



MJS Safety EXPANSION COMING IN EARLY APRIL

• We Will Be Doubling Office Space •

More Room for Fit Testing, Audiometric Testing
and Operator Qualifications

As Well As Drug Testing Collections

▶ MJS SAFETY TRAINING ANNOUNCEMENT

MJS SAFETY LLC is proud to announce the addition of NCCER and O.Q.S.G. to our OQ Services.

MJS SAFETY LLC is an "Authorized Assessment Center" for Proctoring Final Assessments and completing Performance Evaluations for O.Q.S.G. and NCCER – as well as other OQ disciplines such as MEA-EnergyU, Veriforce & EnergyWorldNet. [call to schedule](#) [read more...](#)

▶ Schedule of classes March 2019: • *TRAINING CENTER - 1760 BROAD ST, UNIT H, MILLIKEN, CO 80543* • [read more...](#)

OSHA / CONSTRUCTION NEWS SUMMARY

▶ Gas Detection for Safe Confined Space Entry

It's more than a best practice—it is essential to test the air prior to and during entry, as OSHA requires. [read more...](#)

▶ RECENT OSHA TOPICS IN REVIEW

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- Final Rule on Cranes and Derricks in Construction [read more...](#)
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How managers at Ohio wastewater treatment plants reduced unhealthy noise levels [read more...](#)



TRANSPORTATION NEWS SUMMARY

▶ FMCSA's Medical Certification Program Under Audit By DOT

Spurred by a wake of criminal charges against medical examiners who have fraudulently issued DOT medical certificates to truck operators, the U.S. DOT's Office of Inspector General announced recently it is opening an audit to evaluate the DOT medical certification program. [read more...](#)



▶ FMCSA Launches Drug and Alcohol Clearinghouse Website

Last week, **FMCSA** launched a new website with information about the Commercial Driver's License Drug and Alcohol Clearinghouse. [read more...](#)

TRANSPORTATION NEWS SUMMARY cont'd

▶ Study: Under ELDs, Crash Rates Flat but Unsafe Driving Violations Are Up

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The National Transportation Safety Board released Monday its 2019 2020 Most Wanted List of Transportation Safety Improvements with six of the 10 items relating to truck drivers and the trucking industry. [read more...](#)



MSHA NEWS SUMMARY

▶ To Improve Safety Training, Think Like A Teacher

In a matter of **weeks**, the **production season** will ramp up throughout the nation. If your **miners** haven't had their **annual refresher training**, take time to plan for **training** time that pays **dividends** in terms of **safer operations** throughout the **season**. [read more...](#)



MONTHLY SAFETY & HEALTH TIP NEWS SUMMARY

▶ Most Americans Not Confident About First Aid Skills

A device and a simple technique that can save lives in the event of a health emergency are not within the skill sets of many Americans, according to a recent poll. [read more...](#)



▶ Using Portable Generators Safely

Portable generators are internal combustion engines used to generate electricity...This fact sheet discusses specific hazards inherent with the use of generators and also provides helpful information to ensure that workers and others using such equipment remain safe. [read more...](#)



MJS SAFETY TRAINING ANNOUNCEMENT

MJS SAFETY LLC is proud to announce the addition of NCCER and O.Q.S.G. to our OQ Services.

MJS SAFETY LLC is an "Authorized Assessment Center" for Proctoring and Testing for ENERGY worldnet, Inc., as well as OQ Performance Evaluation Services.

MJS SAFETY LLC continues to offer Proctor and Testing Services, as well as Operator Qualification [OQ] Performance Evaluations under the "EnergyU" system – a service of Midwest ENERGY Association – as well as Veriforce.

MJS SAFETY LLC has "Authorized" Performance Evaluators on staff that can perform this service for specific "Covered Tasks."

MJS SAFETY LLC is also available to assist with the Knowledge Based Training for these tasks. Knowledge-based training is designed to help personnel successfully pass the OQ Knowledge Based Testing as well as the Performance Evaluation process.

The Operator Qualification Rule – commonly referred to as the "OQ Rule" addressed in Title 49 of the Code of Federal [US DOT] regulations, mandates that individuals who perform "Covered Tasks" on covered pipeline facilities be qualified through the Operator Qualification Process.

The intent of the OQ rule is to ensure protection of both pipeline personnel and the public at large. Providing individuals with the necessary knowledge and skills is an essential element of any Operator and Contractor OQ plan.

Acceptable requirements for qualification are determined by the operator. The quality and validity of data related to OQ training, testing, and performance is critical to meet these requirements.

If we can be of assistance with these types of services for your company, please [call to schedule](#).

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- ~PEC SafelandUSA Basic Orientation
- ~OSHA 10 Hour General Industry
- ~OSHA 30 Hour General Industry
- ~NUCA Confined Space
- ~Hydrogen Sulfide [H₂S] - Awareness
- ~Respirator: Medical Evaluation & Fit Testing
- ~Hazard Communication – GHS Training
- ~Teens & Trucks Safety
- ~1st Aid/CPR Course- Medic 1st Aid
- ~HAZWOPER 8, 24 & 40 Hour
- ~PEC'S Intro to Pipeline
- ~Confined Space Rescuer Training
- ~PEC Core Compliance
- ~OSHA 10 Hour Construction
- ~OSHA 30 Hour Construction
- ~NUCA Competent Person for Excavation & Trenching
- ~Hands-on Fire Extinguisher training
- ~DOT Hazmat Training
- ~MSHA Sand & Gravel Training [Part 46 only]
- ~Fall Protection for the Competent Person
- ~Defensive Driving Safety for large and small vehicles
- ~Instructor Development for Medic 1st Aid/CPR
- ~Bloodborne Pathogens Compliance Training
- ~Respiratory Protection Training

► **MJS SAFETY offers these courses as well as custom classes to fit the needs of your company**

Schedule of classes Mar 2019: • TRAINING CENTER - 1760 BROAD ST, UNIT H, MILLIKEN, CO 80543

- PEC Safeland Basic Orientation: March 1, 12, 21; 8 – 4:30
- First Aid/CPR/AED/BLOODBORNE PATHOGENS: March 15; 8 – noon
(We offer MEDIC FIRST AID)
- TEEX H2S Operator Training – Awareness (ANSI Z390-2017 Course): March 15; 12:30 – 4:30
- Fall Protection Competent Person Training: March 6

[For any last minute schedule updates, go to www.mjssafety.com]

► **NEED ANY OF THESE CLASSES IN SPANISH? CONTACT carriejordan@mjssafety.com TO SCHEDULE TODAY** ◀

GO TO mjssafety.com FOR UP-TO-DATE CLASS LISTINGS
 To sign up for one of these classes, or inquire about scheduling a different class
 Call Carrie at 720-203-4948 or Jeremy at 720-203-6325 or Mike at 303-881-2409

— FEATURED TRAINING PROGRAMS —

- Safeland Basic Orientation • Hydrogen Sulfide Awareness • First Aid/CPR
- OSHA 10 Hour for General Industry or Construction • Confined Space for Construction

— ALSO OFFERING —

- PEC Basic 10 — 2 days that cover both Safeland and OSHA 10 for General Industry in 1 class

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SOURCES FOR THIS ISSUE INCLUDE:
 OSHA
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 ISHN
 NTSB
 Aggregates Mgr
 Cintas Corporation
 Researchers from
 Northeastern
 University and
 the University of
 Arkansas



OSHA / CONSTRUCTION

Gas Detection for Safe Confined Space Entry

It's more than a best practice—it is essential to test the air prior to and during entry, as OSHA requires.

Atmospheric hazards are a **key consideration** when planning any **confined space entry**. NIOSH investigations of 670 **confined space fatalities** showed that **atmospheric hazards** were associated with about **56 percent** of the deaths. The most **common types** of gases in **confined spaces** were **hydrogen sulfide** and **carbon monoxide**.

OSHA's confined space standard, [29 CFR 1910.146](#), requires employers to **identify hazards** in confined spaces, test the air **prior to entry** and also during the entry, keep the space ventilated, have on hand **proper safety equipment** for entry and exit and rescue, and have procedures for summoning **proficiently trained rescue teams** that can respond in a **timely manner**.

A confined space:

- Is large enough for an employee to enter fully and perform assigned work,
 - Is not designed for continuous occupancy by the employee, and
 - Has a limited or restricted means of entry or exit.
- Examples include vaults, tanks, storage bins, pits, silos, and similar areas.

A permit-required confined space as defined by OSHA has one or more of these characteristics:

- Contains or has the potential to contain a hazardous atmosphere
- Contains a material with the potential to engulf someone who enters the space
- Has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section
- Contains any other recognized serious safety or health hazards

Employers in general industry **must evaluate** their workplaces to determine **whether spaces** are permit spaces. If a workplace does contain **permit spaces**, the employer **must inform** exposed employees of their **existence**, location, and the **hazards** they pose.

This can be done by **posting danger signs** such as **"DANGER - PERMIT-REQUIRED CONFINED SPACE -- AUTHORIZED ENTRANTS ONLY"** or using an **equally effective** means, according to the agency.

If employees are **not to enter** and work in **permit spaces**, their **employers** must take **effective measures** to prevent them from entering these **spaces**. If employees are expected to **enter permit spaces**, the employer **must develop** a written permit space program and make it available to **employees** or their **representatives**.

Atmospheric Testing in Confined Spaces

A recent **OSHA enforcement case** against an **Alabama tank cleaning firm** included citations for **failing** to ensure atmospheric **testing** and **monitoring equipment** was properly maintained, allowing employees to **enter permit spaces** without the **proper equipment**, and allowing them to enter without **preparing an entry permit**. Proposed **penalties totaled \$171,281** in the case, which was announced in October 2018.

One of the **citations** was for a **willful violation**, with **OSHA** inspectors **concluding** the employer **had not done testing** for **atmospheric hazards at all** in a permit space before **employees** were authorized to **enter it**.

The **OSHA** standard directs that, **before an employee** enters the space, the **internal atmosphere** shall be tested with a **calibrated** direct-reading **instrument** for the following conditions, in the order given: **1) oxygen content, 2) flammable gases and vapors, and 3) potential toxic air contaminants**. It also says there may be **no hazardous atmosphere** within the **space** whenever any **employee** is inside the **space**.

Some of today's **single-gas** and **multi-gas monitors** are **wirelessly connected**; long-life, **maintenance-free** monitors are available to conduct **atmospheric testing** prior to entering a **confined space** and as long as an employee **occupies** the **confined space**.

If a **hazardous atmosphere** is found in the **space** during entry through **use** of a **monitor**, the standard says each **employee** must leave the **space immediately**, and then it must be **evaluated** to determine how the **hazardous atmosphere** developed, and **measures** must be **implemented** to protect employees before any **subsequent entry** is made.

Then, the **employer** is to verify the **space** is safe for **entry** and that the **required pre-entry** measures have been taken, through a **written certification** that contains the **date**, the location of the space, and the **signature** of the **person providing** the certification. The **certification** must be made **before entry** and be made available to each employee **entering** the **space** or to the **employee's authorized representative**.

Training Requirements

According to **OSHA**, before the **initial work assignment** begins, an **employer must** provide **proper training** for all workers who are **required** to work in **permit spaces**. When training has been **completed**, employers must **ensure** the workers have **acquired** the understanding, **knowledge**, and skills necessary to **safely perform** their **duties**.

Additional training is required when the **job duties** change; when a **change occurs** in the permit **space program** or the permit space **operation presents** any new **hazard**; and when an **employee's job** performance shows **deficiencies**. Rescue team members also **must be trained** in **CPR** and **first aid**, and **employers** must certify that this type of **training** has been provided.

Records of the **employee training** are to be **kept** and made **available** for inspection by **employees** and their **authorized representatives**.

Performing atmospheric testing as required and providing the proper **training**, equipment, and **rescue capability** will add up to a successful **confined space program**.

RECENT OSHA TOPICS IN REVIEW

➤ Winter weather is still here...

The first day of Spring is March 20th... however Mother Nature is clearly not quite done with Winter!! Winter weather presents hazards including slippery roads/surfaces, strong winds and environmental cold. Employers must prevent illnesses, injuries, or fatalities, by controlling these hazards in workplaces impacted by winter weather. See the links below for important information.

[OSHA](#) is a Weather-Ready Nation Ambassador committed to working with [NOAA](#) and other Ambassadors to strengthen national preparedness for and resilience against extreme weather.



➤ Trenching and Excavation – An ever-present safety concern

SLOPE IT. SHORE IT. SHIELD IT.

Valuable resources are available [here](#)

➤ Final Rule on Cranes and Derricks in Construction

Effective date: final rule effective December 10, 2018, except amendments to [29 CFR 1926.1427](#) (a) and (f) (evaluation and documentation requirements), effective February 7, 2019.

Here is a [pdf](#) of the Final Rule as well as a pdf of [FAQ's](#)

SUMMARY:

OSHA updated the agency's standard for cranes and derricks in construction by clarifying each employer's duty to ensure the competency of crane operators through training, certification or licensing, and evaluation. **OSHA** also altered a provision that required different levels of certification based on the rated lifting capacity of equipment.

While testing organizations are not required to issue certifications distinguished by rated capacities, they are permitted to do so, and employers may accept them or continue to rely on certifications based on crane type alone. Finally, this rule establishes minimum requirements for determining operator competency.

This final rule will maintain safety and health protections for workers while reducing compliance burdens.

➤ OSHA Penalties

Below are the maximum penalty amounts adjusted for inflation as of Jan. 23, 2019. (See [OSHA Memo, Jan 23, 2019](#)).

Type of Violation	Penalty
Serious Other-Than-Serious Posting Requirements	\$13,260 per violation
Failure to Abate	\$13,260 per day beyond the abatement date
Willful or Repeated	\$132,598 per violation

For More Assistance...click [here](#)

Noise Control

How managers at Ohio wastewater treatment plants reduced unhealthy noise levels

Industrial plants are known for being loud, acoustically-harsh environments. The combination of high ceilings, reflective surfaces and heavy machinery din creates an environment for reverberation and noise. Such conditions can decrease productivity and increase health and safety hazards.

This is especially true for wastewater treatment plants where the combination of high-speed, high volume air blowers and concentrators, high ceilings, and hard, easily-cleanable surfaces combine to create a unique noise problem. Facility managers and operators at the Southerly and Jackson Pike Wastewater Treatment Plants in Columbus, Ohio, as well as officials in the city's Division of Sewerage and Drainage, were well aware of these risks.

THE BEST SOLUTION

Since 2007, the city and its wastewater treatment plant managers have worked diligently to rectify noise and reverberation issues. Over the years they have determined that the installation of **acoustic noise-absorbing panels** was the best solution. That was true again for the most recent projects at the Jackson Pike and Southerly facilities.

In the West Aeration Control (WAC) Building Blower Room at the Southerly plant, the existing drop-ceiling tiles had become severely corroded and deteriorated, making them useless for mitigating noise. Even brand new, such tiles simply can't reduce reverberation enough to fully protect operator hearing and improve verbal communication. According to the city of Columbus Project Manager who oversaw the project and the engineering firm hired to tackle the problem, acoustic noise-absorbing panels were specified because of the positive results achieved in other areas of the facility. The decision was made to remove the existing ceiling tile system and install acoustic panels.

The WAC blower room contains five 900hp DeLaval blowers, each with a diameter of 24 in., speed of 3,500 rpm, generating 20,000 CFM of air. The blowers provide excess air to the continuous activated sludge/nitrification process, which removes ammonia from the wastewater treatment stream. Depending how much additional air is



needed to support that process—related to both the flow and nitrogen content of the stream—more than one blower at a time may be engaged.

The WAC blower room is approximately 208 ft. long by 40 ft. wide and 20 ft. high. It has walls made of concrete masonry units (CMUs), glass and drywall; terrazzo floors; and a concrete ceiling. Those reflective surfaces are incredibly unforgiving in terms of reverberation, especially in a space that large.

ANALYZING DATA

An acoustic consultant performed onsite analysis of the conditions in the room to determine the average reverberation time and noise level at specific frequencies. The tests revealed an average reverb time of 7.5 seconds and an average noise level of 93.6 dB at 500 Hz, confirming the noise-level problem in the space. Understanding these data and knowing the success of prior installations of acoustic panels at the Southerly plant, he believed that same type of panel would do the job.

The consultant, in collaboration with the engineering firm, designed a panel layout that would reduce the reverb time to just 1.2 seconds at 500 Hz. That design had to accommodate installation around lighting fixtures, sprinkler systems, electrical conduits, roof drains and other equipment. Achieving that target reverb time required about 13.5% of the walls and 30% of the ceiling to be covered with noise-absorbing panels at a mounting distance of 4 in. off the wall. In total, 226 EFPs were installed in sizes including 30 in. x 5 ft., 30 in. x 6 ft., 30 in. x 8 ft. and 30 in. x 10 ft. to accommodate the wall and ceiling utilities. Installation was performed with minimal impact to plant operations.

There's clear and powerful evidence of the marked difference that the acoustic panels made in the Southerly's WAC Building Blower Room.

"Before the installation, our operators were required to wear hearing protection at all times. After the job was done, that was no longer the case," said Jeff Bartoe, Southerly Wastewater Treatment Plant Maintenance Manager.

FMCSA's Medical Certification Program Under Audit By DOT

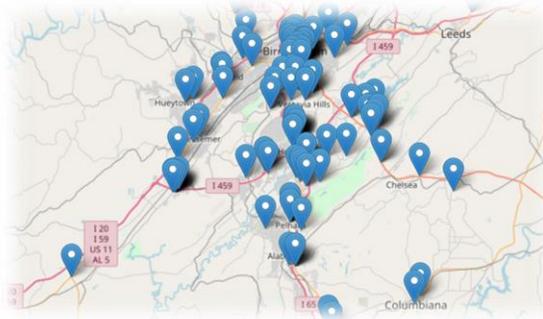
Spurred by a wake of **criminal charges** against **medical examiners** who have **fraudulently** issued **DOT medical** certificates to **truck operators**, the **U.S. DOT's** Office of Inspector General **announced** recently it is opening an audit to **evaluate** the **DOT medical certification** program. Of focus in the **audit** is the **National Registry of Certified Medical Examiners**, implemented by the **Federal Motor Carrier Safety Administration** in 2014.

Since the **August 2014** onset of the **National Registry**, there have been **eight indictments** and six convictions against **medical examiners** who have issued **fraudulent certificates** to drivers. In most cases, the examiner was **issuing certificates** without **performing** a full exam and, in some cases, the **examiners** uploaded **fake exam results** to **FMCSA**.

In a few instances, **FMCSA** had to **issue** a **notice** that required **hundreds** of **drivers** to **renew** their **medical certifications** within **30 days**, even though they hadn't expired, **due to circumstances** surrounding alleged fraud of a **medical examiner**. On one occasion, more than **6,000** **drivers** had to **immediately renew** their **medical certificate**.

Part of a multi-part **overhaul** of the **driver medical certification** process, the **National Registry** rule **requires drivers** to obtain their **medical certificate** from an **FMCSA-approved** examiner.

Examiners **must complete** required training and **pass a test** to be listed in the **registry**.



Ultimately, **medical certificates** will be combined with **drivers CDLs**, with states tapping into **FMCSA's** database to **know** whether a **driver's medical certificate** is

current and **valid**. That portion of the **overhaul** has been **delayed** and is now slated to **take effect** in **June 2021**.

Slim on details so far, the **DOT OIG's** audit is planned to **begin immediately**, the **OIG** said in a **recent notice** to **FMCSA**. The **OIG** will evaluate **FMCSA's** oversight of the **medical certification** process and its protocol for **verifying** the **information** within the **National Registry**.

FMCSA Launches Drug and Alcohol Clearinghouse Website

Last week, **FMCSA** launched a new website with information about the **Commercial Driver's License Drug and Alcohol Clearinghouse**.

Visit <https://clearinghouse.fmcsa.dot.gov> to learn more about how **CDL drivers** and their employers will be required to use the **Clearinghouse** beginning **January 6, 2020**. You will be able to sign up for email updates.

Study: Under ELDs, Crash Rates Flat but Unsafe Driving Violations Are Up

A group of researchers last month (*February*) issued a report on the effects of the **electronic logging device mandate**, and they reached **two main conclusions**: The use of **ELDs** has **not reduced** the rate of **truck crashes**, but it has **increased** the **frequency** of speeding violations, particularly among the **small carrier segment**.

Speeding violations, the report concludes, follow behavioral **changes** driven by **ELD adoption** as truckers try to make up for **productivity losses**.

The report **mostly focuses** on smaller **carriers**, such as **independent owner-operators**, whom the researchers deemed **most impacted** by the mandate. Many **larger carriers**, it assumes, already had been using **ELDs** (or predecessor *automatic onboard recording devices*) prior to the mandate's **December 2017** effective date.

Titled "[Did Electronic Logging Device Mandate Reduce Accidents?](#)" and published by **researchers** from **Northeastern University** and the **University of Arkansas**, the research report **concludes** that the mandate was **effective** in its goal of increased compliance with hours of service **regulations**. "However," they write, "there is **no evidence** to suggest that the **number** of accidents **decreased**" as a result.

The **researchers** studied data on **driver inspections** and federally recorded **crashes** between **January 1, 2017**, and **September 1, 2018**, with the **bulk** of the data coming from the **Federal Motor Carrier Safety Administration**. They studied **violations** from **4 million inspections** of **224,878 for-hire interstate carriers**.

Unaccounted for in the **study** was any control for miles **increases** or **decreases** over the **time periods**, whether in trucks operated or **miles driven** by the motoring **public** with whom truckers share the **roads**. Instead, the **research** is simply **based** on weekly **averages of violations** and crashes.

Also **unaccounted** for is **crash fault**, such as whether crashes were the **fault of truck drivers** or other **motorists**.



The **percentage** of total **hours-of-service** violations in sum fell from **6 percent** (*based on the number of inspections*) to 2.9 percent in the **mandate's hard enforcement** period, though much of that decrease in **violations** came from the **small carrier** segment, the research states. For **independent owner-operators**, the **rate fell** from 10.7 percent to **6 percent**, while for drivers at **larger carriers**, the rates fell from **0.85 percent** to 0.75 percent.

However, **crash numbers** saw **little impact** by the enforcement of the **ELD mandate**, despite fewer **hours of service violations**.

The **January 1, 2017**, to **September 1, 2018**, time period studied by **researchers** included nearly a **year's worth** of data prior to the **December 18, 2017**, enforcement **deadline** of the **ELD** mandate, as well as the **roughly** three-month **light enforcement** period ahead of the **April 1, 2018**, hard enforcement date. It also included data from the **five months** after **hard enforcement** of the mandate began.

For the **pre-enforcement period**, researchers said there was an average of **1,717 truck crashes** a week. That **number** spiked during the soft **enforcement period** (*December 17, 2017, to April 1, 2018*) to **1,912 crashes** a week. After **April 1**, the number **dropped** to an average of **1,703 crashes** per week.

Of note for **smaller carriers**, despite being **more likely** to be hit with an hours of service **violation**, they were less likely to be **involved** in a crash than drivers at **larger carriers**. Independent **owner-operators** averaged 154 crashes a **week** prior to the **ELD** mandate **December 2017** deadline and **160 crashes** after **hard enforcement** began in **April 2018**. Drivers at carriers with **between 101 and 1,000 trucks** averaged **374 crashes** a week before the mandate

and **361 crashes** a week after **hard enforcement** began. Carriers with **1,001 or more** trucks saw their **crash rates** dip slightly, from **244** a week to **240 a week**.

Hours of service violations and truck **crash rates** mostly acted on a **gradient**, according to the numbers. The **smaller** the carrier, the **higher the rate** of hours of service **violations**, especially before the **mandate**. However, the **larger the carrier**, generally, the higher the **crash rate** — an inverse to **hours of service** violations.

Carriers with between **two and six trucks** averaged 242 crashes a week before **ELD enforcement** began and **247 crashes** a week after **hard enforcement** began. Carriers with **seven to 20 trucks** averaged 254 **crashes** prior to the mandate and **261 crashes** a week in the **hard enforcement** period. Carriers with between **21 and 100 trucks** averaged **373 crashes** a week **pre-mandate** and 369 crashes post.

What's more, each of those **segments** (*except for the largest of carriers*) **account** for roughly the **same number** of **power units**, according to data from the **Tucker Company Worldwide**, meaning those **raw weekly** averages aren't **swayed** by an **outsized number** of trucks for any one **segment** (*except for carriers with 500 trucks or more, who account for nearly three times as many power units as the other-size segments*).

Collectively, these numbers do **not point** to any obvious reduction in **accidents** due to the **ELD** mandate, and in some cases suggest a **possible increase** in accidents for those **carriers** most affected by the **mandate**," the researchers **conclude** in the study.

Relative to **unsafe driving infractions** — notably, speeding — hard enforcement of the **ELD** mandate caused the **rate** of infractions to **spike** across all sizes of **fleets**. Researchers **attribute** the increase in **speeding** and other **unsafe driving** violations to drivers attempting to **make up** for productivity **lost** to **ELD** adoption.

For **independent owner-operators**, the weekly average of **unsafe driving** violations jumped to **362** a week in the **hard enforcement period**, up from **268 violations** a week prior to **ELD** enforcement — a **35 percent increase**.

Carriers of **other sizes** also saw increased **violation rates** for unsafe driving, though not nearly as **pronounced** as independent **owner-operators**. For instance, **carriers** with between **101 and 1,000 trucks** saw only a **6 percent increase** in the number of **unsafe driving violations per week** after **hard enforcement** of the **mandate** began. Carriers with more than **1,000 trucks** saw a **12 percent** increase in **unsafe driving violations** after **ELD enforcement** began.

Unsafe driving violations for carriers with **two to six trucks** rose 17.5 percent; **seven to 20 trucks** rose **11 percent**; and 21 to 100 trucks **climbed** 14 percent.

"We find that the **ELD** mandate unequivocally enhanced **HOS compliance**," the researchers write. "However, the **ELD** mandate did not noticeably **improve safety**, and we are able to **produce** no statistically **significant evidence** that **ELD** adoption by the **smaller** firms corresponded to any **reduction in accident rates**."

The **researchers** do note that **ELDs** have shown to be "**correlated with reduced accidents** at larger **firms**," according to research conducted **prior** to the **mandate**.

Despite the **apparent lack** of safety **benefits** of the mandate for the **time period** studied by the **researchers**, they point to **reduced paperwork**, information **availability** to inspectors and carriers and **pressure** on shippers and **receivers** to be more efficient in **cutting delays** for drivers as "**positive aspects**" of the **mandate**.

Collision Avoidance Systems, Sleep Apnea Testing Among NTSB's Most Wanted Safety Improvements

The National Transportation Safety Board recently released its 2019-2020 **Most Wanted List of Transportation Safety Improvements** with six of the 10 items relating to truck drivers and the trucking industry.



Among recommendations that could impact trucking are eliminating distracted driving, eliminating alcohol and drug impairment, implementing a strategy to reduce speeding-related crashes, increasing implementation of collision avoidance systems, reducing fatigue-related accidents, and requiring medical fitness and screening for and treating obstructive sleep apnea.

The NTSB has no regulatory power; however, its job is to recommend to regulators ways to prevent crashes and deadly accidents in all modes of transportation. [The full list of NTSB's 2019-2020 recommendations can be found here.](#)

- **Eliminate distracted driving:** NTSB is recommending that all states add driver distraction codes to traffic accident investigation forms and ban the non-emergency use of portable electronic devices for all drivers, except when using navigation software.

The group also recommends states use high-visibility enforcement to support these bans, as well as using public information campaigns to warn motorists about the use of cell phones and other devices while driving.

NTSB also encourages the development of features that disable phones while a vehicle is in motion.

- **End alcohol and other drug impairment:** NTSB asks the Federal Motor Carrier Safety Administration to give the Board access to all positive drug and alcohol test results and refusal determinations conducted under U.S. DOT testing requirements.

The group also recommends FMCSA determine the prevalence of truck driver use of impairing substances, including synthetic cannabinoids, and develop a plan to reduce their use.

- **Implement a comprehensive strategy to reduce speeding-related crashes:** The group recommends the National Highway Traffic Safety Administration develop standards for speed limiters in trucks and buses and requiring that all newly manufactured trucks and buses are equipped with speed limiters. NTSB also recommends that states pass laws to allow automated speed enforcement.

- **Increase implementation of collision avoidance systems in all highway vehicles:** NTSB recommends NHTSA complete the development and application of performance standards and protocols for forward collision avoidance systems in commercial vehicles, as well as require truck, bus and car manufacturers to install forward collision avoidance systems and automated emergency braking systems.

- **Reduce fatigue-related crashes:** NTSB wants FMCSA to implement a program to identify commercial drivers at higher risk for obstructive sleep apnea (OSA) and require these drivers to provide evidence through the medical certification process that they have been properly evaluated and treated.

The group also wants FMCSA to establish an ongoing program to monitor, evaluate, report on and improve fatigue management programs implemented by fleets.

- **Require medical fitness and screen for and treat OSA:** NTSB says it wants to see mandatory screening and treatment for obstructive sleep apnea for rail and highway personnel in safety-sensitive positions. This includes recommending FMCSA implement a program to identify truckers with OSA and making the 2016 FMCSA Medical Review Board recommendations on screening for OSA easily accessible to medical examiners, and instructing the examiners to use the recommendations as guidance when evaluating for OSA risk.

The DOT was working on a rulemaking to implement sleep apnea screening requirements for truckers, but **FMCSA** withdrew the rulemaking in August 2017.

To Improve Safety Training, Think Like A Teacher



In a matter of **weeks**, the **production season** will ramp up throughout the nation. If your **miners** haven't had their **annual refresher training**, take time to plan for **training** time that pays **dividends** in terms of **safer operations** throughout the **season**. Start by **taking off** your hardhat and **putting on** your **teacher's cap** instead. Review last year's **training** and think about what went well and what **could have gone better**, then adjust **accordingly**.

Begin by **identifying** your goals. What **particular concepts** do you want to **enforce**? Are they specific, such as achieving a **10-percent increase** in the number of miners who **wear seat belts** each day, or broader, such as **implementing best** practices for **fire suppression**? Consider what **citations** your operation may have **received** or what **near misses** may have transpired. These can **inform** your **training topics**.

As you **plan** the **training program**, make sure it is based on **active learning**, which simply means that you **engage miners** throughout the **training**. For example, they aren't **passively listening** or simply taking **notes**. Rather, they are **actively participating** in the training. In the **education field**, research shows that **students retain** about **5 percent** of information when **taught** in a **lecture format**. Retention rates rise to **50 percent** with a discussion **format**, but the holy grail of **education** is practice by **doing**. In this format, students **retain 70 percent** of what they learn. Get your **miners** out of their **chairs** and **actively participating** to achieve the most effective **safety training**.

Then, you need to **assess** what your **miners learned** at the end of the **training** and, equally **importantly**, what they **retain** over time. Provide time during **training** to **assess** if they have **learned** the desired information and **reteach** as needed. Matt Bunner, CSP, CMSP, safety director at **Mulzer Crushed Stone**, says he includes about **5 percent** of the **prior year's training** materials in his **next annual refresher** training. When a miner **calls him** on the **fact** that a certain **question** was used the **year before**, Bunner knows that **workers** weren't just **going through** the motions, they were **truly learning** and retaining the **training**.

Finally, keep your **approach fresh** by incorporating **new approaches**. This doesn't mean that you need to **recreate** the **wheel**. Each fall (*held in October*), the **Mine Safety and Health Administration (MSHA)** hosts its annual **Training Resources Applied to Mining (TRAM)** conference. **Safety professionals** and trainers from throughout the nation meet and **share presentations** and **training ideas**. Take a cue from some of our **safety experts**: Spend a few days at **TRAM** and **exchange ideas** with your peers — **next year's training** will likely be **better** for it.

Most Americans Not Confident About First Aid Skills

A device and a simple technique that can save lives in the event of a health emergency are not within the skill sets of many Americans, according to a recent poll.



The survey found that:

- **63%** of Americans are not confident that they know how to operate an **automated external defibrillator (AED)**
(An automated external defibrillator (AED) is a lightweight, portable device that delivers an electric shock through the chest to the heart.)
- Only **54%** said they know how to perform CPR (Cardiopulmonary resuscitation)
(Cardiopulmonary resuscitation is an emergency procedure that combines chest compressions often with artificial ventilation in an effort to manually preserve intact brain function until further measures are taken to restore spontaneous blood circulation and breathing in a person who is in cardiac arrest.)

When it comes to other basic first aid skills and emergency preparedness, more respondents answered in the affirmative when asked if:

- they know what to do/where to go during a weather-related emergency (e.g., *tornado, hurricane, earthquake*) – **79%**
- they know how to use a fire extinguisher - **78%**
- they know how to administer basic first aid, like bandaging a cut, stopping a nosebleed, using an epinephrine pen or performing the Heimlich maneuver – **75%**

In many emergency situations, prompt, properly administered first aid care can mean the difference between life and death. No matter the size or type of your workplace, first aid and CPR/AED training provides your employees with the certification, confidence and capability to provide immediate critical care during an incident, injury or illness.

Employers are responsible for their company's first aid program. It's important to work with an organization that provides certified, OSHA approved first aid training."

(The survey was conducted online by The Harris Poll, from October 24-26, 2018 among 2,003 U.S. adults ages 18 and older.)

MJS Safety offers Medic First Aid

First Aid/CPR/AED/BLOODBORNE PATHOGENS

**Check our March schedule on [pg 4](#) of this newsletter,
or give us a call for additional information**

CARRIE – 720-203-4948 MIKE – 303-881-2409 JEREMY – 720-203-6325



Using Portable Generators Safely

Portable generators are internal combustion engines used to generate electricity. They are useful when temporary or remote power is needed, and are commonly used during cleanup and recovery efforts following disasters such as hurricanes, tornadoes, etc. This fact sheet discusses specific hazards inherent with the use of generators and also provides helpful information to ensure that workers and others using such equipment remain safe.

Hazards Associated with Generators:

- Shocks and electrocution from improper use of power or accidentally energizing other electrical systems.
- Carbon monoxide from a generator's exhaust.
- Fires from improperly refueling a generator or inappropriately storing the fuel for a generator.
- Noise and vibration hazards.



Shock and Electrocution

The electricity created by generators has the same hazards as normal utility-supplied electricity. It also has some additional hazards because generator users often bypass the safety devices (such as circuit breakers) that are built into electrical systems. The following precautions are provided to reduce shock and electrocution hazards:

- Never attach a generator directly to the electrical system of a structure (home, office, trailer, etc.) unless a qualified electrician has properly installed the generator with a transfer switch. Attaching a generator directly to a building electrical system without a properly installed transfer switch can energize wiring systems for great distances. This creates a risk of electrocution for utility workers and others in the area.
- Always plug electrical appliances directly into the generator using the manufacturer's supplied cords or extension cords that are grounded (3-pronged). Inspect the cords to make sure they are fully intact and not damaged, cut or abraded. Never use frayed or damaged extension cords. Ensure the cords are appropriately rated in watts or amps for the intended use. Do not use underrated cords—replace them with appropriately rated cords that use heavier gauge wires. Do not overload a generator; this can lead to overheating which can create a fire hazard.
- Use ground fault circuit interrupters (GFCIs), especially where electrical equipment is used in or around wet or damp locations. GFCIs shut off power when an electrical current is detected outside normal paths. GFCIs and extension cords with built-in GFCI protection can be purchased at hardware stores, do-it-yourself centers, and other locations that sell electrical equipment. Regardless of GFCI use, electrical equipment used in wet and damp locations must be listed and approved for those conditions.
- Make sure a generator is properly grounded and the grounding connections are tight. Consult the manufacturer's instructions for proper grounding methods.
- Keep a generator dry; do not use it in the rain or wet conditions. If needed, protect a generator with a canopy. Never manipulate a generator's electrical components if you are wet or standing in water.
- Do not use electrical equipment that has been submerged in water. Equipment must be thoroughly dried out and properly evaluated before using. Power off and do not use any electrical equipment that has strange odors or begins smoking.

Carbon Monoxide Poisoning

Carbon monoxide (CO) is a colorless, odorless, toxic gas. Many people have died from CO poisoning because their generator was not adequately ventilated.

- Never use a generator indoors or in enclosed spaces such as garages, crawl spaces, and basements. NOTE: Open windows and doors may NOT prevent CO from building up when a generator is located in an enclosed space.
- Make sure a generator has 3 to 4 feet of clear space on all sides and above it to ensure adequate ventilation.
- Do not use a generator outdoors if its placement near doors, windows, and vents could allow CO to enter and build up in occupied spaces.

- If you or others show symptoms of CO poisoning— dizziness, headaches, nausea, tiredness—get to fresh air immediately and seek medical attention. Do not re-enter the area until it is determined to be safe by trained and properly equipped personnel.

Fire Hazards

- Generators become hot while running and remain hot for long periods after they are stopped. Generator fuels (gasoline, kerosene, etc.) can ignite when spilled on hot engine parts.
- Before refueling, shut down the generator and allow it to cool.
- Gasoline and other generator fuels should be stored and transported in approved containers that are properly designed and marked for their contents, and vented.
- Keep fuel containers away from flame producing and heat generating devices (such as the generator itself, water heaters, cigarettes, lighters, and matches). Do not smoke around fuel containers. Escaping vapors or vapors from spilled materials can travel long distances to ignition sources.
- Do not store generator fuels in your home. Store fuels away from living areas.

Noise and Vibration Hazards

- Generator engines vibrate and create noise. Excessive noise and vibration could cause hearing loss and fatigue that may affect job performance.
- Keep portable generators as far away as possible from work areas and gathering spaces.
- Wear hearing protection if this is not possible.