

MUCH-STUDIED TREND

# WHY U.S. GUN VIOLENCE SPIKES IN HOT WEATHER



A memorial dedicated to the 19 children and two adults killed during the May 24 mass shooting at Robb Elementary School is seen in Uvalde, Texas, on Wednesday. AFP PIC

## Researchers believe rising temperatures due to climate change may lead to higher crime rates

WASHINGTON

**F**ROM the Texas school massacre to a Tulsa hospital shooting and many less-reported incidents, a recent spate of gun violence across the United States bears out a trend police departments have long sworn by: murders go up in warmer weather.

The link had been written about for decades by criminologists, with more recent research drilling down on the precise relationship between temperature and crime rates.

For those who had studied the question, there were common sense, as well as potentially less obvious mechanisms at play.

First, the more obvious: "It's hard to shoot somebody if there's nobody around," David Hemenway, a professor of health policy at the Harvard TH Chan School of Public Health, said, explain-

ciated with 34 per cent more shootings on weekdays, and 42 per cent more shootings on weekends or holidays.

They also found a 10°C higher-than-average temperature was associated with a 33.8 per cent higher rate of shootings.

In other words, said Hemenway, it was not just heat that was important, but relative heat: "In the winter, there were more shootings on those days which wouldn't have been hot in the summer, but were warm for winter."

Another recent paper, led by Leah Schnasi of Drexel University and published in the *Journal of Urban Health* in 2017, looked at violent crime in Philadelphia.

"I live in Philadelphia, and I remember biking home from work on a very hot day and observing how cranky everyone seemed.

"I was interested to see if this observation translated to higher rates of crime on hot days," she said.

She and co-author Ghassan Hamra did indeed find violent crimes happened more often in

ing why gun crime was lower in bad weather.

A second, more controversial idea was that heat itself — as opposed to weather that encouraged people to be out — might rev up conflict.

While there were many causes behind the rising tide of gun violence in the US, weather could play an increasingly important role in world that was fast warming due to climate change.

Hemenway said he had long been interested in the relationship between heat and higher crime given stereotypes about the north-south divide within the US and Italy, as well as between the northern European states of Scandinavia and southern Mediterranean countries.

In 2020, he co-wrote a paper in the journal *Injury Epidemiology* led by his then-graduate student Paul Keeping examining the city of Chicago between 2012 and 2016.

The paper used reports from the *Chicago Tribune* to get the number of shootings per day, and matched those against daily high temperature, humidity, wind speed, difference in temperature from historical average and precipitation type and amount.

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ipants' assets" in the form of gift cards and vouchers.

When it came to the overall issue of gun violence, there were far bigger drivers than temperature, Hemenway acknowledged.

These included the fact there were an estimated 393 million guns in circulation in the US in 2020, more than the number of people, and many states had moved in recent years to ease rather than toughen restrictions.

But better understanding the relationship with weather could have policy implications, for example, finding more activities for young males to keep them off street corners on the hottest summer days and boosting police presence in key areas based on forecasts.

"It's sort of a harm reduction," said Hemenway.

"But even if this wasn't a gun problem, I suspect we would find the same thing if we had evidence about fights and assaults. What the guns do is make hostile interactions more deadly." **AFP**