

From the Centers for Disease Control

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Medical Examiner/Coroner Reports of Deaths Associated With Hurricane Hugo—South Carolina

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At 11:57 p.m. eastern daylight time on Thursday, September 21, 1989, the eye of Hurricane Hugo struck the coast of South Carolina north of Charleston. Peak wind velocities in Charleston were measured at 135 mph, and there was an accompanying tidal surge of 12-17 feet. Heavy rains caused additional flooding and further damage. In addition to the damage or destruction to homes and buildings, approximately 900,000 persons in North and South Carolina were left without electrical power. After striking the coast, Hugo moved across central South Carolina and North Carolina. On September 22, the National Weather Service downgraded Hugo to a tropical storm.

As part of the Medical Examiner and Coroner (ME/C) Information Sharing Program at CDC, public health officials, using contact information in Medical Examiner and Coroner Jurisdictions in the United States,¹ asked ME/Cs in 25 South Carolina counties in the path of Hurricane Hugo to report 1) the number of deaths in their jurisdictions that they investigated between September 21 and October 6; 2) the number of these deaths that were related to the hurricane; and 3) for the 35 deaths reported as hurricane related, information about the demographic characteristics, cause, and circumstances of each death. ME/Cs reported that 29 injury deaths were directly related to the hurricane and categorized the manner of death for these persons as "accident."* In Dorchester and Berkeley counties, coroners reported six deaths caused by "heart attacks" attributed to stress associated with the hurricane. The manner of death in these cases was "natural," and all six occurred after the hurricane.

No deaths are known to have occurred before the storm (preimpact phase), 13 occurred during the storm (impact phase), and 22 occurred after the storm (post impact phase). Of the 13 traumatic deaths that occurred during the impact phase, six persons drowned (five when they attempted to bring boats inland from Charleston on the Cooper River and one when her mobile

TABLE. Characteristics of the 35 deaths attributed to Hurricane Hugo—South Carolina, September 21–October 6, 1989

Date	Age (yrs)	Sex	Cause and circumstances of death
Impact phase			
September 22	38	M	Drowned while bringing boats inland
	41	F	
	58	M	
	59	M	
	30	M	
September 22	60	F	Drowned by storm surge in mobile home
	1	M	
	41	F	
	32	M	
	69	M	
September 22	55	M	Crushed by mobile home/trailer
	67	M	
	30	M	
September 22	56	M	Crushed by collapsing house
	7	F	
	77	F	
	27	F	
	76	M	
September 23	21	F	Suffered multiple blunt trauma from tree falling into home
	3	F	
	1	M	
	57	M	
	69	F	
September 24	87	M	Suffered head injury when car hit by falling tree
	86	M	
	58	M	
	65	F	
	48	M	
September 25	36	F	Asphyxiated (from smoke inhalation) in house fire caused by candle
	6	M	
	2	M	
	8	M	
	41	M	
September 27	64	M	Exsanguinated from neck laceration caused by chain saw
	22	M	
September 28	8	M	Suffered "heart attack" related to stress
	41	M	
	64	M	
	22	M	
September 29	8	M	Suffered "heart attack" related to stress
	41	M	
	64	M	
	22	M	
September 30	8	M	Suffered head injuries when hit by tree during clean-up
	41	M	
	64	M	
	22	M	
October 2	8	M	Electrocuted while removing debris
	41	M	
	64	M	
	22	M	
October 3	8	M	Suffered "heart attack" related to stress
	41	M	
	64	M	
	22	M	
October 3	8	M	Electrocuted while repaving roof
	41	M	
	64	M	
	22	M	

home was struck by the storm surge). Four persons were crushed by their mobile homes. One person was killed when his house collapsed during the storm, and two others were crushed by trees during the storm (one when a tree fell on his house and one when a tree fell on his car).

Of the 22 postimpact-phase deaths, 16 were traumatic. Nine resulted from smoke inhalation or burns from five house fires, these fires were attributed to the use of candles during power outages. In one instance, fire officials concluded the fire was the direct consequence of adults leaving candles burning after going to bed at night. Of the five fires, two separate house fires were each responsible for the deaths of a mother and two young children. Five of

the nine fire-related deaths were among children aged 1-7 years.

Four persons were electrocuted in separate incidents during clean-up activities: two of these were occupationally related deaths (one person was working on power lines, and one was repairing a roof). Two deaths resulted when bystanders were injured by falling trees (one of these was an 8-year-old child who died from head injuries sustained when a tree fell on him; the other was a 27-year-old woman who was trapped under a tree's roots as it fell back into the hole from which it had been uprooted). One death was caused by a chainsaw injury sustained during the clean-up. All deaths occurred immediately or within 8 hours of the fatal incident.