Guidance for Dental Settings During the COVID-19 Response

Clinician Outreach and Communication Activity (COCA) Webinar

Wednesday, June 3, 2020
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- For media questions, please contact CDC Media Relations at 404-639-3286, or send an email to media@cdc.gov.
For More Clinical Care Information on COVID-19

- **Call** COVID-19 Clinical Call Center at 770-488-7100 (24 hours/day).
- **Refer** patients to state and local health departments for COVID-19 testing and test results.
  - Clinicians should NOT refer patients to CDC to find out where or how to get tested for COVID-19, OR to get test results.
- **Visit** CDC’s Coronavirus (COVID-19) website: [https://www.cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)
- **Visit** [emergency.cdc.gov/coca](https://emergency.cdc.gov/coca) over the next several days to learn about future COCA Calls.
Today’s Presenters

- **Casey Hannan, MPH** (no slides)
  Director, Division of Oral Health
  National Center for Chronic Disease Prevention and Health Promotion
  Centers for Disease Control and Prevention

- **Michele Neuburger, DDS, MPH**
  Infection Prevention Control Team
  COVID-19 Response
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- **Alberto Garcia, MS**
  Worker Safety Team
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- **CDR Marie de Perio, MD (USPHS)**
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  Worker Safety Team
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Guidance for Dental Settings

Michele Neuburger, DDS, MPH
Dental Officer

CDC COCA Call Guidance for Dental Settings During the COVID-19 Response

June 3, 2020
CDC Guidance for Dental Settings

- Updated on May 19, 2020
- Key Points
  - Dental settings have unique characteristics that warrant specific infection control considerations.
  - Dental healthcare personnel (DHCP) should:
    - **Prioritize** the most critical dental services and provide care in a way that minimizes harm to patients from delaying care and harm to patients and personnel from potential exposure to COVID-19.
    - **Proactively communicate** to both DHCP and patients the need to stay at home if sick.
    - **Know the steps** to take if a patient with COVID-19 symptoms enters your facility.
Summary of Recent Changes

- Recommendations are provided for resuming non-emergency dental care during the COVID-19 pandemic.
- Expanded recommendations for provision of dental care to both patients with COVID-19 and patients without COVID-19.
- New information regarding:
  - Facility and equipment considerations
  - Sterilization and disinfection
  - Considerations for the use of test-based strategies to inform patient care
Key Recommendations for Dental Healthcare Personnel

- Stay informed and regularly consult with [state or local health departments](https://www.cdc.gov/coronavirus/2019-ncov/community/dental-care/plan.html) for region-specific information and recommendations.
- Continue to [practice universal source control and actively screen for fever and symptoms of COVID-19](https://www.cdc.gov/coronavirus/2019-ncov/community/dental-care/plan.html) for all people (patients, visitors and staff) who enter the dental facility.
- Ensure that DHCP have the appropriate amount and type of personal protective equipment (PPE) and supplies to support the patient volume.
Recommendations for Communities Experiencing No to Minimal Community Transmission

- **Defined** as evidence of isolated cases or limited community transmission, case investigations underway; no evidence of exposure in large communal setting.

- Provide dental care to patients without suspected or confirmed COVID-19 using strict adherence to Standard Precautions.
  - Given that patients may be able to spread the virus while presymptomatic or asymptomatic, DHCP should use additional heightened precautions listed in the guidance whenever feasible.

- Stay updated about local transmission trends by reviewing information and data from state and local health departments.
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).

Provide dental care using additional considerations listed in CDC guidance to protect both DHCP and patients and prevent the spread of COVID-19 in dental facilities.
Consider using a tiered approach to universal PPE based on the level of transmission in the community.

Consider implementing pre-admission or pre-procedure testing for COVID-19, which might inform implementation of PPE use, especially in the situation of PPE shortages.

- Depends on testing availability and how rapidly results are available.
- Limitations should be considered, including:
  - Negative results from patients during their incubation period who could become infectious later.
  - Potential false negative tests.
Patient Management

- Contact all patients prior to dental treatment.
  - Screen for symptoms consistent with COVID-19.
  - Triage to assess need for in-office dental care.
- Systematically assess all patients and visitors upon arrival.
  - Ask about the presence of fever or other symptoms consistent with COVID-19.
  - Actively check the patient’s temperature.
- Ask patient to re-don their face covering at the completion of care.
- Request that the patient inform the dental clinic if they develop symptoms or are diagnosed with COVID-19 within 14 days after the dental appointment.
Facility and Equipment Considerations

- Take steps to ensure that all patients, visitors, and staff adhere to respiratory hygiene and cough etiquette.
- 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.
- Minimize the number of persons waiting in the waiting room.
- Review the manufacturer’s instructions for re-initiating use of all equipment and devices after a period of non-use.
Whenever possible, DHCP should remain with one patient until dental care is complete and minimize the practice of one DHCP providing care to multiple patients at once.

Set up operatories so that only the supplies and instruments needed for the dental procedure are readily accessible.

Avoid aerosol-generating procedures (such as the use of dental handpieces, air/water syringe and ultrasonic scalers) whenever possible. If necessary for dental care:

- Use four-handed dentistry, high evacuation suction, and dental dams to minimize droplet spatter and aerosols.
- Limit number of personnel during the procedure to only those essential for patient care and procedure support.
Monitor and Manage Dental Healthcare Personnel

- Implement sick leave policies for DHCP that are flexible, non-punitive, and consistent with public health guidance.
  - DHCP should not come to work if they suspect they have COVID-19.
- Ask DHCP to regularly monitor themselves for fever and symptoms consistent with COVID-19.
- Screen all DHCP at the beginning of their shift for fever and symptoms consistent with COVID-19.
- Follow CDC’s Healthcare Personnel with Potential Exposure Guidance if DHCP experience a potential work exposure to COVID-19.
Hand Hygiene

- 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 PPE, including gloves.
  - Use alcohol-based hand rub (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.
  - Ensure that hand hygiene supplies are readily available.
Universal Source Control

- DHCP should:
  - Wear a facemask or cloth face covering at all times while they are in the dental setting.
  - Take steps to prevent self-contamination.
  - Perform hand hygiene immediately before and after any contact with the facemask or cloth face covering.

- Dental settings should:
  - Provide DHCP with training about when, how, and where facemasks and cloth face coverings can be used.
  - Request that patients and visitors wear a cloth face covering, or provide a facemask if supplies are adequate.
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:
  - Give the patient a mask 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.

- If emergency dental care is medically necessary, follow CDC’s [Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings](https://www.cdc.gov/covid19), including the use of PPE.

- If aerosol-generating procedures must be performed, take precautions such as wearing an N95 or higher-level respirator and ideally performing the procedure in an airborne infection isolation room.
Environmental Infection Control

- Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly after each patient.
  - 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.

- To clean and disinfect the dental operatory after a patient without suspected or confirmed COVID-19, wait 15 minutes after completion of clinical care and exit of each patient to begin to clean and disinfect room surfaces.

- 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.
Sterilization protocols do not vary for respiratory pathogens.

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.

Follow the manufacturer’s instructions for times and temperatures recommended for sterilization of specific dental devices.
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.
  - Using PPE Training
  - Healthcare Respiratory Protection Resources Training
For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Engineering Controls for Dental Settings

Alberto Garcia, MS
Mechanical Engineer
Maintaining Ventilation Systems

- Clean-to-(less-clean) airflow (e.g. reception desk -> waiting area, work desks -> patient chairs)
- Increase filtration efficiency to the highest level compatible with the HVAC
- Investigate increasing outdoor air percentage in HVAC supply air
- Limit the use of demand-controlled ventilation
- Consider using portable HEPA air filtration unit
- Consider the use of upper-room ultraviolet germicidal irradiation (UVGI)
Patient Placement Strategies

- Individual patient rooms preferred
- If floor plan is open:
  - Ensure there is at least 6 feet of space between patient chairs
  - Place physical barriers between patient chairs
  - Orient operatories parallel to the direction of airflow if possible
- Patient orientation:
  - Patients should be oriented with their head away from pedestrian corridors, towards the rear wall when using vestibule-type office layouts, and near the return air vents

Graphic by CDC/NIOSH
Patient Volume Strategies

- Identify maximum number of patients at any one time
- Allow a 15 minute wait period after patient leaves and before beginning the room cleaning and disinfection process

Particle Settling in Still Air

Time to settle 5 feet by unit density spheres

- 0.5 μm: 41 hours
- 1 μm: 12 hours
- 3 μm: 1.5 hours
- 10 μm: 8.2 minutes
- 100 μm: 5.8 seconds

Aerodynamic diameter definition: diameter of a unit density sphere that settles at the same velocity as the particle in question

Graphic by CDC/NIOSH
Personal Protective Equipment (PPE) and Strategies to Optimize Supply

CDR Marie A. de Perio, MD, FIDSA
Medical Officer

cdc.gov/coronavirus
CDC’s PPE Recommendations for Dental Settings

- For procedures likely to generate splashes: gloves + eye protection + gown (or protective clothing) + surgical mask
- For aerosol generating procedures: gloves + eye protection + gown + N95 or higher level respirator (instead of surgical mask)
- For patients with suspected or confirmed COVID-19: gloves + eye protection + gown + N95 or higher level respirator
PPE Recommendations for Dental Settings

▪ Respirators should be used in the context of a respiratory protection program, which includes medical evaluations, training, and fit testing

▪ Dental healthcare personnel (HCP) should receive training on how to put on, use, and take off PPE

▪ Dental facilities should ensure that any reusable PPE is properly cleaned, decontaminated, and maintained after and between uses
Strategies for Optimizing PPE Supplies

- CDC recommends series of strategies to optimize supplies of PPE in healthcare settings when there is limited supply
- Intended for leaders who are responsible for developing and implementing policies and procedures for preventing pathogen transmission in healthcare settings
Surge Capacity Strata

- Ability to manage sudden, unexpected increase in patient volume that would otherwise severely challenge or exceed present capacity of facility
- **Conventional capacity**: measures consist of providing patient care without any change in daily standard practices
- **Contingency capacity**: measures may change daily standard practices but may not have significant impact on the care delivered to patient or safety of HCP
- **Crisis capacity**: not commensurate with U.S. standards of care

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Conventional Capacity

Engineering Controls
- Perform aerosol generating procedures on COVID-19 patients in airborne infection isolation rooms (AIIR)
- Use physical barriers

Administrative Controls
- Use telemedicine
- Exclude all HCP not directly involved in patient care
- Limit face-to-face HCP encounters with patient
- Implement source control
- Implement cohorting of patients and HCP
Conventional Capacity

Personal Protective Equipment (PPE)

- Use alternatives to N95 respirators
  - N99, N100, P95, P99, P100, R95, R99, or R100
  - Powered air purifying respirators (PAPRs)
  - Elastomeric respirators
When to Move to Contingency and Crisis Capacity

- Understanding of current inventory and supply chain
- Understanding of utilization rate
- **Implementation of conventional capacity strategies**
- Communication with healthcare coalitions, state/local partners
- Discussions with local and state public health and emergency management partners
Contingency Capacity (Expected Shortages)

Administrative Controls

- Temporarily suspend annual fit testing

PPE

- Use N95 respirators beyond the manufacturer-designated shelf life for training and fit testing
- Extend the use of N95 respirators
Crisis Capacity (Known Shortages)

PPE

- Use respirators beyond the manufacturer-designated shelf life for healthcare delivery
- Use respirators evaluated and complying with standards used in other countries
- Implement limited re-use of N95 respirators
- Prioritize the use of N95 respirators and facemasks by activity
Additional CDC Resources

- Using Personal Protective Equipment (PPE)
- Personal Protective Equipment: Questions and Answers
- Strategies to Optimize the Supply of PPE and Equipment
- Considerations for Release of Stockpiled N95s Beyond the Manufacturer-Designated Shelf Life
- Decontamination and Reuse of Filtering Facepiece Respirators
Factors to Consider when Planning to Purchase Respirators from Another Country

Including KN95 Respirators from China

LCDR Megan Casey, RN, BSN, MPH, CIC
Nurse Epidemiologist
Users can be confident that NIOSH-approved respirators will provide the expected level of protection.

- NIOSH-approved respirators are encouraged regardless of their country of origin
- Since 2008, NIOSH has required the Approval number to be on the respirator or strap
- Beware of false claims
  - Inspect the respirator
  - Inspect the packaging
  - Review the required labeling
CDC recommends Crisis Strategies when Conventional and Contingency Strategies have been exhausted

- One crisis option is to use respirators in the workplace conforming to standards from seven other countries, including China
- Confidence in NIOSH approval holders – check the CEL for list of approval holders
- Be cautious if seller is not a NIOSH approval holder

CEL: NIOSH Certified Equipment List:  https://wwwn.cdc.gov/niosh-cel/
Evaluate the Manufacturer

- Investigate the company you intend to purchase from
  - Ask colleagues about any experience they may have had with the manufacturer of interest
  - Utilize every available option to obtain more information about a manufacturer
  - Consider if you would contemplate this purchase with this manufacturer in circumstances other than those existing during the COVID-19 pandemic
Evaluate the Manufacturer (continued)

- Check to determine if manufacturer is a NIOSH approval holder
- Determine if the manufacturer has a test report from a laboratory that is ISO/IEC 17025 accredited
  - CNAS Accredited laboratories
  - The European Union Commission website
- Documentation is crucial
  - BUT not a reliable indicator of the product’s performance.
  - Documentation easy to falsify
Evaluate Devices

- Check the FDA Emergency Use Authorization list
- Evaluate samples of the product prior to making a purchase
- Purchase respirators with traditional head strap designs
  - Difficult to fit respirators with ear loops
- Check filtration efficiency results on NIOSH website
  - [https://www.cdc.gov/niosh/npptl/respirators/testing/default.html](https://www.cdc.gov/niosh/npptl/respirators/testing/default.html)
Since the beginning of April 2020, NIOSH NPPTL has evaluated over 194 products

- Approximately 42% of the products evaluated achieved filtration efficiency greater than 95% (PASSED LIMITED TEST)
- 58% achieved filtration efficiency below 95%. (FAILED LIMITED TEST)
- Make sure product is listed on FDA EUA
Evaluate the Device

- Evaluate samples of the product prior to making a purchase
  - Obtain samples from the manufacturer
  - Evaluate the respirator yourself by conducting a fit test with multiple people in your organization per the requirements of your respirator protection program
Evaluate the Contract Terms

- Beware of price gouging
  - KN95 selling for $2 - $3 per unit
  - If paying more than $2 - $3 per unit, you are likely overpaying
  - Any per unit price below $2 - $3 is suspect
  - This will change through time, as the circumstances change

- Do not be pressured into prepaying for your purchase

- Establish provisions in the contract to protect your purchase through any third-party
NIOSH will continue to prioritize testing according to the scheme shown

<table>
<thead>
<tr>
<th>Prioritization of International FFR Samples For NIOSH Evaluation</th>
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<tbody>
<tr>
<td><strong>PRIORITY 1</strong></td>
</tr>
<tr>
<td>U.S. Food and Drug Administration (FDA)</td>
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<tr>
<td>1.1 Products with Previously Issued FDA EUA</td>
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<tr>
<td>1.2 Products FDA is Evaluating for an EUA</td>
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<tr>
<td><strong>PRIORITY 2</strong></td>
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<tr>
<td>Other Federal Government Agencies In Support of Their Jurisdictional Responsibilities Including FBI, DOJ, US AG Offices, FEMA, DHS</td>
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<tr>
<td><strong>PRIORITY 3</strong></td>
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<tr>
<td>State Government Agencies</td>
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<tr>
<td>3.1 Products Not Previously Evaluated by NIOSH</td>
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<tr>
<td>3.2 Products Previously Evaluated by NIOSH</td>
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<tr>
<td><strong>PRIORITY 4</strong></td>
</tr>
<tr>
<td>FFR Users w/ FFRs Covered by an FDA EUA</td>
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<tr>
<td>4.1 Products Not Previously Evaluated by NIOSH</td>
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<tr>
<td>4.2 Products Previously Evaluated by NIOSH</td>
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<tr>
<td>Notify Each Submitter of Results And Post to NIOSH Website</td>
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</tbody>
</table>
## Additional Resources

**FDA Emergency Use Authorization***

- **March 28 FDA EUA on imported non-NIOSH approved FFRs**
  - Exhibit 1 to FDA's March 28 EUA - list of authorized respirators
- **May 7 FDA EUA on Non-NIOSH-Approved Disposable Filtering Facepiece Respirators Manufactured in China**
  - Appendix A- Authorized Imported, Non-NIOSH Approved Respirators Manufactured in China
  - Respirator Models Removed from Appendix A- Respirator Models No Longer Authorized

**Additional Related Information for Purchasers of Respiratory Protection Equipment**

- The NIOSH counterfeit respirator page
- CDC Crisis Capacity Strategies for Optimizing N95s
- Understanding the Use of Imported Non-NIOSH-Approved Respirators
- Considerations when Purchasing Respirators from Another Country – Includes a link to a webinar on purchasing international respirators
For more information, contact CDC
1-800-CDC-INFO (232-4636)

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Today’s COCA Call Will Be Available On-Demand

**When:** A few hours after the live call

**What:** Video recording

**Where:** On the COCA Call webpage at
Upcoming COCA Call

**Topic:** Updated Information for Long-term Care Facilities during COVID-19 Pandemic

**Date:** Tuesday, June 16, 2020

**Time:** 2:00-3:00 PM ET
COCA Products & Services

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CDC Clinician Outreach and Communication Activity

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As-needed messages that provide specific, immediate action clinicians should take. Contains comprehensive CDC guidance so clinicians can easily follow recommended actions.
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Monthly newsletter providing updates on emergency preparedness and response topics, emerging public health threat literature, resources for health professionals, and additional information important during public health emergencies and disasters.

Informs clinicians of new CDC resources and guidance related to emergency preparedness and response. This email is sent as soon as possible after CDC publishes new content.

CDC’s primary method of sharing information about urgent public health incidents with public information officers; federal, state, territorial, and local public health practitioners; clinicians; and public health laboratories.
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