



## Bloodborne Pathogen Standard Fact Sheet

### Introduction:

The Occupational Safety and Health Administration (OSHA) Bloodborne Pathogen Standard (29 CFR 1910.1030) was designed to protect workers from exposure infectious agents carried in the blood and other human bodily fluids and tissues. Employers have a responsibility to ensure that workers do not come into direct contact with potentially infectious materials while performing their job.

In 1991, OSHA promulgated the Bloodborne Pathogen Standard in response to concerns over the transmission of viruses during health care work. The standard was revised in 2001 to address needle stick safety issues. The standard covers healthcare workers, laboratory workers, housekeeping personnel and anyone that can be reasonably expected to come into contact with blood or other potentially infectious materials (OPIM) during the performance of their duties.

### What are Bloodborne Pathogens?

Bloodborne Pathogens (BBP) are microorganisms in the bloodstream that can cause disease. Examples include Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and Human Immunodeficiency Virus (HIV). Other pathogenic microorganisms carried in the blood can cause diseases such as malaria, syphilis, brucellosis, leptospirosis, Creutzfeldt-Jakob disease, adult T-cell leukemia/lymphoma and viral hemorrhagic fever.

Researchers may be potentially exposed to BBP through:

- Accidental needle sticks and lacerations with contaminated needles and other sharps.
- Direct splatter and contamination of the mucous membranes (eyes, nose and mouth).
- Contact with non-intact skin.

### What materials are covered by the Bloodborne Pathogen Standard?

- Human blood, blood products
- Unfixed human tissue or organ
  - *Including human tissue culture cells*
- Human body fluids
  - Semen, vaginal secretions, pericardial fluid, amniotic fluid, pleural fluid, cerebrospinal fluid
- Any body fluid visibly contaminated with blood
- All body fluids in situations where it is difficult or impossible to differentiate between body fluids

### Employer Responsibilities:

In compliance with the standard, employees must be trained about BBPs upon being hired and refreshed annually thereafter. Harvard University's Department of Environmental Health & Safety (EH&S) provides classroom and online trainings. EH&S also maintains training records of employees. A BBP refresher course is available on the EH&S website: <http://www.uos.harvard.edu/ehs/ehs.shtml>.

Employees working with materials covered under the BBP Standard must be offered and provided Hepatitis B vaccinations at no cost. If you will be working with BBPs, obtain a Harvard University Hepatitis B vaccination acceptance / declination form and contact University Health Services to schedule an appointment. UHS maintains employee medical records.

Personal protective equipment shall be provided to the employee. This includes gloves, eye protection and any other equipment necessary to protect the worker from exposure.



If an employee is accidentally exposed to blood or other potentially infectious material, post-exposure follow up and prophylaxis must be provided to the employee at no cost. If you have been potentially exposed to a BBP, stop what you are doing. Remove any contaminated clothing and wash the exposed skin with soap and water for a minimum of five minutes. Dispose of any contaminated clothes and materials appropriately and report the incident to your supervisor. Report to University Health Services (UHS) immediately or the nearest emergency room to obtain medical attention. For off-hours or severe injuries, report immediately to the nearest hospital emergency room.

- In Longwood, report to UHS at 275 Longwood Avenue from 8:30 a.m. to 5:00 p.m., Monday through Friday. Call in advance at (617) 432-1370 when possible.
- In Cambridge/Allston, report to UHS, Holyoke Center, 75 Mt. Auburn Street. Call in advance at (617) 495- 5711 when possible.

All injuries due to sharps must be recorded. This includes needle stick injuries as well as cuts from broken glassware.

## **Laboratory Responsibilities:**

It is the responsibility of each laboratory to create an Exposure Control Plan (ECP). An ECP is a written plan designed to eliminate or minimize employee exposure to bloodborne pathogens. Each laboratory is required to have an ECP that is site specific, reviewed annually and accessible to employees. Training, risk assessment, personnel, procedures, materials and equipment must be added by the Principal Investigator, Employee Supervisor, or other responsible persons. The EH&S office is available to answer any questions you may have when developing an ECP.

A template for creating an ECP is available on the EH&S website:

[http://www.uos.harvard.edu/ehs/biosafety/exp\\_control\\_long.pdf](http://www.uos.harvard.edu/ehs/biosafety/exp_control_long.pdf) for Longwood facilities and  
[http://www.uos.harvard.edu/ehs/biosafety/exp\\_control\\_camb.pdf](http://www.uos.harvard.edu/ehs/biosafety/exp_control_camb.pdf) for the Cambridge facilities.

The laboratory is responsibility for outlining and using proper work practices. Universal precautions should always be used when working with blood and other potentially infectious materials (OPIM). Always assume that these materials are contaminated and use proper techniques when handling them.

Exposure to blood and OPIM should be limited by engineering and work practices controls. This includes using sharps disposal boxes, prohibiting eating and drinking in work areas, and proper hand washing. Adhere to sharps safety procedures when working with materials potentially containing BBPs. Always dispose of sharps into proper containers. Do not bend, break or recap contaminated needles or other sharps.

General good housekeeping practices should always be used. All biologically contaminated materials are to be placed in the burn box (biological waste box). Label waste materials with the Universal Biohazard Symbol:



## **University Resources:**

Environmental Health and Safety  
Cambridge (617) 495-2060

Longwood (617) 432-1720

University Health Services  
Cambridge (617) 495-5711

Longwood (617) 432-1370