

KEEPING CONSTRUCTION WORKERS SAFE FROM HEAT-RELATED ILLNESSES


Extreme heat heightens the risk of workplace injuries and construction project delays.

Extreme heat-related injuries are increasing

- Extreme heat is now the leading cause of all weather-related deaths in the U.S.¹
- Worldwide, nearly **23 million** workplace injuries and almost 19,000 deaths are caused by extreme heat annually.
- **231 million** workers globally were exposed to heatwaves in 2020 – a 66% increase from 2000.²



Prevalence among construction workers

- Nearly **73%** of construction workers in the U.S. primarily work outdoors, increasing their vulnerability to heat stress.³
- Construction workers accounted for **34%**  of all heat-related workplace deaths between 1992 and 2022.⁴
- U.S. construction workers are **13 times** more likely to die from heat-related injuries than workers in other industries.³

The financial cost

- Just one incidence of a worker overheating can cost almost **\$80,000** in workers' compensation, medical treatment and productivity to employers.⁵
- Extreme heat and other weather-related delays increase a project's cost nearly **24%** and duration **26%**.⁶
- Construction activities involving physical work take **36% longer to execute during extreme heat**.⁷

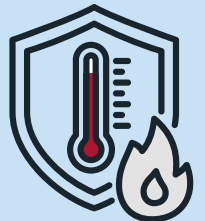
Factors that increase the likelihood of heat-related illness⁸

- Direct sun exposure
- Radiant heat sources
- Limited air movement
- Dehydration
- Physical exertion
- Personal protective equipment (PPE)



Heat-related illness myths

- **Myth: Healthy people aren't at risk.** Even fit individuals can suffer heat stroke during intense activity.
- **Myth: Heat stroke only occurs in extreme heat.** It can happen in moderate temperatures, especially with high humidity.
- **Myth: Hydration alone prevents heat stress.** Hydration is essential, but rest, shade, acclimatization and symptom awareness are also key.



WHAT YOU CAN DO

Construction companies should establish a heat illness prevention program with best practices that include:

- **Ensure workers stay hydrated – even while away from work. Provide access to water and/or beverages with electrolytes.**
- **Encourage frequent breaks to prevent overexertion.**
- **Provide shade or cooling areas.**
- **Allow new or returning workers to gradually acclimate or build a heat tolerance with lighter workloads and more rest.**
- **Train staff to prevent, recognize and respond to symptoms of heat illness.**
- **Establish a clear emergency plan if heat illness occurs.**

¹ National Weather Service, "Heat Safety Tips and Resources," accessed April 1, 2025.

² International Labour Organization, "More workers than ever are losing the fight against heat stress," July 25, 2024.

³ National Library of Medicine, "Assessing Heat Stress and Health among Construction Workers in a Changing Climate: A Review," Feb. 1, 2018.

⁴ U.S. Environmental Protection Agency, "A Closer Look: Heat-Related Workplace Deaths," updated Feb. 6, 2025.

⁵ SafetyandHealthMagazine.com, "The cost of heat-related illnesses," April 13, 2023.

⁶ Buildings, "The Influence of Weather Conditions on Time, Cost, and Quality in Successful Construction Project Delivery," February 3, 2025.

⁷ Bisnow.com, "Adaptation Cost Of Anguish: How Extreme Heat Is Slowing Down Construction," September 5, 2023.

⁸ CDC.gov, "Heat Stress and Workers," accessed March 31, 2025.