

**In this issue of the Environmental Health and Safety (EHS) Listserv,
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**1. Elements of Creating Safety Cultures in Academic Institutions
#11: Establish Internal Review Process/Corrective Actions**

As you may recall from previous issues of the EHS listserv, there has been a great deal of national attention given to the topic of laboratory safety in higher education following investigations of serious incidents at UCLA and Texas Tech. As a result, the American Chemical Society (ACS) recently issued a report, ***Creating Safety Cultures in Academic Institutions***. While this report focuses on laboratory safety, its content is applicable to all campus settings.

This report contained seventeen specific recommendations for creating vibrant, strong safety cultures in academic institutions. Each of these recommendations will be highlighted individually and presented as a series in the EHS listserv. The eleventh recommendation in the ACS report is:

Establish an internal review process of incidents and corrective actions with the Department Safety Committee (faculty, staff, students, graduate students, and postdoctoral scholars), and provide periodic safety seminars on lessons learned for incidents.

Most of what is known about safety has been learned from mistakes or incidents. Investigation of incidents is a key tool in helping to build a strong culture of safety by identifying direct and root causes so action can be taken to prevent future incidents. Once incidents are evaluated the resulting information must be put to use, not only to mitigate identified causes, but also to widely share lessons learned.

At UNL, employees must complete a First Report of Occupational Injury to begin the worker's compensation process. This report is forwarded to EHS, which initiates an injury incident investigation. The investigation results are shared with the Chancellor's University Safety Committee and the department-level safety committee. This information is also available to the general campus community in the minutes of the Chancellor's University Safety Committee, which are posted on the EHS web site.

Department-level safety committees and all members of the campus community are encouraged to use this information to strengthen their safety programs at the local level. Information specifically identifying employees is removed before the investigative results are shared. This is to ensure that the focus remains on using the information in a positive manner to strengthen the safety program at the local level.

EHS has also recently introduced the student injury reporting system and near-miss reporting system, both available on the EHS web page under the “Home” tab. Both of these were highlighted in the August 29, 2013 listserv. They are also valuable tools that can be used to strengthen the safety program at the local level. Information learned through these two tools is shared in the EHS listserv.

Personnel at all levels are encouraged to share their “near miss” incidents, report student injuries, and review injury incident investigation information as a means of identifying hazards and risks that may not have been previously recognized, taking action to reduce the risk of future injuries, and fostering the “Safety Ethic,” espoused by the Safety Culture Task Force of the ACS Committee on Chemical Safety at the local level:

- **Value safety:** Safety is an integral part of what one does, its automatic, and it does not change its priorities. It is never questioned and never compromised.
- **Work safely:** One continues to learn about safety, learns to recognize hazards, assesses the risks of hazards, manages the risk of hazards, and prepares to handle emergencies.
- **Prevent at-risk behavior:** One does not cut corners or bypass safety measures in the laboratory (or other work environment) and shares this information with others, as needed.
- **Promote safety:** One encourages and acknowledges others in working safely.
- **Accept responsibility for safety:** One takes steps to work safely, setting a positive example for others, and being accountable for safety.

Resources:

- Creating Safety Cultures in Academic Institutions
http://portal.acs.org/portal/PublicWebSite/about/governance/committees/chemicalsafety/CNBP_029720
- EHS Student Injury/Illness Reporter!
<https://scsapps.unl.edu/studentinjuryillnessReporter/>
- EHS Near Miss/Close Call Reporter!
<https://scsapps.unl.edu/EHSNearMissReporter/>
- Meeting Minutes of the Chancellor’s University Safety Committee (containing injury/illness data and investigation information)
<http://ehs.unl.edu/chancellors-university-safety-committee-cusc#cusc>

2. UNL Safety Snapshot Survey + Supplier Showcase

In May 2013, the Chancellor's University Safety Committee issued a survey to gauge the current safety climate at UNL. The survey was completed by 263 Building Maintenance Reporters (BMRs) and 41 self-identified UNL Safety Committee Chairs/Contacts. Following is an overview of the findings. If you would like to receive a copy of the compiled survey results contact Elizabeth (Betsy) Howe, ehowe2@unl.edu or 402-472-5488.

- Of the respondents, 47% said their unit/facility had a safety committee, although the definition of "safety committee" was left to the respondent and varied from a formal committee, to management addressing safety, to a single person who is concerned with safety and addresses safety issues in their area.
 - *Observation/Recommendation: All units/departments at UNL can benefit from a safety committee. If your unit/department does not have a safety committee, consider establishing one.*
- The composition of Safety Committees was primarily staff (87.5%) and faculty (55%).
 - *Observation/Recommendation: All affected parties should be represented in a safety committee, including faculty, staff, administration, and students. If your unit/department's safety committee does not have broad and diverse representation, consider member appointments that may bring a new perspective to the table.*
- Safety Committees met "Not regularly or less than annually" in 32.5% of the cases, followed by "Monthly" in 27% of responses.
 - *Observation/Recommendation: The most effective safety committees meet on a regular and frequent basis (e.g., monthly). If your committee does not meet regularly, consider establishing a regular schedule that will encourage member engagement.*
- 61% of units/facilities conducted self/peer-conducted safety audits on a regular basis.
 - *Observation/Recommendation: Self-auditing is a powerful tool for monitoring and correcting uncontrolled hazards. Peer reviews are particularly effective. Consider adding peer audits to the responsibilities of your committee.*
- 72% of respondents agreed that "There is a strong safety culture throughout my unit/facility."
 - *Observation/Recommendation: Consider adopting the Safety Ethic espoused by the American Chemical Society and actively promote it throughout your department/unit.*
- Regarding the two basic safety training courses required of all who get a paycheck from UNL, Core-Injury and Illness Prevention Program and Core-Emergency Preparedness, 43% indicated everyone in their area is expected to take the courses. However, 49% of respondents indicated they were

unaware of this training requirement or did not know if everyone in their area was expected to complete these two courses.

- *Observation/Recommendation: Safety training is a foundational aspect of any strong safety program and culture. Encourage all within your unit/department to complete the basic core training modules, as well as other applicable training.*
- While 71% had an Emergency Response Plan for shelter-in-place and 65% had an Emergency Response Plan for evacuation, only 59% indicated these plans are reviewed on a regular and frequent basis.
 - *Observation/Recommendation: UNLPD is developing an emergency plan template, which should be available on the Emergency Preparedness web site soon. If your unit/department does not have a plan, you are encouraged to develop one. Plans are only good so long as they are kept current. Establish a schedule and assign responsibility for reviewing plans on a regular basis. This is an ideal responsibility of a Safety Committee.*

One outreach venue being tapped by the CUSC again this year is the “Supplier Showcase” sponsored by UNL Procurement Services. The CUSC will have a booth at this annual event scheduled for Tuesday, October 22, 2013 in the Nebraska Union Ballroom from 10:00 a.m. to 2:00 p.m. CUSC members will be on hand to encourage attendees to “Speak Out For Safety.” Stop by the CUSC booth, pick up the targeted handouts and get a sticker to wear to affirm you realize YOU play a role in safety at UNL.

Resources:

- EHS Training Needs Assessment: http://ehs.unl.edu/Training_Needs_Assessment.pdf
- EHS Web-Based Training <http://ehs.unl.edu/onlinetraining>
- Chancellor’s University Safety Committee <http://ehs.unl.edu/chancellors-university-safety-committee-cusc#cusc>

3. Do YOU have a Safety Committee?

Does your department/area/facility have a safety committee? Do you need one? A safety committee is “an officially recognized group of workers (faculty/staff/supervisors) charged with the responsibility of enforcing safety standards or with suggesting new safety precautions and procedures”. Safety committees can be a very important part of a safety program.

At UNL the over-arching safety committee is the Chancellor’s University Safety Committee. Various department/area/facility safety committees within the university system function within their own spheres of influence to raise safety awareness in a way meaningful to their particular constituency. This includes such tasks as:

- Sponsoring/encouraging safety programs/training including regular sharing of “safe practices”
- Reviewing injury incidents toward the goal of mitigating identified hazards and reducing the likelihood of future such incidents
- Conducting periodic workplace inspections to help identify and mitigate potential hazards, in addition to reviewing safety audit reports provided by EHS.

Who should have a safety committee? Certainly higher risk areas such as laboratories, shops, custodial services, maintenance, kitchen/dining. However, recent data indicated that office workers accounted for 22% of the more serious injuries at UNL. Therefore, it is apparent that hazards exist in all work settings and safety should be a concern, regardless of job category. EHS serves as a resource to those areas contemplating development of a safety committee as well as existing safety committees.

Contact Elizabeth (Betsy) Howe (402-472-5488 or ehowe2@unl.edu) if you have a safety committee and your committee is not currently working with an EHS staff member, or if you are interested in discussing the possibility of establishing a safety committee.

Resources:

- ***Increasing the Effectiveness of Your Safety Committee***
http://ehs.unl.edu/effective_committee.pdf
- Safety Committees <http://ehs.unl.edu/committees>

4. UNL Injury Incidents and Safety Audits Overview

EHS will periodically provide information on a few of UNL’s recent occupational injuries and highlights of campus-wide safety audit findings. By sharing this information, we hope to create an opportunity to learn from the experiences of others. When reviewing injury information, consider actions that you can take to avoid similar situations. When reviewing audit findings, consider whether similar conditions may exist in your work area, and if so, take action to remedy the situation.

For fiscal year 2012-13 the number of injury incidents was down by 77, from 297 for fiscal year 2011/2012 to 220 for fiscal year 2012/2013. This is a positive trend. Thanks for YOUR efforts toward safety at UNL!

Following is information gleaned from review of recent injury incidents and near-misses:

- Office workers sustained more injuries than other worker categories, 22% of the OSHA-recordable (more serious) injuries. When walking inside and outside buildings and traversing stairs, pay close attention to where you are placing your feet and hold the handrail of the stairway. If footwear or surface is wet use extra caution, walking as if the surface were icy.

These are some recent injuries related to field work/research:

- One researcher in the field was injured when they stepped into a 2-foot deep hole. Special focus on foot placement must be maintained while traversing unfamiliar/uneven ground.
- One person was detaching a trailer and the hitch tipped striking and fracturing a finger. When performing tasks such as this, a jack should be used to keep the hitch in place while attaching/detaching and secure assistance with such tasks instead of trying to do this alone.
- One person was tightening a hydraulic hose with two wrenches when one of the wrenches slipped. A contributing factor was oil on the hose/tools. The worker stated in future they would be sure hose/tools were clean, use a different tool, and be more aware of positioning to avoid injury should the tool slip.
- One person opened zip ties with a knife, which slipped and lacerated the worker's hand. Rather than using a knife, scissor or similar snipping tool could be used without exposure to the slippage inherent in knife use.
- One employee was transferring anhydrous ammonia from a large to a smaller tank using a hose with a relief valve. The relief valve was not completely closed and the spilled liquid burned their exposed forearm (wearing a short-sleeve shirt). When working with hazardous liquids be sure all valves that should be closed are closed. Wear proper attire as well as the Personal Protective Equipment prescribed for the task.

Following are two common deficiencies recently noted by EHS during safety audits of offices, laboratories, and shops:

- EHS surveys of office-like/storage environments throughout the University during this reporting period indicated a large number of instances of items stored with 18" of sprinkler heads and/or less than 24" from the ceiling in non-sprinkled areas. The 18" requirement means an arc of 18" in all directions from the sprinkler head.
- Following is a deficiency of note in Shops, but we also see this in Laboratory audits: Compressed gas cylinders are not properly restrained. It is not unusual for auditors to find larger compressed gas cylinders PROPERLY restrained in a usage/storage area but smaller compressed gas cylinders NOT restrained securely.
- In chemical, biological and radioactive materials laboratories and shops where hazardous chemicals are used and/or acid batteries are charged, eyewash stations are required. There seems to be confusion about testing frequency recommendations. Eyewash stations should be flushed weekly to assure proper operation in an emergency, eliminate the presence of foreign particles and potential microbial contaminants. Tip: Many areas develop a simple checklist using an Excel or a Word table which includes "date tested" and "initials/signature" of tester, print and post near the eyewash to remind all using the space of the necessity for regular eyewash flushing.

We encourage you to share these injury incident findings and audit deficiencies with others in your area as applicable and continue to report student injuries and near-misses.

Resources:

- **Safety Audit Guidelines SOPs** <http://ehs.unl.edu/sop/safety-audit-guidelines>
- **Gases Under Pressure Hazards & Risk Minimization**
http://ehs.unl.edu/sop/s-gases_under_pressure_haz_risk_min.pdf
- **Emergency Eyewash and Shower Equipment**
http://ehs.unl.edu/sop/s-emerg_eyewash_shower.pdf
- Student Injury/Illness Reporter!
<https://scsapps.unl.edu/studentinjuryillnessReporter/>
- Near-Miss/Close Call Incident Reporting System!
<https://scsapps.unl.edu/EHSNearMissReporter/>

5. Revised Safe Operating Procedures & Documents

- **Employee Training Needs Assessment for EHS-Related Topics**
http://ehs.unl.edu/Training_Needs_Assessment.pdf
Updated to include additional web-based training available
- **Heat Stress** <http://ehs.unl.edu/sop/s-heatstress.pdf>
Updated to include reference to all workers in areas prone to heat build-up (not just outdoor workers) and provide information on an OSHA smartphone app as an “Education” tool.
- **Hearing Conservation** http://ehs.unl.edu/sop/s-hearing_conservation.pdf
Minor editorial changes
- **NUgrant IBC Protocol Form Instructions** http://ehs.unl.edu/sop/s-bio-nugrant_ibc_prot_form_instr.pdf
Updated to reflect the recent IBC module upgrade (NUgrant software) to assist with navigation of the new user interface
- **Personal Hearing Protection Devices** http://ehs.unl.edu/sop/s-hearing_protection.pdf
Clarified that semi-inserted earplugs are not generally recommended

Remember...SAFETY IS AN ATTITUDE!

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