



Sept - Oct
2023

In this issue:

"Safety Comes First"

Case Western Reserve University Environmental Health and Safety

2220 Circle Drive, Service Building, 1st Floor

Phone: (216) 368-2906/2907

FAX: (216) 368-2236

Website: case.edu/ehs

*Top 10 Most
Frequently
Cited
Standards*

1

*Fall
Protection
Preventing
Falls In
General
Industry*

2

*Ban On In-
candescent
Bulbs*

3

*Few People
Treated for
Hepatitis C*

4

*Machine
Guarding—
Protect
Against
Amputations*

6

*Chemical
Spotlight:
Fluorobenzene*

7

Fun Page

8

Staff

9

2023-4

Top 10 Most Frequently Cited Standards

Fiscal Year 2022 (Oct. 1, 2021, to Sept. 30, 2022)

The following is a list of the top 10 most frequently cited standards following inspections of worksites by federal OSHA for all industries. OSHA publishes the list to alert employers about these commonly cited standards so they can take steps to find and fix recognized hazards addressed in these and other standards before OSHA shows up. Workers suffer preventable injuries, illnesses, and deaths related to the hazards addressed in these standards.

1. **Fall Protection, construction** 5,915 violations (29 CFR 1926.501)
2. **Hazard Communication, general industry** 2,639 violations (29 CFR 1910.1200)
3. **Ladders, construction** 2,449 violations (29 CFR 1926.1053)
4. **Respiratory Protection, general industry** 2,412 violations (29 CFR 1910.134)
5. **Scaffolding, construction** 2,251 violations (29 CFR 1926.451)
6. **Control of Hazardous Energy (lockout/tagout), general industry** 2,139 violations (29 CFR 1910.147)
7. **Powered Industrial Trucks, general industry** 1,896 violations (29 CFR 1910.178)
8. **Fall Protection Training, construction** 1,762 violations (29 CFR 1926.503)
9. **Eye and Face Protection, construction** 1,572 violations (29 CFR 1926.102)
10. **Machinery and Machine Guarding, general industry** 1,469 violations (29 CFR 1910.212)

- To search an OSHA standard, see this webpage: [OSHA Law and Regulations](#)
- To search the top violations of an industry with a specific NAICS code, see this webpage: [Frequently Cited OSHA Standards](#)
- To search and view the industry profile for violations of any specific OSHA standard, see this webpage: [Industry Profile for an OSHA Standard](#)

Source: Safety BLR

Fall Protection – Preventing Falls In General Industry



***“Don’t
take
shortcuts,
especially
through
machinery
areas.”***

To avoid slips and resulting falls, be on the lookout for foreign substances on the floor. Watch for deposits of water, food, grease, oil, sawdust, soap, or debris. Even small quantities of these substances—sometimes almost too small to see—can be dangerous. When you come into work from outdoors in rainy or snowy weather, wipe your shoes thoroughly on the doormat, not just to keep the floor clean but also to prevent the wetness of your shoes from making you slip and perhaps fall. And another point about walking safely is not to turn too sharply when changing your direction. Tripping hazards that are all too common are trash or unused materials left in aisles or other areas intended for pedestrian traffic, extension cords across paths of travel, tools not put away, and holes or unevenness in the floor. Additionally, it will help keep passageways clean if you make sure trash or waste goes in the trash barrel. Also, walk where you’re supposed to walk. Don’t take shortcuts, especially through machinery areas. Hold onto the handrails when walking on stairs or traveling on steeper-than-ordinary ramps. Contrary to some beliefs, the use of handrails isn’t a sign of infirmity. It’s just good sense. If material or equipment is stored on stairways or ramps, move it or report it promptly.

- ▶ **Use fall protection when 6 feet up and higher.**
- ▶ **Inspect your harness, lanyard, and anchorage point.**
- ▶ **Always wear your gear and stay connected.**



Ban On Incandescent Bulbs

The Department of Energy, or DOE, under the Biden Administration will be implementing a ban on incandescent lightbulbs starting August 1st. This ban is a part of a longtime phase-out of less efficient bulbs that began under President George W. Bush's Energy Independence and Security Act of 2007. Though increases in efficiency requirements have had a rocky start depending on the president in office, the DOE announced on April 26th, 2022, that all bulbs sold after August 1st, 2023, must now have an efficiency of at least 45 lumens per watt. This means that almost all bulbs sold for lighting homes will now be light emitting diodes, or LEDs.

These changes effectively ban all incandescent lightbulbs. According to NPR, even as early as 2014, an incandescent 60-watt bulb typically gives off 800 lumens of light, or approximately 13 lumens per watt. In contrast, an LED bulb giving off 800 lumens can use as little as 10 watts, or 80 lumens per watt. Per the DOE, LEDs use 75% less energy and last up to 25 times longer than incandescent bulbs. This efficiency difference can mean that up to 569 terawatt hours saved assuming a majority of lighting installations use LEDs, or the annual power produced by 92 1,000 MW power plants. This is particularly important, as the DOE estimates about 5% of global carbon emissions are attributed lighting, and less-efficient bulbs, such as incandescents, contribute more due to producing more heat.

While the new efficiency requirements effectively end the sale of traditional incandescent bulbs, those who still have them can continue to use them until the bulbs burn out. According to the DOE, these new regulations will only apply to manufacturers, importers, and private labelers. So if you still have old incandescent bulbs, you can still use them. But if you're looking to upgrade, while still keeping the warm, familiar feel of incandescents, manufacturers produce a wide variety of LED bulbs to keep all of your spaces lit up how you like.

Sources:

Roush, T. (2023, July 29). U.S. ban on incandescent light bulbs starts next week: Here's what to know. Forbes. <https://www.forbes.com/sites/tylerroush/2023/07/29/us-ban-on-incandescent-light-bulbs-starts-next-week-heres-what-to-know/>

Environmental Protection Agency. (n.d.). How the Energy Independence and Security Act of 2007 Affects Light Bulbs . EPA. <https://www.epa.gov/mercury/how-energy-independence-and-security-act-2007-affects-light-bulbs>

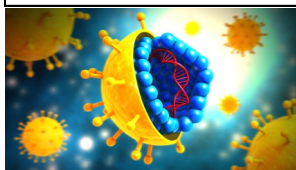
US Department of Energy. (n.d.). Enforcement policy statement—general service lamps - department of energy. https://www.energy.gov/sites/default/files/2022-04/GSL_EnforcementPolicy_4_25_22.pdf

NPR. In the Dark About Picking a Light Bulb? This FAQ Can Help. NPR. <https://www.npr.org/2014/01/28/267185097/in-the-dark-about-picking-a-light-bulb-this-faq-can-help>



*“...an
LED
bulb
giving
off 800
lumens
can use
as little
as 10
watts...”*

Few People Treated for Hepatitis C



“Hepatitis C is curable in more than 95% of cases.”

Over 2 million adults in the United States have hepatitis C virus (HCV) infection, and new infections have continued to rise. Hepatitis C is usually spread through blood, often from injection drug use. Left untreated, hepatitis C can cause advanced liver disease, liver cancer, and death. In 2019, hepatitis C contributed to the deaths of more than 14,200 people in the United States; deaths associated with hepatitis C were higher for Black people (5 per 100,000) and Hispanic people (4 per 100,000) than for White people (3 per 100,000).

Hepatitis C is curable in more than 95% of cases. People who test positive for hepatitis C should be treated with direct-acting antiviral (DAA) medication. Timely treatment is important to prevent liver damage and further spread. Treatment saves lives, prevents ongoing spread, and can save costs by stopping the disease from progressing.

Safe and effective medications (DAAs) for hepatitis C have been available since 2014, yet few people receive treatment within one year of diagnosis. Expanding treatment for all people with hepatitis C is essential to reducing viral hepatitis-related disparities and eliminating hepatitis C as a national public health threat. Too many barriers to treatment remain, including getting diagnosed, being linked to care, and accessing treatment. Even among insured people, only about 1 in 3 receive timely hepatitis C treatment, and this is even lower among people with Medicaid insurance.

To eliminate hepatitis C, more than 260,000 people should be treated every year. Right now, not enough people with hepatitis C are being treated yearly to reach the nation’s viral hepatitis elimination goals. The number of people treated was highest in 2015 and declined to its lowest level in 2020.

Very Few People with Hepatitis C and Insurance Receive Treatment

Even among insured people, only about 1 in 3 receive timely hepatitis C treatment, and this is even lower among people with Medicaid.

People with Hepatitis C Face Multiple Barriers to Receiving Treatment

Eliminating insurance restrictions and expanding the number of primary care doctors treating the infection can improve access to treatment.

Few People Treated for Hepatitis C, Cont.

(Continued from page 4)

To Advance Health Equity

Healthcare providers, insurers, policy makers, and public health professionals should work to improve access to treatment for all people with hepatitis C by:

- Removing eligibility restrictions and preauthorization requirements that make it difficult for people with hepatitis C to be treated and cured.
- Providing treatment where people receive other services, such as primary care offices, community clinics, syringe services programs, substance use treatment centers, and correctional facilities.
- Providing safe and effective treatment in as few visits as possible.
- Expanding the number of primary care providers treating hepatitis C.

Challenges

- When safe and effective direct-acting antiviral treatment first became available in 2014, it cost about \$90,000 per patient; while cost has come down considerably, the high cost of treatment remains a barrier to treatment for many.
- Many insurance providers still have restrictions in place, preventing many people with hepatitis C from accessing lifesaving treatments. These include:
 - o The patient must have liver damage (called “fibrosis”).
 - o The doctor who writes the prescription must be a liver disease or infectious disease specialist.
 - o The patient must be sober.
 - o The doctor must receive preauthorization approval from the insurance provider to start treatment.
 - o Treatment is not routinely integrated into primary health care.
 - o Not enough primary care providers are treating hepatitis C.

“Many insurance providers still have re-strictions in place...”

CDC

Machine Guarding—Protect Against Amputations



“Report any guards or safeguards that are preventing you from doing your normal work...”

Most amputations involve fingertips. The most common machine-related hazards that can cause amputations are cutting, compression, crushing, or getting caught between or hit by objects.

When it comes to stationary machines, amputations happen most commonly when workers are setting them up, threading, preparing, adjusting, cleaning, lubricating, performing maintenance, or clearing jams. These are the times when the guards aren't in place, and the machines are supposed to be shut down and locked out.

For portable machines, many amputations happen during normal operations such as slicing, drilling, and sawing.

The following machine parts are the likely sources of amputation hazards:

- Point of operation—the area of a machine where it performs work on material
- Power-transmission parts—flywheels, pulleys, belts, chains, couplings, spindles, and other machine components that transmit energy
- Other moving parts that move during machine operation, such as reciprocating (i.e., back and forth like a jigsaw motion) and rotating, and “transverse” moving parts, such as a powered wheel turning a belt.

Make sure machine guards and other safeguards are in place to keep you safe. The best way to prevent amputations is with machine guards and other safeguarding devices. Keep an eye out for the following safety devices, and make sure they're properly connected to the machine before you start work.

Guards are physical barriers that prevent any part of your body from contacting the hazardous areas or parts of machines. There are four basic types of machine guards:

1. Fixed guards are attached permanently to equipment and can only be removed with considerable effort
2. Interlocked guards can be removed or opened to allow access to the hazard zone—for example, to insert or remove material from the point of operation
3. Adjustable guards allow a machine to handle a wide variety of material sizes while still protecting the unused portion of the blade or the point of operation
4. Self-adjusting guards, like the one on a circular saw, are pushed away from the point of operation when material is fed into the machine.

Safeguarding devices help prevent contact with points of operation and may replace or supplement guards. Examples are:

- Restraints and pull-back devices that use a wire, cable, or strap attached to your hand, wrist, or arm that prevent you from putting your hand in the danger zone
- Pressure-sensitive devices, such as mats, bars, and trip wires, act as emergency stops when activated
- Chutes, plungers, and sticks that let you feed materials into the machine without putting your hands at risk.

Make sure the devices don't create their own hazards or interfere with normal machine operation and that they're secure, tamper-resistant, and durable.

Report any guards or safeguards that are preventing you from doing your normal work with a machine or that are defective and develop their own hazards, but don't try to bypass them. If a guard itself causes a hazard, like sharp edges or another defect, report it. It may be tempting to remove or disable a guard if you're in a hurry to meet production goals, but that greatly increases the chance of an amputation.

Source: Safety BLR

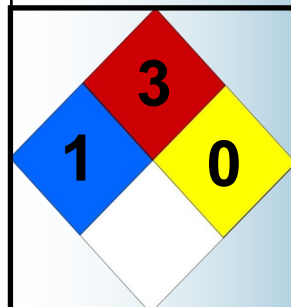
Chemical Spotlight: Fluorobenzene

Fluorobenzene is a colorless liquid. It's used as an insecticide and as a reagent for plastic and resin polymers.

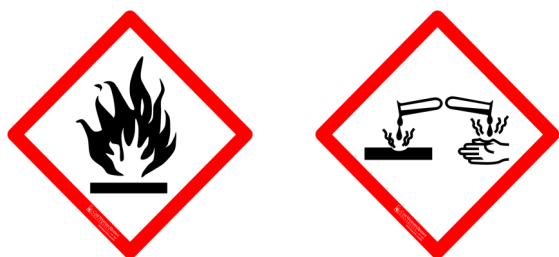
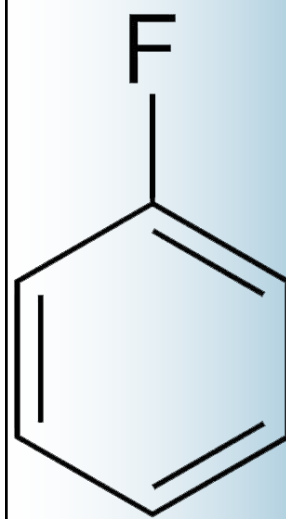
Fluorobenzene isn't compatible with oxidizing agents, ammonium nitrate, chromic acid, halogens, and nitric acid. Store the chemical in tightly closed containers in a cool, well-ventilated area. Sources of ignition are prohibited where fluorobenzene is used, handled, or stored. Metal containers involving the transfer of 5 gallons or more of fluorobenzene should be grounded and bonded. Use only nonsparking tools and equipment, especially when opening and closing containers of the chemical.

If fluorobenzene is spilled or leaked, avoid breathing vapors, mist, or gas, and ensure adequate ventilation. Remove all sources of ignition, and evacuate personnel to safe areas. Use personal protective equipment (PPE), including goggles or safety glasses, gloves, flame-retardant protective clothing, and respiratory protection.

Prevent further leakage or spillage if safe to do so, and don't let the product enter drains, sewers, underground or confined spaces, groundwater, or waterways or discharge into the environment. Absorb liquids in vermiculite, dry sand, earth, or similar material, and deposit in sealed containers. Ventilate and wash the area after cleanup is complete. It may be necessary to contain and dispose of fluorobenzene as a hazardous waste. Contact the federal Environmental Protection Agency (EPA) and local environmental regulatory agency for specific recommendations.



“...avoid breathing vapors, mist, or gas, and ensure adequate ventilation.”



Fun Page

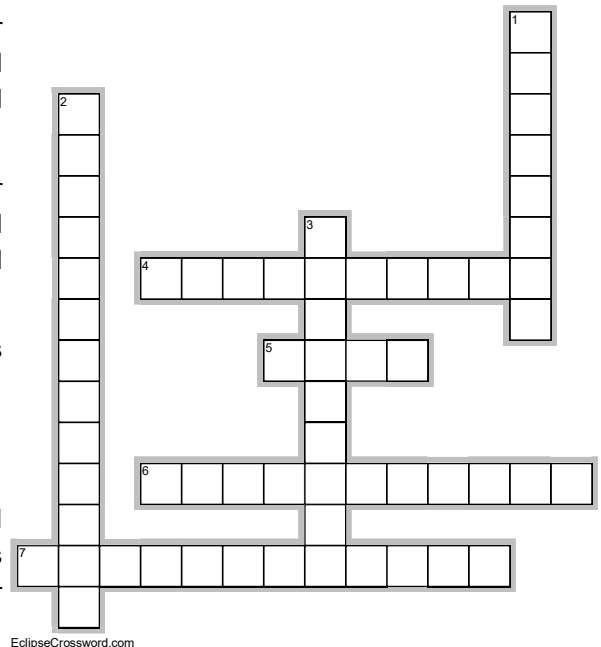
F U N P A G E

Across

4. This violation appears twice under construction in the top 10 frequently cited standards, once for the standard itself and once for the training. (Second of 2 words)
5. This violation appears twice under construction in the top 10 frequently cited standards, once for the standard itself and once for the training. (First of 2 words)
6. The best way to prevent _____ is with machine guards.

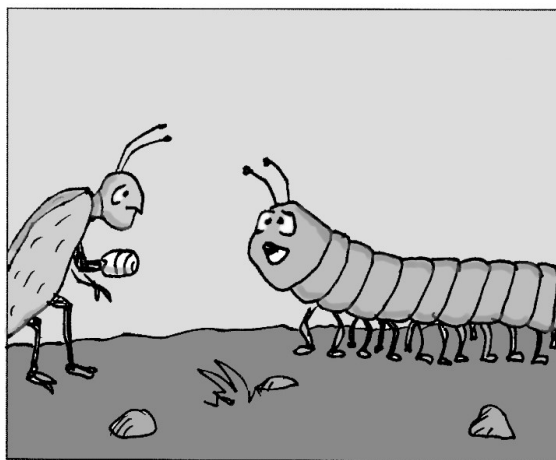
Down

1. _____ hazards include trash or unused materials left in aisles, extension cords across paths of travel, tools, and holes or unevenness in the floor
2. _____ is used as an insecticide and as a reagent for plastic and resin polymers.
3. Left untreated, _____ C can cause advanced liver disease.



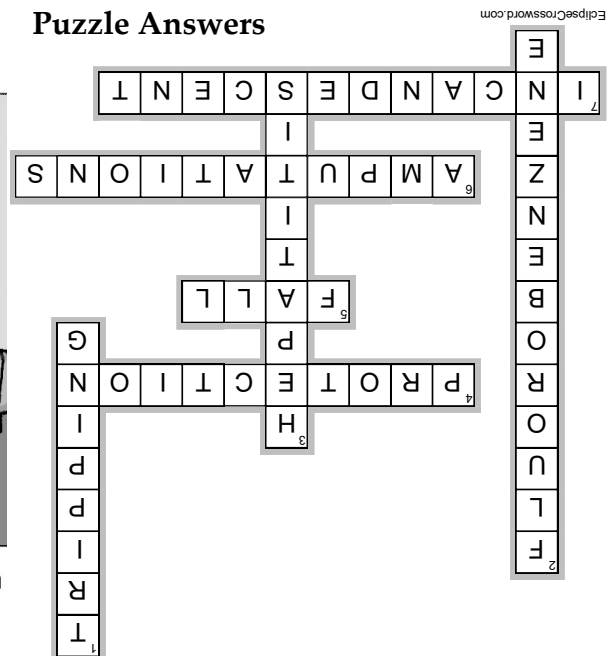
EclipseCrossword.com

Funny Corner



"No, really! Apparently I've had like seven amputations and never even noticed."

Puzzle Answers



EclipseCrossword.com

Environmental Health and Safety Staff

Naomi BOLES (neb51), Department Assistant II

Howard CASH (hac70), Safety Specialist I

Brad FYE (jxf308), Asbestos and Lead Specialist I

Brandon KIRK (bxk230), Assistant Director, Construction, Facilities, Fire-Life Safety

Kumudu KULASEKERE (kck40), Health Physics Specialist II

Andrew MALAK (apm95), Safety Services Specialist I

Tom L. MERK (tlm8), Assistant Director of Safety Services, CSO

Yelena NEYMAN (yxt13), Health Physics Specialist II

Joe NIKSTENAS (jen), Safety Specialist II and LSO

Daniel O'CONNELL (dxo128), Fire Safety Specialist I

Marc RUBIN (mdr6), Senior Director of Safety Services

Dr. Mary Ellen SCOTT (mas35), Safety Services Specialist II

Gayle STARLING-MELVIN (ges83), Clerk III

Felice THORNTON-PORTER (fst2), Assistant Director of Radiation Safety, ARSO

Andrew YOUNG (aby3), Biosafety Officer



Safety Quotes

*Unsafe
acts will
keep you
in
stitches.*

*~Author
Unknown*

All back issues of the EHS Newsletter can be found online at

case.edu/ehs/about/newsletters

Environmental Health and Safety
Case Western Reserve University
(216) 368-2906/2907 _____ FAX: (216) 368-2236
(email) cwruehs@gmail.com
(website) case.edu/ehs