



July 2006

Drowning and Near-Drowning to Children 0-18 Years of Age Miami-Dade County, 2000-2004

MIAMI-DADE COUNTY INJURY FACTS



- Drowning is the third leading cause of death to Miami-Dade County children aged 18 years and under and the leading cause of all deaths to children aged 1-4 years.
- Miami-Dade County had the second highest number of child drowning deaths among all Florida counties between 2000-2004. The drowning rate for county children aged 4 years and under was 42% higher than the national rate but 65% lower than the rate for the state.
- For every child 18 years and younger who drowns, at least three more are hospitalized for nonfatal submersion injuries. Nonfatal incidents can cause brain damage that result in long-term disabilities ranging from memory problems and learning disabilities to the permanent loss of function.

Groups at Risk

- **Children:** Between 2000-2004, 68 children died from drowning and another 200 were hospitalized for non-fatal submersion injuries.

Children aged 4 years and under were most at-risk, accounting for 55% of drownings and 65% of near-drowning incidents (Figure 1).

- **Males:** Males aged 18 and under accounted for 77% of drowning and 65% of near-drowning incidents. However, 2004 was the first year that both the drowning and near-drowning rate was higher for females than males.

- **African-Americans:** Among children 18 years and under, African-American children were more than 3 times likely to drown or suffer a near-drowning than White children. Furthermore, the drowning and near-drowning rate for African-American children aged 4 and under has been increasing over the past five years (Figure 2).

FIGURE 1.
Drowning & Near-Drowning Incidents by Age Group
Residents Aged 0-18 Years, 2000-2004

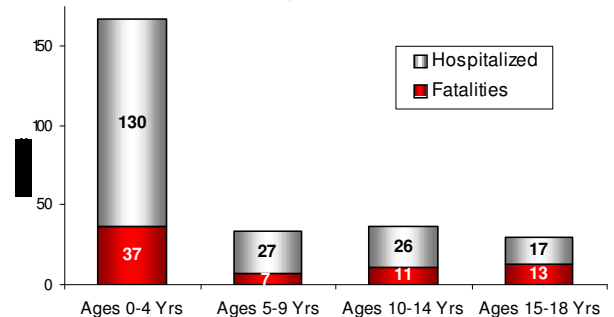
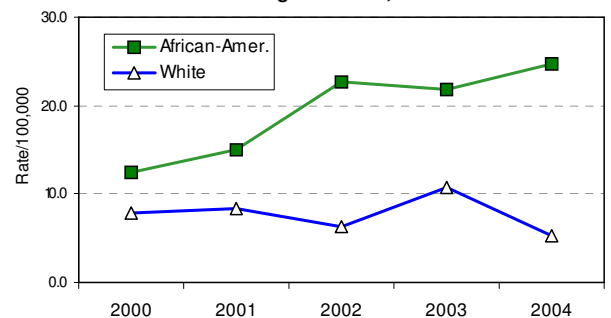


FIGURE 2.
Drowning & Near-Drowning Rate by Race
Residents Aged 0-4 Yrs., 2000-2004



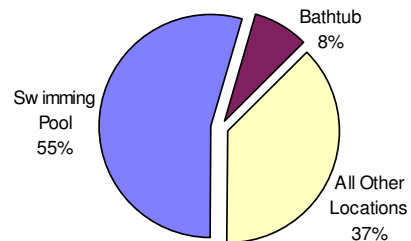
Where Incidents Occurred

The location of drowning and near-drowning incidents to children vary by age:

- **Swimming pools** were the site of more than ½ of all drowning and near-drowning incidents (Figure 3).

Children 4 and under accounted for 83% of all swimming pool drowning incidents and 70% of all pool-related near-drowning incidents.

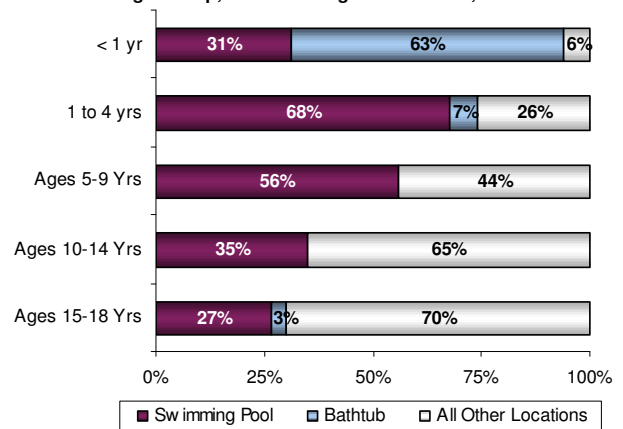
FIGURE 3.
Location of Drowning & Near-Drowning Incidents
Residents Aged 0-18 Years, 2000-2004



- **Bathtubs** were responsible for 4 fatal and 17 non-fatal incidents. Nearly 2/3 of the incidents involving infants less than 1 year of age were bathtub-related (1 fatal, 9 non-fatal incidents) (Figure 4).

- **Open Water:** Older children were more likely to drown in water such as lakes, rivers and the ocean (61% of age 5-14 drowning and 54% of age 15-18 drowning occurred in natural water).

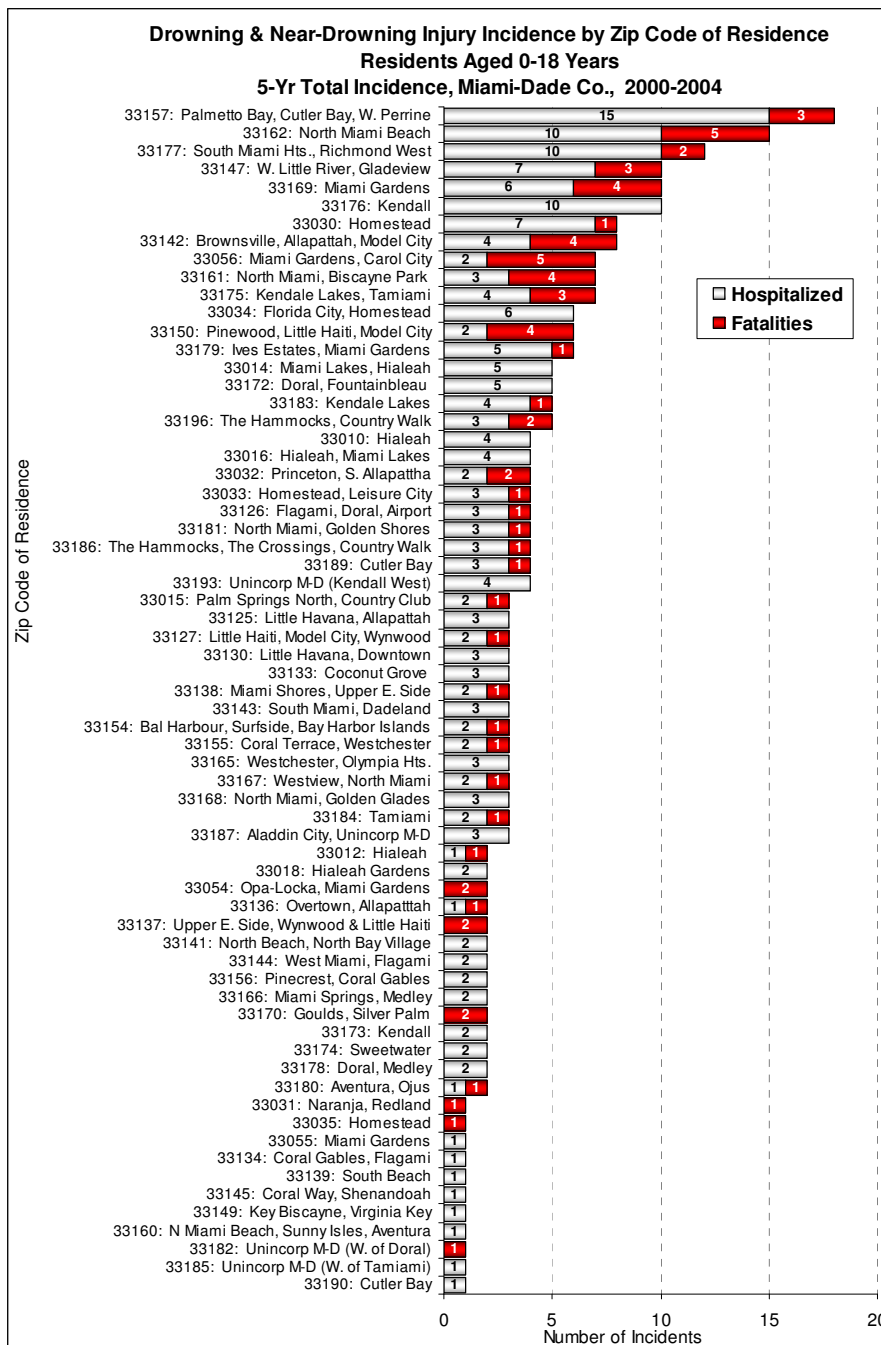
FIGURE 4.
Location of Drowning & Near-Drowning Incidents by
Age Group, Residents Aged 0-18 Years, 2000-04



Residence of Victims

The six areas of the county that experienced the greatest number of child drowning and near-drowning incidents between 2000-2004 were:

- the 33157 zip code (Cutler Bay, Palmetto Bay area: 3 drownings, 15 near-drownings);
- the 33162 zip code (North Miami Beach area: 5 drownings, 11 near-drownings);
- the 33177 zip code (Richmond West area: 2 drownings, 10 near-drownings)
- the 33176 zip code (Kendall area: 10 near-drownings)
- the 33169 zip code (Miami Gardens area: 4 drownings, 6 near-drownings)
- the 33147 zip code (W. Little River, Model City area: 3 drownings, 7 near-drownings)



Drowning Prevention

The Ounce of Prevention Fund of Florida in collaboration with the Florida Department of Health developed the following drowning prevention recommendations.

- Children can drown in a matter of seconds. If a child is missing, check the water first.
- There is no substitute for adequate supervision. Children need to be watched. Never leave children unattended in or around pools or spas - not even for a second.
- A child can drown in less time than it takes to answer the telephone.
- Children drown in pools, spas, buckets, toilets and bathtubs. A child can drown in as little as one inch of water.
- Empty buckets immediately after use and store them upside down and out of a child's reach.
- Keep toilet seats down and consider using a lock or toilet clip to prevent toddlers from opening the toilet
- Never allow a young child to be responsible for a younger sibling or playmate.

The key to preventing swimming pool tragedies is to have layers of protection. This includes placing barriers around your pool to prevent access, using pool alarms, closely supervising your child and being prepared in case of an emergency.

- Never disable an alarm or prop open the gate to a pool barrier.
- Learn to swim and teach children how to swim.
- Flotation devices and swimming lessons are not a substitute for adult supervision.
- Remove toys from in and around the pool area, especially riding toys.
- Knowing cardiopulmonary resuscitation (CPR) can be a lifesaver.

Pool Inspection List

- Is your pool surrounded by a fence or barrier at least 4 foot high?
- Is the fence childproof with bars not more than 4 inches apart? If it is a chain link fence, the diamond shaped opening should be no larger than 1 3/4 inches.
- Are the gates self-closing and equipped with a self-latching mechanism? The self latching mechanism should be out of the reach of children and located on the pool side of the gate.
- Are all the gates kept locked?
- Are all exit doors and windows leading from the house to the pool kept locked and secured?
- Are pool rules posted in a visible location?
- Is rescue equipment kept near the pool? A ring buoy with an attached line and a long handled hook.
- Is the pool cover completely removed or properly installed? Never use a pool with its pool cover partially in place.
- Are steps and ladders leading to an above ground pool secured, locked or removed when the pool is not in use?
- Are there plenty of approved PFD's (Personal Flotation Devices) available?
- Are the diving board and any slides in safe operating condition?
- Does the hot tub or spa have a solid, locking cover, and is the cover in place and locked when the spa or hot tub is not in use?

Produced by the Miami-Dade County Injury Surveillance System

Data Sources: Death Certificates & Hospital Discharge Data

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<http://dadehealth.org/injury/INJURYintro.asp>



Miami-Dade County

HEALTH DEPARTMENT

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