



Weekly Safety Tip

Heat Stress Prevention



HEAT STRESS PREVENTION



WATER – REST – SHADE is now R E S H A P E

Here is what we have been told to keep in mind to avoid a high heat-related incident:



HEAT STRESS PREVENTION has now been become more fully specified as:



HEAT STRESS PREVENTION

Having a written heat stress prevention and management plan protects worker health and safety.

Elements of the plan include:

- Heat hygiene (education)
- Hydration
- Acclimatization (readiness/fit for duty)
- Environmental/Physiological monitoring
- Core body cooling
- Personal protective clothing/equipment
- Emergency procedures

Acclimatization

Preparing workers for heat exposure through repeated bouts of physical activity in hot environments, inducing physiological adaptations that reduce strain and improving thermal tolerance.



The Tip

When working in hot conditions, remember RESHAPE...

Weekly Safety Share



Heat Stress Wearable Tech to Monitor Hydration

Dehydration is a silent threat that affects millions of people every day.

Wearable hydration monitor could help prevent heatstroke, scientists say

Medical tech device tracks body water levels in real time through a smartphone

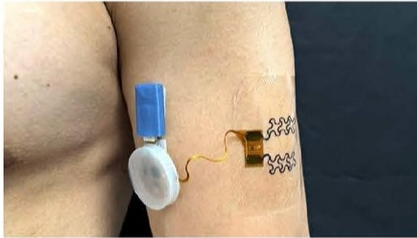
A new [wearable sensor](#) could help people avoid the dangers of dehydration by alerting them when their bodies need more water.

Developed by researchers at the University of Texas, the non-invasive device continuously measures hydration levels in real time and wirelessly transmits the data to a [smartphone](#), according to an SWNS report.

"Dehydration is a silent threat that affects millions of people every day," said Professor Nanshu Lu of the University of Texas at Austin, who led the study.

"Our wearable sensor provides a simple, effective way to monitor hydration levels in real time, empowering individuals to take proactive steps to stay healthy and perform at their best," she added, per SWNS.

The sensor uses a method called [bioimpedance](#), which sends a small, safe electrical current through the body via strategically placed electrodes.



The sensor (shown on the left) uses a method called [bioimpedance](#), which sends a small, safe electrical current through the body via strategically placed electrodes.

(University of Texas / SWNS)

The current's flow depends on how hydrated the tissues are — hydrated tissue allows the current to pass easily, while dehydrated tissue resists the flow, according to SWNS.

"Arm [bioimpedance](#) is not only sensitive to hydration changes, but also aligns closely with whole-body hydration measurements," said study co-author Dr. Matija Jankovic, a post-doctoral researcher in Lu's lab.

"This means the sensor can be a reliable surrogate for tracking hydration levels, even during everyday activities like walking, working or exercising," Jankovic added.

To validate the device, the research team conducted multiple experiments, including a diuretic-induced dehydration study and a 24-hour real-life trial.

Participants were given medication to promote fluid loss. Their hydration levels were monitored via the wearable and compared to urine samples.

The device showed a strong correlation between changes in arm [bioimpedance](#) and total body water loss, SWNS reported.

The findings were published in the Proceedings of the National Academy of Sciences.

The new sensor could offer an accessible and wearable alternative to traditional hydration tracking methods, such as urine or blood analysis, which are invasive, time-consuming and impractical, the researchers noted.



A thoughtful man takes a break, drinking a glass of water in a home kitchen.

He values wellness, focus, and self-care, ensuring hydration is part of his daily lifestyle and healthy habits.



Share this email:



[Manage](#) your preferences | [Opt out](#) using TrueRemove®

Got this as a forward? [Sign up](#) to receive our future emails.

View this email [online](#).

8015 Rinker Pointe Court
Northwood, OH | 43619 United States

This email was sent to .

To continue receiving our emails, add us to your address book.

[Subscribe](#) to our email list.