loads or to prevent transmission. Although COVID-19 was not studied, PPMRs with an antimicrobial product (chlorhexidine gluconate, essential oils, povidone-iodine or cetylpyridinium chloride) may reduce the level of oral microorganisms in aerosols and spatter generated during dental procedures.

Engineering Controls

CDC does not provide guidance on the decontamination of building heating, ventilation, and air conditioning (HVAC) systems potentially exposed to SARS-CoV-2. To date, CDC has not identified confirmatory evidence to demonstrate that viable virus is contaminating these systems. CDC provides the following recommendations for proper maintenance of ventilation systems and patient placement and volume strategies in dental settings.

- Properly maintain ventilation systems.
  - Ventilation systems that provide air movement in a clean-to-less-clean flow direction reduce the distribution of contaminants and are better at protecting staff and patients. For example, in a dental facility with staff workstations in the corridor right outside the patient operatories, supply-air vents would deliver clean air into the corridor, and return-air vents in the rear of the less-clean patient operatories would pull the air out of the room. Thus, the clean air from the corridor flows past the staff workstations and into the patient operatories. Similarly, placing supply-air vents in the receptionist area and return-air vents in the waiting area pulls clean air from the reception area into the waiting area.
Consult an HVAC professional to investigate increasing filtration efficiency to the highest level compatible with the HVAC system without significant deviation from designed airflow.

Consult an HVAC professional to investigate the ability to safely increase the percentage of outdoor air supplied through the HVAC system (requires compatibility with equipment capacity and environmental conditions).

Limit the use of demand-controlled ventilation (triggered by temperature setpoint and/or by occupancy controls) during occupied hours and when feasible, up to 2 hours post occupancy to assure that the ventilation rate does not automatically change. Run bathroom exhaust fans continuously during business hours.

Consider the use of a portable HEPA air filtration unit while the patient is undergoing, and immediately following, an aerosol-generating procedure.

- Select a HEPA air filtration unit based on its Clean Air Delivery Rate (CADR). The CADR is an established performance standard defined by the Association of Home Appliance Manufacturers and reports the system's cubic feet per minute (CFM) rating under as-used conditions. The higher the CADR, the faster the air cleaner will work to remove aerosols from the air.
- Rather than just relying on the building's HVAC system capacity, use a HEPA air filtration unit to reduce aerosol concentrations in the room and increase the effectiveness of the turnover time.
- Place the HEPA unit near the patient's chair, but not behind the DHCP. Ensure the DHCP are not positioned between the unit and the patient's mouth. Position the unit to ensure that it does not pull air into or past the breathing zone of the DHCP.
- Consider the use of upper-room ultraviolet germicidal irradiation (UVGI) as an adjunct to higher ventilation and air cleaning rates.

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.

Patient volume

- Ensure to account for the time required to clean and disinfect operatories between patients when calculating your daily patient volume.

Hygiene

Ensure DHCP practice strict adherence to hand hygiene, including

- Before and after all patient contact, contact with potentially infectious material, and before putting on and after removing personal protective equipment (PPE), including gloves. Hand hygiene after removing PPE is particularly important to remove any pathogens that might have been transferred to bare hands during the removal process.
- Use ABHR with 60-95% alcohol or wash hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHR.
- Dental healthcare facilities should ensure that hand hygiene supplies are readily available to all DHCP in every care location.

Universal Source Control

As part of source control efforts, DHCP should wear a cloth face covering or facemask at all times while they are in the dental setting.

- When available, surgical masks are preferred over cloth face coverings for DHCP; surgical masks offer both source control and protection for the wearer against respiratory to inhalation and exposure of infectious material from others.
control and protection for the wearer against exposure to splashes and sprays of infectious material from others.

- Cloth face coverings should NOT be worn instead of a respirator or facemask if more than source control is required, as cloth face coverings are not PPE.

- Some DHCP whose job duties do not require PPE (such as clerical personnel) may continue to wear their cloth face covering for source control while in the dental setting.

- Other DHCP (such as dentists, dental hygienists, dental assistants) may wear their cloth face covering when they are not engaged in direct patient care activities, and then switch to a respirator or a surgical mask when PPE is required.

- DHCP should remove their respirator or surgical mask, perform hand hygiene, and put on their cloth face covering when leaving the facility at the end of their shift.

- DHCP should also be instructed that if they must touch or adjust their mask or cloth face covering, they should perform hand hygiene immediately before and after.

Because facemasks and cloth face coverings can become saturated with respiratory secretions, DHCP should take steps to prevent self-contamination:

- DHCP should change facemasks and coverings if they become soiled, damp, or hard to breathe through.
- Cloth face coverings should be laundered daily and when soiled.
- DHCP should perform hand hygiene immediately before and after any contact with the facemask or cloth face covering.
- Dental facilities should provide DHCP with training about when, how, and where cloth face coverings can be used, including frequency of laundering, guidance on when to replace them, circumstances when they can be worn in the facility, and the importance of hand hygiene to prevent contamination.

**Using Personal Protective Equipment (PPE)**

Employers should select appropriate PPE and provide it to DHCP in accordance with Occupational Safety and Health Administration PPE standards (29 CFR 1910 Subpart I). DHCP must receive training on and demonstrate an understanding of:

- when to use PPE;
- what PPE is necessary;
- how to properly **don, use, and doff** PPE in a manner to prevent self-contamination;
- how to properly dispose of or disinfect and maintain PPE;
- the limitations of PPE.

Dental facilities must ensure that any reusable PPE is properly cleaned, decontaminated, and maintained after and between uses. Dental settings also should have policies and procedures describing a recommended sequence for safely donning and doffing PPE.

DHCP should wear **a surgical mask, eye protection (goggles, protective eyewear with solid side shields, or a full-face shield), a gown or protective clothing, and gloves** during procedures likely to generate splashing or spattering of blood or other body fluids.

During **aerosol-generating procedures conducted on patients assumed to be non-contagious**, DHCP should use an N95 respirator* or a respirator that offers a higher level of protection such as other disposable filtering facepiece respirators, PAPRs, or elastomeric respirators, if available. Respirators should be used in the context of a respiratory protection program, which includes medical evaluations, training, and fit testing. Of note, it is uncertain if respirators with exhalation valves provide source control. If a respirator is not available for an aerosol-generating procedure, use both a surgical mask and a full-face shield. Ensure that the mask is cleared by the US Food and Drug Administration (FDA) as a surgical mask. Use the highest level of surgical mask available. If a surgical mask and a full-face shield are not available, do not perform any aerosol-generating procedures.

There are multiple **sequences recommended for donning and doffing PPE**. One suggested sequence for DHCP includes:

- Before entering a patient room or care area:
  1. Perform hand hygiene.
2. Put on a clean gown or protective clothing that covers personal clothing and skin (e.g., forearms) likely to be soiled with blood, saliva, or other potentially infectious materials.
   - Gowns and protective clothing should be changed if they become soiled.

3. Put on a surgical mask or respirator.
   - Mask ties should be secured on the crown of the head (top tie) and the base of the neck (bottom tie). If mask has loops, hook them approximately around your ears.
   - Respirator straps should be placed on the crown of the head (top strap) and the base of the neck (bottom strap). Perform a user seal check each time you put on the respirator.

4. Put on eye protection.
   - Personal eyeglasses and contact lenses are NOT considered adequate eye protection.

5. Perform hand hygiene.

   - Gloves should be changed if they become torn or heavily contaminated.

7. Enter the patient room.

   - After completion of dental care:
     1. Remove gloves.
     2. Remove gown or protective clothing and discard the gown in a dedicated container for waste or linen.
        - Launder cloth gowns or protective clothing after each use.
     3. Exit the patient room or care area.
     4. Perform hand hygiene.
     5. Remove eye protection.
        - Carefully remove eye protection by grabbing the strap and pulling upwards and away from head. Do not touch the front of the eye protection.
        - Clean and disinfect reusable eye protection according to manufacturer’s reprocessing instructions prior to reuse.
        - Discard disposable eye protection after use.
     6. Remove and discard surgical mask or respirator†.
        - Do not touch the front of the respirator or mask.
        - Surgical mask: Carefully untie the mask (or unhook from the ears) and pull it away from the face without touching the front.
        - Respirator: Remove the bottom strap by touching only the strap and bring it carefully over the head. Grasp the top strap and bring it carefully over the head, and then pull the respirator away from the face without touching the front of the respirator.
     7. Perform hand hygiene.

PPE Supply Optimization Strategies

Major distributors in the United States have reported shortages of PPE, especially surgical masks and respirators. The anticipated timeline for return to routine levels of PPE is not yet known. CDC has developed a series of strategies or options to optimize supplies of PPE in healthcare settings when there is limited supply, and a burn rate calculator that provides information for healthcare facilities to plan and optimize the use of PPE for response to the COVID-19 pandemic. Optimization strategies are provided for gloves, gowns, facemasks, eye protection, and respirators.

These policies are only intended to remain in effect during times of shortages during the COVID-19 pandemic. DHCP should review this guidance carefully, as it is based on a set of tiered recommendations. Strategies should be implemented sequentially. Decisions by facilities to move to contingency and crisis capacity strategies are based on the following assumptions:

- Facilities understand their current PPE inventory and supply chain;
- Facilities understand their PPE utilization rate;
- Facilities are in communication with local healthcare coalitions and federal, state, and local public health partners (e.g., public health emergency preparedness and response staff) regarding identification of additional supplies;
- Facilities have implemented engineering and administrative control measures;
Facilities have already implemented engineering and administrative control measures; facilities have provided DHCP with required education and training, including having them demonstrate competency with donning and doffing, with any PPE ensemble that is used to perform job responsibilities, such as provision of patient care.

For example, extended use of facemasks and respirators should only be undertaken when the facility is at contingency or crisis capacity and has reasonably implemented all applicable administrative and engineering controls. Such controls include selectively canceling elective and non-urgent procedures and appointments for which PPE is typically used by DHCP. Extended use of PPE is not intended to encourage dental facilities to practice at a normal patient volume during a PPE shortage, but only to be implemented in the short term when other controls have been exhausted. Once the supply of PPE has increased, facilities should return to standard procedures.

Respirators that comply with international standards may be considered during times of known shortages. CDC has guidance entitled Factors to Consider When Planning to Purchase Respirators from Another Country which includes a webinar, and Assessments of International Respirators.

*A respirator is a personal protective device that is worn on the face, covers at least the nose and mouth, and is used to reduce the wearer's risk of inhaling hazardous airborne particles (including dust particles and infectious agents), gases, or vapors. Respirators are certified by CDC/National Institute for Occupational Safety and Health (NIOSH), including those intended for use in healthcare.

Respirator use must be in the context of a complete respiratory protection program in accordance with OSHA Respiratory Protection standard (29 CFR 1910.134). DHCP should be medically cleared and fit tested if using respirators with tight-fitting facepieces (e.g., a NIOSH-approved N95 respirator) and trained in the proper use of respirators, safe removal and disposal, and medical contraindications to respirator use.

†Facilities implementing reuse or extended use of PPE will need to adjust their donning and doffing procedures to accommodate those practices (see PPE Optimization Strategies).

Environmental Infection Control

- DHCP should ensure that environmental cleaning and disinfection procedures are followed consistently and correctly after each patient (however, it is not necessary that DHCP should attempt to sterilize a dental operatory between patients).
  - Clean and disinfect the room and equipment according to the Guidelines for Infection Control in Dental Health-Care Settings—2003.
  - To clean and disinfect the dental operatory after a patient with COVID-19, DHCP should delay entry into the operatory until a sufficient time has elapsed for enough air changes to remove potentially infectious particles. CDC's Guidelines for Environmental Infection Control in Health-Care Facilities (2003) provides a table to calculate time required for airborne-contaminant removal by efficiency.
  - Routine cleaning and disinfection procedures (e.g., using cleaners and water to clean surfaces before applying an Environmental Protection Agency-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.
  - Refer to List N on the EPA website for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2.

- Alternative disinfection methods
  - The efficacy of alternative disinfection methods, such as ultrasonic waves, high intensity UV radiation, and LED blue light against COVID-19 virus is not known. EPA does not routinely review the safety or efficacy of pesticidal devices, such as UV lights, LED lights, or ultrasonic devices. Therefore, EPA cannot confirm whether, or under what circumstances, such products might be effective against the spread of COVID-19.
  - CDC does not recommend the use of sanitizing tunnels. There is no evidence that they are effective in reducing the spread of COVID-19. Chemicals used in sanitizing tunnels could cause skin, eye, or respiratory irritation or damage.
  - EPA only recommends use of the surface disinfectants identified on List N against the virus that causes COVID-19.

- Manage laundry and medical waste in accordance with routine policies and procedures.
Sterilization and Disinfection of Patient-Care Items

- Sterilization protocols do not vary for respiratory pathogens. DHCP should perform routine cleaning, disinfection, and sterilization protocols, and follow the recommendations for Sterilization and Disinfection of Patient-Care Items present in the Guidelines for Infection Control in Dental Health Care Settings – 2003.
- DHCP should follow the manufacturer's instructions for times and temperatures recommended for sterilization of specific dental devices.

Considerations for Additional Precautions or Strategies for Treating Patients with Suspected or Confirmed COVID-19

- If a patient arrives at your facility and is suspected or confirmed to have COVID-19, defer dental treatment and take the following actions:
  - If the patient is not already wearing a cloth face covering give the patient a facemask to cover his or her nose and mouth.
  - If the patient is not acutely sick, send the patient home, and instruct the patient to call their primary care provider.
  - If the patient is acutely sick (for example, has trouble breathing), refer the patient to a medical facility, or call 911 as needed and inform them that the patient may have COVID-19.

- If emergency dental care is medically necessary for a patient who has, or is suspected of having, COVID-19, DHCP should follow CDC's Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings, including the use of PPE.
  - Dental treatment should be provided in an individual patient room with a closed door.
  - Avoid aerosol-generating procedures (e.g., use of dental handpieces, air/water syringe, ultrasonic scalers) if possible.
  - If aerosol-generating procedures must be performed, take precautions.
    - DHCP in the room should wear an 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.
    - 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.
  - Consider scheduling the patient at the end of the day.
  - Do not schedule any other patients at that time.
- People with COVID-19 who have ended home isolation can receive dental care following Standard Precautions.

Considerations for Use of Test-Based Strategies to Inform Patient Care

In the context of COVID-19, some infected individuals might not be identified based on clinical signs and symptoms. Facilities could consider using a tiered approach to universal PPE based on the level of transmission in the community. In areas where there is moderate to substantial community transmission, this includes consideration for DHCP for wearing an N95 or higher-level respirator for patients undergoing procedures that might pose higher risk (e.g., those generating potentially infectious aerosols or involving anatomic regions where viral loads might be higher).

Depending on testing availability and how rapidly results are available, facilities can also consider implementing pre-admission or pre-procedure testing for COVID-19, which might inform implementation of PPE use as described above, especially in the situation of PPE shortages. However, limitations of this approach should be considered, including negative results from patients during their incubation period who could become infectious later, and false negative tests depending on the test method used.

Monitor and Manage Dental Health Care Personnel

- Implement sick leave policies for DHCP that are flexible, non-punitive, and consistent with public health guidance.
- As part of routine practice, DHCP should be asked to regularly monitor themselves for fever and symptoms consistent with COVID-19.
DHCP should be reminded to stay home when they are ill and should receive no penalties when needing to stay home when ill or under quarantine.

If DHCP develop fever (T ≥100.0˚F) or symptoms consistent with COVID-19 while at work, they should keep their cloth face covering or facemask on, inform their supervisor, and leave the workplace.

- Screen all DHCP at the beginning of their shift for fever and symptoms consistent with COVID-19*.
  - Actively measure their temperature and document absence of symptoms consistent with COVID-19.
  - Clinical judgement should be used to guide testing of individuals in such situations.
  - Medical evaluation may be warranted for lower temperatures (<100.0˚F) or other symptoms based on assessment by occupational health personnel. Additional information about clinical presentation of patients with COVID-19 is available.

- If DHCP experience a potential work exposure to COVID-19, follow CDC's Healthcare Personnel with Potential Exposure Guidance.
- If DHCP suspect they have COVID-19:
  - Do not come to work.
  - If DHCP are ill at work, have them keep their cloth face covering or facemask on and leave the workplace.
  - Notify their primary healthcare provider to determine whether medical evaluation is necessary.
  - DHCP with suspected COVID-19 should be prioritized for diagnostic testing.
  - Information about when DHCP with suspected or confirmed COVID-19 may return to work is available in the Interim Guidance on Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19.

- For information on work restrictions for health care personnel with underlying health conditions who may care for COVID-19 patients, see CDC's FAQ.

*For DHCP, fever is either measured temperature ≥100.0˚F or subjective fever. Note that fever may be intermittent or may not be present in some individuals, such as those who are elderly, immunosuppressed, or taking certain medications (e.g., NSAIDs).

Education and Training

- Provide DHCP with job- or task-specific education and training on preventing transmission of infectious agents, including refresher training.
  - Training: Basic Expectations for Safe Care
- Ensure that DHCP are educated, trained, and have practiced the appropriate use of PPE prior to caring for a patient, including attention to correct use of PPE and prevention of contamination of clothing, skin, and the environment during the process of removing such equipment.
  - Using Personal Protective Equipment (PPE)
  - Healthcare Respiratory Protection Resources Training

References
