

## Key Definitions of Disasters

Disasters are emergencies that overwhelm the capacity of local resources, and therefore, require additional resources in order to respond effectively to a disaster. In my opinion, disasters are large and have the potential of having a greater negative impact on normal operations in public health. This includes the ability to maintain core functions, such as adequate human resources, surveillance, lab capabilities, and others. All disasters can have implications to public health without proper preparedness. Some of the most disruptive include incidents without warning, such as earthquakes, and complex events, in which a chain reaction is created and one event exacerbates a system already under stress, therefore magnifying the scale and potential for disruption, morbidity, and mortality.

**Acute disasters** are those that evolve rapidly, leaving little or no time to prepare. I gave the example of earthquakes above, but other examples include flash floods or chemical spills. Some man-made disasters, such as overt biological attacks and incendiary and dirty bomb attacks, can also be included in this category. **Slow-onset disasters** take some time to emerge and to notice. An example of this is droughts, which can have significant human migration impact. Another example is a rise in sea level, which increases global temperatures and lead to land and forest degradation. These events are considered “slow-onset events” by the United Nations Framework Convention on Climate Change (UNFCCC)<sup>1</sup>.

I think the best indicator for public health impact is the disruption or loss of continued services. This includes access to preventive and treatment services, such as primary medical care, access to medication and medical supplies and/or equipment that are oftentimes lifesaving (oxygen tanks, dialysis services, to name a few), and surveillance of pathogens either in relation to the disaster or isolated. The disadvantaged communities usually experience the worst effects of a disaster, as there is a decreased in the ability of emergency medical services to respond and a reduction in their capacity to handle surge. These disruptions have the greatest impact because of their potential to continue for a prolonged period of time following a disaster. This can result in additional morbidity, loss of lives, and loss of productivity in the impacted community and lead to additional socio-economic and psychological repercussions.

## References

1. United Nations Framework Convention on Climate Change. Slow-Onset Events. Thematic Areas of Work. Accessed September 08, 2023. <https://unfccc.int/wim-excom/areas-of-work/slow-onset-events>