WHAT IS THE REVISED PEOSH BLOODBORNE PATHOGENS STANDARD?

Many workers risk on-the-job contact with blood and other body fluids. These materials may contain pathogens, organisms that can cause serious disease. Of major concern are the hepatitis B virus (HBV), the hepatitis C virus (HCV), and the human immunodeficiency virus (HIV), the cause of Acquired Immunodeficiency Syndrome (AIDS).

On July 6, 1993, the federal OSHA standard, 29 CFR 1910.1030, *Occupational Exposure to Bloodborne Pathogens*, was adopted under the New Jersey Public Employees Occupational Safety and Health (PEOSH) Act. This standard protects workers in the public sector in New Jersey who come in contact with blood or other potentially infectious materials.

As a result of the Federal Needlestick Safety and Prevention Act (November 6, 2000), OSHA published the revised Bloodborne Pathogens Standard on January 18, 2001 for the private sector. PEOSH began enforcement of the revised standard on September 4, 2001 for the public sector. The revisions to the standard include:

- Additional definitions (e.g., engineering controls);
- New requirements in the Exposure Control Plan (described on page 2);
- Solicitation of input from non-managerial employees; and
- Maintaining a sharps injury log.

WHO IS COVERED?

The standard covers all public employees who may have contact with blood or other potentially infectious materials because of their work. Employees most likely to be covered include, but are not limited to:

- Health care workers (e.g.: medical and dental personnel, school nurses);
- Emergency medical services employees;
- Firefighters (including volunteers);
- Police officers;
- Corrections officers;
- Some laundry and housekeeping staff;
- Lifeguards; and
- Workers in institutions for the developmentally disabled.
WHAT ARE OTHER POTENTIALLY INFECTIOUS MATERIALS?

The standard defines other potentially infectious materials as the body fluids listed below:

- Semen and vaginal secretions;
- Fluid from the brain, spine, lungs, and amniotic sac;
- Fluid around joints, the heart, and the abdominal lining;
- Saliva in dental procedures;
- All body fluids that are visibly contaminated with blood;
- All body fluids when you cannot tell which type they are.

Also considered as potentially infectious materials are:

- Any unfixed human tissue or organs other than skin;
- Animals or cells infected with HIV or HBV for medical research. (Hepatitis C could also be included.)

HOW ARE EMPLOYEES EXPOSED?

Occupational exposures occur when employees perform tasks that can cause blood or other potentially infectious materials to enter their bodies. These exposures happen through:

- Cuts, cracks, or abrasions in the skin;
- Splashing, or spraying into the eyes, mouth, or nose;
- Puncture wounds from contaminated sharps (needles, broken glass).

WHAT ARE THE MAJOR REQUIREMENTS OF THE STANDARD?

- Employee exposure control plan;
- Methods to prevent exposure;
- Hepatitis B vaccinations;
- Medical evaluation and follow-up;
- Employee training;
- Recordkeeping;
- Special precautions for HIV and HBV research laboratories. (Hepatitis C could also be included.)

The Exposure Control Plan (ECP)

Employers must prepare a written plan that includes the following:

- The job classification tasks and procedures in which employees have occupational exposure;
- The schedule and methods for implementing the requirements of the revised standard;
- Procedures for documenting the circumstances surrounding an employee’s exposure.

The ECP must be accessible to employees. It also must be reviewed and updated at least annually or more often if work tasks or control methods change. The updated ECP must also reflect changes in technology that may eliminate or reduce exposure to bloodborne pathogens. This includes documentation of non-managerial employee input regarding the selection of medical devices.
Methods to Prevent Exposure

The standard describes the following methods to prevent occupational exposure to bloodborne pathogens:

Universal Precautions

Handle all human blood or other potentially infectious materials as if they were contaminated. This approach is known as “universal precautions”.

Engineering Controls

Use engineering controls whenever possible. These are methods that contain or remove the hazard, such as sharps disposal containers, self sheathing needles, safer medical devices such as sharps with engineered sharps injury protections (SESIPs) and needleless systems.

Work Practice Procedures

Use work practice procedures that reduce the chances of exposure. Employers must provide the necessary equipment to implement them. These procedures include:

- Immediately wash hands (and other parts of the body as needed) following any contact with blood or other potentially infectious materials. This may not be possible for certain jobs, such as police work or emergency medical services. In these cases, employers must provide antiseptic hand cleansers, and paper or cloth towels. Employees must wash with running water and soap as soon as they can after the exposure.
- Wash hands as soon as possible after removing gloves or other protective equipment.
- Do not recap, break or bend by hand any contaminated needles. Put used needles and other sharps into special containers until they can be processed or discarded. These containers must be closable, puncture-resistant and leakproof. They should be labeled and put close to the area where sharps are used. Containers should never be overfilled.
  - Do not eat, drink, smoke, apply makeup or lip balm, or handle contact lenses in areas where exposure might occur. Don’t store food or drinks in potentially contaminated areas like refrigerators used to store lab specimens.
  - Use methods to prevent splashing, spraying, or splattering when doing any procedures involving blood or other potentially infectious materials. Don’t use your mouth for suctioning or pipetting.
  - Use leakproof containers for collecting, handling, processing, storing, carrying, or shipping blood specimens or other potentially infectious materials.
  - Label or use color codes on containers and refrigerators used for storage, carrying, or shipping. (See the standard for information on using the biohazard symbol.)
  - Decontaminate any equipment before it is sent out for repair.

Personal Protective Equipment

Wear personal protective equipment when exposure cannot be avoided by other means. This equipment includes gloves, face shields, goggles, gowns, lab coats, mouthpieces, pocket masks, and resuscitation bags. Employers must provide the equipment free of charge. (They must also provide alternatives to employees who are allergic to latex gloves.) Personal protective equipment must be accessible and available in sizes to fit each employee. It should be removed and put in designated containers for cleaning, repair or disposal if it becomes contaminated or
damaged. Employers are required to clean and repair equipment that can be reused. This includes lab coats that are used as personal protective equipment.

**Housekeeping Requirements**

- Establish written procedures and schedules for regular cleaning of the worksite and for disinfecting contaminated surfaces and materials.

- Do not pick up potentially contaminated broken glassware. Use tongs, forceps, or a brush and dust pan.

- Only use containers made for storing, carrying, and shipping sharps.

- Handle contaminated laundry as little as possible and wear gloves (and other protective equipment if necessary). It must be stored and transported in labeled, leakproof containers.

- Follow state laws for handling and disposing of regulated waste. Contact the New Jersey Department of Environmental Protection, Resource, Recovery and Technical Program, P.O. Box 414, 401 East State Street, Trenton, NJ 08625-0414. (609) 984-6985.

**Hepatitis B Vaccinations**

- Employers must offer free hepatitis B vaccinations to all employees who have anticipated exposure to blood or other potentially infectious materials. The first dose of the 3-dose vaccine must be given within ten working days after employees begin jobs that have potential for exposure. Employees may decline the vaccination, but must sign a “declination” statement if they do so.

- The Centers for Disease Control and Prevention (CDC) recommend that health-care personnel (HCP), (e.g., employees, students, attending clinicians, public safety workers, or volunteers) who have contact with patients or blood and are at ongoing risk for percutaneous injuries (e.g., a needlestick or cut from a sharp object contaminated with blood) should be tested 1-2 months after completion of the 3-dose vaccination series for antibodies for hepatitis B surface antigen (anti-HBs). For further information consult PEOSH Publication No. 21, “OSHA Revises the Bloodborne Pathogens Standard” available on the PEOSH website: www.state.nj.us/health/eho/peoshweb or contact the PEOSH Program at (609) 984-1863.

**Medical Evaluation and Follow-up For Exposed Employees**

Employers are required to offer free, confidential medical evaluation and follow-up to all employees who receive an occupational exposure to blood or other potentially infectious materials. These services must include:

- A written report of how the exposure occurred;

- Testing the source person if possible;

- Testing the exposed employee’s blood if she or he consents; and

- Post-exposure treatment and counseling.

**Employee Training About Potential Hazards**

Employers are required to provide initial training for employees who have anticipated occupational exposure. This training must cover all of the major parts of the standard and be repeated annually. Employees must also have access to a copy of the standard and the exposure control plan.
Employers must provide additional training when changes in tasks or procedures affect the employee’s occupational exposure.

Recordkeeping

Confidential records about employee exposures, medical evaluation, and follow-up must be kept for the length of employment plus thirty years. Records showing that employee training has occurred must be kept for three years. A sharps injury log for the recording of percutaneous injuries from contaminated sharps must also be maintained.

Special Precautions for HIV and HBV Research Laboratories

Additional procedures, employee training and equipment are required for HIV and HBV research laboratories. Consult the standard for details.

This information bulletin provides a general overview of the New Jersey PEOSH Bloodborne Pathogens Standard. Consult the standard itself for complete information.

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The PEOSH Program has developed a model Exposure Control Plan which is intended to serve as an employer compliance guide to the Bloodborne Pathogens Standard. The model plan is available from the PEOSH Program Internet site at http://www.state.nj.us/health/eoh/peoshweb/bbp.pdf.
NOTE: This appendix contains web sites that can be used for the purposes of information and research. The examples of effective engineering controls in this appendix do not include all those on the market, but are simply representative of the devices available. **PEOSH does not approve, endorse, register, or certify any medical devices.** Inclusion in this list does not indicate PEOSH approval, endorsement, registration, or certification. The final determination of compliance with PEOSH standards takes into account all factors pertaining to the use of such devices at a particular worksite.

### EFFECTIVE ENGINEERING CONTROLS

**ECRI**  
**Available:** [http://healthcare.ecri.org](http://healthcare.ecri.org)  
ECRI, designated as an Evidence-based Practice Center by the U.S. Agency for Healthcare Research and Quality, is a nonprofit international health services research organization.

**Food and Drug Administration (FDA)**  
**Safety Alerts**  
**Available:** [http://www.fda.gov/cdrh/safety.html](http://www.fda.gov/cdrh/safety.html)  
Link page for Safety Alerts and Advisories that warn of the risk of injuries from medical devices.

**International Health Care Worker Safety Center, University of Virginia**  
**Available:** [http://www.people.virginia.edu/~epinet/products.html](http://www.people.virginia.edu/~epinet/products.html)  
Features a list of safety devices with manufacturers and specific project names.

**National Institute for Occupational Safety and Health (NIOSH)**  
**Sharps Disposal Containers**  
**Available:** [http://www.cdc.gov/niosh/sharps1.html](http://www.cdc.gov/niosh/sharps1.html)  
Features information on selecting, evaluating, and using sharps disposal containers.

**Occupational Safety and Health Administration (OSHA)**  
**Glass Capillary Tubes: Joint Safety Advisory About Potential Risks**  
**Available:** [http://www.cdc.gov/niosh/capssaq.html](http://www.cdc.gov/niosh/capssaq.html)  
Describes safer alternatives to conventional glass capillary tubes.

**Occupational Safety and Health Administration (OSHA)**  
**Needlestick Injuries**  
Features recent news, recognition, evaluation, controls, compliance, and links to information on effective engineering controls.

**SHARPS Injury Control Program**  
**Available:** [http://www.dhs.ca.gov/ohb/sharps/default.htm](http://www.dhs.ca.gov/ohb/sharps/default.htm)  
Established by Senate Bill 2005 to study sharps injuries in hospitals, skilled nursing facilities, and home health agencies in California. Features a Beta version of Safety Enhanced Device Database Listing by Manufacturer.
Training for Development of Innovative Control Technologies (TDICT) Project
Available: http://www.tdict.org/criteria.html
Features “Safety Feature Evaluation Forms” for specific devices.

US DEPARTMENT OF HEALTH & HUMAN SERVICES (DHHS): CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) GUIDELINES AND RECOMMENDATIONS

CDC Prevention Guidelines Database
Provides access to the CDC Prevention Guidelines Database, which is a compilation of all of the official guidelines and recommendations published by the CDC for the prevention of diseases, disabilities, and injuries.

Morbidity and Mortality Weekly Report (MMWR)
Available: http://www2.cdc.gov/mmwr/mmwr.html
Provides access to the MMWR, a series which is prepared by the CDC. Contains comprehensive information on policy statements for prevention and treatment that are within the CDC’s scope of responsibility, for example, recommendations from the Advisory Committee on Immunization Practice (ACIP).

The following are CDC guidelines and recommendations on HIV, Hepatitis B, and Hepatitis C:


Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease. Publication date 10/16/1998.
Available: http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/00055154.htm

Available: http://www.cdc.gov/eop/mmwr/preview/mmwrhtml/00052722.htm

Available: http://www.cdc.gov/eop/mmwr/preview/mmwrhtml/00052801.htm

Immunization of Health-Care Workers: Recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). Publication date 12/26/1997.
(Provides recommendations for Hepatitis B).
Available: http://www.cdc.gov/eop/mmwr/preview/mmwrhtml/00050577.htm


VACCINE SAFETY

Centers for Disease Control and Prevention (CDC)
Available: http://www.cdc.gov/nip/vacsafe/
The National Immunization Program (NIP) of the CDC features information on vaccine safety.

Food and Drug Administration (FDA)
The first site features information on how the FDA ensures vaccine safety. The second site features information on the Vaccine Adverse Event Reporting System (VAERS), a cooperative program for vaccine safety of the FDA and CDC.
Immunization Action Coalition (IAC)
Available: http://www.immunize.org/
The IAC is a nonprofit organization working to increase immunization rates and prevent disease. Features Vaccine Information Statements, free print materials, and other hepatitis and immunization sites.

Infectious Diseases Society of America (IDSA)
The Vaccine Initiative is a project of the IDSA and the Pediatric Infectious Diseases Society. Features information on vaccination and vaccination-related issues.

Institute for Vaccine Safety, Johns Hopkins School of Public Health
Available: http://www.vaccinesafety.edu/
The purpose of the Institute is to obtain and distribute information on the safety of recommended immunizations.

National Institutes of Health (NIH)
Features a 40 page brochure “Understanding Vaccines.”

World Health Organization (WHO)
Available: http://www.who.int/gpv-safety/
Features a vaccine safety home page which offers links to vaccine safety-related information.
Dear Reader:

Please take a few minutes to help us evaluate this publication. Please check the following:

**Check the category that best describes your position:**

- [ ] manager
- [ ] safety professional
- [ ] researcher
- [ ] employee
- [ ] occupational health professional
- [ ] health care worker
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- [ ] other (specify): ____________________________

**Check the category that best describes your workplace:**

- [ ] academia
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- [ ] labor organization
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**Describe how thoroughly you read this publication:**

- [ ] cover-to-cover
- [ ] sections of interest only (specify): ____________________________
- [ ] other (specify): ____________________________

**How will you use this information (check all that apply):**

- [ ] change the work environment
- [ ] change a procedure
- [ ] assist in research
- [ ] change training curriculum
- [ ] provide information
- [ ] copy and distribute
- [ ] in training
- [ ] not used
- [ ] other (specify): ____________________________

Which section did you find most useful?

The least useful and why?

Other occupational health topics you would like to see the PEOSH Program develop an information bulletin on.

Other comments and suggestions.