Extreme Weather Safety Stats and Facts



FACTS

1. **Heat Stress:** Extreme heat overloads the body’s cooling system, causing dehydration, heat exhaustion, or heat stroke—conditions that escalate quickly during outdoor work.
2. **Cold Exposure:** Low temperatures reduce blood flow to extremities, increasing the risk of frostbite, hypothermia, and loss of dexterity needed for safe work.
3. **Lightning Strikes:** Severe storms produce high electrical discharge; workers in open areas, near metal tools, or elevated positions face elevated strike risk.
4. **High Winds:** Sudden wind gusts can knock down ladders, tools, structures, and workers, especially on farms, construction sites, and open fields.
5. **Flood Hazards:** Flash floods can sweep away equipment, vehicles, or workers, and contaminated water creates electrical and biological hazards.
6. **Wildfire Smoke:** Smoke exposure reduces air quality and causes eye irritation, breathing difficulty, and reduced visibility, impairing safe task performance.
7. **Rapid Weather Changes:** Sudden temperature shifts or storm fronts can catch workers off guard, leaving no time to secure equipment or seek shelter.

STATS

- In 2023, weather-related conditions contributed to 100 workplace fatalities in the US, out of 5,283 total fatal work injuries, often from slips, falls, or exposure during storms and extreme temperatures.
- Extreme weather events in Canada are projected to cost $25 billion in 2025, accounting for half of the country’s GDP growth, with significant impacts on worker safety in sectors like construction and agriculture.
- From 2020-2025, extreme heat events in Canada increased the risk of heat-related illnesses among outdoor workers, with studies showing a 40-60% rise in potential workplace injuries due to fatigue and reduced concentration.
- In the US, about 60 employees die annually from weather-related causes (2020-2024 average), including electrocution, drowning, and injuries from falling objects during severe storms.
- Canadian workplaces faced increased emergency response delays during extreme weather in 2023-2024, with 92% of business leaders reporting fears of climate-related disruptions affecting employee safety.
- Between 2020-2024, cold stress incidents in Canadian federally regulated workplaces rose by 15-20%, linked to more frequent extreme winter events, leading to higher rates of frostbite and hypothermia claims.