OSHA for Dentistry and the Basic Elements of a Bloodborne Pathogen Program

By Leslie Canham, CDA, RDA
Leslie Seminars
Copperopolis, California

Educational objectives

Upon completion of this course, participants should be able to achieve the following:

• Describe the basic elements of an OSHA bloodborne pathogen program
• Develop and present an office OSHA safety meeting
• Describe what documentation OSHA requires
• Select resources for infection control and safety information

Employers are required by the Occupational Safety and Health Administration (OSHA) to provide training to employees who have occupational exposure to bloodborne pathogens. Training must be conducted at the time of initial assignment to tasks where occupational exposure may take place, then at least annually and when new tasks or procedures affect the employee’s occupational exposure.

Training may be conducted by the dentist, an employee, or an OSHA trainer-consultant. The person conducting the training must be knowledgeable in the subject matter covered by the elements contained in the training program as relates to the workplace.

Dentaltown.com, Inc. is an AGD PACE Recognized Provider. This course offers 2 AGD PACE Continuing Education Credits free-of-charge.
So where do you begin? First you will need an OSHA manual. Your state dental association may already have an OSHA manual designed specifically for dental offices. If not, you can purchase a manual from the American Dental Association (ADA). There are also private OSHA consultants who can provide you with a personalized manual. Another great resource for dental office infection control and safety information is the Organization for Safety and Asepsis Procedures (OSAP), which can be found online at www.osap.org.

Next, take time to review and personalize your OSHA manual. You can personalize the manual by filling in the information that describes your office. The manual may ask for the names and classifications of employees, persons to contact in the event of an exposure incident, and the location and instructions for proper use of personal protective equipment. When you have finished personalizing your OSHA manual, you can present the information to your employees.

One method of training is to have employees read the OSHA manual. Then hold a staff meeting to summarize each section of the manual. Review the safety plans and provide information as to the location of the emergency eyewash station, first-aid kit, and fire extinguisher. You will need to have a written fire-safety plan that provides employees with the following information: identification, recognition, and reporting of fire hazards, as well as procedures for alarm and notification of fire department. Explain procedures for emergency evacuation and accounting of employees in the event of a fire. Discuss your exposure control plan and review the actions that must be taken in the event of an exposure incident. Give instructions on how to handle biohazard waste and sharps. Be sure to allow time for questions and/or comments.

According to the OSHA Standard 29 CFR 1910.1030, bloodborne pathogen training must include the following 14 elements:

1. A copy and explanation of the Bloodborne Pathogen Standard.

   The standard is usually located in your OSHA manual. If not, you can get a copy from the federal OSHA Web site www.osha.gov, or check your state OSHA Web site. There are 22 states and jurisdictions that have their own OSHA plan covering both the private sector and state and local government employees. These states and jurisdictions include: Alaska, Arizona, California, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Mexico, North Carolina, Oregon, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington and Wyoming. There are four states which cover public employees only: Connecticut, New Jersey, New York and the Virgin Islands.

2. A general explanation of the epidemiology and symptoms of bloodborne diseases.

   Epidemiology is the study of factors and mechanisms involved in the spread of disease within a population. Include a discussion of the symptoms of these bloodborne pathogen diseases: hepatitis B, hepatitis C and Acquired Immunodeficiency Disease (AIDS). A good resource for information on bloodborne pathogen diseases is the Centers for Disease Control (CDC) Web site www.cdc.gov/niosh/topics/bbp. You can print out the CDC fact sheets for bloodborne pathogen diseases and have them available as part of the training.

3. An explanation of the modes of transmission of bloodborne pathogens.

   Dental healthcare workers have an elevated risk of exposure to blood and other body fluids through needlesticks, bites and, other sharps injuries.

   continued on page 42
Exposures can also occur from blood contact with mucous membranes and non-intact skin. In a dental healthcare setting the modes of transmission of blood-borne pathogens are listed in the chart to the left.

4. An explanation of the employer’s exposure control plan and the means by which the employee can obtain a copy of the written plan.

The exposure control plan is a written plan that requires the employer to identify which individuals have occupational exposure and who will receive training, protective equipment, vaccinations and other protections as stated in the Bloodborne Pathogen Standard. Your OSHA manual will have a section on exposure control. Be sure to personalize it with site-specific details. An effective exposure control plan is designed to eliminate or minimize employee exposure to bloodborne pathogen hazards in the workplace.

5. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials (OPIM).

In dentistry, the tasks with occupational exposure to blood or OPIM include dental treatment procedures, radiographic procedures, instrument processing, treatment room cleaning and disinfection, lab procedures, and the handling or disposal of contaminated waste.

6. An explanation of the use and limitations of engineering controls, work practices and personal protective equipment.

Engineering controls are designed to isolate or remove the bloodborne pathogen hazard from the workplace. Examples include heat sterilizers, chemical disinfectants and engineered sharps with sharps injury protection. OSHA’s needlestick safety and prevention plan requires employers to select safer needle devices as they become available, and involve employees in identifying and choosing these devices. If you do not utilize the safer needle devices, you must document why. You can request samples of the safer needle devices from the manufacturers or evaluate them at dental association trade shows. You can download an evaluation form from the CDC Web site, www.cdc.gov/oralhealth/infectioncontrol/forms.htm.

Work practice controls reduce the risk of exposure by altering the manner in which a task is performed, i.e. prohibiting re-capping of needles by a “two-handed” technique and using a one-handed scoop technique instead.

Appropriate personal protective equipment includes gowns, gloves, masks, protective eyewear, face shields, and utility gloves that are chemical and puncture resistant.

7. Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.

Employers are required to provide personal protective equipment to employees. Employees must be instructed on proper use, location, removal, handling and disposal of personal protective equipment. Employers are responsible for laundering of reusable gowns or clinical jackets. OSHA prohibits employees from taking contaminated laundry home for decontamination.

8. An explanation of the basis for selection of personal protective equipment.

OSHA mandates that dental health care workers wear gloves, surgical masks, protective eyewear, and protective clothing in specified circumstances to reduce the risk of exposures to bloodborne pathogens. Gloves may be vinyl, nitrile or
latex and come in ambidextrous as well as “right-hand” and “left-hand” styles. The surgical face mask should fit well and be changed after every patient or more often if it becomes moist or contaminated during procedures. Protective eyewear should be American National Standards Institute (ANSI) rated. Eyewear should have solid side shields that are impact resistant. Chin-length plastic face shields offer more coverage and are easily worn over prescription glasses. Protective clothing must be worn when the employee’s clothes are likely to be soiled with blood or OPIM. Protective clothing is considered appropriate only if it does not permit blood or OPIM to pass through to or reach the employee’s work or street clothes or skin.

9. Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that vaccination will be offered free of charge.

The hepatitis B vaccine must be offered to all employees who have occupational exposure within 10 days of employment. Employees will either accept the employer’s offer of the hepatitis B vaccine or sign a declination form. Employees who decline may request the vaccination at a later date at no cost.

10. Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.

An exposure incident is a specific incident involving contact with blood or other potentially infectious material to the eye, mouth, other mucous membrane, non-intact skin, or parenteral under the skin (e.g., needlestick) that occurs during the performance of an employee’s duties. When an exposure incident occurs, immediate action must be taken to assure compliance with the OSHA Bloodborne Pathogen Standard and to expedite medical treatment for the exposed employee. As part of your exposure incident plan, have a step by step written protocol to follow. For example, see the chart to the left.

11. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.

Employers must follow OSHA requirements for recording and reporting of exposure incidents. The following information must be included in the exposure report, recorded in the exposed person’s confidential medical record, and made available to the health care provider:

1. Date and time of exposure.
2. Details of the procedure being performed.
3. If the exposure involved a sharp device, the type of device.
4. Details of the exposure, including the type and amount of fluid or material and the severity of the exposure.
5. Details about the exposure source – whether the patient was infected with hepatitis B virus (HBV) and their hepatitis B e antigen (HBeAg) status, hepatitis C virus (HCV), or Human Immunodeficiency Virus (HIV).
6. Details about the exposed person’s hepatitis B vaccination and vaccine-response status.
12. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.

The employer must maintain an accurate record for each employee with occupational exposure by providing the employee with a copy of the health care professional’s written opinion within 15 days of the exposure incident. All employee medical information must be kept confidential and the employer must maintain these records for duration of employment plus 30 years.

13. An explanation of the signs and labels and/or color coding to communicate hazards to employees.

In a dental office, signs and labels are utilized to communicate to employees that there are biohazardous materials in that area. The biohazard label, as shown in the picture, is required on sharps containers and other receptacles such as regulated medical waste containers, biopsy containers, etc., that have potentially infectious items in them. Employers are responsible for training employees to recognize this symbol and any other coding such as: bags or containers that are colored “red” or “orange-red” as being biohazardous.

14. An opportunity for interactive questions and answers with the person conducting the training.

Training can easily be conducted by the dentist, an employee, or an OSHA trainer consultant. Training must be held during regular working hours and be provided at no charge to the employee. Training documentation must include the dates of the training sessions, contents or a summary of the training sessions, the names and qualifications of persons conducting the training, and the names and job titles of all persons attending the training sessions. Training records shall be maintained for three years from the date on which the training occurred.

In addition to providing bloodborne pathogen training, OSHA requires dentists to have a written hazard communication plan which must include: an inventory and current Material Safety Data Sheet (MSDS) for each hazardous substance in the workplace, labels for chemical containers not identified, and training of employees on hazards and personal protective equipment.

Now that you have the basic elements of a bloodborne pathogen program, grab the OSHA manual, gather the team for a staff meeting, order the pizza and conduct the OSHA required annual training. Now you’ve got OSHA!

If you would like a complimentary “OSHA training checklist” you may request one from the author by e-mailing leslie@lesliecanham.com.

References:
U.S. Department of Labor Occupational Safety & Health Administration
1. Bloodborne Pathogen training shall be provided:
   a) At the time of initial assignment to tasks where occupational exposure may take place.
   b) At least annually.
   c) When modification of tasks or procedures or institution of new tasks or procedures affect the employee’s occupational exposure.
   d) All of the above.

2. Which pathogen is not mentioned in this study of the Bloodborne Pathogen standard?
   a) Hepatitis B
   b) Hepatitis C
   c) Human Immunodeficiency Virus (AIDS)
   d) Tuberculosis

3. Each employer having an employee(s) with occupational exposure must establish, implement, and maintain an effective Exposure Control Plan which is designed to eliminate or minimize employee exposure to which one of the following hazards?
   a) Bloodborne pathogens
   b) Slips and Falls
   c) Fires
   d) Confined spaces

4. To date there are no confirmed occupationally acquired cases of ____ in dentistry.
   a) hepatitis B
   b) hepatitis C
   c) Acquired Immunodeficiency Disease (AIDS)
   d) herpes virus

5. How long must the employer maintain medical records on employees with occupational exposure?
   a) One year
   b) Duration of employment plus 30 years
   c) Five years
   d) 10 years

6. Employers must provide all of the information listed below to employees except:
   a) Types, proper use, location of personal protective equipment.
   b) Removal, handling, and decontamination of personal protective equipment.
   c) When employees can take contaminated laundry home to decontaminate.
   d) An explanation of the basis for selection of personal protective equipment.

7. The Hepatitis B vaccination must be offered to all occupationally exposed employees at no charge within ____ days of employment.
   a) five
   b) seven
   c) 10
   d) 14

8. A written Fire Safety Plan includes all of the following except:
   a) Biological hazards
   b) Identification, recognition and reporting of fire hazards
   c) Procedures for alarm and notification of fire department
   d) Procedures for evacuation and accounting of employees

9. Appropriate protective eyewear includes all of the following except
   a) Contact lenses
   b) Chin length face shields
   c) Safety glasses with solid side shields
   d) Prescription glasses with solid side shields

10. Elements of a Written Hazard Communication Plan include:
    a) An inventory and a current file of MSDS sheets for each hazardous substances in the workplace.
    b) Labels for chemical containers not identified.
    c) Training of employees on hazards and personal protective equipment
    d) All of the above
Continuing Education Answer Sheet

Fill out this sheet ONLY if you wish to submit your test by mail or fax. A $35 processing fee applies.

Instructions: To receive credit, complete the answer sheet and mail it, along with a check or credit card payment to: Dentaltown.com, Inc., 10850 S. 48th Street, Phoenix, AZ 85044. You may also fax this form to 480-598-3450. You will need a minimum score of 70% to receive your credits.

Please print clearly. Deadline for submission of answers is 24 months after the publication date.

OSHA for Dentistry and the Basic Elements of a Bloodborne Pathogen Program  By Leslie Canham

License Number ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ __________

AGD#___________________________________________________________________________________

Name___________________________________________________________________________________

Address_________________________________________________________________________________

City___________________________________________ State__________ Zip ______________________

Daytime phone __________________________________________________________________________

☐ Check (payable to Dentaltown.com, Inc.)

☐ Credit Card (please complete the information below and sign)

Card Number ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

Expiration Date – Month / Year ____ ____ / ____ ____ ____ _______________

Signature ___________________________________________________ Date_____________________

CE Post-test

Please circle your answers.

1. a b c d
2. a b c d
3. a b c d
4. a b c d
5. a b c d
6. a b c d
7. a b c d
8. a b c d
9. a b c d
10. a b c d

Program Evaluation

Please evaluate this program by circling the corresponding numbers: (3 = Excellent to 1 = Poor)

1. Course objectives were consistent with the course as advertised 3 2 1
2. Course material was up-to-date, well-organized and presented in sufficient depth 3 2 1
3. Instructor demonstrated a comprehensive knowledge of the subject 3 2 1
4. Overall, I would rate this course 3 2 1
5. Overall, I would rate this instructor 3 2 1

For any questions, please contact Rita Zakher, DMD, MBA, director of continuing education at rita@dentaltown.com