



DEPARTMENT OF
**ENVIRONMENTAL
HEALTH AND SAFETY**

EHS BULLETIN

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COLD WEATHER SAFETY

As cold weather approaches, individuals will be exposed to winter conditions that can cause frostbite, hypothermia, and cold stress. These conditions can be fatal, so it is important to understand the symptoms and ways to mitigate exposure. Knowing the risks can help you plan for winter weather and reduce the negative impacts.

Be familiar with the term “wind chill,” which measures the loss of body heat as a result of wind speed combined with low air temperatures. This [tool](#) from the National Weather Service calculates the wind speed and can help you determine the risks associated with going outdoors as well as what kind of clothing you may need to wear.

RISK FACTORS FOR COLD WEATHER CONDITIONS:

- Wet or damp clothing from sweat or other liquid.
- Underdressing for the elements.
- Exhaustion/poor physical conditioning.
- Preexisting health conditions such as diabetes.

METHODS TO AVOID COLD STRESS:

- Use a radiant heater if remaining outside for a long period of time cannot be avoided.
- Increase “warm up” break times. Use this [table](#) to determine how often breaks are needed depending on the temperature and wind speed.
- Try to go outside during the warmer part of the day.
- Select warm clothes that are resistant to dampness. Wool or silk as an interior layer will keep moisture away.
- Avoid drinking alcohol. Warm, sweet drinks are recommended.
- Monitor your physical condition and avoid over-exhaustion.

Be mindful of other risks associated with cold weather. Slips, trips, and falls will become a factor due to ice and melting snow.

THESE TIPS MAY HELP REDUCE RISK:

- Wear shoes with good traction.
- Avoid walking quickly. Take shorter steps at a slower pace.
- Clear your sidewalks and apply a deicer such as salt or kitty litter.

FOR ADDITIONAL INFORMATION ON COLD WEATHER SAFETY, PLEASE SEE THE LINKS BELOW:

- [CDC Indoor Winter Weather Safety](#)
- [OSHA Winter Weather Safety](#)
- [National Weather Service](#)

For questions or more information, email ehs@okstate.edu or call (405) 744-7241.

WORKING ALONE IN A LABORATORY

Research never sleeps, not even in lockdown. While the pandemic closed classrooms, offices, and restaurants, it did not close research laboratories. Handling hazardous chemicals and experimentation still needs to be done in the laboratory, and that is where it remained throughout the pandemic. While social distancing might have cut down on staff allowed in a space, it was never recommended to work in the laboratory alone.

In general, working alone in the laboratory can be unsafe and should be avoided whenever possible, especially in case of an emergency. Environmental Health and Safety (EHS) policy states that work involving chemicals or physical hazards that could prove to be immediately dangerous to life or health should not be conducted alone. It also recommends that all laboratory work be conducted with a partner or co-worker in close proximity. Utilize the buddy system and schedule overlapping work hours.

TWO PROPERLY TRAINED EMPLOYEES SHOULD BE PRESENT FOR ANY OF THE FOLLOWING HAZARDOUS OPERATIONS:

- The use of chemicals with a Permissible Exposure Limit (PEL) below 10 mg/m³ and/or Short-Term Exposure Limit (STEL) of 5 mg/m³, or dermal exposure of 10 mg. In this case, safety air monitoring may also be required, so please check with EHS.
- The use of chemicals with an auto-ignition point below 50 degrees Celsius.
- Handling of explosives or shock sensitive compounds.

Ultimately, the Principal Investigator (PI) has the responsibility to ensure the safety of all their laboratory workers. Although not recommended, there may be instances when less hazardous work is done alone. It is up to the PI to help conduct risk assessments and approve laboratory staff procedures.

WHEN CONDUCTING THIS WORK:

- Notify your PI or supervisor of what you are doing.
- Ask your PI, supervisor, or buddy to check in on you periodically.
- Wear all the required PPE for the laboratory even if working after hours.
- Know the locations of all the emergency equipment and phone numbers.
- Be aware of your surroundings by not wearing ear buds that reduce your situational awareness.

FOR THE EHS POLICY:

- [Working Alone Policy](#)

For questions or more information, email chemicalsafety@okstate.edu or call (405) 744-7241.

CURRENT EVENTS

Bloodborne Pathogen Training

2nd Tuesday of the month, 9-9:45 a.m. and 2-2:45 p.m.
EHS Conference Room, 003 UHS
Required annually for members under OSHA's standard
Registration: email name to chemicalsafety@okstate.edu

Respiratory Protection

1st Tuesday of the month, 8:30-9:30 a.m.
FM North Building, Room 101C
Required annually for members who wear respiratory protection
Registration: email name to ohsp@okstate.edu

Fire Safety w/Hands-On Extinguisher Training

2nd Friday of the month, 9-10 a.m.
EHS Conference Room, 003 UHS
Come join us for fire safety education featuring the BullsEye laser training device
Registration: email name to ohsp@okstate.edu

Monthly Employee Training

3rd Thursday of the month, 9:30-11:30 a.m.
EHS Conference Room, 003 UHS
Topics: Hazcom; Fire Safety; Slips, Trips and Falls; Office Safety and Back Safety
Registration: email name to ohsp@okstate.edu