**FIRE**

- Blacks were 3 times more likely to die from fires (3.7 per 100,000 population) than whites (1.2 per 100,000 population).
- Fire-related injury hospitalizations had the longest average hospital stays (10 days per visit) and the highest average hospital charges ($61,000 per visit) among all injury hospitalizations.

Fire-related injuries and deaths occur most often as a result of fires in private or public buildings, however, such injuries may also occur under other scenarios such as forest fires, or ignition of clothing or inflammable materials. Injuries from certain types of burns, such as scalds, were not included in this report due to death coding system changes.

**Deaths from Fire**

A total of 375 Georgians died from fire during 1999 to 2001, an average of 125 deaths per year. Victims were disproportionately elderly, with 34% being older than 65 years of age. Sixty percent were male and 52% were white (Table 12).

<table>
<thead>
<tr>
<th>Age Group</th>
<th>White Male</th>
<th>White Female</th>
<th>Black Male</th>
<th>Black Female</th>
<th>Other Male</th>
<th>Other Female</th>
<th>Total</th>
<th>Average per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>5-14</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>15-24</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>25-44</td>
<td>28</td>
<td>14</td>
<td>25</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>79</td>
<td>26</td>
</tr>
<tr>
<td>45-64</td>
<td>38</td>
<td>22</td>
<td>28</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>102</td>
<td>34</td>
</tr>
<tr>
<td>65+</td>
<td>33</td>
<td>25</td>
<td>32</td>
<td>37</td>
<td>0</td>
<td>0</td>
<td>127</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>70</td>
<td>102</td>
<td>79</td>
<td>0</td>
<td>0</td>
<td>375</td>
<td>125</td>
</tr>
</tbody>
</table>
The death rate from fires in Georgia has been consistently higher than the death rate in the United States since 1979. Both the national and state rates decreased from 1979 to 1998 (Figure 30). From 1999 through 2001, if the death rate for fires in Georgia had been equal to that of the United States, an estimated 42 persons per year would not have died from fires (Table 1).

**Figure 30. Age-Adjusted Death Rates: Fire, Georgia and US, 1979-2001**

![Age-Adjusted Death Rates: Fire, Georgia and US, 1979-2001]

*NOTE: The dotted line indicates a change in coding systems used for cause of death. ICD-9 codes were used in 1979-1998 and ICD-10 codes were used in 1999-2001.*

Young children and the elderly were more likely to die from fires than persons in other age groups. Georgians aged 5 to 34 years had the lowest fire death rates (Figure 31).

**Figure 31. Age-Specific Death Rates: Fire, Georgia, 1999-2001**

![Age-Specific Death Rates: Fire, Georgia, 1999-2001]
The rate of dying from fires was 1.8 times higher for males (2.3 per 100,000 population) than for females (1.3 per 100,000 population). Blacks were 3 times more likely to die from fires (3.7 per 100,000 population) than whites (1.2 per 100,000 population). Black males had the highest fire death rate (5.0 per 100,000 population) among all race/sex groups (Figure 32).

Eighty-six percent (86%) of all fire deaths occurred in buildings or structures, which includes private and public dwellings (Figure 33).
Map 8. Age-adjusted Death Rate by County of Residence: Fire, Georgia, 1994-2001

Fire deaths per 100,000 population
- Rate not calculated (less than 10 deaths)
- <2.1
- >=2.1 and <3.0
- >=3.0
**Hospitalizations from Fire**

There were 1,171 hospitalizations in 1999-2001 as a result of fire-related injuries (an average of 390 hospitalizations per year) resulting in an average 3,840 hospitalization days and nearly $24 million in hospital charges per year. Although fire accounted for only 1% of all injury-related hospitalizations, the average fire-related hospitalization lasted twice as long and cost 34 times more than other injury hospitalizations in Georgia. Of those hospitalized from fire-related injuries, 67% were males and 58% were whites (Table 13).

**Table 13. Number of Hospitalizations by Age, Race and Sex: Fire, Georgia, 1999-2001**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Total*</th>
<th>Average per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Under 5</td>
<td>17</td>
<td>9</td>
<td>14</td>
<td>5</td>
<td>49</td>
</tr>
<tr>
<td>5-14</td>
<td>78</td>
<td>14</td>
<td>38</td>
<td>11</td>
<td>149</td>
</tr>
<tr>
<td>15-24</td>
<td>79</td>
<td>11</td>
<td>23</td>
<td>10</td>
<td>140</td>
</tr>
<tr>
<td>25-44</td>
<td>160</td>
<td>48</td>
<td>82</td>
<td>45</td>
<td>362</td>
</tr>
<tr>
<td>45-64</td>
<td>127</td>
<td>28</td>
<td>68</td>
<td>28</td>
<td>267</td>
</tr>
<tr>
<td>65+</td>
<td>51</td>
<td>62</td>
<td>43</td>
<td>44</td>
<td>204</td>
</tr>
<tr>
<td>Total</td>
<td>512</td>
<td>172</td>
<td>268</td>
<td>143</td>
<td>1,171</td>
</tr>
</tbody>
</table>

*Total includes all other races/ethnicity.

The hospitalization rate for fire-related injuries increased with age and was highest for those 85 years and older (Figure 34).

**Figure 34. Age-Specific Hospitalization Rates: Fire, Georgia, 1999-2001**
The rate of hospitalization from fire-related injury was 2.7 times higher for males (7.4 per 100,000 population) than for females (rate 2.7 per 100,000 population). Non-Hispanic blacks (7.0 per 100,000 population) were more likely than non-Hispanic whites or Hispanics (both 4.5 per 100,000 population) to be hospitalized for fire-related injuries. Black males had the highest hospitalization rate among all race/ethnic/sex groups (Figure 35).

**Figure 35. Age-adjusted Hospitalizations by Race and Sex: Fire, Georgia, 1999-2001**

Twenty eight percent (28%) of all fire-related hospitalizations resulted from fires in private buildings, and 38% were caused by ignition of highly inflammable materials. Almost 20% of all fire-related hospitalizations were not coded for location (Figure 36.)

**Figure 36. Location of Fire Causing Hospitalization, Georgia, 1999-2001**
Map 9. Age-adjusted Hospitalization Rate by County of Residence:
Fire, Georgia, 1999-2001

Fire injury hospitalizations per 100,000 population
- Rate not calculated (less than 10 hospitalizations)
- <5.5
- >=5.5 and <12.0
- >=12.0
Fire Related Injury Prevention Strategies

Appropriately placed and maintained smoke detectors in homes, emergency fire exit plans, and fire extinguishers are proven ways of reducing death and serious injuries from residential fires. Other measures of reducing fire-related injuries include enforcing existing building fire codes, and placing matches and lighters out of the reach of children.

Injury Prevention Programs for Fire Related Injuries

The Injury Prevention Section of the Department of Human Resources, Division of Public Health, supports a multi-faceted fire prevention program that includes the identification of high-risk neighborhoods and resident education on the risk factors for residential fires. The Program stresses the importance of having a family evacuation plan in case of fire and coordinates and leads the installation of smoke alarms in homes without adequate smoke alarm coverage. The program conducts follow-up visits to continually monitor the effectiveness of the programs. Neighborhoods selected for the program typically include low-income households with large numbers of children or elderly residents and with old structures that can be readily consumed by fire. Firemen and volunteers are responsible for the residence inspection and keeping records as to where the detectors are installed and providing follow-up visits. The program is sponsored by grants from the Centers for Disease Control and Prevention and the Georgia Fire Fighters Burn Foundation. National SAFE KIDS estimates that $60 is saved for every dollar spent on a smoke detector. Since its inception in 1999, the Residential Fire Prevention Program of the Injury Prevention Section has documented 83 cases where residents were alerted to evacuate in time by smoke alarms installed through the program.

Fire Prevention Resources

National Fire Protection Association
http://www.nfpa.org/catalog/home/index.asp

National SAFE KIDS Campaign
http://www.safekids.org/tier2_rl.cfm?folder_id=171

Georgia Firefighters Burn Foundation
http://www.gfbf.org/

U.S. Consumer Product Safety Commission
http://www.cpsc.gov/spscpub/pubs/fire_sfy.html

U.S. Fire Administration
http://www.usfa.fema.gov/public/