

TOGETHER WITH TOSHA

Newsletter



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A Message from TOSHA Leadership

As we end one year and begin the next, it is always good to reflect and take some time to ponder how we can make the new year even better. Last year was an enigma due to issues brought forth by the coronavirus. However, given the complexities, TOSHA was able to continue providing services to employers to ensure the safety and health of Tennesseans.

The statistics for 2020 revealed that 51 employees were fatally injured in the workplace, including 10 COVID-19 related deaths; 590 hospitalization/amputations/loss of an eye; and 2,779 complaints with 1,395 (50%) being COVID related. On average in 2020, there was one death per week, one body part amputated every 3 days, and over 400 hospital stays due to workplace incidents. Many of these events had dreadful consequences for the families involved, and in most instances, these accidents could have been prevented.

To improve the safety and health of your employees, try implementing workplace safety and health management systems to effectively reduce injuries, illnesses, and fatalities. Employers that participate in the Volunteer Star (VPP) and SHARP programs have shown that applying basic management systems to safety and health can routinely deliver injury and illness rates 65 to 70 percent below their industry average. For more information about our Volunteer Star and SHARP Programs visit the TOSHA [website](#).

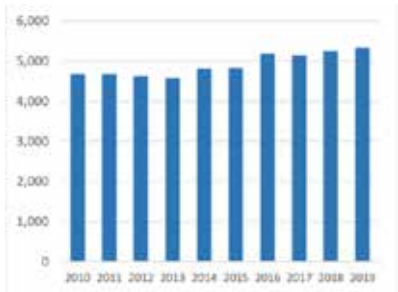


Wendy Fisher
Assistant Commissioner,
TOSHA

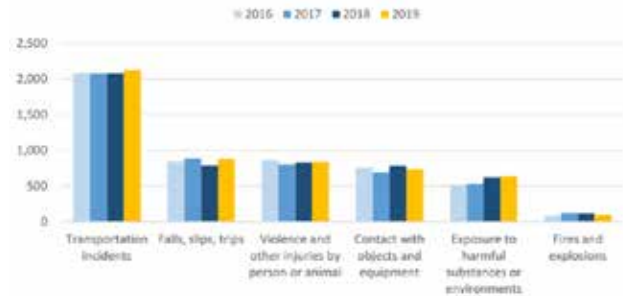
National Census Of Fatal Occupational Injuries In 2019

The Bureau of Labor Statistics recently released its [National Census of Fatal Occupational Injuries in 2019](#). There were 5,333 fatal work injuries recorded in the United States in 2019, a 2 percent increase from the 5,250 in 2018. The fatal work injury rate was 3.5 fatalities per 100,000 full-time equivalent (FTE) workers, which was the rate reported in 2018. These data are from the Census of Fatal Occupational Injuries (CFOI).

Number of fatal work injuries, 2010-2019



Fatal work injuries by major event or exposure, 2016-2019



Transportation incidents increased 2 percent in 2019 to 2,122 cases, the most cases since this series began in 2011. Events involving transportation incidents continued to account for the largest share of fatalities. Falls, slips, and trips increased 11 percent in 2019 to 880. Exposure to harmful substances or environments led to the deaths of 642 workers in 2019, the highest figure since the series began in 2011. Unintentional overdoses due to nonmedical use of drugs or alcohol increased for the seventh consecutive year to 313 in 2019. Fatalities due to fires and explosions decreased 14 percent to 99 in 2019.

2020 TOSHA Investigated Fatality Statistics

January 1st – December 31, 2020

51

Industry Sectors per NAICS Codes

- Manufacturing (31, 32, 33) - 6
- Construction (23) - 14
- Service - 15
- Public Sector - 3
- Arbor / Logging - 2
- Healthcare - 8

Fatality Cause

- Struck by - 9
- Crushed by/Caught in - 8
- Falls - 7
- Electrocution - 9
- Thrown From/Overturnd Vehicle - 1
- Chemical Exposure - 3
- Other - 4
- COVID - 10

Fatality Totals per Quarter



*The 2020 statistics may change due to findings during the TOSHA investigation.

Fatality Review Summary #1482454

A **60-year-old male** employee died after a positive diagnosis of COVID-19. The victim was hospitalized with a confirmed case of COVID-19 and subsequently died during his hospitalization. The TOSHA inspection found that he was 1 of 49 employees of the facility who tested positive for COVID-19 between April 17, 2020, and August 5, 2020.

The victim worked as a CNA in one of the red zones at the rehab center in May 2020. Red zones are areas where residents with confirmed positive cases of COVID-19 were housed to reduce the risk of spread between the residents. He had scheduled vacation time for June so his last day working at the facility was May 29. During a conversation with his daughter, she informed the CSHO that the victim came home from work feeling ill on May 29 but that neither he nor his family believed the illness to be COVID-19. During his vacation time, his symptoms progressively worsened and on June 8 his wife took him to be tested. By June 10, he had not received his results back, so he went to American Family Care to take a rapid test.

The rapid test results indicated he was positive for COVID-19. When the family received the initial results from June 8, they also indicated he was positive.

On June 11, he was admitted into Southern Hills Hospital. According to his family, on June 23, Southern Hills had him transferred to Centennial Hospital where he passed on July 7.

During the inspection, contact was made with several members of the Tennessee Department of Health and Metro Nashville Public Health Department who worked in and with the facility in relation to the facility's response to the COVID-19 pandemic. During conference calls with both departments, it was stated they reviewed the facility's response to COVID-19 as well as performed contact tracing. According to an epidemiologist with the Metro Nashville Public Health Department, the contact tracing records indicated that several employees who tested positive for COVID-19 believed their diagnosis to be work-related. This was also determined during our discussions with positive employees.

In addition, the TN Department of Health indicated that the facility did not appear to respond to the COVID-19 pandemic with appropriate cleaning and disinfecting procedures, adequate training on the use of personal protective equipment, or adequate training on hand hygiene. The Department of Health indicated that many similar facilities were not equipped to handle the COVID-19 pandemic.

COVID-19 Emergency Temporary Standard

On inauguration day, President Biden signed an [executive order](#) recommending that OSHA consider the necessity for implementing an emergency temporary standard (ETS) to protect employee health from the risks associated with exposure to COVID-19. At this time, it is unclear what such a standard would look like. It can be expected to resemble the standards implemented by state plans such as [Virginia](#), however, this is speculation. If an ETS is published in the Federal Register, it will take effect immediately in states under Federal OSHA's jurisdiction. State Plans, such as Tennessee, will likely be required to adopt or promulgate an identical or substantially similar standard. Your best source for current information regarding such a standard, if adopted, will be at www.tnosha.gov.

To read what others have speculated, you may wish to read [this article](#).

COVID-19 Response Summary



OSHA maintains an up-to-date [COVID-19 Response Summary webpage](#) containing data regarding COVID-19 inspections, complaints, referrals, closed cases, and outreach activities. To see the summary click [here](#).

Can My Employer Require A Covid-19 Vaccine?



You may be wondering, can my employer require COVID-19 vaccines? It is believed that most organizations are contemplating whether to mandate vaccinations for their employees. Experts say that mandating vaccinations may allow some companies to reopen safely, but it's complicated. TOSHA has no rule or standard that requires an employee to take a COVID-19 vaccine.

Now is the time for employers to create a plan and educate employees on expectations. Employers may wish to review the opinions in articles such as [“Can Employers Require Workers To Get The COVID-19 Vaccine? One Expert Says It’s Complicated”](#) and [“Employers deciding if they’ll require COVID-19 vaccines”](#) and [“Covid-19 vaccines are here: What that means for employers”](#) when considering the COVID-19 vaccine as a condition of employment. For more information, visit the [FAQ about COVID-19 Vaccination page](#) on the CDC website.

Free Printed COVID Publications

Free printed copies of posters and guidance booklets on protecting workers from the coronavirus can be ordered from [OSHA’s publications page](#).

Crane Standard Reminder

Reminder: OSHA Standard 29 CFR 1926.1427 requires crane operators to be certified by a nationally recognized accrediting agency. Tennessee OSHA compliance officers are currently enforcing this standard and citations have been issued.

OSHA Standard 29 CFR 1926.1427 can be found [here](#).

A current list of acceptable accrediting agencies can be found [here](#).

TSHC Save the Date

June 30 – July 2, 2021



Due to the current pandemic, the TSHC board members are exploring options for this year’s TN Safety & Health Conference. The conference is scheduled earlier this year than years past, so please save-the-date and plan to join us on **June 30 – July 2, 2021**. This year’s conference may look different as we are currently preparing for a possible virtual conference. Registration will open soon so continue checking the TN Safety & Health Conference [website](#) for more developments.

Volunteer STAR News



Successful Volunteer STAR recertifications were recently conducted at Evergreen Packaging-Royal Blue Chip Mill in Pioneer, Manufacturing Sciences Corporation in Oak Ridge and Valero Refinery in Memphis.

The Volunteer STAR is patterned after the OSHA Voluntary Protection Program and recognizes the best of the best in the area of safety and health programming and performance. Qualified candidates must demonstrate that they have performed in a manner that is below the national average for injury and illness rates in their industrial classification. They must also have all of the critical safety and health management system components in place and involve their employees in a manner that ensures total involvement in safety and health issues. Volunteer STAR is open to all manufacturers (NAICS codes 20 – 39). Programs must be in place for at least a year, prior to evaluation.

On average for 2019 the Tennessee Volunteer STAR sites experience three-year Total Case Incident Rates (TCIR) 61% below their industry average and three-year Days Away, Restricted or Transferred Case Rates (DART) 60% below their industry average. In 2019 there were thirteen (13) sites that experienced a TCIR of 0.0 and there were nineteen (19) sites that experienced a DART of 0.

For more information on Volunteer STAR contact the VPP Manager at (800) 325-9901.

SHARP Update

TOSHA Consultative Services recertified and recognized two SHARP sites in Tennessee in late 2020. SHARP activity has continued at limited basis during the Covid-19 using remote technology for opening and closing conferences, document review and interviews as appropriate and with safety protocols for the onsite activity to protect both the site's and TOSHA's staff.

Rolled Metal Products South of Lebanon was recognized on September 14, 2020. Program Manager Garrett Rea presented a flag and bar to Dan Milas, General Manager. Rolled Metal Products South is a steel service center specializing in stainless steel for industries such as appliances, automotive and cookware. Larger coils are slit and cut for their customers based on their specifications and needs. The site has 26 employees and had no recordable incidents in 2019. This was the first recertification; the site was originally recognized in April of 2018.

American Colloid Company, A Minerals Technologies Company of Chattanooga, was recognized on October 13, 2020. Program Manager Garrett Rea presented a flag and



bar to Tim Harris, Plant Manager. American Colloid is a supplier of clay and mineral-based materials to the steel and iron foundry industry. Raw materials are custom blended based on a customer's needs. This site has seven employees and has not experienced a recordable incident since 2016 which is commendable. This was the fourth recertification for the site since the site was first recognized as a SHARP site in August of 2009.

There are currently sixteen recognized SHARP sites in Tennessee and potential new sites continue to express interest in this program. SHARP is a nationwide recognition program for smaller employers who have effective safety and health programs and incident rates below industry averages. For more information on the program, please contact TOSHA Consultative Services at (800) 325-9901.

Winter Weather Hazards



You don't want to get caught unprepared when winter weather strikes. OSHA maintains a [Winter Weather Hazards webpage](#) to help you plan, prepare and respond to winter weather hazards. Although OSHA does not have a specific standard that covers working in cold environments, under the Occupational Safety and Health Act (OSH Act) of 1970, employers have a duty to protect workers from recognized hazards, including cold stress hazards, that are causing or likely to cause death or serious physical harm in the workplace.

Carbon Dioxide Safety

In late 2020 pharmaceutical companies began shipping doses of the COVID 19 vaccine across the country. Due to the significant need for refrigeration, frozen carbon dioxide ("dry ice") has been utilized to ship and store the limited amount of vaccine available. However, there are some hazards associated with dry ice that employers should be aware of as this hazardous chemical enters the workplace.

The most obvious hazard is exposure to extreme cold, which may lead to burns of the skin or frostbite if mishandled. Lesser-known as the dry ice sublimates (changes phase directly from solid to vapor), it can displace oxygen from the room, creating an asphyxiation hazard.

If your workplace is using dry ice as part of the vaccination effort, take the time to train your staff on this chemical's hazards. Ensure they understand measures they must take to protect themselves. In support of this effort, TOSHA has posted a [hazard alert](#) on our website and you may view the alert on page 6 of this newsletter. Should you have questions, please call our office at 800-249-8510.

OSHA Safety Tip

Never operate a machine without proper safeguards. For more information click [here](#).

TOSHA HAZARD ALERT



DRY ICE

- What is Dry Ice
- What are the Hazards
- Proper Storage
- PPE
- Training
- TN Fatality

What is Dry Ice

Dry ice is the solid form of carbon dioxide (CO₂) which converts directly to carbon dioxide gas at -78°C (-109°F). Carbon dioxide gas is a colorless, odorless gas. Typically found in flakes, pellets, or block form, dry ice is commonly used by pharma distributors, hospitals, and other healthcare facilities to ship and maintain pharmaceuticals at their appropriate temperature.

What are the Hazards

- Dry ice is an extremely cold solid which may cause burns to the skin or frostbite.
- Dry ice will sublime (change from solid to gas) at any temperature above -109 °F. This releases potentially substantial volumes of CO₂ (1 pound solid is approximately 250 liters gas), which can displace oxygen quickly in the air around the dry ice. This can create an asphyxiation hazard; causing dizziness, headaches, difficulty breathing, loss of consciousness and death.
- When dry ice sublimates, the outgassing may also cause hypercapnia, elevated carbon dioxide levels present in blood.
- Due to the rapid emission of large volumes of CO₂ gas, dry ice stored in a sealed container can pressurize the container. Given enough time at normal room temperature, such a container may rupture if the gas is not able to escape.
- TOSHA's permissible exposure limit (PEL) is 10,000 ppm (18,000 mg/m³) and the short term exposure limit (STEL) is 30,000 ppm (54,000 mg/m³).

Proper Storage

- Dry ice should always be stored in well-ventilated locations.
- Dry ice should be stored in insulated, ventilated storage areas, chests, insulated coolers, or specially designed coolers for dry ice.
- Never store dry ice in tightly sealed containers that would prevent CO₂ from venting.
- Do not store in a confined space, walk-in cooler, refrigerator, environmental chambers, or rooms without ventilation.

Personal Protective Equipment (PPE)

- Wear appropriate eye protection, including goggles and/or a face shield.
- Wear loose-fitting thermally insulated gloves (e.g., leather or cloth) to manually handle dry ice.
- Never handle dry ice with bare hands.
- Inspect gloves thoroughly prior to each use.
- Protective clothing such as long-sleeved shirts, lab coats, or aprons may be necessary to prevent skin exposure.

Training

- Employers must train employees to use the appropriate personal protective equipment (PPE) according to 29 CFR 1910.132.
- Training for PPE shall be repeated when the workplace changes, the type of PPE changes, or when inadequacies in employees' knowledge or use occur.
- Employers must train employees on the hazards associated with dry ice in accordance with the Hazard Communication Standard, 29 CFR 1910.1200 and the TN Right-To-Know law, TDLWD Rule 0800-01-09. Training must include an explanation of labels received on shipped containers, the workplace labeling system, and the safety data sheet, including the order of information and how employees can obtain and use the appropriate hazard information.
- Training for hazard communication shall be repeated annually, per the TN Right-To-Know Law.

Fatal Facts: Asphyxiation Fatality



A 47-year-old co-owner of a restaurant business died when he became locked in a walk-in cooler containing a large amount of dry ice. Electrical power on a Friday evening was lost to the building complex where the business was located. Between 400 and 500 pounds of dry ice was purchased to prevent the loss of food in the cooler. The dry ice was placed in the cooler around midnight. On Sunday afternoon, the electrical power was restored to the building and the victim entered the business Sunday night to determine if the food had been saved. When he entered the walk-in cooler, the door closed behind him and locked. The inside lock-release mechanism was broken and had been missing for an extended period of time. The hole in which the release shaft should have been located was filled with putty to prevent loss of cold air; the release mechanism was on a shelf outside the cooler. The victim was unable to exit the cooler and was discovered on Monday morning. He had succumbed to the high levels of carbon dioxide in the cooler from sublimation of the dry ice.

Contact Information:

TOSHA Main Office
Phone: (800) 249-8510
www.tnosh.gov

TOSHA Consultation
Phone: (800) 325-9901
TOSHA.Consultation@tn.gov



Tennessee
Safety & Health Conference

June 30-July 2, 2021

COVID-19 Resources:

TOSHA's COVID-19 Website

OSHA's COVID-19 Website

Reminder: March 2, 2021, is the deadline for electronically reporting your OSHA Form 300A data for calendar year 2020.

Tennessee Pledge

Reopening Tennessee Responsibly

The "Tennessee Pledge" is a plan to help Tennesseans return to work in a safe environment, restore their livelihoods and reboot our state's economy.

**2021 January - July
TOSHA Seminar
Schedule**



Hoist/Rigging - This half day class will review recordkeeping requirements, maintenance of the OSHA 500 log, reporting & electronic scanning requirements.

01/20 - Virtual - TCCI
02/25 - Virtual - TCCI
03/15 - Virtual - TCCI
05/05 - Murfreesboro (Hybrid) - TCCI

Maintenance Related Standards - This full day class will review the most cited standards in general industry, lockout / tag-out (LOTO), machine guarding, electrical, confined spaces, housekeeping, egress routes, emergency procedures, fire safety, compressed gas safety & health hazards.

02/03-04 - Virtual - TCCI
03/16-17 - Virtual - TCCI

Basic Safety and Health - This two 1/2 day class will review Exit Routes, Emergency Action and Fire Prevention Plans; Machine Guarding, Lockout/Tag-out, Hazard Communication, Personal Protective Equipment, and Respiratory Protection.

01/27-28 - Virtual - TCCI
02/17-18 - Virtual - TCCI
05/12 - Knoxville - TCCI

Walking, Working Surfaces - This half day class will review the changes to subparts D & I of 29 CFR 1910.

02/10 - Virtual - TCCI
03/12 - Virtual - TCCI
03/23 - Virtual - TCCI

Powered Industrial Trucks (Forklifts) - This half day class will cover hazards associated with forklifts in the workplace. The standard 29 CFR 1910.178 will be reviewed.

03/03 - Virtual - TCCI
03/25 - Murfreesboro (Hybrid) - TCCI

OSHA 30 Hour for General Industry - This four day course emphasizes the identification, avoidance, control & prevention of safety & health hazards present in general industry. The training helps to ensure that workers are more knowledgeable about workplace hazards and their rights. An OSHA 30 Hour card is achieved after completion of the course.

05/17-20 - Murfreesboro - TCCI

Basic Safety for Utilities - This full day class will review confined spaces, trenching & excavation, personal protective equipment (PPE), walking working surfaces, lockout / tag-out (LOTO), electrical, & the most cited standards in utilities.

07/13 - Lenoir City - TAJD

For general information and registration, please contact the co-sponsor listed below.

TCCI - <http://tccinc.com> (818) 266-6141

TAJD - http://www.tajd.org/Training/DetailPage.aspx?Item_Aid (813) 906-1000

Agency Links

OSHA

Tennessee's Government Website

Tennessee Department of Labor & Workforce Development

Tennessee Occupational Safety & Health Administration (TOSHA)

Useful Links

File a Complaint

Video Library

TOSHA Publications

Safety & Health Conference

Recognition Links

TOSHA Safety Awards

VPP

SHARP

The Tennessee Department of Labor and Workforce Development is committed to principles of equal opportunity, equal access, and affirmative action. Auxiliary aids and services are available upon request to individuals with disabilities.



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