

Strategies for coping with extremely hot weather

January 8 2013, by Margaret Loughnan



Preparation is key to surviving extremely hot weather. Credit: Misswired/Flickr

Exposure to extreme heat can cause illness and even death for some people. But there are several small steps you can take to protect yourself and your loved ones.

We need to keep our body temperature in the range of 35.5 to 37.5°C as

this protects our [vital organs](#) and allows the body to function normally. Bodies gain [heat](#) from both the metabolic processes within and the environment, and heat is lost through the skin by radiation and by sweating.

How you experience heat can be improved by adaptive behaviour, such as staying in the shade, indoors in air-conditioned places and using fans to circulate the air.

Heat-related illnesses occur when heat gain is greater than [heat loss](#); when heat gain from the environment or [metabolic processes](#) cannot be effectively dissipated through physiological or behavioural thermoregulatory processes. These illness range in impact from mild, such as heat cramps to severe or life-threatening, such as heat stroke.

[Heat stroke](#) is a medical emergency, leading to rapid death in 10% to 50% of cases and poor outcomes in a high proportion of survivors, according to the [World Health Organisation](#).

Those at greatest risk of [heat-related illnesses](#) are people aged 65 years and older, babies and young children, pregnant women and [breastfeeding mothers](#). People who have difficulty communicating, moving around or are bedridden are also at [high risk](#) (because they rely on others for drinks and showers), as are older people living alone.

Exposure to extreme heat has particularly adverse effects on people with [chronic illnesses](#) such as cardiovascular, respiratory or renal diseases, along with diabetes and obesity, and those with mental illness. These people account for a high proportion of the deaths caused by extreme heat.

People working outdoors [also face high risk](#), especially if they're working in direct sunlight. Excessive drug or alcohol use increases the

risk of heat-related illness the drugs affect thermoregulation and alcohol acts as a diuretic (causes increased urination).

Medications including blood pressure and heart medicine (beta-blockers), water pills (diuretics), antidepressants, antipsychotics and anti-convulsants (seizure medication) and antihistamines (allergy medications) may also affect how the body reacts to heat. And where you live could play a role in the degree of risk heat poses for you. People living in multistorey buildings, and houses without external shading either from blinds, awnings or vegetation are most likely to be affected.

Access to air-conditioning is clearly protective during [extreme heat](#). This can either be at home or by going to an air-conditioned place such as cinema, shopping centre, community centre, or library.

You should be prepared for extremely hot weather over summer, and ensure that your heatwave plan includes:

- setting up fans in living areas and bedrooms. Some people may need assistance from family or carers to do this;
- check that air-conditioning units work efficiently. Ensure they're not still on heat mode after winter and that the thermostat has been reset. Also, make sure that the cool function is clearly marked on the remote control;
- access to fluids is important. Have a supply of cool drinks and water in the refrigerator;
- make sure you have enough food, drink and medicines for a few days if very hot weather is forecast;
- all refrigerated medicines should be kept in the fridge at all times, and other medication may need to be moved to cooler places in the house;
- protect your home from heat by pulling down awnings and

blinds. Put shade cloth over outdoor pergolas to shade walls and windows; and

- think about what you will do if there's an electricity blackout. Have a list of people you can call for help if needed. Ask whether your phone will work without power, if you have a backup mobile phone, and whether you will be able to ask your neighbours for help.

During extremely hot weather:

- keep in touch with friends and family, as they may be your lifeline;
- stay hydrated – drink plenty of fluids even if you don't feel thirsty, taking small amounts often. Don't drink alcohol and limit tea and coffee as these are mildly diuretic;
- stay out of the sun, especially during the hottest part of the day, and do any essential outdoor jobs early in the morning when it's cooler;
- use your air-conditioner or fans. Cooling one room is easier and cheaper than cooling the whole house. Cool your bedroom two or three hours before bedtime, and open windows for ventilation in the evening when it's cooler;
- if you don't have air-conditioning, arrange to go to a cool place and leave as early as possible to avoid travelling in the heat;
- place damp towels around neck and shoulders to cool yourself, place your feet in basin or bucket of cool water. Cool water is better than icy cold, which causes your blood vessels to constrict and slows down the body's ability to radiate heat. Be mindful of people who can't do this for themselves such as disabled people, children and babies.
- eat frequent small meals and avoid cooking. Store food in the refrigerator;

- rest – don't do unnecessary work, think siesta; and
- listen to the radio and television for heatwave information.

Heatwave preparedness plans and fact sheets are available on state government departments of health [websites](#) and in many local government offices.

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Source: The Conversation

Citation: Strategies for coping with extremely hot weather (2013, January 8) retrieved 6 May 2024 from <https://medicalxpress.com/news/2013-01-strategies-coping-extremely-hot-weather.html>

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