

## **Not My Fault: What happens when disasters combine?**

Lori Dengler/For the Times-Standard  
Posted May 17, 2020

I've been impressed with the Atlantic Monthly's coverage of the pandemic. This week Robin George Andrew's story caught my eye, "What Happens If a 'Big One' Strikes During the Pandemic?" I immediately thought earthquake, but it could just as likely be a tornado, hurricane, wildland fire, flood or other disaster.

For emergency managers, this is not a new concept. It has already happened. Spring is tornado season and over 400 tornados have been reported in the United States since the beginning of March, causing more than \$4 billion in damages and 65 deaths. The worst was the Easter outbreak on April 12-13 when 139 tornadoes were confirmed in ten southern states. Thirty-eight people died in Mississippi, Georgia, Tennessee and South Carolina and nearly 200 were injured. All four states were under COVID shelter-in-place orders at the time.

The coronavirus is a two-edged sword. Mississippi Governor Tate Reeves remarked, "The fact that the coronavirus exists is complicating the recovery from the tornado, while the tornadoes are complicating our efforts to make sure that we do everything in our power to stop the spread of the virus" (Time Magazine 4/16). Even when personal protective gear is available to first responders, it can make it more difficult to do their jobs and poses additional logistical issues and expense.

The Red Cross provides shelter and support for persons displaced in emergencies. Early on in the outbreak, the Red Cross adopted new policies for distancing. Shelter capacity was reduced so that beds could be widely spaced and people both working in the shelters and clients were required to wear facemasks. One family in Alabama was reportedly turned away from a shelter when they didn't have enough masks.

Organizations like the Red Cross rely heavily on volunteers, many of whom are retired and in the high-risk category for COVID-19. The combination of reduced capacity and limited staff, made logistics and response more difficult. Food banks and other organizations active in disaster response have similar problems.

Tornadoes are spotty. They wreak havoc where they touch down and, like the Easter storms, multiple touchdowns can affect many communities and states at the same time. But infrastructure in surrounding regions is left untouched and response can be quickly mobilized from undamaged areas. The outbreak complicates response, but our existing systems should be able to handle them.

What about larger scale disasters such as a major hurricane, wildland fires, or floods that require mass evacuation? The likely duration of COVID-19 makes cumulative disasters not just hypothetical, but likely. Wildland fires are a sure bet in California and other western states this summer. NOAA has yet to release its official 2020 hurricane season outlook, but several other groups are forecasting a more active than average season. Severe winter storms and flooding will occur while we are still affected by the pandemic.

Last year is a good preview. In 2019, NOAA reported 13 one-billion-dollar weather and climate-related disasters affecting 14 million people. The list includes the longest Mississippi River flooding on record lasting from early spring through July and the unprecedented wildland fires in California. Earthquakes have no seasonal predictability, but the uptick in activity over the past ten months should put them high on our radar screens. We've been fortunate that last July's 7.1 Ridgecrest earthquake and the 5.7, and two 6.5s in Utah, Idaho and in Nevada were all either not quite big enough or too remote to cause widespread damage. Move any of them by tens of miles or add a few decimal points to the magnitude and the story becomes quite different.

I'm always skeptical when journalists take on a topic I know something about. I read the Atlantic article with a critical eye and was pleasantly surprised. They spoke to the right people, a mix of researchers (several who I know) from a broad swath of the disaster world – emergency managers, scientists from different disciplines including social scientists. My hackles go up when an article cherry picks a select few experts to push a particular perspective.

Andrews did not succumb to sensationalism and fear. The temptation for lurid headlines and doom/gloom when discussing disasters is hard to resist. He keeps his story forward looking, discusses projects emergency management professionals are working on to address the issue and ends with to dos – actions we can all take to reduce impacts when such a double whammy occurs.

Two points I was particularly glad to see highlighted. First, how misinformation wars and growing mistrust of government institutions not hamper COVID response, but could make it even more difficult to get people to do the right thing when a flood, hurricane or tsunami is approaching. And second, how a long and costly duration disaster may also drain reservoirs of empathy, meaning we become numb to the plight of others and the marginalized are ever more marginalized.

<https://www.times-standard.com/2020/05/17/lori-dengler-what-happens-when-disasters-combine/>

The most important take away for me is how essential it is not to throw all our resources into the pandemic basket and make sure that monitoring, research and emergency planning/management, and outreach/preparedness efforts for other disasters don't get forgotten or supported. The response to the coronavirus is a sad lesson that resilience means planning ahead. Being reactive is not the way to protect health and reduce impacts.

Pandemics, like major earthquakes, are rare. We know they are coming but predict them in advance. It is human nature to focus on more immediate needs. It costs money to keep weather, earthquake, volcano, flood, landslide and other programs in place. In a time of ballooning budget deficits and crying economic needs, some will argue that we really don't need seismic instruments, a tsunami warning system or weather systems. Life and death decisions must be made quickly in any disaster response and just because an earthquake or fire coincides with a pandemic, doesn't mean that we don't still need trained people and science-based data to make the right ones.

And you might just want to stick a mask or two into your grab and go kit.

Note: The Atlantic is making all of their COVID-related stories available to anyone. The recent article on the Big One can be found at

<https://www.theatlantic.com/science/archive/2020/05/hurricane-earthquake-wildfire-tornado-disaster-pandemic/611455/>

-----  
Lori Dengler is an emeritus professor of geology at Humboldt State University, an expert in tsunami and earthquake hazards. All Not My Fault columns are archived at <https://www2.humboldt.edu/kamome/resources> and may be reused for educational purposes. Leave a message at (707) 826-6019 or email [Kamome@humboldt.edu](mailto:Kamome@humboldt.edu) for questions/comments about this column, or to request a free copy of the North Coast preparedness magazine "Living on Shaky Ground."