

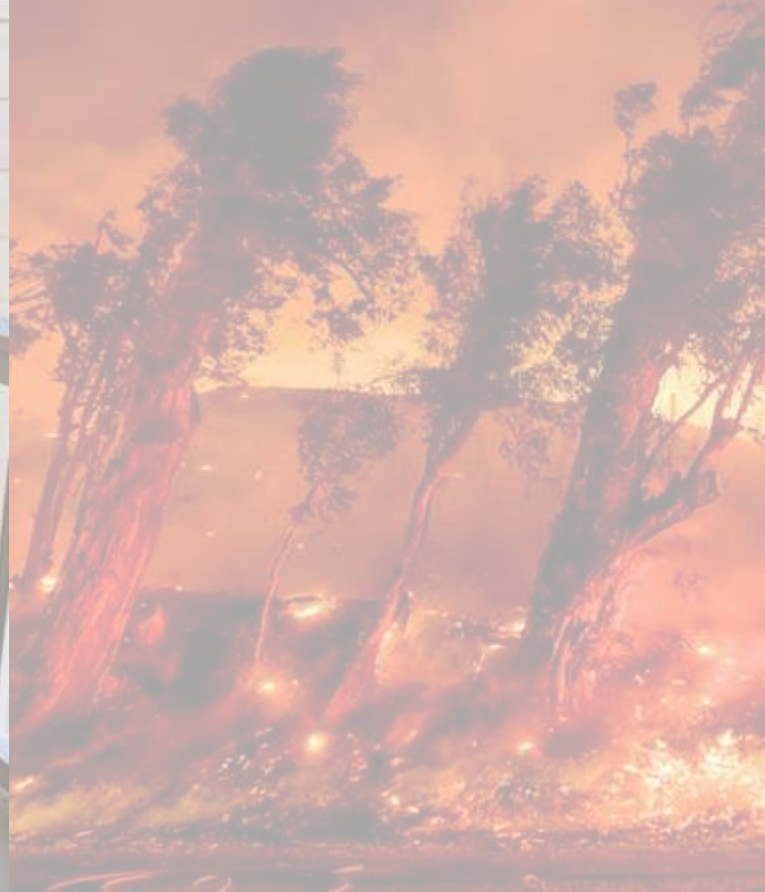
Disaster Epidemiology

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Disaster Epi and Response Team

CSTE Disaster Epidemiology Workshop
17 MAY 2021



Credit : Tony Price





Credit: Getty Images



Credit: Amy Helene Schnall



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The Public Health Perspective

Many disasters are responsible for negative health affects



Increased Morbidity
& Mortality



Environmental
Hazards



Displaced
Populations



Disruption of public
health infrastructure

...disasters are defined by **what they do to people** – the *impact* – otherwise they are just interesting geological or meteorological phenomena...

Direct vs Indirect Effects

Direct effects

- Caused by the actual environmental forces of the disaster or direct consequences of those forces
 - Structural collapse
 - Flying debris

Indirect effects

- Caused by the unsafe or unhealthy conditions that disasters create
 - Diminished sanitation
 - Reduced health services (primary care access, medicine, etc.)
 - Damaged infrastructure (electric, water, etc.)

Disaster Preparedness



Trainings



Exercises



Guidance



Templates



Credit: Amy Helene Schnall



Credit: Amy Helene Schnall



Credit: Amy Helene Schnall

Disaster Response

Syndromic Surveillance

National Poison Data System

Shelter Surveillance

Mortality Surveillance

Rapid Needs Assessments

Disaster Epidemiology: Always Adapting

- **Community Assessment for Public Health Emergency Response (CASPER)**
 - Team and household safety considerations
 - Modified CASPERs to include individual testing
- **Disaster Shelters**
 - Updated interim guidance to prioritize non-congregate shelters, distancing, health checks, and virtual operations
 - Surveys conducted to assess public concern of sheltering

CDC's Interim Guidance for General Population Disaster Shelters During the COVID-19 Pandemic

Updated Oct. 8, 2020 [Print](#)

This interim guidance is based on current information about the transmission and severity of coronavirus disease 2019 (COVID-19). The U.S. Centers for Disease Control and Prevention (CDC) will update this guidance as needed and as additional information becomes available. Please check the [CDC COVID-19 website](#) periodically for updated guidance. Because conditions vary from community to community, disaster shelter managers should look to their state and local health officials for information specific to their location.

Key points

- Alternatives to opening disaster shelters, such as sheltering in place, should be considered during the COVID-19 pandemic.
- Hotels/dormitories and small shelters (fewer than 50 residents) should be prioritized over larger shelters. Large congregate shelters should be a last resort.
- Officials should demobilize large congregate shelters as soon as possible after the emergency phase and relocate residents to hotels/dormitories or small shelters for better social distancing.
- Shelter managers should maintain contact with state and local public health agencies and emergency management for updates on local COVID-19 information.
- Shelter health staff should monitor residents daily for [symptoms of COVID-19](#) and other illnesses, including mental health concerns, and provide a daily status update to the local health department and other relevant agencies. View resources on [daily life and coping](#).
- Body temperature monitoring should be conducted for all persons entering the shelter and in food distribution areas.



Mass Care/Emergency Assistance Pandemic Planning Considerations

For State, Local, Tribal, Territorial and Non-Government Organizational Planners, Providers and Support Agencies

June 2020



FEMA



Data and Disasters: Preparing for the Future

- Continue to use data to guide our preparedness, response, and recovery efforts for all types of disasters
- Apply lessons learned from 2020
 - Concurrent incidents are going to continue
- Work closely with our communication partners to help turn data into understandable information



Thank you!

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For more information, contact NCEH
1.800.CDC.INFO

The findings and conclusions in this presentation are those of the author and do not necessarily represent the official position of the Centers of Disease Control and Prevention

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