100 scientists call for response to climate change centred on health

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In the summer of 2022, record-breaking heatwaves triggered wildfires and heat-related deaths.

The changing climate has also raised the risk of dengue transmission by 12 per cent globally over the past decade, compared with the 1950s.

Reporting these findings in top science journal Lancet, close to 100 scientists across the globe are calling for a health-centred response to the climate crisis.

The seventh annual Lancet Countdown On Health And Climate Change report, released on Wednesday, pooled 43 indicators that monitor the health impacts of climate change and analysed the extent of solutions available to address the impacts.

Led by the University College London, the report represents the work of 99 experts from 51 institutions, including the World Health Organisation (WHO), the World Meteorological Organisation and two researchers from Singapore.

The two researchers – Associate Professor Jason Lee and Dr Samuel Gunther from the National University of Singapore’s Yong Loo Lin School of Medicine – contributed to an indicator that investigated heat’s effect on light exercise.

They found that over the past decade, a typical person who did light exercise outdoors was at high risk of suffering heat stress for 238 more hours each year – a 42 per cent rise – compared with someone who did it 20 years ago.

A handful of new indicators and metrics were added to the new edition of the report, including the impact of extreme temperatures on food security and households’ exposure to harmful pollutants caused by burning fossil fuels.

In rural areas, for instance, houses still use solid fuels for cooking and heating, and the fuels release hazardous ultrafine particles called PM2.5 which can reach deep into the lungs.

Food insecurity also worsened this year, with the economic effects of the Russia-Ukraine war pushing up food prices.

Extreme weather events have also shortened the growth of staple crops by up to 10 days, compared with a few decades ago, reducing yields and harvests.


“This situation is now worsened by Russia’s invasion of Ukraine and the energy and cost-of-living crises... threatening to result in 13 million additional people facing undernutrition in 2022.”

Beyond physical health, the report also touched on mental health.

It noted that temperature spikes, heatwaves and humidity have been associated with worsened mental health outcomes and increased suicidality.

However, the report also gave a nod to progress in climate action.

For example, the deployment of clean, renewable energy reached record-high levels in 2020.

In 2021, zero-carbon energy sources also accounted for 80 per cent of investments in ways to generate electricity.

The report also noted that 86 per cent of the countries that submitted their updated or new climate pledges to the UN, called the nationally determined contributions (NDC), acknowledged the link between health and climate in their updated documents.

The updated NDCs were submitted between 2020 and 2021, and Singapore was one of 126 countries that included health-climate links in their documents.

By 2045, temperatures in Singapore could hit 40 deg C on some days, compounded by the urban heat island effect.

The Republic is also at risk of worsened dengue outbreaks, since warmer weather allows the Aedes mosquito to breed more quickly.

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