Use of Short-Course Tuberculosis Preventive Therapy Regimens in HIV-Seronegative Persons

Deaths Associated With Hurricane Georges—Puerto Rico, September 1998

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MMWR. 1998;47:911-912
IN THE MMWR Recommendations and Reports, Prevention and Treatment of Tuberculosis Among Patients Infected with Human Immunodeficiency Virus: Principles of Therapy and Revised Recommendations,1 CDC has recommended the use of a 2-month regimen of daily rifampin and pyrazinamide (2RZ) as an alternative to a 12-month regimen of isoniazid for the prevention of tuberculosis in HIV-infected persons with positive tuberculin skin test reactions. This recommendation is based on the results of several randomized, controlled clinical trials in HIV-infected persons. Next year, CDC, in conjunction with the American Thoracic Society, expects to issue new guidelines on screening and preventive therapy for tuberculosis that will include a recommendation on the use of the 2RZ regimen for HIV-negative persons for whom preventive therapy is indicated. This recommendation will note that a comparative trial of the 2RZ regimen in HIV-negative persons has not been conducted and that additional data will be needed on acceptability and toxicity to determine whether it is a cost-effective alternative to longer courses of isoniazid.

Until new guidelines are issued, the regimen for HIV-positive persons can be used for HIV-negative persons, following the same guidelines for HIV-positive persons. This regimen may be useful especially in settings where provision of longer courses of preventive therapy has not been feasible (e.g., jails). CDC’s Division of Tuberculosis Elimination (DTBE), National Center for HIV, STD, and TB Prevention, will collect information on completion of preventive therapy from selected programs using the short-course regimen. Programs interested in working with the DTBE in this effort can contact CDC, telephone (404) 639-8123.

Reference
1. CDC. Prevention and treatment of tuberculosis among patients infected with human immunodeficiency virus: principles of therapy and revised recommendations. MMWR 1998;47 (no. RR-20).

Deaths Associated With Hurricane Georges—Puerto Rico, September 1998

MMWR. 1998;47:897-898
ON THE EVENING of September 21, 1998, Hurricane Georges struck Puerto Rico with estimated maximum winds of 115 mph (Category 3). It made multiple landfalls throughout the Caribbean, including Antigua, the U.S. Virgin Islands, Hispaniola, and Cuba. On September 25, Hurricane Georges struck the U.S. mainland near Key West, Florida, and made final landfall on September 27 in Biloxi, Mississippi, as a Category 2 hurricane. This report presents preliminary data about deaths resulting from the hurricane in Puerto Rico.

On September 23, all 78 civil divisions in Puerto Rico reported damage to homes, and 416 government-run shelters were housing approximately 28,000 persons. Approximately 700,000 persons were without water, and 1 million had no electricity.

The medical examiner (ME) at the Institute of Forensic Sciences provided information about the number and causes of deaths associated with Hurricane Georges. The ME determined whether a death was hurricane-related, including deaths during the impact phase of the storm (i.e., associated with high winds, storm surge, or flash flooding), and during the post-impact phase (i.e., associated with hurricane-related effects such as structural damage, power outages, and injuries incurred during clean-up).

Case Reports
Case 1. On September 23, a 28-year-old woman from Ponce died inside her home from carbon monoxide (CO) poisoning. A gasoline-powered electric generator had been operating inside the home while she was sleeping. Two other family members were hospitalized because of CO poisoning.

Case 2. On September 24, a 46-year-old man from Bayamón was found dead from CO poisoning inside his family store. He had been cleaning the store the night after the hurricane, and a gasoline-powered electric generator was operating outside near an opening where fumes could enter the structure.

Case 3-6. On September 25, a 27-year-old woman from Caguas and her three children (aged 4, 6, and 7 years) died in a fire in their home. They were using candles to light the home. The mother apparently was asleep when the house caught fire.

Case 7. On September 25, a 66-year-old man from Utuado died as a result of head trauma sustained on September 22. He was removing water that had entered his home during the hurricane when he fell and struck the back of his head.

Case 8. On September 28, a 49-year-old man in San Juan was electrocuted while repairing a cable damaged by the storm. He was an employee of the electrical company.

Public Health Response
Mortality surveillance in Puerto Rico after Hurricane Georges led directly to public health interventions by the Puerto Rico Department of Health. Public health alerts covering the sources, symptoms, diagnosis, and treatment of CO poisoning were issued to hospital emergency departments across the island. Community education efforts were initiated, and a CO fact sheet was prepared. Emergency departments of the largest hospital system in Puerto Rico instituted surveillance for cases of CO poisoning.
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CDC Editorial Note: Preliminary findings of the investigation of deaths in Puerto Rico associated with Hurricane Georges indicate that all deaths occurred during the post-impact phase. Because improvements in hurricane warning systems have greatly decreased deaths during the impact phase of such storms in many areas, additional intervention efforts in these localities should focus on adverse health events in a storm’s aftermath, such as those associated with storm damage and clean-up. The two deaths caused by CO poisoning from generators illustrate the growing importance of this toxicant as a cause of morbidity and mortality in post-disaster situations.

These eight deaths, and deaths in similar circumstances after other hurricanes,1-3 suggest that public health authorities should emphasize worker safety during clean-up and power-restoration activities and the hazards of open flames in homes. In addition, to reduce the risk for CO poisoning, persons should be warned to place generators outside and away from homes and discouraged from operating gasoline-powered items in enclosed areas. In localities with large Spanish-speaking populations, these and other warnings should continue to be in English and Spanish. In the future, mortality surveillance should continue to be conducted during the immediate aftermath of hurricanes and other natural disasters to guide public health activities.

References 3 available.

Acute Hemorrhagic Conjunctivitis—St Croix, US Virgin Islands, September-October 1998

MMWR. 1998;47:899-901
1 figure omitted
HURRICANE GEORGES struck the U.S. Virgin Islands on September 21, 1998. Immediately thereafter, health authorities on St. Croix (1998 population: approximately 50,000) became aware of increased numbers of cases of conjunctivitis. During September, one of the two public health clinics on the island recorded 88 cases of conjunctivitis, compared with three cases during August. Cases were characterized by periorbital swelling, excessive lacrimation, conjunctival redness with occasional hemorrhages, and foreign-body sensation in the eye. No severe sequelae were reported. Local ophthalmologists considered the symptoms characteristic of viral acute hemorrhagic conjunctivitis (AHC). This report describes the initial findings of an ongoing clinical, epidemiologic, and laboratory investigation of this outbreak.

To identify cases, investigators reviewed medical records at the two Virgin Islands Department of Health clinics and the emergency department of the hospital in St. Croix. A case was defined as physician-diagnosed conjunctivitis since August 31. The number of cases increased substantially in early September before the hurricane, then plateaued during the following weeks. As of October 25, 1051 cases had been identified at these three facilities. Median age of 273 AHC patients was 13.5 years (range: 3.5 months-81 years); 57 (22%) were aged 0-5 years, 99 (38%) were aged 6-17 years, and 104 (40%) were aged 18 years. Sex distribution differed by age group; 58 (50%) of children were female, compared with 84 (78%) of adults who were female. Bilateral ocular involvement was reported among 116 (69%) cases.

To further assess disease burden, investigators contacted approximately 600 households during October 17-21 by calling randomly selected listed telephone numbers. One adult in each household was asked whether any members of the household had developed conjunctivitis (defined as the onset of redness, tearing, swelling, itching, and/or burning around one or both eyes of at least 1 day’s duration) within the preceding 8 weeks. Approximately 10% of households reported at least one case of conjunctivitis, and cases were distributed widely across the island. The self-reported average duration of symptoms was 5 days.

Preliminary results from testing of laboratory specimens from St. Croix indicate that the probable agent is coxsackievirus A24 variant (CA24v).

Control measures included disseminating public health information by press release and radio interviews and distribution of fact sheets by physicians’ offices, public health clinics, and schools. St. Croix health authorities recommended that residents avoid social contact with persons who have AHC, including indirect contact (e.g., sharing towels or beds), restrict persons with AHC from attending school and work while symptomatic, and increase hand-washing.

References 5 available.

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