

Safety Technology Can Save Lives at Work



Top Risks

According to [National Institute for Occupational Safety and Health's](#) Mining Program, the **top accident classifications** for fatalities between 2010 and 2020 (N=387) were:

- Powered haulage (29%)
- Machinery (20%)
- Fall of ground (from in place) (14%)
- Ignition/explosion of gas/dust (9%)
- Falling, rolling, or sliding rock or material (8%)
- Slip or fall of person (8%)
- Electrical (4%)



Data Insights

The [Department of Labor](#) (DOL) reported 29 fatalities in the mining industry in 2020 (22 at surface operations; 7 underground):

- 9 involved machinery
- 6 involved powered haulage
- 4 had to do with slip/fall of person
- 3 involved fall of roof or back
- 2 were material handling related
- 2 were from fall/slide of material
- 2 involved electrical hazards
- 1 involved hand tools

Contractor deaths accounted for 41% of fatalities at mines in 2019 and 28% in 2020.



Technology Solutions

In 2021, [Deloitte Insights](#) reported that **integrated predictive safety systems** are needed to take safety and business to the next level in mining. Current technologies in use across mining operations include, but are not limited to:

- Wearable technology
- Robotics and automation
- Radio-frequency identification (RFID)
- Drones
- Worksite simulators

Industry Overview

The **mining** industry plays a significant role in the world's energy market, as well as construction and chemical industries. Mining is also critical to the production of electronics and other consumer goods.

The [National Mining Association](#) (NMA) estimates **more than 650,000 individuals work directly** in the U.S. mining industry.

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

