

UNCW OSHA Bloodborne Pathogens Requirements

The *OSHA Standard 29 CFR 1910.1030*

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051

requires employers to provide a safe and healthy work environment for all employees who face a significant health risk as the result of occupational exposure to blood and other potentially infectious materials because they may contain bloodborne pathogens including Hepatitis B Virus which causes Hepatitis B, a serious liver disease, and Human Immunodeficiency Virus, which causes Acquired Immunodeficiency Syndrome (AIDS). OSHA concludes that this significant health risk can be minimized or eliminated using a combination of task identification, engineering and work practice controls, personal protective clothing and equipment, training, medical follow-up of exposure incidents, vaccination (where applicable), and other provisions.

EXPOSURE CONTROL PLAN COMPONENTS:

The University of North Carolina Wilmington (UNCW) chairs/department heads whose employee's jobs may result in exposure to blood or other potentially infectious biological materials will establish and update as necessary (at least annually), a written *Exposure Control Plan*. This plan should reflect significant changes in employee tasks and procedures as they occur. The plan should include the exposure determination and requirements for Universal Precautions, work practices/housekeeping, engineering controls, personal protective equipment (PPE), training and education, post exposure medical evaluation, a work site survey, program assessment and recordkeeping as detailed below. [See Appendix A.doc](#) (Exposure Control Plan example)

Exposure Determination:

Each department will evaluate routine and reasonably anticipated tasks and procedures to determine whether there is actual or potential exposure to blood or other potentially infectious materials. All employees performing tasks with actual or potential exposure should be identified.

Identification of "At Risk" Work Force Employees:

Occupational exposure can occur in many ways, including needle sticks, cuts or direct exposure to blood or body fluids. These include such occupations as law enforcement officers, housekeeping personnel, research laboratory workers, healthcare workers, athletic trainers, plumbers or any employees in any occupation where they are directly exposed to body fluids are considered to be at substantial risk of occupational exposure to HIV, HBV and other bloodborne diseases.

List of Job Classification and Job Titles at Risk:

Each department shall make a list of job classifications and tasks that will be at risk of exposure. Where some, but not all employees in a given job classification have exposure, the specific tasks or procedures involving exposure should be determined and listed.

Universal Precautions for At-Risk Workers:

"Universal Precautions" shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials. [See Appendix B.doc](#) (for Universal Precautions)

Work Practices/Housekeeping:

For all identified tasks, the department shall have written work practices (Exposure Control Plan). All employees who perform at risk tasks should have immediate access to the **"Exposure Control Plan."** [See Appendix A.doc](#) (Exposure Control Plan example)

Work practices should include provisions for safe collection of fluids and tissues and waste disposal. EH&S is available to help determine a suitable method of disposal. Provisions must be made for safe removal, handling, and disposal or decontamination of protective clothing and equipment, soiled linens, etc. Work practices should provide guidance on procedures to follow in the event of spills or personal exposure to fluids or tissues. These procedures should include instructions for personal and area decontamination, as well as appropriate supervisory personnel to whom the incident should be reported.

With regard to sharp objects, work practices should provide specific and detailed procedures to be observed. Puncture-resistant receptacles must be readily accessible for depositing sharp objects after use. These receptacles must be clearly marked and specific work practices must be provided to protect personnel responsible for disposing of them or processing their contents for reuse. Where applicable, work practices shall include the following:

Employees shall wash their hands immediately or as soon as possible after removal of gloves or other PPE and after hand contact with blood or other potentially infectious materials.

All PPE shall be removed immediately upon leaving the work area or as soon as possible if overtly contaminated, and placed in an appropriately designated container for storage, washing, decontamination or disposal.

Used needles and other sharps shall not be sheared, bent, broken, recapped, or resheathed by hand.

Eating, drinking, smoking, applying cosmetics, lip balm, and handling contact lenses are prohibited in work areas where there is a potential for occupational exposure.

Food and drink shall not be stored in refrigerators, freezers, or cabinets where blood or other potentially infectious materials are stored or in other areas of possible contamination.

All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, and aerosolization of these substances.

Mouth pipetting/suctioning is prohibited.

Cleaning and disinfection - All equipment, environmental areas and working surfaces shall be properly cleaned and disinfected after contact with blood or other potentially infectious materials.

Work surfaces shall be decontaminated with an appropriate disinfectant frequently.

Protective coverings such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper may be used to cover equipment and environmental surfaces. These coverings shall be removed and replaced at the end of the work shift or when they become contaminated.

Equipment which may become contaminated with blood or other potentially infectious materials shall be checked, cleaned and disinfected prior to servicing or shipping.

All bins, pails, cans and similar receptacles intended for reuse that have a potential for becoming contaminated with blood or other potentially infectious materials shall be inspected, cleaned and disinfected on a regularly scheduled basis and cleaned and disinfected immediately or as soon as possible upon visible contamination.

Broken glassware that may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, a vacuum cleaner, tongs, cotton swabs or forceps.

Specimens of blood or other potentially infectious materials shall be placed in a closable, leak proof container labeled or color-coded prior to being stored or transported. If outside contamination of the primary container is likely, then a second leak proof container that is labeled or color-coded shall be placed over the outside of the first and closed to prevent leakage during handling.

Reusable items contaminated with blood or other potentially infectious materials shall be decontaminated prior to washing and/or reprocessing.

Laundry from workplaces that is contaminated with blood or other potentially infectious materials or may contain contaminated sharps shall be treated as if it were contaminated and shall be handled as little as possible and with a minimal agitation.

Contaminated laundry shall be placed and transported in bags that are labeled or color-coded. Whenever this laundry is wet and presents the potential for soak through or leakage from the bag, it shall be placed and transported in leak proof bags.

Engineering Controls:

When possible, engineering controls shall be used as the primary method to reduce worker exposure to harmful substances. To the fullest extent possible, intrinsically safe substances, procedures, or devices should be substituted for hazardous procedures or devices. Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

An alternative engineering control technique is the isolation or containment of the hazard. For example, disposable puncture-resistant containers for used needles, blades, etc., isolate cut and needle-stick injury hazards from the worker. Glove boxes, ventilated cabinets, or other enclosures for tissue homogenizers, sonicators, vortex mixers, etc., serve not only to isolate the hazard but also to contain spills or splashes and prevent spatter and mist from reaching the laboratory worker.

Personal Protective Equipment (PPE):

Listed below are common tasks/procedures that require the use of PPE. This list is not all-inclusive:

Laboratories - The use of gloves is required for processing body fluid and tissue specimens. Masks and protective eyewear are required when the worker's mucous membranes may come in contact with body fluids.

Laundry operations - The department shall ensure that laundry workers wear protective gloves and other appropriate PPE to prevent occupational exposure during handling or sorting.

Law enforcement - Whenever the possibility for exposure to blood or other body fluids exist the appropriate protection should be worn, if feasible under the circumstances. In case of blood contamination of clothing an extra change of clothing should be available at all times. Gloves should be provided or available to law enforcement personnel which may come in contact with blood, other bodily fluids, blood contaminated clothing, surfaces or blood contaminated hypodermic needles.

Gloves, facemask and eye protection or face shields are required for laboratory and evidence technicians whose jobs entail potential exposure to blood via a splash to the face, mouth, nose or eyes. This would also apply to evidence technicians removing or scraping dried blood.

Officers and crime scene technicians may require additional protective clothing, such as overalls, aprons, boots, or protective shoe covers - especially when the crime scene has unusual hazards or involve violent behavior where large amounts of blood are present. Pocket mouth-to-mouth resuscitation mask can be used by law enforcement personnel to isolate response personnel from contact with victim's bodily fluids.

Research laboratory - PPE includes laboratory coats, gowns, smocks, uniforms, gloves or other appropriate protective clothing. It shall be worn in the work area and animal rooms. Protective clothing shall not be worn outside of the work area and shall be decontaminated before being laundered.

Accessibility/Maintenance:

When an employee is required to perform tasks where they are directly exposed to body fluids and are considered to be at substantial risk of occupational exposure to HIV, HBV and other bloodborne diseases, PPE must be:

Accessible - The department shall assure that appropriate PPE in the appropriate sizes is readily accessible or issued to employees. Hypoallergenic gloves shall be readily accessible to those employees who have latex allergies.

Clean - The department shall provide for the cleaning, laundering or disposal of PPE.

Repair and replacement - The department shall repair or replace required PPE as needed to maintain its effectiveness.

EH&S is available to assist in equipment selection.

Type:

The following suggestions are provided for PPE that the department should provide to employees at no cost.

Gloves:

When the employee has the potential for the hands to have direct skin contact with blood, other potentially infectious materials, mucous membranes, nonintact skin, and when handling items or surfaces soiled with blood or other potentially infectious materials, gloves must be worn.

Disposable (single use) gloves, such as surgical or examination gloves, shall be replaced as soon as possible when visibly soiled, torn, punctured, or when their ability to function as a barrier is compromised. They ***shall not*** be washed or disinfected for reuse.

Utility gloves may be disinfected for reuse if the integrity of the glove is not compromised. However, they ***must be discarded*** if they are cracked, peeling, discolored, torn, punctured, or exhibit other signs of deterioration.

Gowns, Aprons, and Other Protective Body Clothing:

Gowns, lab coats, aprons, or similar clothing shall be worn if there is a potential for soiling of clothes with blood or other potentially infectious materials.

Fluid-resistant clothing, including hoods if applicable, shall be worn if there is a potential for splashing or spraying of blood or other potentially infectious materials.

Fluid-proof clothing shall be worn if there is potential for clothing becoming soaked with blood or other potentially infectious materials.

Fluid-proof shoe covers shall be worn if there is a potential for shoes to become contaminated and/or soaked with blood or other potentially infectious materials.

Masks, Eye Protection and Face Shields:

Masks and eye protection or chin-length face shields shall be worn whenever splashes, spray, spatter, droplets, or aerosols of blood or other potentially infectious materials may be generated and there is a potential for eye, nose, or mouth contamination.

Resuscitation Equipment:

For emergency mouth-to-mouth resuscitation, pocket masks, resuscitation bags, or other ventilation devices should be supplied in areas where workers are trained in CPR.

Containment/Decontamination:

Containment equipment and devices such as biological safety cabinet (Class I, II, or III) shall be used for all activities that pose a threat of exposure to splashes, spills, or aerosols. Biological safety cabinets shall be certified when installed and at least annually thereafter by EH&S.

An autoclave for waste decontamination should be in or near as possible to the work area.

Hand washing and eye washing equipment shall be located near an exit to the laboratory area. These shall be capable of operation with foot, elbow or automatically.

Spill Response:

Each department is responsible for routine spill clean-up in their assigned areas, (e.g. vomit, blood spills, etc.). For larger spills or in the absence of trained personnel, UNCW Housekeeping Services should be contacted. Receipt funded departments may be charged back for these services.

Prior to the arrival of spill response personnel, departmental personnel should restrict access to where the spill occurred.

Training and Education:

Material appropriate in content and vocabulary to educational level, literacy and language background of employees shall be used.

Job Specific:

An explanation of the department's Exposure Control Plan.

They shall receive training regarding the location and proper use of PPE. They shall be trained concerning proper work practices and should understand the concept of Universal Precautions as it applies to their work practices.

Training shall also include the meaning of color-coding or other methods used to designate contaminated articles or infectious waste. Proper disposal methods for contaminated waste and needles should be taught.

Employees shall be trained in the corrective actions to take in the event of spills or personal exposure to fluids or tissues, the appropriate reporting procedures and the medical monitoring recommended in cases of needle-stick injuries or other exposure to blood or body fluids.

Requirements:

Training shall be provided within ten (10) days of initial assignment and at least annually thereafter. Contact EH&S for training schedule.

The training programs shall contain the following elements:

A copy of the department's policy and procedure as well as a copy of the OSHA Standard and an explanation of its content.

A general explanation of the epidemiology and symptoms of bloodborne diseases.

An explanation of the modes of transmission of bloodborne pathogens.

An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.

An explanation of the use and limitations of practices that will prevent or reduce exposure including appropriate engineering controls, work practices and PPE.

Information on the types, proper use, location, removal, handling, decontamination and/or disposal of PPE.

An explanation of the basis for selection of PPE.

Information on the Hepatitis B vaccine, including information on its efficacy, safety and the benefits of being vaccinated.

Information on the appropriate actions to take and persons to contact in an emergency.

An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available. Also, information on the medical counseling the employer is providing for the exposed individual(s) will be available.

An explanation of the signs and labels and/or color-coding.

An opportunity for interactive questions and answers with persons conducting the training session.

Medical Surveillance:

In addition to any healthcare or surveillance required by other rules or regulations, UNCW will provide at no cost to employee:

If an exposure occurs following decontamination, immediately contact EH&S (ext. 3057) to schedule this evaluation. If after hours, call University Police (ext. 4911) to contact EH&S personnel.

Post-exposure medical evaluation performed by or under the supervision of a licensed physician.

Employee HBV vaccination. If employee refuses HBV vaccination, he/she must read and sign a ***Hepatitis B Vaccination Declination Form***, [See Appendix C.doc](#) (example of Hepatitis B Declination Form)

The vaccination will be made available after employee has received training and within ten (10) working days of initial assignment.

If an employee has received an HBV vaccination prior to an incident or from a previous employer, evidence of that vaccination must be obtained and placed in the employee departmental training and vaccination file. When contacted, EH&S will schedule inoculations and training.

If an employee has a percutaneous (needle-stick or cut) or mucous membrane (splash to eye, nasal mucosa, or mouth) exposure to blood and/or body fluids or has a cutaneous exposure to blood when the worker's skin is chapped, abraded, or otherwise nonintact, the source individual shall be informed of the incident and after consent is obtained tested for HIV or HBV infections.

Medical counseling for all employees found, as a result of monitoring described above, to be seropositive for HBV or HIV. Counseling guidelines have been published by the Public Health Service. For detailed information, reference Occupational Bloodborne Pathogen Standard 29 CFR Part 1910.

Following a report of an exposure incident, EH&S will coordinate a confidential medical evaluation and follow-up. The medical evaluation and follow-up shall include at least the following:

Documentation of routes of exposure and circumstances under which the exposure occurred.

Identification and documentation of source individual unless prohibited by law. Results of source individual testing shall be made available to the exposed employee.

Testing of the exposed employee's blood by consent.

Post exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service.

Counseling and evaluation of reported illnesses.

EH&S shall ensure that the healthcare professional responsible for medical evaluation and follow-up is provided with a copy of [29 CFR 1910.1030](#) (Bloodborne Pathogens Standard). _____

The attending physician will provide the exposed employee with a copy of the evaluation within fifteen (15) days of completion of the evaluation.

Worksite Survey/Program Assessment:

Each department is responsible for maintaining a list of employees subject to the Bloodborne Pathogen Program (BBP) and submit it annually to EH&S along with completed Employee Medical and Training Records Form.

Routinely- EH&S will evaluate the effectiveness of the BBP.

Recordkeeping:

If an employee is required to perform at risk tasks, the department will maintain records documenting:

Training records, indicating the dates of training sessions, the content of those training sessions along with the names of all persons conducting the training and their qualifications, as well as the names and job titles of all those receiving training. These records must be maintained for three (3) years. One copy of the training roster will be forwarded to Human Resources.

The conditions associated with each incident of mucous membrane or parenteral exposure to body fluids or tissue, and evaluation of these conditions, and a description of any corrective measures taken to prevent a recurrence or other similar exposure. EH&S will assist in the investigation. [See Appendix D 2004.doc](#) (OSHA Bloodborne Standard Check Sheet)

Medical Records :

Each department will maintain HBV inoculation and declination records for each employee and annually, forward a copy to EH&S. This record shall include:

The name, social security number and job title of the employee.

A copy of the employee's Hepatitis B vaccination or declination records and medical records relative to the employee's ability to receive vaccination or the circumstances of an exposure incident.

A copy of all results of physical examinations, medical testing and follow-up procedures as they relate to the employee's ability to receive vaccination or to post exposure evaluation following an exposure incident.

The department's copy of the physician's written opinion.

A copy of the information provided to the physician.

All post exposure recordkeeping will be maintained by EH&S.

Specific requirements should not preempt NCOSHA recordkeeping requirements.

Confidentiality:

The department shall assure that employee medical records required are:

Are not disclosed or reported to any person within or outside the workplace except as required by this section or as may be required by law.

The department shall maintain this record for at least the duration of employment plus thirty (30) years. [Employee Medical and Training Records](#) required by this requirement shall be provided upon request for examination and copying to the subject employee and to anyone having written consent of the subject employee.

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