



HEAT STRESS AWARENESS TOOLBOX TALK



What is Heat Stress?

Heat stress occurs when the body cannot cool itself effectively, causing core temperature to rise. Normal core body temperature is 97.7 - 99 .5 °F.

Heat exhaustion can develop when core temperatures reach around 100 - 104 °F, and heat stroke becomes life-threatening above 104 °F.

Environmental factors such as high air temperature, direct sun exposure, high humidity, radiant heat from equipment, and physical exertion increase risk. Even moderate temperatures can be hazardous when combined with heavy PPE or strenuous activity.

Recognizing Heat Stress

Early signs include excessive sweating, fatigue, dizziness, headache, and nausea. As conditions worsen, signs can escalate to confusion, hot dry skin, rapid pulse, and fainting - indicators of heat stroke, which is a medical emergency.

Safe exposure guidelines (approximate, depending on activity and clothing):

- Light activity: up to 2 hours in 80 – 85°F with hydration
- Moderate activity: 30 – 60 minutes in 90 – 95°F
- Heavy activity: 15 – 30 minutes above 95 °F without proper rest, hydration, and cooling

Prevention Strategies

Preventing heat stress starts long before symptoms appear. By managing hydration, workload, PPE, and environmental conditions, workers can maintain safe core temperatures even in demanding environments. These strategies are designed to help teams stay proactive rather than reactive:



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- Hydration: Drink water regularly, even before you feel thirsty. Avoid excessive caffeine or alcohol.
- Clothing & PPE: Wear breathable, light-colored clothing and sun protection; adjust PPE layers when possible.
- Work/Rest Cycles: Schedule frequent breaks in shaded or cooled areas; rotate crews to limit continuous exposure.
- Acclimatization: Gradually increase work intensity over 7–14 days for employees new to hot environments.
- Monitoring: Use buddy systems to watch for early signs in yourself and coworkers.

Emergency Response

If heat stress symptoms appear, rapid action is critical. Early intervention can prevent a mild case of heat exhaustion from escalating into heat stroke—a life-threatening emergency. The steps below outline how to stabilize the individual, begin cooling immediately, and ensure they receive proper medical attention.

- Move the affected person to a cool, shaded or air-conditioned area
- Remove or loosen heavy clothing and PPE
- Apply cool, wet cloths to the skin or use cooling vests
- Hydrate with water or electrolyte solutions
- **Call emergency services immediately** if heat stroke is suspected (hot, dry skin, confusion, or loss of consciousness)

Discussion / Engagement Questions

Ask your team:

- Which tasks today expose us to extreme heat?
- Do all team members have adequate hydration and PPE adjustments?
- How can we monitor each other for early signs of heat stress?

RATTLIR Takeaway

Heat stress can escalate rapidly and silently. By understanding environmental factors, monitoring physiological signs, and using proper hydration, clothing, and work/rest cycles, you can strike before it bites – keeping yourself and your team safe and productive in hot conditions.