# In this issue of the Environmental Health and Safety (EHS) Listserv, June 20, 2014:

- 1. Why Report Near Misses?
- 2. Communicating Safety Daily
- 3. Safety Audits = A Leading Indicator
- 4. Laboratory Incident: Inhalation of Corrosive/Reactive Chemical

5. Revised Safe Operating Procedures/Training

\_\_\_\_\_

### 1. Why Report Near Misses?

A Near Miss is an unplanned event that did not result in an injury or property damage, but had the potential to do so. Given a slight shift in time or position, damage or injury easily could have occurred. Such incidents are estimated to occur at a rate of 50 near-misses for each injury reported.

Identifying and investigating near-misses is a key element to finding and controlling risks before workers are injured. The information gathered through near-miss reporting is evaluated to determine root causes and hazard mitigation strategies. "Lessons learned" are shared in a general way (you are not identified) so all employees can benefit from the findings and your near-miss does not turn into someone else's injury! Near-miss reporting is vitally important in preventing serious incidents that are less frequent but more harmful than near-misses.

Many safety activities are reactive, that is, they occur after an injury incident. By reporting near-miss incidents you can promote proactive safety at UNL. "Proactive" means raising awareness of potential hazards and mitigation strategies BEFORE an injury occurs. Recognizing and reporting near-miss incidents can significantly improve worker safety and enhance the safety culture of the university.

EHS provides a *Near-Miss/Close Call Incident Reporting System* online for ease of reporting by answering a few questions about what happened. Report YOUR near-misses and encourage your co-workers to do the same to promote safety at UNL.

Resources:

EHS Near-Miss/Close Call Reporter <u>https://scsapps.unl.edu/EHSNearMissReporter/</u>

## 2. Communicating Safety Daily

Each June, the National Safety Council (NSC) celebrates National Safety Month as a time to bring attention to key safety issues. This year's slogan is "SAFETY: It takes all of us."

Here are some ideas to communicate safety daily:

- Share a daily tip with your co-workers. There are tips available through the National Safety Council web site. The National Fire Protection Association offers free safety tip sheets on a variety of fire and life safety topics, a quick download to spread the word about fire safety. Other organizations, to be found through a web search, also provide free safety tips. EHS Safe Operating Procedures lend themselves well to being shared, point by point, as a daily tip.
- Incorporate "safety" into your conversations with co-workers, e.g.,
  - o It looks like you need help lifting that safely. Can I help?
  - Thanks for cleaning up that spill. That will keep us from slipping and falling!
  - Are you having a safe day? I am!
  - Did you hear about the injury (near-miss) reported in the EHS listserv? That's good information I plan to use.
  - Wow, that could have been bad! I am going to share this near-miss through the EHS *Near-Miss/Close Call Reporter*.
  - What was your favorite safety tip from our recent safety meeting?
  - Did you read about the recent procedure change that will take a bit longer? I think doing the task more safely is worth the time!
- Participate in your department/area/facility safety committee. Research shows that where there are safety committees there are fewer workplace injuries. Contact EHS if you are interested in helping start a safety committee for your area.

The NSC celebration reinforces the ethic recommended by the American Chemical Society (ACS), *Creating Safety Cultures in Academic Institutions* report:

- 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 <u>http://portal.acs.org/portal/PublicWebSite/about/governance/committees/chemica</u> <u>lsafety/CNBP\_029720</u>
- National Safety Council <u>http://www.nsc.org/nsc\_events/Nat\_Safe\_Month/Pages/home.aspx</u>
- National Fire Protection Association (NFPA) Safety Tip Sheets <u>http://www.nfpa.org/safety-information/safety-tip-sheets</u>
- Sample Workplace Safety Rules <u>http://www.nonprofitrisk.org/tools/workplace-safety/public-sector/concepts/smpl-rules2-ps.htm</u>
- EHS Safe Operating Procedures <u>http://ehs.unl.edu/sop</u>

## 3. Safety Audits = A Leading Indicator

Safety audits are beneficial for several reasons. Recent research indicates that a strong audit program is a significant indicator for reducing injury incidents. Besides uncovering potential hazards, regular audits send a clear message to employees that workplace safety matters.

Safety inspections and observations are most effective with supervisor and employee involvement. As described in the University of Nebraska Injury and Illness Prevention Plan, supervisors and employees should conduct regular audits of their workplaces to detect and correct unabated hazards. When was the last time you audited your work place, even in an informal/undocumented manner?

If you are not in the habit of conducting regular audits consider the benefits of starting this practice. Self-audits should consider the physical environment as well as employee adherence to established safety practices, procedures, and protocols. Regular audits also function to enhance the safety culture by demonstrating that safety is a priority in the work place. Research has proven that facilities that engage in routine self-audits have lower occupational injury and illness rates than those that don't.

This graphic shows the different types of analysis that can be conducted using safety data once it is collected through safety audits. Analysis can answer the questions of how results relate to day-to-day operations and what mitigation needs to occur to improve workplace safety. Commit to starting your audit program today as a means of enhancing the safety culture in your work place. Call EHS if you need assistance in designing an audit program, we'd love to help!



#### Resources:

- EHS Today online The Holy Grail of Safety: A Single, All-Encompassing Safety Leading Indicator <u>http://ehstoday.com/safety-leadership/holy-grail-safetysingle-all-encompassing-safety-leading-indicator?page=1</u>
- Safety Audit Guidelines SOPs <u>http://ehs.unl.edu/sop/safety-audit-guidelines</u>

## 4. Laboratory Incident: Inhalation of Corrosive/Reactive Chemical

First thing one morning a laboratory worker opened a bottle of oxalyl chloride with the intent of withdrawing a fixed volume in a small syringe. Mistakenly assuming that the bottle had a "SureSeal" septum closure, the worker held the bottle fairly close to their face while unscrewing the plastic cap. The bottle was not septumsealed (merely capped) and the worker inhaled a small volume of vapor coming off of this low-boiling acid chloride.

The worker reported feeling a sharp burning sensation in their nose but was able to carry on with lab work for some time. In the early afternoon, they were bothered by a fairly severe headache and went home. Only one other person in the area was aware of the earlier exposure.

The next morning the worker with the chemical exposure did not come in to work. At that time, the second worker who had observed the incident the previous day notified the Safety Committee Chair of the incident. The Chair learned that the exposed worker still did not feel well and advised them to seek medical attention. The injured worker was checked and cleared with instructions to report back if they continued to feel poorly. By the second day post-incident the worker seemed to feel fine and returned to work as usual.

Suggested Strategies/Lessons Learned:

- Regardless of whether this chemical was thought to have a "SureSeal," it should have been opened in a chemical fume hood. Use greater care in opening bottles of volatile hazardous chemicals.
- Institute a written lab policy that anyone who experiences any kind of significant chemical exposure must report it to others working in the area and

to someone on their department's Safety Committee, other safety contact designated by their department, or their PI and that they seek immediate medical evaluation if experiencing symptoms.

 Institute a written lab policy that any illness potentially associated with a chemical exposure be immediately brought to the attention of the UNL Health Center, or an urgent care clinic, or an emergency room. Review the *On-the-Job and Student Injuries* SOP for further guidance.

Review this incident with others as it applies to your work area/tasks so all may learn from the experience of others. If a student who is not a UNL employee should be injured, report it through the **Student Injury/Illness Reporter!** 

Review the FREE laboratory safety posters available through EHS. Determine which are relevant to your work and request by email (<u>ehs@unl.edu</u>) or phone (402-472-4925) any you wish to post in your area.

Resources:

- > EHS-Provided "Safety Posters" <u>http://ehs.unl.edu/safety-posters</u>
- Near-Miss/Close Call Incident Reporting System <u>https://scsapps.unl.edu/EHSNearMissReporter/</u>
- Student Injury/Illness Reporter! <u>https://scsapps.unl.edu/studentinjuryillnessReporter/</u>
- Chemical Safety SOPs <a href="http://ehs.unl.edu/sop/chemical-safety">http://ehs.unl.edu/sop/chemical-safety</a>
- On-the-Job and Student Injuries SOP <u>http://ehs.unl.edu/sop/s-injury.pdf</u>

## 5. Revised Safe Operating Procedures/Training

- Ladder Safety SOP <u>http://ehs.unl.edu/sop/s-ladder.pdf</u> Portable Ladder Safety Web-Based Training <u>http://ehs.unl.edu/onlinetraining#PortableLadder</u> Revised to include information on mobile ladder stands.
- Personal Fall Arrest Systems SOP <u>http://ehs.unl.edu/sop/s-personal\_fall\_arrest\_systems.pdf</u>
  Updated to include a resource on suspension trauma after a fall and the importance of fall protection.

## Remember...SAFETY IS AN ATTITUDE!

#### **Environmental Health and Safety**

University of Nebraska-Lincoln 3630 East Campus Loop Lincoln, NE 68583-0824 (402) 472-4925 http://ehs.unl.edu