



## Guidelines for Completing the Exposure Control Plan

The Occupational Safety & Health Administration (OSHA) Bloodborne Pathogen Standard (29 CFR 1910.1030) requires an employer to complete an Exposure Control Plan (ECP) for employees with occupational exposure to blood and other potentially infectious (human) materials. This plan is a written guide designed to eliminate or minimize employee exposure to bloodborne pathogens (BBP). The Environmental Health & Safety department has created template ECPs to assist laboratories with compliance. The template ECPs are available for download on the EH&S website at: [http://www.uos.harvard.edu/ehs/biosafety/exp\\_control\\_long.pdf](http://www.uos.harvard.edu/ehs/biosafety/exp_control_long.pdf) for the Longwood laboratories 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 laboratories.

The template plan must be customized and made site specific for the laboratory. This can be accomplished by adding applicable locations, procedures, materials and equipment. Completing the ECP includes determining occupations at risk of exposure to BBP, outlining best work practices, and developing cleanup and exposure response procedures. ECPs must be **reviewed annually** and updated whenever there is a change in procedure that may affect employee exposure. ECPs must be accessible to employees. Keep a copy of the completed ECP on hand in the laboratory.

### Appendix 1: Risk Determination

This section outlines jobs and tasks performed in the laboratory that pose potential employee exposure to BBP.

Table A. List the job titles and names of employees that are exposed to blood and other potentially infectious materials **as part of their job description** (e.g. research assistant in an HIV research laboratory). For each employee, list the date of hire and date of termination, if applicable.

Table B. List the job titles and names of employees that are exposed to blood and other potentially infectious materials **due to some of the tasks that they perform** (e.g. laboratory technician that handles or washes contaminated glassware). For each employee, list the date of hire and date of termination, if applicable.

### Appendix 2: Site Specific Work Practices:

This section outlines work practice controls used in the laboratory to limit exposure to BBP.

Appendix 2A. List the exact locations (including building and room number) of eyewashes, safety showers, and sinks suitable for hand washing.

Appendix 2B. If there are any non-disposable or reused sharps in the laboratory (e.g. reusable needles, scissors, scalpels) list them in the 1<sup>st</sup> box. In the 2<sup>nd</sup> box, indicate procedures that require their use and in the 3<sup>rd</sup> box, outline the procedure for decontaminating, cleaning and reusing the non-disposable sharps.

Appendix 2C. List all of the hazardous biological materials used in the laboratory (including human cell lines) along with the date they were introduced and discontinued, if applicable. Indicate if there are any entry restrictions into the laboratory, including necessary vaccinations and training. Also indicate the locations, including building and room number, of areas where food and drinks are allowed.

Appendix 2D. Outline the laboratory tasks where personal protective equipment is required. The 1<sup>st</sup> section concerns identifying tasks that require the use of protective clothing and the proper disposal,

decontamination or laundry procedures used for contaminated clothing. The 2<sup>nd</sup> section outlines tasks that require eye and face protection, including any procedures that generate sprays, splatters or splashing. The 3<sup>rd</sup> section contains information indicating the tasks requiring the use of gloves, the types of gloves used and the glove manufacturers.

Appendix 2E. List the contents of laboratory spill kits along with exact locations and the dates the kits were inspected and replenished. Spill Kits should be available in laboratories where blood or other potentially infectious materials are handled.

Appendix 2F. Outline the procedures for cleaning up of biological spills. Some guidelines are listed. Be sure to use tongs to remove sharps before cleaning the spill and to make up a fresh 10% bleach solution for disinfecting. Add any other laboratory specific clean-up procedures that should be followed.

### Appendix 3: Site Specific Engineering Controls

This section describes engineering controls used in the laboratory to protect employees from BBP.

Appendix 3A. For each biological safety cabinet used in the laboratory, fill out the exact location, contact person and a detailed description of the type of cabinet.

Appendix 3B. List the locations of all sharps containers used in the laboratory as well as the name and phone number of a contact person. Indicate the name and contact information of the sharps container supplier for the laboratory. In the 2<sup>nd</sup> box, list who is responsible for sharps container disposal and in the 3<sup>rd</sup> box write out the waste treatment and disposal procedure parameters.

Appendix 3C. This section concerns needle recapping. Needles should never be recapped unless it is absolutely necessary. In the 1<sup>st</sup> box of Appendix 3C, list procedures where needles will need to be recapped or removed from syringes. In the 2<sup>nd</sup> box, list the manufacturer and model of self sheathing needles used. Also, list any additional safety methods or devices used during the recapping procedures.

### Appendix 4: Chemical Disinfectants

This section is complete and contains approved chemical disinfectants for working with BBPs. You may add other effective chemical disinfectants used in the laboratory.

### Appendix 5: Training Records

Use this section to list names, job titles and dates of BBP training for laboratory employees. You may wish to print training certificates and file them in this section. Ensure that annual refresher training is completed and records are updated as necessary.

### Appendix 6: Occupational Exposure to Bloodborne Pathogens & HBV Vaccine Declination Statement Form

A vaccination acceptance / declination form must be completed by each employee that will be working with blood or other potentially infectious materials covered under the BBP standard. The form contains four (identical) sheets; one page is kept by the employee and the other copies are maintained by the department, Human Resources, and University Health Services (UHS). Originals are available from the Department Administrator, the Office of Human Resources, or the Biosafety Office.

Copies of this form do not need to be kept as part of the ECP as long as the location of an original is stated. A signed log that states that employees have been offered the HBV vaccination may be maintained within this section.

Part A of the form is to be filled out by the Principal Investigator or Employee Supervisor along with the employee. The Eligibility Determination Record identifies the employee's job has the potential to cause exposure to BBP, the employee has been given information concerning the HBV vaccination and the employee has been offered the HBV vaccination.

Part B of the form is completed by the employee. The section indicates the employee's acceptance or declination of the HBV vaccine.

Part C is completed by the Health Care Provider at the University Health Services

### Appendix 7: OSHA Recommended Practices & Procedures for HIV/HBV Research and Production Facilities

This section is complete and contains OSHA recommended specific practices and procedures for research and production facilities handling Human Immunodeficiency Virus (HIV) and/or Hepatitis B Virus (HBV). For these types of facilities, the Principal Investigator or employee supervisor should ensure compliance with the recommendations in this section.

### Appendix 8: OSHA Bloodborne Pathogens Standard

This section is complete and contains the full text of the OSHA Bloodborne Pathogens Standard for reference.

For more information, please call the EH&S Department at 617-495-2060 for Cambridge/Allston or 617-432-1720 for Longwood.