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Patient Safety Tip of the Week

May 5, 2020 COVID-19 and the Dental Office

We've done several columns on patient safety in dental practice. But COVID-19 certainly raises a new concern. Most dental practices had closed (except for emergencies) during the current COVID-19 pandemic. But many are now preparing to re-open as some of the state-imposed restrictions are being relaxed. You should be concerned not only if you are a dentist or work in a dental office, but also if you are a patient needing dental care or services.

The basic concern is that the nature of dental instruments, particularly high speed drills, makes aerosolization unavoidable. So it is incumbent upon all dental practices to ensure that their staffs and their patients are protected against exposure to coronavirus.

A lot of planning needs to take place prior to re-opening a dental practice. Considerations include: patient and staff screening procedures, infection control procedures, maintaining social distancing, scheduling, staff education and training, patient education, alternate workflows, inventory of PPE, contingency planning, and others.

We'd start with an inventory of **PPE (personal protective equipment)**. Your inventory of PPE should also take into account your likely "burn" rate (i.e. how fast you will go through your PPE supplies). If hospitals are any indicator of "burn" rates, make sure your estimates of PPE needs are adequate. Important**: If your dental office is unable to secure the appropriate PPE to safely operate, your practice should not reopen until it is obtained**.

Of course, PPE (personal protective equipment) is of greatest concern. CDC guidelines (CDC 2020a) recommend, **during aerosol-generating procedures** (e.g. use of dental handpieces, air/water syringe, ultrasonic scalers), put on one of the following:
an N95 respirator or a respirator that offers a higher level of protection such as other disposable filtering facepiece respirators, powered air-purifying respirators (PAPR's), or elastomeric respirators. CDC has a good section on PPE (personal protective equipment), including sections on "How to Put On (Don) PPE Gear" and "How to Take Off (Doff) PPE Gear" that include posters and a video (CDC 2020c).

PPE also includes appropriate **eye protection**. CDC states "Before entering the patient room or care area, put on eye protection (i.e., **goggles or a full face shield** that covers the front and sides of the face)." It notes that personal eyeglasses and contact lenses are NOT

considered adequate eye protection. If respirators are not available and surgical masks are used, wear a full-face shield.

Clean **gloves** and **gowns** are also needed before entering the room.

The CDC guideline (CDC 2020a) also has recommendations on removal, disposal or disinfection of all PPE on leaving the room.

Obviously, strict **hand hygiene** is required for the whole practice. Hand hygiene should take place before and after all patient contact, contact with potentially infectious material, and before putting on and after removing PPE, including gloves. Hand hygiene after removing PPE is particularly important to remove any pathogens that might have been transferred to bare hands during the removal process. Use of alcohol-based hand rub (ABHR) with 60-95% alcohol or washing hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHR. Dental healthcare facilities should ensure that hand hygiene supplies are readily available to all dental healthcare personnel in every care location.

But even before PPE, **office practice management** needs to change to meet the new COVID-19 world. The Indiana Dental Association (Indiana is one of the first states re-opening dental practices) has several practical recommendations (IDA 2020):

- Ask patients to wait in their cars and call the office to "check in" once they have arrived and have a staff member call or text the patient when a treatment room is available.
- Escort the patient directly to the treatment room where he or she may fill out any required paperwork and answer any medical health questions while sequestered.
- Wipe down the clipboard and writing utensil after each patient has completed check-in paperwork.
- Discourage patients from bringing companions to their appointment, except pediatric patients, people with special needs, elderly patients, etc. In those cases, limit companions to just one.
- Remove magazines, reading materials, toys and other objects that may be touched by others and which are not easily disinfected.
- Print and place signage in the dental office for instructing patients on standard recommendations for respiratory hygiene/cough etiquette and social distancing.
- Schedule appointments far enough apart to minimize possible contact with other patients in the waiting room.
- Allow time to disinfect and set up the room for the next patient.
- Surfaces such as door handles, chairs, desks, elevators, and bathrooms should be cleaned and disinfected frequently.

CDC has guidelines and recommendations that are updated as needed (CDC 2020a). First, it is important to make sure your own staff does not expose patients or other staff to COVID-19. CDC says "Implement **sick leave policies** for DHCP that are flexible, non-punitive, and consistent with public health guidance, allowing employees to stay home if

they have symptoms of respiratory infection. Ask staff to stay home if they are sick and send staff home if they develop symptoms while at work."

Next, you need to assess patients for the likelihood that they might be harboring coronavirus. CDC recommends you **telephone triage** all patients in need of emergency dental care. You should assess the patient's dental condition and determine whether the patient need to be seen in the dental clinic. Use teleconferencing or teledentistry options as alternatives to in office care. If dental treatment can be delayed, provide patients with detailed home care instructions and any appropriate pharmaceuticals.

If emergency dental care is medically necessary for a patient who has, or is suspected of having COVID-19, airborne precautions (an isolation room with negative pressure relative to the surrounding area and use of an N95 filtering disposable respirator for persons entering the room) should be followed. Dental treatment should be provided in a hospital or other facility that can treat the patient using the appropriate precautions.

Practices should **pre-screen** patients (with a phone call the day prior to a visit) for symptoms of COVID-19. In addition to the classic symptoms of fever, cough and shortness of breath, CDC has recently updated its list of COVID-19 symptoms and signs to include chills, repeated shaking with chills, muscle pain, headache, sore throat, and new loss of taste or smell (CDC 2020b). If the patient has symptoms suggestive of COVID-19 they should be referred to their medical provider and perhaps referred to a hospital that has dental capabilities and takes care of COVID-19 patients.

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

Some practices will undoubtedly use touchless thermometers to screen patients. But we see problems with that. First, some dental patients, such as those with a dental abscess, may have a fever and not have COVID-19. Second, many patients may be in an asymptomatic phase of COVID-19 yet be capable of shedding virus. So, as below, you need to assume that every patient might be harboring coronavirus and take appropriate safety precautions.

In Japan, dentists will be allowed to take nose and throat swab samples to test patients for the novel coronavirus (Neuman 2020). Allowing onsite testing for COVID-19 in dental practices may be a consideration. However, given that false negative tests may occur, one cannot rely on a single negative test to conclude the patient does not harbor the coronavirus responsible for COVID-19. Just as we adopted **universal precautions** back when HIV first appeared, we need to assume that every patient might harbor COVID-19 and use the same precautions for all patients.

Social distancing should be practiced in the dental office. You should ensure that patients are able to sit at least 6 feet apart in the waiting area and that also requires that scheduling of patients is such that there will never be more than a set number of patients in the waiting room at one time.

CDC made several revisiions on April 27, 2020 to its guidelines for dental settings (CDC 2020a), including:

- To address asymptomatic and pre-symptomatic transmission, implement source control **(require facemasks or cloth face coverings) for everyone** entering the dental setting (**dental healthcare personnel and patients**), regardless of whether they have COVID-19 symptoms
- **Actively screen everyone on the spot for fever and symptoms of COVID-19 before they enter the dental setting**
- Actively **screen dental healthcare personnel** on the spot for fever and symptoms **before every shift**.

All patients should wear **facial masks** in the waiting area. The dental practice should have masks available for those patients who did not wear their own mask. You also need to have **alcohol-based hand sanitizer** available in the entrance, waiting area, and any other site where patients or staff should be disinfecting their hands. (Keep in mind that washing hands with soap and water is actually preferable to use of alcohol-based hand sanitizers but soap and water is not practical in the waiting area.) You should also make available tissues and no-touch receptacles for disposal at facility entrances, waiting rooms, bathrooms, and patient check-ins.

If dental care is indicated, CDC recommends certain work practices and certain ones to avoid. For example, you should **avoid aerosol generating procedures whenever possible**. Avoid the use of dental handpieces and the air-water syringe. Use of ultrasonic scalers is not recommended during this time. Prioritize minimally invasive/atraumatic restorative techniques (hand instruments only). If aerosol generating procedures are necessary, use four-handed dentistry, high evacuation suction and dental dams to minimize droplet spatter and aerosols. The number of dental healthcare personnel present during the procedure should be limited to only those essential for patient care and procedure support. Visitors should not be present for the procedure.

Dental healthcare personnel should wear a facemask **at all times** while they are in the dental setting. When available, surgical masks are generally preferred over cloth face coverings for dental healthcare personnel because 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.

CDC notes that some dental healthcare personnel whose job duties do not require PPE (such as clerical personnel) should continue to wear their cloth face covering for source control while in the dental setting. Other dental healthcare personnel (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. Dental healthcare personnel should remove their respirator or surgical mask and put on their cloth face covering when leaving the facility at the end of their shift.

Education of all staff about PPE is important. Dental facilities should provide dental healthcare personnel with **training about when, how, and where cloth face coverings can be used** including frequency of laundering, guidance on when to replace, circumstances when they can be worn in the facility, and the importance of hand hygiene to prevent contamination. Dental facilities should provide all staff with **job-specific training on PPE** and have them demonstrate competency with selection and proper use (putting on and removing without self-contamination). Because cloth face coverings can become saturated with respiratory secretions, dental healthcare personnel should take steps to prevent self-contamination, including:

- change the coverings if they become soiled, damp, or hard to breathe through
- coverings should be laundered daily and when soiled
- perform hand hygiene immediately before and after any contact with the cloth face covering

The CDC guideline (CDC 2020a) also has recommendation on cleaning and disinfecting rooms and equipment. Also included are sections on post-exposure guidance and contingency and crisis planning.

The American Dental Association's Interim Guidance for Minimizing Risk of COVID-19 Transmission (ADA 2020) has sections on:

- Dentist and Dental Team Preparation
- Screening for COVID-19Status and Triaging for Dental Treatment
- Instructions for Patient Arrival
- Standard and Transmission Precautions and Personal Protective Equipment (PPE)
- Clinical Technique (Handpieces, Equipment, etc.)
- Steps After Suspected, Unintentional Exposure
- In Between Patients
- Post-Operative Instructions for Patients
- When Going Home After a Workday

In addition to state and local health departments, OSHA, CDC and the American Dental Association oversee workplace safety. Remember: **before you re-open you need to protect your patients, your staff, and yourselves**.

Also note that many of the recommendations above, especially those related to practice management, scheduling, staff training, etc., are also useful for any type of medical practice.

Some of our previous columns on dental patient safety issues:

March 15, 2016 "Dental Patient Safety"
August 2016 "Guideline Update for Pediatric Sedation"
March 28, 2017 "More Issues with Dental Sedation/Anesthesia"
August 8, 2017 "Sedation for Pediatric MRI Rising"
November 28, 2017 "More on Dental Sedation/Anesthesia Safety"
July 2019 "Dental Prescribing Called Into Question"
September 2019 "New Guidelines for Pediatric Dental Sedation"

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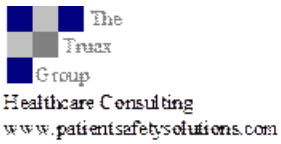

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