Heat-related injury cases remain low

Singapore lacks extreme fluctuations in temperature; air-con places easily accessible

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It may be getting hotter here, but heat-related injuries remain low, say hospitals. And the reasons are twofold. First, Singapore does not experience the extreme temperature fluctuations of 5 deg C or more, which are a prime cause of heatstroke in places like Japan. Also, there is an air-conditioned environment usually within reach, from homes and offices to public transport and malls.

Dr Edward Chng, deputy medical director at Parkway Shenton, said: "Singapore has a relatively constant temperature and humidity all year round and most residents know what appropriate precautions to take to keep themselves cool."

The National University Hospital said it has fewer than 10 cases of heatstroke a year and has seen a noticeable increase at its emergency department.

In 2006, Khoo Teck Puat Hospital saw 21 cases of heat exhaustion or heatstroke. In 2017, it saw 19 patients, and this year the hospital has seen 16 so far.

Dr Kamarul Muada, a consultant at the hospital's acute and emergency care department, said that behind the numbers is a growing awareness of the damage heat can cause and avoidance measures to take such as "a push for greater hydration". He added: "Places that are not used to heat are at greater risk because the people are not acclimated to the heat and have little knowledge of the injuries that heat can have on the body, along with warning signs to look out for."

"Singapore has developed itself around the heat. The country's planning is to move in shaded areas; the connections between transportation and malls and shopping centres are covered. The movement in unshaded areas is minimised, thus minimising the risk of heat injury."

Associate Professor Benedict Tan, chairman of Exercise Is Medicine Singapore – an initiative to make physical activity and exercise a standard part of a disease prevention and treatment medical paradigm, said Singaporeans' acclimatisation also explains why incidents have not gone up even though more people are doing outdoor activities.

Heatstroke facts

Associate Professor Fabian Lim, assistant dean for research at Nanyang Technological University's Lee Kong Chian School of Medicine, describes what happens during a heatstroke when the body temperature goes above 40 deg C.

- A body's normal temperature is around 37 deg C. At higher temperatures, the heart has to work harder to pump blood and the brain has to work harder as well to maintain its functions.
- When the temperature is higher than 42 deg C, the heat can destroy the structure of cells in the body and cause organ damage.
- A person might feel nauseous, dizziness and semi-conscious. These symptoms are partly due to the heat and also because of a reduction in blood supply to the brain, which can cause a person to faint.
- Even exercising in a cool environment can cause heat injuries if someone is in poor health. Heatstroke prevention includes looking at overall health such as past medical history, training, diet and lifestyle.

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