Introduction:
Instrumentation and devices used in the practice of dentistry are designed to efficiently cut and puncture skin, muscle, bone, tooth structure and a variety of structures/substances. These same instruments and devices, while intended to perform specific clinical procedures, can and do cause injury to dental healthcare workers (DHCWs) resulting in their exposure to the blood and/or body fluid of the patient (exposure incident).1 As defined by OSHA, an exposure incident occurs whenever, during the performance of an employee’s duties, an instrument/device contaminated with blood/saliva/other potentially infectious material (OPIM) causes a percutaneous injury (needlestick or cut with a sharp object) or contacts mucous membrane (eye, nose, mouth, other) or nonintact skin.1-3 The inherent risk of sustaining an exposure increases when instruments/devices are used carelessly or improperly. The Centers for Disease Control and Prevention (CDC) estimates that 385,000 needlesticks and other sharps-related injuries are sustained by hospital-based healthcare personnel every year and an average of 1,000 sharps injuries occur each day.1 Data for exposures in outpatient facilities, including dental facilities, is incomplete and many exposure incidents are suspected to go unreported.1-4 However, a significant number of parenteral exposures, splashes and other contact with mucous membranes or non-intact skin frequently occur in outpatient medical and dental settings.2-4 While more than 20 pathogens associated with occupational transmission in healthcare settings have been documented, the bloodborne pathogens (HBV, HCV, and HIV) are the most commonly transmitted and are the greatest concern in dental outpatient settings.4 Although occupational HIV, HBV and HCV seroconversion is relatively rare, especially in dentistry, the risk of acquiring a bloodborne infection after an exposure is definable and very real.4 Costs, including appropriate post-exposure counseling, testing and prophylaxis, are estimated to range from $500 to $3,000 depending on the treatment provided per occurrence.1 Each exposure incident carries with it significant emotional anguish from worrying about the possible consequences of seroconversion. The OSHA Bloodborne Pathogens Standard specifically dictates the exact procedures that an employer must follow when an employee sustains an occupational exposure.1 The American Dental Association, CDC and all related agencies recommend that dental practitioners comply with the OSHA regulations regarding bloodborne pathogens.1-5 Non-compliance could result in a higher risk of bloodborne disease transmission and increased anxiety for the exposed individual — and significant fines for the employer. Effective post-exposure management must be an essential part of every dental office’s infection control and safety protocol.1-5 Prevent The Exposure Incident
Prevention is paramount. Avoiding exposure to blood/OPIM and compliance with immunization recommendations remain primary strategies for reducing occupationally acquired infection.1,4-5 While most exposures in dentistry are preventable when proper preventive controls are implemented, accidents and occupational exposures can and do occur. Needlesticks and other hollow bore exposures are the most significant risk for transmission of bloodborne diseases due to the significantly increased volume of infected blood/OPIM contained within the lumen.1,3,6 In 1991, OSHA issued the Bloodborne Pathogens Standard to protect workers from this threat.1 However, the markedly increased potential for disease transmission from hollow-bore needles/devices has resulted in greater attention to removing sharps.
hazards through the development and use of engineering controls that mechanically reduce the chance of a hazard or injury occurring and are frequently technology-based, incorporating safer designs of instruments and devices. By the end of 2001, many states had mandated some form of safe sharps legislation. In 2001, OSHA revised the 1991 Bloodborne Pathogens Standard to include legislation from the Needlestick Safety and Prevention Act. The revised standard, effective March 6, 1992, clarifies the need for employers to:
1. select safer needles and devices
2. involve employees in identifying and choosing these devices
3. maintain a log of injuries from contaminated sharps

While this OSHA update does not specifically require safer sharps to be used in every clinical scenario, it does state that employers should consider “safer” needles and other “safer” sharps and devices as they become available. Each office should conduct an annual review of the sharps in use and their possible replacement with “safer” versions that are clinically acceptable. A log documenting this yearly review should include:
1. the date of the review;
2. the personnel in attendance;
3. products reviewed;
4. a brief explanation of the evaluation process; and
5. which, if any “safer” devices will be selected.

Cost may not be used as a justification for non-selection of safer sharps.

Non-managerial employees with occupational exposure including dental hygienists, assistants and any other staff member such as nurses and nursing assistants should be actively involved in identifying and choosing such devices. Many “safer” versions of sharps devices such as self-sheathing needles, scalpels with retractable blades, etc., have become available and should be considered. The selected devices must be acceptable for clinical care and provide optimal protection against injuries. The annual review of selecting sharps injury prevention devices gives offices a systematic way to determine how well a device performs in each office’s clinical setting. The CDC Division of Healthcare Quality Promotion publishes an invaluable resource to help with this evaluation. The Workbook for Designing, Implementing and Evaluating a Sharps Injury Prevention Program, is available for download at http://www.cdc.gov/sharpssafety/workbook.html. This workbook outlines an 11-step approach for selecting a product and has a number of examples of how to evaluate safer sharps. The Sample Device Evaluation Form (Figure 3) may help facilitate this effort.

Important information to obtain before performing product evaluation includes:
1. Frequency of use and purchase volume of the conventional devices;
2. Most commonly used sizes;
3. Purpose(s) for which the device is used;
4. Other products the device is used with that might pose compatibility concerns;
5. Unique clinical needs that should be considered; and

Conclusions:
1. Exposure incidents place dental healthcare personnel at risk for HBV, HCV and/or HIV infection,
2. The Needlestick Safety and Prevention Act, effective March 6, 1992, revised the Bloodborne Pathogens Standard of 1991 and clarifies the need for employers to:
   a. select safer needles and devices
   b. involve employees in identifying and choosing these devices
   c. maintain a log of injuries from contaminated sharps.
References:


5. American Dental Association (ADA), Post-exposure evaluation and follow-up requirements under OSHA’s standard for occupational exposure to bloodborne pathogens, a step-by-step guide to compliance, Available at http://www.ada.org/prof/resources/topics/osha/steps.asp.


Did you miss one of these Virtual Seminars?
Audio CDs are Now Available for the Following Programs:

**Keys to Hiring and Maintaining Quality Staff**
originally presented on May 17, 2006
Crystal Reeves, CPC, CMPE
This virtual seminar provides step-by-step guidance to develop an organization and build a staff that functions smoothly and efficiently. The practical tools and techniques discussed will prepare the participant to take a fresh look at staffing, hiring, training and assessment. Participants will be better prepared to identify problems and develop solutions within their OMS Offices. Code: AOM – 11595

**Electronic Transactions in the OMS Office: They’re Easier Than You Think**
originally presented on March 15, 2006
Alan H. Feldman
One of the first steps towards e-health, electronic transactions have grown beyond just claim submissions. This seminar will explore the many ways to utilize technology that will enable OMSs and their staff to make better use of their time and improve the overall efficiency of the office. Electronic Data Interchange (EDI), Electronic Funds Transfer (EFT), costs of implementing electronic transactions, Electronic Attachments, and HIPAA's National Provider Identifier (NPI) required by May 23, 2007 are discussed. Code: AOM – 11530

**OMS Buy-Ins and Pay-Outs: Structuring the Right Deal for You**
originally presented on November 9, 2005
Sandra E.D. McGraw, JD, MBA
This seminar will provide an overview of what it means to make your associate your partner, and the obligations that you have to each other. Valuing the hard assets, accounts receivable, good will and structuring the buy-in and pay-out, alternatives and options that should be considered will be discussed. Concrete examples are used, as they pertain to OMS practices. Code: AOM – 10850

**Rebirth of the Referral Network**
originally presented on July 13, 2005
Scott McDonald
This program will teach OMSs and their staff how to prioritize referral sources, identify new referrals, and patch up lost relationships. Especially useful for new associates, newly re-located practices and others hoping to grow their practices quickly. Build your practice through internal marketing outside the office, create a referral network plan with staff, and employ specific dialogues to persuade potential referrals. Code: AOM – 10671

**Use of Formal Pay Scales in the OMS Practice**
originally presented on May 18, 2005
John S. Bauer, MBA and Robert G. Haney
Learn how to Hold and Mold the Right Staff! This virtual seminar will help to assure a well-operated office with a friendly environment, low-turnover rate and higher employee satisfaction. Attract and keep your greatest asset — your employees, allow the practice to be accountable for a budget; create realistic employee pay expectations, and decrease the cost of bad hiring decisions. Code: AOM – 10582

**HIPAA Security Compliance Part-II**
originally presented on February 23, 2005
John C. Parmigiani, MS, BES
This seminar will indicate what OMSs need to do in order to be compliant with the administrative, physical and technical safeguards of HIPAA Security Regulations. Security policies, procedures and documentation requirements as well as specific implementation issues practical to the OMS office are highlighted. Code: AOM – 10246

For more information or to purchase your CDs, please visit [www.krm.com/aaoms](http://www.krm.com/aaoms) and click on the Recordings link or call 800/775-7654.

Questions? Please contact Beth Hayson at 800/822-6637; ext. 4357 or bhayson@aaoms.org