

Climate change has affected 85% worldwide, study says

Chicago Daily Herald

October 12, 2021 Tuesday

WEB Edition NC1 Edition NC2 Edition MF12 Edition NC3 Edition NM1 Edition NC Edition NC14 Edition MC1 Edition MC3
Edition MD1 Edition ML2 Edition NL1 Edition NC14C Edition NC4 Edition CLFM Edition eBlast Edition

Copyright 2021 Paddock Publications, Inc.

Section: NATION_; Pg. 7

Length: 943 words

Byline: By Annabelle Timsit and Sarah Kaplan The Washington Post

Body

At least 85% of the global population has experienced weather events made worse by **climate change**, according to new research published Monday in the journal Nature **Climate Change**. Using machine learning to analyze and map more than 100,000 studies of events that could be linked to global warming, researchers paired the analysis with a well-established data set of temperature and precipitation shifts caused by fossil fuel use and other sources of carbon emissions. These combined findings — which focused on events such as crop failures, floods and heat waves — allowed scientists to make a solid link between rising temperatures and human activities. They concluded that global warming had already affected 80% of the world's land area.

"We have a huge evidence base now that documents how **climate change** is affecting our societies and our ecosystems," said lead author Max Callaghan, researcher at the Mercator Research Institute on Global Commons and **Climate Change** in Germany. The study provides hard numbers to back up the lived experiences of people from New York City to South Sudan. "**Climate change**," Callaghan said, "is visible and noticeable almost everywhere in the world." The findings come amid a major push to get countries to commit to more ambitious **climate** goals ahead of a United Nations summit in Glasgow next month. Research shows that existing pledges will put the planet on track to heat up about 2.7 degrees Celsius (4.9 degrees Fahrenheit) by the end of the century — a level of warming that would lead to drastic food and water shortages, deadly weather disasters and catastrophic ecosystem collapse. Some of the world's top emitters, including China and India, have yet to formally commit to a new 2030 emissions reduction target. Activists worry that an emerging energy crisis, which has raised prices and triggered blackouts, could imperil efforts to get developing economies to phase out polluting fuels. In United States, **climate** disasters have already caused at least 388 deaths and more than \$100 billion in damage this year, according to analyses from The Washington Post and the National Oceanic and Atmospheric Administration. Yet despite a pledge to halve emissions by the end of the decade, congressional Democrats are struggling to pass a pair of bills that would provide hundreds of billions of dollars for renewable energy, electric vehicles and programs that would help communities adapt to a **changing climate**. The contrast between the scope of **climate** disasters and the scale of global ambition is top of mind for hundreds of protesters who have descended on Washington this week to demand an end to fossil fuel use. The activists, many of them from Indigenous communities that have been harmed by global warming, risked arrest as they remained on the sidewalk outside the White House after police ordered them to clear the area. The new research in Nature adds to a growing body of evidence that **climate change** is already disrupting human life on a global scale. Scientists are increasingly able to attribute events like heat waves and hurricanes to human actions. In August, the U.N.'s Intergovernmental Panel on **Climate Change** devoted an entire chapter to extreme weather consequences of a warming world. The study's conclusion that 85% of humanity is experiencing **climate** impacts may sound high. But it's "probably an underestimation," said Friederike Otto, a senior lecturer at the Grantham Institute for **Climate Change** and the Environment at Imperial College, who was not involved in the study. The study looked at average temperature and precipitation **changes**, rather than the

Climate change has affected 85% worldwide, study says

most extreme impacts, for which Otto says there is an even more evidence of **climate change**'s role. "It is likely that nearly everyone in the world now experiences **changes** in extreme weather as a result of human greenhouse gas emissions," she said. The human toll of these events has become impossible to ignore. This summer, hundreds of people in the Pacific Northwest died after unprecedented heat baked the usually temperate region. More than a million people in Madagascar are at risk of starvation as a historic drought morphs into the a **climate**-induced famine. Catastrophic flooding caused New Yorkers to drown in their own homes, while flash flooding inundates refugee camps in South Sudan. In a letter released Monday, some 450 organizations representing 45 million health-care workers called attention to the way rising temperatures have increased the risk of many health issues, including breathing problems, mental illness and insect-borne diseases. One of the papers analyzed for the new study, for example, found that deaths from heart disease had risen in areas experiencing hotter conditions. "The **climate** crisis is the single biggest health threat facing humanity," the letter said. Yet in many of the places that stand to suffer most from **climate change**, Callaghan and his colleagues found a deficit of research on what temperature and precipitation could mean for people's daily lives. The researchers identified fewer than 10,000 studies looking at **climate change**'s effect on Africa, and about half that number focused on South America. By contrast, roughly 30,000 published papers examined **climate** impacts in North America. In poorer countries, the researchers say, roughly a quarter of people live in areas where there have been few impact studies, despite strong evidence that they are experiencing shifts in temperature and precipitation patterns. In wealthier countries, that figure stands at only 3%. "But it indicates that we're not studying enough," Callaghan said, "not that there isn't anything happening."

Classification

Language: ENGLISH

Publication-Type: Newspaper

Subject: RESEARCH REPORTS (91%); **CLIMATE CHANGE** (90%); CLIMATOLOGY (90%); EXPERIMENTATION & RESEARCH (90%); GLOBAL WARMING (90%); SCIENCE & TECHNOLOGY (90%); WEATHER (90%); EMISSIONS (89%); NEGATIVE ENVIRONMENTAL NEWS (89%); NEGATIVE NEWS (89%); SEVERE WEATHER (89%); EARTH & ATMOSPHERIC SCIENCE (78%); EMERGING MARKETS (78%); EXTREME TEMPERATURES (78%); GREENHOUSE GASES (78%); HEAT WAVES (78%); OCEANOGRAPHIC & ATMOSPHERIC SERVICES (78%); POLLUTION & ENVIRONMENTAL IMPACTS (78%); RESEARCH INSTITUTES (78%); ENERGY & ENVIRONMENT (77%); ENERGY & UTILITY POLICY (76%); ENERGY SHORTAGES (76%); ENVIRONMENTAL ACCIDENTS & DISASTERS (75%); ARRESTS (74%); FOOD CRISES & SHORTAGES (73%); SOCIETY, SOCIAL ASSISTANCE & LIFESTYLE (73%); UNITED NATIONS (73%); WRITERS (73%); ARTIFICIAL INTELLIGENCE (72%); MACHINE LEARNING (72%); PRICE INCREASES (70%); INDIGENOUS PEOPLES (69%); UNITED NATIONS INSTITUTIONS (68%); NEGATIVE MISC NEWS (67%); PRICES (67%); PROTESTS & DEMONSTRATIONS (67%); US DEMOCRATIC PARTY (67%); WATER CRISES & SHORTAGES (63%); PRICE **CHANGES** (62%); SUSTAINABLE TRANSPORTATION (60%); ELECTRIC VEHICLES (50%)

Company: GRAHAM HOLDINGS CO (52%)

Ticker: GHC (NYSE) (52%)

Industry: NAICS517311 WIRED TELECOMMUNICATIONS CARRIERS (52%); NAICS515120 TELEVISION BROADCASTING (52%); NAICS511120 PERIODICAL PUBLISHERS (52%); NAICS511110 NEWSPAPER PUBLISHERS (52%); GLOBAL WARMING (90%); EMISSIONS (89%); ENERGY & UTILITIES (89%); ENERGY &

Climate change has affected 85% worldwide, study says

ENVIRONMENT (77%); ENERGY & UTILITY POLICY (76%); ENERGY SHORTAGES (76%); POWER FAILURES (75%); FOOD CRISES & SHORTAGES (73%); WRITERS (73%); ARTIFICIAL INTELLIGENCE (72%); MACHINE LEARNING (72%); PRICE INCREASES (70%); ALTERNATIVE & RENEWABLE ENERGY (67%); PRICE **CHANGES** (62%); SUSTAINABLE TRANSPORTATION (60%); ELECTRIC VEHICLES (50%)

Geographic: NEW YORK, NY, USA (75%); GLASGOW, SCOTLAND (54%); NEW YORK, USA (79%); UNITED STATES (92%); CHINA (79%); GERMANY (79%); INDIA (78%)

Load-Date: October 12, 2021

End of Document