

# Caring for workers affected by climate change



Due to climate change, the world is experiencing longer dry seasons, earlier snowmelt, stronger winds, heavier rainfall, higher sea levels, and more severe thunderstorms. These conditions have led to a rapid increase in natural disasters, such as wildfires, floods, hurricanes, and tornadoes – all of which can have devastating and tragic consequences.<sup>1</sup>

Climate change has also created hotter temperatures and increased the likelihood of heat waves, which now occur three times more often than they did in the 1960s. The average heat wave season is 46 days longer, and individual heat waves are becoming more intense.<sup>2</sup>

The impact of extreme weather, fires, and storms on the health of the population and the economy has been enormous. Globally, from 1970 to 2021, these events caused 2 million deaths, 12,000 disasters, and \$4.3 trillion in reported economic losses.<sup>3</sup>



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## Effect of climate change on employer costs

The overall cost to employers from climate change events is high and rising rapidly. A 2025 study from S&P Global used current data to project these costs.<sup>4</sup>

### Annual costs

2030s	2050s	2090s
<b>\$885 billion</b>	<b>\$1.2 trillion</b>	<b>\$1.6 trillion</b>

### By the 2050s

#### **91%** of total costs

experienced will be associated with extreme heat, water stress, and drought

#### **\$244 billion** in annual costs

borne by the utilities sector – the heaviest financial toll among all industries

#### **\$4.6 billion** in annual costs

per average electric utility company, more than four times the cross-industry average

## Effect of climate change on worker health and safety

While natural disasters and extreme heat affect the general population, they have an outsized effect on workers operating in extreme weather conditions or performing the dangerous and often hazardous tasks associated with emergency management. The physical and emotional consequences of their work can be severe: heat exhaustion, smoke inhalation, burns, electrical injuries, infections from floodwaters, and post-traumatic stress disorder (PTSD) are some of the many health effects that workers may experience.

Firefighters, first responders, utility and construction workers, waste management workers, agricultural workers, mail carriers, delivery workers, and factory workers are all at greater and increasing risk of injury and illness.

### Extreme heat injuries

- Heat stroke
- Heart attack
- Severe sunburn

### Flood injuries

- Near-drowning incidents
- Electrical injuries
- Skin infections
- PTSD

### Wildfire injuries

- Burns
- Respiratory injuries from smoke/chemical inhalation
- Lacerations
- Musculoskeletal injuries
- PTSD

### Hurricane and tornado injuries

- Lacerations and musculoskeletal injuries
- Head trauma
- Amputation
- PTSD

## Whole-person support for workers

Workers who have become injured or ill as a result of a weather-related event or natural disaster often have more than one health need, and many times their needs are codependent. A whole-person approach to care addresses the patient's physical needs but also works to uncover the emotional and social factors that could delay recovery. By supporting all of the patient's needs, employers and payers can accelerate return-to-work timelines and minimize disability risks, in turn lowering medical expenses, indemnity payouts, and overall claim durations.

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Holistic care is the right approach, but sometimes it's hard to put all the pieces together. Optum will partner with you to design cost-effective solutions that aid in recovery by supporting each injured worker's unique needs.

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### Medications for physical injuries and psychological trauma

Medications are often needed to treat physical conditions such as heat-related injuries, smoke inhalation, and injuries from flooding, hurricanes, and tornadoes. But natural disasters can also have a significant impact on mental health, leading to diagnoses such as PTSD, depression, and anxiety disorders.

Our injury-based formularies include medications needed for treating the most common physical and psychological conditions resulting from extreme heat or a natural disaster.

- Antibiotics
- Pain medications
- Topical anesthetics
- Topical antimicrobial agents
- Asthma & COPD medications
- Musculoskeletal therapy agents
- Antidepressants
- Anti-anxiety agents
- Corticosteroids



## Non-medication treatments and supplies

And while medication therapy is often the first step toward the patient's journey to recovery, an injured worker may also need:



Durable medical equipment (DME)



Orthotic devices



Supplies



Prosthetic devices



Home health services

Optum Ancillary Services, our Durable Medical Equipment, Prosthetic Devices, Orthotics, and Supplies (DMEPOS)-accredited program, can fill these needs. Our network of carefully vetted, quality providers offer DME, home health care, hearing services, prosthetic and orthotic devices, and home and vehicle modification services.

## Access to care

Statistics show that early warning systems and efficient disaster management reduce injuries and deaths. As a result of emergency systems and protocols, despite a surge in the number of natural disasters, the number of deaths actually decreased almost threefold between 1970 and 2019.<sup>5</sup>

Optum is committed to providing injured workers with access to their injury-related medications and ancillary services orders during emergency events as appropriate. During a state of emergency, Optum uses sophisticated systems to initiate an emergency protocol that allows injured workers in affected areas to obtain early refills of prescriptions during the emergency period. Our home delivery pharmacy, Optum Rx, and our Ancillary Services team will also ship the injured person's medications and supplies to an alternate address if needed.



## Resources for managing pain and optimizing recovery

Many of the injuries that occur during natural disasters can result in acute pain. The Optum Managing Your Pain program provides educational resources for injured workers who have been prescribed opioid medications for pain. This program provides clear information on how to use opioid analgesics safely and encourages the patient to discuss any concerns with their doctor and dispensing pharmacist. Through this proactive guidance, issues can be uncovered and resolved before the claim reaches the chronic phase of injury.

In addition to supporting pain management through the use of medications, Optum can provide patients with access to Kaia Health, a digital therapeutics product, which provides 24/7 access to a clinically validated program and access to coaches and physical therapists (PTs) to help alleviate back, neck, muscle, or joint pain.

Using the Kaia Health app on their phone, the patient can get immediate PT-grade care and one-on-one support from licensed physical therapists and coaches in both English and Spanish.



On our [Managing Your Pain web page](#), an injured worker can find online resources to guide their recovery, which can be especially useful during a natural disaster.

## Additional support for comprehensive care

An injured worker may also need:



Immunizations



Nutritional support



Behavioral health support



Social services



Chiropractic services

It's important to keep all of these factors in mind. Optum workers' compensation nurses can also provide advice for locating and obtaining the additional resources needed to support an injured worker's unique recovery situation.





## Key takeaways for payers and adjusters

Physical injuries can be easy to recognize. But some injuries that are equally significant can go unseen. An injured worker may suffer long-term effects from smoke inhalation, or they may begin having nightmares months after they are initially seen by a doctor. Coordination of care for all of the patient's medical, pharmaceutical, and supply needs is paramount. By treating the whole person, not just the injury, Optum promotes faster recovery and lower claim costs.



### Learn more

As the number of injuries and illnesses from climate change continues to rise in worker populations, Optum is ready to help. To find out more about our programs that support our holistic approach to injured worker care, contact us at [expectmore@optum.com](mailto:expectmore@optum.com).

<sup>1</sup> Vernick, D. [Is climate change increasing the risk of disasters?](#) World Wildlife Federation; January 14, 2025.

<sup>2</sup> [Climate Change Indicators: Weather and Climate](#), U.S. EPA; last updated March 26, 2025.

<sup>3</sup> [Extreme Weather as a Climate Health Hazard](#), United Nations; last updated April 10, 2025

<sup>4</sup> [For the world's largest companies, climate physical risks have a \\$1.2 trillion annual price tag by the 2050s](#), S&P Global; March 10, 2025.

<sup>5</sup> [Climate and weather related disasters surge five-fold over 50 years, but early warnings save lives - WMO report](#), United Nations; September 1, 2021.