



The **Cycle** of Hydration, Heat Stress & Fatigue

Dangerous trio

Dehydration - the Catalyst:

Dehydration occurs when fluid loss exceeds intake. Even mild dehydration - **just 2% loss of body water** - can impair physical and mental function.



Heat Stress - Body Overheating

Heat stress happens when the body can't cool itself fast enough. The risk is **significantly increased by dehydration**, water is needed for sweating and evaporative cooling.



Fatigue – the Downstream Effect

Fatigue is a typical outcome. The Cycle:

1. **Dehydration** lowers blood volume → heart rate rises
2. **Heat stress** increases strain on thermo regulation
3. **Fatigue** sets in sooner → decreased performance, poor coordination

Dehydration, heat strain, fatigue - this dangerous trio reduces concentration and reaction speed, increases risk of heat illness and impairs workplace safety

Top Prevention Tips

Breaking the Hydration | Heat Stress | Fatigue cycle:

- ✓ Hydrate proactively – encourage workers to drink before they feel thirsty.
- ✓ Educate workers on the benefits of drinking fluids more regularly versus a large amount all at once.
- ✓ Encourage use of electrolyte solutions if working >60 minutes in the heat
- ✓ Schedule work breaks in cool/shaded environments
- ✓ Use PPE smartly – minimize heat-retaining gear when possible
- ✓ Use a hydration monitoring system to help workers manage their hydration.



We recommend the Salhy personal hydration test for **rapid, convenient** and **portable** hydration testing

Salhy PERSONAL
HYDRATION
TEST

