

The Safety Coordinator's Role in Maintaining the Safest Dental Visit™

OSAP continues to support The Safest Dental Visit™, an educational program based on authoritative best practices and supported by behavioral change tools including *Infection Control in Practice*. This year *Infection Control in Practice* will provide education and tools to help the practice's Safety Coordinator successfully maintain the Safest Dental Visit™. This guide can be used as a tool to spark discussion during a morning team huddle, at a staff meeting or within an educational presentation.



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TEAM HUDDLE: Set The Stage For Maintaining The Safest Dental Visit™

The Case for Designating a *Dental Safety Coordinator*

One of the most important ways to provide the Safest Dental Visit™ is to rely on the facility's dental safety coordinator to manage patient and provider safety. This encompasses management of infection control and hazardous materials. Successfully coordinating the compliance and cost considerations of governmental safety regulations and recommendations requires dedicating personnel to the management of infection control and hazardous materials.¹ In emphasizing the importance of such safety programs the Centers for Disease Control and Prevention (CDC) stated: "An infection-control coordinator (e.g., dentist or other dental health care personnel) knowledgeable or willing to be trained should be assigned responsibility for coordinating the program".²

LEARNING OBJECTIVES

After reading this publication, the reader should be able to:

- give examples of systems that support the facility's safety program and that set the stage for The Safest Dental Visit™;
- describe what governmental agencies support the designation of a dental safety coordinator;
- describe the basic abilities important for a dental safety coordinator.

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The Incident

Dr. Belque's hygienist needed time off to care for her mother recovering from hip surgery. A temporary worker (Rose) was hired and when she arrived on her first day she was immediately put to work with a patient. She asked the dental assistant (Sally) for a copy of the office's exposure control plan (ECP) so she could familiarize herself with office procedures. She reviewed the ECP then told Sally that she needed extra small exam gloves and a pair of protective glasses because in her excitement to come to work, she forgot hers at home. Sally told her they didn't have any safety glasses and she gave her a box of size small gloves but said the extra smalls wouldn't be in until next week. Rose said: "OK I'll make these work and I'll have to just wear my own eyeglasses."

After her first patient Rose checked the ECP for the disinfecting procedures used and then asked Sally where the disinfectant wipes were. Sally handed her a spray bottle and paper towels and said they had changed to this new disinfectant. As Rose sprayed the bracket table the fan on the countertop blew the spray back in her face. Even though she was wearing her prescription glasses she thought some of the spray may have contacted her eyes. She searched for an eyewash station and found one in the sterilizing room, but it didn't work. So she splashed her face and batted her eyes in water cupped in her hand. Although she had no face pain and her eyes felt normal, she still asked Sally for the disinfectant's safety data sheet (SDS). Sally went to the store room and started leafing through the stack of SDSs, but couldn't find one for the new disinfectant.

Since there weren't many hygiene patients scheduled that day, Sally asked Rose if she would mind helping out in the sterilizing room over the lunch hour. Rose obliged, and began wrapping previously cleaned

instrument cassettes for processing in the office's new dry heat sterilizer. While Sally was loading the steam sterilizer, she handed Rose a *Geobacillus stearothermophilus* spore strip to tape to the outside of one of the cassettes. This confused Rose so she again checked the ECP, and that's exactly what was indicated for the office sterilizer. Rose then asked Sally about use of chemical indicators, and Sally said: "Dr. B said we don't need to use those because I always check the gauges of the sterilizers".

At the end of the day Rose told Dr. B that he would have to get another temporary dental hygienist because there was no culture of safety in his office and she didn't want to continue the risk of injuring herself or patients.

Potential Consequences

Without a properly trained safety coordinator that has been given sufficient time to manage office safety, many problems can occur. Wearing exam gloves that are too large make it more difficult to control the movements of hand instruments. This can



SAFETY TIP

What can go wrong will go wrong (so Murphy's Law says). Dental practices should operate preventively to address situations that can interfere with the daily workflow. One suggestion would be to confirm contact information for the relevant manufacturers, distributors, sales representatives, and repair services. Call them to help resolve future unexpected "snags" such as running out of a glove size, breaking the spray nozzle on the disinfectant bottle, sterilizer failure and so on.



enhance the risk of injury to the provider and the patient. Rose attempted to understand Dr. B's office procedures by reviewing the ECP. Unfortunately the ECP did not reflect the current surface asepsis procedures.* Fans in the clinical area (and sterilizing room) are not recommended because they merely circulate more airborne microbes over the patient (or instruments).

Having a hazardous chemical sprayed at one's face without wearing proper protective equipment could be damaging to the eyes and mucous membranes of the nose and mouth. To make it worse, after the exposure, Rose had to search for an eyewash station, and when she found one, it didn't work! Fortunately Rose must have blinked quickly enough to avoid getting the disinfectant in her eyes. Not having a SDS for the disinfectant means that specific post-exposure first-aid information as well as other details about the chemical is not readily available.

Sally was not aware that the spores in biological indicators (BI) for a steam sterilizer are different than those for a dry heat sterilizer. Instruments should not be released unless it is known that the sterilizer is working correctly. Also, BIs should be used as directed by the manufacturer – usually placed inside a test pack. Taping the BIs to the outside of packages does not monitor the conditions inside the packages where the instruments are located. In addition, a control BI was not used. So even if the correct BI had been used (as was the case with the steam sterilizer) the tests would not have yielded valid results because of the improper location of the BIs and the absence of control BIs.

Rose tried to find the correct procedure for sterilization monitoring by searching the ECP, but again the plan had not been updated with correct dry heat sterilization monitoring. To top it all off, there was no indication that the use of chemical indicators was even considered. Therefore, none of the instruments in this practice could ever be considered as safe for use on patients.

* An Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens compliance inspector would base the review of an office on what was stated in the ECP.



Prevention, Recommendations, and Regulations

Dr. B should designate Sally as the safety coordinator for the office and ensure she is properly trained and given sufficient time to perform the responsibilities. Sally should have taken the time to inform Rose of office procedures before she began seeing patients. This would have included showing the location of the eyewash station, SDSs, and supplies as well as describing the pre-op procedures, post-exposure protocols and other important procedures.

Running out of essential supplies such as gloves and safety eyewear is unacceptable. OSHA indicates that the employer must ensure that appropriate personal protective equipment (PPE) in the proper sizes is readily accessible at the worksite.³ The problem of not being able to readily supply Rose with the appropriate PPE could have been previously solved, if Sally had set the stage for The Safest Dental Visit™ (see **Success Strategies for the Dental Safety Coordinator** on page 4) and previously organized an emergency supplies delivery system with a distributor. The set of SDSs in the facility must be kept up to date to reflect what chemicals are actually being used.⁴ The eyewash stations⁵ and SDSs need to be readily available where hazardous chemicals are used, because frequently time is of the essence when treating a chemical exposure.

If Sally had set the stage for The Safest Dental Visit™ (see page 4), she would have properly updated the ECP (as annually required by OSHA's Bloodborne Pathogens Standard³). She would have checked the eyewash station and functioning of other major equipment. When new equipment is purchased it's important to receive training on proper use and to carefully review the manufacturer's operating and maintenance instructions. (In Canada, this is called installation qualification [IQ], operational qualification [OQ], and performance qualification [PQ].)

BIs containing *Geobacillus stearothermophilus* spores are used to monitor steam sterilization, and those containing *Bacillus atrophaeus* spores are used to monitor dry heat sterilization.⁶

G. stearothermophilus is more resistant to moist heat than is *B. atrophaeus*, and *B. atrophaeus* is more resistant to dry heat than is *G. stearothermophilus*. A matching control BI (one that is not processed through the sterilizer) from the same lot number as the test BI is to be used with each biological monitoring test.⁷ Chemical indicators are to be placed inside each package, and if it cannot be seen from the outside, an exterior chemical indicator is also placed on the outside of the package.⁷

The Case for Designating a *Dental Safety Coordinator* Continued from page 1

OSHA's Hazard Communication Guidelines for Compliance states: "In order to have a successful program, you must assign responsibility for both the initial and ongoing activities that have to be undertaken to comply with the rule. Early identification of responsible employees and their involvement in developing your action plan will result in a more effective program design".⁸ OSHA's written models for the Bloodborne Pathogen's Exposure Control Plan and the Hazard Communication program indicate that the name of the person responsible for each of the major parts of the standards is required.⁹ This could be the employing dentist or a safety coordinator.

In 2012 epidemiologists at the CDC reported the results of a survey of U.S. dentists about their implementation of four new CDC infection control recommendations, one of which was designating an infection control coordinator to monitor all infection control activities.¹⁰ Almost 80% of the 3,042 respondents reported having a designated infection control coordinator. The responding dentist was listed as the coordinator in 44.3 % of the offices. A chairside assistant was the coordinator in 35.8 %, and a dental hygienist was the coordinator in 10.2 %.

Basic Abilities of a Dental Safety Coordinator¹¹

Every dental facility needs a dental safety coordinator. At a minimum this person should have a basic understanding of: microbiology; modes of cross-contamination in dentistry; infection prevention and general safety procedures; related governmental regulations and recommendations; and products and equipment available to maintain patient and provider safety.

In addition, the coordinator must be able to champion a "culture of safety" for the facility, and have organizational abilities as well as good written and verbal communication skills which will facilitate execution of the job responsibilities. Additional training at the time of initial appointment to this role may be needed, and continuing education (including being an active member of OSAP) is especially important to remain current about regulations, emerging diseases, vaccines available, and new safety devices and other products.

SUCCESS STRATEGIES FOR THE DENTAL SAFETY COORDINATOR

Setting the stage for **the safest dental visit**TM

While the more complete duties of a dental safety coordinator will be discussed in the next two issues of *Infection Control In Practice*, a coordinator is especially helpful in making sure the stage is set for maintaining The Safest Dental VisitTM. Early in the New Year is a good time to review and update the systems that support the facility's safety program. This includes:

- updating written safety policies and procedures and other documents (e.g., exposure control plan³; hazard communication program⁴; safety data sheets⁴; list of hazardous chemicals⁴; work restriction information⁷);
- making available to all employees the above policy and procedural documents and governmental regulations and recommendations (e.g., OSHA's Bloodborne Pathogens Standard [BPS]³ and Hazard Communication Standard⁴, and the CDC's Guidelines for Infection Control in Dental Health-Care Settings – 2003⁷);
- confirming that the OSHA-required post-exposure medical evaluation and follow-up system is in place (e.g., address, phone number, travel directions for, and the availability of the evaluating healthcare professional; information packet for the evaluating professional that contains a copy of the BPS, forms to describe the exposed employees' duties as related to the exposure incident, documentation of the routes of exposure and circumstances surrounding the incident, results of the source individual's blood testing if available, and all medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain)³;
- making sure the safety-related training programs received by employees are appropriate;
- checking the functioning, maintenance schedules or certification of equipment (e.g., sterilizers, eyewash stations, instrument cleaners/washers, x-ray units);
- determining correct performance of safety procedures by the employees;
- confirming the mechanisms of informing employees of and performing appropriate training on chemicals, procedures, products, and equipment that are new to the facility;
- making sure employee immunizations are current;
- making sure training, medical, and sterilization monitoring records are current;
- reviewing the facility's "culture of safety" to assure it is being maintained; and
- confirming the supplies/equipment ordering systems are in place; (e.g., routine and emergency deliveries or "as needed" availability).

What's Wrong With This Picture?

Can you identify the breach(s) in infection prevention and safety procedures in this photo? Check your answer below.



ANSWER: If this image depicts action before patient treatment, the clinician's exam gloves have been properly donned. If this image depicts action after patient treatment, the used facemask pulled under the chin exposes the operator's skin to microorganisms on the contaminated mask. The patient's chart is being contaminated with soiled gloves. The contaminated gloves and facemask should be removed, and hands washed, before handling the patient chart. Sleeves of underlying work clothes are exposed.

Educational Spotlight

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Glossary

Culture of Safety: Reflects the shared commitment of the employer and employees towards ensuring the safety of the work environment, the office personnel, and the patients.

Dental Safety Coordinator: A person who manages, performs, and monitors safety procedures in a dental facility.

Safety Data Sheet: A document prepared by a chemical manufacturer describing procedures for handling a hazardous chemical that includes physical data, toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill/leak procedures. OSHA requires a safety data sheet for each hazardous chemical used in the office.

Work Restriction: Exclusion of healthcare workers from work or patient contact, if infected with or exposed to certain infectious diseases recommended by the CDC.²

Links to Resources

1. **Runnels RR and Powell, GL.** Managing infection control, hazard communication and infectious waste disposal. *Dent Clin No Amer* 1991; 35(No. 2):299-308.
2. **CDC. Guidelines For Infection Control In Dental Health-Care Settings – 2003.** *Morb Mortal Wkly Rpts* 2003; 52(No RR-17):3. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5217a1.htm>.
3. **OSHA. Bloodborne Pathogens Standard.** Accessed December 2014 at: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051.
4. **OSHA. Hazard Communication.** Accessed December 2014 at: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10099.
5. **OSHA. Eye and Face Protection eTool.** Accessed December 2014 at: <https://www.osha.gov/SLTC/etools/eyeandface/employer/requirements.html>.
6. **Miller, CH. Instrument Processing.** In *Infection Control and Management of Hazardous Materials for the Dental Team*. Elsevier, St. Louis, 5th ed., 2014, Chapter 12, pp. 130.
7. **CDC. Guidelines for Infection Control in Dental Health-Care Settings – 2003.** *MMWR* 2003; 52(No.RR-17):1-66. Accessed December 2014 at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5217a1.htm>.
8. **OSHA. Hazard Communication Guidelines for Compliance.** Accessed December 2014 at: <https://www.osha.gov/Publications/osha3111.html>.
9. **OSHA. Model Plans and Programs for the OSHA Bloodborne and Hazard Communication Standards.** Accessed December 2014 at: <https://www.osha.gov/Publications/osha3186.pdf>.
10. **Cleveland JL, Foster M, Barker L, et al.** Advancing Infection Control in Dental Care Settings: Factors Associated With Dentists' Implementation of Guidelines From the Centers for Disease Control and Prevention. *J Amer Dent Assoc* 2012; 143(No. 10):1127-1138.
11. **Miller, CH. Management of the Office Safety Program.** In *Infection Control and Management of Hazardous Materials for the Dental Team*. Elsevier, St. Louis, 5th ed, 2014, Chapter 25, pp. 236-245.
12. **OSAP. Team Huddle: Who is managing your safety culture?** *Infect Contrl in Pract.* March, 2014; 13(No. 1):1-4.

KEY TAKEAWAYS

1. Set the stage for maintaining The Safest Dental Visit™ by reviewing and updating the systems that support the facility's safety program (e.g., procedural documents, government regulations and recommendations, exposure control plan, hazardous chemicals' lists and SDSs, emergency and routine supplies' ordering systems, equipment functioning and maintenance schedules, performance of safety procedures, mechanisms for training temporary workers and housekeeping staff).
2. Reaffirm a culture of safety¹² for the office.

GET YOUR CE CREDIT ONLINE

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Step 1: Go to http://bit.ly/OSAP_ICIP_FEB_2015 and purchase the CE exam through the OSAP Store. OSAP members, 1 CE credit \$15. Non-members, 1 CE credit \$20.

Step 2: OSAP will send you a purchase confirmation email and a separate email with the link to the online CE exam. Click on that link to access the exam.

Step 3: Complete the online exam. You have 2 attempts to pass with 7 out of 10 correct answers. When finished, you can print out or download your CE record of completion for your records. Your record of completion will also be emailed to you.

QUESTIONS FOR ONLINE QUIZ

1. What bacterial spore-former is used to biologically monitor steam sterilization?
 - a. *Bacillus subtilis*
 - b. *Bacillus atrophaeus*
 - c. *Clostridium perfringens*
 - d. *Geobacillus stearothermophilus*
2. What bacterial spore-former is used to biologically monitor dry heat sterilization?
 - a. *Bacillus subtilis*
 - b. *Bacillus atrophaeus*
 - c. *Clostridium perfringens*
 - d. *Geobacillus stearothermophilus*
3. Where should chemical indicators be placed to monitor the sterilization process?
 - a. Inside of every package
 - b. Outside of every package
 - c. Outside and inside of every package
 - d. Outside and inside of one package in every run
4. How often should the exposure control plan be updated?
 - a. Weekly
 - b. Monthly
 - c. Annually
 - d. Bi-annually
5. Who prepares safety data sheets?
 - a. CDC
 - b. OSHA
 - c. The user of a hazardous chemical
 - d. The manufacturer of a hazardous chemical
6. A basic understanding of which of the following would be least important for a dental safety coordinator?
 - a. Physiology
 - b. Microbiology
 - c. Modes of cross-contamination
 - d. Governmental regulations and recommendations
7. OSHA's written models for the Bloodborne Pathogens Exposure Control Plan and _____ indicate that the name of the person responsible for each of the major parts of the standards is required.
 - a. Respiratory Protection Standard
 - b. Emergency Action Plan Standard
 - c. Hazard Communication Standard
 - d. Eye and Face Protection Standard
8. A survey conducted by CDC epidemiologists found about how many of the responding dental offices had a designated infection control coordinator?
 - a. 100%
 - b. 80%
 - c. 25%
 - d. 10%
9. The OSHA-required information packet to be provided to the healthcare professional evaluating an employee who received a needlestick should contain: forms to describe the exposed employee's duties as related to the exposure incident; documentation of the routes of exposure and circumstances surrounding the incident; results of the source individual's blood testing if available; and:
 - a. all the safety data sheets kept in the office.
 - b. a copy of the Bloodborne Pathogens Standard.
 - c. names and contact information of all patients treated that day.
 - d. a list of all infectious diseases the exposed employee has had in the last year.
10. What is a control Biological Indicator (BI)?
 - a. Contains no spores
 - b. Stored in the freezer before used
 - c. Not processed through the sterilizer
 - d. Processed twice through the sterilizer

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TEAM HUDDLE DISCUSSION GUIDE

1. What can Sally do to obtain proper safety training that would bring her up to date?
2. Does everyone know the location of the eyewash stations and SDSs in your office?
3. Does everyone know what to do after an exposure incident in your office?
4. How good is the culture of safety in your office?
5. Is the stage set for The Safest Dental Visit™ in your office?

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TEAM HUDDLE HIGHLIGHTS

1. Does your facility have a designated dental safety coordinator?
2. Have you updated your exposure control plan in the last year?
3. Does your eyewash station work?
4. Do you have an ordering system that can quickly provide a supply item?
5. Do you know how to obtain a back-up sterilizer when necessary?

Read on!



The Safest Dental Visit™



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