

Construction

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Occupational Health Best Practices for the Construction Industry

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About the Author



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With 20 years of experience in occupational medicine, Dr. McCarthy shares her expertise to help employers provide a safer and healthier work environment.

Executive Summary

In all workplaces, it's important to acknowledge potential occupational health and safety hazards and how they can vary by industry and work environment. For the construction industry, workplace accidents have a high potential to be life-threatening; therefore, construction employers have the weighty responsibility of taking measures to identify and mitigate workplace health and safety risks. Construction employees must also be mindful of these risks, using sound judgment and adhering to precautionary measures that aim to protect them on the job.

As a leading provider of occupational health services, Concentra has developed these best practices to help construction employers reduce workplace accidents and industry-related illnesses while building a culture of workplace safety. These practices include building awareness for accident prevention, interpreting occupational health and safety guidelines for

effective workforce training, continually engaging construction employees on worksite safety, leveraging medical surveillance to protect employee health, and safeguarding the overall well-being of your business.

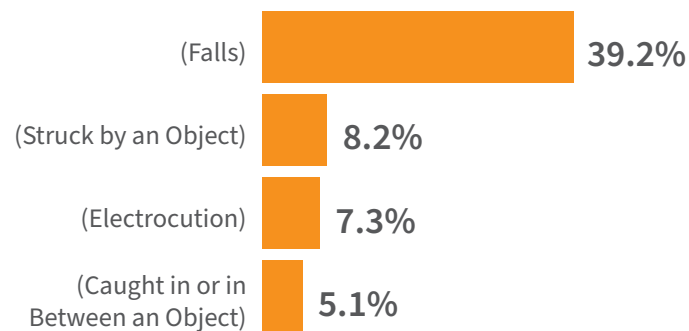
The construction safety practices and risk-management strategies expressed in this guide are recommendations provided by Concentra occupational health physicians. The practices suggested in this document are meant to augment construction employers' efforts to combat problematic health and safety trends associated with this industry. The recommendations are not intended to supplant practices, policies, or procedures set by state and federal entities responsible for establishing workforce health and safety standards. The recommendations provided herein do not constitute legal advice and are not intended as a substitute for legal counsel. Questions and concerns regarding safety regulations and guidelines should be directed to your legal counsel.

Introduction

Construction is one of the most vital industries in the American economy – and statistically, one of the most dangerous. According to the Occupational Safety and Health Administration (OSHA), construction employees suffer more than 20 percent of all work-related fatalities each year, while representing less than 10 percent of the American workforce.¹

Protecting employees on the worksite and preventing OSHA recordables can present major challenges to construction employers. Overcoming these challenges requires a strategic approach to worksite safety that includes building awareness, implementing safety protocols, maintaining constant communication, and employing preventive measures.

Fatal Four: Top Causes of Construction Fatalities



Source: OSHA

Building Awareness for Accident Prevention

Setting a standard of worksite safety is pivotal to any workplace culture, regardless of industry; however, it's an absolute necessity for employers in high-risk industries like construction. OSHA data reveals that the non-fatal injury rate for construction is 71 percent higher than any other industry, with fall protection being the most frequently cited standard based on construction site inspections conducted by OSHA officials.² These statistics clearly indicate that construction firms must continue to build greater awareness around worksite safety and accident prevention. Building awareness involves a number of activities, including:

- Identifying workplace hazards
- Training employees on safety practices and procedures
- Teaching employees – especially site leaders – the company's accident-reporting protocol

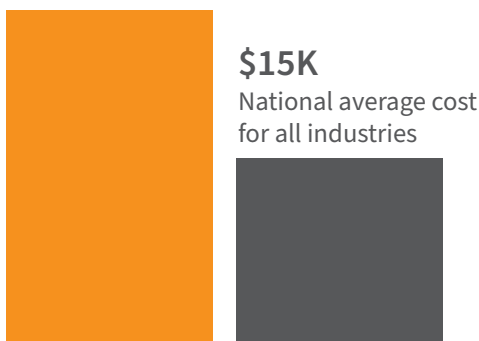
OSHA provides workplace safety training and standards specific to the construction industry. The responsibility of teaching these standards falls on the employer, but adhering to these standards should be twofold. Construction employers must stay abreast of OSHA regulations and regularly train their workforces, and employees must take an active role in practicing

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Construction Injury Statistics

\$27K

Average cost of fatal or nonfatal construction injury



1 in 10 construction employees is injured annually



1 in 5 private-industry work fatalities is in construction



Source: National Institutes of Health

these standards. By doing so, employees not only reduce their risk of personal injury; they also help to protect co-workers and even the general public.

Interpreting Safety Guidelines for Effective Training

Before employers can build awareness around worksite safety, they must have a firm understanding of OSHA regulations and the required training. The construction industry is one

of four major categories defined by OSHA, with the other three being agriculture, maritime, and general industry. Each category has specific safety standards, but some standards apply across all categories. For instance, some safety standards under general industry must be followed by all employers regardless of their category.

It is not uncommon for a construction site to be cited for failing to comply with a general industry safety standard, such as [29 CFR 1910.134](#), the respirator

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protection standard. When it comes to respirator protection, all industries must follow the general industry standard.

In addition to discerning federal safety guidelines, construction companies must also be mindful of how some states have standards that go above and beyond the minimum requirements [approved by OSHA](#). State and federal safety standards can be perplexing to even some seasoned construction professionals, but a firm understanding is necessary for proper training and compliance.

While OSHA does provide resources to assist workforces, an occupational health provider like Concentra has experts who stay abreast of OSHA standards and can help construction employers disentangle some of the complexities associated with safety guidelines that cross categories. Occupational health providers can work with construction firms to:

- Develop medical evaluations, ensuring employees are fit for duty
- Evaluate employees' ability to use personal protective equipment (PPE) while performing specific job functions
- Provide worksite injury prevention consultation

Engaging Construction Workforces on Safety

The use of safety signs, barricades, and labels at construction sites are both required by OSHA and critical to workforce protection, but employee engagement must go beyond the use of signage. It should be interactive, developing a collaborative relationship that promotes an exchange of ideas and information. The conversation of worksite health and safety must be ongoing to ensure principles are understood, methods are observed, and concerns are voiced. Research reveals that when workforce engagement about safety is lacking, the likelihood of OSHA recordable incidents increases.³

An essential part of workforce engagement is establishing an employer-employee relationship that does not become fractured over time due to inconsistent communication. Being proactive can help. For example, introducing employees to newly adopted industry trends and safety measures is a more prudent approach to workforce engagement than communicating with employees only after an incident occurs. While both scenarios can create opportunities for meaningful dialogue, it's safe to presume that every employer and its workforce would prefer a discussion about preventing a serious injury over a meeting to discuss what caused one.

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The benefits of engaging workforces on worksite safety include:

- Fewer OSHA recordables
- Lower workers' compensation rates
- Improved productivity
- Better employee morale
- Overall health cost savings

Effective workforce engagement can enhance the work experience, offering a forum to employees that helps build employee morale, or rebuild morale in the wake of a recent work-related injury or illness.

Using Medical Surveillance to Protect Employees' Health

Along with building awareness and driving workforce engagement, establishing preventive measures is also critical to setting a precedent for construction site safety and health. [Medical surveillance examinations](#) help to protect employees from work-related illnesses by evaluating their fitness for work, monitoring the occupational exposure, evaluating the adverse health effects of the exposure, and determining the effectiveness of worksite control measures.

A form of medical surveillance common to the construction industry is for respirable crystalline silica. Baseline medical surveillance evaluates employees' baseline health and ability to work in environments with silica dust exposure. Ongoing, periodic medical surveillance monitors their ability to work in exposed environments using the required PPE and monitors for health effects from continued exposure. Construction firms can use information obtained from the medical surveillance of exposed employee groups to evaluate the effectiveness of worksite health and safety control measures.

Roughly 2.3 million employees are potentially exposed to dust containing crystalline silica, and almost 90 percent of them work in construction.⁴ An occupational health provider like Concentra can partner with a construction firm to assess silica dust exposure at project sites. Concentra occupational health clinicians can administer a silica medical surveillance exam, which could include the following services:

- Medical surveillance history and exam
- Spirometry administered by a technician certified by a NIOSH-approved course
- Tuberculosis screening
- Chest X-ray 1-view with B-read interpretation

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- Written medical-opinion reports to the employer and employee

An occupational health provider can also assist employers with understanding OSHA regulations, such as [silica dust exposure limits](#). Per OSHA standards, employers must use engineering controls, such as additional ventilation and wet saws, to prevent or reduce employee exposure to silica and other toxic chemicals that can be released into the air.

To meet regulatory requirements and to establish standards of practice that protect construction workforces from harmful occupational exposures, OSHA makes several recommendations, which include (but are not limited to):

- Maintaining the [permissible exposure limit](#) (PEL) of harmful substances (e.g., 50 $\mu\text{g}/\text{m}^3$ of respirable silica over an eight-hour, time-weighted work period)
- Establishing and implementing a written exposure control plan that identifies tasks that expose employees to toxic chemicals and indicates PPE recommendations (e.g., respirators)
- Offering medical exams (e.g., chest X-rays, lung function tests, etc.) regularly to employees exposed to toxic chemicals for early detection of exposure-related health conditions

Safeguarding Your Construction Business

Construction firms should be motivated for ethical and fiscal reasons to improve worksite health and safety. Taking action to protect your construction company involves developing a worksite safety program that is consistent with state and federal occupational health and safety regulations. This requires employers to stay abreast of regulatory changes and industry trends that can reshape their safety programs.

The safety practices adopted by construction firms can vary from general contractors to subcontractors, and the scope of a safety program can vary by company size. Implementing a safety program sets the tone for how a company addresses worksite accidents. It also reveals how proactive a company may be at preventing them. A comprehensive safety program should include a component that documents everything from worksite safety initiatives to emergency response protocols. It should also have a system in place to measure program effectiveness.

Having a well-designed safety program not only helps to prevent or reduce occupational injuries and illnesses. It also helps to mitigate the risk of serious legal action, which can result from insufficient incident reporting, improper PPE usage, inadequate

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safety training, or other worksite safety infractions that could jeopardize employees' well-being and damage the company's reputation.

Conclusion

The construction industry presents a unique set of health and safety risks, which helps to explain why injury rates and associated costs can be significantly higher when compared to other industries. Reducing these risks requires foresight and diligence. Mitigating these risks can help to offset direct and indirect costs associated with workers' compensation claims; however, improving the bottom line should not supersede the importance of protecting and preserving the well-being of the workforce.

The necessity of construction site safety is obvious, but the steps to achieve it are not. Construction firms position themselves for greater success when they have an action plan to continually heighten awareness around worksite health and safety. They should stay current on industry safety updates and conduct ongoing training to keep workforces up-to-date. For compliance and transparency, construction firms should document training and all incidents according to OSHA reporting standards. Finally, every construction safety program should have benchmarks to measure program effectiveness.

While the depth of a construction company's safety program may vary, all construction employers share a common goal of increasing workforce knowledge of safety standards and reducing fatal and nonfatal occupational injuries and illnesses.

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About Concentra

Concentra, a division of Select Medical, is a leading health care company focused on improving the health of America's workforce, one patient at a time. With more than 11,000 colleagues nationwide, Concentra provides occupational medicine, urgent care, physical therapy, and wellness services from more than 520 medical centers, 131 onsite medical facilities, and 32 community-based outpatient clinics across 44 states. Learn more at concentra.com.

Contact an expert

To learn more about how Concentra can help you improve the health and safety of your construction workforce while reducing overall company health care costs, talk to an [occupational health expert](#).