Infection Control Checklist for Dental Offices

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The COVID-19 pandemic has forced the world to face a new normal. In addition to the terrible morbidity and mortality toll on the global population, the spread of SARS-CoV-2 as a droplet-mediated respiratory pathogen has also severely impacted delivery of health care.

As the COVID-19 pandemic progressed, dentists in the United States were called upon to suspend nonessential and elective dental procedures.

The prolonged closure of the vast majority of dental offices was unprecedented and has had a major impact on dental practices, yet it is unknown at this time how COVID-19 may permanently change infection control practices in dental health care settings. While the science and understanding of the COVID disease continues to evolve, infection control guidance and modifications to patient procedures are being recommended by the CDC, OSHA, NIOSH, ADA, ADHA, and other health organizations. Simultaneously, new products are entering the dental market to manage aerosols, while personal protective equipment (surgical masks and respirators) remain scarce. Thus, as dentists open their practices, they may be understandably confused and anxious.

The highly transmissible nature and airborne transmission of SARS-CoV-2 presents a unique hazard to dental offices. OSHA places dental professionals in a very high exposure risk category, as their jobs are those with high potential for exposure to known or suspected sources of the virus during specific procedures. And according to the CDC, "dental settings have unique characteristics that warrant additional infection control considerations" (CDC, 4/27/2020).

As dental offices reopen, dental personnel must take the appropriate precautions to protect patients and dental health care professionals from the spread of COVID-19, as the safety of team members and patients must remain the top priority. In addition, dental personnel should consider that this is a rapidly evolving situation, and guidance will continue to be updated as more information becomes available. As with other infection prevention guidelines and regulations, dental personnel should comply with all federal, state, local, tribal, and/or territorial public health agencies, professional organizations, regulatory bodies, and state dental practice acts regarding the practice of dentistry. The latter includes Executive Orders on reopening as issued by the governor.

The purpose of this article is to help dental team members comply with current infection control regulations and guidelines. The following user-friendly checklist has been developed using the most recently available science and clinical-based evidence gathered from multiple health professional resources. It is intended to support practices as they evaluate (e.g., self-assess) and reopen in the era of COVID-19.

Dental personnel must take the appropriate precautions to protect patients and dental health care professionals from the spread of COVID-19, as the safety of team members and patients must remain the top priority.

Note that this checklist is current as the date of publication, yet these guidelines may change as the understanding of SARS-CoV-2 transmission, diseases sequelae, and effective health professional infection prevention practices evolve.

Checklist begins on the next page.

Checklist 1 — Office Equipment and Facility Preparation

General Considerations	**Reference and Resources (See Pages 46-47):**
Stay informed of region-specific information and recommendations Monitor trends in local cases of COVID-19 and deaths Tip: See MI Safe Start Map to track phases of COVID-19 in your county in Michigan	1, 2, 63
If your community is experiencing no transmission or minimal community transmission, use strict adherence to standard precautions when providing care to patients without suspected or confirmed COVID-19	3
If there is a surge in incidence of COVID-19, consider providing emergency services only Note: Continually monitor risk level incidence, as there may be times when it will be important to cease nonessential procedures if there is a surge in COVID-19 incidence	43
Consider a soft opening in which all dental team members practice new routines and procedures	43
Be familiar with COVID-19 health care infection prevention to dentistry	4, 5, 6
Prioritize urgent and emergency dental visits while commencing non-emergency and elective dental care	38
Maintain special hours for highly vulnerable patients, including the elderly and those with chronic conditions	62
Office Equipment and Facility Preparation	
Utilize resources for reopening policies and protocols	7, 11, 44
Dental unit waterlines: Follow recommendations for monitoring water quality provided by the manufacturer of the unit and waterline treatment product • Follow protocol for office closure and storage, and recommended maintenance per manufacturer • Shock all DUWLs including those used for ultrasonic scalers and other devices attached to DUWLs • Test water quality to ensure it meets standards for safe drinking water as established by the EPA (< 500 CFU/mL)	8, 9
Biological monitoring: Monitor sterilizers with a biological indicator with a matching control (i.e., biological indicator and control from same lot number) prior to the first day back at work	8, 10
Instrument cleaning equipment: • Perform routine cleaning and maintenance on instrument cleaning equipment (instrument washers, ultrasonic units, and sterilizers, per manufacturer's IFU) • Dental handpiece maintenance equipment: Perform routine cleaning, lubrication, and maintenance per manufacturer's IFU to prevent buildup of lubricant	8, 9
Follow protocol for storage and recommended maintenance per manufacturer for air compressor, vacuum and suction lines, radiography equipment, high tech equipment, amalgam separators, and other dental equipment • Follow instructions for use (IFUs) from manufacturers of equipment	5, 11
Use engineering controls to shield dentistry workers, patients, and visitors from potential exposure to SARS-CoV-2. This may include: • Easily decontaminated physical barriers or partitions between patient treatment areas (e.g., curtains separating patients in semi-private areas) • If dental offices are equipped with the capability, use local exhaust ventilation to capture and remove mists or aerosols generated during dental care • If possible, use directional airflow, such as from fans, to ensure that air moves	5, 45

Checklist 1 — (Cont'd)

Office Equipment and Facility Preparation (Cont'd)	Reference and Resources (See Pages 46-47):
through staff work areas before patient treatment areas—not the reverse • Note: A qualified industrial hygienist, ventilation engineer, or other professional may help ensure that ventilation removes, rather than creates, workplace hazards	
Consider current HVAC system of facility • Consider air exchanges rate in operatories per ANSI/ASHRAE/ASHE standards • Check if HVAC system already has or is adaptable to HEPA filtration and Ultraviolet Germicidal Irradiation (UVGI) • Investigate the ability to increase percentage of outdoor air supplied through HVAC system • Limit the use of demand-controlled ventilation (triggered by temperature setpoint and/or by occupancy controls) during occupied hours • Consider the use of a portable HEPA air filtration unit during and following an aerosol-generating procedure (place HEPA unit within vicinity of patient's chair) • Consult with qualified ventilation engineer to determine office capabilities	5, 58
Consider the use of upper-room ultraviolet germicidal irradiation (UVGI) as an adjunct to higher ventilation and air cleaning rates	51
Biohazardous waste: Arrange to have biohazardous waste picked up if this was not done before office closure; follow state and federal guidelines	8, 12
Patient placement: Ideally provide care in individual patient room If open floor plan, there should be: • At least 6 feet between patient chairs • Physical barriers between chairs (easy to clean, floor to ceiling) • Operatories should be oriented parallel to direction of airflow if possible • When feasible, place patient's head near return air vents, away from corridors, and towards the rear wall	5
Reception Area Policies	
• Limit the number of appointments to maintain social distancing • If possible, maintain a single-entry point • Waiting rooms should be marked to enforce social distancing • Enable contactless sign, checkout, and payment as soon as practicable	62
Print and place signage in reception room instructing patients on: • Standard recommendations for respiratory hygiene and cough etiquette • Instructional information on COVID-19	13, 14
Tissues, no-touch receptacle, and alcohol-based hand rub (ABHR) or hand washing facilities are available at reception area	9
• If facility has toys, reading materials, remote controls or other communal objects, remove them or clean them regularly • Place chairs in reception area 6 feet apart or consider "virtual reception area" • Install physical barriers (e.g. glass or plastic windows) at reception area if possible	5, 39, 62
Consider providing welcome-back reassurance letter to patients. Inform of changes within facility including: • Pre-screening protocol • Wear mouth covering to facility • Hand sanitizer upon entry and exit of facility • Social distancing • Essential guests only	39

Checklist 2 — Education and Training of Dental Personnel

Education and Training	Reference and Resources (See Pages 46-47):
Create an infectious disease preparedness and response plan that can help guide protective actions against COVID-19 Train all DHCP and those at risk of occupational exposure of COVID-19 with job- or task-specific education and training on preventing transmission of COVID-19 to include: • Transmission of SARS-CoV-2 (the virus that causes COVID-19) • A description of their exposure risks • Review of prevention strategies and infection prevention policies and procedures • How to manage work-related illness and injuries, including post exposure protocol • Review of work restrictions for the exposure or infection	15, 16, 29, 37, 40, 44, 45
Develop and implement a comprehensive respiratory protection program that must contain the following elements: • A written program that is worksite-specific • Respiratory selection • Employee training • Fit testing (initial and annual) • Medical evaluation • Respiratory use • Cleaning, maintenance, and repair	40, 46
Establish a response plan and team or leader to design, implement, monitor, and report on key practices that apply to all site visitors, and manage COVID-19 preparedness	62
Employers must create a written exposure control plan that includes: • Engineering controls • Administrative controls • Workplace controls • Hand hygiene and environmental surface disinfection • Personal protective equipment • Health surveillance • Training	40, 44, 46, 62
Ensure that DHCP are educated, trained, and have practiced the appropriate use of PPE prior to caring for a patient, including attention to correct use of PPE and prevention of contamination of clothing, skin, and the environment during the process of removing such equipment	19
Provide OSHA annual bloodborne pathogen training per BBP Standard (if due)	47
Provide initial fit-testing with use of N95 and other NIOSH-approved respirators Note: OSHA has temporarily lifted the requirement for annual fit tests, as long as employers have performed initial fit tests for each health care professional	20, 46, 48, 49
Promote frequent and thorough hand washing, including by providing workers and visitors with a place to wash their hands. If soap and running water are not immediately available, provide alcohol-based hand rubs containing at least 60% alcohol	8, 9, 42, 43, 44

Checklist 3 — Personal Protective Equipment (PPE)

Personal Protective Equipment	**Reference and Resources (See Pages 46-47):**
Ensure that you have appropriate amount of PPE and supplies to support patient volume	5
Procure adequate PPE supplies, while also setting restrictions on supplies to reduce hoarding	62
Cloth face coverings may be worn by: • Clerical personnel (non-clinical personnel) • Clinical personnel when not engaged in direct patient care activities • Dental personnel when leaving facility at end of shift • Cloth face coverings should be laundered daily and when soiled	5
Wearing of facemasks: • If facemask or cloth covering is touched or adjusted, hand hygiene should be performed immediately before and after • Change masks and coverings if soiled, damaged, wet, or hard to breathe through	5
Employers should select appropriate PPE and provide to dental personnel and train when to use PPE, how to don and doff PPE, disposal, and limitations of PPE Reusable PPE should be properly cleaned, decontaminated, and maintained after use	44, 45, 50
For procedures that are likely to generate splashing or spattering of blood or body fluids: Wear surgical mask, eye protection (goggles, protective eyewear with solid side shields, or full face shield), gown or protective clothing	5
For aerosol-generating procedures on patients assumed to be non-contagious: DHCP should wear N95 respirators (or a mask that offers a higher level of protection), protective eyewear, gowns, and gloves when treating patients • If respirator is not available, use highest level of surgical mask available and full face shield (consider wearing a full-face shield over an ASTM level 3 mask) • Ensure that the mask is cleared by the US FDA as a surgical mask • If surgical mask and full face shield are not available, do not perform aerosol-generating procedures	6, 22, 39, 41, 53, 54
N-95 respirators should be CDC/ NIOSH-certified • Alternatives to NIOSH-certified respirators may be acceptable if on current FDA list of authorized respirators • Respirators must be used in context of complete respiratory protection program in accordance with OSHA Respiratory Protection Standard • Facilities implementing reuse or extended use of PPE will need to adjust their donning and doffing procedures to accommodate those practices	22, 52, 53, 54, 55, 56
If surgical loupes are worn, barrier protect with shield or clean/disinfect between patients per IFU of loupe manufacturer	39
Changing of PPE: • Change masks and gloves between patients • Clean, disinfect / launder reusable PPE after each use • Discard disposable items after use	5, 39
DHCP should adhere to the standard sequence of donning and doffing of PPE for COVID-19 (note multiple sequences recommended for donning and doffing PPE)	5, 19, 24
• Identify a designated clean area to don PPE • Identify a designated area to doff contaminated PPE	43
For shortages of PPE (especially surgical masks and respirators) follow CDC strategies to optimize supplies of PPE Note: policies are intended to remain in effect during times of shortage during the COVID-19 pandemic	21, 22

Checklist 3 — (Cont'd)

Personal Protective Equipment (Cont'd)	Reference and Resources (See Pages 46-47):
Do not perform dental care without minimally acceptable PPE. If appropriate PPE is not available, refer the patient to a clinician who has the appropriate PPE	5, 19, 44
Disposable foot covers and head covers are not officially recommended: Use professional judgment	39
Clothing: • If available, disposable gowns should be considered • Disposable gowns should be discarded after each use • Cloth gowns should be laundered after each use	5, 25
Facial hair: For workers with facial hair who wear tight-fitting respirators, ensure respirator will provide seal Tip: See CDC/NIOSH Infographic on facial hairstyles and filtering facepiece respirators intended for workers who wear tight-fitting respirators	23

Checklist 4 — Medical Conditions, Work-Related Illness, and Work Restrictions

Medical Conditions, Work-related illness, and Work Restriction:	Reference and Resources (See Pages 46-47):
Ensure DHCP have received seasonal flu vaccine and all other immunizations for health care personnel	26, 39
All DHCP should self-monitor for respiratory symptoms (cough, shortness of breath, sore throat) and check their temperature at the beginning of their shift, regardless of the presence of other symptoms	18
Screen all dental personnel entering the workplace for fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, diarrhea Note: This list does not include all possible symptoms Maintain confidentiality • DHCP experiencing influenza-like-illness (fever with either cough or sore throat, muscle aches) or shortness of breath, should not report to work • Note: DHCP should be free of fever (100.0°F or greater) without the use of fever-reducing or other symptom-altering medicines (e.g., cough suppressants)	39
For dental health care personnel who were confirmed COVID-19: • Employers may require a doctor's note to release an employee who was tested and confirmed COVID-19 positive to return to work • Consider consulting with local infectious disease experts when making return-to-work decisions for individuals who might remain infectious longer than 10 days (e.g., severely immunocompromised) • If HCP had COVID-19 ruled out and have an alternate diagnosis (e.g., tested positive for influenza), criteria for return to work should be based on that diagnosis	62

Checklist 4 — (Cont'd)

Medical Conditions, Work-related illness, and Work Restriction: (Cont'd)	Reference and Resources (See Pages 46-47):
Some DHCP are at higher risk of severe COVID-19 disease. This includes those of older age (65 years and older), serious underlying medical condition, immunocompromised, etc. DHCP at higher risk for COVID-19 disease should consider a medical evaluation before coming to work	17, 43, 44
Pregnant women: • Should avoid people who are sick or who have been exposed to the virus • Seek and follow medical guidance regarding work • Consider limiting exposure of pregnant staff to patients especially during higher risk exposures (aerosol-generating procedures)	17, 27, 60
If DHCP suspect they have COVID-19, they should: • Notify employer • Contact local or state health departments • Ensure DHCP notifies their health care provider to determine whether medical evaluation is necessary • DHCP with suspected or confirmed COVID-19 should follow Return to Work Criteria for HCP	28
DHCP who have had potential exposure in a dental health care setting to patients with coronavirus disease should follow CDC-recommended guidance for monitoring and work restrictions	29

Checklist 5 — Environmental Surfaces

Environmental Surfaces:	Reference and Resources (See Pages 46-47):
Limit the number of appointments to allow adequate time between patients for cleaning, accounting for the amount of time needed for disinfectants to be effective per product label	62
Follow CDC guidelines for cleaning and disinfection of housekeeping surfaces and clinical contact surfaces • Follow the manufacturer's IFU for contact time to ensure adequate disinfection of surfaces	3, 8, 9
To disinfect, use products that meet EPA's criteria for use against SARS-CoV2, and are appropriate for the surface. Tip: Use the product name or EPA reg. number to ensure products or equivalent is effective against coronaviruses and SARS-CoV2	57
Provide wipes or materials to clean pens, clipboard, counter, phone, keyboards, light switches and other high-touch surfaces On a regular schedule, wipe all touchable surface areas with an approved surface cleaner. (e.g., tables, chair arms, doorknobs, light switches)	39

Checklist 5 — (Cont'd)

Environmental Surfaces: (Cont'd)	Reference and Resources (See Pages 46-47):
Prior to clinical care, plastic barriers: • Are applied to difficult-to-clean surfaces, e.g., air/water syringe, suction valve, technology, handpiece docking area, and computer keyboards. • Should be fluid-resistant, fit properly, and be easy to remove. If the surface under the barrier becomes contaminated, proper cleaning and disinfection must be performed.	8, 9
Alternative disinfection methods (ultrasonic waver, high intensity UV radiation, LED blue light) is not known • EPA cannot confirm whether or under what circumstances such products might be effective against COVID-19 • Sanitizing tunnels are not recommended	5

Checklist 6 — Patient Care

Pre-appointment Screening	Reference and Resources (See Pages 46-47):
Conduct triage to interview the patient by telephone, text monitoring system, or video conference before the visit	30, 45, 59, 62
Instruct patients to use available telephone advice lines, patient portals, and online self-assessment tools, or call and speak to their health care provider if they become ill with symptoms such as fever, cough, or shortness of breath	31, 32
Request that patient bring face coverage to appointment	39
Screen patient for symptoms of upper respiratory infection including fever, cough and shortness of breath, flu-like symptoms (GI upset, headache, fatigue), recent loss of taste or smell) Inquire whether they have been in contact with any confirmed COVID-19-positive patients, if age is over 60, and travel history in past 14 days as relevant to location	5, 39, 43
If patient reports symptoms consistent with COVID-19, avoid non-emergent dental care and delay dental care until the patient has recovered	31, 32, 62
Appointment Check-in	
When possible, paperwork should be made available on a website or mailed to the patient so it can be completed prior to the appointment	62
Ensure patient has donned their own cloth face coverage or provide a surgical mask Have patient (and those accompanying patient) perform hand hygiene with hand washing or 60-90% ABHR	39
Children under the age of 2 are not required to wear a face covering	62

Checklist 6 — (Cont'd)

Appointment Check-in (Cont'd)	Reference and Resources (See Pages 46-47):
Re-screen patient for symptoms of upper respiratory infection (see pre-appointment screening) Check patient's temperature (<100.4°F) with thermometer • Consider touchless thermometer to minimize cross contamination • Follow manufacturer's instructions • Maintain patient confidentiality	39
If dental patient does not have a fever (100.4° or above) and is otherwise without even mild symptoms consistent with COVID-19 infection (e.g., fever, sore throat, cough, difficulty breathing), they can be seen in dental settings with appropriate protocols and PPE in place If dental 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 signs/symptoms of COVID-19 infection (e.g., fever, sore throat, cough, difficulty breathing), they can be seen in dental settings with appropriate protocols and PPE in place	39
If positive responses to screening questions: • Isolate patient to prevent transmission of the disease to other individuals • Engage in deeper discussion with the dentist prior to proceeding with elective dental treatment • If patient is not acutely sick, send the patient home and instruct the patient to call his/her primary care provider • If acutely sick (for example, has trouble breathing) refer the patient to a medical facility	5, 39, 45
If dental procedures are performed on patients with suspected or confirmed COVID-19, ensure: • Only emergency dental procedures are performed • Appropriate precautions are taken • Appropriate PPE is available (N95 or higher-level respirator, eye protection, gloves, gown) and worn by DHCP	45, 62
If emergency dental care is medically necessary for a patient who has or is suspected of having COVID-19, follow CDC Interim Infection and Control Recommendations for Patients with Suspected or Confirmed COVID-19: • Individual patient room with closed door • Ideally use airborne infection isolation room (AIIR) • Avoid aerosol-generating procedures If aerosol-generating procedures must be performed: • DHCP wear N95 or higher-level respirator, eye protection, gloves, gown • Number of DHCP present should be limited to those essential for patient care • Consider scheduling patient at end of day • Do not schedule any other patients at that time	4
People who have recovered from COVID-19 and have completed home clearance can receive dental care. This decision may be based on two strategies: • Symptom-based strategy • Test-based strategy	5, 36
Reception Area Protocols:	
Observe social distancing: • Limit the number of persons accompanying the patient	5, 39, 62

Checklist 6 — (Cont'd)

Reception Area Protocols (Cont'd)	Reference and Resources (See Pages 46-47):
Observe social distancing: (Cont'd) • Per LARA: Patient may be accompanied by one caregiver • No hand-shaking or physical contact • All persons should remain at least 6 feet apart • Minimize overlapping dental appointments	5, 39, 62
Limit waiting area occupancy by asking patients to wait in cars or outside, while maintaining social distancing; call patient to enter when ready	62
Recommendations for front-desk personnel: • Perform frequent hand hygiene by hand washing or with alcohol-based hand rub with 60-95% alcohol • Wearing of gloves is not recommended • Wear a surgical facemask (change mask if it becomes wet or soiled) • If patients wish to, or if the waiting room does not allow for appropriate "social distancing" (chairs situated at least 6 feet or 2 meters apart), they may wait in their personal vehicle or outside the facility where they can be contacted by mobile phone when it is their turn to be seen (this can be communicated to patients at the moment of scheduling the appointment, based on established office procedures)	5, 39
Treatment Protocols:	
• Limit clinical care to one patient at a time when possible • Set up operatories so only clean or sterile supplies are readily accessible • All other supplies and instruments should be in covered storage	5
Consider revised informed consent • Check with malpractice carrier for any consideration of revisions	39
Access to operatory: • Limit access to operatory to the patient only when possible. Supply a mask and shield to anyone who accompanies the patient. • Keep staff level in operatory to the minimum required • Staff should mask pre-entry to operatory • Limit paperwork in operatory	39
• Perform hand hygiene before and after patient contact, contact with potentially infectious materials, before putting on and after removing PPE including gloves • Use ABHR with 60-95% alcohol or wash hands with soap and water for 20 seconds • If hands are visibly soiled, use soap and water	5
Prior to beginning dental procedure: • Review overall health history • Confirm that screening questions were asked • Review if necessary	39, 42
Pre-procedural mouth rinses: • Perform a one-minute pre-procedural mouth rinse with an antimicrobial product to reduce the level of oral microorganisms in aerosols and spatter during dental procedures • Per ADA Toolkit: No documented evidence exists at this time to support the pre-procedural rinses to reduce the transmission of the COVID-19 virus.	8, 39, 61

Checklist 6 — (Cont'd)

Treatment Protocols (Cont'd)	Reference and Resources (See Pages 46-47):
Use professional judgment to employ the lowest aerosol-generating armamentarium when delivering any restorative or hygiene care (e.g., dental turbines, micro-motor handpieces, ultrasonic scalers, air-water syringes) • Use hand instrumentation • Use selective plaque and stain removal • Do not use air polishing • Avoid air/water syringe combination function	39, 43, 45
If aerosol-generating procedures are necessary, use four-handed dentistry to minimize exposure by using dental dams, high-volume evacuation (HVE)	5, 39, 45
Consider the use of extra-oral suction devices and dental isolation systems that also limit aerosol Note: There is limited evidence of the efficacy of these devices in reducing disease transmission; these devices may reduce the volume of aerosolized water, oral fluids, and particulate debris	45
Use of nitrous oxide: Use disposable nasal hood; tubing should either be disposable or if reusable, sterilized according to the manufacturer's recommendations	39
Discharge Protocols:	
Upon discharge, patient should be: • Asked to re-don their personal nose/face coverage or surgical mask when they leave treatment area and/or approach front desk • Encouraged to leave the practice with protective coverage or mask • Asked to perform hand hygiene • Reminded to report any signs or symptoms of COVID-19 within the next two days to the dental facility	39, 5
Follow CDC guidelines for cleaning and disinfection of housekeeping surfaces and clinical contact surfaces • Clean and disinfect operatory while wearing gloves, mask and face shield or goggles	8, 9, 39
Follow CDC guidelines for cleaning, disinfection, and sterilization of patient-care items. • Follow manufacturer's instructions for times and temperatures recommended for sterilization of specific dental devices	5
Dental Personnel upon Departure from Facility:	
As dental personnel depart from facility: • All PPE will be removed (contaminated PPE will be removed prior to leaving leaving treatment area) • Scrubs and other office garb will be changed back into street clothes upon exit	39
Laundry: • Laundry facilities will be avaialble in dental office, or contracted with laundry service	39

NOTE: It is recommended to right-click on reference links and select Open in New Tab if viewing in a web browser.

References and Resources

Centers for Disease Control and Prevention (CDC):

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5. CDC Coronavirus Disease 2019 Interim Infection Prevention and Control Guidance During the COVID-19 Response: https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html
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31. CDC Coronavirus Disease, Ambulatory Care Settings: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-hcf.html#anchor_1591799984921
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