

## In this issue of the Environmental Health and Safety (EHS) Listserv – September 9, 2021

1. Revised SOP: Disposing of Biohazardous Materials Including Recombinant and Synthetic Nucleic Acids
2. Ten Often-Ignored Office Hazards
3. Heads Up! – New Graphics Available
4. Situational Preparedness – Driving Safely in the Rain
5. September is National Preparedness Month
6. National Farm Safety Week (9/19/21 – 9/25/21)

---

### 1. Revised SOP: Disposing of Biohazardous Materials Including Recombinant and Synthetic Nucleic Acids

The “Disposing of Biohazardous Materials” Safe Operating Procedure (SOP) has been revised to add updated guidance on the protection of vacuum systems used for collection and disinfection of liquid biohazardous materials such as supernatant from cell culture flasks or microbial culture flasks and plates. The 6<sup>th</sup> Edition of Biosafety in Microbiological and Biomedical Laboratories was published in November 2020 and the guidance regarding protection of vacuum lines was revised to require an in-line HEPA or equivalent filter after the disinfectant trap (as shown) in order to protect house vacuums and vacuum pumps from aerosol contamination.

This requirement was previously only required for labs working with HIV and HBV. With the update, this protection is required for all vacuum lines and is an item on the EHS Safety and Compliance Survey checklist.



The SOP includes a procedure for preparing the flask, labeling it and disposing of the waste when the flask is full. Other changes to the SOP include new guidance about disposing of solid waste that has been chemically decontaminated and evaluation of liquid waste for collection by

EHS or for sewer disposal. Finally, there is new guidance for collection of pipettes and pipette tips.

Collection containers for pipettes and pipette tips must the following requirements:

- Be rigid, leak-proof, and sealable
- Be closed when not actively being filled.
- Be emptied at the end of each work session if the container is for temporary collection of these materials.

Please contact the UNL Biosafety Officer with questions about this new guidance by email: [manderson11@unl.edu](mailto:manderson11@unl.edu) or phone: 402.472.9554.

## Resources

- **Disposing of Biohazardous Materials Including Recombinant and Synthetic Nucleic Acids** <https://ehs.unl.edu/sop/s-bio-dispose.pdf>

## 2. Ten Often-Ignored Office Hazards

When the topic of safety in the workplace arises, most people think of laboratories, custodial or maintenance operations. Every year tens of thousands of office worker suffer injuries or work-related health problems that lead to lost time. Following are common hazards and practical mitigation strategies:

- **Slipping and falling.** The National Safety Council has reported that people are two and a half times more likely to have a disabling fall in an office environment than elsewhere in the work environment. Typically using improper methods to reach objects in high places is the culprit. Use stepladders/stepstools to access items in tall cabinets. Desks, chairs, any other furniture, boxes and other like items are unsafe substitutes.

Wiring across traffic areas and under desks presents a trip hazard. Cords/wiring should be covered to prevent one's feet from becoming entangled.

Upturned edges on mats or carpets are also a trip hazard. Wetness or dirt/dust on tile floors creates slippery conditions. Tile floors should be kept free of liquids, dust and dirt. If items such as small bits of paper/wrappers are dropped in a walkway, they should be removed at once.

- **Collisions and obstacles.** A worker focused on the task may not look down at their travel path. Items in the walkway or open file or desk drawers can lead to injury of an unsuspecting worker.

Blind corners can prevent workers from seeing each other as they emerge into hallways or common areas. Workers should avoid walking so quickly they cannot respond to others entering their path.

- **Equipment.** Wheeled chairs are designed for small movements in a limited area and workers should never lean back in a wheeled chair.

Chairs or other furniture either broken or missing parts can make their use dangerous.

Time-saving tools such as paper cutters, scissors, box cutters can cause injury if not stored and used properly.

- **Stacking and lifting.** Stacked boxes and other equipment can fall over onto someone or into their travel path. Stacking also increases the likelihood that the worker will lift or retrieve the materials incorrectly leading to a sprain.

Ensure materials are not stored so high as to present a hazard. Store heavier objects on or near the floor.

Secure help to lift heavy, items of an awkward shape, or containers with items inside that can shift and upset your balance. Use carts if available to transfer items from area to another.

- **Repetitive stressors.** Avoid injury from repetitive tasks such as typing by ensuring equipment provides the proper ergonomics and employees are trained on correct use.
- **Poor lighting.** Inadequate lighting can conceal hazards, for example, in hallways and storage rooms. Poor lighting can contribute to vision problems. Placing computer monitors slightly below eye level and about two feet from the worker's face is optimal positioning.
- **Noise pollution.** Noise can distract workers. Designing offices with separation or use of noise-cancelling materials can reduce noise.
- **Fire hazards.** Electrical defects or improper use of extension cords and/or power strips are a main cause of office fires. Electrical cords and plugs should be maintained in good condition. Extension cords are only for temporary use and when used the cord should be plugged directly into a permanently installed outlet. Power strips should be

plugged directly into a permanently installed outlet and only used for low-power applications (not for microwaves, coffee pots, refrigerators, and other devices that draw higher amperages).

- **Safe egress.** Workers must be able to exit the office immediately and safely in the event of an emergency. They should know where to gather outside the workplace to facilitate accounting for all workers. Fire doors should not be blocked. Escape routes should not be used for storage. If the fire alarm rings, always presume there is a real fire and exit the building. Regular fire drills are encouraged.

## Resources

- “Ten Often-Ignored OFFICE HAZARDS.” *Safety Management Group*, 1 Jan. 2013, <https://safetymanagementgroup.com/ten-often-ignored-office-hazards/>

## 3. Head Up! – New Graphics Available

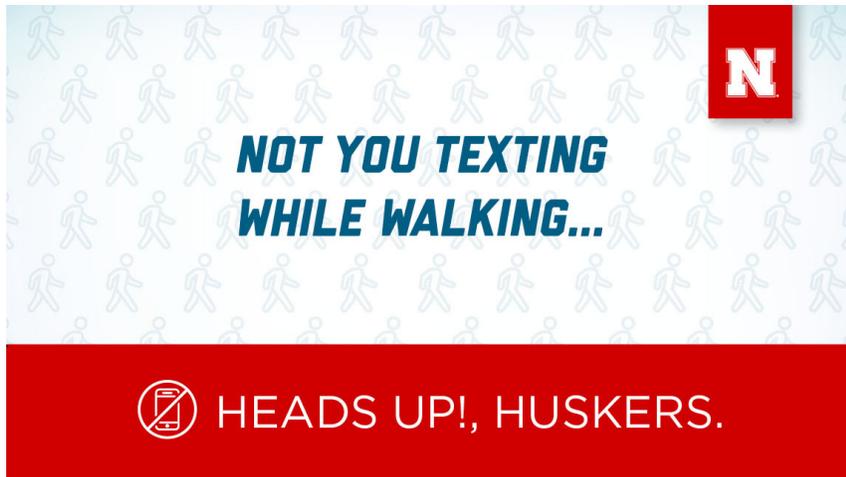
The Chancellor’s University Safety Committee has recently commissioned University Communications to develop an entirely new set of graphics for the Heads Up! campaign to promote safe driving, walking, and bicycling on campus. These new graphics emphasize safe use of scooters, skateboards and other such devices, which are becoming increasingly common.

Graphics are available for download from the EHS website (<https://ehs.unl.edu/heads-up-graphics>). They are also available through the UNL Digital Content Library or EHS can provide an electronic file suitable for electronic display boards at UNL. To request a file, contact EHS by phone (402.472.4925) or email ([ehs@unl.edu](mailto:ehs@unl.edu)).

There are other materials available to promote safe navigation around and on campus (<https://ehs.unl.edu/heads-up-marketing-materials>):

- Short reminders to use in your department/area communications
- Discussion Questions to use at safety committee or other safety meetings
- Resources that include videos, infographics and more

Here are the graphics highlighted for September – October:

A graphic with a light blue background featuring a repeating pattern of white walking figures. A red square with a white letter 'N' is in the top right corner. The text is centered in a bold, blue, sans-serif font. Below the text is a solid red horizontal bar containing a white icon of a smartphone with a red prohibition sign over it, followed by the text 'HEADS UP!, HUSKERS.' in white, sans-serif font.

**N**

**NOT YOU TEXTING  
WHILE WALKING...**

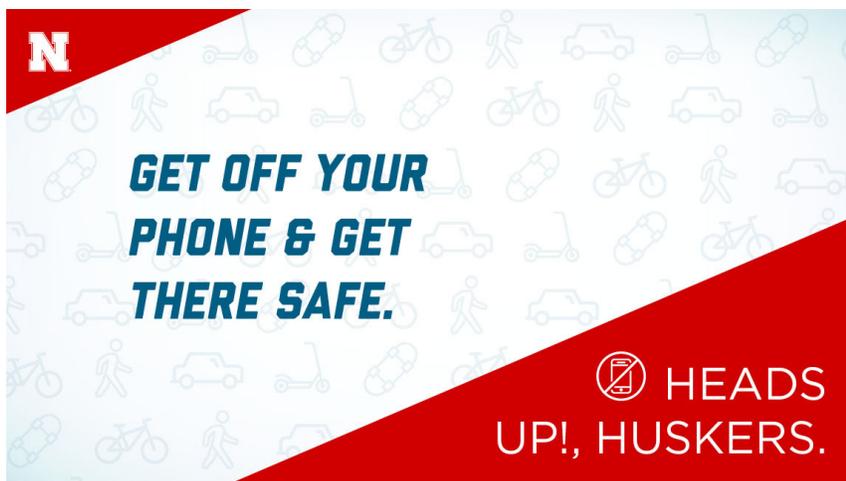
**HEADS UP!, HUSKERS.**

A graphic with a light blue background featuring a repeating pattern of white wheelchair icons. A red square with a white letter 'N' is in the top right corner. The text is centered in a bold, blue, sans-serif font. Below the text is a solid red horizontal bar containing a white icon of a smartphone with a red prohibition sign over it, followed by the text 'HEADS UP!, HUSKERS.' in white, sans-serif font.

**N**

**WHEN YOU'RE ON WHEELS,  
GET OFF IG REELS.**

**HEADS UP!, HUSKERS.**

A graphic with a light blue background featuring a repeating pattern of white icons for various modes of transport: a person walking, a car, a bicycle, a scooter, and a skateboard. A red square with a white letter 'N' is in the top left corner. The text is centered in a bold, blue, sans-serif font. Below the text is a solid red diagonal bar containing a white icon of a smartphone with a red prohibition sign over it, followed by the text 'HEADS UP!, HUSKERS.' in white, sans-serif font.

**N**

**GET OFF YOUR  
PHONE & GET  
THERE SAFE.**

**HEADS  
UP!, HUSKERS.**

Visit the EHS Heads Up! graphics website every two months to find different graphics you can use to spread the word about safe driving/bicycling/walking and use of scooters, skateboards, etc.

## 4. Situational Preparedness – Driving Safely in the Rain

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 while driving, bicycling, walking or using scooters, skateboards and other such equipment.

This month let’s consider rainy conditions. Rain can reduce visibility for all using roadways, regardless of the vehicle/equipment being used. Rain also reduces traction which adds to stopping distance and can cause vehicle wheels to slip and not respond as anticipated, in particular if it has been a while since the last rain. Following too close to the vehicle in front of yours can reduce visibility from spray coming off the wheels of the vehicle ahead of yours.

Suggestions for motorcycles and other motor vehicles:

- Turn on headlights to better see and be seen.
- Beware of hydroplaning. When excess water sits on top of the road tires can lose traction. If your vehicle hydroplanes let up on the gas and steer in the direction the front of your car needs to go.
- Turn off cruise control to reduce the risk of hydroplaning.
- Avoid flooded areas. Never try to cross running water in roadways.
- Avoid the splash. A big splash driving through a huge puddle can send water into the engine compartment.
- Reduce speed. Posted speed limits are based on normal conditions.
- Defrost windows before and while driving if necessary. Use windshield wipers.
- Keep a safe distance from other vehicles, leaving more space on wet roads to allow for the additional stopping distance of wet surfaces.
- Brake earlier and with less force. Slow down when turning.
- Driving at night can cause the glare of oncoming traffic to be amplified. Dim dashboard lights and avoid looking directly at oncoming vehicle headlights.
- If it is raining so hard you have difficulty seeing, pull off the road until conditions improve.

If using a scooter, skateboard, etc., consider not using that mode of transportation during rainy weather.

### Resources

- *Driving Safely in the Rain*, Safety+Health - a nsc publication, 27 June 2021, [www.safetyandhealthmagazine.com/articles/21360-drive-safely-](http://www.safetyandhealthmagazine.com/articles/21360-drive-safely-)

- [in-the-rain?utm\\_source=safetytips-topic&utm\\_medium=email&utm\\_campaign=topic](https://www.statefarm.com/simple-insights/auto-and-vehicles/tips-for-driving-safely-in-the-rain)
- State Farm Staff Writer. “Tips for Driving Safely in the Rain - State Farm®.” *State Farm*, State Farm, 17 June 2021, [www.statefarm.com/simple-insights/auto-and-vehicles/tips-for-driving-safely-in-the-rain](https://www.statefarm.com/simple-insights/auto-and-vehicles/tips-for-driving-safely-in-the-rain)
  - Zakhareuski , Andrei. “Driving in the Rain - 10 Crucial Things to Know.” *10 Crucial Things to Know Before You Start Driving in the Rain*, Driving Tests, 13 May 2021, [driving-tests.org/beginner-drivers/how-to-drive-in-rain/](https://driving-tests.org/beginner-drivers/how-to-drive-in-rain/)

## 5. September is National Preparedness Month

Disasters don't wait. Make your plan today. National Preparedness Month (NPM) is recognized each September to promote family and community disaster planning now and throughout the year. At <https://www.ready.gov/september> you can find weekly themes, social media and graphics, videos and more to help you, your co-workers and your families “be ready” for various types of disaster.

## 6. National Farm Safety Week

According to the Bureau of Labor Statistics (BLS), in 2019 agriculture was the most dangerous sector in America, with 573 fatalities for an annual death rate of 23.4 deaths per 100,000 workers. BLS has designed the third week of September as National Farm Safety and Health Week.

This year the National Education Center for Agricultural Safety (NECAS) is promoting September 19-25, 2021, as the dates for this annual observance, in place since 1944. The purpose of the NECAS in general, and the week in particular, is to call attention to the hazards and risks of farm work and promote safe practices to mitigate those hazards. Agricultural field research is subject to most of the same hazards found in family farm operations.

The theme for 2021 is “Farm Safety Yields Real Results.” Daily Topics focus on a particular hazard area:

- Monday –Tractor Safety & Rural Roadway Safety
- Tuesday –Overall Farmer Health
- Wednesday – Safety & Health for Youth in Agriculture
- Thursday – Agricultural Fertilizer & Chemical Safety
- Friday – Safety & Health for Women in Agriculture

The National Education Center for Agricultural Safety (NECAS) provides resources supporting each day's theme, in addition to the vast resources always available online through their website. The AgriSafe Network, another

group focused on farm safety, is participating by providing daily webinars. Review the webinar topics (<https://www.necasag.org/media/necas/documents/NFSHW-2021-Webinar-Promotional-Flyer.PDF>). Webinars will be held at noon and 2 p.m. Central Time. A free AgriSafe account is required to access the webinars. You can register from the NECAS website, (<https://www.necasag.org/nationalfarmsafetyandhealthweek/>). Scroll to Webinars. Note that use of Chrome browser is preferred.

U.S. Agricultural Safety and Health Centers, funded by the National Institute for Occupational Safety and Health (NIOSH), has produced safety and health videos related to agriculture and other outdoor activities. Popular topics are grain bins, heat illness, tractor rollovers, livestock safety and needlestick injuries. These videos are available through the U.S. Agricultural Safety and Health Centers YouTube channel.

Additional resources are provided by the Upper Midwest Agricultural Safety and Health Center (UMASH), a multidisciplinary collaboration of five leading research and health care institutions that work to address existing and emerging occupational health and safety issues in agriculture. A few of the resources are forms and checklists, links to other farm safety organizations and a hazard evaluation mitigation tool.

EHS provides resources on a variety of topics relating to safety while conducting agricultural/outdoor operations under the Safe Operating Procedure (SOP) heading **Ag Safety**. Topics include:

- Nebraska Guide G1770 Cleaning Pesticide Application Equipment
- All-Terrain Vehicles
- Animal Feeding Operations
- Grain Bin Safety
- Harvest Safety
- Outdoor Power Equipment Safety
- Sharps Use and Handling with Livestock
- Skid Steer Loaders
- Tractor Safety.
- And more...

Other SOPs relevant to agricultural/outdoor operations are found online in the SOP categories **Heat Stress**, **Landscape**, **Shops**, and **General/Other**.

## Resources

- EHS **Ag Safety** Safe Operating Procedures  
<https://ehs.unl.edu/sop/ag-safety>
- AgriSafe Network <https://www.agrisafe.org/>
- UMASH National Farm Safety and Health Week  
<http://umash.umn.edu/national-farm-safety-and-health-week/>

- *NECAS National Farm Safety and Health Week 2021*  
<https://www.necasag.org/nationalfarmsafetyandhealthweek/>
- U.S. Agricultural Safety and Health Centers videos  
<https://www.youtube.com/user/USagCenters>
  
- **The National Education Center for Agricultural Safety** video series (<https://www.necasag.org/safetytraining/videosandwebinars/>) provides safety information on a variety of topics such as:
  - Chainsaw Safety
  - Fatigue Safety
  - PTO Safety
  - Farm Electrical Safety
  - Auger Safety
  - Rural Road Safety
  - Sun Safety
  - Unloading and Loading Trailer Safety...and more.

**THINK SAFETY – DON'T LEARN BY ACCIDENT!**

### **Environmental Health and Safety**

University of Nebraska-Lincoln

3630 East Campus Loop

Lincoln, NE 68583-0824

(402) 472-4925

<http://ehs.unl.edu>

~To SUBSCRIBE and get your own copy if you received this from someone else or UNSUBSCRIBE, send an e-mail to [LISTSERV@LISTSERV.UNL.EDU](mailto:LISTSERV@LISTSERV.UNL.EDU) . In the Message (not Subject) field enter SUBSCRIBE EHSINFO or UNSUBSCRIBE EHSINFO