

## Heat-related Illnesses and Prevention

Every year, dozens of workers die and thousands more become ill while exposed to heat in their workplaces. Most outdoor fatalities, 50% to 70%, occur in the first few days of working in warm or hot environments because the body needs to build a tolerance to the heat gradually over time. The process of building tolerance is called heat acclimatization. Lack of acclimatization represents a major risk factor for fatal outcomes.

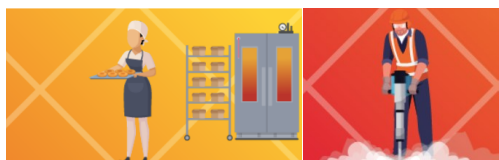
Hazardous heat exposure can occur indoors or outdoors, and can occur during any season if the conditions are right, not only during heat waves. The following is a list of some industries where workers have suffered heat-related illnesses.

### Indoors

- Bakeries, kitchens, and laundries (sources with indoor heat-generating appliances)
- Electrical utilities (particularly boiler rooms)
- Fire Service
- Iron and steel mills and foundries
- Manufacturing with hot local heat sources, like furnaces (e.g., paper products or concrete)
- Warehousing

### Outdoors

- Agriculture
- Construction – especially, road, roofing, and other outdoor work
- Landscaping
- Mail and package delivery
- Oil and gas well operations



### Heat Illness Risk Factors

- High temperature and humidity
- Low fluid consumption
- Direct sun exposure (with no shade) or extreme heat
- Limited air movement (no breeze or wind)
- Physical exertion
- Use of bulky protective clothing and equipment

### Watch for Any Symptoms and Signs of Heat Illness

#### Heat Exhaustion :

- Fatigue
- Irritability
- Thirst
- Nausea or vomiting
- Dizziness or lightheadedness
- Heavy sweating
- Elevated body temperature
- Fast heart rate

#### Heat Stroke :

- Confusion
- Slurred speech
- Unconsciousness
- Seizures
- Heavy sweating or hot, dry skin
- Very high body temperature
- Rapid heart rate



#### Heat Illness Can Be Prevented!

- ✓ Water
- ✓ Shade and Rest
- ✓ Training
- ✓ Emergency Plan

More information, visit:



### First Aid

- Take the affected worker to a cooler area (e.g., shade or air conditioning).
- Cool the worker immediately.
- Remove outer layers of clothing, especially heavy protective clothing.
- Place ice or cold wet towels on the head, neck, trunk, armpits, and groin.
- Use fans to circulate air around the worker.
- Never leave a worker with heat-related illness alone.
- **When in doubt, call 911!**



For more information, please contact HIOSH at:  
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