UNCHECKED WARMING COULD BRING CONCURRENT CRISES TO U.S. CITIES
New report traces a future of compounding dangers

(PRINCETON, N.J.) — Absent substantial cuts in carbon pollution, 21 U.S. cities are threatened with multiple concurrent and severe climate hazards by mid-century, according to Climate Central’s new report, CLIMATE PILE-UP: Global Warming’s Compounding Dangers. Building on research by a team of scholars led by the University of Hawai‘i’s Camilo Mora, the report lays out how the impacts of climate change will compound at 244 locations across the United States.

CLIMATE PILE-UP rests on a broad cumulative index of 11 climate-linked hazards — including sea-level rise, drought, heatwaves, and more — that Mora and his colleagues synthesized for locations around the world. As those dangers pile up, they will increasingly strain communities’ abilities to cope. Strengthening coastal storms, for instance, ride on the back of higher sea levels to cause damage farther inland. And when a heat wave strikes during a drought, demand for water rises when it’s already in short supply.

The new report puts the differences that humanity’s emissions choices will make for American communities into stark relief.

For example, if emissions continue to grow unabated, by midcentury, U.S. cities including Cleveland and Pittsburgh will face cumulative hazards about three times more severe than would occur under moderate emissions cuts. By the end of the century — well within the lifetimes of children born today — cities including Detroit, Michigan; Flint, Michigan; and Erie, Pennsylvania would face cumulative hazards five-fold greater than they would under deep cuts.

“Communities are increasingly experiencing multiple hazards almost simultaneously, such as Florida’s triple whammy in the last six months from record-high temperatures, abnormally toxic algal blooms, and the house-flattening winds of Hurricane Michael,” said Bernadette Woods Placky, Climate Central’s chief meteorologist. “This report shows that multiple compounding hazards will increasingly hit much of the U.S. in the years ahead.”

For some American communities, CLIMATE PILE-UP shows, humanity’s choice between reducing emissions and letting them grow unchecked could represent the difference between manageable damage and unmanageable devastation.

To read the report and download related data, click here.

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