MDHA Answers to Covid-19 Questions

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Thank you for attending the MDHA Covid-19 Webinar. There were several questions asked and here are some answers. Attached are links to where the information can be found from sources such as OSHA, CDC, and MASS.GOV. Although we share the same concerns, some legal questions are very specific to the employer/employee and we encourage you to reach out to an employment lawyer for further guidance. Having these types of conversations can be difficult, but you are intelligent licensed professionals who are extremely well trained and ethical. Please refer to the listed sources and share any evidence based sources with the hygiene community.

Please understand as more information is researched, some answers will change. We will update you on current standards as often as possible.

Questions pertaining to to N95/kN95/respirators/masks

A majority of questions asked where pertaining to proper masks. Some key facts about N95, kN95, and other related mask options:

A respirator shall be provided to each employee when such equipment is necessary to protect the health of such employee. The **employer** shall provide the respirators which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protection program, which shall include the requirements outlined in paragraph (c) of this section. The program shall cover each employee required by this section to use a respirator. (*1910.134 - Respiratory Protection. | Occupational Safety and Health Administration*, n.d.)

In any workplace where respirators are necessary to protect the health of the employee or whenever respirators are required by the employer, the employer shall establish and implement a written respiratory protection program with worksite-specific procedures. The program shall be updated as necessary to reflect those changes in workplace conditions that affect respirator use. The employer shall include in the program the following provisions of this section, as applicable:
- Procedures for selecting respirators for use in the workplace
- Medical evaluations of employees required to use respirators;
- Fit testing procedures for tight-fitting respirators;
- Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations;
- Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators;
- Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators;
- Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations;
- Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance; and
- Procedures for regularly evaluating the effectiveness of the program.

Reusing Disposable Respirator during time of Shortage

Reusing disposable filtering facepiece respirators (FFRs) has been suggested as a crisis capacity strategy to conserve available supplies for healthcare environments during a pandemic. Strategies for FFR extended use and reuse (without decontamination of the respirator) are currently available from CDC's National Institute for Occupational Safety and Health (NIOSH).

The surfaces of an FFR may become contaminated while filtering the inhalation air of the wearer during exposures to pathogen-laden aerosols. The pathogens on the filter materials of the FFR may be transferred to the wearer upon contact with the FFR during activities such as:

- Adjusting the FFR
- Doffing the FFR improperly
- Performing a user-seal check when redoffing a previously worn FFR

A study evaluating the persistence of SARS-CoV-2 (the virus that causes COVID-19) on plastic, stainless steel, and carboard surfaces showed that the virus is able to survive for up to 72 hours [1]. One strategy to mitigate the contact transfer of pathogens from the FFR to the wearer during reuse is to **issue five respirators to each healthcare worker** who may care for patients with

suspected or confirmed COVID-19. The healthcare worker will wear one respirator each day and store it in a breathable paper bag at the end of each shift. The order of FFR use should be repeated with a **minimum of five days between each FFR use**. This will result in each worker requiring a minimum of five FFRs, providing that they put on, take off, care for them, and store them properly each day. Healthcare workers should treat the FFRs as though they are still contaminated and follow the precautions outlined in our reuse recommendations. If supplies are even more constrained and five respirators are not available for each worker who needs them, FFR decontamination may be necessary.

Decontamination and subsequent reuse of FFRs should only be practiced where FFR shortages exist. At present, FFRs are considered one time use products and there are no manufacturer authorized methods for FFR decontamination before reuse. On March 29, 2020, the U.S. Food and Drug Administration (FDA) issued the first Emergency Use Authorization (EUA) for a decontamination process, and additional subsequent EUAs have been issued. The [FDA Emergency Use Authorizations websiteexternal icon](#) should be checked for the most up-to-date information. Only respirator manufacturers can reliably provide guidance on how to decontaminate their specific models of FFRs. In the absence of manufacturer's recommendations, third parties may also provide guidance or procedures on how to decontaminate respirators without impacting respirator performance. Decontamination might cause poorer fit, filtration efficiency, and breathability of disposable FFRs as a result of changes to the filtering material, straps, nose bridge material, or strap attachments of the FFR. While decontamination and reuse of FFRs are not consistent with approved usage, this option may need to be considered when FFR shortages exist.

An effective FFR decontamination method should reduce the pathogen burden, maintain the function of the FFR, and present no residual chemical hazard. The filter media in NIOSH-approved respirators varies by manufacturer. The ability of the respirator filter media to withstand cleaning and disinfection are not NIOSH performance requirements. The NIOSH's National Personal Protective Technology Laboratory (NPPTL) and other researchers have investigated the impact of various decontamination methods on filtration efficiency, facepiece fit of FFRs, and the ability to reduce viable virus or bacteria on the FFRs. This research is summarized below.

How to Decontaminate

HCPs should take the following precautionary measures before using a decontaminated FFR:

- Clean hands with soap and water or an alcohol-based hand sanitizer with at least 60% alcohol before and after touching or adjusting the FFR.
- Avoid touching the inside of the FFR.
- Use a pair of clean (non-sterile) gloves when donning the FFR and performing a user seal check.

- Visually inspect the FFR to determine if its integrity has been compromised.
- Check that FFR components such as the straps, nose bridge, and nose foam material did not degrade, which can affect the quality of the fit, and seal.
- If the integrity of any part of the FFR is compromised, or if a successful user seal check cannot be performed, discard the FFR and try another FFR.
- Users should perform a user seal check immediately after they don each FFR and should not use an FFR on which they cannot perform a successful user seal check. (CDC, 2020)

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. 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 face covering 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 face covering, or provide a surgical mask if supplies are adequate.
  - Ask about the presence of fever or other symptoms consistent with COVID-19.
  - 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 14 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 alertspdf icon (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

- Properly maintain ventilation systems.
    - Ventilation systems that provide air movement from a clean (DHCP workstation or area) to contaminated (clinical patient care area) flow direction should be installed and properly maintained. Providing supply air only in the receptionist

area with return air louvers positioned in the waiting area will help to achieve this effect.
- Consult a heating, ventilation and air conditioning (HVAC) professional to investigate increasing filtration efficiency to the highest level compatible with the HVAC system without significant deviation from designed airflow.
- Consult a 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 two hours post occupancy to assure that ventilation 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 actively undergoing, and immediately following, an aerosol-generating procedure.
  - The use of these units will reduce particle count (including droplets) in the room and will reduce the amount of turnover time, rather than just relying on the building HVAC system capacity.
  - Place HEPA unit within vicinity of patient's chair, but not behind DHCP. Ensure 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 extending barriers to 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 towards the rear wall when using vestibule-type office layouts.
- Patient volume
  - Determine the maximum number of patients who can safely receive care at the same time in the dental facility, based on the number of rooms, the layout of the facility, and the time needed to clean and disinfect patient operatories*.

Timing In Between Appointments

Although, the CDC lifted the wait time prior to disinfection (June 18, 2020), the ADA recommended extended time prior to disinfection after the patient leaves. This amount of time will vary by risk factors and amount of aerosols created during the appointment. Please refer to the ADA toolkit for more information.

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.

Personal Protective Equipment (PPE)

Except as provided by paragraphs (h)(2) through (h)(6) of this section, the protective equipment, including personal protective equipment (PPE), used to comply with this part, shall be provided by the employer at **no cost to employees**.

- The employer is not required to pay for non-specialty safety-toe protective footwear (including steel-toe shoes or steel-toe boots) and non-specialty prescription safety eyewear, provided that the employer permits such items to be worn off the job-site.
- When the employer provides metatarsal guards and allows the employee, at his or her request, to use shoes or boots with built-in metatarsal protection, the employer is not required to reimburse the employee for the shoes or boots.

The employer is not required to pay for:

- The logging boots required by 29 CFR 1910.266(d)(1)(v);
- Everyday clothing, such as long-sleeve shirts, long pants, street shoes, and normal work boots; or Ordinary clothing, skin creams, or other items, used solely for protection from weather, such as winter coats, jackets, gloves, parkas, rubber boots, hats, raincoats, ordinary sunglasses, and sunscreen.

The **employer** must pay for replacement PPE, except when the employee has lost or intentionally damaged the PPE.

Where an employee provides adequate protective equipment he or she owns pursuant to paragraph (b) of this section, the employer may allow the employee to use it and is not required to reimburse the employee for that equipment. The employer shall not require an employee to provide or pay for his or her own PPE, unless the PPE is accepted by paragraphs (h)(2) through (h)(5) of this section. (*1910.132 - General Requirements. | Occupational Safety and Health Administration*, n.d.)


Who Needs PPE

check circle solid icon **Patients** with confirmed or possible SARS-CoV-2 infection should wear a facemask when being evaluated medically

check circle solid icon **Healthcare personnel** should adhere to Standard and Transmission-based Precautions when caring for patients with SARS-CoV-2 infection. Recommended PPE is described in the [Infection Control Guidance](#)

U.S. Healthcare Facilities: [Optimize the Supply of PPE and Equipment](#)

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
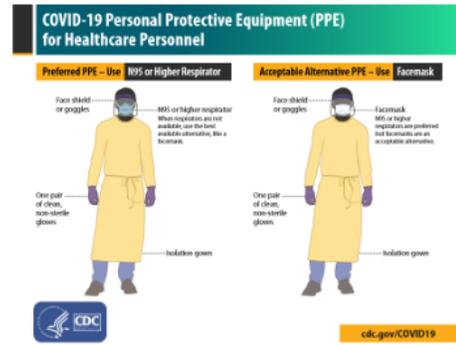
How to Put On (Don) PPE Gear

More than one donning method may be acceptable. Training and practice using your healthcare facility's procedure is critical. Below is one example of donning.

1. **Identify and gather the proper PPE to don.** Ensure choice of gown size is correct (based on training).
2. **Perform hand hygiene using hand sanitizer.**
3. P**ut on isolation gown.** Tie all of the ties on the gown. Assistance may be needed by other healthcare personnel.
4. **Put on NIOSH-approved N95 filtering facepiece respirator or higher (use a facemask if a respirator is not available).** If the respirator has a nosepiece, it should be fitted to the nose with both hands, not bent or tented. Do not pinch the nosepiece with one hand. Respirator/facemask should be extended under chin. Both your mouth and nose should be protected. Do not wear respirator/facemask under your chin or store in scrubs pocket between patients.*
   - **Respirator:** Respirator straps should be placed on crown of head (top strap) and base of neck (bottom strap). Perform a user seal check each time you put on the respirator.
   - **Facemask:** Mask ties should be secured on crown of head (top tie) and base of neck (bottom tie). If mask has loops, hook them appropriately around your ears.
5. **Put on face shield or goggles.** When wearing an N95 respirator or half facepiece elastomeric respirator, select the proper eye protection to ensure that the respirator does not interfere with the correct positioning of the eye protection, and the eye protection

does not affect the fit or seal of the respirator. Face shields provide full face coverage. Goggles also provide excellent protection for eyes, but fogging is common.
6. **Put on gloves.** Gloves should cover the cuff (wrist) of gown.
7. **Healthcare personnel may now enter patient room.**

How to Take Off (Doff) PPE Gear

More than one doffing method may be acceptable. Training and practice using your healthcare facility's procedure is critical. Below is one example of doffing.

1. **Remove gloves.** Ensure glove removal does not cause additional contamination of hands. Gloves can be removed using more than one technique (e.g., glove-in-glove or bird beak).
2. **Remove gown.** Untie all ties (or unsnap all buttons). Some gown ties can be broken rather than untied. Do so in gentle manner, avoiding a forceful movement. Reach up to the shoulders and carefully pull gown down and away from the body. Rolling the gown down is an acceptable approach. Dispose in trash receptacle. *
3. **Healthcare personnel may now exit patient room.**
4. **Perform hand hygiene.**
5. **Remove face shield or goggles.** Carefully remove face shield or goggles by grabbing the strap and pulling upwards and away from head. Do not touch the front of face shield or goggles.
6. **Remove and discard respirator (or facemask if used instead of respirator).** Do not touch the front of the respirator or facemask.*
   - **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.
   - **Facemask:** Carefully untie (or unhook from the ears) and pull away from face without touching the front.
7. **Perform hand hygiene after removing the respirator/facemask and before putting it on again if your workplace is practicing reuse.***

Universal Source Control

As part of source control efforts, DHCP should wear a 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 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 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)

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

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)external icon. 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), and a gown or protective clothing** 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**, consider the use of 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 maskexternal icon](#). Use the highest [level of surgical maskpdf iconexternal icon](#) 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 appropriately 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.
    6. Put on clean non-sterile gloves.
        - 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.
        - Discard disposable gowns after each use.
        - [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 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 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.

Follow the link for graphics and a video on donning and doffing PPE:
https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html

Gowns and Lab Coats

Gowns

- Put on a clean isolation gown upon entry into the patient room or area. Change the 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 there are shortages of gowns, they should be prioritized for:
    - aerosol generating procedures
    - care activities where splashes and sprays are anticipated
    - high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of HCP. Examples include:
        - dressing
        - bathing/showering
        - transferring
        - providing hygiene
        - changing linens
        - changing briefs or assisting with toileting
        - device care or use
        - wound care
    - **Use isolation gown alternatives that offer equivalent or higher protection.**
    - Several fluid-resistant and impermeable protective clothing options are available in the marketplace for HCP. These include isolation gowns and surgical gowns. When selecting the most appropriate protective clothing, employers should consider all of the available information on recommended protective clothing,

including the potential limitations. Nonsterile, disposable patient isolation gowns, which are used for routine patient care in healthcare settings, are appropriate for use by HCP when caring for patients with suspected or confirmed COVID-19. In times of gown shortages, surgical gowns should be prioritized for surgical and other sterile procedures. Current U.S. guidelines do not require use of gowns that conform to any standards.

Reusable (i.e., washable) gowns are typically made of polyester or polyester-cotton fabrics. Gowns made of these fabrics can be safely laundered according to routine procedures and reused. Care should be taken to ensure that HCP do not touch outer surfaces of the gown during care.

- Laundry operations and personnel may need to be augmented to facilitate additional washing loads and cycles
- Systems are established to routinely inspect, maintain (e.g., mend a small hole in a gown, replace missing fastening ties), and replace reusable gowns when needed (e.g., when they are thin or ripped)
  - An issue of recent concern involves the use of disposable (i.e., single use) versus reusable (i.e., multiple use) surgical attire and fabrics in health-care settings.[1292] Regardless of the material used to manufacture gowns and drapes, these items must be resistant to liquid and microbial penetration.[7, 1293–1297] Surgical gowns and drapes must be registered with FDA to demonstrate their safety and effectiveness. Repellency and pore size of the fabric contribute to gown performance, but performance capability can be influenced by the item's design and construction.[1298, 1299] Reinforced gowns (i.e., gowns with double-layered fabric) generally are more resistant to liquid strike-through.[1300, 1301] Reinforced gowns may, however, be less comfortable. Guidelines for selection and use of barrier materials for surgical gowns and drapes have been published.[1302] When selecting a barrier product, repellency level and type of barrier should be compatible for the exposure expected.[967] However, data are limited regarding the association between gown or drape characteristics and risk for surgical site infections.[7, 1303] Health-care facilities must ensure optimal protection of patients and health-care workers. Not all fabric items in health care lend themselves to single-use. Facilities exploring options for gowns and drapes should consider the expense of disposable items and the impact on the facility's waste-management costs once these items are discarded. Costs associated with the use of durable goods involve the fabric or textile items; staff expenses to collect, sort, clean, and package the laundry; and energy costs to operate the laundry if on-site or the costs to contract with an outside service

Temporary Hygiene

As stated above, if you have specific legal questions, you should ask a lawyer. As the lawyer Michal Heiner stated, Massachusetts is an at-will employer/employee state. This means that you can quit or be fired from a job without notice. As a temp, you are deemed an employee unless working as an independent contractor. You should be supplied with the appropriate PPE. Unfortunately, if you appear to work in an office, and they do not supply you with the required PPE (a fit tested N95 respirator mask), they can not bring litigation against you for refusing to work. Some temp companies are communicating with the offices prior to placement and ensuring the appropriate PPE is available. You should ask the temp agency you work for what their standards and guidelines are during this time and how they are ensuring the appropriate PPE is available. You can also call ahead of your placement and ask the office directly how they are handling their schedules, engineering controls, and PPE. Ultimately it is up to you when taking on a gig type job.

Appointment Considerations from the CDC

Recommendations

Minimize Chance for Exposures

Ensure facility policies and practices are in place to minimize exposures to respiratory pathogens including SARS-CoV-2, the virus that causes COVID-19. Measures should be implemented before patient arrival, upon arrival, throughout the duration of the patient's visit, and until the patient's room is cleaned and disinfected. It is particularly important to protect individuals at increased risk for adverse outcomes from COVID-19 (e.g., older individuals with comorbid conditions), including HCP who are in a recognized risk category.

- ## Universal Source Control

Continued community transmission has increased the number of individuals potentially exposed to and infectious with SARS-CoV-2. Fever and symptom screening have proven to be relatively ineffective in identifying all infected individuals, including HCP. Symptom screening also will not identify individuals who are infected but otherwise asymptomatic or pre-symptomatic; additional interventions are needed to limit the unrecognized introduction of SARS-CoV-2 into healthcare settings by these individuals. As part of aggressive source control measures, healthcare facilities should consider implementing policies requiring everyone entering the facility to wear a cloth face covering (if tolerated) while in the building, regardless of symptoms. This approach is consistent with a [recommendation to the general public](#) advising them to wear a cloth face covering whenever they must leave their home.

- ## Patient and Visitors

Patients and visitors should, ideally, be wearing their own cloth face covering upon arrival to the facility. If not, they should be offered a facemask or cloth face covering as supplies allow, which should be worn while they are in the facility (if tolerated). They should also be instructed that if they must touch or adjust their cloth face covering they should perform hand hygiene immediately before and after. Facemasks and cloth face coverings should not be placed on young children under age 2, anyone who has trouble breathing, or anyone who is unconscious, incapacitated or otherwise unable to remove the mask without assistance. Patients may remove their cloth face covering when in their rooms but should put them back on when leaving their room or when others (e.g., HCP, visitors) enter the room. Screening for symptoms and appropriate triage, evaluation, and isolation of individuals who report symptoms should still occur.

- Healthcare Personnel

As part of source control efforts, HCP should wear a facemask at all times while they are in the healthcare facility. When available, facemasks are generally preferred over cloth face coverings for HCP as facemasks offer both source control and protection for the wearer against exposure to splashes and sprays of infectious material from others. **If there are anticipated shortages of facemasks, facemasks should be prioritized for HCP and then for patients with symptoms of COVID-19 (as supply allows). Cloth face coverings should NOT be worn instead of a respirator or facemask if more than source control is required.**

Some HCP whose job duties do not require PPE (e.g., clerical personnel) might continue to wear their cloth face covering for source control while in the healthcare facility. Other HCP (e.g., nurses, physicians) might wear their cloth face covering for part of the day when not engaged in direct patient care activities, only switching to a respirator or facemask when PPE is required. To avoid risking self-contamination, HCP should consider continuing to wear their respirator or facemask (extended use) instead of intermittently switching back to their cloth face covering. Of note, N95s with an exhaust valve might not provide source control. HCP should remove their respirator or facemask and put on their cloth face covering when leaving the facility at the end of their shift. They should also be instructed that if they must touch or adjust their facemask or cloth face covering they should perform hand hygiene immediately before and after.

HCP should have received job-specific training on PPE and demonstrated competency with selection and proper use (e.g., putting on and removing without self-contamination).

Because cloth face coverings can become saturated with respiratory secretions, care should be taken to prevent self-contamination. They should be changed if they become soiled, damp, or hard to breathe through, laundered regularly (e.g., daily and when soiled), and, hand hygiene should be performed immediately before and after any contact with the cloth face covering. Facilities should also provide training about when, how, and where cloth face coverings can be used (e.g., frequency of laundering, guidance on when to replace, circumstances when they can be worn in the facility, importance of hand hygiene to prevent contamination).

● Before Arrival
  - When scheduling appointments for routine medical care (e.g., annual physical, elective surgery), instruct patients to call ahead and discuss the need to reschedule their appointment if they develop fever or symptoms of COVID-19 on the day they are scheduled to be seen. Advise them that they should put on their own cloth face covering, regardless of symptoms, before entering the facility.
  - When scheduling appointments for patients requesting evaluation for possible COVID-19, use nurse-directed triage protocols to determine if an appointment is necessary or if the patient can be managed from home.
    - If the patient must come in for an appointment, instruct them to call beforehand to inform triage personnel that they have symptoms of

COVID-19 and to take appropriate preventive actions (e.g., follow triage procedures, put on their own cloth face covering prior to entry and throughout their visit or, if a cloth face covering cannot be tolerated, hold a tissue against their mouth and nose to contain respiratory secretions).

- ○ If a patient is arriving via transport by emergency medical services (EMS), EMS personnel should contact the receiving emergency department (ED) or healthcare facility and follow previously agreed upon local or regional transport protocols. This will allow the healthcare facility to prepare for receipt of the patient.

● Upon Arrival and During the Visit

- ○ Limit and monitor points of entry to the facility.
- ○ Advise patients and visitors entering the facility, regardless of symptoms, to put on a cloth face covering or facemask before entering the building and await screening for fever and symptoms of COVID-19.
- ○ Take steps to ensure everyone adheres to respiratory hygiene and cough etiquette, hand hygiene, and all patients follow triage procedures throughout the duration of the visit.
    - ■ Post visual alertspdf icon (e.g., signs, posters) at the entrance and in strategic places (e.g., waiting areas, elevators, cafeterias) 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.
    - ■ Consider establishing triage stations outside the facility to screen individuals before they enter.
- ○ Ensure rapid, safe triage and isolation of patients with symptoms of suspected COVID-19 or other respiratory infection (e.g., fever, cough).
    - ■ Ensure triage personnel who will be taking vitals and assessing patients wear a respirator (or facemask if respirators are not available), eye protection, and gloves for the primary evaluation of all patients presenting for care until COVID-19 is deemed unlikely.
    - ■ Prioritize triage of patients with symptoms of suspected COVID-19.
    - ■ Triage personnel should have a supply of facemasks or cloth face coverings; these should be provided to all patients who are not wearing

their own cloth face covering at check-in, assuming a sufficient supply exists.
- Ensure that, at the time of patient check-in, all patients are asked about the presence of fever, symptoms of COVID-19, or contact with patients with possible COVID-19.
- Isolate patients with symptoms of COVID-19 in an examination room with the door closed. If an examination room is not readily available ensure the patient is not allowed to wait among other patients seeking care.
  - Identify a separate, well-ventilated space that allows waiting patients to be separated by 6 or more feet, with easy access to respiratory hygiene supplies.
  - In some settings, patients might opt to wait in a personal vehicle or outside the healthcare facility where they can be contacted by mobile phone when it is their turn to be evaluated.
- Incorporate questions about new onset of COVID-19 symptoms into daily assessments of all admitted patients. Monitor for and evaluate all new fevers and symptoms consistent with COVID-19 among patients. Place any patient with unexplained fever or symptoms of COVID-19 on appropriate Transmission-Based Precautions and evaluate.
- Prioritize patients with suspected COVID-19 who require admission to a hospital or congregate care setting (e.g., nursing home) for testing.
- **Additional Strategies to Minimize Chances for Exposure:** The need for additional strategies will be dependent on factors including the level of SARS-CoV-2 transmission in the community, the number of patients with COVID-19 being cared for at the facility and if healthcare-associated transmission is occurring, and any current or anticipated PPE or staffing shortages. Factors may change over time and will vary by practice type, setting, and the potential for patient harm if care is deferred. Examples of strategies might include:
  - Implementing alternatives to face-to-face triage and visits, such as telehealthexternal icon
  - Designating an area at the facility (e.g., an ancillary building or temporary structure) or identifying a location in the area to be a "respiratory virus evaluation center" where patients with fever or symptoms of COVID-19 can seek evaluation and care.
  - Cancelling or modifying in-person group healthcare activities (e.g., group therapy, recreational activities) by implementing virtual methods (e.g., video format for group therapy) or scheduling smaller in-person group sessions while having patients sit at least 6 feet apart and wear a cloth face covering.
  - Postponing elective procedures, surgeries, and non-urgent outpatient visits.
    - In addition to the factors above (e.g., level of community transmission), facilities should consider the potential for patient harm if care is deferred when making decisions about providing elective procedures, surgeries, and non-urgent outpatient visits. Refer to the Framework for Healthcare

[Systems Providing Non-COVID-19 Clinical Care During the COVID-19 Pandemic](#) for additional guidance. (CDC, 2020)

ADA Patient Screening Form

Patient Screening Form

ADA.

Patient Name:

	PRE-APPOINTMENT		IN-OFFICE	
	Date:		Date:	
Do you/they have fever or have you/they felt hot or feverish recently (14-21 days)?	☐ Yes	☐ No	☐ Yes	☐ No
Are you/they having shortness of breath or other difficulties breathing?	☐ Yes	☐ No	☐ Yes	☐ No
Do you/they have a cough?	☐ Yes	☐ No	☐ Yes	☐ No
Any other flu-like symptoms, such as gastrointestinal upset, headache or fatigue?	☐ Yes	☐ No	☐ Yes	☐ No
Have you/they experienced recent loss of taste or smell?	☐ Yes	☐ No	☐ Yes	☐ No
Are you/they in contact with any confirmed COVID-19 positive patients? *Patients who are well but who have a sick family member at home with COVID-19 should consider postponing elective treatment.*	☐ Yes	☐ No	☐ Yes	☐ No
Is your/their age over 60?	☐ Yes	☐ No	☐ Yes	☐ No
Do you/they have heart disease, lung disease, kidney disease, diabetes or any auto-immune disorders?	☐ Yes	☐ No	☐ Yes	☐ No
Have you/they traveled in the past 14 days to any regions affected by COVID-19? (as relevant to your location)	☐ Yes	☐ No	☐ Yes	☐ No

Positive responses to any of these would likely indicate a deeper discussion with the dentist before proceeding with elective dental treatment.

- For testing, see the list of State and Territorial Health Department Websites for your specific area's information.

Covid-19 Resources

ADA Return to work Toolkit-
https://success.ada.org/~/media/CPS/Files/Open%20Files/ADA_Return_to_Work_Toolkit.pdf
OSHA- Respirators
https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134
https://www.osha.gov/SLTC/covid-19/dentistry.html
CDC- Don and Dof PPE:
 https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html
CDC- PPE respirators
https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html#PPE
https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132

LIST OF PHD in state:
https://www.naccho.org/membership/lhd-directory?searchType=standard&lhd-state=MA#card-filt
er

NIOSH Fit testing information:
https://www.cdc.gov/niosh/npptl/hospresptoolkit/fittesting.html
https://success.ada.org/~/media/CPS/Files/COVID/Conducting_Respirator_Fit_Tests_And_Seal
_Checks.pdf

How to check if N95 kn95 masks are approved:
https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/international-respirator-purchase.h
tml

Mass.gov BORID Covid guidance:
https://www.mass.gov/news/board-of-registration-in-dentistry-borid-covid-19-guidance

CDC Covid-19 PowerPoint:
https://emergency.cdc.gov/coca/ppt/2020/Final-COCA-Call-Slides_06-03-2020.pdf

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https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.ht

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