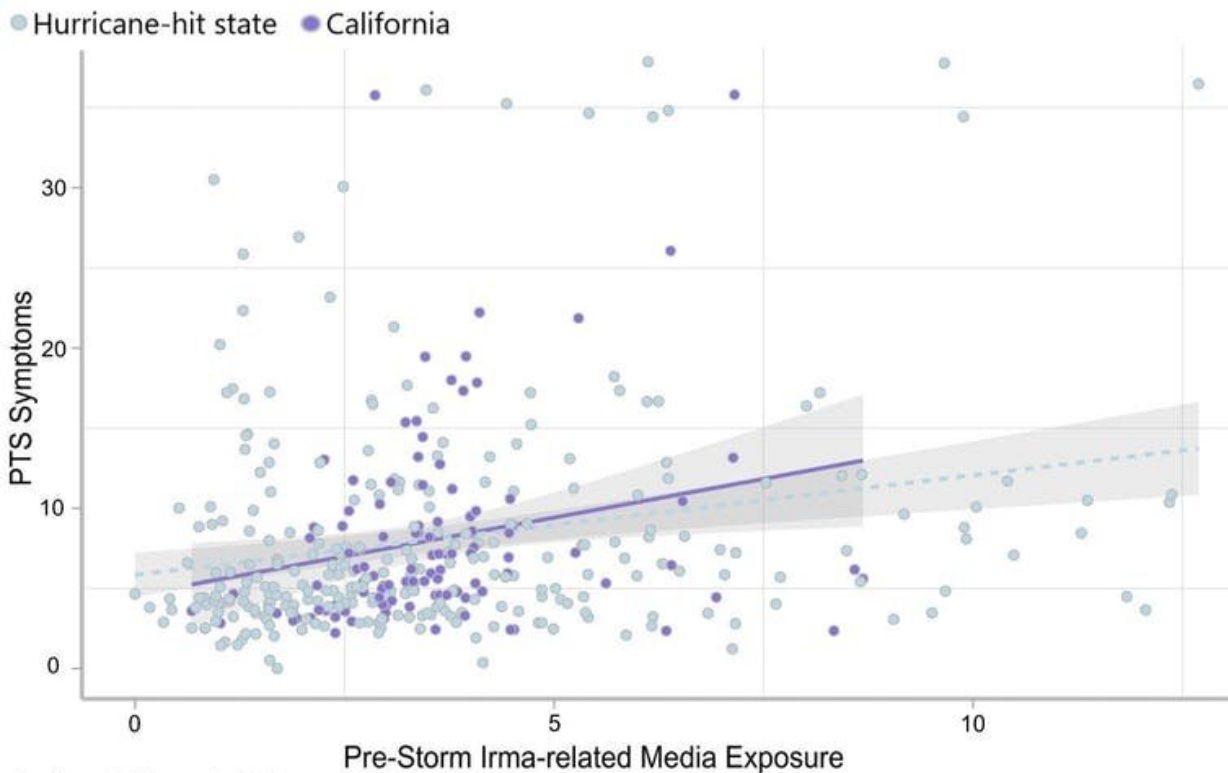


# Disaster news on TV and social media can trigger post-traumatic stress in kids thousands of miles away

February 8 2022, by Jonathan S. Comer, Anthony Steven Dick

## Impact of media exposure on youth PTS symptoms

During Hurricane Irma, post-traumatic stress symptoms among young people rose with media exposure to disaster coverage on social media and television, including among those far from the diaster.



Anthony Dick, et al, 2021

When disasters strike, the flood of images on TV and social media can have a powerful psychological impact on children—whether those children are physically in the line of danger or watching from thousands of miles away.

Our latest research uses brain scans to show how [simply watching news coverage of disasters](#) can raise children's anxiety and trigger responses in their brains that put them at risk of post-traumatic stress symptoms. It also explores why some [children](#) are more vulnerable to those effects than others.

This risk is important for parents and [media](#) to understand. In just the past few months, news coverage has been saturated with images of [wildfires burning through neighborhoods](#) in Colorado, [tornado damage](#) across the Midwest, a [school shooting](#) in Michigan and news of [rising illnesses](#) from the COVID-19 pandemic.

With [climate change](#), researchers estimate that today's children will face [three times as many climate-related disasters](#) as their grandparents. And the pervasiveness of social media and 24-hour news make [exposure](#) to images of [disasters](#) more likely.

As a [neuroscientist](#) and a [psychologist](#) who study youth anxiety and the adolescent brain, we have been exploring ways to identify children who are most at risk.

## **Harm to some kids' mental health, but not all**

The Academy of Pediatrics [declared a national emergency](#) in child and adolescent mental health in 2021 as mental health professionals saw [rising rates](#) of mental health problems in youth.

[Exposure to disasters in particular can trigger](#) post-traumatic stress

symptoms, such as loss of sleep, intrusive thoughts about the experience, memory impairments or severe emotional distress. [But while around 10%](#) of people who are directly exposed to traumatic events develop symptoms that are severe enough to meet diagnostic criteria for post-traumatic stress disorder, or PTSD, a majority do not.

[Understanding which](#) factors help determine whether disaster exposure will lead to serious mental health problems may help identify children at greatest risk for PTSD, facilitate [early intervention](#) and help develop targeted mental health outreach in the aftermath of disasters.

This also applies to children exposed to disasters and other traumatic events through media.

A [once-dominant theory](#) of disaster mental health, sometimes called the "bull's-eye model," proposed that the negative mental health effects of a disaster were directly related to how close the person was to the center of the event—the bull's-eye. But [more](#) and [more studies](#) are finding that the negative mental health effects of disasters extend far beyond the immediate disaster area.

Sensationalized 24-hour news cycles on television and online are [part of the reason](#), [studies suggest](#). These media are designed to attract viewers and keep them engaged. This is especially true for content on social media, which often contains [more graphic images](#) and scenes than typically broadcast by more traditional news sources.

So, why are some children vulnerable to these media influences, whereas others are not?

Our research points to [preexisting and identifiable neurobiological profiles](#) that can make young people especially susceptible to the harmful mental health effects of disaster-related news coverage.

## Hurricane Irma's impact—3,000 miles away

When Hurricane Irma struck in 2017, we were able to use a [national long-term research project](#) that was already underway to study how children were coping both before and after the disaster. We could look at the types of disaster exposure, and whether any preexisting characteristics could distinguish those children who went on to develop post-traumatic stress symptoms from those who did not.

We were able to more firmly establish whether changes were due to disaster and media exposure, and not something else.

The [Adolescent Brain Cognitive Development study](#) followed 11,800 children across the United States over a 10-year period using a variety of brain imaging and mental health assessments. Three of the study sites—two in Florida and one in South Carolina—were hit by [Hurricane Irma](#), one of the most powerful Atlantic hurricanes on record.

In the week before Irma made landfall, national media coverage provided highly dramatic, around-the-clock forecasting of the impending "[catastrophic](#)" storm and its threat of destruction of "[epic proportions](#)." Irma led to the largest human evacuation in U.S. history, about [7 million people](#).

After the storm, we collected additional data from about 400 of the project's participants at the three sites affected by Irma and a demographically similar site on the other side of the country, in San Diego. We assessed their exposure to the hurricane and to media coverage ahead of the storm, and the extent to which the child exhibited post-traumatic stress symptoms six to eight months after the storm, when the children were 11 to 13 years old.

We found that [greater media exposure](#) was associated with higher

reporting of post-traumatic stress symptoms—and the link was just as strong in San Diego youth as it was in Florida youth.

The association between media exposure and post-traumatic stress symptoms was strongest for those with a particular brain response in the [amygdala](#), a brain area involved in processing fear and detecting potential threats.

Earlier in the study, many of the same children had been particularly reactive when viewing fearful facial expressions. At the same time, their [brain scans](#) showed reduced activity in another region of the brain, the [orbitofrontal cortex](#), thought to be involved in reducing emotional arousal.

That brain activation profile marked vulnerability for developing post-traumatic stress symptoms after viewing disaster-related media coverage.

## **What can parents do?**

These findings highlight how children do not need to be in harm's way or even close to a disaster to be affected by it—exposure to media coverage of a disaster can have a substantial impact as well.

They also suggest that there are identifiable vulnerabilities that might make some children more likely to be emotionally affected by media.

Scientists are increasingly interested in understanding what exposure to traumatic [news coverage](#) is doing to younger viewers who are still developing a sense of security. Recent research has suggested that parents should also be concerned about children's exposure to social media apps such as Instagram and [TikTok](#).

So what can parents do? For starters, parents can monitor and limit

access to some internet content for young viewers.

While it is important for parents to get periodic updates about impending storms or fires, extended exposure to such content rarely provides additional actionable information. Intermittent check-ins of breaking news may be appropriate, but the TV and [social media](#) do not have to be on constantly.

It's easy to routinely unplug, and it's good for the mental [health](#) of children.

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