Public Employees Occupational Safety and Health Alert
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April, 2002

OSHA Revises the Bloodborne Pathogens Standard (29 CFR 1910.1030)

This Alert is to inform New Jersey public employers and employees that OSHA has revised its Bloodborne Pathogens Standard. OSHA began enforcement of the new provisions in the private sector on July 17, 2001. ***The effective date for enforcement by the Public Employees Occupational Safety and Health (PEOSH) Program in the public sector in New Jersey is September 4, 2001***. A copy of the revised standard can be found on the OSHA web site, www.osha.gov.

Background

The Occupational Safety and Health Administration (OSHA) published the Occupational Exposure to Bloodborne Pathogens Standard in 1991 because of a significant health risk associated with exposure to viruses and other microorganisms that cause bloodborne diseases. Of primary concern are the human immunodeficiency virus (HIV), the hepatitis B virus (HBV) and the hepatitis C virus (HCV).

The standard sets forth requirements for employers with workers exposed to blood or other potentially infectious materials. In order to reduce or eliminate the hazards of occupational exposure, an employer must implement an Exposure Control Plan for the worksite with details on employee protection measures. The Plan must also describe how an employer will use a combination of engineering and work practice controls; ensure the use of personal protective clothing and equipment; provide training, medical surveillance, hepatitis B vaccinations, and signs and labels, among other provisions. Engineering controls are the primary means of eliminating or minimizing employee exposure and include the use of safer medical devices, such as needleless devices, shielded needle devices, and plastic capillary tubes.

Nearly 10 years have passed since the Bloodborne Pathogens Standard was published. Since then, many different medical devices have been developed to reduce the risk of needlesticks and other sharps injuries. These devices replace sharps with non-needle devices or incorporate safety features designed to reduce injury. Despite these advances in technology, needlesticks and other sharps injuries continue to be of concern due to the high frequency of their occurrence and the severity of the health effects.

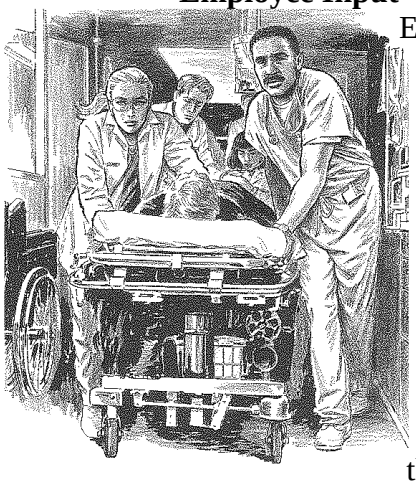
The Centers for Disease Control and Prevention (CDC) estimate that healthcare workers sustain nearly 600,000 percutaneous injuries annually involving contaminated sharps. In response to both the continued concern over such exposures and the

technological developments which can increase employee protection, Congress passed the **Needlestick Safety and Prevention Act.** This act directed OSHA to revise the Bloodborne Pathogens Standard to establish detailed requirements for employers to identify and make use of effective and safer medical devices. That revision was published on January 18, 2001, and became effective April 18, 2001 for the private sector.

Summary

The revision to OSHA's Bloodborne Pathogens Standard added new requirements for employers that include additions to the Exposure Control Plan and keeping a sharps injury log*. It does not impose new requirements for employers to protect workers from sharps injuries. The original standard already required employers to adopt engineering and work practice controls that would eliminate or minimize employee exposure to hazards associated with Bloodborne Pathogens.

The revision does, however, specify in greater detail the engineering controls, such as safer medical devices, which must be used to reduce or eliminate worker exposure.



Exposure Control Plan

The revision includes new requirements regarding the employer's Exposure Control Plan, including an annual review and update to reflect changes in technology that may eliminate or reduce exposure to bloodborne pathogens. The employer must:

- take into account innovations in medical procedures and technological developments that reduce the risk of exposure (e.g., newly available medical devices designed to reduce needlesticks); and

- document the consideration and use of appropriate, commercially available, and effective safer devices (e.g., describe the devices identified as candidates for use, the method(s) used to evaluate those devices, and justification for the eventual selection of the appropriate device).

No one medical device is considered appropriate or effective for all circumstances. Employers must select devices that, based on reasonable judgment:

- will not jeopardize patient or employee safety or be medically inadvisable; and
- will make an exposure incident involving a contaminated sharp less likely to occur.

Employee Input

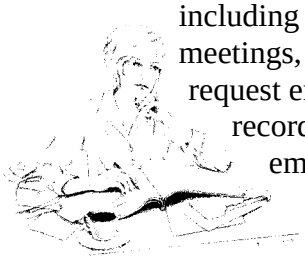
Employers must solicit input from non-managerial employees responsible for direct patient care regarding the identification, evaluation, and selection of effective engineering controls, including safer medical devices. Employees selected should represent the range of exposure situations encountered in the workplace, such as those in geriatric, pediatric, or nuclear medicine, and others involved in direct care of patients.

The PEOSH Program will check for compliance with this provision during inspections by questioning a representative number of employees to determine if and how their input was requested.

Documentation of employee input

Employers are required to document, in the Exposure Control Plan, how they received input from employees. This obligation can be met by:

- Listing the employees involved and describing the process by which input was requested; or
- Presenting other documentation, including references to the minutes of meetings, copies of documents used to request employee participation, or records of responses received from employees.



Recordkeeping

Employers who have employees who are occupationally exposed to blood or other potentially infectious materials, and who are required to maintain a log of occupational injuries and illnesses under existing recordkeeping rules, must also maintain a sharps injury log*. That log will be maintained in a manner that protects the privacy of employees. At a minimum, the log will contain the following:

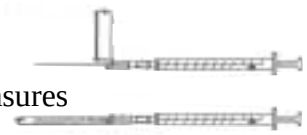
- the type and brand of device involved in the incident;
- location of the incident (e.g., department or work area); and
- description of the incident

The sharps injury log may include additional information as long as an employee's privacy is protected. The format of the log can be determined by the employer.

Modification of Definitions

The revision to the Bloodborne Pathogens Standard includes modification of definitions relating to engineering controls. Two terms have been added to the standard, while the description of an existing term has been amended.

<u>Engineering Controls</u>



Engineering Controls include all control measures that isolate or remove a hazard from the workplace, such as sharps disposal containers and self-sheathing needles.

The original Bloodborne Pathogens Standard was not specific regarding the applicability of various engineering controls (other than the above examples) in the healthcare setting. The revision now specifies that "…safer medical devices, such as sharps with engineered sharps injury protections and needleless systems" constitute an effective engineering control, and must be used where feasible.

<u>Sharps with Engineered Sharps Injury Protections</u>

This is a new term which includes non-needle sharps or needle devices containing built-in safety features that are used for collecting fluids or administering medications or other fluids, or other procedures involving the risk of sharps injury. This description covers a broad array of devices, including:

- syringes with a sliding sheath that shields the attached needle after use;
- needles that retract into a syringe after use;
- shielded or retracting catheters
- intravenous medication (IV) delivery systems that use a catheter port with a needle housed in a protective covering.

<u>Needleless Systems</u>

This is a new term defined as devices which provide an alternative to needles for various procedures to reduce the risk of injury involving contaminated sharps. Examples include:

- IV medication systems which administer medication or fluids through a catheter port using non-needle connections; and
- jet injection systems which deliver liquid medication beneath the skin or through a muscle.

UPDATE:

*OSHA's revised Recordkeeping Rule (29 CFR 1904) was published in the Federal Register on January 19, 2001. It became effective January 1, 2002 for the private sector, as well as the public sector in New Jersey.

The revised Rule requires employers to record all injuries from contaminated needles and other sharps on the OSHA Log 300 form. For further information, contact the NJDOL PEOSH Program at (609) 292-0767 or NJDHSS PEOSH Program at (609) 984-1863.

CDC UPDATE

The Centers for Disease Control and Prevention (CDC) recently issued an "Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis" (June 29, 2001 / 50 (RR11);1-42). The report updates and consolidates the previous CDC guidelines and recommendations for occupational hepatitis B (HBV), hepatitis C (HCV), and human immunodeficiency virus (HIV) exposure management for health care personnel (HCP).

New Definition of Health-care Personnel

In the report, health-care personnel (HCP) are defined as persons (e.g., employees, students, contractors, attending clinicians, **public-safety workers,** or volunteers) whose activities involve contact with patients or with blood or other body fluids from patients in a health-care, laboratory, or **public-safety setting**. According to the report, the potential exists for blood and body fluid exposure to other workers, and the same principles of exposure management could be applied to other settings.

What is an Exposure?

An exposure that might place HCP at risk for HBV, HCV, or HIV infection is defined as:

- a percutaneous injury (e.g., a needlestick or cut with a sharp object), or
- contact of mucous membrane or non-intact skin (e.g., exposed skin that is chapped, abraded, or afflicted with dermatitis) with blood, tissue, or other body fluids that are potentially infectious.

Antibody Testing after the Hepatitis B Vaccination

The CDC recommends that any person who performs tasks involving contact with blood, blood-contaminated body fluids, other body fluids, or sharps should be vaccinated against hepatitis B.

The CDC stated in the report that "HCP who have contact with patients or blood and are at **ongoing risk for percutaneous injuries** should be tested 1-2 months after completion of the 3-dose vaccination series for antibodies for hepatitis B surface antigen (anti-HBs).

The PEOSH Bloodborne Pathogens Standard (29 CFR 1910.1030) requires that the most recent CDC guidelines be followed regarding the hepatitis B vaccine and post-exposure follow-up. ***Therefore, employers of New Jersey public safety workers (e.g., EMT's, police, firefighters, corrections officers) and other public employees covered under the PEOSH Bloodborne***

Pathogens Standard must determine if their employees are at ongoing risk for percutaneous injuries. If so, then the employer is required to offer blood testing to these employees 1-2 months after completion of the 3-dose vaccination series for antibodies for hepatitis B surface antigen (anti-HBs). (If the employee does not respond to the primary vaccine, consult the CDC report[1] for additional recommendations.) The employer does not have to offer antibody testing to those employees who have been previously vaccinated.

Booster Doses of Hepatitis B Vaccine

Booster doses of hepatitis B vaccine are still not necessary, and *periodic* serologic testing to monitor antibody concentrations after completion of the vaccine series is not recommended.

Other Resources

Information used in this Alert was obtained from documents published by the US Departments of Labor and Health and Human Services. These include the Occupational Safety and Health Administration (OSHA) and the Centers for Disease Control and Prevention (CDC).

For further information contact:

New Jersey Department of Health and Senior Services
Public Employees Occupational Safety and Health Program
PO Box 360, 7th Floor
Trenton, NJ 08625-0360
(609) 984-1863
http://www.state.nj.us/health/eoh/peoshweb

New Jersey Department of Labor
Public Employees Occupational Safety and Health Program
PO Box 386
Trenton, NJ 08625-0386
(609) 292-0767
(800) 624-1644
http://www.state.nj.us/labor/wps/psosh/osh/training/training.htm

Occupational Safety and Health Administration
U.S. Department of Labor
http://www.osha.gov

Centers for Disease Control and Prevention
U.S. Department of Health and Human Services
http://www.cdc.gov

1. The website for the Centers for Disease Control and Prevention *Morbidity and Mortality Weekly Report*: "Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis" (June 29, 2001 / 50(RR11);1-42) is:

   http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm

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PEOSH PROGRAM
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