

## - Body temperature

HEATWAVE PROTECTION

# It's getting

Average temperatures soaring across the world is bad enough, but we also have to contend with our summer heatwaves. Here's what's going on and how you can stay safe.

# HOT

# out here

**S**ummertime issues, like heat rashes and sunburn, have been around forever. But with the acceleration of climate change – the 10 warmest years ever recorded have all occurred since 2010, and experts predict that the world's average temps could soar another one to five degrees Celsius over the next decades – it's time to consider the health dangers of extreme heat, says sports medicine expert Dr Elizabeth Gardner.

The death toll from heatwaves in Australia has exceeded that of any other environmental disaster, including floods, bushfires and cyclones, and the same is true for Europe and the US. Furthermore, direct ill effects of extreme heat may not always be officially identified as heat related if death is linked to the worsening of an underlying chronic illness, which is common during a heatwave.

Heat also makes people very sick. Aussie researchers determined that each time the

thermometer goes up by one degree Celsius, reports of illness leap by 18 per cent. Some of heat's effects don't show up immediately and thus can fly under the radar. Visits to the ER for kidney stones, urinary tract infections and other kidney conditions spike several days after heat rolls in, one recent study found. And when the temp soars, more people with mental health conditions suffer, too, with a greater number visiting the ER for worsening anxiety and schizophrenia, scientists have discovered.

It's easy to overestimate your ability to tolerate heat, Dr Gardner says, but during a heatwave, temperature readings after the sun goes down may matter more than those at the height of the day, particularly if you don't have airconditioning. Your organs need a chance to cool down at night, which keeps them healthy, says extreme heat specialist Kurt Shickman. "Most negative health outcomes happen when you have high nighttime temps," he notes.

PRINTED FROM  
PRESSREADER

Another reason it can be hard to know when hot is too hot? There's more involved than just thermometer readings. Scientists use a 'wet bulb' gauge – similar to the 'feels like' measurement on common weather apps – that takes into account wind speed, cloud cover and humidity, which is especially problematic when you exercise outdoors. "The process of burning energy generates heat that must be dissipated through sweating," explains Dr Gardner. When the air is thick with moisture, sweat cannot evaporate, so you don't cool down.

Extreme heat is especially dangerous to our brain. "The highest level of illness is called heatstroke for a reason," says sports medicine physician Dr Kristopher Paultre. Symptoms like confusion and dizziness are similar to those of an actual stroke. Bad cases may result in neurological symptoms or even death.

## How can we stay safe in the heat?

**1 KNOW THE SIGNS** If you're sweating heavily, clammy, nauseated or cramping, move to a cooler place, sip water and cool your body down with a wet cloth or a cold bath. It's a "call 000 emergency" when confusion or neurological symptoms set in or when your temperature is 39°C or higher and/or your skin becomes hot, red and dry.

**2 HYDRATE SLOWLY** Your body can absorb only a small amount of water at a time, says Dr Gardner. Prehydrate safely by sipping water steadily over several hours. When outside, carry a water bottle with you and aim for 170 to 230ml every 20 minutes. If you exercise outside for more than an hour, opt for an electrolyte solution.

**3 KNOW YOUR RISKS** People who suffer from cardiovascular and respiratory illnesses are especially vulnerable to excessive heat, as are children and the elderly. Make sure you and your loved ones seek out airconditioned venues, such as shopping centres, during multi-day heatwaves. **P**

