



# Coronavirus Disease 2019 (COVID-19)

## Dental Settings

Interim Infection Prevention and Control Guidance for Dental Settings During the COVID-19 Response

### Key Concepts

- Dental settings have unique characteristics that warrant additional infection control considerations.
- Postpone elective procedures, surgeries, and non-urgent dental visits.
- Proactively communicate to both staff and patients the need for them to stay at home if sick.
- Know steps to take if a patient with COVID-19 symptoms enters your facility.

### What's New

#### Revisions were made on April 7, 2020

- Description of risk to dental health care personnel (DHCP)<sup>1</sup> when providing emergency care during the COVID-19 pandemic.
- Recommendations for contacting patients prior to emergency dental care.
- Recommendations for providing emergency dental care to non-COVID-19 patients including engineering controls, work practices and infection control considerations.
- Potential exposure guidance.
- Contingency and crisis planning.

During the COVID-19 pandemic, dental emergencies<sup>2</sup> will arise and may require treatment by DHCP. DHCP should regularly consult their state dental boards or other regulating agencies for requirements specific to their jurisdictions, as information is changing rapidly. The following dental-specific recommendations should be used with CDC's [Interim Infection Prevention and Control Recommendations](#) for patients with COVID-19 and the [Interim Additional Guidance for Outpatient and Ambulatory Care Settings: Responding to Community Transmission of COVID-19 in the United States](#). This information supplements, but does not replace, the general infection prevention and control recommendations for COVID-19.

## Background

SARS-CoV-2, the virus that causes COVID-19, [is thought to be spread](#) primarily through respiratory droplets. Airborne transmission from person-to-person over long distances is unlikely. However, the contribution of aerosols, or droplet nuclei, to close proximity transmission is currently uncertain. The virus has been shown to survive in aerosols for hours and on surfaces for days. There are also indications that patients may be able to spread the virus while pre-symptomatic or asymptomatic.

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 contains large particle droplets of water, saliva, blood, microorganisms, and other debris. This spatter travels only a short distance and settles out quickly, landing on the floor, nearby operatory surfaces, DHCP, or the patient. The spray also might contain certain aerosols. 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 or to determine whether DHCP are adequately protected when providing dental treatment using [Standard Precautions](#). To date in the United States, clusters of healthcare workers 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 personnel. The Occupational Safety and Health Administration's [Guidance on Preparing Workplaces for COVID-19](#)  places DHCP in the *very high exposure risk* category, as their jobs are those with high potential for exposure to known or suspected sources of the virus that causes COVID-19 during specific procedures.

When practicing **in the absence of Airborne Precautions**, the risk of SARS-CoV-2 transmission during aerosol generating dental procedures cannot be eliminated. Caring for patients requiring Airborne Precautions is not possible in most dental settings as they are not designed for or equipped to provide this standard of care. For example, most dental settings do not have airborne infection isolation rooms or single-patient rooms, do not have a respiratory protection program, and do not routinely stock N95 respirators.

## Recommendations

### Postpone Elective Procedures, Surgeries, and Non-urgent Dental Visits

Services should be limited to emergency visits only during this period of the pandemic. These actions help staff and patients stay safe, preserve personal protective equipment and patient care supplies, and expand available health system capacity.

This recommendation aligns with the Centers for Medicare & Medicaid Services (CMS) [Adult Elective Surgery and Procedures Recommendations](#) , which states to limit all non-essential planned surgeries and procedures, including dental, until further notice.

### Stay at Home if Sick

Implement [sick leave policies](#) for DHCP that are flexible, non-punitive, and consistent with public health guidance, allowing employees to stay home if they have symptoms of respiratory infection. Ask staff to stay home if they are sick and send staff home if they develop symptoms while at work.

Telephone screen all patients for signs or symptoms of respiratory illness (fever<sup>3</sup>, cough, shortness of breath). If the patient reports signs or symptoms of a respiratory illness, avoid dental care. If possible, delay emergency dental care until the patient has recovered from the respiratory infection.

### Contact Patients Prior to Emergency Dental Treatment

Telephone triage all patients in need of emergency dental care. Assess the patient's dental condition and determine whether the patient needs to be seen in the dental clinic. Use teleconferencing or teledentistry options as alternatives to in office care. If dental treatment can be delayed, provide patients with detailed home care instructions and any appropriate pharmaceuticals.

#### **Provision of Emergency Care to Patients with COVID-19 During the COVID-19 Pandemic**

If a patient arrives at your facility and is suspected or confirmed to have COVID-19, take the following actions:

- Defer dental treatment
  - Give the patient a mask to cover his or her nose and mouth.
  - If not acutely sick, send the patient home and instruct the patient to [call a medical provider](#).
  - If acutely sick (for example, has trouble breathing) refer the patient to a medical facility.

If emergency dental care is medically necessary for a patient who has, or is suspected of having COVID-19, [Airborne Precautions](#) (an isolation room with negative pressure relative to the surrounding area and use of an N95 filtering disposable respirator for persons entering the room) should be followed. Dental treatment should be provided in a

hospital or other facility that can treat the patient using the appropriate precautions.

### Provision of Emergency Care to Patients Without COVID-19 in a Dental Clinic During the COVID-19 Pandemic

If a patient must be seen in the dental clinic for emergency care, systematically assess the patient at the time of check-in. The patient should be asked about the presence of symptoms of a respiratory infection and history of travel to areas experiencing transmission of COVID-19 or contact with possible patients with COVID-19. If the patient is afebrile (temperature < 100.4 °F) and otherwise without symptoms consistent with COVID-19, then emergency dental care may be provided using appropriate engineering controls, work practices, and infection control practices.

#### Engineering Controls and Work Practices

- Avoid aerosol generating procedures whenever possible. Avoid the use of dental handpieces and the air-water syringe. Use of ultrasonic scalers is not recommended during this time. 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 and dental dams to minimize droplet spatter and aerosols.

#### Infection Control Considerations

#### Use the highest level of personal protective equipment (PPE) available:

- If available, wear gloves, a gown, eye protection (i.e., goggles or a disposable/reusable face shield that covers the front and sides of the face), and an N95<sup>4</sup> or higher-level respirator during emergency dental care for patients without COVID-19.
  - Disposable respirators should be removed and discarded after exiting the patient's room or care area.
  - Reusable eye protection must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use. Disposable eye protection should be discarded after use.
  - Change gown if it becomes soiled. Remove and discard the gown in a dedicated container for waste or linen before leaving the patient room or care area. Disposable gowns should be discarded after use. Cloth gowns should be **laundered** after each use.
- If a respirator is not available, use a combination of 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.
  - Surgical masks should be removed and discarded after exiting the patient's room or care area.
  - Change surgical masks during patient treatment if the mask becomes wet.
- **If the minimally acceptable combination of a surgical mask and a full-face shield is not available, do not perform any emergency dental care. Refer the patient to a clinician who has the appropriate PPE.**
- Ensure DHCP practice strict adherence to **hand hygiene**, including:
  - Before and after contact with patients.
  - After contact with contaminated surfaces or equipment.
  - After removing PPE.
- Clean and disinfect the room and equipment according to the [Guidelines for Infection Control in Dental Health-Care Settings—2003](#) 
  - Clean, disinfect, or discard the surface, supplies, or equipment located within 6 feet of symptomatic patients.
  - Use products with EPA-approved emerging viral pathogens claims—refer to [List N](#)  on the EPA website for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program from use against SARS-CoV-2.
- Screen all DHCP at the beginning of their shift for fever and respiratory symptoms. Document shortness of breath, new or change in cough, and sore throat. If they are ill, have them put on a facemask and leave the workplace.

People with COVID-19 who have [completed home isolation clearance](#) can receive emergency dental care. This is decided

using two strategies: a non-test-based strategy, and a test-based-strategy:

- Non-test-based-strategy: At least 3 days (72 hours) have passed since recovery (resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms such as cough or shortness of breath) **and** at least 7 days have passed since symptoms first occurred.
- Test-based-strategy:
  - Persons who have COVID-19 who have symptoms: Resolution of fever without the use of fever-reducing medications **and** improvement in respiratory symptoms (e.g., cough, shortness of breath) **and** negative results of an FDA Emergency Use Authorized molecular assay for COVID-19 from at least two consecutive nasopharyngeal swab specimens collected  $\geq 24$  hours apart<sup>5</sup> (total of two negative specimens).
  - Persons with laboratory-confirmed COVID-19 who have not had any symptoms: At least 7 days have passed since the date of the first positive COVID-19 diagnostic test and have had no subsequent illness.

## Potential Exposure Guidance

Even when DHCP screen patients for respiratory infections, they may treat a dental emergency patient who is later confirmed to have COVID-19.

DHCP should institute a policy to contact all patients who received emergency dental care in the dental setting 48 hours after receiving emergency care. DHCP should ask patients if they are exhibiting any signs or symptoms of COVID-19. If a patient reports signs or symptoms of COVID-19, refer the patient to their medical provider for assessment and follow CDC's [Healthcare Personnel with Potential Exposure Guidance](#).

## Contingency and Crisis Planning

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. These policies are only intended to remain in effect during the time of the COVID-19 pandemic.

During severe resource limitations, consider excluding DHCP [who may be at higher risk for severe illness from COVID-19](#), such as those of older age, those with chronic medical conditions, or those who may be pregnant, from performing emergency dental care.

## Additional Resources

- [Infection Prevention and Control Recommendations](#)
- [Public Health Personnel Evaluating at Home or Non-Home Residential Settings](#)
- [Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure](#)
- [American Dental Association: What Constitutes a Dental Emergency](#)  

## Footnotes

<sup>1</sup>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

<sup>2</sup>The urgency of a procedure is a decision based on clinical judgement and should be made on a case-by-case basis.

<sup>3</sup>Fever may be subjective or confirmed.

<sup>4</sup>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 the CDC/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](#)[external icon](#) ). Healthcare Providers 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.

<sup>5</sup>All test results should be final before isolation is ended. Testing guidance is based upon limited information and is subject to change as more information becomes available.

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