

Safety Lines

Teens in the workplace: Pay extra attention to young worker safety, health

By Dave Ferkul, Minnesota OSHA Workplace Safety Consultation Supervisor

Thousands of teen workers enter the workforce each year. For many, it is their first experience with work and they may be unfamiliar with their rights and responsibilities under existing labor laws and Minnesota Occupational Safety and Health Administration (MNOSHA) safety and health standards.

In Minnesota, all workers have the right to a workplace free of recognized hazards that could result in injury or illness. To promote worker safety and health, employers must:

- maintain a clean, organized work area;
- provide and maintain necessary machine safeguards and personal protective equipment;
- provide adequate job orientation and training; and
- provide adequate supervision.

Actively preventing occupational injuries and illnesses is not only value-added for the business, but also sets a good example for young workers, who may not otherwise think much about their personal safety when they are working. Supporting efforts to reduce workplace injuries and illnesses among young workers can help guide them to a successful and rewarding work experience that carries over throughout their adult careers.



Young workers more susceptible to workplace accidents

Those who are inexperienced in the workplace may be more susceptible to workplace accidents due to:

- an unfamiliarity with the work and a lack of adequate job orientation and training;
- feeling pressure to accept the job they are assigned;
- doing whatever is asked of them;
- working faster than they are truly able;
- inadequate supervision;
- inappropriate expectations about how the work will be performed;
- hazardous equipment and work environments; and
- being assigned work that is not age or skill-level appropriate.



Resources

- Minnesota Department of Labor and Industry (DLI) labor law information and resources for teens, parents and employers – www.dli.mn.gov/LS/TeenWorkers.asp
- DLI's "Youth rules for kids at work" flyer – www.dli.mn.gov/LS/Pdf/youthrules.pdf (print, post, distribute)
- MNOSHA Compliance's "Safety hazard alert – Grain bins" – www.dli.mn.gov/OSHA/Pdf/hazalert_grainbins.pdf
- MNOSHA Workplace Safety Consultation's free on-site consultation services – www.dli.mn.gov/Wsc.asp
- Federal OSHA resources for young workers – www.osha.gov/youngworkers
- Centers for Disease Control and Prevention's "NIOSH Alert – Preventing deaths, injuries and illnesses of young workers" – www.cdc.gov/niosh/docs/2003-128/pdfs/2003128.pdf

Excavation Safety Stand-down

Make a plan to protect workers
and prevent accidents

April 17-21, 2017



About Excavation Safety Stand-down Week

For the first time, Minnesota OSHA, along with other safety professionals, will promote and participate in a statewide Excavation Safety Stand-down Week from April 17 through 21.

The goal of the stand-down is to raise awareness among employers and workers about preventing excavation accidents, which have resulted in three fatalities to Minnesota workers since 2015, due to trench collapse.

During the stand-down, employer and workers are asked to pause their workday to talk about excavation safety and discuss topics such as how to properly slope, shore or shield workers from hazards during excavation projects. Employers are encouraged to make a plan to protect workers and prevent accidents.

The stand-down is part of Minnesota OSHA's ongoing emphasis on excavation and trench safety to provide employers with lifesaving information and educational materials about how to plan ahead to prevent accidents and protect workers.

Certificate of participation

After their stand-down event, employers can submit a photo of the event via email to dli.communications@state.mn.us and provide the number of employees involved to receive a personalized certificate of participation from Minnesota OSHA.

More information

Visit www.dli.mn.gov/OSHA/Excavation.asp for complete information about Excavation Safety Stand-down Week, including a printable poster and tips for hosting a successful stand-down, as well as excavation safety information from Minnesota OSHA and federal OSHA.

Minnesota's newest **MNSHARP** Construction worksites



John Kraemer and Sons, Inc. – Fredrickson Project, Shorewood (left) and Garrison Landing Project, Wayzata

The Department of Labor and Industry recently recognized John Kraemer and Sons, Inc., for two Minnesota Safety and Health Achievement Recognition Program (MNSHARP) Construction worksites. The two worksites are: the Fredrickson Project in Shorewood, Minnesota; and the Garrison Landing Project in Wayzata, Minnesota.

MNSHARP Construction is a Minnesota Occupational Safety and Health Administration (MNOSHA) program that recognizes major-construction companies where managers and employees work together to develop safety and health programs that go beyond basic compliance with all applicable OSHA standards and result in immediate and long-term prevention of job-related injuries and illnesses. Only construction projects at least 18 months in duration are eligible for participation in MNSHARP Construction. Learn more about MNSHARP Construction at www.dli.mn.gov/Wsc/MnsharpConstruction.asp.

May 16 Construction Seminar gives free overview OSHA's silica standard



Construction workers are clearly at risk of developing silicosis and other lung diseases if they breathe high levels of concrete and rock dust. This free Construction Seminar, at 7 a.m. on May 16, is designed to help those in the construction industry anticipate and control silica exposures, and learn how to comply with OSHA's silica standard.

Since Federal OSHA decided April 6, 2017, to delay enforcement of this standard, MNOSHA will also delay enforcement of this standard until Sept. 23, 2017. MNOSHA will provide guidance to employers to ensure they are in compliance when enforcement begins in September.

Presenters: Ron Anderson, supervisor, Minnesota OSHA Compliance; and Don J. Garvey, CIH, CSP technical service specialist, 3M.

Location, more information

The seminar is at the MnDOT Training and Conference Center, 1900 W. Cty. Road I, Shoreview, MN. The facility is state of the art and has plenty of free parking available for the attendees. Complete information, directions and maps are available at www.dli.mn.gov/OSHA/ConstructionSeminars.asp.

MNOSHA reaches out to Latinos in the construction industry

By Tyrone Taylor, Minnesota OSHA Workplace Safety Consultation Director

Latino Worker Safety Center

Minnesota OSHA Workplace Safety Consultation (WSC) is pleased to work with the Latino Worker Safety Center (LWSC) to provide free fall-protection training in Spanish on May 10 at the Paul and Sheila Wellstone Center, 179 Robie Street E., St. Paul, MN.

The LWSC was created by a federal OSHA Susan Harwood Capacity Building Grant, awarded to the Construction Safety Council of Hillside, Illinois, in 2011. The basis of the \$170,000 award was to present construction safety and health training that targets low-literacy immigrant workers. The LWSC evolved into an independent, not-for-profit organization and one of the only dedicated bilingual OSHA Compliance Training Centers in the U.S., providing a full spectrum of jobsite safety classes in English, Polish and Spanish.



The LWSC has trained more than 4,500 workers under the Harwood Grant and has trained many more workers in OSHA 10-hour, OSHA 30-hour and other safety-specific topics for both construction and general industry per U.S. Department of Labor regulations 29 CFR 1926 and 29 CFR 1910. The LWSC has also been invited to become an OSHA Training Institute Education Center hosting site – the first dedicated Spanish hosting site on the continent.

For more information, call LWSC Executive Director Dan Ramir at 1-888-595-5972 or visit the LWSC website at www.latinoworker.org.

Guadalupe Alternative Program

Minnesota OSHA Workplace Safety Consultation provided an OSHA 10-hour training class to 42 students from the Guadalupe Alternative Programs (GAP) on Jan. 24 and 25.

The OSHA 10-hour class provides training for workers and employers about the recognition, avoidance, abatement and prevention of safety and health hazards in the workplace. The program also provides information about workers' rights, employer responsibilities and how to file a complaint.



The Guadalupe Alternative Programs provides an alternative school for high-school-aged youth near Our Lady of Guadalupe Church on the West Side of St. Paul, Minnesota. GAP serves children and youth at high risk of school failure, and immigrants and refugees seeking to create a better life in the United States. It was founded in 1967. GAP programming has expanded to include mental health and social work services, adult basic education, training leading to industry-recognized certificates, mentoring and post-secondary transition support.

The training was done by WSC's Bob Durkee, Michael Seliga and William Stuart, and by Department of Labor and Industry Community Services Representative John Stiffin.



Week-long national campaign to focus on fall prevention in the construction industry

Minnesota OSHA (MNOSHA), along with federal OSHA, is promoting and participating in the 2017 “National Safety Stand-down to Prevent Falls in Construction,” May 8 through 12.

MNOSHA is partnering with key national safety and health groups, and leading employers and employer organizations for this voluntary “safety stand-down” event that encourages employers to talk directly to employees about fall hazards and to reinforce the importance of fall prevention.

Fatalities caused by falls from elevation continue to be a leading cause of death for construction workers.

Construction companies are asked to stop work for a safety stand-down meeting about a related safety topic – such as ladder safety, scaffold safety or fall-protection equipment – to provide information about hazards, protective methods and the company’s safety practices, policies, goals and expectations.

Although the safety stand-down begins next month, fall-prevention resources, posters and participation information from MNOSHA are available now at www.dli.mn.gov/OSHA/Falls.asp.

Beginning May 8, participating companies can visit www.osha.gov/StopFallsStandDown to print an OSHA participation certificate and share a photo from their safety stand-down meeting on Twitter using [#standdown4safety](https://twitter.com/standdown4safety).

MNOSHA staffers presenting, answering questions at 2017 Minnesota Safety and Health Conference

The annual Minnesota Safety and Health Conference, May 16 through 18 at the Minneapolis Convention Center, offers knowledge and tools for all levels of workplace safety experience. The event, presented by the Minnesota Safety Council, is designed to help attendees improve their organizations’ safety programs and enhance their skills.

MNOSHA Compliance and MNOSHA Workplace Safety Consultation will again be represented at the conference. In the exhibit hall, visit Compliance at booth 112 and Workplace Safety Consultation at booth 525 or stop by the Meet the Experts booth. MNOSHA staff members will be presenting during the educational sessions as well.

Nearly 100 educational sessions led by local and national experts form the core of the conference. The exhibit hall (May 16 and 17 only) provides access to: industry experts; the most recent safety programs, products and gear; and a new interactive Wellness Village. In addition, tours offer a behind-the-scenes look into safety operations at sites including the Mall of America, 3M’s Customer Innovation Center and Xcel Energy’s Riverside plant.

The final day of the conference includes a celebration of safety excellence at the Governor’s Safety Awards Luncheon, with recognition of Governor’s Workplace Safety Award winners, the Arthur E. McCauley Jr. Award recipient, Minnesota Safety and Health Achievement Recognition Program (MNSHARP) worksites and Minnesota STAR (MNSTAR) Program worksites.



Complete conference details are online at www.minnesotasafetycouncil.org/conf.

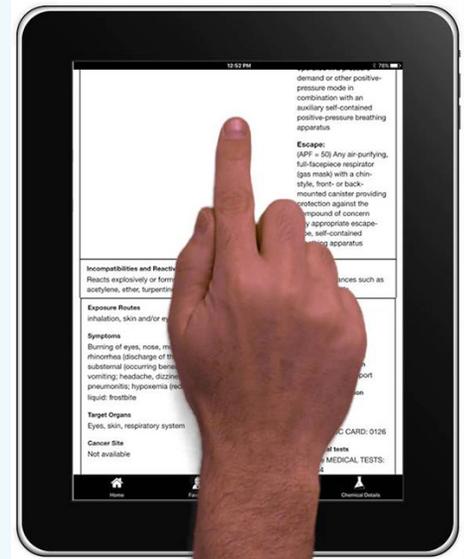
Need safety information on the go? ‘There’s an app for that!’

By Diane Amell, MNOSHA Training Officer

In keeping with its mission – “promoting productive workplaces through safety and health research,” the National Institute for Occupational Safety and Health (NIOSH) has created various tools to help employers and employees achieve that goal. One type of tool NIOSH has developed are cell phone applications, better known as apps.

NIOSH Pocket Guide to Chemical Hazards mobile web application

This web app provides the same information as the printed pocket guide from NIOSH – 634 chemical entries plus appendices – and can be used offline when no internet or cell phone connection is available. Searches can be done by chemical name, synonym, DOT number, CAS number or RTECS number. Users can choose to view any or all of 43 data items for each chemical, including synonyms and trade names, chemical formula, individual chemical and physical properties, personal protective equipment and respirator recommendations, and first aid. When web access is available, users can also view the basis for the “immediately dangerous to life or health concentration” (IDLH) and the OSHA and NIOSH analytical methods.



The app is compatible with any HTML5-compliant web browser. To download the app or to watch a series of short informational videos about the app, visit www.cdc.gov/niosh/npg/mobilepocketguide.html.

NIOSH Ladder Safety app

This app helps workers use extension and step ladders safely, using the gyroscope in a smart phone to measure the angle or verticality of an extension or step ladder. The current version of the software features seven tools to assist workers in the field.

- **Angle Measuring** helps employees angle an extension ladder correctly and check the verticality.
- **Decision** helps employees plan the time, materials and tools needed to complete a job.
- **Selection** helps determine the correct size and type of ladder for the job.
- **Inspection** provides an inspection checklist for the ladder.
- **Set Up** provides help setting up or installing ladders and using the ladder safety app.
- **Proper Use** contains ladder safety rules.
- **Accessories** provides information about ladder safety accessories.

An advertisement for the NIOSH Ladder Safety App. The top left features a blue box with the text 'Download for Free' and the NIOSH logo. Below this is the app's name 'NIOSH Ladder Safety App' in large white letters. To the right is a photograph of a worker in a blue shirt using a smartphone to measure a red extension ladder. Below the photo is a white box with the text: 'To prevent ladder-related fall injuries and deaths, download and use the National Institute for Occupational Safety and Health's (NIOSH) award-winning Ladder Safety app today.' At the bottom, there are logos for the Department of Health and Human Services, Centers for Disease Control and Prevention, and NIOSH.

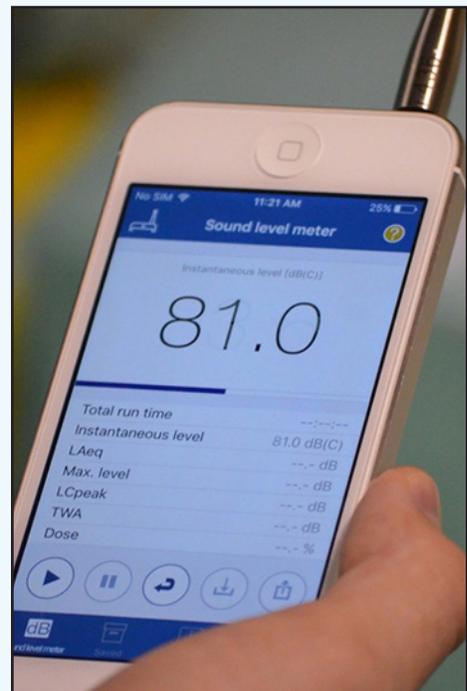
The app is so easy to use it is recommended for home improvement use as well. The app is available free (English or Spanish) from the Apple Store and Google Play. For complete information, visit www.cdc.gov/niosh/topics/falls/mobileapp.html.

NIOSH Sound Level Meter app

NIOSH evaluated nearly 200 cell phone apps for measuring sound levels and found only four iOS apps that met all of the NIOSH criteria and none of the Android apps. So NIOSH created its own, in conjunction with app developer EA LAB.

The new NIOSH Sound Level Meter app, currently only available for iOS use, is able to take instantaneous sound level readings in the A-, C- or Z-weighted scales. It measures and calculates the total run time, the A-weighted equivalent sound level (LAeq), the maximum level measured during the current run time, the C-weighted peak sound pressure level (LCpeak), the time-weighted average (TWA) and the dose.

Tests of the app showed it was accurate to within one decibel (dB) of a regular sound level meter over a range of 65 to 95 dB using an external microphone. The app also includes information about noise and hearing conservation.



While NIOSH cautions the app is not meant to replace a professional sound level meter or a noise dosimeter or be used for compliance purposes, it can serve as a screening tool or to build employee awareness of noise exposure.

To download the app or read the application user manual, go to www.cdc.gov/niosh/topics/noise/app.html. A short video of the app in use is online at blogs.cdc.gov/niosh-science-blog/2017/01/17/slm-app.

NIOSH has also developed two apps for specific mining operations and more apps are sure to follow.

DLI experts available for speaking engagements

Department of Labor and Industry (DLI) staff members regularly speak to community, industry and school groups about issues that affect employees, employers and other DLI stakeholders. As part of its outreach efforts to stakeholders, DLI's speakers bureau can provide interested parties with a knowledgeable speaker in an array of topics.

- Apprenticeship programs and opportunities
- Construction codes and licensing
- Occupational safety and health topics or free consultation assistance
- OSHA recordkeeping
- Wage and hour requirements
- Workers' compensation coverage, reporting and claims issues
- Workers' compensation dispute resolution
- Workers' compensation ombudsman services



For more details or to request a speaker, visit www.dli.mn.gov/Speakers.asp.

Hospital injury, illness rates decline, musculoskeletal cases increase

By Brian Zaidman, Research and Statistics

In 2015, the 203 private hospitals in Minnesota employed an annual average of 104,000 workers, 4.3 percent of all private-sector workers in the state. These workers experienced an estimated 4,700 OSHA recordable injuries and illnesses, resulting in a total case rate of 6.3 injuries and illnesses per 100 full-time-equivalent (FTE) workers. The rate for all private-sector workers was 3.5 cases per 100 FTE workers. Hospitals accounted for 7.1 percent of all injury and illness cases to private-sector workers, 7.6 percent of all private-sector cases with one or more days away from work (DAFW) and 16.2 percent of all DAFW cases involving women.

While the rates remain high, the estimated rate of occupational injuries and illnesses continued to decline at Minnesota’s privately owned hospitals (see Figure 1). This is consistent with the decrease in the national rate for privately owned hospitals. The total case rate at Minnesota’s hospitals decreased by 36 percent since 2003, while the rate for U.S. hospitals decreased by 31 percent.

Figure 1 also shows the rate of cases with one or more days away from work or days of job transfer or job restriction (DART) has decreased since 2003; the rates have leveled off since 2012.

The rate of DAFW cases, a component of the DART rate, followed a different trend than the DAFW case rate among all private-sector workers (Figure 2). This difference is even more pronounced when looking at DAFW cases due to musculoskeletal disorders (MSD). The MSD case rate among all private-sector industries changed from an estimated 40.7 cases per 10,000 FTE workers in 2011 to a rate of 35.0 cases in 2015, but the MSD rate for hospital employees changed from 113.5 cases per 10,000 FTE workers in 2011 to 88.0 cases in 2013 and to 116.6 cases in 2015. Hospital workers experienced DAFW cases due to MSD at a similar rate to DAFW cases from all injury types for all private-sector workers.

Figure 1. Total recordable case rates and DART rates, private-sector hospitals, Minnesota and United States, 2003-2015

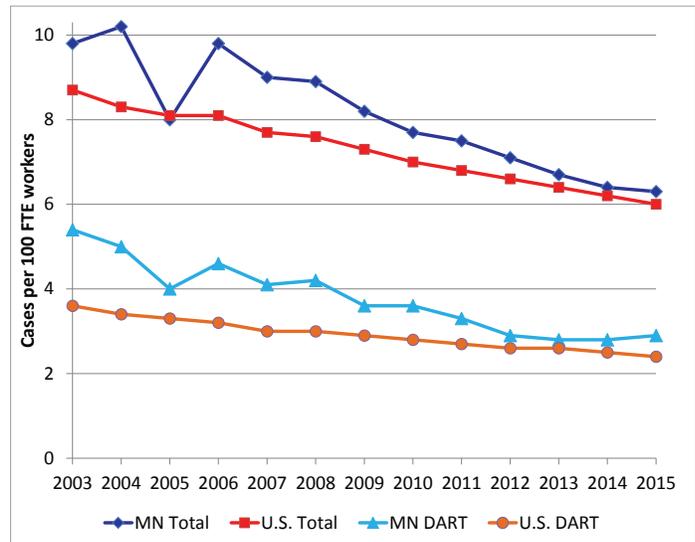
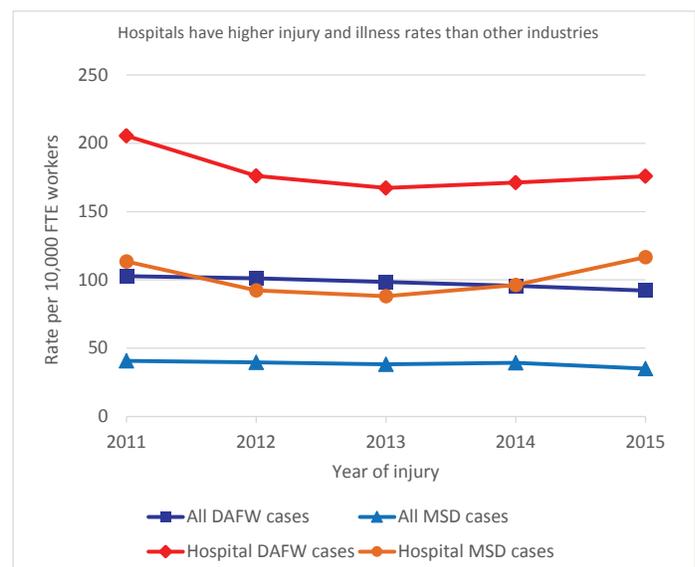


Figure 2. Rates for all cases with one or more days away from work (DAFW) and for DAFW cases resulting from musculoskeletal disorders (MSD)



OSHA answers

frequently asked questions

As part of its continual effort to improve customer service and provide needed information to employers and employees, Minnesota OSHA (MNOSHA) Compliance answers the most frequently asked questions from the previous quarter.

Q. A vendor wants to sell me a piece of equipment that he says is “OSHA approved.” How can I check to be sure that is true?



A. Simple – neither state OSHA programs nor the federal OSHA program approve products. A vendor may claim a product “meets OSHA standards,” but it is up to the employer to ensure the product is safe, is in compliance and is used as intended by the employees.



Do you have a question for Minnesota OSHA? To get an answer, call (651) 284-5050 or send an email message to osha.compliance@state.mn.us. Your question may be featured here.

Current, past MNOSHA fatality investigations, serious-injury investigations summaries available online

Each month, Minnesota OSHA (MNOSHA) Compliance publishes current, updated summaries of its fatality investigations and serious-injury investigations.

For the federal-fiscal-year that began Oct. 1, 2016, MNOSHA Compliance has investigated nine workplace fatalities and 38 serious injuries through March 31.

The information provided about each investigation is:

- the inspection number, date of incident and worksite city;
- the type of business and number of employees;
- a description of the event; and
- the outcome of the MNOSHA Compliance investigation.

The summaries, plus other helpful workplace safety and health information from Minnesota OSHA, are available online at www.dli.mn.gov/OSHA/Information.asp.



Notes from the undercount, part 10:

Unrecorded, under-recorded cases found during accuracy campaign

By Brian Zaidman, Research and Statistics

Notes from the undercount is a series presenting results and ideas from the Department of Labor and Industry's efforts to understand and reduce the undercount of cases in the annual Survey of Occupational Injuries and Illnesses. Minnesota's report about its undercount research, part of a broader U.S. Bureau of Labor Statistics research program, is available online at www.bls.gov/iif/mn_interviews.pdf.

Employers, researchers, and state and federal governments rely on accurate Survey of Occupational Injuries and Illnesses (SOII) estimates to evaluate and focus programs to improve worker health and safety. Following the U.S. Government Accounting Office's 2009 evaluation of U.S. Department of Labor procedures to ensure the accuracy of the injury and illness estimates, federal OSHA conducted a Recordkeeping National Emphasis Campaign from 2009 through 2012 and recently communicated some of the findings from its recordkeeping inspections.¹

The paper describes OSHA's efforts to address the extent of under-recording injuries and illnesses on the OSHA logs. Under-recording covers injuries that should have been on the log but weren't included *and* cases reported as less severe than they actually were. An example of under-recording would be to record a case where there were days of job restriction as an other-recordable case.

Analysis of 350 federal OSHA recordkeeping inspections found that 47 percent of the establishments had unrecorded or under-recorded cases and that 23 percent of the DART cases had recordkeeping errors. (DART cases include cases with one or more days away from work and/or days of job restriction or job transfer.) However, just 7 percent of the establishments accounted for more than half of the under-recorded DART cases. Many of these under-recorded cases were uncovered during employee interviews. Interestingly, OSHA found more recordkeeping errors in establishments with low reported injury and illness rates.

¹Fagan, K.M. & Hodgson, M.J., Under-recording of work-related injuries and illnesses: An OSHA priority, *Journal of Safety Research* (2016), <http://dx.doi.org/10.1016/j.jsr.2016.12.002>.

In a special set of recordkeeping inspections in the poultry industry, OSHA found that on-site first-aid and nursing stations staffed by LPNs or EMTs often led to inaccurate recordkeeping. Workers with serious repetitive trauma injuries were treated with first-aid and sent back to work instead of receiving thorough evaluations and medical care, keeping those cases off the OSHA log.

Free recordkeeping training June 23

The ability to maintain an accurate OSHA log of recordable work-related injuries and illnesses is an important skill that benefits employers, workers, safety professionals and government agencies. Recording the correct cases and accurately including the required information leads to higher quality injury and illness rates that enable employers to better understand their relation to the benchmark rates and help government agencies to properly direct resources.

This free introductory-level training session about OSHA recordkeeping requirements will be Friday, June 23, from 9 to 11:30 a.m., at the Minnesota Department of Labor and Industry (DLI), 443 Lafayette Road N., St. Paul, MN. Register now at www.dli.mn.gov/OSHA/Recordkeeping.asp.

Topics will include a review of the fundamental requirements of OSHA recordkeeping and will expose the most common OSHA log errors. If you have questions about the training session or about recordkeeping, call the DLI Research and Statistics unit at (651) 284-5025.

MNOSHA Compliance signs safety, health partnerships



**Graham Construction Services – Como Park Senior Living,
St. Paul, Minnesota**



**J.E. Dunn Construction – Cofferdam Data Center,
Chaska, Minnesota**

Minnesota OSHA (MNOSHA) Compliance recently signed Level 3 Cooperative Compliance Partnerships with four construction companies. Level 3 is the peak level of MNOSHA Compliance partnerships, with applicants striving to be an industry leader with very comprehensive safety and health programs.

The partnerships with **Graham Construction Services** and **J.E. Dunn Construction** are under the Construction Health and Safety Excellence (CHASE) Minnesota partnership between MNOSHA Compliance and Associated General Contractors (AGC) of Minnesota members. CHASE Minnesota partnerships recognize those contractors where managers and employees work together to develop safety and health management systems that go beyond basic compliance with all applicable OSHA standards and result in immediate and long-term prevention of job-related injuries and illnesses. To qualify for Level 3, participants must have reached Level 2 and remained there for at least one year.

The partnerships with **Lyon Contracting** and **Shingobee Builders** are under the partnership between MNOSHA Compliance and the Minnesota Chapter of Associated Builders and Contractors (MN ABC) members. The partnerships recognize those contractors where managers and employees work together to develop safety and health management systems that go beyond basic compliance with all applicable OSHA standards and result in immediate and long-term prevention of job-related injuries and illnesses. To qualify for Level 3, participants must have reached Level 2 and remained there for at least one year.

Learn more about MNOSHA's partnerships at www.dli.mn.gov/OSHA/Partnerships.asp.



**Lyon Contracting, Inc. – Powers Ridge Senior Housing,
Chanhassen, Minnesota**



**Shingobee Builders, Inc. – Courtyard Hotel,
St. Louis Park, Minnesota**

Minnesota OSHA's calendar of events

April 2017

April 12 *LogSafe training, Tower*

www.dli.mn.gov/Wsc/Logging.asp

April 17-21 *Excavation Safety Stand-down Week, statewide*

www.dli.mn.gov/OSHA/Excavation.asp

April 19 *LogSafe training, Bemidji*

www.dli.mn.gov/Wsc/Logging.asp

April 25 *LogSafe training, Little Fork*

www.dli.mn.gov/Wsc/Logging.asp

April 26 *LogSafe training, International Falls*

www.dli.mn.gov/Wsc/Logging.asp

April 27 *LogSafe training, Baudette*

www.dli.mn.gov/Wsc/Logging.asp

May 2017

May 2 *LogSafe Training, Brainerd*

www.dli.mn.gov/Wsc/Logging.asp

May 3 *LogSafe Training, Cloquet*

www.dli.mn.gov/Wsc/Logging.asp

May 5 *Occupational Safety and Health Advisory Council*

www.dli.mn.gov/Oshac.asp

May 8-12 *National Safety Stand-down to Prevent Falls in Construction*

www.dli.mn.gov/OSHA/Falls.asp

May 10 *Construction fall protection training in Spanish*

www.dli.mn.gov/OSHA/PDF/Spanish_construct_fall_protect_train_english_flier_May2017.pdf

May 16 *Construction Seminar: OSHA's silica standard*

www.dli.mn.gov/OSHA/ConstructionSeminar.asp

