Reducing heatwave and other summer risks

December 18 2015

As temperatures head over 40C, the need to closely monitor vulnerable younger and older people with health issues is high – particularly with the increased risk of bushfires and interruption to critical infrastructure causing potential for power blackouts and loss of communications.

Summer in Australia often brings increased risks of major emergencies and has historically seen a number of significant disasters, the Torrens Resilience Institute says.

"One of biggest risks is heatwave, with heatwaves responsible for more deaths in Australia than any other natural disaster," says Torrens

Resilience Institute (TRI) director Professor Paul Arbon.

In Australia between 1990 and 2014, the EM-DAT International Disaster Database calculates that extreme temperature is responsible for almost twice as many mortalities as bushfires, and four times the number of fatalities associated with flooding and storms respectively.

Extreme heat conditions could exacerbate existing conditions related to cardiovascular, cerebrovascular, renal, respiratory and mental health issues, says TRI researcher Associate Professor Lidia Mayner.

"It is essential for families to look out for elderly relatives during time of hot weather, especially for those who already suffer from any of these conditions," she says.

"The risk is particularly significant in older people who sometimes do not realise the need to maintain hydration. Also, many do not use fans or air-conditioning to cool their homes, in part because of concerns about power bills."

The Institute is currently studying the effect of various medication types and potential links to hospital presentations during heatwaves. The outcome of this research will assist medical professionals in identifying those most at risk for adverse effects during heatwaves.

The Torrens Resilience Institute, part of Flinders University's Faculty of Medicine, Nursing and Health Sciences, is working hard keep communities safe from disaster, and swiftly recover when disasters do occur.

Toolkits have been developed for both community and home use that aim to measure disaster resilience, and speed community recovery in disaster zones, such as the devastating Pinery fires that claimed two

lives, injured more than 30 and caused extensive loss of property, livestock and other assets.

Staff of the Flinders' institute assisted the communities through Flinders University policy allowing staff to take emergency services leave, allowing them to volunteer with the emergency services.

"We have been successful in a number of projects related to the assessment of community and household resilience to disasters," Professor Arbon says.

The TRI is also leading new research projects to study the enablers of – and barriers to – community recovery, with the aim to support government and communities to recovery quicker from similar events.

"It should be recognised that disruptive events do offer opportunities to learn and improve for future events," Professor Arbon says.

"And it surprises many communities how difficult and complex the recovery from natural disasters can be."

Dr Malinda Steenkamp, one of the project's researchers, says the benefit to assessing disaster resilience is "having the conversation about what might happen and what the community or households might do about it".

"Those who become more resilient through preparations can often bounce back faster after a disaster than those who haven't previously planned for potential events," she says.

Provided by Flinders University

2024 from https://phys.org/news/2015-12-heatwave-summer.html