

## Medical News

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### Cal-OSHA Issues Citation for Failure to Adopt Safer Needle Devices

The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal-OSHA), recently issued its first citation under the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogen Standard for failure to adopt engineering controls. Acting on a complaint filed by Service Employees International Union (SEIU), which represents healthcare workers at the hospital, Cal-OSHA cited the hospital for "not evaluating and adopting engineering control devices, such as new protective intravenous and injection devices." The hospital had completed an evaluation of a needleless intravenous system, but had not implemented it at the time of the inspection. No penalties were issued with the citation.

The citation reflects the California Code of Regulations' emphasis on the employer's responsibility to evaluate existing engineering controls and to provide such controls where possible.

Although the bloodborne pathogen standard did not specifically require the use of "safer needle devices," labor unions and needle safety experts have hoped the standard might be interpreted and enforced to encourage the use of new needle technology designed to reduce or eliminate the risk of needlestick injuries, which represent the greatest risk for occupational infection with HIV and HBV. Employers under federal OSHA jurisdiction should note the long-standing requirement to implement engineering controls when a hazard exists, if such controls are available. At the time of adoption of the bloodborne pathogen standard, OSHA indicated that needleless systems were not yet widely available; however, that clearly is changing, and employers will be expected to evaluate such devices for adoption.

### FDA and EPA's Regulatory Authority Over Chemical Germicides Clarified

On July 9, 1993, the Environmental Protection Agency (EPA) announced that a memorandum of understanding has been signed with the Food and

Drug Administration (FDA) regarding the regulation of liquid chemical germicides to provide interim guidance, to minimize duplicative regulatory requirements, and to begin the rule-making process to provide permanent exclusive jurisdiction for certain categories of chemical germicides.

Historically, the EPA has assessed the effective performance of all chemical germicides and addressed health and safety issues presented by their use. The FDA's priority has been to confirm the efficacy and safety of chemical germicides used to reprocess critical and semicritical devices, which pose the greatest risk of disease transmission. As a result of both agencies trying to fulfill their statutory responsibilities, overlapping regulatory processes have evolved for manufacturers of liquid chemical germicides used on devices.

According to the agreement, all products that bear sterilant label claims and can be used on critical or semicritical surfaces as defined by the Centers for Disease Control and Prevention (CDC) will be regulated by the FDA as devices. In addition, any sterilant product whose claims correspond to a high-level disinfectant use pattern also will be regulated by the FDA. The EPA will regulate all remaining types of chemical germicides as pesticides, excluding sterilants, which are considered general-purpose disinfectants.

When the rule-making process is complete, new rules issued by each agency will eliminate the remaining overlapping jurisdiction.

### Sixth HIV Patient Identified in Florida Dental Investigation

The CDC recently identified a sixth patient who became infected with human immunodeficiency virus (HIV) as a result of dental care provided by an HIV-infected dentist in Florida. The patient, a teen-aged female, was HIV seropositive when tested as an applicant for military service in late 1992. She had not been tested for HIV previously, although she had been notified in December 1990 that, as a former patient of the dentist, she should consider such testing.

Multiple interviews with the patient and her family and review of her medical records did not

identify another mode of exposure to HIV. She was a patient in the dental office from 1987 to 1989 and received prophylaxis and restorative fillings under local anesthesia.

DNA sequence analysis showed that her HIV strain had a high degree of similarity to that of the dentist and five other infected patients. The precise events resulting in HIV transmission in this practice remain unknown. Unlike the other five infected patients, this patient had neither dental extractions nor root canal therapy. Opportunities for injuries to the dentist were limited. However, exposure of this patient to the dentist's blood cannot be ruled out (eg, related to use of the anesthetic syringe).

Approximately 1,100 patients of the dentist are known to have been tested for HIV. This dental practice in Florida remains the only documented instance of HIV transmission from a healthcare worker to patients.

FROM: Centers for Disease Control and Prevention. *MMWR* 1993;42:320-331.

## **CDC Reports No HIV Infection in Patients Treated by HIV-Infected HCWs**

The CDC recently reported the results of investigations of 19,036 persons treated by 57 HIV-infected healthcare workers (HCWs). No seropositive persons were reported among 11,529 patients tested from practices of 46 HCWs, including 23 dentists and dental students, 12 physicians and medical students, seven surgeons and obstetricians, and four others. For the remaining 11 HCWs, 7507 patients were tested and 92 seropositive patients were identified. Follow-up investigations have been completed for 86 (94%) of these 92 patients; eight patients were documented to be infected before receiving care from the HIV-infected HCW; 54 had established risk factors for HIV; 19 may have had opportunities for HIV exposure (ie, exchange of sex for drugs or money); and five had no risks identified. Investigations are in progress for six patients of two HCWs.

The CDC reports that the risk for transmission of a bloodborne pathogen from an HCW to a patient is associated with the circulating titer of the pathogen in the blood, the procedure performed, techniques and infection control precautions used, and the medical condition of the HCW. The cluster of six cases associated with the dental practice in Florida represents the only documented instance of HIV transmission from an HCW to patients. The data presented in this report of 57 investigated practices are consistent with previous assessments that the risk for HIV

transmission from an infected HCW to patients during invasive procedures is small and can be reduced with appropriate use of infection control precautions.

In an editorial on HIV-infected surgeons and dentists that appeared in the April 14, 1993, issue of the *Journal of the American Medical Association*, Drs. Ban Mishu and William Schaffner of the Vanderbilt University School of Medicine, Nashville, Tennessee, noted that although the lookback studies done to date have been important in establishing that the overall risk to patients from HIV-infected HCWs is low, these studies are unlikely to detect the infrequent highly infectious practitioner who might pose a substantially higher risk to patients. Further, they note that although the Florida dental case has been characterized as an aberration because no other cases of transmission from HCW to patients have been reported, in fact, it rather closely resembles provider-to-patient transmission of HBV, which often produces clusters of cases in the absence of obvious infection control lapses.

FROM: Centers for Disease Control and Prevention. *MMWR* 1993;42:320-331; Mishu B, Schaffner W. *JAMA* 1993;269:1843-1844.

## **OSHA Creates Office of Occupational Health Nursing**

The U.S. Department of Labor announced that a new office of Occupational Health Nursing has been established to underscore the major role nurses play in striving for safe and healthful workplaces. OSHA estimates that there are 23,000 practicing occupational health nurses nationwide, representing the largest group of healthcare providers at the nation's worksites.

The new office will help the agency in developing standards, surveillance policies, and implementing education and training activities, as well as assist with field investigations and evaluation of employees' medical care and injury/illness surveillance records.

## **New Recommendation Calls for HBV Vaccination for All College Students**

The American College Health Association (ACHA) recently recommended that all colleges and universities require hepatitis B vaccine for healthcare students and strongly urge vaccination for all college students with special attention to those at highest risk of infection. Health officials have urged colleges and universities to conduct campaigns to educate students