WORKtoZERO
an nsc program

Industry Spotlight: Construction

Safety Technology Can Save Lives at Work

Top Risks

According to the Occupational Safety and Health Administration (OSHA), some of the most **serious hazards** associated with the construction industry include:

- Falling from rooftops
- Unguarded machinery
- Being struck by heavy equipment
- Electrocutions
- Exposure to silica dust
- Exposure to asbestos

Data Insights

The Bureau of Labor Statistics (BLS) reported 1,008 fatalities in the construction industry in 2020, equaling approximately 13 deaths per day or one worker dying every 111 minutes.

The National Institute for Occupational Safety and Health (NIOSH) reported the following statistics regarding the leading cause of death in construction in 2019:

- Falls (38%)
- Struck by objects (15%)
- Electrocutions (7%)
- Caught in/between (5%)



Technology Solutions

Cutting edge technology is currently used in construction to advance engineering and design principles. However, technologies can also be used to enhance health and safety.

Safety technologies currently in use or gaining traction in construction include, but are not limited to:

- **Virtual and augmented reality** for digital training
- **Drones** for inspections and surveying
- **Sensors** for proximity detection, location geofencing, environmental monitoring, etc.
- **Mobile apps** for lone worker monitoring, worksite inspections, etc.
- **Wearables** to monitor heat stress and other biometrics
- **Camera analytics** and **artificial intelligence**

Industry Overview

The **construction industry** plays a significant role in the world's economy, supporting nearly all aspects of our lives and **employs more than 7.5 million individuals** in the U.S.

The industry is commonly described based on the following sectors:

- Residential and commercial building
- Infrastructure projects
- Special trades such as electrical work, plumbing, painting, etc.

To Learn More…

Explore the tools and resources available at nsc.org/WorktoZero to learn how digital technologies can save lives:

- Complete a Digital Readiness Assessment to determine your organization's readiness
- Use a Digital Technology Locator Tool to identify safety technologies
- Locate specific, market-ready technologies at Safetytech.ai
- Use an Investment Calculator to explore the value of adopting safety technologies
- Follow a Pilot and Implementation Roadmap to adopt life-saving technologies

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