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1. Spring Safety Colloquium April 12

Dan Olsen, CHMM, will speak on ***Chemical Hazard Assessment and Risk Minimization*** at the spring Safety Colloquium. How do you ensure that your work with chemicals will not result in harm to yourself, others, or result in a fire or other property damage? Learning how to anticipate chemical hazards, and hazards associated with the operation (e.g., unexpected reactions, heat or gas generation, pressurization, etc.) and planning actions to reduce the risk is the topic of this colloquium.

This colloquium will demystify the chemical hazard assessment and risk minimization process. Faculty, staff, and students who work with hazardous chemicals, particularly those who conduct chemical reactions or work with varied and numerous chemicals will find this colloquium informative and are invited to attend.

Wednesday, April 12, 2017
11:30 a.m. - 12:30 p.m. at East Campus Union
3:30 p.m. - 4:30 p.m. at Hamilton Hall, Room 112

Select the time/location that best fits your schedule. RSVPs are not necessary for this colloquium.

Resources

- EHS Laboratory Safety Colloquium Series
<http://ehs.unl.edu/training/Colloquium>

2. Chemical Safety Library Available

The **Chemical Safety Library** is a new database tool scientists can use to share information about hazardous chemical reactions. To use this tool,

chemists must first register for an account. Then they can start entering reaction information, including specific reagents as well as reaction class, hazard category, scale, warning message, and additional information such as literature references. More than 75,000 reagents are preloaded. All submissions are reviewed to ensure they are appropriate.

Chemists may search the library for particular reactions or reagents or even download the full data set. Download/review may be for personal research use or for incorporation into an electronic laboratory notebook system. The library can be a resource for researchers when doing hazard and risk assessments of experiments.

This library tool is an experiment to gather information about the willingness of the community to populate and use the database. The nonprofit development group will analyze database use to determine the resources and technology needed to sustain this initial library program.

Resources

- Kemsley, Jyllian. "Database of hazardous reactions launched." *CEN RSS*. 14 Mar. 2017. <http://cen.acs.org/articles/95/i12/Database-hazardous-reactions-launched.html>
- **Chemical Safety Library** <http://www.pistoiaalliance.org/projects/chemical-safety-library/>

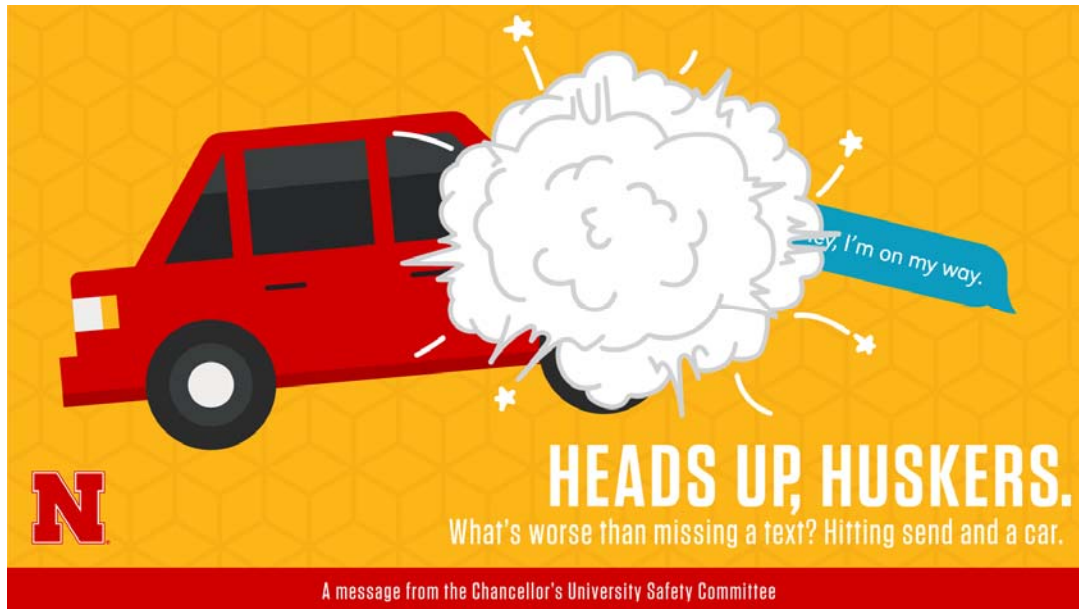
3. Situational Preparedness – “Inattention Blindness”

Situational preparedness is so important that we will be looking at various aspects over time, as well as providing resources to assist you to “be prepared” for whatever situations you may encounter at UNL. The Chancellor’s University Safety Committee has initiated a “*Heads Up!*” campaign to address concerns with distracted walking/driving/bicycling at UNL.

Dr. David Strayer, University of Utah, has conducted a body of research on effects of distraction on performance, in particular relating to driving. His studies indicate that talking on a cell phone increases the risk of accidents to the same level as driving while intoxicated above the legal limit. He discovered no differences between use of handheld and hands-free phones.

Dr. Strayer’s career of studying the effects of distraction and driving confirm that when talking on a cell phone and driving your conversation becomes the primary task with driving the secondary task. He refers to this form of cognitive distraction as “Inattention Blindness.” For example, we look at a red light while driving and talking on a phone but do not “see” it so we drive through it.

The work he has done on cognitive distraction seems to apply to pedestrians and cyclists as well, based on a number of close calls between vehicles/bicyclists/pedestrians on campus walkways and street crossings. The following graphic specifically mentions texting while driving a car. However, walking/bicycling and texting has resulted in injury/death at other universities.



If you would like to have a PDF or JPG of this *Heads Up!* graphic commissioned by the Chancellor's University Safety Committee so you can encourage safe practices and awareness in your department/area/facility, contact Elizabeth (Betsy) Howe, ehowe2@unl.edu or 402-472-5488.

Resources

- Chancellor's University Safety Committee
<http://ehs.unl.edu/chancellors-university-safety-committee-cusc#cusc>
- Go Cognitive: David Strayer – Driver Distraction
<http://www.gocognitive.net/interviews/david-strayer-driver-distraction>

4. Ladder Safety Month

The American Ladder Institute (ALI) has designated March as National Ladder Safety Month. This initiative began to address ladder-related incidents that kill almost three workers every week and injure more than 50 workers every day in the United States. ALI believes ladder injuries are preventable with proper training. Ladder-related safety citations are consistently on the Occupational Safety and Health Administration (OSHA) "Top 10" list. OSHA fully supports National Ladder Safety Month. OSHA has developed resources that align with the ALI's goal of preventing ladder-related injuries and fatalities. The ALI notes that many people who use a ladder at work use one at home as well.

The ALI is the ANSI (American National Standards Institute)-approved developer of safety standards for the ladder industry. ALI maintains a web site with a number of resources available.

Resources

- **National Ladder Safety Month** web site
<https://www.laddersafetymonth.com/>
- OSHA **Portable Ladder Safety** QuickCard
https://www.osha.gov/OshDoc/data_Hurricane_Facts/portable_ladder_qc.pdf
- **American Ladder Institute** web site
<http://www.americanladderinstitute.org/>
- EHS **Ladder Safety** Safe Operating Procedure (SOP)
<http://ehs.unl.edu/sop/s-ladder.pdf>
- EHS **Portable Ladder Safety** Web-Based Training <http://ehs.unl.edu/web-based-training#PortableLadder>

5. Safety Shorts – Ladder Safety

This series features links to short safety resource(s) each month. Provided this month is a resource related to ladder safety.

- **Three Point Contact – Safety Training Video – Prevent Falls and Injuries** (Safety Memos, 1:42 minutes)
https://www.youtube.com/watch?v=fv8W_agW1dM

Other ladder safety videos are online in the “Safety Shorts” section of the February 23, 2016, issue of the monthly listserv: http://ehs.unl.edu/ls_2016-02-23.pdf

NOTE: Resources provided are for informational purposes only. Publication does not indicate endorsement a particular company or product or affect current UNL policies and procedures.

6. Ladder Injuries at UNL

Do not become a statistic! Below for your review are fall incidents occurring over time at UNL that resulted in various degrees of injury. Suggested mitigation strategies follow the incident overview.

- Employee on a stepladder lost footing trying to hand a piece of sheet rock to another worker.
- Employee was descending a ladder with items in their hands.
- Employee turned around while on a ladder.

Mitigation: Use the proper equipment for the task. Portable ladders are not a good choice when it is necessary to carry heavy loads or shift center of gravity while conducting work at elevated height. Face the ladder. Always keep three points of contact when using a portable or extension ladder.

- Employee stood on a chair to reach overhead items.
- Employee stood on a rolling chair to reach items and the chair rolled out from under them.

Mitigation: Chairs should never replace a step stool or ladder.

- Employee was standing on an old wooden ladder when the ladder broke.

Mitigation: Inspect ladders for integrity prior to use. Tag damaged ladders out of service. Pay special attention to wooden ladders. Wooden ladders are affected by age (degrade over time) as well as exposure to heat and dampness.

- Employee missed a step while descending a ladder.
- Employee stepping down a stationary access ladder slipped off a step.
- Employee using an extension ladder slipped and lost their footing.

Mitigation: Use extra care and attention when ascending/descending a ladder. Make sure footwear is clean, dry and appropriate for the ladder and conditions.

- Employee reached out to the side of a ladder rather than repositioning the ladder and subsequently fell.

Mitigation: To maintain center of gravity keep your body positioned at the center of the ladder. Descend and reposition the ladder as necessary.

- Employee used a stepladder as an extension ladder and the bottom of the ladder slipped.

Mitigation: Use ladders only as intended by the manufacturer. Do not attempt to substitute one type of ladder for another.

EHS has developed both a Safe Operating Procedure and Web-Based Training to educate workers on safe use of variety of ladders the worker might need to use as part of their job tasks. Mitigation suggestions provided here are a subset of these training materials.

Resources

- **Ladder Safety SOP** <http://ehs.unl.edu/sop/s-ladder.pdf>

- **Portable Ladder Safety** Web-Based Training <http://ehs.unl.edu/web-based-training#PortableLadder>

7. How Are We Doing?

Environmental Health and Safety is committed to excellent customer service and offers a *Customer Satisfaction Survey* as an easy method for the campus community to provide feedback on our services and staff. By taking a few moments to complete the survey (<http://ehs.unl.edu/survey>), you will be helping us to identify areas where we might need to focus our attention. Your participation is greatly appreciated.

Please feel free to contact Brenda Osthus, EHS Director, at 402-472-4927 or bosthus1@unl.edu if you would rather communicate outside the parameters of this survey.

8. NEW Poster: Autoclaving Biohazardous Waste Bags

EHS provides a number of safety posters of relevance to the campus community. Featured this month is a new poster with information at-a-glance regarding “Autoclaving Biohazardous Waste Bags.” Refer to the applicable Safe Operating Procedure for complete information.

Autoclaving Biohazardous Waste Bags



- ✓ Biohazard bag not overfilled (<math>< \frac{3}{4}</math> full)
- ✓ Seal loosely
- ✓ Proper placement of Indicator tape
- ✓ Secondary containment
- ✓ Bag is upright

PROPER PREPARATION = EFFECTIVE DECONTAMINATION

 Safe Operating Procedure (ehs.unl.edu):
Autoclave Operation and Performance Testing

 Nebraska Environmental Health & Safety
Lincoln (402) 472-4925

Request your FREE poster(s). Contact ehs@unl.edu or 402-472-4925 with your name, campus mailing address, and quantity desired. If you have an idea for a safety poster, contact Elizabeth (Betsy) Howe, ehowe2@unl.edu, 402-472-5488.

Resources:

- Safety Posters <http://ehs.unl.edu/safety-posters>
- **Autoclave Operation and Performance Testing** Safe Operating Procedure <http://ehs.unl.edu/sop/s-bio-autoclavesafety.pdf>

9. Revised Training and Safe Operating Procedures

Training:

- **EHS Biosafety Basics** Web-Based Training <http://ehs.unl.edu/web-based-training#BioBasics>
Module extensively revised. Additions include sections on the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules, stakeholders at UNL and their roles and responsibilities, guidance on Institutional Biosafety Committee protocol creation and maintenance, and biosecurity.

Safe Operating Procedures:

- **Autoclave Operation and Performance Testing SOP** <http://ehs.unl.edu/sop/s-bio-autoclavesafety.pdf>
Revised to provide updated guidance on basic autoclave procedures, add general procedures for autoclaving plant material and soil, add sections on record keeping (including a sample “autoclave use log” in Appendix B) and routine maintenance of autoclaves. The SOP also details revised procedures for the EHS Autoclave testing program.
- **Electrical Safety** SOP <http://ehs.unl.edu/sop/s-electricalsafety.pdf>
Contains additional information on proper use of extension cords and power strips/surge suppressors.
- **Safety Protocol: ²⁴¹AM (BE) Neutron Probe** SOP http://ehs.unl.edu/sop/SP_SOP_241Am%28Be%29NeutronProbe.pdf
Added information from the recent inspection report re: handling of shipping papers.

Remember...SAFETY IS AN ATTITUDE!

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