Direct and Indirect Disaster Related Deaths

KATHRYN PINNERI, MD MONTGOMERY COUNTY FORENSIC SERVICES

Disaster

Term encompasses many different things

Original meaning: an unfavorable aspect of a planet or star Based on the belief that the positions of stars can influence the fate of humans, often in destructive ways¹

More common meaning: a sudden calamitous event bringing great damage, loss, or destruction; a sudden or great misfortune or failure $^{\rm L}$

Mass disaster: A natural or human-caused incident that results in more injuries and/or fatalities, such that local resources are overwhelmed

1: www.mirlam-webster.com/dictionary/disaster

Disasters

Natural disasters:

- Hurricanes
- · Tornadoes
- Floods
- EarthquakesWildfires
- Human caused disasters:
- Mass shooting
- Mass vehicular homicide
- Plane crashWildfires
- Terrorist attack

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Driver of vehicle submerged in flood waters associated with Hurricane Harvey	Arson related wildfires, terrorist attacks: homicide The disaster name should go in the 'HOW INJURY OCCURRED' section	
	Driver of vehicle submerged in flood waters associated with Hurricane Harvey	

Classification	of	indirect	deaths

May not get reported to ME/C

Educate local hospitals and law enforcement agencies during and after disaster

COD: as determined by the autopsy/review of records

MOD: as determined from the investigation
Will include natural, accident, homicide and undetermined

Disaster name should go on the death certificate

How injury occurred section for non-natural deaths
Part 1 or Part 2 for natural deaths

Indirect disaster related deaths

Blunt trauma after falling from ladder putting up storm shutters in preparation for Hurricane Ike

Hyperthermia while evacuating in car ahead of Hurricane Rita while stuck in traffic End stage renal disease with lack of access to dialysis due to flooding from Hurricane Katrina

Mechanical asphyxia due to compression of chest by watercraft while trailering jet ski ahead of Hurricane Sandy

Chronic obstructive pulmonary disease

Part 2: Inability to obtain oxygen tanks due to flooded roadways from Hurricane Harvey

Acute myocardial infarct due to atherosclerotic cardiovascular disease

– Part 2: Medical responders delayed due to debris on roadway from tornado

When is the disaster over?

For disasters with extensive displacement, deaths should be considered for as long as the displacement occurs

Can be up to 1 year or longer

6 months was traditional cutoff

Some disasters will have clear end points

Plane crashes Mass shootings

Effects of displacement	
Heavy financial burden Loss of all or part of home and belongings Loss of webicles	
Pay for temporary shelter, basic necessities Maintain home involved in the disaster: mortgage, utilities, etc	
Repair home Replace lost belongings	
	4
Effects of displacement	
Physical stress Demolition of damaged property	
Debris removal Exposure to toxins	
Bacteria infested water Rusted metal and electrical wires	
Mold Cleaning chemicals	
Extensive dust	
	1
Effects of displacement	
Emotional stress	
Forced evacuation Uncertainty for future: where to live, transportation, next steps	
Inability to get home repaired (competing with others for contractors, supplies and equipment) Lack of resources Finances and physical strain	
Finances and physical strain Fighting with insurance companies and/or FEMA Never-ending list of things to do, on top of regular duties/job	
Depression, anxiety and anger; increased substance abuse	
	1

Typical timeline 1-4 weeks evacuation 2-3 weeks for demolition 3-12 weeks for FEMA inspection 6-12+ months for renovations	
Why is this important? Benefits may be available for funeral/burial costs Reimbursement for agencies handling deaths Prevention of future deaths Hurricane Ria Evacuation September 24, 2005: 28 deaths in Houston area Millions of people on the roads, gridlock, gas shortages, record high temperatures (95-100 F) Hurricane turned east; minimal effects to Houston area Hurricane Katrina evacuees: many left without medications and succumbed to natural diseases (diabetes, hypertension)	
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Thank you!	