

Safety Technology Can Save Lives at Work



Top Risks

The following is a non-exhaustive list of **hazards and high-risk tasks** that utility workers commonly face:

- Working at height
- Trenching and working in confined spaces
- Overhead line work
- Utility strikes, explosions, and vibration damage from digging
- Working around heavy equipment
- Electrical hazards and electrocution
- Responding to weather emergencies or natural disasters
- Exposure to biological or chemical hazards
- Environmental exposure (heat or cold stress)



Data Insights

According to the [Bureau of Labor Statistics](#) (BLS), between 2017 and 2020, 158 employees from the utilities subsector lost their lives at work. BLS also reported a **fatal injury rate of 1.8 per 100,000 full-time workers in 2020**.

[Travelers insurance](#) claim data from 2016 revealed that “52% of all workplace injuries occur within the first year of employment.”



Technology Solutions

The [American Public Power Association](#) and [T&D World](#) have recently showcased **technologies with promise to advance safety in utilities**. Examples of innovation include:

- Augmented reality
- Virtual reality
- Sensors for collision avoidance
- Drones
- Wearables and other embedded technology
- Safety devices for inspections and maintenance (e.g., infrared windows, ultrasonic ports, etc.)
- Camera analytics
- Use of artificial intelligence (AI) and predictive analytics

Industry Overview

According to the [North American Industry Classification System](#)

(NAICS), the **utilities** subsector consists of the following industry groups:

- Electric Power Generation, Transmission & Distribution
- National Gas Distribution
- Water, Sewage and Other Systems

The [Bureau of Labor Statistics](#) (BLS) estimates **more than 539,000 individuals work directly** in the U.S. utilities subsector and approximately 20% of employees are members of or represented by unions.

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



