

Keyword: global-warming

Headline: Global heat might become too hot for humans

Byline: Dale Arasa

Published Date: 02:12 PM October 12, 2023

Section: technology

Word Count: 795

Content:

Climate change is making the planet too hot for humans to survive. This discovery came from recent research by the Penn State College of Health and Human Development, Purdue Institute for a Sustainable Future, and Purdue University College of Sciences. The researchers warn of a global temperature increase ranging from 1.5°C to 4°C or 34.7°F to 39.2°F.

The research identified parts of the world that may first experience the detrimental effects of extreme temperatures. Learning more about this study could help you prepare for the long-term consequences if you live in those areas. Meanwhile, it could remind everyone to continue the fight against climate change to sustain livable conditions on Earth.

This article will explain how the researchers determined their global heat projections and which countries would experience its worst effects. Later, I will discuss why this extreme heat may become unbearable for humans.

The researchers looked at previous temperature increases to predict how much higher it could be. They said extreme global warming started during the Industrial Revolution.

Worldwide adoption of heavy machinery and factories burned unprecedented amounts of fossil fuels. That increased activity caused global temperatures to rise by almost 1°C or 1.8°F.

In 2015, it prompted 196 countries to sign the Paris Agreement, which aimed to prevent global heat from reaching the 1.5°C threshold. The worst-case scenario of rising temperatures involves an increase of 1.5°C to 4°C.

That is also why climate scientists worked with human body experts. W. Larry Kenney, Penn State Physiology professor, explained why he joined the global warming study:

“To understand how complex, real-world problems like climate change will affect human health, you need expertise both about the planet and the human body,” Kenney said in an Interesting Engineering article.

“I am not a climate scientist, and my collaborators are not physiologists. Collaboration is the only way to understand the complex ways that the environment will affect people’s lives and begin to develop solutions to the problems that we all must face together.”

Penn State researchers published a study last year that said the ambient wet-bulb temperature limit for young, healthy people is roughly 31°C or 87.8°F at 100% humidity.

You may also like: [How to monitor PC temperature](#)

Meanwhile, only the Middle East and Southeast Asia have recorded temperatures and humidity that surpass human limits. Raising global heat by 2°C above preindustrial levels would expose the

following populations to unbearable temperatures:

Most lower-to-middle-income areas may lack access to air conditioning and similar systems. As a result, they are unlikely to manage the extreme heat.

W. Larry Kenney and his colleagues conducted 462 separate experiments to document the combined heat, humidity, and physical exertion levels humans can tolerate before they cannot maintain a stable core temperature. Eurekalert said these limits are lower than previously theorized.

“As people get warmer, they sweat, and more blood is pumped to their skin so that they can maintain their core temperatures by losing heat to the environment,” Kenney said.

“At certain levels of heat and humidity, these adjustments are no longer sufficient, and body core temperature begins to rise. This is not an immediate threat, but it does require some form of relief.”

“If people do not find a way to cool down within hours, it can lead to heat exhaustion, heat stroke, and strain on the cardiovascular system that can lead to heart attacks in vulnerable people.”

Eurekalert shared relevant insights from the graduate student of Matthew Huber, one of the study’s co-authors. Qinqin Kong studied how people in various parts of the world.

You may also like: [Wearable tech helps beat the heat](#)

He and his team stated that 3°C is the best estimate of how much the Earth will warm by 2100 if trends continue. However, Kong warns governments must act immediately to combat this major threat.

“Around the world, official strategies for adapting to the weather focus on temperature only,” Kong said. “But this research shows that humid heat is going to be a much bigger threat than dry heat.”

“Governments and policymakers need to re-evaluate the effectiveness of heat-mitigation strategies to invest in programs that will address the greatest dangers people will face,” he added.

[Subscribe to our daily newsletter](#)

By providing an email address. I agree to the [Terms of Use](#) and acknowledge that I have read the [Privacy Policy](#).

Recent research warns that global heat may become intolerable for humans soon. By 2100, parts of India, China, and other countries could become unsustainable for human life.

Fortunately, technology has been advancing sustainability and renewable energy worldwide. For example, scientists recently discovered a way to turn humid air into a green energy source.

Visit [Eurekalert](#) to learn more about this collaborative global warming study. Also, check out [Inquirer Tech](#) for the latest digital tips and trends.