Contractor Safety – Stats and Facts

DID YOU KNOW?

The construction industry is known for being one of the most dangerous fields to work in. Out of every 5,000 private-industry worker fatalities, 20 percent are in construction. That means one out of every five worker deaths is construction-related!

Construction also results in many non-fatal injuries that cost companies millions of dollars per year. This makes safety paramount in the industry. While safety measures and precautions, like those outlined by OSHA, can be costly upfront, their ROI can be massive.

A successful construction business will maintain effective safety programs, stay updated on OSHA regulations and pay the expenses involved even when business is slow. Not only because OSHA violations can range anywhere from a warning to $70K per incident, but because they care about their employees.

To illustrate the importance of worksite safety, we've compiled 25 construction safety statistics that cover the high number of injuries and fatalities, the cost of these accidents and the benefits of safe practices.

Construction Fatality Statistics

1. One in five worker deaths annually is in construction. [OSHA]
2. Workplace fatalities that were crane-related fell to their lowest level recorded in 2017 with 33 deaths. [BLS]
3. Construction workers accounted for 1008 (47 percent) of all fatal work injuries in 2018. [BLS]
4. The "Fatal Four" leading causes of private sector working fatalities in the construction industry are falls, being

struck by an object, electrocution and being caught in something or between two objects. These accidents are responsible for 58.6 percent of construction worker deaths. [OSHA]

5. Companies with 10 or fewer employees and those who are self-employed account for nearly half of all deaths on construction sites. [CDC]
6. Of all industries, construction sees the most fatal falls, accounting for 51 percent of all falls in the United States. [CDC]
7. During a 45-year career, there is a 1 in 200 chance that a construction worker will die from a work-related incident. [Safety & Health Magazine]

1. Non-Fatal Injuries in Construction

8. One in every 10 construction workers is injured annually. [OSHA]
9. Construction sees non-fatal injury rates that are 71% higher than any other industry. [Accident Analysis & Prevention]
10. Around half of serious workplace injuries go unreported each year.
11. Lifting, using a tool or machine, and carrying heavy objects are the leading causes of strain injuries in construction.
12. Workers who are between the ages of 35 – 34 are the most likely to be injured while working in construction. [National Safety Council]
13. Construction worker illnesses and injuries are down from 10.9 incidents per 100 workers in 1972 to 2.8 per 100 workers in 2017.

2. The Cost of Jobsite Injuries

14. One fatal injury costs an average of $991,027 in hospital costs. [Converge Point]
15. The construction industry sees a 71 percent higher spend on workers' compensation than all goods-producing industries combined, more than twice the mean cost for the average employer in other industries. [CPWR]

16. 15 percent of overall workers' compensation costs are spent on workers who were injured at a construction site. [Workers Compensation]
17. Work-related injuries have caused companies to lose 103,000,000 production days in 2018. [National Safety Council]
18. Indirect costs for injuries in the construction industry can be as much as 17 times more than direct costs. [Safety & Health Magazine]
19. Purvis Home Improvement Co. Inc was fined $1.79 million for a preventable fatal fall, the highest fine of 2019. (OSHA)

3. It Pays to Practice Safety

20. Construction companies can save an average of $32,000 for each medically consulted injury they avoid. [National Safety Council]
21. Construction companies can save $4 – 6$ in indirect costs for every $1 invested in direct costs by evading an injury in the workplace. [OSHA]
22. Construction site injuries account for 6–9 percent of project costs, while safety and health programs only account for 2.5 percent of project costs. [CPWR]
23. A company must sell an additional $1,667,000 in services to offset $50,000 in losses from injuries, illness or damage and still make a 3% profit. [CPWR]
24. Better and more frequent training, regular inspections and regular health and safety meetings with construction supervisors result in lower costs, fewer lost-time injuries and more profits. [CPWR]
25. Getting rid of the "Fatal Four" causes of construction worker deaths would save 591 lives in the U.S. each year. [OSHA]

Special Trade Contractors

Executing construction projects is a large managerial challenge and contributes to the industry's productivity problem.

Specialty trade contractors are **12-28% less productive than large-scale building contractors**, according to a McKinsey Global Institute study.

5 Advances in Construction Technology for 2018

Improve cost, safety, efficiency, and gain a competitive advantage in the industry.

Better communication between managers and off-site contract and temporary workers.

Adopting new technology could boost $1.6 trillion in the industry(estimated), adding about 2% to the global economy, or the equivalent to meeting half of the world's infrastructure needs (McKinsey report, 2015).

1. **Virtual Reality**

Managers can use 4D virtual reality models to immerse stakeholders and owners into the environment of the design plan for major projects such as airports and hotels. A 4D environment increases the success of building a more consistent and quality final product that meets the expectations and buy-in of stakeholders.

2. **Augmented Reality**

Physically walk through the environment with a 3D view. This allows users to gather real-time information about improvements for the environment. There are Mobile Apps that exist that allow you to interact with existing components or objects through the screen. Measure, level, and place objects with the Apps, the Apps operate using your any Smart Phone or Tablet.

3. **Advanced Tracking**

Employers can improve safety and keep projects on schedule with wearable technology. Track the activity of workers, alert them of potential hazards in real time, and receive live project updates.

4. **Connected Job Sites**

Better manage risk, keep projects on track, and maintain company standards with connected job sites. Track more accurate, real-time data using online cloud-based project management software. This allows users to access real-time information from anywhere. With management systems like this in place, employees can update blueprints, respond to RFIs in real-time, and it reduces the potential for error and miscommunication.

5. **Unmanned Aerial Vehicles (UAVs)**

UAVs aka drones are already in use in the industry, providing a convenient way to conduct safety audits, observations, and inspections. However, advancements to make the most of their use remains to be seen. It is also estimated that more than 1.4 million new industrial robots will be installed in workplaces worldwide from 2016-2019.

KEEP IN MIND

When you think of workplace safety, you should realize that a safety culture isn’t just for the workers on your payroll. A safe work environment is also an expectation of contractors, and getting them involved in your safety culture is critical to helping them remain safe on the job.

The Importance of Contractor Safety

We’re living in an increasingly complex workforce, where employees and contractors alike are traveling between locations. It’s a challenging task for any EHS department leader to keep track of temporary workforces, contractors, and regular hires and their roles within the company.

While contractors aren’t employees of your company, their safety is still your responsibility. Contractors that become injured while performing work for you could hold you liable, and the financial consequences could be even more severe than if one of your own employees were to get hurt.

Dealing with contractors on site who don't adhere to your safety procedures can be risky. Since you or your employer can be subject to fines or even jail time when not compliant with regulations, you need to know who is accountable for your contractors.

Countries have different rules and regulations when it comes to safety and training for contracted companies and lone workers.

Globally, the International Labour Organization (ILO) reports that "although there are no ILO instruments that specifically address contractors' and subcontractors' safety and health at work (or for training in the industry), those concerning occupational safety and health (OSH) in general emphasize the importance of OSH training for all workers. Safety training should focus on supporting preventive action and finding practical solutions."

While there are no specific global requirements, we will explore contractor safety regulations for the construction industry in the United States, United Kingdom, Canada and Australia.

United States

OSHA offers safety and health regulations for construction. According to the regulations for construction, "in no case shall the prime contractor be relieved of overall responsibility for compliance with the requirements of this part for all work to be performed under the contract."

Workers in the engineering and construction industries face many hazards, as construction sites are one of the most dangerous places to work in the world, especially for contracted lone workers.

OSHA also indicates that "to the extent that a subcontractor of any tier agrees to perform any part of the contract, he also assumes responsibility for complying with the standards in this part with respect to that part…With respect to subcontracted work, the prime contractor and any subcontractor or subcontractors shall be deemed to have joint responsibility."

In 2013, OSHA noted that 20 percent of occupational fatalities

were in construction. Every month, the agency reports fatalities of contract workers, and often, publicizes citations and fines for both host companies and the employers of contract employees if they are killed or injured or endangered on the job.

Canada

The Canadian Centre for Occupational Health and Safety (CCOHS) reports some instances where employers were found to not protect the safety of their contractors – with fatal results.

"On June 12, 2006, a landscape contractor was crushed to death when the backhoe his employer was driving failed to stop, pinning the employee to a wall. The investigation of the incident found that the 30-year-old backhoe had not received any regular maintenance since the vehicle was purchased and that no formal inspection had been done in the previous five years. Upon further investigation it was discovered that the vehicle had no braking capacity. In September 2010, the employer was convicted of criminal negligence causing death and was given a two-year conditional sentence to be served in the community."

In the province of British Columbia, WorkSafe BC's prime contractor responsibilities state that at most multiple-employer work sites, "the prime contractor is responsible for health and safety" and offers advice for contractors to protect themselves and take preventative safety measures:

- Get it in writing.
- Identify, address and correct hazards.
- Communicate and coordinate with subcontractors.
- Assign a qualified coordinator.
- Establish an emergency response plan.
- Maintain accurate records.

Essentially, it's best for both employer and contractor to take the above tips into consideration when working together.

Contractors fill one of every five jobs in the United States and are expected to make up nearly half our workforce within the next

decade. They bring with them varying degrees of occupational health and safety knowledge, training and experience, making it difficult for organizations to manage workplace safety.

To mitigate the risks associated with disparate, and potentially inadequate safety training of contractors who work on their behalf, more than 75% of companies in a recent NAEM safety management benchmarking discussion plan to advance their contractor safety programs. It's for good reason: Preliminary OSHA reports show that organizations across industries and trades continue to fall short when addressing critical safety hazards, including the use of personal protective equipment, operation of machinery and industrial trucks, and fall protection, among other hazards.

A strong contractor safety program—one that prequalifies contractors before they are hired and monitors and manages ongoing safety performance—can ensure that contractors are adequately equipped to mitigate hazards. This can help to prevent worker injuries, protect corporate reputation, support compliance with government regulations, and avoid hefty fines associated with violations.

"We're in an industry with a lot of regulations," said a NAEM participant committed to strengthening contractor safety management. "We're responsible for our contractors and held accountable for their performance. We need to manage them because we have strong performance and safety numbers and we want to keep it that way."

Business drivers for creating a more strategic contractor safety management program include the following:

- Rising safety incident or injury rates.
- Regulatory requirements.
- Benchmarking best practices.
- Environmental, social and governance reporting/stakeholder expectations.
- Enterprise risk management.

Here are five best practices for mastering contractor safety management with dedicated, strategic programs that extend throughout your entire supply chain. Leveraging them can help you build a more comprehensive, effective program to better protect the people on your job sites and, in turn, your business.

1. Ensure that safety and expectations are communicated through induction training.

Safety training is one of the most impactful tools companies have for sharing their safety culture throughout their workforce, including their contracted workers. What better way to ensure your workforce's safety readiness than to train them before they set foot on a job site?

Onboarding or induction training communicates safety expectations and trains workers to safely perform job duties before they come to work. Typically instructor-led, the detailed training efficiently and effectively prepares contractors to safely operate machinery and understand how to mitigate the unique safety hazards of their jobs.

It often includes the company's safety and emergency procedures, work permits, and site requirements. Requiring contractors to complete induction training provides assurance that they are prepared with the most effective, relevant training for the jobs they are hired to do. Use of badging or other technology-based tools to enable easy verification of training completion before a contractor goes to work is key to ensuring compliance.

2. Build safety requirements into contracts and accounts payable processes.

Contracts help to clearly establish your organization's expectations regarding its contractors' safety preparedness and performance. Legal contract language should require their compliance with federal, state and local regulatory requirements, along with company-specific health and safety requirements. This

may include participation in the company's safety prequalification program administered through a third-party provider and maintenance of an acceptable safety score in their contractor management system.

In addition, some organizations also tie meeting contractor safety requirements into their accounts payable processes to help motivate and enforce contractor compliance. For example, when contractors don't maintain their compliance, as evidenced by an acceptable safety score in the contractor management system, payment is withheld until compliance is achieved.

3. Establish and track contractor safety KPIs.

Key performance indicators (KPIs)—such as total number of safety-related incidents and lost time rates—are one of the newest tools for advancing contractor safety.

EHS leaders rely heavily on safety metrics to create awareness of safety adherence and motivate workers to improve their performance. Many companies leverage a third-party software provider to host a digital dashboard that features the company's key safety-related KPIs for its contractors.

Clearly visible analysis of KPIs that represent safety adherence and progress can help decrease serious incident rates by holding department directors accountable for them. Regularly scheduled meetings to discuss performance metrics, including any incidents that occurred along with their root causes and corrective actions, can help teams strategize for continued improvement.

4. Leverage audits and incorporate safety performance into post-project evaluations.

Periodic on-site inspections, jobsite walk-throughs and annual audits are effective ways to monitor contractor safety

performance. These can be conducted by internal resources or some organizations leverage an outside vendor to perform these audits, supplementing their internal resources to give them more eyes in the field.

Organizations with advanced contractor safety programs go beyond contractor prequalification and monitoring by integrating safety performance into post-project evaluations and close-out conversations. For example, an EHS team included in the NAEM study conducts a post-project evaluation upon the completion of all contracted work. The company relies on the same general contractors for various projects, so they can regularly evaluate their performance and collaborate with them on subcontractor management to monitor and continually improve safety adherence.

The results of contractor safety audits and post-project evaluations can also be shared with supply chain, providing that part of the organization with additional metrics to monitor contractor performance, manage the relationship, and make decisions regarding inclusion in future bid invitations.

5. Leverage technology and third-party vendor support.

Gathering, verifying and auditing contractors' health and safety metrics and safety programs are not quick or easy tasks. According to EHS Today's 2019 National Safety Survey, leveraging technology for assistance is one of the most prominent industry trends. Technology, such as contractor management software solutions, modernizes contractor safety management for more efficient, effective results.

NAEM survey respondents with advanced programs rely on third-party providers with technology solutions that are backed by safety expertise to bring added capacity. A provider with expertise in contractor safety management can help standardize the prequalification process across the organization and provide clear visibility into whether a contractor company meets its safety expectations when assessing potential hires. This type of solution

also frees up internal resources by handling time-consuming collection and review of safety program information from contractors and, at the individual worker-level, can provide a clear picture of contract workers' training and readiness to work, and to help flag workers in need of additional training.

All told, then, adopting proven best practices to build or enhance your contractor safety management program can help ensure your contractors share your commitment to safety, improving safety performance and strengthening your workforce.

These ten construction safety facts can help you put precautions and procedures into perspective for your employees.

1. Construction Injuries Are More Common Than You Might Think

According to OSHA, about one out of every ten construction workers sustain an injury each year. Many construction companies and workers operate under the idea that injuries don't happen often, that only those who are disregarding safety rules or not paying attention to their work can become injured. This can serve as an excellent reminder that no one is immune from injury.

2. The Chance of Death throughout a Worker's Career is 1 in 200

This study shows that throughout a 45-year career in the construction industry, workers have a one out of 200 chance of dying on the job. And, during this same tenure, a worker has a 75% chance of sustaining an injury that will leave them disabled. The study also claims that construction workers are at a greater risk of dying early compared to other industries.

3. New Construction Workers Could Be at a Greater Risk of Injury

Data shows that 60% of construction workplace accidents occur within the employee's first year on the job. There could be a

number of factors that contribute to this figure, including lack of training, lack of experience, or a lack of understanding about the safety risks on a job site.

4. Nearly a Fifth of Workplace Deaths Come From the Construction Industry

Between 2002 and 2012, nearly 20% of all work-related deaths came from the construction industry. More than half of these deaths resulted from the "fatal four" causes: electrocution, falls, being struck by an object, and being crushed between two objects.

5. Falls Are the Biggest Risk to Construction Workers

Research shows that falls are the number one cause of fatal construction accidents. Specialty trade contractors make up the majority of fatal falls, and the risk varies depending on the construction worker's role. Older construction workers are at a greater risk than younger workers.

Falls don't always result in death. They can cause serious injury that could put the employee out of work for several days.

6. An Average of Two Deaths Occur Daily in Construction

On average, two construction workers die each day as a result of work-related injuries. The fatal four mentioned in #4 are the most common culprits. Check out this infographic to learn more.

7. Electrocutions Account for 9% of Construction Deaths

One of construction's fatal four, electrocutions make up almost 9% of all construction-related deaths. Deaths are usually caused by coming into contact with power lines, lack of ground fault, or misusing equipment or power cords.

8. Fall Protection Is One of the Biggest OSHA Violations in Construction

This figure could certainly be linked to #5 on this list. OSHA data shows that fall protection is one of its most common violations in the construction industry. It might be prudent to share these two stats with your team to remind them of the importance of using proper fall protection to mitigate the risk of injury.

9. Laborers Are at the Greatest Risk of Injury

Though no role is 100% safe in construction, carpenters tend to have the least amount of risk, while general laborers are at the highest risk. Electricians, roofers, and front line supervisors also carry a slightly elevated risk. The actual risk is determined by the job, the job site, and other conditions.

10. Surviving a Construction Accident Isn’t Without Consequences

Employees who survive construction site accidents often sustain life-changing damage. Repercussions include blindness, deafness, loss of limb, scarring or disfigurement, spinal cord injury, neck or back injury, brain injury, or other factor that could cause permanent disability.