**Purpose**

University of Alaska Anchorage departments will develop plans and procedures to limit occupational exposure to blood and other potentially infectious materials (PIM) in compliance with federal and state regulations. Employees in certain job classifications have a risk of occupational exposure to blood and other potentially infectious materials that may contain hepatitis B virus (HBV), which can cause a potentially fatal liver disease; human immunodeficiency virus (HIV), the cause of acquired immunodeficiency syndrome (AIDS); or other bloodborne organisms.

**Scope**

This policy covers all employees who could be reasonably anticipated, as the result of performing their job duties, to face contact with potentially infectious materials including blood, other body fluids, and tissues from human or other potentially infectious sources. Some identified university occupations that fall under this policy are:

- Medical, dental, nursing, and biomedical employees
- University police officers
- Sports trainers
- Employees whose job descriptions require them to provide CPR and First Aid

Other employees who are not anticipated to face routine contact with PIM, such as janitors and non-medical (good Samaritan) first aid providers, should take precautions to avoid exposure through the use of protective clothing, gloves, and personal hygiene when necessary. In addition, all employees should report exposures to their supervisors and EHS/RMS for investigation and possible medical evaluation and treatment.

**Exposure Control Plan**

The OSHA Bloodborne Pathogens Standard requires the university to write exposure control plans to minimize or eliminate occupational exposure to bloodborne pathogens. These plans must be developed by each affected department as each department has unique operations and situations. The plans must be available for review by an OSHA compliance officer, the Alaska Department of Labor, EHS/RMS, and
employees. In addition, they must be reviewed at least annually and revised as often as necessary to accommodate changes in the workplace.

The plans must cover five major areas:

- Exposure determination
- Methods of compliance
- HBV vaccination and post exposure follow-up
- Communication of hazards to employees
- Recordkeeping

Responsibilities

Department, EHS/RMS, and Statewide Office of Risk Management (SWORM) responsibilities for each of the areas of the exposure control plan are identified as follows:

Exposure Determination

Departments must use a worksheet to:

- List all job classifications in which the potential for occupational exposure to bloodborne pathogens exists regardless of the specific measures taken to minimize exposure.

- Identify, in writing, all tasks and activities in which occupational exposure to bloodborne pathogens will or may occur.

Methods of Compliance

Departments must institute the following measures to reduce the risk of exposure to bloodborne pathogens:

- Universal precautions must be taken. This means treating all human blood and certain human body fluids as if they were known to be infected with HBV, HIV, or other bloodborne pathogens.

- Engineering controls must be established to eliminate or minimize exposure potential. These measures are designed to minimize needlesticks, avoid splashing and spraying of body fluids, and ensure appropriate packaging of contaminated materials and biohazardous wastes. Under OSHA’s hierarchy of measures, engineering controls
are considered the most important and effective. Examples of engineering controls include:

- Hoods
- Biological safety cabinets
- Puncture-resistant, leak-proof containers for sharp objects (sharps) such as needles and scalpel blades
- Needle sheathing devices
- Permanent guards and shields
- Specially marked containers or bags for contaminated materials

• Work practice controls must be established and enforced. They are second in importance in OSHA’s hierarchy of control measures. Effective work practice controls include procedures to:

- Prohibit the consumption or storage of food in work areas
- Minimize the splashing and spraying of blood
- Require the use of personal protective equipment whenever splashes, spray, splatter, or droplets of blood or other PIM are likely to occur
- Clean, launder, or dispose of personal protective equipment (Contaminated personal protective equipment must be discarded as regulated medical waste)
- Ensure that employees remove all personal protective clothing and equipment before leaving the work area
- Make sure that employees wash their hands thoroughly and immediately after contact with blood or other body fluids, and after gloves are removed
- Ensure employees take precautions to avoid injuries when using, cleaning, handling, or disposing of hypodermic needles, scalpel blades, and other sharps
- Make sure employees never shear, recap, bend, or break needles, or remove them from disposable syringes
- Ensure that employees use puncture-resistant, leak-proof containers that are labeled for disposal of disposable syringes and other sharps
- Decontaminate equipment or label it as contaminated before shipping to servicing facilities
- Establish schedules and methods of cleaning equipment, work surfaces and receptacles
- Deal with the disposal of contaminated waste

- Employees must be provided with specialized clothing and equipment, called personal protective equipment (PPE). Personal protective equipment acts as a barrier between the employee and the source of bloodborne pathogens. Such equipment is considered appropriate only if it does not permit blood or other PIM to pass through or reach an employee’s work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use, and only if it continues to be effective for the entire length of time it is in use. The PPE must be cleaned, repaired, and replaced when necessary.

Appropriate personal protective equipment may include, but is not necessarily limited to, such items as:

- Face shields with one-way valves, and resuscitation bags or other ventilation devices
- Fluid-resistant laboratory coats
- Gloves
- Head coverings or masks
- Fluid-resistant aprons
- Eye protection

**HBV Vaccination**

The HBV vaccination must be made available for all employees who have or may have occupational exposure to, HBV. SWORM funds the hepatitis B vaccinations through licensed health care professionals at no charge to departments or employees. If an employee falls under the occupational exposure guidelines, the *OSHA REQUIRED MEDICAL EXAMINATIONS/PROCEDURES, EHS/RMS Appendix 17* should be completed and sent to EHS/RMS for authorization. Consult with EHS/RMS prior to submitting the form ([http://www.uaa.alaska.edu/EHSRMS/ehspersonnel.cfm](http://www.uaa.alaska.edu/EHSRMS/ehspersonnel.cfm)). The
vaccination will be provided free of charge and within ten working days of a job assignment.

Employees may decline to accept the HBV vaccination. An employee who refuses to take the vaccination must sign a statement (EHS Appendix 12) indicating that he or she has been given the opportunity to receive the vaccination but has declined to do so. The refusal to accept a vaccination will not prevent the employee from obtaining a vaccination or prophylactic treatment at a later date. Booster doses will be made available through this plan if warranted.

**Titers**

Two months after the completion of the immunization procedure, antigen (anti-HBs or hepatitis surface antigen) titers will be determined. Employees who do not respond to the primary vaccination should receive a second series of inoculations and then be retested for titers two months later unless medical opinions differ. Employees who still fail to respond should receive medical counseling concerning the results and ramifications. Titers should be confirmed periodically (suggested every five years) for employees operating under the Bloodborne Pathogen Policy. Employees falling below acceptable levels must be offered re-immunization or boosters and be provided with appropriate medical counseling. Employees declining these offers must do so in writing.

**Post Exposure Follow-up**

The university provides a free medical examination (see OSHA REQUIRED MEDICAL EXAMINATIONS/PROCEDURES, Appendix 17) and follow-up exam to any employee exposed to HBV or other bloodborne pathogens. A licensed health care professional will perform a confidential evaluation by:

- Identifying the route of exposure and how the exposure occurred.
- Finding out, by reasonable attempt, whether or not the source individual is infected with HBV, HIV, or any other bloodborne disease (department expense).
- Finding out whether the exposed employee has been infected by HBV, HIV, or any other bloodborne infection.
If the source individual refuses to be tested, tests positive, or already knows that he or she has the HBV virus, the university will take these steps:

- Make sure the employee is evaluated both clinically and by HIV antibody testing as soon as possible.
- Advise the employee to get medical attention if he or she experiences any flu-like symptoms or other illness within 12 weeks following the exposure. Offer repeat HIV testing to exposed employees at 6 weeks, 12 weeks, and 6 months after the exposure.

If the patient has been exposed or potentially exposed to HBV, follow-up procedures will depend on whether or not the worker has received the HBV vaccination, and the HBV status of the source patient.

The department must provide the health professional with the following information to facilitate the evaluation:

- The employee’s name and social security number
- The supervisor’s name, title, and phone number
- A description of the employee’s job duties as they relate to the exposure incident
- A description of how the exposure occurred
- A description of the route of exposure
- A record of whether or not the employee has been vaccinated for HBV
- All other medical records on the employee that could relate to the exposure incident.

After the evaluation of the incident and examination of the employee, the health care professional will provide an opinion on the need and the employee’s ability to receive an HBV vaccination or other treatment. The opinion must be provided to the employee within 15 days of the evaluation. All diagnoses must remain confidential unless a Workers’ Compensation claim is being filed by the employee.
Prophylaxis

Employees who do not respond to Hepatitis B immunization or have not been immunized must be offered HBIG prophylaxis after any exposure or probable exposure to HbsAG-positive blood or body fluid. Employees who have been exposed to HIV-positive blood or body fluids must be offered the currently acceptable and available prophylaxis treatment in accordance with the Centers for Disease Control (CDC) recommendations. Employees declining prophylaxis must do so in writing. This prophylaxis section applies to all employees regardless of their status under the Bloodborne Pathogen regulations as long as the exposure occurred during the course and scope of their employment.

Communication of Hazards

Employees must be protected from exposure to bloodborne diseases in the workplace by being clearly informed of the hazards. Departments must have a communication program that provides appropriate training and information to employees initially upon assignment and annually thereafter. In addition, employees must be retrained if conditions change. Departments will need to develop a communication program that:

- Uses a system of labels and signs to warn of hazards
- Uses information and training to educate employees on how to work safely around bloodborne pathogens

Labels and Signs

Identify hazards by posting labels on refrigerators, freezers, and other containers that hold blood or other potentially infectious materials. Make sure that these labels:

- Show the word “Biohazard” and the biohazard symbol
- Are fluorescent orange or orange-red
- Are attached to the container by string, wire, or adhesive in such a way that they cannot come loose

Follow these labeling practices:

- Ensure all primary containers of potentially infectious wastes and secondary containers (refrigerators, cabinets, boxes, etc.) are appropriately labeled with biohazard symbol or alternatively, use red plastic bags instead of labeling.
• Ensure that waste that has been decontaminated is relabeled as decontaminated.
• Label body fluids or tissues that have been found to be free of HIV or HBV accordingly.

**Information and Training**

Departments must provide a mandatory program of training and education for all employees who face potential exposure to bloodborne diseases. Document the training by making sure that all employees sign a form indicating that they have completed and understand the training, and that they also understand that using the PPE, engineering controls, and work practice procedures is a condition of their employment. Bloodborne Pathogen training is an annual requirement.

The training program should be designed so employees learn:

• How HIV, HBV, and other bloodborne diseases can be transmitted
• The symptoms of HIV, HBV, and other bloodborne diseases, and what behaviors put employees at risk of contracting these diseases
• What an exposure control plan is, how it works, and where employees can access a written copy
• Where an employee can access a copy of the OSHA standard
• How to recognize job tasks that involve exposure to infectious material
• The limits of, and how to use universal precautions; engineering controls; work practice controls; personal protective equipment, including information the types, proper use, location, removal, handling, decontamination, and disposal of PPE, and why the particular PPE has been chosen.
• The benefits and safety of the HBV vaccination, and the fact that it is free of charge
• How to report an exposure incident and what to do when one occurs
• What the post exposure evaluation and follow-up examination involves
• How the hazard labeling system works, and what the biohazard symbol means
During training, there must be opportunities for questions and answers and the trainer must be knowledgeable in the subject matter. Laboratory workers who routinely work with bloodborne pathogens must receive additional specialized training. EHS/RMS has a training video package to assist departments with their training needs.

**Recordkeeping**

Records must be kept on every employee exposed to infectious or potentially infectious materials while on the job. Records must also be kept for all employee training sessions.

Medical records:

The licensed health care professional will maintain the employees' confidential medical records for the duration of employment plus thirty years. Departments are responsible to notifying the health care professional when an employee is terminated. These medical records must be made available to the employee and the Alaska Department of Labor upon request. Written and signed employee releases or court orders are required for all other access. These records will include information as prescribed under federal and state laws.

Training records:

Departments must maintain training records for at least three years from the date of training. Keep the following records on employee training:

- The dates of the training sessions
- The information provided at the sessions
- The names and qualifications of the people providing the training
- The names and job titles of all the employees who attended the training sessions

Training records must be made available upon request to OSHA, the Alaska Department of Labor, the employee, or anyone having the written consent of the employee.

**Other Exposures**

Visitors, contractors, vendors and students may occasionally be exposed to bloodborne pathogens. These individuals, at the very least, must be
given basic hazard awareness information or training, and in some cases
must be provided with direct supervision by a trained university
employee. Departments are not responsible for providing extensive
employee type training or other provisions of this policy to these
individuals.

**Needlestick Procedure**

Employers must consider the use of safer needle devices when they
conduct their annual review of their exposure control plan. Safer sharps
are considered appropriate engineering controls, the best strategy for
worker protection; below are other requirements/strategies:

1. Involving frontline employees in selecting safer devices will help
insure that workers who are using the equipment have the opportunity
for input into purchasing decisions.
2. Detailed logs of all needlesticks must be maintained to assist with
tracking and identifying problem areas or operations.
3. The privacy of employees who have experienced needlesticks must
be maintained.

**Sample Plans**

A Bloodborne Pathogens Exposure sample plan is available and proper
use of this OSHA publication will help to eliminate technical citations
and fines if used properly. A Hazard Communication Plan (sample) will
be required along with the Bloodborne Pathogen Exposure Plan if
hazardous chemicals are being used (disinfectants, sterilizers, etc.)