Pennsylvania OSHA Consultation Program

www.iup.edu/pa-oshaconsultation

The Pennsylvania Consultation Connection

From the desk of
Dr. John M Mulroy, CSP
Director & Assistant Professor

Is safety and health only about complying with OSHA's regulations? Perhaps compliance is a business decision, meaning protecting your workforce avoids costly workers' compensation claims and therefore safety is a good investment. Or instead, is your reason to protect employees simply altruistic, meaning the most valuable resource your company has, your workers, all go home safe to their families every day?

The objective of the "safety professional" is to identify, evaluate, and control unacceptable levels of operational risk. Sometimes this risk resides in routine tasks, like a missing guard on a machine. Or, like "Mayhem" in the popular insurance commercials on TV, your actual risk may lie dormant for years until a critical, non-routine task suddenly reveals it, and someone you count on is seriously hurt.

If you are reading this, its likely you look to the faculty consultants here at IUP's PA OSHA Consultation to help you achieve lower risk. If you are driven to be compliant, that's good, because rarely will a fatal injury covered in the local news have occurred if a particular OSHA regulation had been fully in place. So yes, verbatim OSHA compliance significantly reduces risk.

If safety is a business decision, then you are in good company. According to the *Liberty Mutual Workplace Safety Index* occupational injuries and illnesses cost US business over $1 billion every week, with the bulk associated with just ten most frequent injury types. So yes, safety is good business.

Or instead, your organization is simply driven to always do the right thing, regardless of whether an OSHA standard exists or not. For example, you implemented a heat stress reduction program, despite OSHA not having a standard. Or you invested significant capital to reduce combustible dusts or hired trainers to qualify your electricians to NFPA 70E. You may be the type of safety leader who holds all workers across the organization accountable for incorporating safety and health into each routine business decision made. So yes, involving purchasing, engineering, maintenance, and HR in your safety program makes workers on your frontline measurably safer.

Regardless of your motivation, protecting your workers is a priority, and we will help.

Are your OSHA written safety and health programs current? Is your training and education effective? Is "Mayhem" lurking in your daily operations, just waiting to reveal itself?

If you feel overwhelmed with OSHA.gov, or suspect intolerable risk in your operations, we will help. As noted in our last newsletter, we have a significant backlog of PA companies and yes, OSHA's funding continues to shrink. Despite this challenge, we commit to you this – if you submit a request for no-cost compliance assistance, we will be there. It's that easy.

Get started today – click the link below and we'll work together to fulfill your duty, as an employer, to provide a safe workplace for your most valuable asset – your workers: https://www.iup.edu/pa-oshaconsultation/request/index.html

Respirator CHANGE SCHEDULES

By Daniel Larson, MS, CIH

Did you know that if employees are required to wear respirators employers must provide a respirator change out schedule?

This applies for:

- Air-purifying respirators
- Respirators providing protection against gases and vapors

Respirators cartridges have a limited lifetime. A change-out schedule is required by the employer to ensure that cartridges are changed in a timely manner before an employee risks overexposure. The change-out schedule is included in the employer's written respirator protection program and says how often the cartridges need to be replaced and what information is used to make the change-out decision.

So, how do you know when to change the respirator cartridge or canister? Many respirators are equipped with an End-of-Service-Life Indicator (ESLI) certified by the National Institute of Occupational Safety and Health (NIOSH) for a particular contaminant. If no ESLI is provided or if the ESLI provided is deemed to not be appropriate for work conditions the employer must implement their own change-out schedule for canisters and cartridges. This change-out schedule is based on the cartridges service life and can be estimated in several ways:

- **Conduct Experimental Tests**. This may be the best way to determine service life for a workplace environment with exposure to multiple chemicals and considers specific workplace conditions.
- **Manufacturer Recommendations.** Respirator and chemical manufacturers often conduct their own testing and may be able to provide an estimate of what change-out schedules should be used based on their testing.
- **Mathematic Modeling**. Utilizing a mathematic modeling application to calculate service life of respirators. This is a complicated and time-consuming process and does not account for chemical mixtures.

Respiratory protection is an essential part of employee protection. Remember, PPE is the employee's last line of defense! Ensure that you are familiar with all of the requirements necessary to properly protect the health and safety of employees.

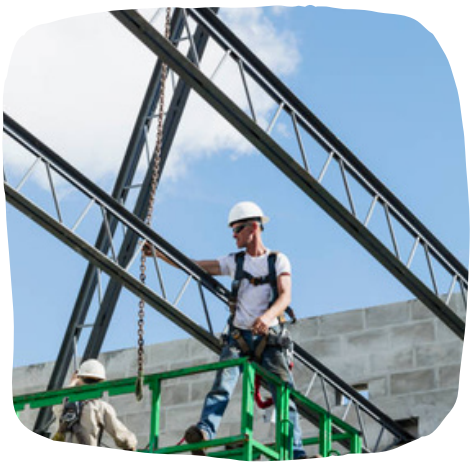
For additional information see PA OSHA Consultation Focal Point Series located at:
Focal Point Series - PPE- General Industry

Contact the PA OSHA Consultation program for additional assistance or with any questions you may have including full details of your obligations for Respiratory Protection Program compliance as stated in 29 CFR 1910.134. Osha.gov/etools/respiratory-protection

Workplace Summer Safety Tips

OSHA has a number of safety tips for working in hot weather, including:

- Hydration: Provide workers with access to drinking water at all times.
- Rest breaks: Schedule breaks in cool or shaded areas so workers can recover from heat.
- Clothing: Encourage workers to wear light-colored, loose-fitting, breathable clothing and a hat.
- Acclimatization: New workers need time to adapt to working in hot conditions.
- Heat illness monitoring: Encourage workers to monitor themselves and others for signs of heat illness.



Some other tips for working in the heat include:

- Eating to fuel your day
- Taking time to acclimatize
- Protecting your skin
- Monitoring the weather
- Using the buddy system
- Spending time in air-conditioned buildings during breaks and after work

PROTECTING EMPLOYEES FROM Electric-Arc Flash Hazards

By Cynthia Mellen MS, CSP

Understanding OSHA's Updated Arc Flash Safety Guidance

In November 2024, the Occupational Safety and Health Administration (OSHA) issued updated guidance to strengthen protections against arc flash hazards for electrical workers in commercial, industrial, and residential settings. This long-awaited update addresses persistent safety challenges and aims to reduce arc flash-related injuries and fatalities.

What is an Arc Flash?

An arc flash is a sudden release of electrical energy caused by a fault between electrical phases or between a phase and the ground. This event generates intense heat, light, and pressure, with temperatures exceeding 35,000°F—four times hotter than the sun's surface. Such extreme conditions can vaporize metals, ignite flammable materials, and cause severe or fatal injuries. Many arc flash injuries result from flammable clothing ignition rather than direct contact with the arc itself.
https://www.osha.gov/electrical/flash-hazards

Key Updates in OSHA's Arc Flash Guidance

OSHA's revised guidance includes four key areas of focus:

1. Emphasis on Low-Voltage Risks

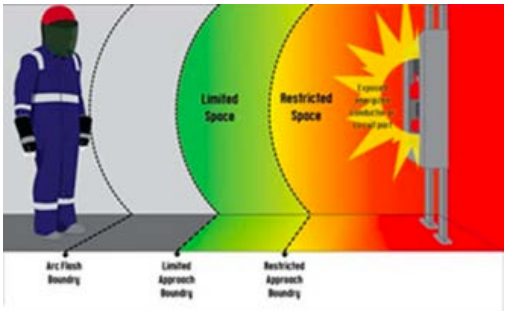
Contrary to common misconceptions, OSHA clarifies that low-voltage systems, including those operating at 120/208 volts, can pose serious arc flash hazards. These systems are capable of producing molten metal and igniting flammable clothing, leading to severe or fatal injuries. As a result, tasks involving low-voltage equipment now require appropriate personal protective equipment (PPE) and, in many cases, an energized work permit.

2. Clarification on De-Energized Work

The updated guidance addresses a significant myth about energized work. Many workers assume that de-energized equipment is completely safe. “Common Electrical Work Myths” brochure detail these myths.

However, OSHA emphasizes that simply turning off the power does not eliminate electrical hazards. Proper lockout/tagout (LOTO) procedures are essential to ensure an electrically safe working condition. Conductors and parts of electrical equipment that have been de-energized but not properly locked out or tagged out must be considered energized. Additionally, even in cases where energized work is deemed justified, strict safety measures must be followed to minimize risk. Such tasks may necessitate the use of appropriate PPE, including arc-rated clothing, to protect workers from potential arc flash incidents.
https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.269AppE

3. Enhanced Employer Responsibilities



OSHA highlights the importance of comprehensive workplace assessments to identify arc flash hazards. Employers must estimate the incident heat energy of electrical conductors or equipment to determine the arc flash boundary

Establishing Boundaries Around Arc Flash Hazards
OSHA Publication 4474
https://www.osha.gov/sites/default/files/publications/OSHA4474.pdf. This assessment informs the selection of suitable arc-rated PPE to ensure worker safety.

4. Worker Participation and Training

The guidance strongly advocates for active worker involvement in safety programs. Employers are encouraged to involve workers in developing and revising safety procedures, conducting hazard assessments, and participating in training sessions. This collaborative approach fosters a safety culture where workers feel comfortable reporting concerns and contributing to hazard mitigation strategies

Being Aware of Arc Flash Hazards.
https://www.osha.gov/sites/default/files/publications/OSHA4475.pdf

Implications for Electrical Workers and Employers

This updated OSHA guidance is a crucial reminder of the dangers associated with arc flash incidents and the necessity of stringent safety measures. Employers must ensure that all electrical work, regardless of voltage level, is performed with appropriate safeguards, including arc-rated PPE and adherence to de-energization protocols.

Scott Margolin of the Partnership for Electrical Safety (PES) highlights the broader significance of these updates:

"*This new guidance is a game-changer and could not have come at a more appropriate time. Thousands of electricians are currently working without life-saving PPE. With our nation investing heavily in electrical grid modernization, EV infrastructure, and DC charging stations, OSHA's updated guidance was imperative to clarify requirements and improve safety now."("Major Implications for De-Energized" and Low-Voltage Work"*
https://tyndaleusa.com/blog/2025/01/15/fundamentals-of-arc-flash-introduction)

Looking Ahead

The release of OSHA's updated arc flash guidance marks a significant step toward improving electrical worker safety. By following these enhanced safety protocols, organizations can minimize the risk of arc flash incidents and ensure the well-being of their workforce.

For more details, OSHA's full guidance document, "Protecting Employees from Electric-Arc Flash Hazards," is available on their official website.
https://www.osha.gov/sites/default/files/publications/OSHA4472.pdf

Nominations
NOW OPEN

2025 GOVERNOR'S AWARD FOR SAFETY EXCELLENCE

The Pennsylvania Department of Labor & Industry (L&I) announced the opening of nominations for the 2025 Governor's Award for Safety Excellence (GASE), an annual award that recognizes employers with exceptional safety strategies and injury prevention programs that protect Pennsylvania workers. Employers across the Commonwealth are encouraged to submit applications by Thursday, May 1, 2025.

"Our workers are safer today because employers have committed to establishing and upholding safety practices, and the most successful companies in the Commonwealth are those that make workplace safety an integral part of their corporate culture, not just a compliance checkbox," said L&I Secretary Nancy A. Walker. "With the Governor's Award for Safety Excellence, the Shapiro Administration is able to recognize the employers with outstanding safety records that are going above and beyond to make sure they're protecting their most valuable asset – their employees.".

Pennsylvania employers may nominate themselves or may be nominated by a third party. Information about how to nominate an employer is available on L&I's website.

Pennsylvania businesses are encouraged to establish a certified workplace safety committee, supported by L&I's Bureau of Workers' Compensation Health & Safety Division, to help identify potential hazards, maintain compliance with industry safety regulations, and promote a safe work environment for employees. Certified workplace committees also help businesses save money: those certified receive a five percent discount on their workers' compensation insurance premiums. More than 13,300 state-certified workplace safety committees have been established since March 1994, protecting more than 1.6 million workers. Additionally, employers with certified workplace safety committees have saved more than $925 million in workers' compensation premiums. These savings in insurance costs are due solely to the five percent premium discount provided to businesses that have these committees.

For more information on the Pennsylvania Department of Labor & Industry, please visit the website or follow L&I on Instagram, Facebook, X, and LinkedIn.

METHYLENE CHLORIDE

By Shaun McGinnis, CSP

Methylene Chloride (dichloromethane) Chemical Abstract Number: 75-09-2 is a chemical that is utilized in a variety of products. This volatile colorless liquid is a potential occupational carcinogen. Some examples of products that may contain Methylene Chloride are listed below. Review your safety data sheets to identify potential exposure sources.

- Paint Strippers
- Rust Removers
- Degreasers
- Polyurethane foam blowing agents
- Artificial salon nail solvents
- Welding Fume Anti-spatter

Methylene Chloride (MC) exposure can lead to harm to the central nervous system and/or neurotoxicity. Longer-term exposures have been linked to liver and lung cancers. The methylene chloride standard (1910.1052) was initiated in rulemaking in 1986, and the final standard was passed in January 1997. The construction standard and shipyard employment standards are 1926.1152 and 1915.1052 respectively. If employee exposures to methylene chloride exist, employers are required by the standard to conduct monitoring of employee exposures. The standards set a permissible exposure limit of 25 ppm as an eight-hour time-weight average. Additionally, the standards set an action level of 12.5 ppm and a short-term exposure limit (15 min) of 125 ppm. Employers are required to implement engineering controls and work practices to limit exposures and utilize respiratory protection if the controls are not adequate to lower exposure below the specified limits. Additionally, the following are key elements of the methylene chloride standard.

- Regulated Areas- Limit access to exposure areas
  *Worker Rotation cannot be used to comply with the permissible exposure limit.
- Chemical Specific Training- Prior to or at the time of initial assignment to a job involving potential exposure to MC.
- Periodic Monitoring
  *If initial monitoring shows employee exposures at or above the action level or STEL, employers must perform periodic 8-hour TWA or STEL monitoring as follows:
    - 8-hour TWA monitoring
      - Every six months if initial TWA monitoring results are at or above the action level but at or below the TWA PEL.
      - Every three months if initial TWA monitoring results are above the TWA PEL.
      - Periodic 8-hour TWA monitoring is not required if initial TWA monitoring results are below the action level.
    - STEL monitoring:
      - Every three months if initial STEL monitoring results are above the STEL.
      - Periodic STEL monitoring is not required if initial STEL monitoring results are at or below the STEL.

*If two consecutive measurements, taken at least 7 days apart, show that exposure levels have decreased, employers may modify the monitoring requirements accordingly.

- Medical Surveillance
  - *Initial Medical Surveillance:
    - Employers must make initial medical surveillance available before the employee is assigned to work which involves potential MC exposure.
    - Initial surveillance is not required if the employee has received medical surveillance equivalent to that required by the MC standard within the previous 12 months.
  - *Periodic Medical Surveillance:
    - Employers must make periodic physical exams and appropriate laboratory surveillance available based on the following age-based frequency:
    - Annually for employees 45 years of age or older.
    - Every three years for employees under the age of 45.
    - Employers must update each employee's medical and work history annually.
  - *Additional Medical Surveillance:
    - Employers must make additional medical surveillance available to employees when determined necessary by the examining physician or licensed health care professional.
- Respiratory Protection—If required by the standard
  - *Must use atmosphere supplying
    - Cannot be a half mask style due to eye irritation
- Hygiene Facilities
  - *If contact with skin to a product containing 0.1% MC- Wash Facilities are required
  - *If contact with eyes to a product containing 0.1% MC- Eyewash facilities are required
- PPE
  - *Must prevent eye and skin irritation
  - *Must be cleaned, laundered, and repaired/replaced by the employer
- Recordkeeping
  - *Monitoring Data
  - *Medical Records

GRAIN HANDLING SAFETY

By Bryan Brougher, CSP

In case you missed it, **Stand Up for Grain Safety** week was March 24-28, 2025. OSHA and industry partners consider grain handling so hazardous an entire week in March is dedicated to this industry.

What is a safety stand-up? OSHA stand-ups for safety are dedicated time on the job focusing on a set of hazards employees, contractors and customers face every day.

How does this stand up differ from a regular safety training? A stand-up pauses work for a short period of time, bringing everyone together to think, discuss, and recognize hazards.

OSHA has a Safety and Health Topics page dedicated to Grain Handling and addresses may of the hazards that may be found during grain handling, including:

Suffocation from engulfment and entrapment in grain bins - Suffocation is a leading cause of death in grain storage bins. Suffocation can occur when a worker becomes buried (engulfed) by grain as they walk on moving grain or attempt to clear grain built up on the inside of a bin. Moving grain acts like "quicksand" and can bury a worker in seconds. "Bridged" grain and vertical piles of stored grain can also collapse unexpectedly if a worker stands on or near it, again, engulfing and killing workers.

OSHA has a "Hazard Alert" providing guidance on OSHA's regulation covering Gran Handling Facilities (29 CFR 1910.272) emphasizing:

- De-energizing and locking out all mechanical, electrical and pneumatic equipment presenting dangers, such as augers moving grain, preventing grain from being loaded.
- Never stand or walk on grain as it is deadly, acting like quicksand quickly burying workers. Grain moving out of a bin can pull workers down and engulf them.
- Body harnesses should be used with lifelines or a boatswain's chair and ensure they are secured to a proper tie -off and worn properly.
- Ensure a stand-by person is station outside the bin or silo being entered by another person. Stand-by person must be able to provide assistance, and their only task is to continuously track the employee in the bin. Ensure communication is maintained between the stand-by person and the entrant.
- Prohibit workers from entry into bins or silos underneath a bridging condition, or where a build-up of grain products on the sides could fall and bury them.
- Provide ventilation to maintain safe entry conditions and provide respirators were necessary.
- Test the air within a bin or silo prior to entry for the presence of combustible and toxic gases, and to determine if there is sufficient oxygen.
- Ensure an entry permit is issued for each instance a worker enters a bin or silo, certifying that the precautions listed above have been implemented.

Fires and explosions from grain dust accumulations - Grain dust explosions are often severe, involving loss of life and substantial property damage. Grain dust is the main source of fuel for explosions in grain handling. Grain dust is highly combustible and can burn or deflagrate if enough becomes airborne and finds an ignition source (such as hot bearing, overheated motor, misaligned conveyor belt, welding, cutting, and brazing). OSHA standards require that both grain dust and ignition sources in grain elevators be controlled to prevent these often-deadly explosions.

For a grain dust explosion to occur all the elements in the dust explosion pentagon (fuel, suspension, containment, ignition, and oxygen) must be present. Thus, if a single factor is removed, a dust explosion can be prevented. These factors include:

- Modifying the process to reduce dust handling effectively – Minimize use or substitute for less hazardous materials and moderate handling methods.
- Preventing suspension of combustible dust – Utilize HEPA vacuum systems rated for combustible dust, work with smaller piles of dust, remove dust and thoroughly clean dust “hot spots”.
- Removing the ignition sources entirely or at least minimize their presence – Eliminate ignition sources traceable to workers’ actions, including smoking, open fames, open light bulbs, welding, cutting, and grinding through training and enforcement.
- Providing appropriate equipment maintenance – Read the equipment operator’s manuals, become familiar with them and follow the instructions for regular equipment routine and preventive maintenance.

To prevent, reduce or mitigate explosions and fires employers should review OSHA’s Standard 29 CFR 1910.272 which requires elements such as the following:

- Development and implementation of a written housekeeping program with instructions to reduce dust accumulations on ledges, floors, equipment and other exposed surfaces.
  - Identify "priority" housekeeping areas in grain elevators.
  - This includes floor areas within 35-feet of inside bucket elevators, floors of enclosed areas containing grinding equipment and floors of enclosed areas containing grain dryers located inside the facility.
  - Do no permit dust accumulations in these priority housekeeping beyond 1/8-inch.
- Implementation of a preventative maintenance program including regularly scheduled inspections for mechanical and safety control equipment, which may include heat producing equipment such as motors, bearings, belts etc.
  - The use of vibration detection methods, heat sensitive tape or other heat detection methods can help in the implementation of the program.
- Utilization of Hot Work protection procedures (electric or gas welding, cutting, brazing or similar flame producing operations) to minimize ignition sources.
- Installation of wiring and electrical equipment suitable for hazardous locations.

- Designing and locating dust collection systems to minimize explosion hazards.
  - Locate all filter collectors outside the facility or locate in an area inside the facility protected by an explosion suppression system, or in an area that is separated from other areas by construction having at least a one-hour fire resistance rating, next to an exterior wall vented to the outside.
- Installing an effective means of removing ferrous material from grain streams so that such material does not enter equipment such as hammer mills, grinders ,and pulverized.

The University of Arkansas Division of Agriculture's Research and Extension has a document article **"Preventing Grain Dust Explosions"** which can be helpful in reducing or eliminating risk of fire and explosion. Reviewing this document provides a detailed list of controls/measure to minimize or eliminate such hazards which include:

- Various suggestions for explosion reduction design,
- Best industry practices for preventing dust explosions including:
  - OSHA regulation reference
  - Good housekeeping, preventative maintenance
  - Hot work
  - Bucket elevator leg design
  - Emergency action plans
  - Training and education
- Dust explosion damage control, and
- Grain dust control and prevention procedures.

Falls from heights - Falls are often prevalent throughout a grain handling facility. Examples of such surfaces include (but not limited to) floors, machinery, structures, roofs, skylights, unguarded holes, wall and floor openings, ladders, unguarded catwalks, platforms and man-lifts. Falls can also occur as workers move from the vertical exterior ladders to bin roofs and through bin entrances.

Workers on walking/working surfaces with an unprotected side or edge that is 4-feet or more above a lower level must be protected from falling. Implementation of items such as exterior stairways, integrated ladder fall protection systems, and designated fall protection equipment such as lanyards and body harnesses should be used. OSHA's 29 CFR 1910 – Subpart D – Walking and Working Surfaces (1910.21-30) provides requirements for such safeguarding. The excerpt from **Stand up 4 Grain Safety** provided by Ohio State University's College of Food Agriculture and Environmental Sciences, Extension Agricultural Safety and Health (at agsafety.osu.edu) below illustrates various controls in place for fall protection, housekeeping, crushing or caught in hazards, energy control (lockout/tagout) and electrical hazards.

Crushing injuries and amputations from grain handling equipment - Mechanical equipment within grain storage structures, such as augers and conveyors, often present serious entanglement and amputation hazards. Workers can easily have limbs caught in improperly guarded moving components. OSHA's 29 CFR 1910 – Subpart O – Machinery and Machine Guarding (1910.211-219) provides requirements for machine guarding, where one or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks.

Exposures to hazardous atmospheres - Storage structures can also develop hazardous atmospheres due to gases given off from spoiling grain or fumigation. Workers may be exposed to unhealthy levels of airborne contaminants, including molds, chemical fumigants (toxic chemicals), and gases associated with decaying and fermenting silage. Fumigants are commonly used for insect control on stored grain, and many have inadequate warning properties. Exposure to fumigants may cause permanent central nervous system damage, heart and vascular disease, and lung edema as well as cancer. These gases may result in a worker passing out and falling into the grain, thus becoming engulfed and suffocating or otherwise injuring themselves. Measures that can be instituted to prevent these exposures include:

- Improving ventilation (local and general),
- Installing automatic sensors/alarms designed to detect air contaminants,
- Monitoring air prior to entry, and
- Providing respiratory protection

Grain-specific hazard, and their effective controls are be covered under 'Stand Up 4 Grain Safety Week.' Are stand ups successful? OSHA reports in 2023, employers in grain handling realized a 35.7% reduction in worker entrapments, and between 2018 and 2023 there was a 12.1% reduction in injuries and/or fatalities associated with confined space entry into grain storage vessels. While this is good news, it is important to note grain handling is especially high hazard, with 6 out of ten grain engulfment incidents end in a fatality, so grain employers identifying, evaluating, and controlling grain hazards is critical to protecting worker safety.

CALL BEFORE YOU DIG

6 TIPS FOR AVOIDING BURIED UTILITIES

As temperatures rise and excavation projects increase, prioritizing safety is crucial. April is National Safe Digging Month, a time to raise awareness about excavation hazards and the risks of striking underground utilities and pipelines – also known as "dig-ins." In the U.S., more than **550 "dig-ins" occur every day*** – each posing serious dangers to workers and communities.

Did you know that every digging project – no matter the size – **requires contacting 811 before work begins?** Whether online or by phone, **your state's 811 service** will guide you through a simple process. After answering questions about the details and location of your project, you'll receive a free ticket number and information on how much time your local utilities have to mark their underground lines. Before you dig, it's important to confirm that all utilities have responded and marked their lines.

By following a few key safety steps—including contacting 811 before every dig—you can help ensure smooth and incident-free excavations. Whether you're working on a large construction project or a routine dig, here are six must-follow excavation safety tips:

1. ALWAYS HAVE A VALID 811 TICKET.

Contact 811 a few business days before every dig – no exceptions. Before starting work, double-check that your ticket is valid and includes the correct location, start and end dates, contractor details, and project type.

2. CONFIRM UTILITY RESPONSES BEFORE DIGGING.

Before breaking ground, review your 811 ticket to ensure all utility companies have responded by marking your site or clearing your ticket. Physically inspect the area for any above-ground signs of unmarked underground utilities before proceeding, such as pedestals, manhole covers or meter boxes.

3. PROTECT UTILITY MARKINGS.

Once utilities are marked, it's your responsibility to preserve flags, stakes, and paint markings. If weather or site conditions make the markings unclear, request a remark from 811 before continuing work.

4. POTHOLE OR TEST DIG TO EXPOSE UTILITIES.

Utility markings are approximate, and congested underground environments can lead to mismarks. To safely verify utility locations, use hand tools or soft-dig methods (such as vacuum excavation) within the "tolerance zone," the designated safety margin surrounding marked utilities that demands careful, non-mechanical excavation practices. This is the only way to accurately confirm underground utilities.5. Use Caution with Heavy Equipment. Even after verifying utility locations, exercise extreme caution when operating heavy machinery near buried lines. Backhoes cause the most damage to underground utilities, so operators should designate an "observer" to help prevent dig-ins.

5. USE CAUTION WITH HEAVY EQUIPMENT.

Even after verifying utility locations, exercise extreme caution when operating heavy machinery near buried lines. Backhoes cause the most damage to underground utilities, so operators **should designate an "observer" to help prevent dig-ins.**

6. OSHA'S 3 S'S: SLOPE IT.

Shore it. Shield It. Soil is heavy, and trench collapses can be fatal. Always follow trench safety best practices**: slope trench walls at a safe angle or bench them in steps; shore trench walls with protective supports; and shield workers using trench boxes. These precautions protect workers inside and around excavations.

Remember, 811 helps protect you and your community by preventing utility strikes that can disrupt service, lead to costly repairs, or cause serious injuries and fatalities. Before any digging project, always contact your **state's 811 center**, wait for utilities to respond, and confirm that all utilities have marked their lines before you put a shovel in the ground.

The information above is also available at **Common Ground Alliance**, a member of OSHA's **Partners for Safe Trenching and Excavation Operations Alliance.** This alliance raises awareness and promotes best practices to reduce risks associated with trenching, excavation, and related construction hazards.

Visit OSHA's **Trenching and Excavation** safety and health topics page and read **Common Ground Alliance Best Practices** for more information.

Safety Sciences and Environmental Engineering
www.iup.edu/safetysciences

BREAKING NEWS

RANKED FIRST IN PENNSYLVANIA AND SECOND IN THE NATION BY UNIVERSITIES.COM

Indiana University of Pennsylvania's bachelor's degree in safety, health, and environmental applied sciences has been ranked first in Pennsylvania and second in the nation by Universities.com. Universities.com uses independent government data combined with student interviews to create its rankings, which consider information from more than 6,000 colleges and universities. Colleges and universities are ranked based on retention and graduation, quality of instructors and faculty, financial support for students, and salaries of its graduates.

MORE INFORMATION
HTTPS://WWW.IUP.EDU/NEWS-EVENTS/NEWS

Students Ben Wolf, Sarah Pierce and Mason Engel during the Hensel Phelps summer intern program.
The Sky's the Limit!

Congratulation, Dan Gibney, one of our Safety Science students to complete the IUP's EMT Program.
www.iup.edu/rural-health-safety

SAFETY SCIENCES AND ENVIRONMENTAL ENGINEERING CAREER FAIR

The annual IUP Safety Sciences and Environmental Engineering Career Fair is set for September 25, 2025, at IUP's Kovalchick Convention and Athletic Complex. There will be a Meet and Greet event with the students, as well as luncheon for recruiters. Details to follow. Career Fair will run from 12:00 to 2:30. Rooms for interviewing students will be held following the career fair.

Please reach out to Tracey Cekada (cekadat@iup.edu) for a detailed agenda and more information.

ARCO CONSTRUCTION SCHOLARSHIP WINNER

Congratulations to Meaghan Roach, recipient of a $2500 scholarship provided to IUP Safety Sciences students by ARCO. A special thank you to ARCO for providing our students with this generous scholarship

PREPARE TO LEAD THE WAY IN WORKPLACE HEALTH AND SAFETY

In IUP's Safety, Health, and Environmental Applied Sciences BS program, you'll learn how to play a key role in the prevention of worker injuries, illness, and fatalities. You'll also build your leadership skills to competently create change that results in better workplace productivity and business performance.

REQUEST MORE INFORAMTION
HOW TO APPLY
iup.elluciancrmrecruit.com
www.iup.edu/admissions

OSHA
Occupational Safety and Health Administration

Free OSHA Training
Toolbox Talks

Toolbox talks are an easy way for foremen and supervisors to supplement the OSHA training efforts of their company or organization, and to keep safety front and center in their workers' minds. These short pre-written safety meetings are designed to heighten employee awareness of workplace hazards and OSHA regulations.

Each toolbox training topic provided below is generic enough to be applied to many different work environments (construction and general industry). While the information contained in each toolbox talk is believed to be accurate, remember that these toolbox talks are not intended to take the place of formal OSHA training; they are only intended to supplement the mandatory training and help maintain awareness.

For Toolbox Topics, visit;

https://oshatraining.com/more-osha-training-resources/toolbox-talks-for-osha-safety-and-health

Pennsylvania
Department of Labor & Industry

PATHS Training Calendar

Wednesday, April 9
9:30 to 10:30 am Hazard Identification Webinar

Tuesday, April 15
9:30 to 10:30 am Emergency Action Plan Webinar

Friday, April 18
9:30 to 10:30 am Safety Committee Leadership Webinar

Wednesday, April 23
9:30 to 10:30 am Electrical Safety Webinar

Thursday, April 24
11:00 to 11:30 am Ergonomics Webinar

Monday, April 28
9:30 to 10:30 am Lock-out Tag-out LOTO Webinar

Wednesday, April 30
9:30 to 10:30 am Head Protection Webinar

Thursday, May 1·9:30 – 10:30am
Heat Related Injuries & Illnesses Webinar

Wednesday, May 7·9:30 – 10:30am
Electrical Extension Cord Safety Webinar

Thursday, May 8·1:30 – 2:30pm
Walking & Working Surfaces Webinar

For a complete list of training webinars, visit PATHS Training Calendar

Find and Register for PATHS Workplace Safety Training | Commonwealth of Pennsylvania

WHAT YOU NEED TO KNOW

Request Consultation

Free Safety Consultations Make Big Impact on Businesses. Employers can receive no-cost safety, health, and industrial hygiene evaluations by signing up for a program run by IUP's Safety Sciences and Environmental Engineering Department.

https://www.iup.edu/pa-oshaconsultation/request/index.html

PA OSHA Consultation Webinars

Webinars provided by the PA OSHA Consultation Program.

https://www.iup.edu/pa-oshaconsultation/resources/webinars/index.html

PA OSHA Focal Point Series

The Pennsylvania OSHA Consultation Program developed this series of videos focusing on the top 25 areas identified by the Occupational Safety and Health Administration during inspections.

https://www.iup.edu/pa-oshaconsultation/resources/focal-points/index.html

PA OSHA YouTube

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IUP Pennsylvania OSHA Consultation