



REG **REVIEW**SM

February 2019

Employers Could be Liable for Active Shooter Violence

If it seems like active shootings are happening more frequently, that's because they are. The Federal Bureau of Investigation (FBI) identified 250 active shooter incidents between 2000 and 2017, with 50 happening between 2016-2017 alone. The agency recorded 30 such events in 2017, the highest year on record.

While the FBI reports that nearly half (42 percent) of the incidents between 2000 and 2017 took place at businesses or areas of commerce, that number is actually much higher. Most of the locations categorized as non-commerce, such as education, health care, and places of worship, are also places of employment. Through this lens, more than 80 percent of active shootings happened in places of employment.

The employer's responsibility

Section 5 of the Occupational Safety and Health Act states that employers are required to furnish workplaces "free from recognized hazards that are causing or are likely to cause death or serious physical harm." In other words, employers have a duty to keep their employees safe from identifiable harm.

With the rise of workplace shootings in recent years, this kind of violence is beginning to be considered a "recognized hazard," and employers have faced increased legal action following such incidents.

For instance, in 2017, an employee was allowed to enter the distribution facility where he worked despite setting off metal detectors at the entrance. He then shot five coworkers, three of whom died, before killing himself. The company in question now faces lawsuits from families of those who were shot, as well as employees who were injured trying to escape.

Reducing risk

Though the likelihood of a workplace shooting is low, employers must be prepared to protect their employees should it happen. Just as you prepare your employees to respond to other devastating events with drills, such as fires or tornadoes, you should teach them how to react in the face of workplace violence using an active shooter drill. The more they practice, the less likely they will be to freeze up in the event that the unthinkable happens.

Plan drills carefully

Drills help workplaces prepare for emergencies. When the drills aren't managed correctly, however, they can do much more harm than good — especially in the case of active shooter drills. *(continued)*

In December, two such instances caused chaos at a Maryland military hospital and a Florida high school. At the hospital, staff began receiving notifications via email and other alert systems that an active shooter was present. At the high school, a voice over the loudspeaker announced a “code red,” the school’s code for an active shooter.

In both cases, the warnings came with distinct “not-a-drill” messaging that sent staff, visitors, patients, teachers, and students into a panic as they tried to escape or find safety. Several students at the high school reported suffering panic attacks and minor injuries in the chaos.

After inevitable investigations, the hospital’s staff admitted to accidentally triggering the alert system, while the school’s administration maintained that the drill had been executed correctly and blamed students for overreacting (though the county sheriff has suspended all unannounced drills until further notice).

Drills are a necessary and effective approach to preparing for the unexpected, but they should be conducted in an orderly manner with plenty of notice.

3D Printers May Present Potential Health Risks

Following an in-depth, two-year research period with the Georgia Institute of Technology (Georgia Tech), Underwriters Laboratories (UL) Chemical Safety found that many desktop 3D printers generate ultrafine particles (UFPs) while in operation. UFPs may pose a health concern since they are the size of nanoparticles and may be inhaled and penetrate deep into the human pulmonary system.

The research also revealed that more than 200 different volatile organic compounds (VOCs), many of which are known or suspected irritants and carcinogens, are also released while 3D printers are in operation. Many factors, including nozzle temperature, filament type, filament and printer brand, and filament color, affect emissions while extrusion temperature, filament material, and filament brand were found to have the greatest impact on emission levels. However, there is currently little marketplace information available to help users choose safer options.

The findings come at a time when this low-cost, compact, and user-friendly emerging technology is increasingly gaining momentum in consumer, commercial, medical, and educational settings.

Researchers say the potential risks can be lessened by:

- Operating 3D printers only in well-ventilated areas
- Setting the nozzle temperature at the lower end of the suggested temperature range for filament materials
- Standing away from operating machines
- Using machines and filaments that have been tested and verified to have low emissions.

Based on the scientific research conducted with Georgia Tech and further collaboration with third-party stakeholders, a UL/American National Standards Institute (ANSI) consensus standard for testing and evaluating 3D printer emissions has been developed.

OSHA Promotes Compliance Assistance Resources For Fall Protection

OSHA has developed a collection of compliance assistance resources to address falls in the workplace, the leading cause of worker fatality in the construction industry. The Agency says its goal is to promote awareness about common fall hazards in construction, educate job creators and workers on fall protection, and reduce the number of fall-related injuries and fatalities.

OSHA explains that falls can be prevented if employers plan ahead to ensure the job is done safely; provide the right equipment; and train workers to use the equipment safely.

The fall protection compliance assistance resources can be found on OSHA's website and include:

- Information on the sixth annual National Safety Stand-Down to Prevent Falls in Construction to be held May 6-10, 2019. The weeklong outreach event encourages employers and workers to pause during the workday to discuss fall hazards and how to prevent them.
- A series of fall safety videos showing how to prevent construction-related fall hazards from floor openings, skylights, fixed scaffolds, bridge decking, reroofing, and leading edge work.
- OSHA's Fall Prevention Training Guide, which provides a lesson plan for employers including several Toolbox Talks.
- Fact sheets on ladders and scaffolding which provide guidance on the safe use of these types of equipment while performing construction activities.
- A brief video, *5 Ways to Prevent Workplace Falls*, encouraging employers to develop a fall prevention plan, and to provide workers with fall protection and training.

It's That Time of year ... **Deadline For Posting OSHA 300A Summary Approaching**

Employers who are required to track workplace injuries and illnesses under 29 CFR 1904 must post a paper copy of the 300A Summary from February 1 through April 30.

The Summary, which covers the previous year's recordable injuries and illnesses, must be posted in a prominent area where notices to employees are normally placed and must not be covered, altered, or defaced during that time. Note that the Summary must be posted even if an establishment had no recordable injuries during the previous year.

Checking to see that your Summary is posted is one of the first things an OSHA compliance officer will do during an inspection. Missing or covered Summaries could result in a civil penalty.

Don't forget e-submission coming on March 2

Certain employers must also electronically submit information from their 300A to OSHA. This requirement applies to establishments that are already keeping OSHA injury and illness records *and* have 250 or more employees *or* have 20-249 employees and are listed by NAICS code in Appendix A to Subpart E in Part 1904.

If the e-Submit requirement applies to you, you must submit your 2018 300A Summary data to OSHA by March 2, 2019, using the Injury Tracking Application on the OSHA website.

OSHA Revises Requirements for Authorized Trainers in Outreach Program

OSHA has revised the requirements for authorized trainers in its Outreach Training Program. The revisions include eliminating the 90-day grace period after a trainer card expires and updating the Trainer Code of Conduct and trainer responsibilities. OSHA says it expects the training to meet adult learning needs and include interactive activities; training must include workshops, case studies, exercises, and demonstrations that involve student participation and interaction.

The Outreach Trainer Program trains workers and supervisors to recognize and prevent safety and health hazards on the job, and to understand workers' rights and employers' responsibilities.

The new requirements take effect April 1, 2019.

OSHA's Top Violations

While you can't prevent [OSHA](#) inspectors from showing up at your door, you can be prepared for them. A look at OSHA's annual top 10 list of most frequently cited safety and health standards gives you an idea of where inspectors are focused and provides a starting point to examine how your company's compliance program measures up.

What's on the list?

While most of the standards remain the same from year to year, new to the list in 2018 is eye and face protection in construction ([1926.102](#)), which replaced electrical wiring ([1910.335](#)) from 2017.

- 1) Fall protection in construction work – [1926.501](#)
- 2) Hazard communication – [1910.1200](#)
- 3) Scaffolding in construction work – [1926.451](#)
- 4) Respiratory protection – [1910.134](#)
- 5) Lockout/tagout – [1910.147](#)
- 6) Ladders in construction work – [1926.1053](#)
- 7) Powered industrial trucks – [1910.178](#)
- 8) Training on fall protection in construction – [1926.503](#)
- 9) Machine guarding – [1910.212](#)
- 10) Eye and face protection in construction – [1926.102](#)

Is there a common theme?

While there are trouble spots unique to each standard, training is one area in which [OSHA](#) finds violations across general industry and construction. The [lockout/tagout](#) standard has three different levels of training, depending on employees' duties and whether they are considered "authorized," "affected," or "other" under [1910.147](#). Authorized employees need the most training, other employees the least. (*continued*)

Training plays a major role in hazard communication (HazCom). Employers must train all employees prior to their first exposure to a hazardous chemical and retrain them when new or different chemicals are introduced, or when there are changes in the way the chemicals are used.

The powered industrial truck (PIT) standard requires employers to train operators on all the types of PIT equipment they operate. Employers often fail to provide equipment-specific training and instead allow workers with only forklift training to operate other types of PIT.

OSHA also has been cracking down on training on fall protection in construction. Training must be provided to all employees who might be exposed to fall hazards, and it must both enable employees to recognize the hazards of falling and understand how to minimize these hazards. In all instances, training must be provided in a format and language that employees understand. Also, keep in mind that OSHA requires temporary employees to have the same training as any other employees if they are exposed to the same hazards.

New OSHA Bulletin Focuses on Lithium Battery Safety

OSHA has released a new Safety and Health Information Bulletin (SHIB) focused on preventing fire and explosion injuries from wearable devices that contain lithium batteries. Workers who wear or frequently handle lithium-powered devices or batteries may be at risk if the battery catches fire or explodes since the device or battery is close to the body. For example, small cameras worn by workers (e.g., police and security personnel) can cause burns or other serious injury if the battery catches fire or explodes while worn.

OSHA says that while lithium batteries are generally safe and unlikely to malfunction, damage from physical impact, exposure to certain temperatures, and/or improper charging can cause them to fail.

The SHIB provides prevention and training guidelines for employers:

- Ensure lithium batteries, chargers, and associated equipment are tested in accordance with an appropriate test standard and certified by a Nationally Recognized Testing Laboratory (NRTL) and are rated for their intended uses.
- Follow manufacturer's instructions for storage, use, charging, and maintenance.
- When replacing batteries and chargers for an electronic device, ensure they are specifically designed and approved for use with the device and are purchased from the device's manufacturer or a manufacturer authorized reseller.
- Remove lithium-powered devices and batteries from the charger once they are fully charged.
- Store lithium batteries and devices in dry, cool locations and in fire-resistant containers.
- Avoid damaging lithium batteries and devices. Inspect them for signs of damage, such as bulging/cracking, hissing, leaking, rising temperature, and smoking before use, especially if they are wearable. Immediately remove a device or battery from service and place it in an area away from flammable materials if any of these signs are present.
- If batteries are damaged, remove from service and dispose in accordance with local, state, and federal regulations. Contact a local battery recycling center for disposal instructions.
- Ensure that an emergency action plan (EAP) for a workplace with lithium-powered devices or batteries includes lithium-related incident response procedures based on manufacturer's instructions for responding to battery failures including fires or explosions.

Ensure that appropriate information about the hazards of lithium-powered devices and lithium batteries is communicated to exposed workers (e.g., during repair of lithium-powered devices or during recycling activities) and that workers receive training on the physical and health hazards associated with lithium-ion and/or lithium-metal cells or batteries.

NIOSH Clarifies its Definition of Respirator Sealing Surfaces, Facial Stubble

In a recent revised notice, NIOSH clarified its definition of respirator sealing surfaces, including the primary seal, and facial stubble. NIOSH says the interpretation applies to all primary seals of tight-fitting full and half-face piece respirators, as well as tight-fitting respirator designs that rely on a neck dam seal.

According to NIOSH, facial hair that lies along the sealing area of the respirator, such as beards, sideburns, moustaches, or stubble, should not be permitted on employees who are required to wear respirators that rely on tight face piece fit. The revised notice clarifies that stubble means “more than one day or 24 hours of growth.” The language in an August 2018 notice referred to “a few days’ growth.”

The Agency also clarifies its definition of primary seal and primary sealing surface to mean “that part of the respirator that touch the wearer’s facial areas (near the nose and mouth for half-mask respirators and including around the eyes for full-face piece respirators) that provide a gas or dust-tight seal in order to protect the user from the outside contaminant(s).”

NIOSH says the revised notice supersedes its October 2, 2006, letter to manufacturers and its August 2018 notice.

NIOSH Study Shows Noise-Related Health Risk Varies by Industry, Occupation

High blood pressure and high cholesterol — key risk factors for heart disease — are more common among workers exposed to loud noise at work, according to a recent study by the National Institute for Occupational Safety and Health (NIOSH).

Data from the 2014 National Health Interview Survey was used to estimate the prevalence of occupational noise exposure, hearing difficulty, and heart conditions within industries and occupations. NIOSH researchers also looked at the association between workplace noise exposure and heart disease.

Among the findings:

- 25 percent of current workers had a history of work-related noise exposure; 14 percent were exposed in the last year.
- 12 percent of current workers had hearing difficulty, 24 percent had high blood pressure, and 28 percent had high cholesterol. Of these cases, 58 percent, 14 percent, and 9 percent, respectively, can be attributed to occupational noise exposure.
- Industries with the highest prevalence of occupational noise exposure were mining (61 percent), construction (51 percent), and manufacturing (47 percent).

Occupations with the highest prevalence of occupational noise exposure were production (55 percent); construction and extraction (54 percent); and installation, maintenance, and repair (54 percent).

OSHA Reminds Employers of Dangers of Carbon Monoxide Exposure

With frigid temperatures affecting much of the U.S., OSHA is reminding employers to take precautions to protect workers from the dangers of carbon monoxide (CO) exposure. Each year, workers die from CO poisoning, usually while using fuel-burning equipment and tools in buildings or semi-enclosed spaces without adequate ventilation. Sources of carbon monoxide can include anything that uses combustion to operate, such as gas generators, floor buffers, compressors, pumps, welding equipment, space heaters, and furnaces.

Symptoms of CO exposure can include headaches, dizziness, drowsiness, nausea, vomiting, or tightness across the chest. Severe CO poisoning can cause neurological damage, coma, and death.

To reduce the risk of CO poisoning in the workplace, OSHA says employers should:

- Install an effective ventilation system
- Avoid the use of fuel-burning equipment in enclosed or partially-enclosed spaces
- Use carbon monoxide detectors in areas where the hazard is a concern
- Ensure space heaters and stoves are in good working order and never use them in enclosed spaces or indoors

Consider using tools powered by electricity or compressed air, if available.

OSHA Raises Penalties for 2019

OSHA, along with other Department of Labor agencies, will see an increase in penalties in 2019. The Department of Labor released a pre-publication version of its final rule revising civil monetary penalties assessed or enforced in the regulations for 2019. The Penalties Inflation Adjustment Act Improvement Act of 2015 requires the Department to adjust its assessed penalty levels no later than January 15 of each year.

OSHA's adjusted penalties for 2019 are shown in the following table. They will take effect once the final rule is published in the Federal Register.

Regulation	Type of violation	Penalty amounts 2018	Penalty amounts 2019
§1903.15(d)(1)	Willful violation, minimum	\$9,239	\$9,472
§1903.15(d)(1)	Willful violation, maximum	\$129,336	\$132,598
§1903.15(d)(2)	Repeated violation	\$129,336	\$132,598
§1903.15(d)(3)	Serious violation	\$12,934	\$13,260
§1903.15(d)(4)	Other-than-serious violation	\$12,934	\$13,260
§1903.15(d)(5)	Failure to correct violation	\$12,934	\$13,260
§1903.15(d)(6)	Posting requirement violation	\$12,934	\$13,260