

Manufacturing



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), 341 preventable fatalities occurred in manufacturing in 2020. Also, while the **fatality rate for manufacturing was 2.3 per 100,000 full-time workers in 2020**, the following subsectors experienced a higher rate:

- Cement, concrete, lime, and gypsum product manufacturing (18.7)
- Nonmetallic mineral product manufacturing (8.8)
- Wood product manufacturing (8.1)



Technology Solutions

Safety technologies currently gaining traction in manufacturing include, but are not limited to:

- **Virtual or augmented reality training** to prepare employees for hazardous situations
- **Robotics** to conduct more complex or dangerous tasks
- **Sensor technology** to monitor machines
- **Mobile applications** to improve audits and inspections and to assist with risk management and compliance
- **Predictive analytics** to better utilize data for safe production
- **Wearables** to track employee location and biometrics, as well as environmental and other worksite conditions (e.g., smart goggles, smart vests, etc.)

Industry Overview

Manufacturing is the fourth largest industrial sector in the United States and accounts for approximately 11% of the nation's gross domestic product.

The [Bureau of Labor Statistics](#) (BLS) estimates **more than 12.6 million individuals were employed** in manufacturing in the United States in 2022.

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