

In this issue of the Environmental Health and Safety (EHS) Listserv, May19, 2010:

1. Did you know?
 2. Mark your calendars!
 3. Bloodborne Pathogens Program Update
 4. Safety in the Field
 5. Hot Work
 6. New Safe Operating Procedures (SOPs)
-

1. Did you know?

While Environmental Health and Safety provides training, tools, and online guidance to assist supervisors and employees with hazard identification and mitigation, only the supervisor can provide training on specific hazards and specific mitigation techniques for the operation(s) they oversee.

A Job Safety Assessments (JSA) should be completed by the supervisor for each individual, job classification (if classification indicates all the same duties), or job task. The JSA helps the supervisor document hazards and develop risk minimization plans that incorporate engineering controls, administrative controls, and personal protective equipment.

EHS offers a variety of tools to assist supervisors implementing the risk mitigation plans they develop through the JSA process. Three of the most important tools are:

- Safe Operating Procedures (SOPs), such as *Communication of Work Area Safety Information*, and hundreds of others available to the campus community. SOPs are generally organized by type of work, e.g., laboratory operations, custodial operations, maintenance or shop operations, landscaping/agricultural operations, etc.). SOPs serve as a reference source on appropriate controls and may assist supervisors with training efforts.
- The Virtual Manual (VM) is an online tool to help ‘fit the pieces together’ and create a safety/compliance manual specific to an operation. The VM uses a short assessment to assemble all EHS-published guidance material into one location for ease of use.
- Training common across disciplines may be found within the following web-based training modules: Injury and Illness Prevention Plan, Emergency Preparedness and Chemical Safety. Other available instructor-led or web-based training may have a regulatory requirement. The *Employee Training Needs Assessment for EHS-Related Topic* matrix provides supervisors information on some such training that is provided by EHS.

Resources:

Job Safety Assessments SOP <http://ehs.unl.edu/sop/s-JSA.pdf>

Communication of Work Area Safety SOP <http://ehs.unl.edu/sop/s-workareasafety.pdf>

EHS SOPs (viewable by subject or alphabetically) <http://ehs.unl.edu/sop/>

EHS Virtual Manual <https://scsapps.unl.edu/VirtualManual/>

EHS Web-based Training <http://ehs.unl.edu/onlinetraining/>

2. Mark Your Calendars!

The American College of Emergency Physicians has declared May 16-22, 2010, National Emergency Medical Services (EMS) Week. This is the time to celebrate the hard work and outstanding dedication of emergency responders here at UNL and in our community. Make a special effort to thank any EMTs,

firefighters and policemen you know for their services. According to the U.S. Department of Labor, there are over 500,000 firefighters and EMTs in the United States. Many employees working at UNL, and in particular Extension Centers, are EMTs and/or volunteer firefighters.

Resource:

American College of Emergency Physicians <http://www.acep.org/>

3. Bloodborne Pathogens Program Update

- **Do you use** human blood, human blood components, products made from human blood or human cell lines in your research?
- **Are you exposed** to human blood, any of these human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, or any human body fluids that are visibly contaminated with blood?
- **Are you possibly subject to or exposed to** bites, cuts or scrapes during the course of your normal assigned job tasks that would result in exposure to someone else's blood or body fluids?

If you answered any of these questions in the affirmative, you and/or your staff may need to enroll in the UNL Bloodborne Pathogens Program. This UNL program complies with the OSHA Bloodborne Pathogen Standard (29 CFR 1910.1030) and applies to all workers with potential occupational exposure (meaning exposure while conducting job-related tasks) to human blood or bloodborne pathogens. More details about the UNL Exposure Control Plan (ECP) and Bloodborne Pathogens program, as well as other related documents, may be accessed through the EHS web site as noted below.

If you are already enrolled in the program, the ECP has been recently revised, so please review the updated documentation to make sure you are still in compliance. If you have any questions or aren't sure if you need to enroll, please contact the UNL Biosafety Officer, Matt Anderson, at 472-9554 or manderson11@unl.edu.

Resources:

UNL Exposure Control Plan <http://ehs.unl.edu/programdocuments/BBP.pdf>
Bloodborne Pathogens Program, EHS SOPs, link to OSHA Standard (BBP)
<http://ehs.unl.edu/documents/BBP.shtml>.

4. Safety in the Field

This is the time of the year when employees are able to work in earnest on research that must be done outside the confines of the university. Workers and researchers should have a plan to minimize injuries that may occur at a specific location, or while working on a specific project, and think about what safety procedures are to be followed. Some areas to consider when preparing for field work:

- Noise exposure – Are you using equipment such as chain saws, tractors, mowers, etc.? Are you aware of the Hearing Conservation Program?
- Climbing/Walking hazards – Slip, trips & falls can occur anywhere, but might be a particular concern if there is climbing involved or walking over uneven ground.
- Heat stress – Temperature, humidity, sunlight, wind speed and level of physical activity all are components contributing to heat stress. Are you aware of how to minimize their effects?

- Lifting hazards – When doing field work or research outdoors it is likely you will be transferring items in and out of a vehicle, setting up equipment, or other lifting. Protect yourself from overexertion injuries by using safe lifting techniques.
- Operating equipment – Whether the equipment being used in the field is large or small, motorized or not, be sure you read the manufacturer’s operating instructions prior to use. If operating a Powered Industrial Truck (like a forklift), you need special training which is available through EHS.
- Vehicle hazards – While driving a car, van or truck might not be part of your job duties all year long, field work requires that you GET to the location. Follow safe driving guidelines, use common sense and obey all laws, for example, no texting or cell phone use. Defensive driving information is available online from various sources. The Nebraska Safety Council in Lincoln provides several courses to help you improve your driving safety.
- Insect stings – Employees who work outdoors are often at increased risk of insect stings. It is important to know how to prevent and treat such stings.

Before proceeding with field work, review the safe operating procedures listed below to optimize safety for your summer experience. You might consider reviewing the entire list online in case there are other SOPs that apply to your anticipated work.

Resources:

Hearing Conservations SOPs <http://ehs.unl.edu/sop/#hearing>

Slips, Trips, Falls – Reducing Risk and Avoiding Injury http://ehs.unl.edu/sop/s-slips_trips_falls.pdf

Heat Stress SOPs <http://ehs.unl.edu/sop/#Heat>

General Material Handling /Safe Lifting http://ehs.unl.edu/sop/s-gen_safe_lifting.pdf

Forklift / Powered Industrial Truck Safety <http://ehs.unl.edu/sop/s-forklift.pdf>

Insect Stings SOP http://ehs.unl.edu/sop/s-insect_stings.pdf

Nebraska Safety Council- Lincoln <http://www.nesafetycouncil.org/>

EHS Safe Operating Procedures <http://ehs.unl.edu/sop/>

5. Hot Work

“Hot work” means processes involving burning, welding, or similar operations that are capable of initiating fires or explosions through spark, flame, or heat, such as: Welding and allied processes (e.g., oxy-fuel gas welding, open-flame soldering, brazing, thermal spraying, oxygen cutting, arc cutting); Heat treating; Grinding; Thawing pipe; Powder-driven fasteners; Hot riveting; Torch-applied roofing. Often those conducting such processes may not think of these processes as hazardous. The information contained in the SOP, *Hot Work Permit Operations*, applies to all UNL personnel conducting hot work on University owned or leased property, whether indoors or outdoors, and in areas that have not been permanently established, designated, and maintained for this type of work.

If you conduct “hot work” operations, review the *Hot Work Permit Operations* SOP. This SOP outlines conditions requiring a hot work permit and then how to proceed if a hot work permit is required. If a hot work permit is required, it must be issued by a “Permit Authorizing Individual (PAI).” It is the responsibility of the department employing and supervising the hot work operator to designate a PAI.

The “Hot Work” SOP lists items for Pre-Operational Review by the PAI and Fire Watch. Following are a few hot work safety guidelines:

- Be aware of hazards posed by the hot work process and the work site.

- Be aware of work area fire alarm initiation/emergency responder notification procedures, such as alarm pull stations.
- Know the location of and how to use a portable fire extinguisher.
- Combustibles within 35' of the hot work should be removed or protected by fire resistant tarpaulins or metal shields.
- Ventilation should be checked to be sure it is and will remain sufficient to prevent development of a hazardous atmosphere during the hot work process.

Two related SOPs available through the EHS web site are:

- ***Welding and Cutting Operations.*** This SOP provides an awareness of hazards associated with welding and cutting operations and strategies for minimizing associated risks. These hazards primarily consist of toxic fumes, dusts, burns, fires, explosions, electric shock, radiation, noise, and heat stress.
- ***Welding Lens Shade and Personal Protective Equipment (PPE) Selection.*** This SOP reviews appropriate eye and face protection, which is of utmost importance when conducting welding and cutting operations to protect against flying debris, sparks, heat, and optical radiation hazards.

Resources:

Hot Work Permit Operations <http://ehs.unl.edu/sop/s-hotwork.pdf>

Welding and Cutting Operations http://ehs.unl.edu/sop/s-welding_&_cutting_operations.pdf

Welding Lens Shade and Personal Protective Equipment (PPE) Selection

http://ehs.unl.edu/sop/s-welding_lens_and_ppe.pdf

6. New Safe Operating Procedures (SOPs)

EHS has created new SOPs which are available on the EHS website:

- Vehicle/Equipment Washing http://ehs.unl.edu/sop/s-vehicle-equip_washing.pdf
- Radioactive Material Inventory Tracking http://ehs.unl.edu/sop/s-RAM_inventory_tracking.pdf

Additional SOPs relevant to various hazards and tasks are available through the EHS website at

<http://ehs.unl.edu/sop/>.

Remember...SAFETY IS AN ATTITUDE!