



Oct 2011

Pedal Cycle Injuries to Children Aged 0-17 Years Miami-Dade County, 2005-2010

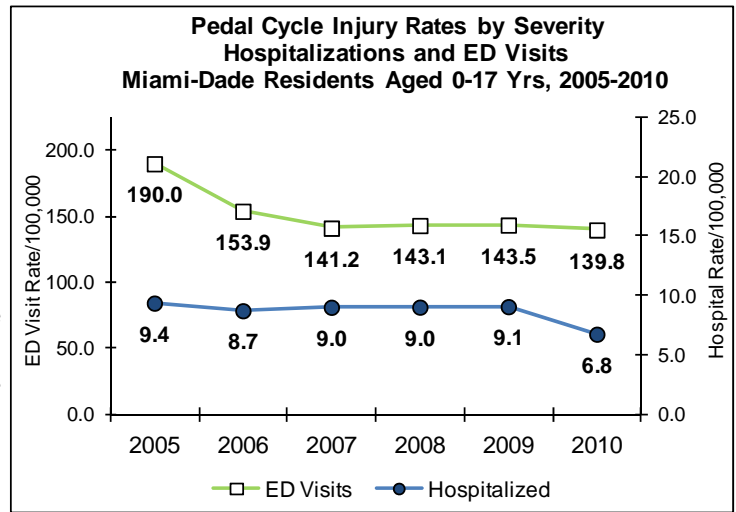
Miami-Dade County Injury Facts



Injuries from riding pedal cycles were the seventh leading cause of medically-treated injury to Miami-Dade County children aged 0-17 years in 2010.

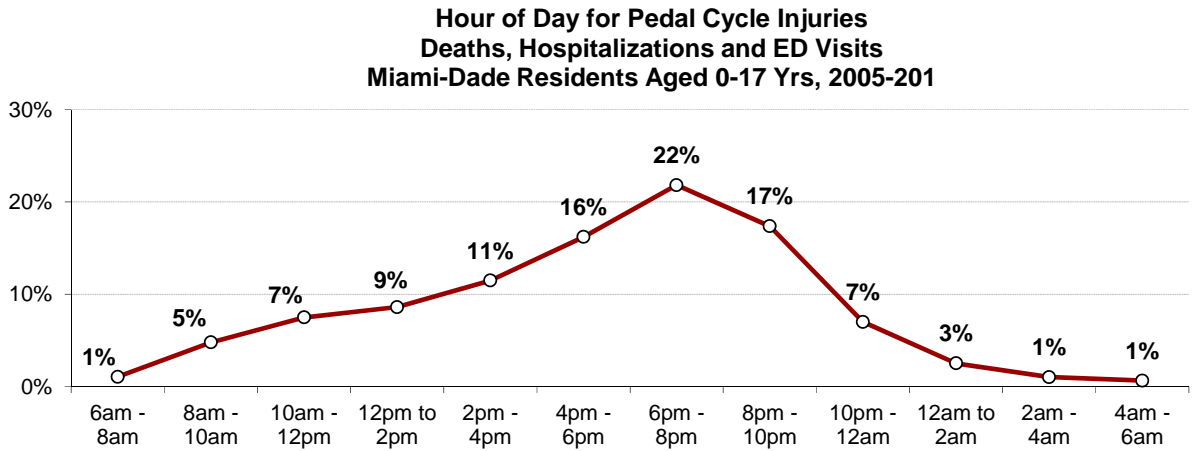
The vast majority of pedal cycle injuries were emergency department visits. During the 6-year period 2005-2010 there were 5,121 emergency department (ED) visits, 310 hospitalizations and 4 deaths from pedal cycle injuries to Miami-Dade County children.

- The injury rate for hospitalized pedal cycle injuries (blue line) remained mostly unchanged between 2005-2009 then declined 26% in 2010.
- The injury rate for ED pedal cycle injuries (green line) declined 26% between 2005-2007 but has remained essentially unchanged since 2007.



When Pedal Cycle Injuries Occurred

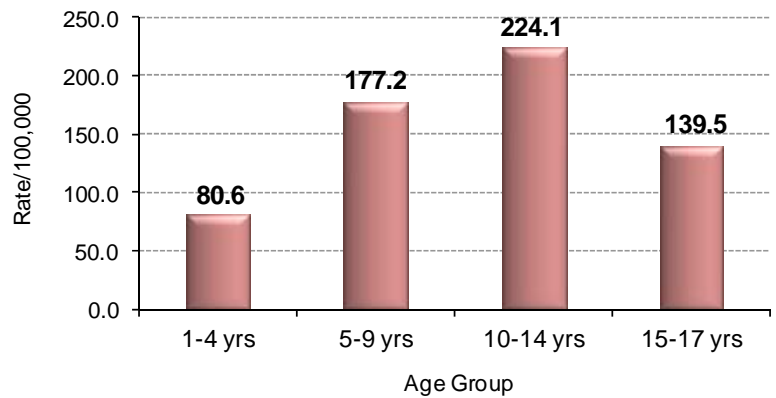
- Pedal cycle injury incidence peaked between the hours of 6pm and 8pm where 22% of all injuries occurred.



Who is At Risk?

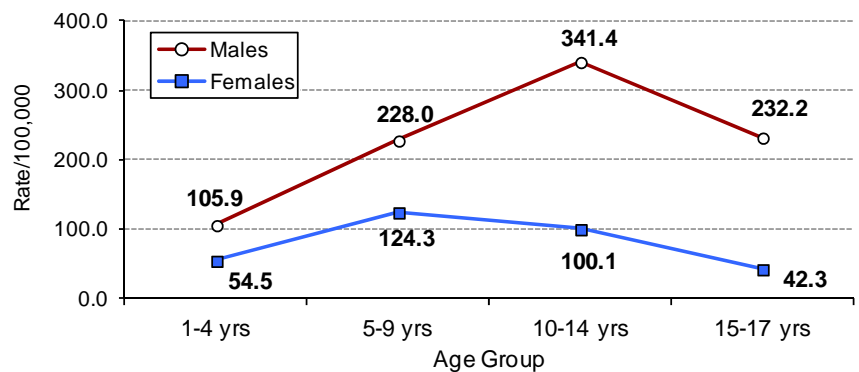
- Children aged 10-14 years had the highest rate of medically-treated pedal cycle injuries. The incidence of pedal cycle injuries peaked at age 13.

Pedal Cycle Injury Rate by Age Group
Deaths, Hospitalizations, ED Visits
Miami-Dade Residents Aged 0-17 Yrs
Six-Year Avg. Rate, 2005-2010



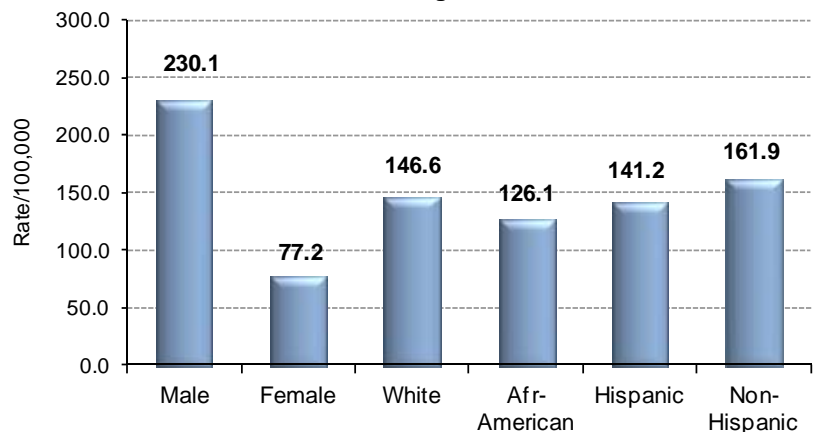
- Males aged 10-14 years had the highest rate of medically-treated pedal cycle injuries while the rate for females peaked in the 5-9 year age group.

Pedal Cycle Injury Rates by Age Group & Gender
Deaths, Hospitalizations and ED Visits
Miami-Dade Residents Aged 0-17 Yrs
Six-Year Avg. Rate, 2005-201



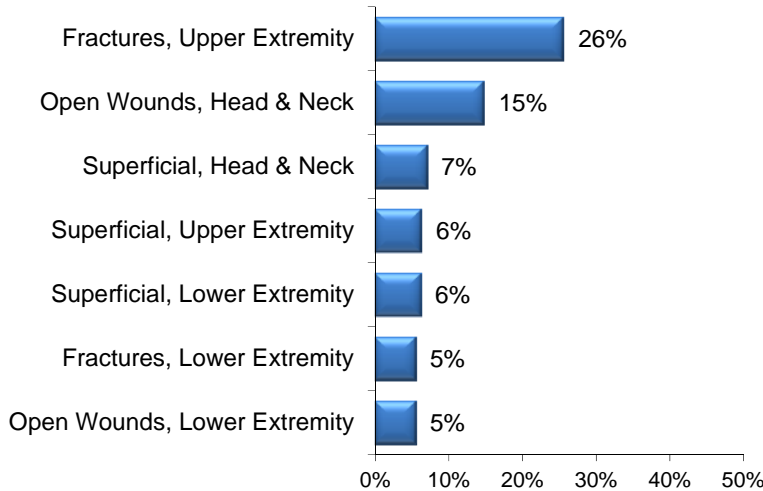
- The injury rate for males was 3-times higher than female children.
- There were no significant racial or ethnic differences for pedal cycle injury rates among county children.

Pedal Cycle Injury Rate by Gender, Race and Ethnicity
Deaths, Hospitalizations, ED Visits
Miami-Dade Residents Aged 0-17 Yrs
Six-Year Avg. Rate, 2005-2010



Body Region Injured by Pedal Cycle Injuries

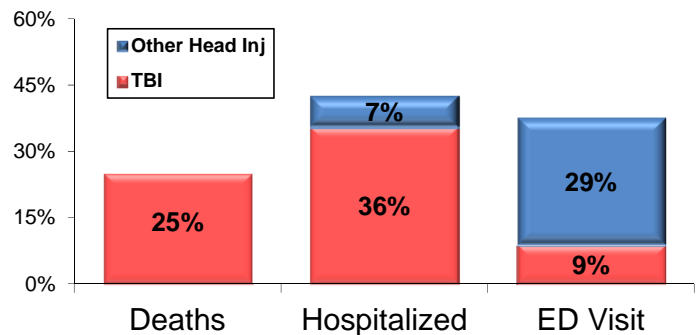
**Primary Diagnoses for Injuries From Pedal Cycles
Deaths, Hospitalizations, ED Visits
Children Age 0-17 Yrs, Miami-Dade Co., 2005-2010**



- Upper extremity fractures (26%) and open wounds to the head or neck (15%) were the most common types of pedal cycle injuries, accounting for 41% of all the injuries.

- Overall, nearly 1/3 of the children suffered any injury to the head with 10% suffering a traumatic brain injury (TBI).
- 36% of hospitalizations involved a TBI. Another 7% had contusions, open wounds or superficial head injuries.
- 9% of ED visits involved a TBI and another 29% had contusions, open wounds or superficial head injuries.
- One of the four deaths experienced a TBI.
- There was no information regarding bicycle helmet use by these patients.

**Percentage of Pedal Cycle Injuries That Experienced a Head Injury
Miami-Dade Co., 2005-2010**

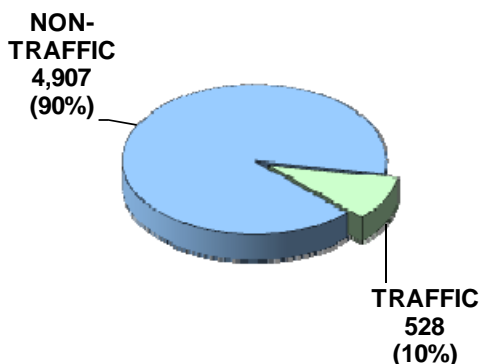


Hospital Charges for Pedal Cycle Injuries, 2010

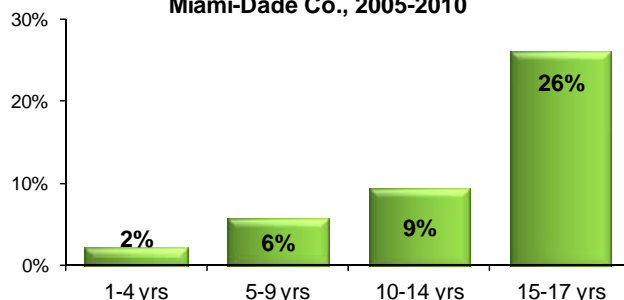
- In 2010, there were 828 pedal cycle injuries to county children treated in Florida hospitals and emergency departments that resulted in more than 3.6 million dollars in hospital charges.
- The median charge for a pedal cycle hospitalization was \$22,199 while the median charge for an ED visit was \$1,889.

2010 Non Fatal Pedal Cycle Injuries	Pedal Cycle Hospitalizations	Pedal Cycle ED Visits	All Pedal Cycle Injuries
Number of Injuries	40	788	828
Median Hospital Charge	\$22,199	\$1,889	\$2,030
Total Hospital Charges	\$1,643,042	\$1,989,412	\$3,632,454

Where Pedal Cycle Injuries Occurred



Percentage of Traffic-related Bike Injuries by Age Group
Miami-Dade Co., 2005-2010



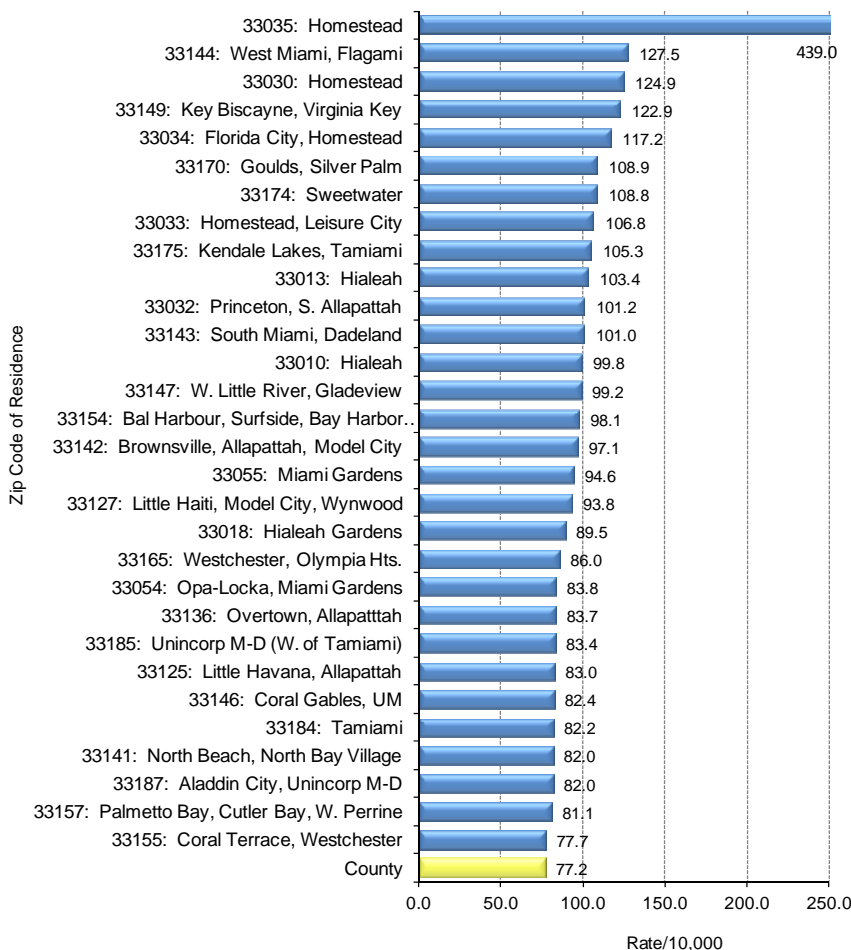
- Only 10% of all the medically-treated or fatal pedal cycle injuries were traffic-related. Most of the pedal cycle injuries involved a collision with an object or a fall that didn't involve a vehicle.
- However, traffic-related pedal cycle injuries are a significantly greater issue for children aged 15-17, where 26% of the injuries involved a vehicle in traffic.

Residence of Children Injured by Pedal Cycles

The figure to the right shows all county zip codes that had a pedal cycle injury rate higher than the county rate during the years 2005-2010.

- Zip codes for the communities of Homestead and Florida City had 4 of the 8 highest child pedal cycle injury rates:
 - 33035 (43 injuries)
 - 33030 (126 injuries)
 - 33034 (68 injuries)
 - 33033 (157 injuries)
- The zip code 33144 (50 injuries) which includes West Miami had the 2nd highest child pedal cycle injury rate.
- The zip code 33149 (36 injuries) representing Key Biscayne, had the 4th highest child pedal cycle injury rate.

Age 0-17 Pedal Cycle Injury Rates by Zip Code of Residence
Deaths, Hospitalizations & Emergency Dept. Visits
Miami-Dade Co., FL 2005-2010



Reducing the Risk of Pedal Cycle Injury

These safety tips can help reduce the risk of injury from pedal cycles:

Wear a Helmet!

- Not only is it the law, but helmets save lives and decrease head injuries in a crash.
- Get a helmet with your child's first tricycle or bicycle or if riding with an adult.
- Buy the helmet when you buy the bike!
- Kids are more likely to wear a helmet if parents do.
- The right helmet fits straight on the head and does not move around when buckled

Ride Safely

- Pick a bike that is the right size for your child now, not one they will grow into.
- Ride during the day - not at dusk or night when it is hard to be seen.
- Young children should stay on sidewalks until they can judge traffic and obey traffic rules.

Child Passengers

- Children less than one year of age should not ride as passengers.
- Only an experienced adult should take a child on a bicycle. Be aware of an altered center of gravity, and longer brake time when carrying a child as a passenger.
- A rear-mounted seat must have a high back and secure shoulder harness to support a sleeping child.
- Adults riding with children should stick to parks, bike paths and quiet streets.

Produced by the Miami-Dade County Injury Surveillance System

Data Sources: Death Certificates, Office of Vital Statistics, FL Dept. of Health
Medical Examiner Records, Miami County Medical Examiner Dept.
Hospital Discharge & ED Data, Agency for Health Care Administration
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