

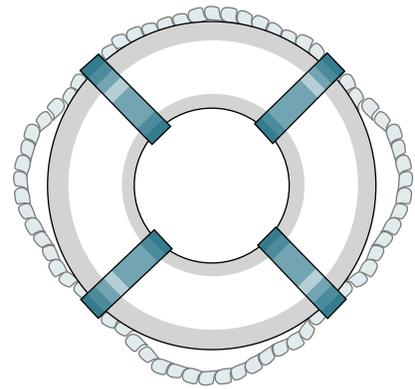
## DROWNING & NEAR DROWNING

- *Children ages 1 to 4 years and 15 to 24 years had a significantly higher risk for drowning than Georgians in other age groups*
- *More than half of the hospitalizations for near drowning resulted from incidents in swimming pools, and almost half (42%) of those hospitalized were children under 5 years of age.*

Drowning and submersion deaths include deaths involving swimming pools, natural open water (rivers, lakes, or seas), bathtubs and other bodies of water where no watercrafts were involved.

### Deaths from Drowning

Drowning is an important injury concern, as it was the 2<sup>nd</sup> leading cause of unintentional injury death for children 1 to 4 years of age. From 1999 through 2001, 351 Georgians drowned, an average of 117 per year. Of these, 37% were children under the age of five or young adults between the ages of 15 and 24 years. Eighty percent (80%) were male, and 62% were white (Table 14).



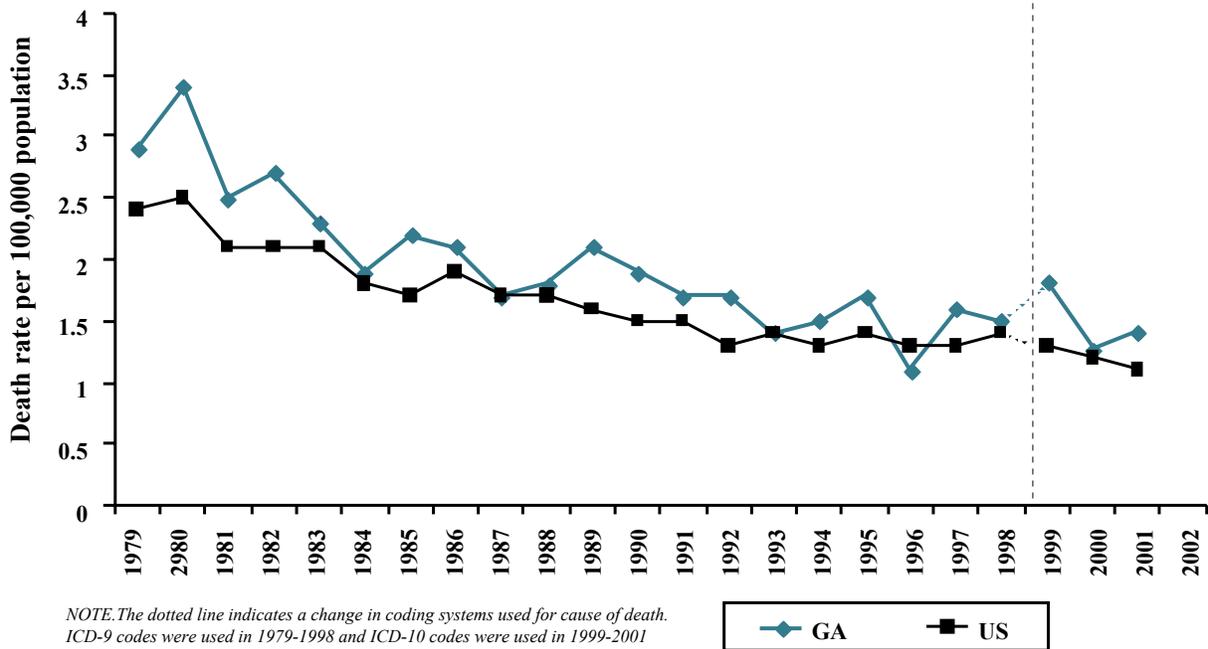
**Table 14. Number of Deaths by Age, Race and Sex:  
Drowning, Georgia, 1999-2001**

Age Group	White		Black		Other		Total	Average per year
	Male	Female	Male	Female	Male	Female		
Under 5	20	16	8	2	2	1	49	16
5-14	11	6	27	6	0	1	51	17
15-24	47	3	32	2	2	0	86	29
25-44	45	10	24	2	1	0	82	27
45-64	34	12	14	1	0	0	61	20
65+	10	3	5	4	0	0	22	7
Total	167	50	110	17	5	2	351	117

## Profile of Injuries in Georgia

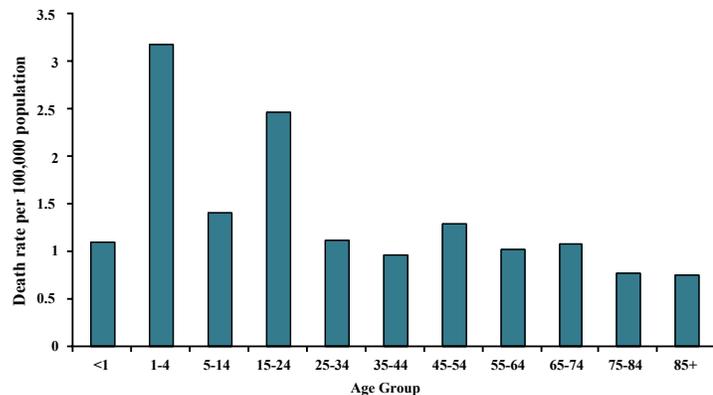
The death rate from drowning in Georgia decreased from 1979 to 1993 but remains slightly higher than the US rate (Figure 37). From 1999 through 2001, if the death rate for drowning in Georgia had been equal to the death rate for drowning in the United States, an estimated 10 persons per year would not have died from drowning in Georgia (Table 1).

**Figure 37. Age-Adjusted Death Rates: Drowning, Georgia and US, 1979-2001**



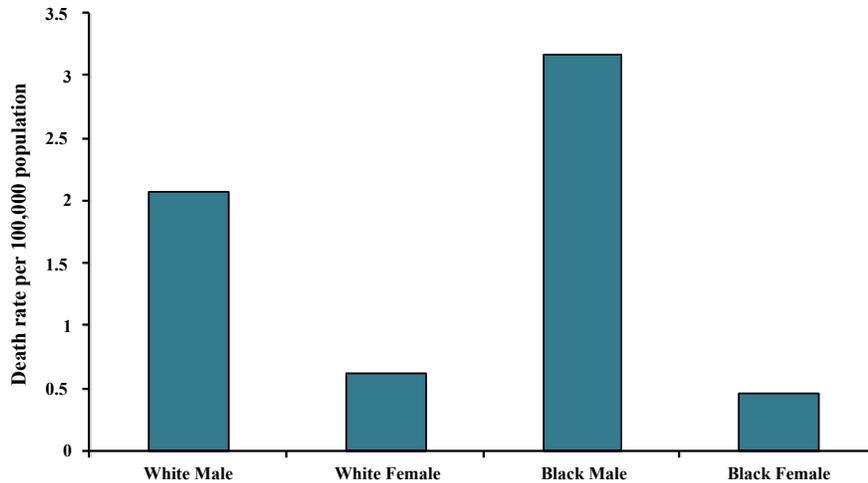
**Figure 38. Age-Specific Death Rates: Drowning, Georgia, 1999-2001**

Children 1 to 4 years of age and young adults 15 to 24 years of age had a significantly higher risk for drowning than other age groups (Figure 38).



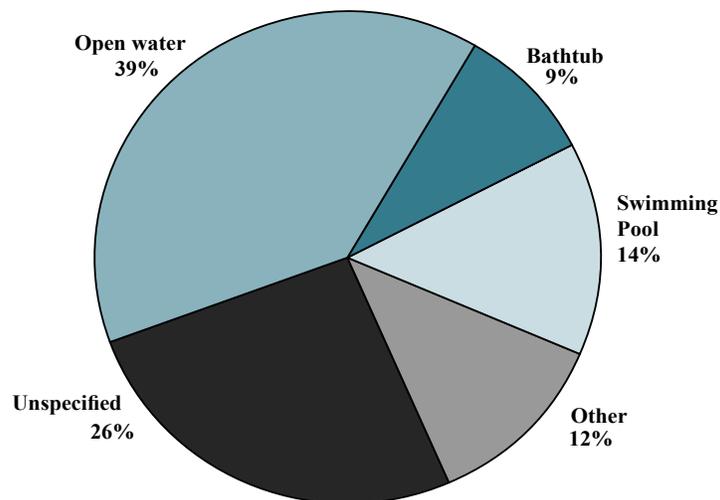
The rate of drowning was about four times higher for males (2.3 per 100,000 population) than for females (0.6 per 100,000 population). Whites (1.4 per 100,000 population) were slightly less likely than blacks (1.8 per 100,000 population) to die from drowning. Among the race/ethnicity/sex groups, black males had the highest drowning rate (3.2 per 100,000 population) (Figure 39).

**Figure 39. Age-Adjusted Death Rates by Race and Sex: Drowning, Georgia and US, 1999-2001**

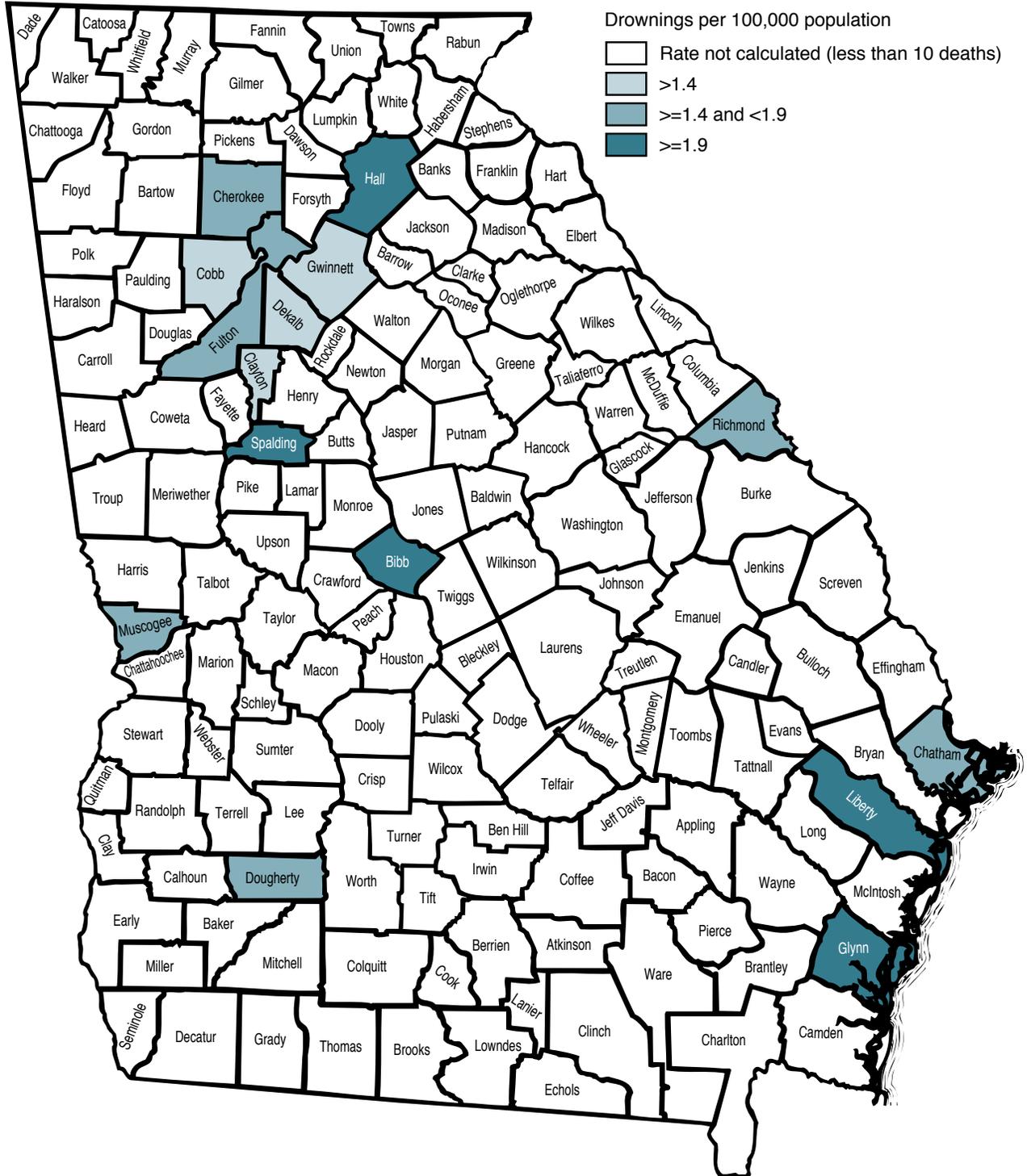


More than one-third (39%) of all the drownings occurred in open water, and almost half (48%) of the open water victims were teenagers or young adults between 15 and 34 years of age. Of those who drowned in a swimming pool (14% of all drownings), 59% were children ages 1 to 14 years old. (Figure 40).

**Figure 40. Drowning by Type, Georgia, 1999-2001**



**Map 10. Age-adjusted Death Rate by County of Residence:  
Drowning, Georgia, 1994-2001**



## Hospitalizations from Near Drowning

From 1999 through 2001, 188 Georgians were hospitalized for near-drowning, an average of 63 per year, resulting in an average of 400 days in hospital stay and nearly \$1.3 million in hospital charges per year. Although drowning incidents resulted in fewer hospitalizations than deaths, near-drownings ranked 2<sup>nd</sup> in hospital charges per visit among all the injury mechanisms, with average charges of approximately \$21,000. Of all those hospitalized for near-drownings, 42% were children under 5 years of age, 61% were males, and 47% were whites (Table 15).

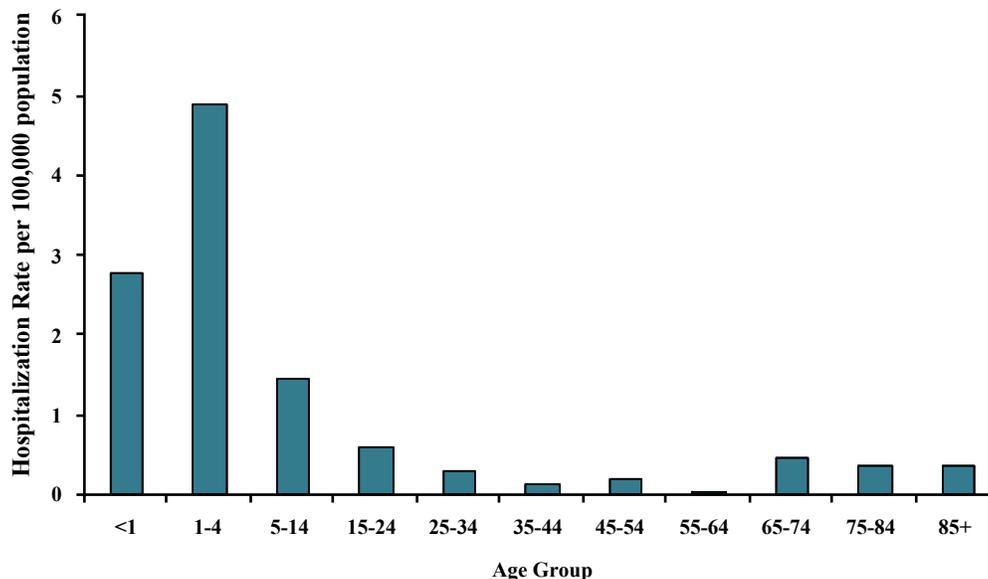
**Table 15. Number of Hospitalizations by Age, Race and Sex: Near-Drowning, Georgia, 1999-2001**

Age Group	White		Black		Hispanic		Total*	Average per Year
	Male	Female	Male	Female	Male	Female		
Under 5	29	17	15	4	1	3	79	26
5-14	9	3	16	16	0	0	52	17
15-24	5	1	12	0	3	0	21	7
25-44	8	3	3	1	1	0	18	6
45-64	3	1	3	0	0	0	8	3
65+	7	3	0	0	0	0	10	3
Total	61	28	49	21	5	3	188	63

\*Total includes all other races/ethnicity.

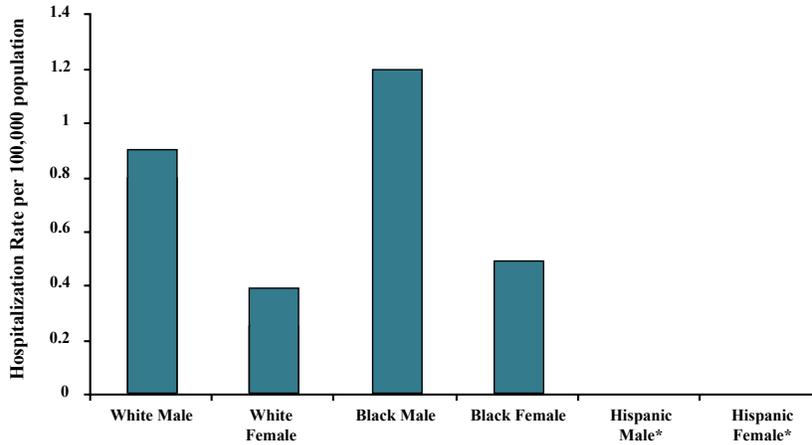
Children under 5 years of age had the highest hospitalization rates among all age groups (Figure 41).

**Figure 41. Age-Specific Hospitalization Rates: Near-Drowning, Georgia, 1999-2001**



The rate of near-drowning hospitalization was higher among males (rate 1.1 per 100,000 population) than among females (rate 0.5 per 100,000 population). Whites (0.6 per 100,000 population) and blacks (0.8 per 100,000 population) were equally likely to be hospitalized for near-drowning. However, black males had the highest near-drowning hospitalization rate among all race/ethnic/sex groups (Figure 42).

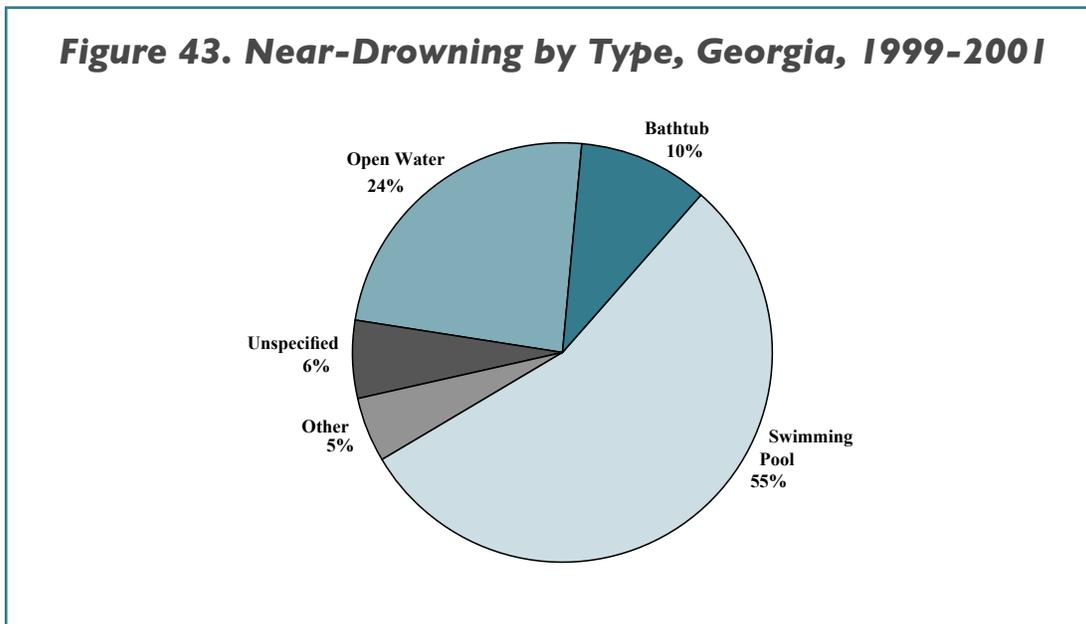
**Figure 42. Age-Adjusted Hospitalization Rates by Race and Sex: Near-Drowning, Georgia, 1999-2001**



\*Less than 10 hospitalizations; rate not calculated

More than half of the hospitalizations for near-drowning (55%) occurred after incidents in swimming pools, and almost 78% of persons affected were children under 15 years of age. Near-drowning incidents in open water accounted for 24% of hospitalizations with a majority (77%) of those affected being children under 15 years old (Figure 43.)

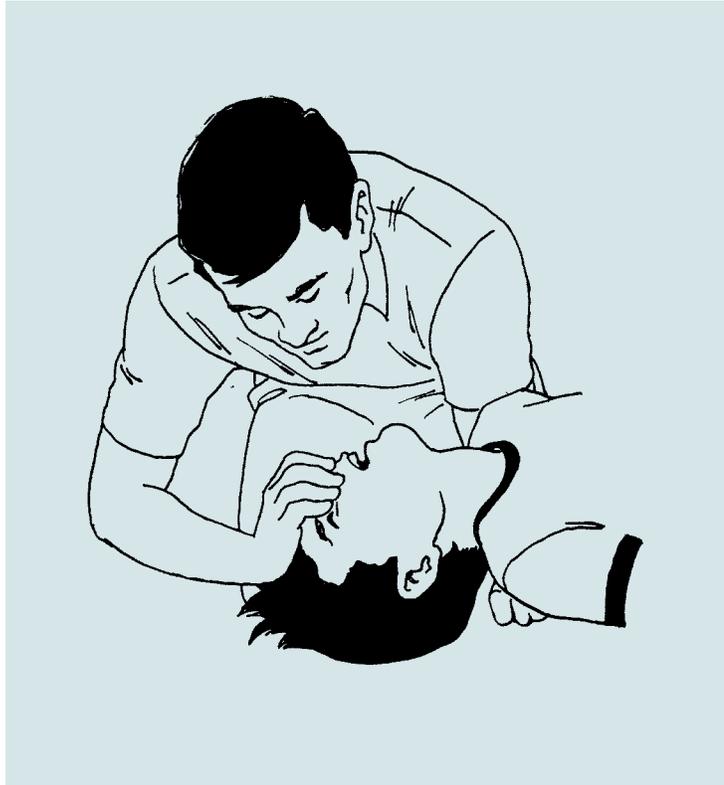
**Figure 43. Near-Drowning by Type, Georgia, 1999-2001**



There were too few hospitalizations per county to allow for calculation of reliable county-specific hospitalization rates for near drowning.

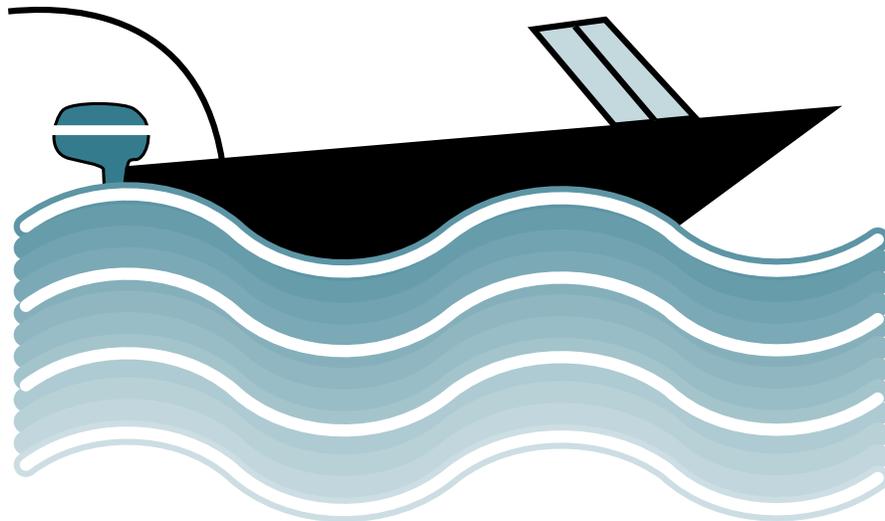
### *Drowning Related Prevention Strategies*

Many of the drownings could have been prevented through constant adult supervision of children near swimming pools and open water (lakes, ponds, etc), enforcing ordinances for child proof fencing around pools, covering pools with appropriate covers, and using effective barriers around ponds and open water. Parental knowledge of cardiopulmonary resuscitation (CPR) could greatly increase the chance for survival or reduce the severity of injury to children in near-drowning cases. Other prevention measures include utilizing Coast Guard approved personal floatation devices (PFD) when involved in water-related recreational activities, avoiding swimming after dark, and avoiding the use of alcohol or other drugs before and during recreational water activities.



### *Injury Prevention Programs for Drowning Related Injuries*

The Injury Prevention Section of the Georgia Department of Human Resources, Division of Public Health, works with local communities and other state agencies to develop drowning prevention programs. These include the support of PFD provision programs on major open water recreational waterways. These programs have frequently involved partnerships with local coalitions through which the Injury Prevention Section provides district or county specific data on drowning or near drowning related mortality and morbidity.



### *Drowning Prevention Resources*

The following organizations and web sites provided recommendations and best practices on preventing drowning related deaths and near-drowning injuries.

**American Academy of Pediatrics**

**<http://www.aap.org/family/tippool.htm>**

**The Medical Center of Central Georgia**

**<http://www.mccg.org/childrenshealth/safety/waterhub.asp>**

**American Red Cross**

**<http://www.redcross.org/services/bss/tips/healthtips/safetywater.html>**

**U.S. Consumer Product Safety Commission**

**<http://www.cpsc.gov/cpscpub/pubs/chdrown.html>**

**Children's Safety Network**

**<http://www.childrensafetynetwork.org/>**

**National Safety Council**

**<http://www.nsc.org/library/facts/drown.htm>**

**U.S. Coast Guard, Office of Boating Safety**

**<http://www.uscgboating.org/>**

**The United States Lifesaving Association**

**<http://www.usla.org/index.html>**