Special Series on Circumstances

Our series of topics for this year is designed to help you with infection control and safety by addressing some different circumstances that can occur in the office. The first issue was “So you just became the Office Safety Coordinator—What do you do now?” This current issue will be followed by “Exceptional Patients”, “Bringing the Outside In”, “High Tech Infection Control” and “Frequently Asked Questions”.

When “Stuff” Happens

In most businesses uncommon dangerous or injurious events happen unexpectedly and require some kind of action to resolve or at least address the situation. From a safety standpoint it’s important to identify such possible events and develop plans to manage them, if they do happen. In some instances these events may periodically recur (e.g., sharps injuries), and plans can be developed and activated based on past experience. In other instances (e.g., a fire), plans must be developed in anticipation of these possible events. The key message is - Be Prepared!

Training plays an important role in this preparation. It seems logical that the more you know about a potential hazard, the better off you’ll be in dealing with a hazardous situation and in preventing its occurrence. For example the required training described in the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard is to include information on:

- how to recognize tasks in the office that may involve exposure to blood or saliva;
- the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
- the procedure to follow if a blood or saliva exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available;
- the post-exposure evaluation and follow-up that the employer is required to provide for the incident;
- the warning signs and labels and/or color coding used to identify bio-hazards;
- changes such as modification of tasks or procedures or institution of new tasks or procedures that affect the employee’s occupational exposure.

Can you identify the “stuff” that could happen as a result of actions that are about to take place in this photo? Check your answers on page 6.

Learning Objectives

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

- Describe the importance of proper training in the recognition, prevention and management of hazardous events.
- Describe an emergency action plan.
- List some possible emergency situations in a dental office and describe some approaches to help prepare for such events.
- List some specific ways to help prevent sharps injuries.

Contents

1. Topic Overview Learning Objectives What’s Wrong With This Picture?
2. Topic Overview (continued) Did You Know?
3. Putting It All Together
4. Communicate and Educate Around the World What are Your “Bright Ideas”?
5. Putting It All Together (continued) Sponsors
6. Roadmap to OSAP Glossary Links to Resources
7. Continuing Education
8. Bright Ideas
When “Stuff” Happens

continued from front cover

Equally important is the required training associated with OSHA’s Hazard Communication Standard that includes information on:
- any operations in work areas where hazardous chemicals are present;
- the location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and material safety data sheets (MSDSs);
- methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area;
- the physical and health hazards of the chemicals in the work area;
- the measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals;
- the details of the hazard communication program developed by the employer, including an explanation of the labeling system and the material safety data sheets, and how employees can obtain and use the appropriate hazard information;
- any new physical or health hazard introduced into their work area on which the employees have not previously been trained.

Did You Know?

Influenza A(H1N1)/SWINE FLU

OSAP keeps you on top of emerging issues through special email alerts and resources. For example, be sure to check the special Influenza A(H1N1)/swine flu resources page at http://www.osap.org/displaycommon.cfm?an=1&subarticlenbr=1216.

Did you know that the American Dental Association (ADA) has announced the availability of “What To Do Before, During and After An Emergency or Disaster: A Preparedness Toolkit for Office-based Health Care Practices”. The development of this toolkit was funded by the U.S. Department of Health and Human Services and prepared by the American Medical Association (AMA) and Columbia University with major input from dentists and the ADA. This kit can provide the office with information on how to serve the patients and community in times of crises including:
- assessing practice and community vulnerability;
- determining what is needed to maintain the business’s continuity;
- creating an emergency preparedness plan for the practice;
- training staff to implement the plan;
- evaluating staff readiness through participation in drills and exercises.

The kit contains a book and a computer disk for $35 and is to become available this Spring. Call the AMA’s Leigh Adams at 1-312-464-2540.
Putting It All Together

A variety of situations that require action are described below.

1. Developing an Emergency Action Plan (EAP)

The purpose of an EAP is to facilitate and organize employer and employee actions during workplace emergencies. The elements of the plan include, but are not limited to:

- means of reporting fires and other emergencies;
- evacuation procedures and emergency escape route assignments;
- procedures to be followed by employees who remain to implement critical operations before they evacuate;
- procedures to account for all employees after an emergency evacuation has been completed;
- rescue and medical duties for those employees who are to perform them;
- names or job titles of persons who can be contacted for further information or explanation of duties under the plan.

OSHA has developed a convenient online mechanism for creating your own EAP. Check it out at: [http://www.osha.gov/SLTC/etools/evacuation/expertsyste‌‌‌‌m/default.htm](http://www.osha.gov/SLTC/etools/evacuation/expertsyste‌‌‌‌m/default.htm).

Other emergency standards related to evacuation routes and fire prevention can be found at: [http://www.osha.gov/SLTC/etools/evacuation/evaluate.html](http://www.osha.gov/SLTC/etools/evacuation/evaluate.html).

2. Bad Weather

Tornadoes, hurricanes and floods can disrupt everything. It’s difficult to prepare for such events, but sometimes advance notice is given. The ADA in conjunction with the Florida dental community has prepared information related to disaster response. Of course the first priority is the safety of everyone in the office and attempting to protect the property must be secondary. Their information concentrates on:

- preserving history (e.g., protecting electronic and paper records and x-rays);
- protecting equipment (e.g., most instruments can be sterilized so just pack them away; use heavy plastic to wrap or elevate chairs and furniture);
- securing the landscape (e.g., remove temporary signs)
- securing the structure (e.g., hurricane shutters; post contact information on the doors and protect from moisture).

One of the major problems with flooding is the subsequent growth of mold. Contact an appropriate “clean-up” company to address this problem. Don’t just assume everything will be OK when things dry out. Also contact the manufacturer about any equipment that has been soaked with water.

3. Boil Water Notices

Boil water notices are issued when there is a pipeline break, hurricane, flood or some other event that increases the likelihood of water contamination downstream from the problem. When such a notice is issued:

- do not deliver water from the public water system to the patient through the dental unit, ultrasonic scaler, or other dental equipment that uses the public water system;
- do not use water from the public water system for dental treatment, patient rinsing, or handwashing;
- patients may rinse with bottled water, and germicides may be diluted with boiled water or bottled water;
- use antimicrobial-containing products for hand hygiene that do not require water for use (e.g., alcohol-based hand rubs). If hands are visibly contaminated, use bottled water, if available, and soap for handwashing or an antiseptic towelette.

When the boil-water advisory is cancelled:

- follow guidance given by the local water utility regarding adequate flushing of waterlines. If no guidance is provided, flush dental waterlines and faucets for 1-5 minutes before using for patient care;
- disinfect dental waterlines as recommended by the dental unit manufacturer.

4. Sharps Injuries and Other Exposure Incidents

Make sure everyone in the office knows what to do in the event of an exposure to blood or saliva. Determine in advance who will:

- inform the immediate supervisor of the incident;
- perform any first aid that may be necessary such as flushing with good quality water;
- contact the healthcare facility to which the exposed person and
Communicate and Educate

Receiving a sharps injury is very distressing. This stress mainly comes from the unknown—such as waiting on results of the medical testing particularly when the source patient cannot be identified or refuses to be tested. Make it a goal in your office to eliminate sharps injuries. Communicate the goal and educate everyone about sharps safety. Here are some “points” to remember:

- look before picking up or returning a sharp instrument to or from the cassette or tray at chairside;
- place instruments back in the cassette or on the bracket table or tray in a stable fashion;
- don’t recap needles by hand;
- use tongs to pick up dropped sharps and broken glass;
- be careful when removing used burs from the handpiece;
- point the bur in when placing the handpiece back in its holder;
- don’t hand scrub instruments but check with instrument manufacturers about mechanical cleaning (e.g., ultrasonic scaler tips and handpieces may not withstand ultrasonics);
- don’t hand sharpen contaminated scalers – supply more scalers in the set-up, or sharpen one-handed on a tape-stabilized sterile sharpening stone;
- be careful when wiping off an instrument at chairside;
- don’t test the sharpness of an instrument with your finger or fingernail!

Around the World

In considering the topic presented in the March issue, and how best to apply “So you just became the Office Safety Coordinator – what do you do now?” in Mexico, I wanted to point out that there may be significant differences in the way dentistry is practiced in this country. In addition, job roles and titles to identify persons who are responsible for coordinating infection control and safety in the dental practice may differ. I know many “top notch” dental practices in Mexico where a dental assistant has been made responsible for some infection control compliance issues. Yet, in Mexico, there is no equivalent of an OSHA regulation applicable to dentistry, and an IC coordinator is not mandatory. Moreover, most dentists practice solo (one man band), and even for those who have staff - there are no schools providing formal training to dental hygienists, dental nurses, or dental assistants. These three activities are unregulated. Dentists recruit and train the help they need, and many employ dental students.

In October 2008 the Ministry of Health (MOH) published the updated Mexican Official Norm for the practice of dentistry which includes recommendations on IC (http://www.dof.gob.mx/documentos/3510/SALUD/SALUD.htm). The MOH also published a guide to facilitate compliance, available in Spanish at (http://www.odonto.unam.mx/temas/cl/index.html).

From June 15-17 we’ll have a meeting of the Mexican Branch of Patients for Patients Safety. For information: curiel@servidor.unam.mx.

Dr. Enrique Acosta, National University, Mexico

As in Mexico, Canada does not have an “OSHA”. There is a movement by the individual provincial dental associations to visit dental offices in a more organized manner to encourage improved self-regulation. Offices are visited by a team hired or appointed by the provincial dental regulatory body, observed, and provided with suggestions and information to assist them in adhering to accepted Canadian guidelines per the Canadian Dental Association.

Dr. Nita Mazurat, University of Manitoba, Canada

Concerning a “boil water” notice, we have performed a series of tests to determine the conditions under which the waterlines of the dental unit and office water pipes may be contaminated when the “all clear” is announced. Most important was the quality of water in the pipes after extended periods of stagnation and whether there were any “dead ends” in the pipe system. Therefore we recommend rinsing the pipe system when the boil water notice is lifted so that no “bad quality” water enters the dental unit.

Dr. Fritz Stauffer, Bernhard Gottleib University, Austria
Putting It All Together

continued from page 3

patient are going to be sent for a medical evaluation;
- interact with the patient whose blood or saliva was involved requesting consent to test for their bloodborne disease status;
- gather the following items to provide to the evaluating healthcare person;
  - a copy of the bloodborne pathogens standard
  - a description of the employee’s duties as related to the exposure incident
  - a description of the routes and circumstances surrounding the exposure incident
  - medical records of the exposed person relevant to the exposure incident (respecting confidentiality)
  - results of the source individual’s blood testing, if available (respecting confidentiality)
- accompany (if necessary) the exposed person and source patient to the healthcare facility for evaluation.

5. Addressing Chemical Exposures

Make sure:
- everyone knows what hazardous chemicals they are working with and what protective equipment should be worn when working with those chemicals;
- hazardous chemicals are properly labeled;
- MSDSs are available for all hazardous chemicals in the office and that everyone knows where these are kept;
- eyewash stations are available and working;
- to determine in advance what healthcare facility will be used if an exposed person needs medical attention.

6. Sterilizer and Other Equipment Failures

Determine in advance who to contact if critical equipment such as a sterilizer fails. Prepare a sheet with the names, addresses and phone numbers of repair services, equipment manufacturers, and dental suppliers so they can be contacted quickly. Determine in advance from your local dental supplier if backup equipment would be available for such occurrences. For sterilizer failures follow the CDC recommendations.6

Before placing the sterilizer back into service, rechallenge the sterilizer with biological indicator tests in three consecutive empty chamber sterilization cycles after the cause of the sterilizer failure has been determined and corrected.

“Thanks” to our SPONSORS

OSAP thanks the following companies that help to underwrite each issue of this special series of Infection Control In Practice in 2009.

- A-dec ► a-dec.com
  Enriching the lives of dental professionals by providing simple and creative solutions.
- Biotrol ► biotrol.com
  E-mail sciencegeeks@biotrol.com for infection control answers. Infection control down to a science.
- Crosstex ► crosstex.com
  A leading global manufacturer of infection control and single-use disposable products for the healthcare industry.
- DentalEZ Group ► dentealez.com
  DentalEZ’s six brands provide a full line of products for the operatory.
- Dentsply ► dentsply.com
  Delivering solutions ‘For Better Dentistry’ which benefit practitioners and patients globally.
- DUX ► duxdental.com
  Trustworthy innovation for superior infection control products, staff safety and patient comfort.
- Henry Schein ► henscheindental.com
  We’re here for you! Supplies, equipment, services and technology for dental practices.
- Hu-Friedy ► hu-friedy.com
  Hu-Friedy helps dental professionals perform at their best by providing superior products, knowledge and support.
- Medicom ► medicom.com
  Medicom, proud leaders in disposable infection control products since 1988.
- Midmark ► midmark.com
  Midmark Corporation, A provider of innovative solutions that work for you.
- Miele ► miele.com
  Developed specifically to clean dental instruments and accessories and to reduce the risk of infection by providing high-level disinfection.
- North Bay/Bioscience ► nbbs.com
- Palmero Health Care ► palmerohealth.com
  DisCide Ultra Spray & Wipes • DisCideXRA Hand Wipes • TelAseptic Wipes • Barriers • Safety & Disposable Eyewear.
- Patterson Dental ► pattersondental.com
  Dental’s most trusted partner for service, supplies, equipment and technology.
- PDI, The healthcare division of Nice-Pak ► pdipdi.com
  Live a healthier life with clinically proven products that safely clean, disinfect and control disease infection.
- SciCan ► sciican.com
  SciCan Inc., the final word in all dental instrument reprocessing.
- Septodont ► septodontusa.com
  Septodont, providing better dentistry through pain control, restoratives and infection control products.
- SmartPractice ► smartpractice.com
- SPSmedical Supply Company ► spsmedical.com
  Sterilization monitoring (spore tests), chemical indicators/integrators and packaging products (wrap and pouches).
- Sultan Healthcare ► sultanhealthcare.com
  Products to complete the cycle of infection control.
- TotalCare ► kerntotalecare.com
  Offering high-quality infection prevention products to protect staff and patients in the dental operatory.
Roadmap to OSAP

If you have received this newsletter from a friend or associate, you can access other helpful resources and timely information on infection control and safety by becoming a member of the OSAP community.

Member resources include:

► Infection Control Educator’s Kit
► NEW online CDC Guidelines course
► Links to FDA patient safety news, traveler’s guide to safe dental care, and much more!
► Written referenced responses to your IC questions
► Topical updates such as recent information on Influenza A(H1N1)/swine flu

Member registration is easy.
Online at www.osap.org or by phone: 1-800-298-OSAP (6727) within the U.S. or 1-410-571-0003 outside the U.S.

Current membership levels:

► Individual member (within the U.S.) $110
► Web-only member (anywhere) $100
► Individual member (outside the U.S.) $160
► Student member $25
► Corporate memberships are welcome; please contact OSAP for more information.

Photo Challenge from Front Cover
ANSWERS: 1) No safety glasses on the patient could result in foreign matter being sprayed into the patient’s eyes from use of the dental handpiece.
2) The forearms of the dental professional are exposed which could result in bacteria, contaminated aerosols and debris adhering to the skin.

Glossary

Boil Water Notice: This is a public health announcement (notification) advising the public to boil tap water used for drinking, cooking and ice-making until tests verify the water is safe.

Exposure Incident: A specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or saliva. In case of chemical exposure the contact may involve inhalation, ingestion, eye or skin contact or absorption.

Sterilization Failure: This may occur when a sterilizer malfunctions or is not used correctly resulting in inadequate killing of microbes. It might be detected by mechanical, chemical or biological monitoring (e.g., when the results of a sterilization spore test are positive which means that the test spores grew and were not killed during the cycle).

Links to Resources

If you wish to obtain one (1) hour of continuing education (CE) credit, complete the following test by selecting the best answer and fax or mail it to the OSAP Central Office for grading. Please include payment information to cover the grading charges. Pending satisfactory results (at least seven out of ten), you will be issued a letter for one (1) CE credit hour. OSAP is recognized by the American Dental Association as a CERP Provider. For more information, call OSAP at 1-800-298-6727 (1-410-571-0003).

For each item, pick the best answer.

1. Who prepared “What To Do Before, During and After An Emergency or Disaster: A Preparedness Toolkit for Office-based Health Care Practices”?
   a. OSHA   b. ADA   c. AMA and Columbia University   d. Indiana University

2. The purpose of an EAP is to:
   a. facilitate and organize employer and employee actions during workplace emergencies.
   b. efficiently recruit temporary help when an employee is sick.
   c. provide a mechanism to evaluate the dangers of a potentially hazardous chemical.
   d. help set up a protocol for testing a new safety device.

3. Which of the following is not required to be provided to the healthcare professional evaluating a staff person’s blood-exposure incident?
   a. A copy of the bloodborne pathogens standard
   b. A description of the exposed employee’s duties as related to the exposure incident
   c. A description of the routes and circumstances surrounding the exposure incident
   d. A listing of the names and addresses of all employees in the office

4. What’s the first step to take with a steam sterilizer in case of a positive spore test?
   a. Retest the sterilizer using mechanical monitoring
   b. Retest the sterilizer using chemical monitoring
   c. Take the sterilizer out of service for processing patient care items
   d. Clean the chamber drain and door gasket and place the sterilizer back in service

5. A boil water notice:
   a. comes from the ADA when a dental unit water cleaning agent has been shown not to work as advertised.
   b. is a public health notification advising the public to boil tap water used for drinking, cooking and ice-making.
   c. is an OSHA mandate for hospital employees to use only boiled water when preparing coffee or tea at work.
   d. is a recommendation from CDC to soak all blood-contaminated laundry in boiling water for 5 minutes before laundering.

6. Who has developed a convenient on-line process for preparing an EAP?
   a. CDC   b. ADA   c. OSHA   d. OSAP

7. Who required training of employees on the warning signs and labels and/or color coding used to identify biohazards?
   a. CDC   b. ADA   c. OSHA   d. OSAP

8. Who provides an Infection Control Educator’s Kit?
   a. CDC   b. ADA   c. OSHA   d. OSAP

9. How many empty, consecutive, sterilization cycles are required to be run and spore-tested before placing a sterilizer back in service when that sterilizer first had a repeat spore test that was positive?
   a. one   b. two   c. three   d. four

10. A positive spore test means that:
    a. the test spores grew and were not killed during the sterilizer cycle.
    b. the results of the test spores did not match the results of the control spores.
    c. the results of the test spores matched the results of the control spores.
    d. the test spores did not grow and were killed during the sterilizer cycle.

Please mail or fax completed test with the appropriate payment to receive one (1) hour of continuing education credit.

Your Name: OSAP Member Name: ________________________________
Address: City: ________________________________ State: ______ ZIP: 
Email: ________________________________

Fees: ☐ OSAP MEMBER, $15 ☐ NON-MEMBER, $20
Payment: ☐ MASTERCARD ☐ VISA ☐ CHECK ENCLOSED
Name on Card: Card Number: ____________ Exp. Date: ____________

After completing the information above:
mail to: OSAP CE, P.O. Box 6297, Annapolis, MD 21401, USA or fax to: 1-410-571-0028
(NEW! Members can now complete this CE test conveniently online at www.osap.org.)
Bright Ideas

Present a topic on safety at each staff meeting. Here are some examples.

- List the various ways exposures might occur.
- Review the office’s emergency action plan and evacuation routes.
- Review any recent studies on infection control reported in professional journals.
- Have a contest on who can come up with the best slogan about sharps safety.
- Review sections of OSHA’s Hazardous Communication Standard.²
- Review sections of OSHA’s Bloodborne Pathogens Standard.¹
- Ask if anyone has heard of any new infection control products, equipment or special safety devices.
- Ask for any tips on how to be more efficient in using infection control products.
- Remind everyone where the MSDSs are kept and the location of the eyewash stations.
- Review the latest information on Influenza A(H1N1) at: www.osap.org
- Review the latest issue of OSAP’s Infection Control In Practice.
- Review steps to take if an exposure occurs.
- Review OSAP’s “What’s New?” column at www.osap.org
- Review any recent studies on infection control reported in professional journals.
- Review the latest issue of OSAP’s Infection Control In Practice.
- Review sections of OSHA’s Hazardous Communication Standard.²
- Review sections of OSHA’s Bloodborne Pathogens Standard.¹
- Ask for tips on how to prevent injuries.
- Review steps to take if an exposure occurs.
- Review any recent studies on infection control reported in professional journals.

In the next issue... Exceptional Patients

Please forward this issue of ICIP to other dental professionals involved in infection control and safety.