



# Pedal Cycle Injuries to Children Aged 0-17 Years Miami-Dade County 2008 - 2012

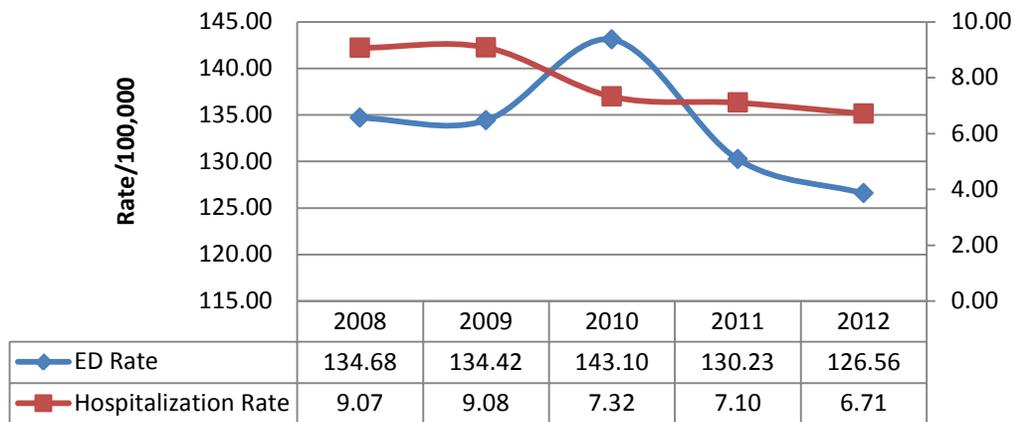


Injuries from riding pedal cycles were the eighth leading cause of medically-treated injury to Miami-Dade County children aged 0-17 years in 2012.

The majority of pedal cycle injuries resulted in an emergency department visit. Between 2008 & 2012, there were 3,796 emergency department (ED) visits, 224 hospitalizations and 2 deaths from pedal cyclist injuries to children aged 0-17 years.

- The injury rate for hospitalized pedal cycle injuries (red line) has declined 26% between 2008 & 2012.
- The injury rate for ED pedal cycle injuries (blue line) increased 6% between 2008 & 2010 but has declined 12% since.

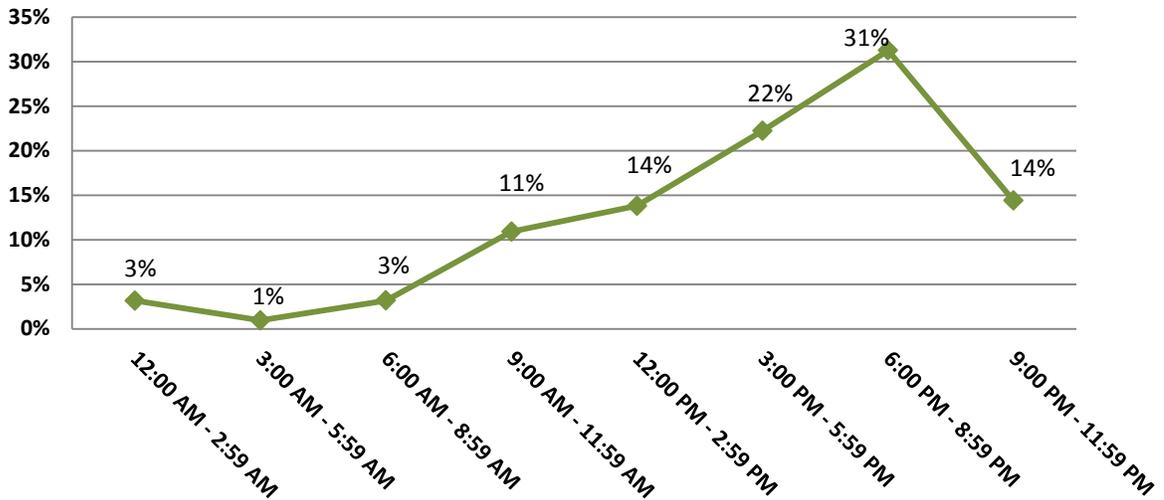
**Pedal Cycle Injury Rates  
Hospitalizations and ED Visits  
Miami-Dade Residents Aged 0-17 Yrs, 2008-2012**



### When Pedal Cycle Injuries Occurred

- Pedal cycle injury incidence peaked between the hours of 6pm and 9pm where 31% of all injuries occurred.
- Just over a third of all pedal cycle injuries took place over the weekend.

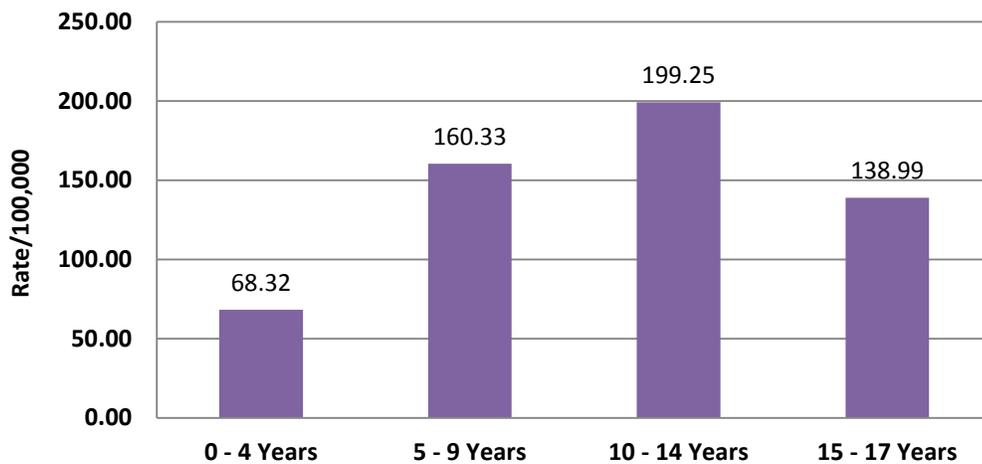
**Hour of Day for Pedal Cycle Injuries  
Hospitalizations and ED Visits  
Miami-Dade Residents Aged 0-17 Yrs, 2008 - 2012**



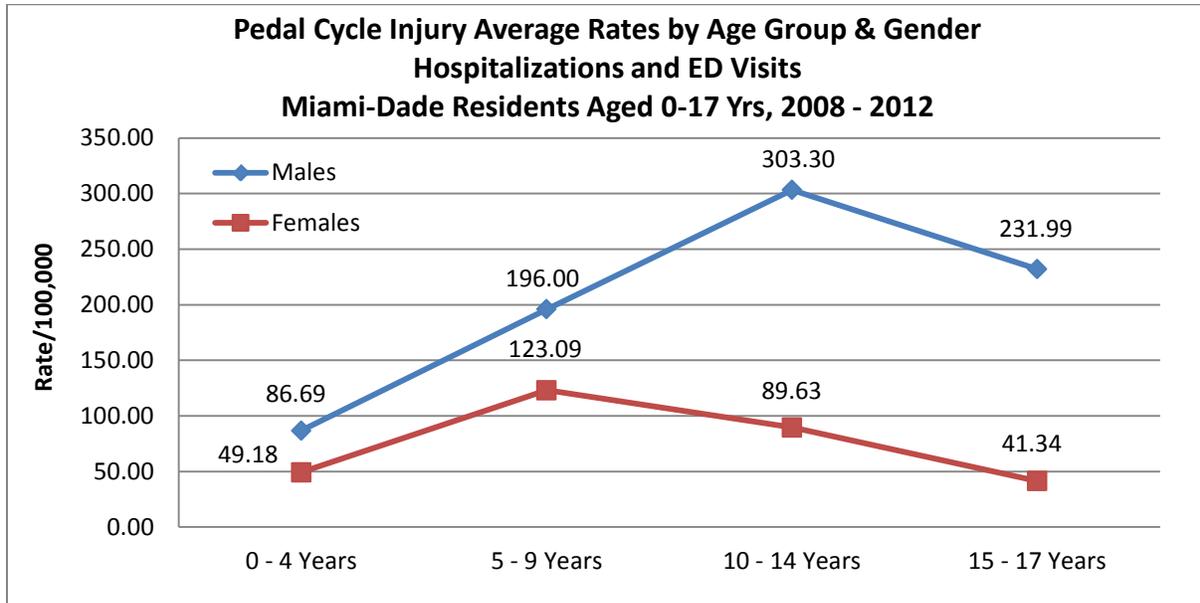
**Who is At Risk?**

- 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.

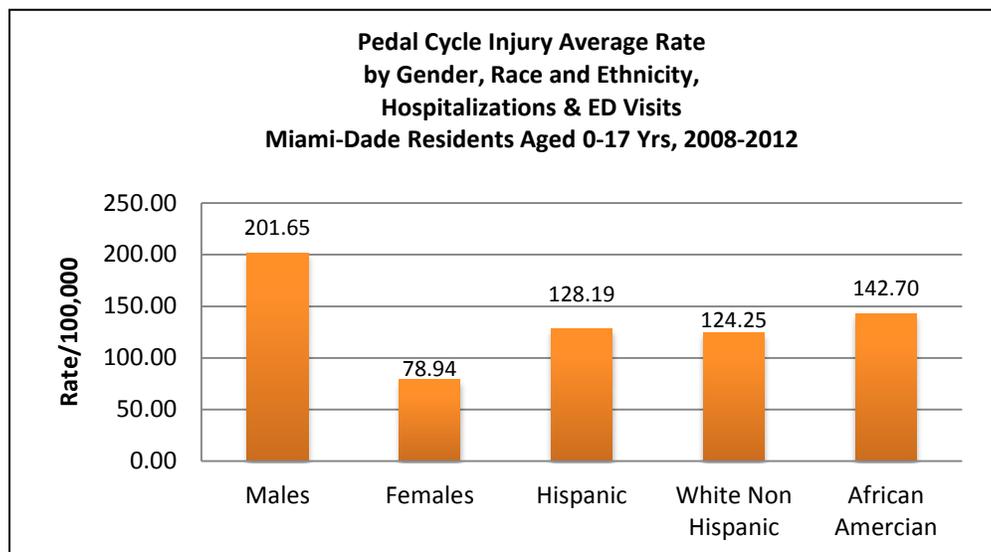
**Pedal Cycle Injury Average Rate by Age Group  
Hospitalizations & ED Visits  
Miami-Dade Residents Aged 0-17 Yrs, 2008 - 2012**



- 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.



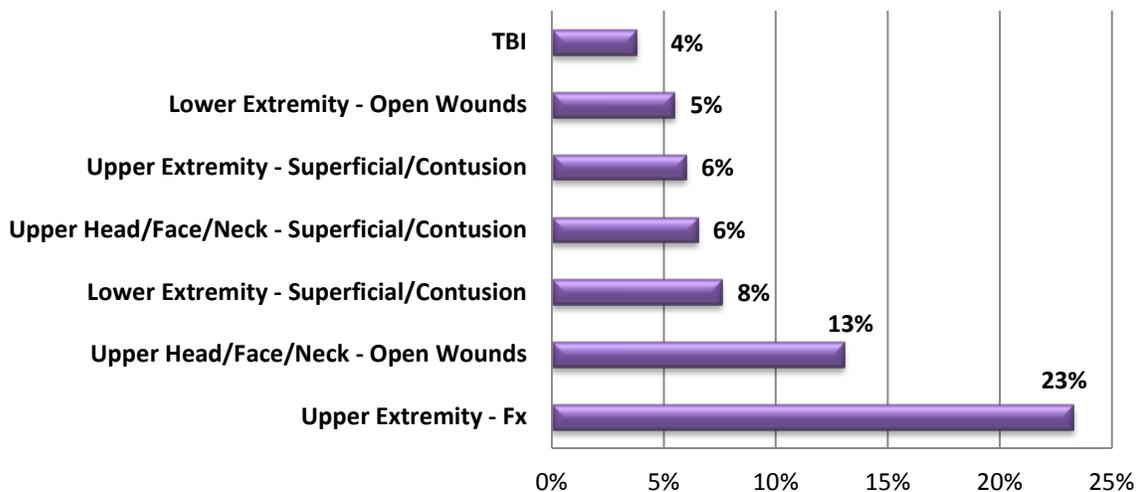
- The injury rate for male children was approximately 2.5 times higher than females.
- There were no significant racial or ethnic differences for pedal cycle injury rates among county children.



## Body Region Injured From Pedal Cycle Injuries

- Overall, upper extremity fractures (23%) and open wounds to the head or neck (13%) were the most common types of pedal cycle injuries among 0 – 17 year olds, accounting for 36% of all the injuries.
- Approximately 28% of hospitalizations involved a TBI. Upper extremity fractures (26%) were the next most common injury resulting in a hospitalization.
- There was no information regarding bicycle helmet use by these patients.

### Primary Diagnoses for Pedal Cycle Injuries Hospitalizations & ED Visits Children Aged 0-17 Yrs, Miami-Dade Co., 2008-2012



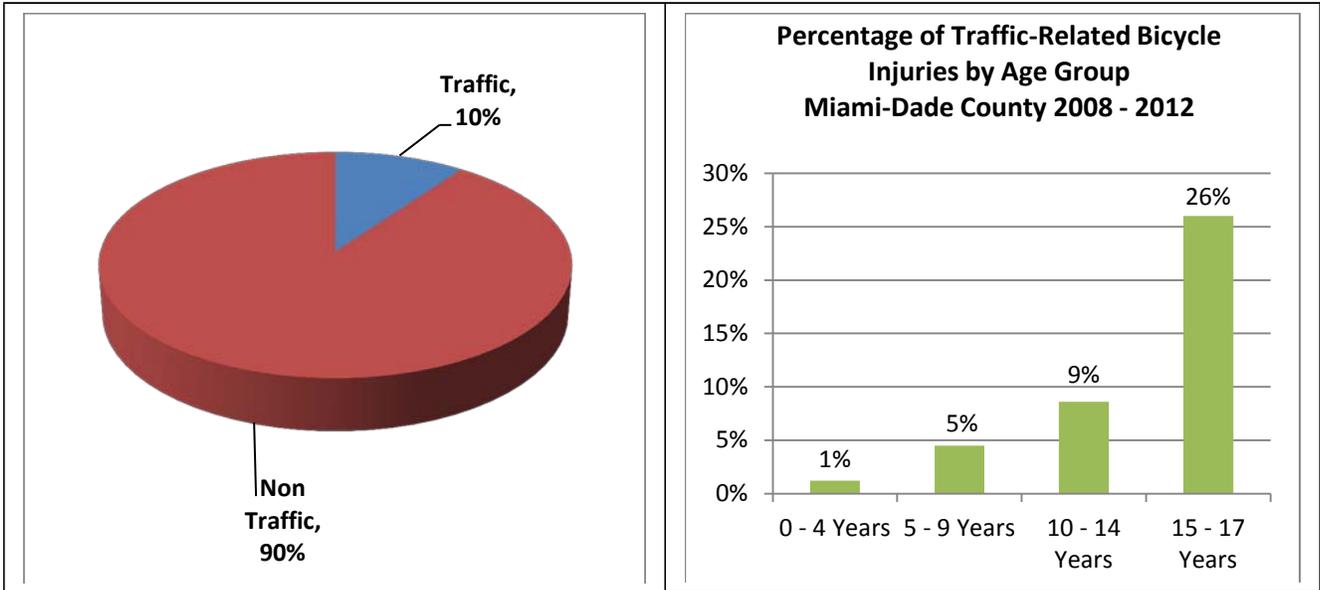
## Hospital Charges for Pedal Cycle Injuries, 2012

- In 2012, there were 735 pedal cycle injuries to county children treated in Florida hospitals and emergency departments that resulted in more than four million dollars in hospital charges.
- The median charge for a pedal cycle hospitalization was \$26,106 while the median charge for an ED visit was \$1,800.

2010 Non-Fatal Pedal Cycle Injuries	Pedal Cycle ED Visits	Pedal Cycle Hospitalizations
Number of Injuries	698	37
Median Hospital Charge	\$1,800	\$26,106
Total Hospital Charges	\$1,986,469	\$2,058,247

## Where Pedal Cycle Injuries Occurred

- 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.



## Reducing the Risk of Pedal Cycle Injury

The following 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.