

TOGETHER WITH TOSHA



Department of
**Labor & Workforce
Development**

TOSHA

Spring 2016

Final Rule to Improve Workers' Protection from the Dangers of 'Respirable' Silica Dust

The Occupational Safety and Health Administration has announced a final rule to improve protections for workers exposed to respirable silica dust. The rule will curb lung cancer, silicosis, chronic obstructive pulmonary disease and kidney disease in America's workers by limiting their exposure to respirable crystalline silica.

"This rule will save lives," said U.S. Secretary of Labor Thomas E. Perez. "It will enable workers to earn a living without sacrificing their health. It builds upon decades of research and a lengthy stakeholder engagement process – including the consideration of thousands of public comments – to finally give workers the kind of protection they deserve."

OSHA estimates that when the final rule on Occupational Exposure to Respirable Crystalline Silica becomes fully effective, it will save more than 600 lives annually and prevent more than 900 new cases of silicosis – an incurable and progressive disease – each year. The agency also estimates the final rule will provide net benefits of about \$7.7 billion per year.

About 2.3 million men and women face exposure to respirable

crystalline silica in their workplaces, including two million construction workers who drill and cut silica-containing materials such as concrete and stone, and 300,000 workers in operations such as brick manufacturing, foundries and hydraulic fracturing. The final rule will improve worker protection by:

- Reducing the permissible exposure limit for crystalline silica to 50 micrograms per cubic meter of air, averaged over an eight-hour shift.
- Requiring employers to use engineering controls (such as water or ventilation) and work practices to limit worker exposure; provide respiratory protection when controls are not able to limit exposures to the permissible level; limit access to high exposure areas; train workers; and provide medical exams to highly exposed workers.
- Providing greater certainty and ease of compliance to construction employers – including many small employers – by including a table of specified controls they can follow to be in compliance,
- without having to monitor exposures.
- Staggering compliance dates to ensure employers have sufficient time to meet the requirements, e.g., extra time for the hydraulic fracturing (fracking) industry to install new engineering controls and for all general industry employers to offer medical surveillance to employees exposed between the PEL and 50 micrograms per cubic meter and the action level of 25 micrograms per cubic meter.

The final rule is written as two standards, one for construction and one for general industry and maritime. Employers covered by the construction standard have until June 23, 2017, to comply with most requirements. Employers covered by the general industry and maritime standard have until June 23, 2018, to comply with most requirements; additional time is provided to offer medical exams to some workers and for hydraulic fracturing employers to install dust controls to meet the new exposure limit. More information is available [here](#).

Winter 2016

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I encourage you to attend this year's Tennessee Safety and Health Congress to be held again at the Gaylord Opryland Convention Center July 17-20. A new feature this year is a pre-conference workshop, "The Worst Plant - A Virtual S&H Audit." This workshop was held last year at the Tennessee Valley Section AIHA Fall Conference in Knoxville and was very well received. This is an excellent opportunity for people in the field of workplace safety and health to gain valuable knowledge

and sharpen their skills.

Please see the section in this newsletter about the importance of acclimating workers to the heat. Heat stress is a very real hazard in Tennessee during the summer months. It's crucial for both employers and employees to be aware of the symptoms of heat stress and preventative measures to take.

Tennessee OSHA is one of many co-sponsors of the Tennessee Construction Safety Stand Down. This year's Stand Down topic will be "Pay Safety Forward," and will be held on June 13, at 7:00 am. Please take the time on your job sites to participate in this event.

Finally, Tennessee OSHA is working with the Tennessee Department of Health to develop and disseminate information on the Zika Virus threat specific to Tennessee. A fact sheet with additional information and links can be found in this newsletter.

- Steve Hawkins, TOSHA Administrator

The Tennessee Safety and Health Congress will be offering a pre-conference workshop on Sunday, July 17, 2016, from 12:30 to 4:30 pm. The cost of the workshop is \$99.00.

"The Worst Plant - A Virtual H&S Audit"

This interactive presentation will take attendees through a virtual tour of "the worst plant in the world"... an assemblage of digital photographs of various compliance issues noted during the speakers' 75+ years of regulatory audits and assessments. As photos are shown, the instructors will discuss various issues noted and where they might be found in the TOSHA regulations. In addition, instructors will provide case histories that backup select photos. The full-range of OHS topics will be covered, from abrasive wheels to Subpart Z. [Click here to register.](#)



TENNESSEE SAFETY &
HEALTH CONGRESS

Gaylord Opryland Hotel

Nashville, TN

Educating, Innovating, Motivating

July 17-20, 2016

The 39th Annual Tennessee Safety & Health Congress will be held July 17th-20th, 2016, at Gaylord Opryland Convention Center. Since 1977, the Congress has been a joint venture between the Tennessee Occupational Safety and Health Administration (TOSHA) and the American Society of Safety Engineers (ASSE). The Congress offers a series of educational seminars to help employers and employees improve workplace safety and health, learn more about the latest trends, equipment, best practices, and network with peers. Registration is now open [click here](#).

Please make sure you follow us on social media for all the latest updates about the TSHC and for information on vendors, safety tips, etc. (Click on the images below to go to our various pages.)



Pay Safety Forward: Tennessee Stand Down June 13th!



Tennessee OSHA is partnering with several trade associations to promote a statewide "Pay Safety Forward" Construction Safety Stand Down. The event is scheduled to take place June 13, at 7:00 am. This event will emphasize the importance of the team work that goes into building a positive safety and health culture at the job site. Last year, more than 20,000 employees across the state participated in the "Health Hazards Stand Down!"

To register to be a part of this year's event please check with your trade association or fill out the [registration form](#) and email it to Tina.Kline-Douglas@tn.gov.

Heat Illness in Outdoor Workers

Employers should establish a complete heat illness prevention program to prevent heat illness. This includes: provide workers with water, rest and shade; gradually increase workloads and allow more frequent breaks for new workers or workers who have been away for a week or more to build a tolerance for working in the heat (acclimatization); modify work schedules as necessary; plan for emergencies and train workers about the symptoms of heat-related illnesses and their prevention; and monitor workers for signs of illness.



Some of the heat disorders/health effects that are possible from heat overexposure are heat stroke, heat exhaustion, heat cramps, rashes, and fatigue.

Acclimatize workers by exposing them to work in a hot environment for progressively longer periods. NIOSH (1986) suggests that workers who have had previous experience in jobs where heat levels are high enough to produce heat stress may acclimatize with a regimen of 50% exposure on day one, 60% on day two, 80% on day three, and 100% on day four. For new workers who will be similarly exposed, the regimen should be 20% on day one, with a 20% increase in exposure each additional day.

Replace Fluids by providing cool (50°-60°F) water or any cool liquid (except alcoholic beverages) to workers and encourage them to drink small amounts frequently, e.g., one cup every 20 minutes. Ample supplies of liquids should be placed close to the work area. Although some commercial replacement drinks contain salt, this is not necessary for acclimatized individuals because most people add enough salt to their summer diets.

Reduce the physical demands by reducing physical exertion such as excessive lifting, climbing, or digging with heavy objects. Spread the work over more individuals, use relief workers or assign extra workers. Provide external pacing to minimize overexertion.

Provide recovery areas such as air-conditioned enclosures and rooms and provide intermittent rest periods with water breaks.

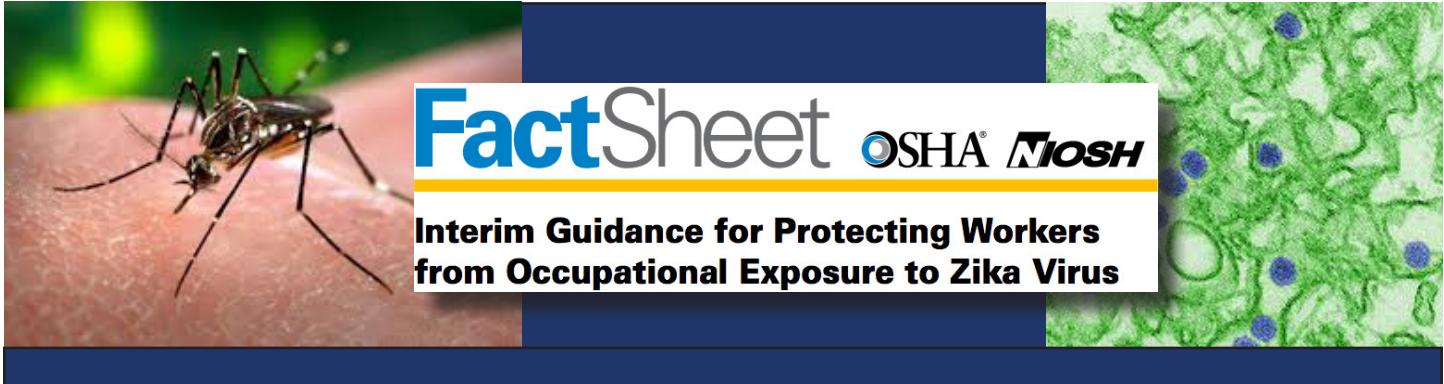
Reschedule hot jobs for the cooler part of the day, and routine maintenance and repair work in hot areas should be scheduled for the cooler seasons of the year.

Monitor workers who are at risk of heat stress, such as those wearing semi-permeable or impermeable clothing when the temperature exceeds 70°F, while working at high metabolic loads (greater than 500 kcal/hour). Personal monitoring can be done by checking the heart rate, recovery heart rate, oral temperature, or extent of body water loss.

For training, educational resources, and additional information [click here](#).



WATER. REST. SHADE.
The work can't get done without them.



The Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) are monitoring the Zika virus outbreak spreading through Central and South America, Mexico, and parts of the Caribbean, including U.S. territories. For the most up-to-date information, check the Centers for Disease Control and Prevention (CDC) Zika website frequently. Some U.S. states have mosquitoes that can become infected with and spread Zika virus, and travel-associated Zika virus infections in U.S. states may result in local spread of the virus. Workers who are exposed on the job to mosquitoes or the blood or other body fluids of infected individuals may be at risk for occupationally acquired Zika virus infection.

Zika Virus Infection in Humans

Current science-based evidence suggests that approximately one out of five infected people develops symptoms of Zika virus, usually beginning 2-7 days after the bite of an infected mosquito. Symptoms are usually mild and can last 2-7 days. The most common symptoms of Zika virus infection are fever, rash, joint pain and red or pink eyes. Other symptoms include myalgia (muscle pain) and headache. These symptoms are similar to those of dengue fever or chikungunya. Neurological and autoimmune complications are infrequent but have been described in outbreaks in Polynesia and, more recently, Brazil.

Recommendations for Employers

- Provide workers with, and encourage them to wear, clothing that covers their hands, arms, legs, and other exposed skin. Consider providing workers with hats with mosquito netting to protect the face and neck.
- Get rid of sources of standing water (e.g., tires, buckets, cans, bottles, barrels) whenever possible to reduce or eliminate mosquito breeding areas. Train workers about the importance of eliminating areas where mosquitos can breed at the worksite.
- If requested by a worker, consider reassigning anyone who indicates she is or may become pregnant, or who is male and has a sexual partner who is or may become pregnant, to indoor tasks to reduce their risk of mosquito bites.

Recommendations for Employees

- Use insect repellents.
- Wear clothing that covers hands, arms, legs, and other exposed skin. Wear hats with mosquito netting to protect the face and neck. Wear socks that cover the ankles and lower legs.
- In warm weather, wear lightweight, loose-fitting clothing. This type of clothing protects workers against the sun's harmful rays and provides a barrier to mosquitoes. Drink plenty of water, take rest breaks in shaded areas, and watch for signs and symptoms of heat illness, including in coworkers.
- Get rid of sources of standing water (e.g., tires, buckets, cans, bottles, barrels) whenever possible to reduce or eliminate mosquito breeding areas.
- Talk to your supervisor(s) about any outdoor work assignment(s) if you are or may become pregnant, or, for males, if your sexual partner is or may become pregnant. Such workers should be familiar with CDC information on Zika virus and pregnancy.
- If symptoms develop, seek medical attention promptly. Discuss any possible exposure to mosquitoes or infections spread by mosquitoes with a healthcare provider.

Additional Resources: [OSHA Fact Sheet](#), [Help Control Mosquitoes that Spread Dengue, Chikungunya, and Zika Viruses \(Spanish Version\)](#), [Fact Sheet Mosquito Bite Prevention \(Spanish Version\)](#), [Protect Yourself from Mosquito Bites](#), [Protect Your Pregnancy](#), and [Tennessee Department of Health](#).

Evaluation: First Year of OSHA Injury Reporting Requirement Helps Agency Engage with Employers and Focus Resources Where Needed

Since Feb. 24, 2015, employers have been required to report all severe work-related injuries (defined as admission to the hospital, amputation or loss of an eye) within 24 hours. The requirement to report a fatality within 8 hours was unchanged. During the first full year the new injury reporting requirement has been in effect, employers reported 454 severe injuries, including 339 reports hospitalizations and 139 reports of amputations.

In the majority of cases, TOSHA asked employers to conduct their own incident investigations and take corrective action to prevent future injuries. TOSHA provided employers with guidance materials to assist them in this process. Known as a Rapid Response Investigation (RRI), this collaborative, problem-solving approach allows the employer and a TOSHA safety specialist or industrial hygienist to work together to eliminate hazards and improve overall workplace safety and health. At other times, the agency determined that the hazards described warranted a worksite inspection. TOSHA prefers employers report these events using the [online reporting tool](#).

Severe Injury Reports		
2/24/15 to 02/24/16		
Injury types	RRI	Inspection
All Types	69.9%	30.1%
Amputation	51.8%	48.2%
Hospitalization	75.7%	24.3%

"The rapid response investigation has proven to be a valuable tool. Most employers want to correct hazards quickly and effectively. Working directly with TOSHA staff helps improve workplace safety and health and is less resource intensive", said Steve Hawksins, TOSHA Administrator.

OSHA Updates Eye and Face Protection Standards in Final Rule

The Occupational Safety and Health Administration has published a [final rule](#) that updates requirements for personal protective equipment for workers in general industry, shipyards, longshoring, marine terminals and construction. The final rule reflects current national consensus standards, and ensures that workers can use up-to-date eye and face protection.

The rule updates references in OSHA's Eye and Face Protection Standards to recognize the ANSI/ISEA Z87.1-2010, Occupational and Educational Personal Eye and Face Protection Devices, while deleting the outdated 1986 edition of that same national consensus standard. OSHA is also retaining the 2003 and 1989 (R-1998) versions of the ANSI standard already referenced in its standard.

In addition, the final rule updates the construction standard by deleting the 1968 version of the ANSI standard that was referenced and now includes the same three ANSI standards referenced above to ensure consistency among the agency's standards. OSHA's final rule became effective on April 25, 2016.



VPP Best Practices: Bear Creek Operations

Since 2008 EnergySolutions Bear Creek Operations (BCO) in Oak Ridge, TN has engaged in a number of Human Performance Improvement (HPI) initiatives. In 2015 the BCO HPI committee looked for different options to further engage the workforce and encourage their active participation in promoting the HPI culture with the goal of improving safety, performance and quality.

One method proposed to communicate the HPI fundamental tools was the production of short videos that could be aired during shift turnover meetings on a weekly basis. This avenue would not only commu-

nicate various HPI, safety & quality topics, but would also require the active participation of selected employees to be featured in the videos.

By midyear 2015, "Bear Creek Productions" was formed by the HPI committee to direct, edit, produce and distribute informational videos for the site. By September, the introductory "Tool Time Tuesday" HPI/Safety video aired across the site using "The Marlin Company" service TVs installed in each break area. Engaging the workforce to become an active participant on the production of these videos is one of the elements of employee involvement in the hu-

man performance program.

During 2016 each work group, committee and department will be participate in two "Tool Time Tuesday" videos. As an added incentive, at the end of the year the HPI committee will vote on the year's best video and give a "Grizzly" award (mascot) to the participant(s) at the annual all-hands meeting. The BCO HPI committee continues to look for even more opportunities to effectively communicate and involve each BCO employee in the performance improvement process.



VPP Update

On April 26th, Commissioner Burns Phillips presented the employees of Lucite International in Millington with their Volunteer STAR Award as part of the site's third certification effort. The site received their first certification in 2006. The 175 employees at the site manufacture Lucite sheeting.

On May 5th, Commissioner Phillips granted initial Volunteer STAR status to Marathon Petroleum-Nashville Asphalt Terminal in Nashville, making them the 38th Volunteer STAR site. The plant manufactures a variety of asphalt mixtures used in the construction of roadways and is also a bulk storage facility for Asphalt. The 21 employees at the facility have also worked for over 132,000 hours, since 2012, without a reportable injury.



Online Resources Available to Prevent Aerial Lift Injuries and Fatalities

While aerial lifts are used frequently at construction, warehousing, and many other jobsites, they can pose potentially fatal hazards to workers. Aerial devices include boom-supported aerial platforms, such as cherry pickers or bucket trucks, aerial ladders and vertical towers.

The major causes of injuries and fatalities are falls, electrocutions, and collapses or tip-overs due to the lift positioned on unleveled ground.

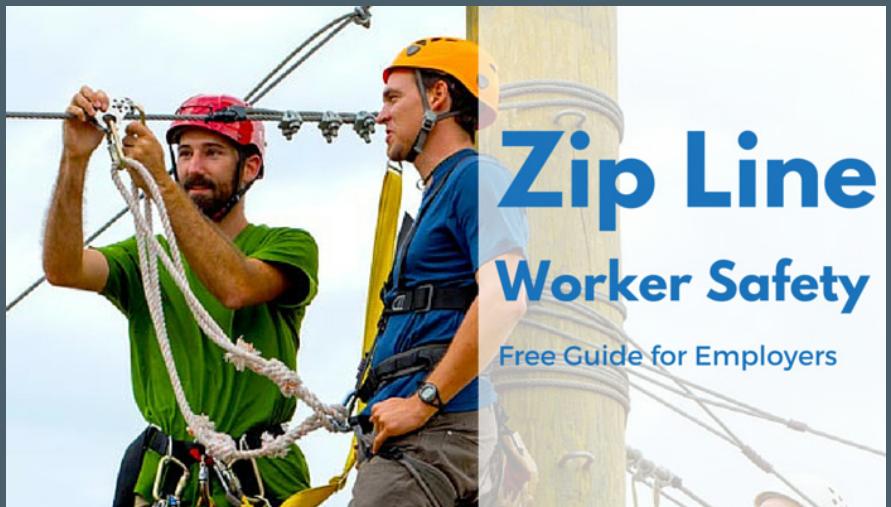
Learn about the fall-related risks and recommended safe work practices associated with this equipment by visiting the [new NIOSH Aerial Lifts webpage](#). The page includes a Hazard Recognition Simulator designed to help you acclimate to aerial lift operation. Additional [resources on aerial lift safety](#) are available from OSHA.



New Pamphlet Available on Protecting Zip-Line Workers

A [new pamphlet](#) explaining methods and training employers should use to protect workers engaged in the operation of zip-lines has been published by OSHA. Tennessee OSHA has investigated two incidents in which workers received serious injuries. Zip-line activities can be found at places such as parks, summer camps, amusement parks and resorts.

Zip-line workers may be injured or killed by hazards such as falls, colliding with riders and getting entangled in ropes or caught in rotating parts.



Bulletin Board

To view the
2014 Census
of Fatal
Occupational
Injuries click
here.

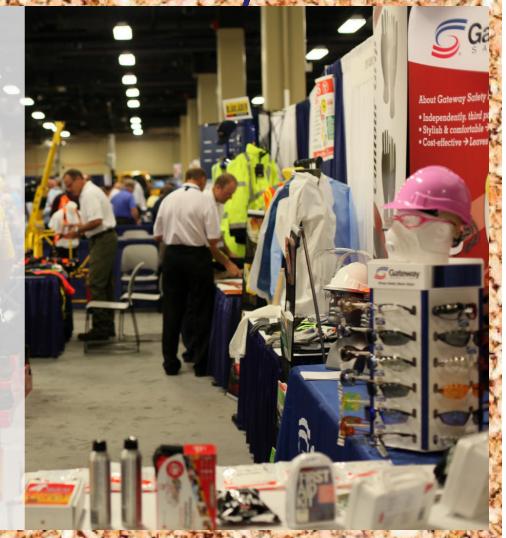
TN Department of
Labor & Workforce
Development

2014 TENNESSEE
Census of Fatal
Occupational
Injuries

The Occupational Injuries
and Deaths Survey

Prepared by the Tennessee Department of Labor & Workforce Development Labor Research & Statistics Bureau
with the U.S. Department of Labor Bureau of Labor Statistics

Tennessee Safety Stand Down!
Pay Safety Forward!
June 13, 7:00 am
Stand with us! To register e-mail
Tina.Kline-Douglas@tn.gov



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 Congress](#)

Recognition Links

[TOSHA Safety Awards](#)

[VPP](#)

[SHARP](#)



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