

CLIMATE COACH

The surprisingly powerful force that can help people after a natural disaster

Fires and floods can wreck your mental health. Community can rebuild it.



Column by [Michael J. Coren](#)

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PINE ISLAND, Fla. — Ahren and Jaime Surgent were hoping for the best after almost losing everything. In 2022, one of the most damaging hurricanes in U.S. history swept ashore near their home in Southwest Florida. Hurricane Ian’s 150-mph winds blew out the windows, mold soon festered in the sweltering humidity, and the entire home had to be gutted.

The damage was only beginning, says Ahren Surgent, 45, a local firefighter. Insurers balked at paying for the damage, he says, so the family spent the next two years living in a trailer. They accepted charitable donations to cover much of the rebuilding costs as they tried to reassemble their lives.

Like millions of others rebuilding after extreme weather, the experience left them emotionally exhausted and financially drained, and worried about what another hurricane season might bring.

“If this ever happens again ... we would absolutely consider walking away,” says Jaime Surgent, 38. “I cannot mentally do it again.”

We often think about physical impacts in the aftermath of a natural disaster. We rarely tally the mental toll. The most persistent destruction from a natural disaster, researchers say, is often the interior wreckage: depression, anxiety, post-traumatic stress and even cognitive deficits passed down in utero to children. That can last years, or even decades, after the event.

But this is not inevitable. While building stronger homes or speeding disaster relief money can help, it’s often the strong social connections to other people that offer the best refuge from a storm, says Ellyn Maese, a developmental psychologist who studies the mental health effects of environmental crises.

Here's why your friends, family and neighbors may be the key to defending your home, and your mental health, in a volatile century.

The psychological toll of climate change

In 2014, a major storm dumped two months of rain in one day on the city of Burlington, Ontario. The muddy floodwaters engulfed 3,500 homes, wrecked cars in driveways and forced thousands to undertake expensive, arduous repairs.

Blair Feltmate, a researcher at the University of Waterloo, wanted to know what happened to people after the flood. Going door-to-door three years later, Feltmate and his collaborators surveyed people to get at a simple question: How were they doing? Their responses captured everything from sleeping and breathing difficulties to worries and stress.

“They all made statements like, ‘It was the worst thing I ever went through,’ or ‘I wouldn’t wish it on my worst enemy,’” says Feltmate, who serves as the director of the Intact Center on Climate Adaptation. The data revealed that about half of the people whose homes flooded now experience spiking anxiety every time it rains. “This is just how they live now,” Feltmate says.

Feltmate’s results are just the latest to confirm the persistence of mental health complications years after floodwaters have receded or the wildfire has been extinguished.

A 2021 analysis of hundreds of studies, published by the peer-reviewed journal Behavioral Sciences, found that people affected by wildfires exhibited elevated rates of post-traumatic stress disorder, depression and generalized anxiety years after the event. Nearly two years after Hurricane Katrina ravaged New Orleans, roughly one-half of study subjects — mostly young, low-income Black mothers — were likely to be suffering from higher levels of post-traumatic stress disorder. Similar findings appear after other natural disasters.

The effects may even be felt in the womb.

Researchers have known for decades that intensely stressful experiences of the mother can alter the developing brain of a fetus, sometimes delaying cognitive and social development years later. David Laplante, now a senior research associate at Montreal’s Lady Davis Institute for Medical Research, was a researcher studying 89 children whose mothers had endured a 1998 Canadian ice storm. Three million people were without power in freezing temperatures, sometimes for weeks.

Laplante’s team measured the developmental milestones of children whose mothers lived through the storm in a 2008 study published in the peer-reviewed Journal of the American Academy of Child and Adolescent Psychiatry. While most were unaffected, Laplante says, children exposed to higher levels of prenatal stress were more likely to exhibit lower cognitive and language abilities five years later.

Laplante described the “small but significant” effects in the classroom as roughly equivalent to the difference between an “A student or an A-minus or even a B student.” When the researchers followed up nearly two decades later, the effects were still detectable.

Not all children exposed in utero to disasters will be negatively affected, Laplante cautioned, but numerous studies have shown that early, intensely stressful experiences may make children more susceptible to subsequent environmental or genetic risk factors for behavioral issues or cognitive delays.

Yet the research also contained clues about how to lower the risks to future generations: Not all mothers, and their children, were equally affected by the storm.

Only about one-third of the women in the 2008 study reported intensively negative experiences. The rest described it as a neutral or even positive experience since it enabled them to spend more time connecting with close friends and family. It’s possible these mothers tended to benefit from strong social networks and economic resources to quickly find a safe, stable home.

Laplante suggests meeting mothers’ basic material and emotional needs in the immediate aftermath of a natural disaster could reduce the harm to unborn children. “What we need to do is try to get a woman’s life as stable as possible, and as quickly as possible,” Laplante says.

‘A pervasive part of the American experience’

Most people think climate change is happening. Relatively few think it is happening to them. Just 42 percent of Americans believe global warming will personally impact their lives, according to a 2023 survey from the [Yale Program on Climate Change Communication](#)

Yet that may soon change, says Maese, a researcher working for the polling firm Gallup. Most people, she was surprised to learn, have already suffered an environmental crisis in their life, based on her survey of 12,684 U.S. adults last year. [More than half of respondents](#) had endured at least one “environmental crisis” in the past five years (many linked to extreme weather, although some questions also included pollution). In the South, the share rose to 70 percent.

“We tend to think of these as isolated events, but they’re really a pervasive part of the American experience these days,” she says, “and it’s only growing and intensifying.” By 2050, [researchers predict](#) the number of people displaced by global warming could reach hundreds of millions, or perhaps more than 1 billion.

To measure how this affects people’s state of mind, Maese, a lead author on a study for Gallup’s [Center on Black Voices](#), surveyed measures of well-being. She found Americans who had suffered at least one environmental crisis sometime in the past five years were less likely to be “thriving” (47 percent) than those who hadn’t (54 percent), a negative effect similar to the covid pandemic. The effect was most severe among households making less than \$60,000 per year; households earning more than \$120,000 — the [top 10 percent of earners](#) — saw minimal effects.

Negative emotions persist years after an environmental crisis ends

Question: "Did you experience the following emotions a lot of the day yesterday?"

	STRESS	ANXIETY	SADNESS	ANGER
One or more environmental crises	55	46	29	22
No environmental crises	42	33	22	14

Self-reports within five years of experiencing one or more of the following: tornado, hurricane, wildfire, flood, drought, earthquake, water boil advisory, chemical spill, radiation leak or failed home safety inspection.

Source: [Gallup Center on Black Voices Quarterly Survey, August 2023](#).

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“The big surprise, and maybe it shouldn’t have been, was the magnitude of the impact,” Maese says. “We’re seeing high levels of anxiety, depression and other negative emotions. It’s really shaking up people’s daily life experience and their confidence in the future.”

What can you do?

We are entering a new era of natural disasters: a rising tempo of rapidly intensifying hurricanes, Midwestern droughts, unprecedented fires and torrential rainstorms in the Northeast.

But there are two lines of defense when it comes to your mental health.

The first is physical. Feltmate says two groups of people emerged after the flood in Burlington: people who installed flood-control measures on their homes and those who hadn’t. The former group came through largely unscathed, while the others often watched their money and precious personal items wash away.

“We see this repeatedly,” says Feltmate, whose center has produced primers on affordable flood, fire and heat protection in homes and apartments. “The protective measures work.”

This carried over to people’s well-being years later. “The stress of those who had protected their homes: Almost all were virtually zero,” Feltman says. “For them, it was a nonevent.”

The second line of defense is what Maese calls resources to cope: the social and community ties that help people survive a catastrophe, and even thrive amid the chronic disruption expected to become a bigger part of daily life on a hotter planet.

While money helps, as her research shows, few people have the resources to pay for everything they need in the immediate aftermath of a disaster. If they do, it’s often not enough. Friends and neighbors who can help clear away debris, cut down tree limbs, lend a bed or advise on how to reassemble their lives are invaluable and, as some mothers discovered in Canada after the ice storm, it can even turn a potentially catastrophic event into a positive one.