

# Climate pact can prevent mass deaths, experts say

**Cutting greenhouse gases could stem heat waves.**

By *KENDRA PIERRE-LOUIS* *New York Times* – June 6, 2019



MAHESH KUMAR A. • Associated Press An Indian man used a towel to wipe his face as temperatures reached 113 degrees on Monday in Hyderabad, India.

Summertime heat is forecast to become even deadlier without action to drastically reduce the greenhouse gas emissions that cause climate change, according to a new study.

Under the Paris climate agreement, 195 countries pledged to cut their greenhouse gas in an effort to hold global warming to 3.6 degrees Fahrenheit above preindustrial levels. They also promised efforts to limit the temperature increase even further, to 2.7 degrees F.

The difference between 3.6 and 2.7 degrees F may not seem like much, but, according to research published Wednesday in the journal *Science Advances*, it could mean saving or losing thousands of lives each year in the United States alone.

The researchers wanted to assess the benefits of the Paris Agreement “not in terms of the climate or the temperature, but in terms of how many human lives could be saved or how many heat-related deaths could be avoided by mitigating climate change,” said Eunice Lo, a research associate at the University of Bristol and lead author of the study.

Lo and her colleagues used the 2.7-degree F temperature target from the Paris Agreement as their baseline, and under that level of warming estimated the heat deaths that would occur in 15 cities across the United States. They selected those cities — which included Detroit, Los Angeles, Philadelphia and New York — because there was reliable climate and health data available.

Once they had that baseline, they compared what would happen if the planet reached 3.6 degrees of warming by the end of this century. Despite growing awareness of climate change, the world, which has already warmed by roughly 1.8 degrees, is on target to hit 5.4 degrees of warming by century's end. The researchers looked at what would happen under that warming scenario as well.

What they found is that, in almost every city they considered, the more global temperatures rose, the more people will die. The exceptions were Atlanta and San Francisco, a finding that researchers attributed to limited extreme heat days in the data for those cities.

"The more warming you have, the more heat waves you have," said Michael Wehner, a senior staff scientist in the computational research group at Lawrence Berkeley National Laboratory, who was not involved in this study. "The more heat waves you have, the more people die."

"The numbers are quite astonishing in terms of how many deaths we could avoid by limiting global warming," Lo said. For example, she said, that would allow New York City to avoid 2,716 heat-related deaths during the most extreme temperature years.

There are some caveats. For example, as temperatures warm, people tend to adapt. A key form of adaptation is air conditioning. But air conditioners pose their own problems both as contributors to climate change through energy consumption and because they pump warm air outside, further increasing urban temperatures.