2007 Georgia Data Summary:

Fire-related Injuries

Fire was the 5th leading cause of unintentional injury-related death in Georgia.

Fires and burns are the 5th leading cause of unintentional injury-related death (2004) and the 3rd leading cause of fatal home injury (2004) in the U.S.

Each year in Georgia, fire-related injuries caused approximately:

- **130 deaths**
- **470 hospitalizations**
- **2,400 emergency room visits**

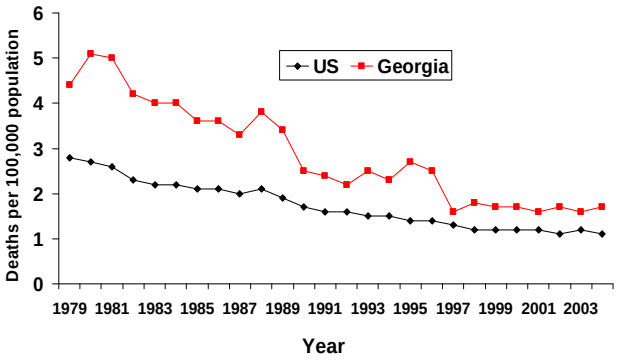
Fire was the 5th leading cause of unintentional injury-related death in Georgia from 1999 to 2004.

Mortality

Trend

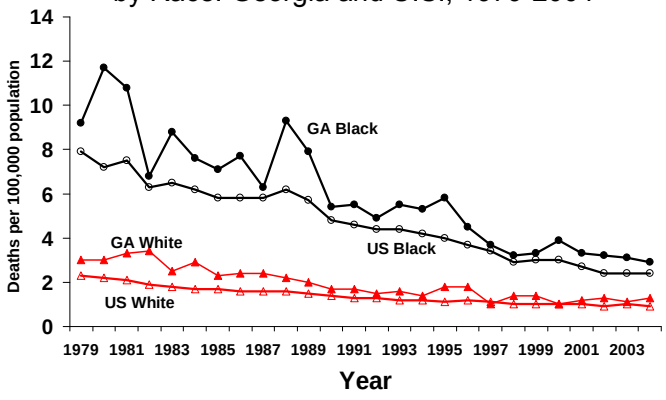
Although the number of deaths caused by fires has declined gradually over the past several decades, both nationwide and in Georgia, Georgia consistently had a higher rate of fire-related death compared to the national rate. (Figure 1).

Figure 1. Age-adjusted Fire-related Death Rates: Georgia and U.S., 1979-2004



The fire-related death rate among blacks has been higher than that among whites in both the U.S. and Georgia over the past decades (Figure 2).

Figure 2. Age-adjusted Fire-related Death Rates by Race: Georgia and U.S., 1979-2004



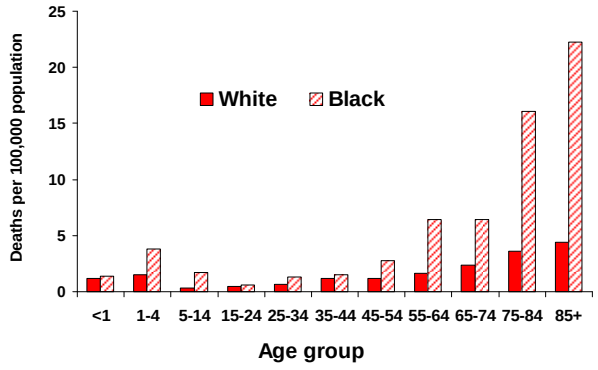
Age

Young children and the elderly were more likely to die from fires than persons in other age groups. People aged ≥75 years had the highest risk of dying from fires among all age groups, (6.4 per 100,000 population).

Among blacks, the pattern of higher rates among the young and the elderly was similar to the pattern observed for whites.

However, blacks had a higher risk of dying from fires than whites across all age groups (Figure 3).

Figure 3. Age-specific Fire-related Death Rates by Race: Georgia, 2000-2004



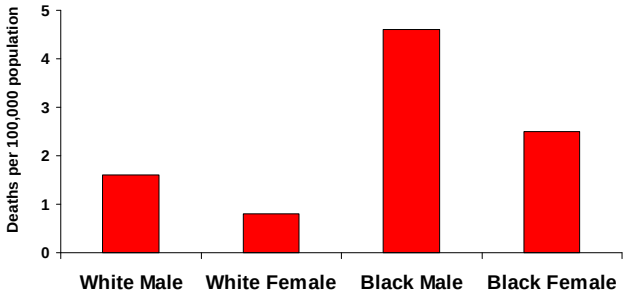
Race and Sex

The risk of dying from fires was almost three times higher for blacks (3.4 per 100,000 population) than for whites (1.2 per 100,000 population).

Males were almost twice as likely to die from fires (2.2 per 100,000 population) as were females (1.2 per 100,000 population).

Black males had the highest fire-related death rate (4.6 per 100,000 population) among all race/sex groups (Figure 4). For other race/ethnic groups, too few deaths occurred to calculate race and sex-specific rates.

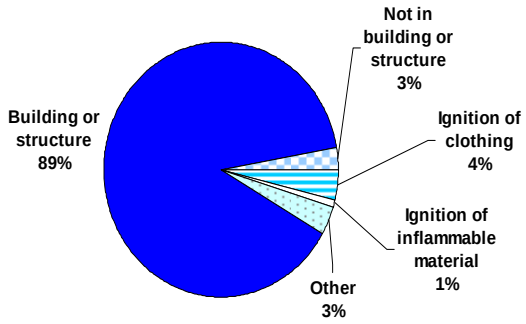
Figure 4. Age-adjusted Fire-related Deaths Rates by Race and Sex: Georgia, 2000-2004



Location and Causes

Almost 90% of all fire-related deaths occurred in buildings or structures, including private and public dwellings (Figure 5).

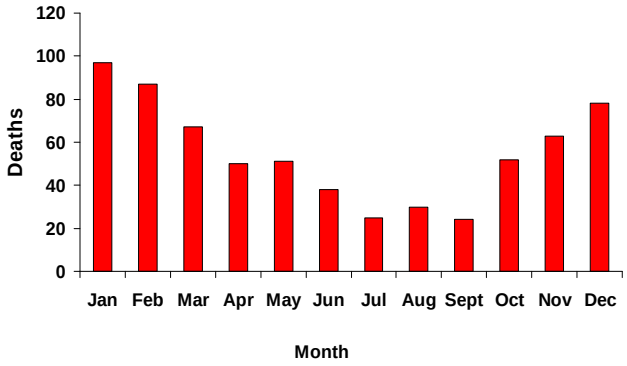
Figure 5. Location/Causes of Fatal Fires, Georgia, 2000-2004



Seasonality

Fire-related deaths occurred more frequently during winter months (Figure 6). This seasonality is consistent with national reports of fire-related deaths.

Figure 6. Fire-related Injury Deaths by Month, Georgia, 2000-2004

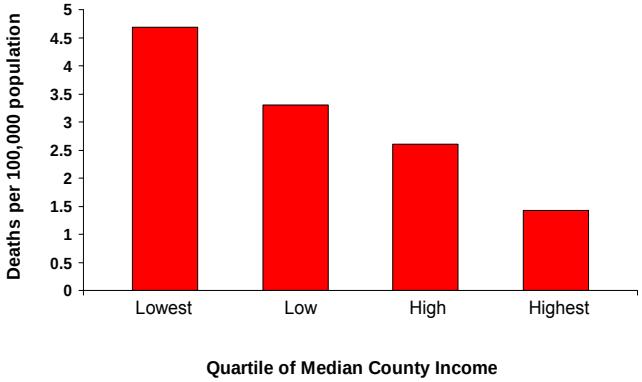


Income

Lower socio-economic status is known to increase the risk of fire-related death. People living in counties in Georgia with a median county income in the lowest quartile were more likely to die from fire than those living in counties with higher median county income.

As median county income rises, the fire-related death rate decreases. (Figure 7).

Figure 7. Age-adjusted Fire-related Death Rates by Quartile of Median County Income: Georgia, 2000-2004



Note: Counties were ranked by median county income and divided into quartiles of lowest, low, high and highest median income.

Morbidity

Hospitalizations

From 2002 to 2004, 1,400 hospitalizations occurred as a result of fire-related injuries, resulting in approximately

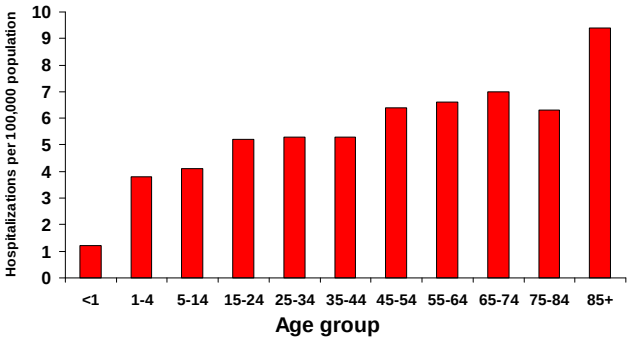
- $80 million hospital charges
- 10,300 days of hospital stay

Although fire-related injures accounted for only 1% of all injury hospitalizations, they had the highest average hospital charges and the longest average hospital stays among all injury-related hospitalizations.

Age

The rate of hospitalization for fire-related injuries generally increases with age. The hospitalization rate for fire-related injuries was highest for adults aged ≥ 85 years (9.4 per 100,000, Figure 8).

Figure 8. Age-specific Fire-related Hospitalization Rates: Georgia, 2002-2004

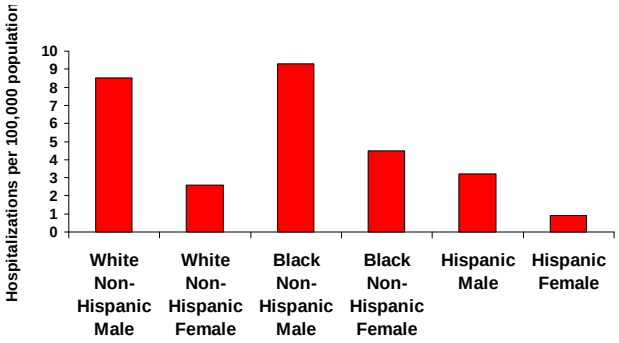


Sex, Race and Ethnicity

Hospitalization rates for fire-related injuries also differ between males and females. Males had a higher fire-related injury hospitalization rate (8.0 per 100,000 population) than did females (3.0 percent per 100,000 population).

Non-Hispanic blacks (6.7 per 100,000 population) were more likely than non-Hispanic whites (5.5 per 100,000 population) or Hispanics (2.3 per 100,000 population) to be hospitalized for fire-related injuries. Non-Hispanic black males had the highest hospitalization rate (9.3 per 100,000 population) among all race/ethnic/sex groups (Figure 9).

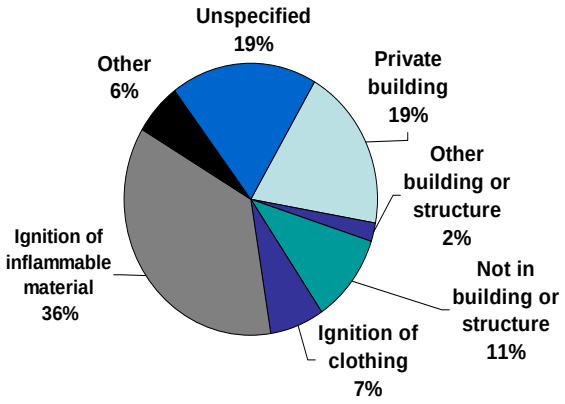
Figure 9. Age-adjusted Fire-related Hospitalization Rates by Race and Sex: Georgia, 2002-2004



Location and Causes

Thirty-six percent of all fire-related injuries that led to hospitalizations were caused by ignition of highly inflammable materials, and about 19% resulted from fires in private buildings (Figure 10).

Figure 10. Location/Causes of Fire-related Hospitalizations, Georgia, 2002-2004



Seasonality and Income

Hospitalizations for fire-related injuries showed a pattern of seasonality similar to that for deaths. More hospitalizations occurred during the winter and spring.

As was seen with fire-related death rates, hospitalization rates decreased with increased median county income level.

Emergency Department Visits

In 2002-2004, 7,309 emergency department visits occurred as a result of fire-related injuries, incurring emergency department charges of approximately $4.8 million.

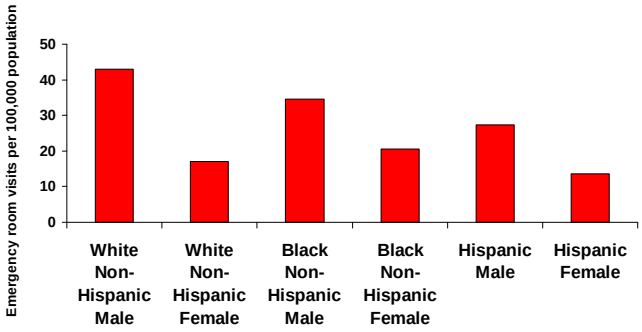
Age

Children aged 1 to 4 years and persons aged 15 to 44 years had the highest risk of fire-related emergency department visits among all age groups.

Sex, Race and Ethnicity

The risk pattern for fire-related emergency department visits is shown in Figure 11. White males had the highest risk among all groups.

Figure 11. Age-adjusted Fire-related Emergency Department Visit Rates by Race and Sex: Georgia, 2002-2004



Location and Causes

- 21% of fire-related injuries that led to emergency department visits occurred in buildings and 19% were caused by ignition of inflammable materials or clothing
- However, for 35% of visits, causes were unknown or unspecified.

Seasonality and Income

- No seasonality was observed for fire-related emergency department visits overall.
- However, among just those fires that occurred in buildings, emergency department visits were more common in the winter and spring, a pattern similar to that for deaths and hospitalizations.
- The rate of fire-related injury emergency department visit decreased with increased median county income level.

Notes:

1. **Fire-related injuries or deaths** followed the definition published in *Profile of Injuries in Georgia 2005* based on ICD-9-CM and 1CD-10 codes. They generally included injuries or deaths due to exposure to smoke, fire and flames, but excluded certain types of burns, such as scalds.
2. **Data sources:**
   Georgia Vital Death Records
   Georgia Hospital Discharge Data
   Georgia Emergency Department Visit Data
3. **Date updated:** August 2007
4. **Publication number: DPH07/122HW**
5. Visit
   http://health.state.ga.us/epi/cdiee/injury.asp or
   http://oasis.state.ga.us/oasis/qryMorbMort.aspx or
   http://health.state.ga.us/programs/injuryprevention/core.asp#6
   for more information about injuries in Georgia.

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