Call to Order

Meeting was called to order by Kristy Olive; she replaced Bryce Morgan and serves as the Interim Director of the Office of Environmental Health & Safety. Upon her introduction, Kristy asked that if those attending have a Safety Committee in their area to please notify OEHS for assistance. The objective is always Safety First, and UAH will work with available resources to make that possible.

Roll Call

In Attendance: Melissa Brown; Bob Lindquist; Kristy Olive; Kristi Dendy; Hannah Upton; Scott Royce; Greg Smith; Elizabeth Hamrick; Emanuel Waddell; Shannon Mathis; Laterrica Shelton; Haley Hoy

Each person in attendance briefly introduced themselves.

Approval of Minutes

Approval of Minutes: Bob Lindquist
Second to Motion: Emanuel Waddell

Unfinished Business (Attachment A = Agenda)

Lab Safety Committee – no comment on this item

New Business

New EHS Staff – A handout was provided detailing the contact information for OEHS by subject matter. (Attachment B – OEHS Contact Information – Subject Matter Contacts)
- Contact Kristy Olive for the following issues: environmental air and water; biological safety; industrial hygiene; indoor air quality; Chematix inspection module and user/room assignments; and administrative matters.
- Contact Kristy Dendy for the following issues: fire safety; CPR/first aid (she has 20 years of experience as an instructor; five classes are offered this month); electrical safety; life safety code; AED/fire extinguishers; industrial safety training (includes ergonomics and blood borne pathogens); and assistance with radiation safety.
- Contact Hannah Upton for the following issues: laboratory safety; environmental land; hazardous and chemical waste; biological waste; universal waste recycling (bulbs and batteries); fume hood evaluations; and Chematix and SDS online – chemical and waste modules.

Chematix Inspection/Waste Management Software Implementation Status – Chematix is the software used to track waste from the first drop through the labeling process through the disposition process.
- The software capabilities include tracking and inventory management for lab spaces. Modules included are Inventory Management, Waste Management, and Resource Management.
- Kristy Olive provided a handout detailing the steps to use the Chematix Inspection tab. Attachment C – Chematix Inspection and Waste Instructions - Abbreviated
- Kristy Olive can assist with tailoring the software to meet a department’s various needs.
- Chematix is a web-based software as no app is available.
- One current glitch involves labs located in MSB; some of these labs have been assigned to Jeffrey Champoux and are presently being corrected. Relate any necessary changes to Kristy Olive.
- Kristy Olive can be contacted at oehs@uah.edu.

OEHS Updates

**Inspection Findings** – Kristy Olive provided a Summary of Inspection Findings for the following colleges and centers: College of Science; Center for Applied Optics; College of Arts, Humanities, and Social Sciences; College of Engineering as well as Life Safety Code Inspections.
- College of Science had 51 inspections with 153 findings including 121 unresolved in Chematix. A majority of the findings are related to chemical storage issues and maintaining clear aisles. The focus should be on the chemical storage issues because of the safety hazard. Dr. Waddell expressed a concern with objects in the hallway areas that need to be moved. Greg Smith indicated that he is presently involved with updating the campus move procedures. One possible solution is to hire outside movers to come twice per month to move items.
- Center for Applied Optics had 13 lab inspections with 46 findings including 42 unresolved in Chematix. The majority of the findings are related to maintaining updated signage and chemical inventories. Chematix findings are related to software training issues.
- CAHSS had 14 lab inspections with 27 findings including 27 unresolved in Chematix – related to software training. The majority of the findings are related to chemical inventories.
- College of Engineering had 41 lab inspections with 125 findings including 55 unresolved in Chematix. COE’s use of Chematix is working well. The majority of the findings are related to improper use of extension cords and safety training records.
- Life Safety Code Inspections were conducted in nine common areas with 52 findings. Any building maintenance findings are submitted through the work order system for follow up by OEHS. The majority of the findings were electrical related and would be addressed with the department. These findings include items such as missing outlet covers. Per Kristy Olive, these inspections were not performed until July as a result of the passing of Bobby Dempsey and the hiring of the present staff.
- Other colleges/centers have not been inspected yet. Those inspections will continue with the beginning of the new fiscal year.
- Contact the Associate Vice President of Facilities and Operations, Greg Smith, to assist with building maintenance solutions.
- Reports are available from Kristy Olive.
- Work orders are tracked through the work order system which sends OEHS an e-mail when they are complete.
- Kristy Olive and other OEHS staff can provide Chematix software training upon request.

Blood Borne Pathogen Policy Updates for Comment

- Legal comments must be added.
- Per Elizabeth Hamrick, edits will be made regarding the current On the Job Injury Policy.
- The immediate concern is to address any injuries and subsequent care.
Kristy Olive provided a draft of proposed revisions to the current policy. Changes/comments are highlighted in yellow. Additional comments are welcome.

Per Haley Hoy, Louise O’Keefe shared these with the College of Nursing.

Per Laterrica Shelton, any changes to the policy must come through her office, Compliance/Title IX.

Kristy Olive will send an email to solicit additional questions and comments.

Before finalizing, the policy must go through the Office of Counsel.

The goal is to have consistency among the UA System – UA, UAB, and UAH.

As an FYI – the HepB vaccine is offered for $200 per person. Consideration must be given due to the work a person does.

**Need for Biosafety Officer (termed BSO)**

Per Bob Lindquist, the need for this position at UAH will probably be necessary.

A BSO is needed for certain biosafety levels in order to receive/work with sponsored awards from NIH.

A BSO will help meet more rigorous requirements from NIH.

Like Mike Banish, presently the campus radiation safety specialist, a designated BSO will require additional training.

The concern is planning what is needed now and what is needed on the horizon.

Could anyone in any of the colleges serve as BSO? From College of Nursing?

**Need for Person with DEA Authorization Number**

Preferably someone with a DEA authorization number is needed on campus. DEA authorization numbers are site or individual specific and needed in the tracking and shipping of controlled substances. UAH does not have an institutional license.

**Safety Concerns**

**Campus Lighting**

Per Greg Smith, lighting deficiencies have and are being identified. Some are easy fixes, and some are construction related. The situation should improve over the next 60 – 90 days.

**Children in Labs**

Per Laterrica Shelton, children have been present in labs without prior authorization. Children need proper supervision. If children will be present in labs, then prior authorization must go through her office.

Per Bob Lindquist, the Deans should be aware of UAH policy regarding children and should convey the need to go through Compliance/Title IX with their departments in regards to children being present in UAH labs. The departments must be accountable as such.

**Kinesiology**

Per Shannon Mathis, laundry items used in this department could present a biochemical hazard.

**Crosswalks**

Per Emanuel Waddell, students have been crossing the street at MSB over to the athletic field, in addition to crossing inside the crosswalk to housing.

Is it possible to add a crosswalk south of ACU where the students cross?

OEHS is always open to accept concerns. Safety is FIRST, and research is SECOND.
Seek help if solutions are needed in your space.

Airborne Testing
- When people move to and from spaces, they may want their environment tested.
- However, there is not an unlimited budget to pay for these tests.
- If a tested space fails an indoor air quality assessment, then OEHS will pay for 100% of the assessment testing cost and refer the building issue to Facilities and Operations for corrections.
- If a tested space passes the indoor air quality assessment, then the department requesting the test will be asked to share the cost of the assessment.
- OEHS wants to help and perform any necessary testing. Any situations posing potential health problems need to be corrected.
- However, repetitive assessment costs must be shared.

Noise Evaluations
- If noise is determined to be in the range of occupational hearing loss, then the situation will need to be corrected.
- If noise is determined to be within comfort of business level, then the department will pay for any corrections.

Adjourn

The meeting was adjourned – motioned by Dr. Lindquist.

Minutes taken by Melissa Brown.

Attachment A – Agenda
Attachment B – OEHS Contact Information – Subject Matter Contacts
Attachment C – Chematix Inspection and Waste Instructions – Abbreviated
Attachment D – Bloodborne Pathogen Control Plan
UAH Environmental Health & Safety Committee
AGENDA – Fall 2018
SSB 114, UAH Campus

I. Call to Order

II. Roll Call

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris Taylor</td>
<td>College of Arts, Humanities, and Social Sciences</td>
</tr>
<tr>
<td>Ivey MacKenzie</td>
<td>College of Business</td>
</tr>
<tr>
<td>Laterrica Simmons</td>
<td>Compliance/Title IX</td>
</tr>
<tr>
<td>Shannon Mathis</td>
<td>College of Education</td>
</tr>
<tr>
<td>Mike Anderson</td>
<td>College of Engineering</td>
</tr>
<tr>
<td>Kristy Olive</td>
<td>Office of Environmental Health and Safety</td>
</tr>
<tr>
<td>Greg Smith</td>
<td>Facilities and Operations</td>
</tr>
<tr>
<td>Haley Hoy</td>
<td>College of Nursing</td>
</tr>
<tr>
<td>Robert Lindquist</td>
<td>Office of Research (Chairperson)</td>
</tr>
<tr>
<td>Emanuel Waddell</td>
<td>College of Science</td>
</tr>
<tr>
<td>Scott Royce</td>
<td>Student Affairs</td>
</tr>
</tbody>
</table>

III. Approval of Minutes

IV. Unfinished Business
a. Lab Safety Committee

V. New Business
a. New EHS Staff
b. Chematix Inspection/Waste Management Software Implementation Status

VI. OEHS Updates
a. Inspection Findings
b. Bloodborne Pathogen Policy Updates for Comment
c. Need for Biosafety Officer

VII. Safety Concerns

VIII. Adjourn
Subject Matter Contacts

Kristy Olive, Interim Director OEHS: 256-824-2171

- Environmental Air
- Environmental Water
- Biological Safety
- Industrial Hygiene
- Indoor Air Quality

Chematix Inspection Module and User/Room Assignments

Administration

Kristy Dendy, Campus Safety Specialist: 256-824-2352

- Fire Safety
- CPR/First Aid
- Electrical Safety
- Life Safety Code
- AED/Fire Extinguishers
- Industrial Safety Training
- Assisting RSO with Radiation Safety

Hannah Upton, Chemical Hygiene Officer: 256-824-6053

- Laboratory Safety
- Environmental Land
- Hazardous and Chemical Waste (RCRA)
- Biological Waste
- Universal Waste Recycling (Bulbs and Batteries)
- Fume Hood Evaluations

Chematix and SDS Online – Chemical and Waste Modules
Chematix Inspection
And Waste System

UAH OEHS
September 21, 2018
Welcome to Chematix

You are logged in as: Test User Your home department is: 253001, Chemistry

5 Inspection Deficiencies are waiting to be reviewed

This system is composed of the modules shown below. To open a module, click on its name. These modules are also accessible using the buttons at the top of the screen. For more information about the system, click on HELP.

Inventory Management
This module allows users to add bar coded items to the inventory, print barcodes, generate full inventory reports, and monitor the status of items. Users can also view all details pertaining to a specific item by scanning or entering its barcode.

Waste Management
This module monitors inventory for regulatory compliance and generates reports providing notification of chemicals requiring disposal. Lab personnel can submit requests for chemical removal and monitor these requests.

Resource Management
This module is where administration of users, locations, and departments takes place. Here authorized users can manage selected user, location, and department information and privileges.
<table>
<thead>
<tr>
<th>Inspection Date (MM/dd/yyyy)</th>
<th>Inspector</th>
<th>Building / Room</th>
<th>Laboratory</th>
<th>PI</th>
<th>Deficiency</th>
<th>Inspection Type / Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/21/2018 Olve, Kristy L</td>
<td>MSB / 100C Fake Lab for training</td>
<td>User, Test</td>
<td>03. Chemicals are properly label...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/21/2018 Olve, Kristy L</td>
<td>MSB / 100C Fake Lab for training</td>
<td>User, Test</td>
<td>06. Waste containers are proper...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/21/2018 Olve, Kristy L</td>
<td>MSB / 100C Fake Lab for training</td>
<td>User, Test</td>
<td>02. Corridors, aisles, and exits...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/21/2018 Olve, Kristy L</td>
<td>MSB / 100C Fake Lab for training</td>
<td>User, Test</td>
<td>03. Lab doors are closed and win...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/21/2018 Olve, Kristy L</td>
<td>MSB / 100C Fake Lab for training</td>
<td>User, Test</td>
<td>01. Chemicals are stored by clas...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Inspection Followup Record List

<table>
<thead>
<tr>
<th>Inspection Date (MM/dd/yyyy)</th>
<th>Inspector</th>
<th>Building / Room</th>
<th>Laboratory</th>
<th>PI</th>
<th>Deficiency</th>
<th>Inspection type / revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/21/2018</td>
<td>Olve, Kristy L</td>
<td>MSB / 100C</td>
<td>Fake Lab for training</td>
<td>User, Test</td>
<td>03. Chemicals are properly labeled...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
</tr>
<tr>
<td>09/21/2018</td>
<td>Olve, Kristy L</td>
<td>MSB / 100C</td>
<td>Fake Lab for training</td>
<td>User, Test</td>
<td>08. Waste containers are properly sealed...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
</tr>
<tr>
<td>09/21/2018</td>
<td>Olve, Kristy L</td>
<td>MSB / 100C</td>
<td>Fake Lab for training</td>
<td>User, Test</td>
<td>02. Corridors, aisles, and exits...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
</tr>
<tr>
<td>09/21/2018</td>
<td>Olve, Kristy L</td>
<td>MSB / 100C</td>
<td>Fake Lab for training</td>
<td>User, Test</td>
<td>03. Lab doors are closed and windows are in good con...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
</tr>
<tr>
<td>09/21/2018</td>
<td>Olve, Kristy L</td>
<td>MSB / 100C</td>
<td>Fake Lab for training</td>
<td>User, Test</td>
<td>01. Chemicals are stored by clas...</td>
<td>UAH Lab EHS Inspection Rev. 0</td>
</tr>
</tbody>
</table>

- Open Details
- Return
Review My Inspection Records

Followup Inspection Details

Laboratory: Fake Lab for Training
Inspector: Olive, Kristy L
Inspection Date: 09/21/2018
Inspection Name and Revision: UAH Lab EHS Inspection Rev. 0
Inspection Section: Chemical Storage
Failed on: Unsatisfactory
Inspection Item: 03. Chemicals are properly labeled.
Inspector’s comments: Three bottles in hood had no label.

Please select the solution: Select
Please describe the solution: 

Resolved and Completed  Forwarded  Cancel & Return
Followup Inspection Details

Laboratory: Fake Lab for training
Inspector: Olive, Kristy L
Inspection Date: 09/21/2018
Inspection Name and Revision: UAH Lab EHS Inspection Rev. 0
Inspection Section: Chemical Storage
Inspection Item: 03. Chemicals are properly labeled.
Failed on: Unsatisfactory
Inspector’s comments: Three bottles in hood had no label.

Please select the solution: Fixed as described below

Please describe the solution: Bottles have been labeled and OTA has been instructed on proper labeling procedure.

Resolved and Completed  Forwarded  Cancel & Return
If you would like to do self-inspections, please contact OEHS at 2171 and we will be happy to help. You set them up.
Waste Card Labeling and Pickup Requests
Waste Management

Your institutional customized user help text printed here

Manage your Laboratory Waste

Create Waste Card
Create Waste Pickup Worksheet
Edit Waste Card
Waste Card Hot List
Create Waste Card

Your institutional customized user help text printed here

Chemical Mixture by Percentage
Chemical Mixture by Quantity
Pure Chemicals in Individual Containers
Recyclable Materials
Paint and Paint Related Materials
Oil and Antifreeze
Aerosols
Gas Cylinders
Photo Chemicals
Contaminated Materials

<table>
<thead>
<tr>
<th>Global Waste Card Hotlist</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deslaining Solution-CME</td>
<td>Water; Methanol; Acetic Acid</td>
</tr>
<tr>
<td>Loading Buffers(reducing and None)CME</td>
<td>Water; Glycerol, anhydrous; Mercaptoethanol; Sodium n-dodecyl s...</td>
</tr>
<tr>
<td>Rapid Quant of Lipids-CME</td>
<td>Phosphoric acid; Water; Sulfuric Acid; Ethanol; Chlorofo...</td>
</tr>
<tr>
<td>Running Buffer-CME</td>
<td>Water; Glycine; Tris; Tris, free base; Sodium n-dodecyl s...</td>
</tr>
</tbody>
</table>
Help us update the software:

Please log in and let us know if your lab is properly assigned.

Email, Name, Charger ID, Lab #'s and Phone to hu0003@uah.edu.
UAHuntsville
Bloodborne Pathogen Control Plan

Effective Date: September 2013 - September 2018
Contents

INTRODUCTION .................................................................................................................. 2
SCOPE ............................................................................................................................... 2
RESPONSIBILITY .............................................................................................................. 2
BBP EXPOSURE DETERMINATION...................................................................................... 3
COMPLIANCE METHODOLOGY ...................................................................................... 3
EXPOSURE CONTROL PLAN .............................................................................................. 3
  Engineering Controls ........................................................................................................ 4
  Work Area Restrictions .................................................................................................... 5
Work Practice controls ....................................................................................................... 5
  I. Housekeeping Precautions ......................................................................................... 6
  II. Laundry Precautions ................................................................................................. 9
  III. First-Aid Precautions .............................................................................................. 10
Personal Protective Equipment (PPE) ................................................................................ 10
REGULATED WASTE DISPOSAL: .................................................................................... 11
HEPATITIS B VACCINATION PROGRAM ........................................................................ 12
POST BLOODBORNE PATHOGENS EXPOSURE PROCEDURE ........................................ 12
  A. Post-Bloodborne Pathogens Exposure Evaluation ................................................... 13
  B. Procedures for Evaluating the Circumstances of a BBP Exposure Incident .................. 14
TRAINING PROGRAM ...................................................................................................... 14
RECORDKEEPING PROGRAM .......................................................................................... 15
ATTACHMENT A .............................................................................................................. 16
INTRODUCTION
In accordance with the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030, the
Exposure Control Plan (ECP) is developed to eliminate or minimize the occupational exposure to
bloodborne pathogens (BBP), which are defined as pathogenic microorganisms that are present
in human blood, human body fluids, human tissues or other potentially infectious material.

In addition to blood, other potentially infectious materials (OPIM) are:
The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid,
pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any
body fluid that is visibly contaminated with blood, and all body fluids in situations where it is
difficult or impossible to differentiate between body fluids;
Any unfixed tissue or organ other than intact skin from a human (living or dead);
Human cell lines or cultures, human tissue cultures, human organ cultures;
Blood, body fluids or other tissues from non-human primates
Blood, body fluids or other tissues from experimental animals infected with BBP
Liquid or solid culture medium or other materials containing biological agents capable of
causing disease in healthy adults (i.e. equivalent to agents handled at Biosafety Level 2 or

SCOPE
This Standard applies to all University of Alabama in Huntsville (UAH) faculty, staff and student employees that may
reasonably anticipate skin, eye, mucous membrane, or parenteral (under the skin) contact with
blood or other potentially infectious materials during the performance of their job duties at the
UAH.

RESPONSIBILITY
Department heads and supervisors are responsible for ensuring their employees comply with the
provisions of this plan. Each department is responsible for providing all necessary supplies, such
as personal protective equipment, soap, bleach, Hepatitis B vaccinations, etc., to its employees.
The Office of Environmental Health and Safety (OEHS) shall be responsible for providing
making training available to UAH employees as to the requirements of the Bloodborne Pathogen
Plan (BBP). “BBP” is already defined above. Does it stand for bloodborne pathogens, or
Bloodborne Pathogens Plan? and for disposing of biohazardous waste. Each supervisor is
responsible for ensuring their affected employees attend.

The BBP will be reviewed and updated annually by UAH OEHS. Implementation of the BBP is
monitored and coordinated by the Office of Environmental Health and Safety (OEHS). The
UAH General Safety and Laboratory Safety Committee manages and oversees compliance of the
BBP. Additional information can be found in the University Biosafety Manual and the webpage
of the UAHuntsville OEHS (http://www.uah.edu/OEHS/).
BBP EXPOSURE DETERMINATION

Exposure Determination is made without regard to the use of personal protective equipment (i.e., employees whose expected job functions include occupational exposure to blood or other potentially infectious material are considered to be exposed even if they wear personal protective equipment). The purpose of an exposure determination is to identify the UAH job classifications that are required to comply with this BBP Plan.

Each University unit must develop a list of job classifications and/or job descriptions under their supervision that may have occupational exposure to bloodborne pathogens. Supervisors are responsible to enforce compliance with this BBP Plan for all applicable employees. These lists should be provided to OEHS so that training can be offered to applicable employees.

COMPLIANCE METHODOLOGY

UAH protects its employees by implementing a Bloodborne Pathogens Exposure Control Plan. UAH follows all “Universal Precautions” to help keep employees protected and healthy when there may be the potential to come into contact with blood or other body fluids. These “Universal Precautions” help to prevent the spread of infection. These precautions treat all human blood, body fluids and other potentially infectious fluids as if they are infectious.

EXPOSURE CONTROL PLAN

Employees covered under this exposure control plan must receive an explanation of hazards of their jobs and how to protect themselves as per this Exposure Control Plan during their initial training session. All employees have the opportunity to review this plan at any time during their work shifts by visiting [link]. When requested by an employee, a copy of the BBP Plan will be provided free of charge. The UAH OEHS is responsible for reviewing and updating the Exposure Control Plan annually, or more frequently if necessary, to reflect new regulations or modified tasks and procedures that affect occupational exposure. This plan has many stages to eliminate or reduce potential risk of exposure to employees. These stages include:

- Engineering controls
- Work practice controls
- Use of personnel protective equipment
- Employee training
- Vaccination
Engineering Controls

Engineering Controls are controls that isolate or remove the bloodborne pathogen’s hazard from the workplace. Examples: sharps disposal containers, self-sheathing needles, safer medical devices such as sharps with engineered sharps injury protections and needleless systems. Where potential for occupational exposure still exists after implementation of these controls, personal protective equipment shall also be utilized. UAH will identify the need for changes in engineering controls and work practices through reviews of the sharps injuries with follow-up exposure investigation and through discussion with the appropriate supervisor and or safety committee.

- **Sharps Containers**: The container is to be open when in use to allow unobstructed access and securely closed for disposal in a waste stream designated for biohazardous waste. Only approved sharps containers are to be utilized. The person disposing of sharps is responsible for monitoring the container and disposing of the container when it is two-thirds full. Contact the OEHS at 2171 for sharps disposal.

- **Biosafety Cabinets**: The person working in the cabinet will disinfect the work surface of the Biosafety Cabinet after each use. If the cabinet has a front drain, it will be checked monthly, disinfected, and drained if required. The cabinet will have an annual performance certification that the Principal Investigator is responsible for arranging. This certification is also required prior to initial cabinet use or prior to use after any cabinet relocation.

- **Sharps with Engineered Sharps Injury Protections**: These devices are needle-less or otherwise altered with a built-in feature or mechanism that effectively reduces the risk of an exposure incident. It is recommended that these devices be utilized in all applications at UAH when there is potential for occupational exposure to blood or OPIM involving sharps.

Implementation or active evaluation of engineered sharps devices is mandated in the following instances:

1. **University employees with human subject research or direct patient contact duties**: Examples include drawing blood or administering injections.
2. **University employees working with experimental animals at animal biosafety level 2 (ABSL-2+) or above**: Examples include injection of lentiviral agents into animals or blood draws from animals exposed to lentiviral agents.
3. **University employees working at ABSL-2 and for whom it has been determined present a high risk of significant exposure to dangerous pathogens via sharps injury**: Examples include injections of rabies virus or plasmodium species into animals.

It is the responsibility of those with supervisory or managerial duties at UAH to ensure that employees in these categories are utilizing engineered sharps devices. It is also the responsibility of the supervisor to include non-managerial staff in the evaluation of safety devices. A list of these devices is available at the Occupational Health Care Worker Safety Center at the University of Virginia Health System at the following website: http://www.healthsystem.virginia.edu/internet/epinet/

Supervisors may contact the Office of Environmental Health and Safety at (256) 824-2352-2171 to develop a lab specific or protocol specific evaluation form. Supervisors should utilize these protocols and forms to solicit input from the non-managerial employees with respect to the selection of safety devices.
If a supervisor does not believe that utilizing an engineered sharps device is possible or warranted for a specific application, they must:

- Document which devices have been evaluated, the extent of the evaluation, and identify which employees performed the evaluations.
- Document the rationale for not utilizing an engineered sharps device. This rationale is only acceptable if it demonstrates the device is medically contraindicated for the human or animal research subject, is unreliable in operation, or is incompatible with another essential component of the research.

**Work Area Restrictions**

_**General:** In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees should comply with the following work area restrictions:

- No eating or drinking, applying cosmetics or lip balms, smoking or handling contact lenses
- Food and beverages are not kept in refrigerators, freezers, shelves, cabinets, or counter tops or bench tops where blood or other potentially infectious materials are present
- Mouth pipetting is prohibited; automatic or manual pipetting devices should be provided
- All procedures will be conducted in a manner that will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious material.

**Research Facilities:** This section applies to research laboratories engaged in culture, concentration, experimentation, and manipulation of potentially infectious materials.

- Laboratory doors shall be kept closed when work with potentially infectious material is in progress;
- Access to the work area shall be restricted to authorized personnel. Only personnel trained on the potential hazards of BBP and who comply with the entry and exit procedures shall be allowed to enter;
- Vacuum lines shall be protected with liquid disinfectant traps and HEPA filters that are checked twice a year and replaced as necessary. Filters must be labeled with the date installed.
- Each laboratory shall contain a facility for hand washing and an eye wash station.

**Work Practice controls**

Work Practice Controls are controls that reduce the likelihood of exposure by altering the manner in which a task is performed:

I. Housekeeping Precautions
II. Laundry Precautions
III. First-Aid Precautions
I. Housekeeping Precautions

To prevent contamination:

- Use a dust pan and broom to pick up sharp objects
- Place sharp objects in labeled sharps container
- Place all contaminated waste in red biohazard bags within a secondary container
- Wash hands as soon as possible after contamination and after removing gloves
- Do not handle items such as pens, door handles, elevator buttons while wearing gloves
- Do not wear gloves out of the laboratory

1) Hand Washing

Hand washing is considered to be the single most important defense against disease transmission. Hand washing facilities are available to the employees with potential exposure to blood or other potentially infectious materials. Supervisors must make sure that employees wash hands as soon as possible after an exposure to blood or OPIM. If employees incur exposure to their skin or mucous membranes, those areas shall be washed or flushed with water as appropriate as soon as feasible following contact. To wash your hands, you must follow special procedures to avoid cross-contamination.

- Turn on the water
- Wet your hands
- Apply soap
- Rub your hands together, for at least 20 seconds
- Rinse your hands
- Use a dry paper towel to turn the water off

Thorough hand washing is extremely important, but soap and water alone have not been shown to kill the Hepatitis B virus. This is why it is necessary to wear disposable, water-impervious vinyl or latex gloves whenever there is a potential for exposure to blood or other bodily fluids visibly tinged with blood and any object contaminated with these fluids.

When hand washing facilities are not readily available, either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes should be used. When antiseptic hand cleansers or towelettes are used, be sure to wash hands with soap and
running water as soon as possible. Hands should also be washed as soon as possible after removing gloves or any other personal protective equipment.

2) **Needles**

- Contaminated needles and other contaminated sharps shall not be bent, recapped, removed, sheared or purposely broken.
  - If no alternative is feasible, then the recapping or removal of the needle must be accomplished using a mechanical device or the one-handed technique.

3) **Specimen Containers:**

- Specimens of blood or other potentially infectious materials will be placed in a container that prevents leakage during the collection, handling, processing, storage, and transport of the specimens.
- The container used for this purpose will be labeled or color-coded in accordance with the requirements of the OSHA standard.
- Any specimens that could puncture a primary container will be placed within a secondary container that is puncture resistant.
  - If outside contamination of the primary container occurs, the primary container shall be placed within a secondary container that prevents leakage during the handling, processing, storage, transport, or shipping of the specimen

4) **Sharps Containers**

- Known or suspected contaminated sharps shall be discarded immediately or as soon as feasible in containers that are closeable, puncture-resistant, leak-proof on sides and bottom, and marked with an appropriate biohazard label. If sharps container is not pre-labeled, biohazard labels are available through EHS.
- Must not be opened, emptied or cleaned manually or in any other manner that would expose employees to the risk of injury.
  - When containers of contaminated sharps are being moved from the area of use or discovery, the containers shall be closed immediately before removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping

5) **Containers for Reusable Sharps:**

Contaminated sharps that are reusable are to be placed immediately or as soon as feasible after use, into appropriate containers. At UAH these containers are puncture resistant, labeled with a biohazard symbol, and are leak proof on the sides and bottom.
6) Cleaning and Decontamination

All equipment, environmental, and other working surfaces need to be cleaned and decontaminated after contact with blood or other potentially infectious materials. Each Principal Investigator (PI) with laboratories presenting an exposure hazard must determine and implement an appropriate written schedule for cleaning and decontamination process.

Written schedules must include and be based on the:

- Location
- Type of surfaces
- The tasks or procedures to be performed in the area
- The necessary personal protective equipment
- The disinfectant necessary

- The disinfecting agent should be selected based on the area or substance to be decontaminated as well as the suspected agents to be destroyed. Information concerning the utility and selection of disinfectants may be obtained by visiting the EPA Antimicrobial Information Network at http://ace.orst.edu/info/nain/
- Must be left in contact with contaminated work surfaces, tools, objects, or potentially infectious materials for at least 10 minutes before cleaning.

- Cleaning wet blood/bodily fluids:
  - Place paper towel or absorbent material over the contaminated fluid to soak up
  - Spray paper towel area with disinfectant
  - Use red biohazard bag for contaminated paper towels
  - Spray area with disinfectant solution and wipe dry

- Cleaning dried blood/body fluids:
  - Spray with disinfectant solution
  - Wipe with paper towel

- Properly dispose of contaminated PPE, [What does “PPE” stand for/mean?], towels, rags in a red biohazard bag inside a rigid, puncture resistant, leak-proof secondary container with a biohazard label on the outside of the container and lid, during use, storage, and transport.
1) **Equipment**

- All work surfaces must be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or other potentially infectious materials, as well as at the end of the work shift if the surface may have become contaminated since the last cleaning.
- Equipment that has become potentially contaminated with blood or other potentially infectious materials shall be decontaminated as necessary unless the decontamination of the equipment is not feasible.
- If decontamination of equipment or portions thereof is not feasible, then readily observable labels shall be attached to equipment which remains contaminated. The labels shall state which portions remain contaminated. The equipment should also be wrapped or contained to prevent exposure to contaminants.

2) **All bins, pails, cans, and similar receptacles intended for reuse which may have become contaminated:**

- Must be cleaned and decontaminated immediately or soon as feasible upon visible contamination.
- Must be inspected and decontaminated on a regularly scheduled basis, at least a monthly basis.

**II. Laundry Precautions**

- Wear gloves and other PPE to handle contaminated laundry and separate contaminated laundry from non-contaminated.
- Bag and handle contaminated laundry with a minimal amount of agitation, at the location where it was used.
- Use melt away bags that can be thrown directly into washers without having to unload or remove contaminated laundry from bags.
- Rinsing soiled laundry in the utility rooms is acceptable, if it is not contaminated with blood, OPIM, or does not contain sharps.
- Do not hold contaminated laundry bags close to your body or squeeze or place your hand underneath to support when transporting.

**III. First-Aid Precautions**

- Wash your hands before and after any medical intervention.
- Wear gloves whenever you are in contact with another's blood, bodily secretions, or tissues.
• Wear a facemask or body gown whenever there is a possibility of blood splashing onto the rescuer.
• Dispose of contaminated sharp objects in the appropriate puncture-proof container.
   — Dispose of all contaminated equipment in an appropriate biohazard container.

If you get blood on you:
• Wash it off as soon as possible with soap and water
• Flush your eyes with water at a sink or eyewash station immediately
• Report the incident your supervisor

Personal Protective Equipment (PPE)
All personal protective equipment used at this facility will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The UAHuntsville Biosafety Manual and OEHS are available for consultation on selection of appropriate personal protective equipment. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time that the protective equipment will be used.

Employees Must:
• Utilize protective equipment in occupational exposure situations.
• Remove garments that become penetrated by blood or other potentially infectious material immediately or as soon as feasible.
• Replace all personal protective clothing that are torn or punctured, or that lose their ability to function as a barrier to bloodborne pathogens.
• Remove all personal protective equipment before leaving the work area. It shall then be placed in an appropriately designated container or area for storage, washing, decontamination, or disposal.
• Wash hands immediately or as soon as feasible after removal of gloves or other PPE.

Gloves:
• Should be worn whenever touching blood or bodily fluids, or surfaces soiled with blood or bodily fluids.
• When you clean toilets and sinks
• When you handle trash

When emptying trash watch for:
• Sharp objects
• Broken glassware
- Used syringes
  - Change gloves when one or both are torn or punctured
  - Not to be worn outside of the work area

**Protective Clothing/Footwear:**
- Shall be worn as an effective barrier against blood and OPIM

**Face Shields and Eye Protection:**
- Shall be worn whenever splashes, spray, spatter, droplets, or aerosols may be generated causing eye, nose, mouth contamination

**REGULATED WASTE DISPOSAL:**
Regulated waste includes liquid or semi-liquid blood or other potentially infectious materials, contaminated items that would release blood or other potentially infectious materials if compressed, items caked with dried blood or other potentially infectious materials that are capable of releasing these infectious agents during handling, and sharps.

- All sharps shall be discarded as soon as feasible in sharps containers that are located in the facility. The sharps containers must be labeled with the biohazards symbol.
- Containers must be puncture-resistant and leak resistant.
- Regulated solid wastes shall be placed in red polyethylene biohazard bags that are at least 3-mil thick. All solid wastes must be autoclaved (121 Degrees C, 60 - 90 minutes) prior to removal from the premises. Disposal is accomplished by placing the red biohazard bag in a leak proof trash container and removed from the building for pickup.
- Regulated liquid wastes should be carefully poured into the appropriate disinfectant to deactivate the biohazardous agent.
- Following sufficient contact time, the disinfected liquid may be disposed of in the sanitary sewer. This should be done carefully to avoid aerosol generation and splashing. Afterwards the drain should be flushed with disinfectant of sufficient volume to fill the trap.

More information on compliance methods can be found in the UAH Biosafety Manual [www.uah.edu/OEHS/bio_safety_manual.htm](http://www.uah.edu/OEHS/bio_safety_manual.htm).

**HEPATITIS B VACCINATION PROGRAM**
All University personnel (faculty, staff, and students) who have been identified as having exposure to blood or other potentially infectious materials, must be provided or acquire an HBV vaccination series upon assignment that poses a risk of exposure. They have the option to decline the vaccination but must read and sign the Vaccination Declination Form (attachment...
A) within 24 hours of the assignment. This form verifies that personnel were informed of the potential health hazards that Hepatitis B virus represents in their work environment. In addition, the form records the individual's choice to decline the Hepatitis B vaccine. Employees (faculty and staff) consenting to vaccination will receive the Hepatitis B vaccine (HBV) at no cost. The cost is incurred by the employee's department. Vaccinations are provided through the UAHuntsville Faculty and Staff Clinic. The supervisor should contact the Clinic to arrange for vaccinations. Employees who initially decline the HBV vaccine, but later wish to have it may have the vaccine provided at no cost.

Students consenting to vaccination must arrange for the HBV vaccination at the Student Wellness Center. Students must acknowledge their decision to decline the HBV vaccination by signing a waiver declination form from their academic department.

**POST BLOODBORNE PATHOGENS EXPOSURE PROCEDURE**

A bloodborne pathogen exposure incident occurs when potentially infectious material comes into contact with the eyes, mouth, other mucous membrane, damaged skin or penetration through the skin (parenteral—under the skin) during the performance of an employee's duties.

**If you are exposed and the incident is an emergency or requires immediate medical attention, or if the incident occurs after-hours or during a holiday:**
- Call 911 or otherwise seek immediate medical attention, as needed.
- After receipt of immediate medical attention, contact your supervisor as well as the On-the-Job Injury (“OJI”) Coordinator in the Office of Counsel at your earliest convenience to report the injury.
- Submit a fully completed Employee Occupational Accident Report to the OJI Coordinator. The form may be found here: [http://www.uah.edu/legal/injuries](http://www.uah.edu/legal/injuries).
- The OJI Coordinator will then provide a copy of the Employee Occupational Accident Report to Risk Management.

**If you are exposed during regular working hours and the incident is not an emergency and does not require immediate medical care:**
- Rinse the affected area with copious quantities of water and prevent others from coming into contact with the pathogen.
- Contact the OJI Coordinator in the Office of Counsel so that she can schedule an appointment for your injury. Risk Management will select a medical provider for post-exposure evaluation and/or medical treatment provided below in Post-Bloodborne Pathogens Exposure Evaluation.
- Notify your supervisor immediately after the BBP exposure incident and provide detailed information about the incident. The supervisor must ensure the timely submission of the Employee Occupational Accident Report requisite forms to the OJI Coordinator, who will in turn provide a copy to Risk Management.
A. Post-Bloodborne Pathogens Exposure Evaluation

- Documentation of the route of exposure and the circumstances related to the incident.
- The employee will be offered the option of having blood collected for testing of the employee’s HIV/HBV/HCV serological status. The blood sample will be preserved for at least 90 days to allow the employee to decide if the blood should be tested for HIV status. However, if the employee decides prior to that time that testing will be conducted then the appropriate action can be taken and the blood sample discarded.
- If necessary, the identification of the source and, if possible, the status of the source will be determined. If possible, the blood of the source subject will be tested (after consent is obtained) for HIV/HBV/HCV infectivity.
- Results of testing of the source subject will be made available to the exposed employee but the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual will be strictly followed. Current Alabama law concerning disclosure of the HIV status of an individual without consent is governed by the requirements of the Alabama Confidentiality of HIV Related Information Act. This law provides that an employee who has been notified of the identity and test result status of the source individual must not divulge this information to others unless the source individual signs a special written consent.
- The employee will be offered post-exposure prophylaxis in accordance with the current recommendations of the U.S. Department of Health and Human Services.
- The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illness to be alert for and to report experiences to appropriate personnel.

If the exposure involves a non-human primate or non-human primate tissue, the Standard Operating Procedures for Management of Herpes B Virus exposure or SIV exposure developed by Employee Health Services will be followed.

B. Procedures for Evaluating the Circumstances of a BBP Exposure Incident

Employees should notify their supervisor immediately after the exposure incident, or as soon as possible if the incident occurs outside of working hours. The supervisor records the details of the exposure incident including the route of exposure, the infective agent and an estimate of the dosage.

The supervisor will submit the Employee Occupational Accident Injury Report to the Office of Counsel within 48 hours. The report must include the route of exposure, the infective agent, and an estimate of the dosage.

If the exposure involves a sharp, the supervisor will also collect and provide the following information regarding the exposure on the "SHARPS INJURY REPORT" (attachment B):
The OEHS compiles these "Sharps Injury Report" forms into an "Occupational Injury Log". The OEHS will annually review the Sharps Injury Reports to determine if changes are necessary to the procedures outlined in the Exposure Control Plan and to ensure that appropriate changes are implemented.

Training for all employees will be conducted for employees prior to initial assignment to tasks where occupational exposure to bloodborne pathogens may occur. The OEHS conducts BBP Training annually. Training information is on the OEHS web site.

**Training for employees includes the following:**

- Overview of bloodborne pathogens;
- Epidemiology, symptoms, and routes of transmission of bloodborne pathogens;
- Prevention techniques;
- Explanation of the use of and limitations of engineering controls, work practices, and personal protective equipment;
- Spill cleanup procedures;
- Accident and Exposure follow-up procedures;
- Elements of **29 CFR 1910.1030**; (OSHA BBP)
- Exposure Control Plan, HBV vaccinations, Methods of Compliance, Hazard Communication, Record Keeping.

**RECORDKEEPING PROGRAM**

Employee Training records must be maintained within their departmental files.
ATTACHMENT A

The University of Alabama in Huntsville

Hepatitis B Vaccination Declination Form

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring the hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with the hepatitis B vaccine, at no charge to myself. However, I decline the hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with the hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Signature ______________________________ Date ___________
**THE UNIVERSITY OF ALABAMA IN HUNTSVILLE**

**SHARPS INJURY REPORT**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Employee Last Name</td>
</tr>
<tr>
<td>2</td>
<td>Employee First name</td>
</tr>
<tr>
<td>3</td>
<td>Social Security Number / UAHID / Charger ID</td>
</tr>
<tr>
<td>4</td>
<td>Date of Incident</td>
</tr>
<tr>
<td>5</td>
<td>Occupation</td>
</tr>
<tr>
<td>6</td>
<td>Department</td>
</tr>
<tr>
<td>7</td>
<td>Building</td>
</tr>
<tr>
<td>8</td>
<td>Room number</td>
</tr>
<tr>
<td>9</td>
<td>Brand of device</td>
</tr>
<tr>
<td>10</td>
<td>Please provide a brief description of how the injury occurred, including the task which was being performed as well as any protective equipment worn or utilized</td>
</tr>
<tr>
<td>11</td>
<td>Was an animal involved?</td>
</tr>
<tr>
<td>12</td>
<td>Was immediate treatment sought? If so, where?</td>
</tr>
<tr>
<td>13</td>
<td>Recommendation for preventing recurrence</td>
</tr>
</tbody>
</table>

Office of Environmental Health and Safety