



Feb 2007

Hospitalizations and Emergency Dept. Visits Due to Falls Children Aged 0-17 Years, Miami-Dade County, 2005

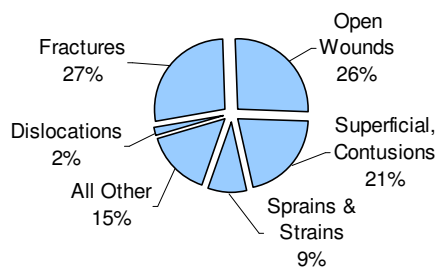
MIAMI-DADE COUNTY INJURY FACTS



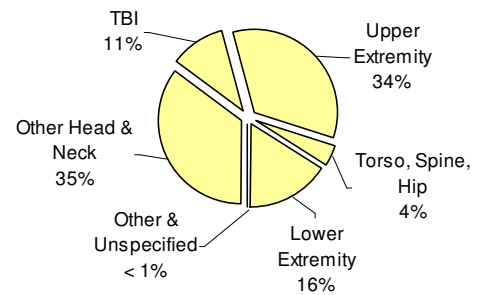
Falls are the leading cause of medically-treated injury to children aged 0-17 years. In 2005, there were 15,959 emergency department (ED) visits and 374 hospitalizations due to falls to county residents aged 0-17 years. No fall-related deaths occurred in 2005 for this age group.

Nature and Site of Injury

**Nature of Injuries Due to Falls
Residents Aged 0-17 Years
Miami-Dade Co., 2005**

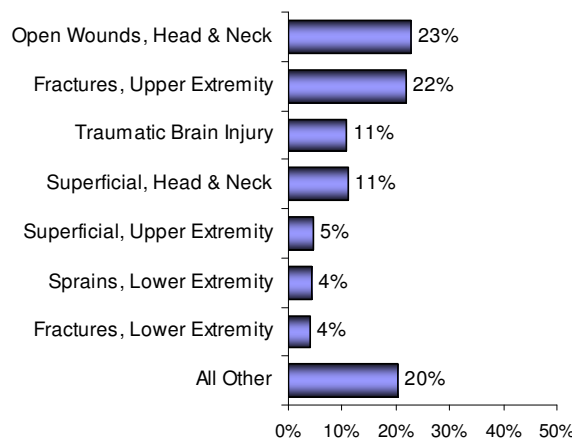


**Site of Injury Due to Falls
Residents Aged 0-17 Years
Miami-Dade Co., 2005**



- Nature of Injury:** Fractures (27%), open wounds (26%) and superficial injuries such as contusions (21%) accounted for 3/4 of medically-treated falls.
- Body Region Injured:** Nearly one-half of all fall-related injuries occurred to the head or neck: 11% resulted in a diagnosis of traumatic brain injury (TBI) and 35% were other injuries to the head, face or neck. Upper (34%) and lower (16%) extremities were the next most common locations of injuries from falls.
- Primary Diagnosis:** Open wounds to the head or neck (23%) and upper extremity fractures (22%) were the most common injuries from falls. One in every ten patients was diagnosed with a traumatic brain injury.

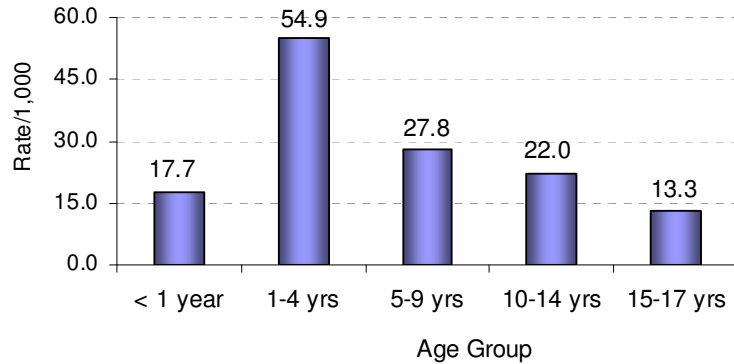
**Primary Diagnoses for Injuries From Falls
Residents Aged 0-17 Years
Miami-Dade Co., 2005**



Groups at Risk

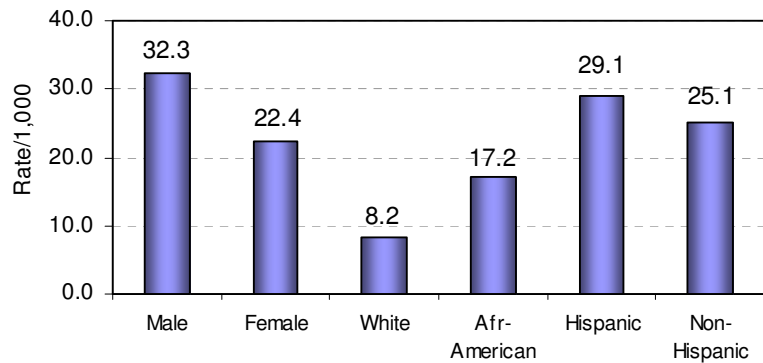
- Age:** Children aged 1-4 years had the highest rate of experiencing a medically-treated fall, with an injury rate nearly two times higher than the next highest age group. The

Nonfatal Fall Rate per 1,000 Residents Aged 0-17 Yrs
Hospitalized and ED Visits by Age Group
Miami-Dade Co., 2005



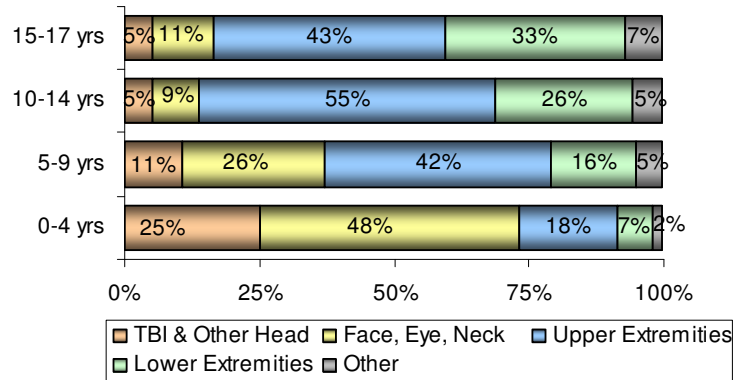
- Gender, Race and Ethnicity:** Male children had nearly a 50% higher rate of treatment for a fall-related injury than females. African-American and Hispanic children had higher rates of fall-related injuries than White children and Non-Hispanic children respectively

Nonfatal Fall Rate per 1,000 Residents Aged 0-17 Yrs
Hospitalized and ED Visits by Gender, Race, Ethnicity
Miami-Dade Co., 2005



- As children aged, the proportion of injuries that were TBI or head-related decreased while the proportion of injuries to the extremities increased. One-fourth of fall-related injuries to children aged 0-4 years old were to the head and another 48% were to the face, eye or neck. In contrast, more than three-fourths of injuries to 10-14 year olds and 15-17 year olds were to the extremities.

Nature of Injuries Due to Falls by Age Group
Miami-Dade Co., 2005



Activities Causing Injuries Due to Falls

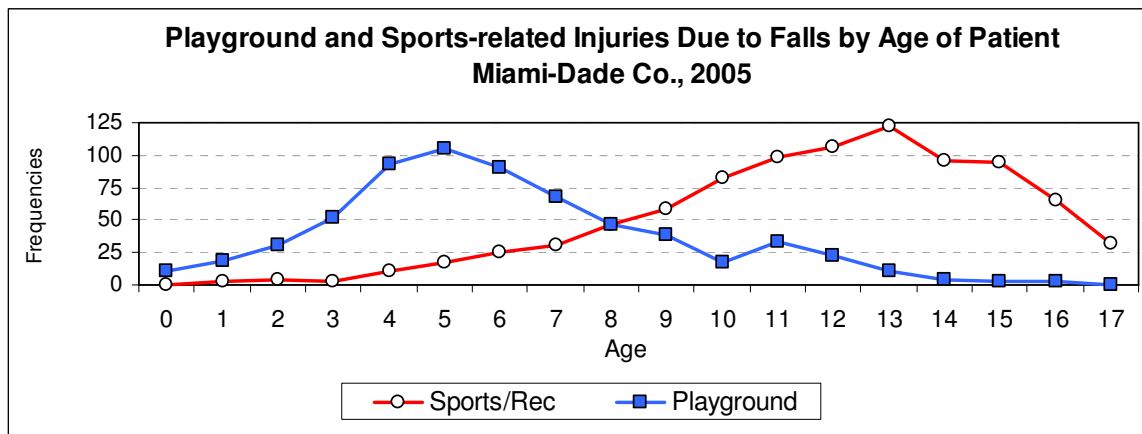
Identifying the external cause for any injury is essential for injury prevention because modifying or eliminating the external causes are among the most effective methods of preventing injury. Unfortunately, the data sources we use to monitor injury incidence often do not provide enough information to identify the specific cause of an injury.

As seen in the table below, every age group had more than one-half of their injuries coded in the medical record as an unspecified fall. This limits our ability to identify the causes which we should focus our prevention efforts on.

Mechanism of Fall	Ages 0-4	Ages 5-9	Ages 10-14	Ages 15-17
Fall: slip, trip (on same level)	16%	19%	22%	25%
Fall from furniture, chair	27%	8%	2%	1%
Fall in sports, recreation	0%	4%	14%	14%
Fall at playground	3%	8%	2%	0%
Fall down stairs or steps	2%	2%	3%	4%
Fall: unspecified	52%	58%	57%	55%

Among fall-related injuries that contained detailed cause-of-injury coding, some of the findings were:

- Slipping or tripping on the same level was the most common cause of a medically-treated fall in every age group but the records do not specify what or where the children tripped or slipped on.
- Falls from chairs or other furniture was the primary cause of fall injuries to children age 0-4 years.
- More than ½ of all fall-related injuries to infants < 1 year old were due to falls from furniture.
- Children aged 0-9 were most likely to be injured at playgrounds, with children 5 years of age experiencing the greatest number of playground injuries (see graph). A total of 41 children aged 0-9 years were hospitalized due to playground falls in 2005 and more than 600 others were treated in the emergency dept. More than one-half of the playground injuries were fractures.
- Sports-related injuries from falls began accelerating after age 7 and peaked at age 13 and declined rapidly after age 15. More than ½ of these injuries were fractures and another 16% sprains or strains to the extremities.



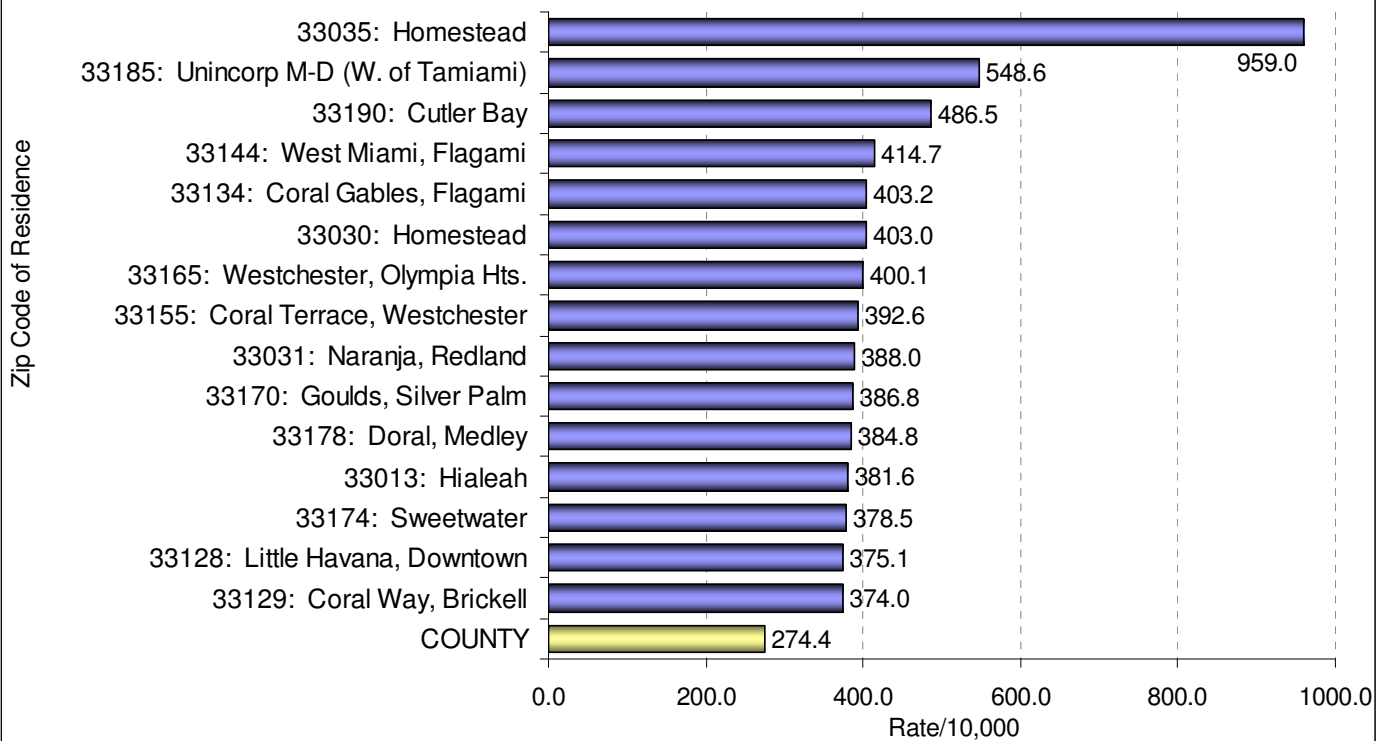
Residence of Children Injured by Falls

The areas of the county that experienced the highest injury rate due to falls to children aged 0-17 years during 2005 were:

- Three zip codes in the Homestead area were among the 15 communities with the highest rates for medically-treated fall-related injuries to children: 33035, 33030 and 33031 (Redlands area). The 33035 zip code of Homestead had a fall-related injury rate that was nearly 4 times greater than the rate for the entire county.
- The 33185 zip code (Unincorporated Miami-Dade) had the second highest rate of medically-treated falls to children and was twice the rate for the entire county.
- The adjacent zip codes of 33144 (West Miami area), 33165 (Westchester area) and 33155 (Coral Terrace area) was another region of the county that experienced high fall-related rates to children.



**Hospitalizations & Emergency Dept. Visits Due to Falls
Injury Rate/10,000 Residents Aged 0-17 Years by Zip Code of Residence,
Leading Communities, Miami-Dade Co., FL 2005**



Reducing the Risk of Falls

These simple home safety tips can help reduce the risk of falls:

- Baby walkers should never be used. They are very dangerous because they can tip over and allow children to reach things they wouldn't otherwise get to. Instead, use a playpen or stationary play toy without wheels.
- Never leave a baby or child alone on furniture like changing tables, beds or sofas- not even for just a moment.
- Fasten straps on equipment such as high chairs, changing tables, and strollers.
- Use gates at the top and bottom of staircases.
- Consider window guards or stops for windows above the first floor. Fixed guards or bars (ones that can't be removed in an emergency) should not be used.
- Children should not play on balconies. Spaces between the vertical rails on balconies should be no wider than 4 inches.
- Secure heavy furniture, like dressers and bookshelves, to the wall with brackets or straps. These can tip over when a child tries to grab something or climb up.
- Try using something else besides a shopping cart. Use a front pack, backpack or stroller. Consider bringing another adult to watch your child if you can.
- If you do use a shopping cart,
 - Try to use safer carts - ones with seats that allow children to ride close to the ground.
 - Always have the child sit in the seat using the safety strap. They shouldn't be in the basket or standing on the outside.
 - Never leave your child alone in the cart and never place an infant carrier in or on top of the cart.

Active play is an important part of healthy child development. Spending time at the playground allows children to use muscles and move their bodies in new and challenging ways. As children interact with other kids and try new things, they are also working on their social, emotional and intellectual development. Unfortunately, not every playground is as safe as it should be. To help prevent injuries, keep these things in mind as you choose a play space for your child:

- Supervision: Always supervise children on playground equipment. Make sure you can see all play areas.
- Equipment checks:
 - ✓ The surface under the equipment should absorb energy to help prevent fall injuries. Good surface covers are rubber, a deep layer of sand, or wood chips. Exposed concrete, grass or wood are not acceptable.
 - ✓ There should not be any exposed sharp or rusty parts. All screws and bolts should be capped.
 - ✓ Swings should be made of soft material, not wood or metal.
 - ✓ High surfaces should have guardrails to prevent falls.
 - ✓ Any space between equipment should be less than 3 ½ inches or more than 9 inches, to prevent children from getting trapped.
- Age-appropriate play areas: Play areas are usually made for either preschoolers or school-age children. Children should stick to play areas for their age group only. Equipment for school-aged children is not safe for pre-school children. Older children can also become trapped in the smaller pre-school equipment.

Produced by the Miami-Dade County Injury Surveillance System

Data Sources: Hospital Discharge & Emergency Department Data, Agency for Health Care Administration

PHONE (IFCK): 305-804-7212 (MDCHD): 305-470-5649

E-MAIL: sdearwater@med.miami.edu

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

