



July 2011

Emergency Dept. Injuries Due to Motor Vehicle Crashes Miami-Dade Co. Children Aged 0-17 Years, 2005-2010

Miami-Dade County Injury Facts

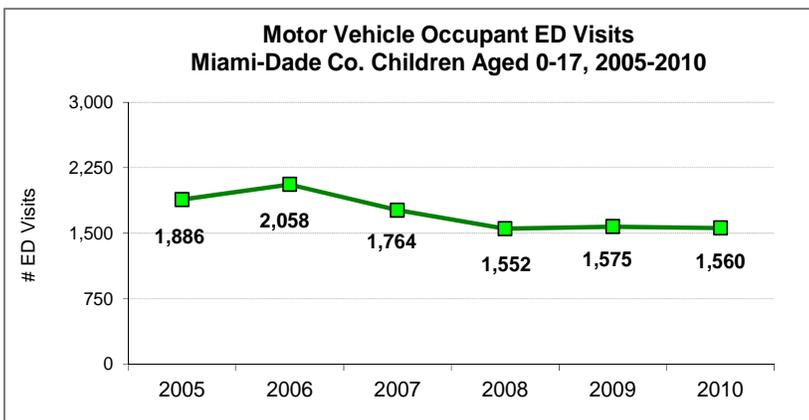


Being an occupant in a motor vehicle crash is the 6th leading cause of emergency dept. (ED) injuries among children aged 0-17 years in Miami-Dade County since 2005.

This fact sheet reviews trends in motor vehicle crash (MVC) injuries that resulted in ED visits to Miami-Dade County children age 0-17 over the six-year period 2005-2010.

Trends for ED Visit Child MVC Injuries

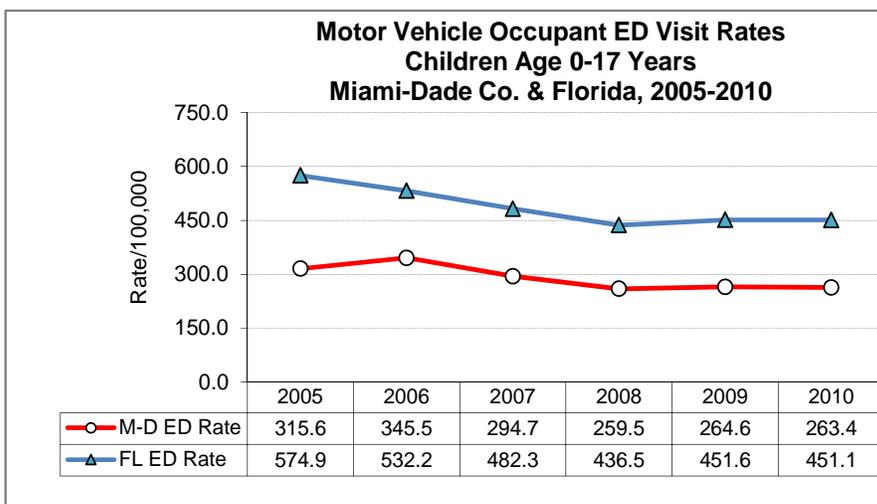
- Data on ED visits have been available statewide since 2005. Over these six years, the county has averaged 1,733 MVC ED visits a year to children. ED visits for MVC injury have been relatively unchanged since 2008.



- Among ED cases, 14% of victims were drivers, 76% were passengers and 10% unknown. Information on child restraint use is not available from ED data.

Miami-Dade's annual ED MVC injury rates were compared to Florida's MVC injury rates for the years 2005-2010.

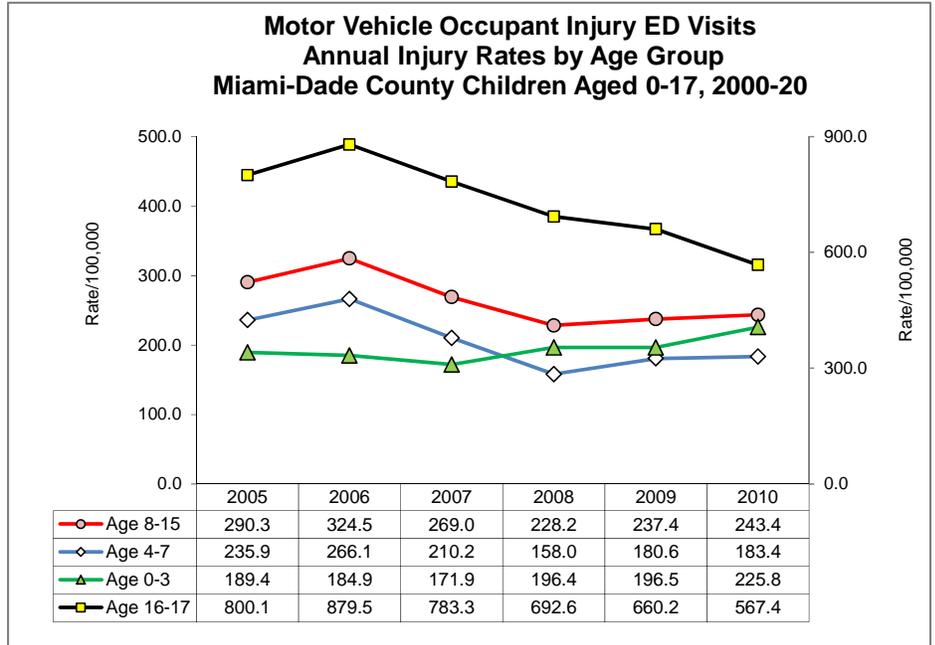
- The county's ED rate for child MVC injuries has declined 16% since 2005. Florida's rate has declined 21% over the same time period.
- The county ED injury rate has been between 34-44% lower than the state rate every year.



Trends in ED Visit MVC Injury Rates by Age Group

The trends for ED MVC injury rates were examined for four child age groups.

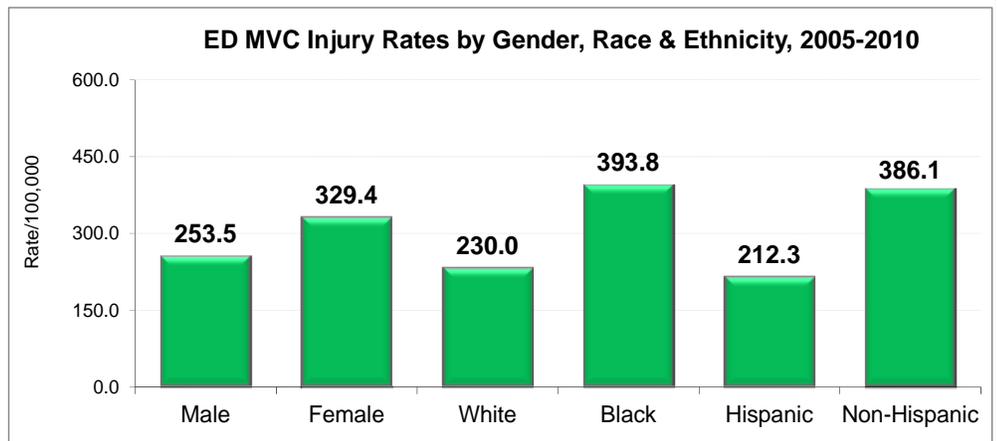
- The ED MVC injury rate for adolescents aged 16-17 (black line) has declined 29% since 2005.
- The ED MVC injury rate for children aged 8-15 (red line) has decreased 16% since 2005.
- Ages 4-7 (blue line) corresponds to the age when most children should be using booster seats or car seats with harnesses. The MVC injury rate has dropped 22% since 2005.
- Ages 0-3 (green line) corresponds to the age children must be properly restrained in car seats with harnesses. The ED MVC injury rate for this age group has increased 19% since 2005 and 31% since 2007.



Trends in ED Visit MVC Injury Rates by Gender, Race and Ethnicity

Over the 6 years 2005-2010:

- The ED MVC injury rate for female children was 30% higher than male children.
- The ED MVC injury rate for black children was 71% higher than white children.
- Non-Hispanic children had nearly double the risk for an ED MVC injury than Hispanic children.



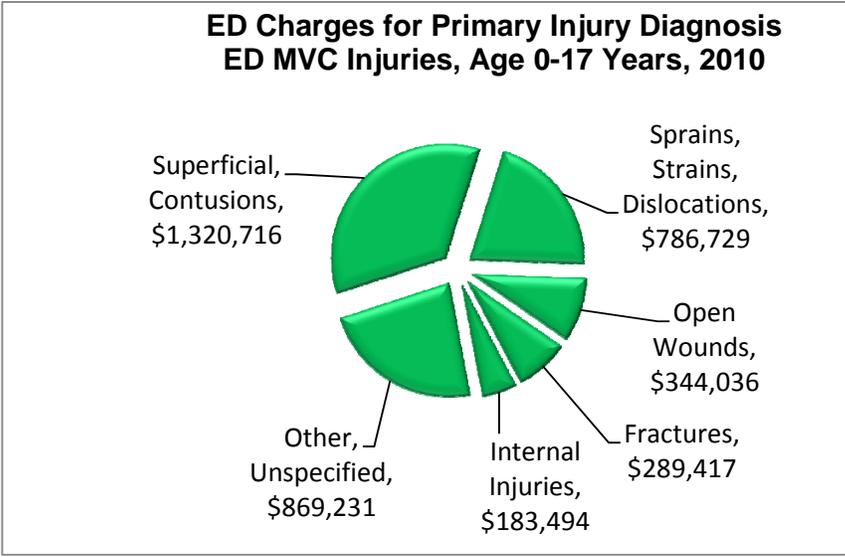
Primary Injury Diagnosis for ED Visit Child MVC Victims

- Overall, there was little difference across the 4 age groups in the types of injury that were listed among the five leading primary diagnoses for ED cases.
- The leading primary diagnosis among age groups 8-15 and 16-17 was a sprain or strain of the back, accounting for nearly 1 in every 5 ED injuries.
- The top two primary diagnoses to children age 0-3 and 4-7 involved injuries to the head or neck, accounting for more than one-third of their ED injuries.

Leading Primary Diagnoses for ED Patients by Age Group, 2005-2010			
Age 0-3	Age 4-7	Age 8-15	Age 16-17
Head/Neck: Contusion, 31%	Head/Neck: Contusion, 30%	Back Sprain, Strain, 18%	Back Sprain, Strain, 21%
Head/Neck: Open Wound, 8%	Head/Neck: Open Wound, 8%	Head/Neck: Contusion, 16%	Head/Neck: Contusion, 12%
Upper Ext. Contusion, 8%	Back Sprain, Strain, 8%	Upper Ext. Contusion, 8%	Lower Ext. Contusion, 8%
Torso Contusion, 7%	Torso Contusion, 6%	Torso Contusion, 7%	Upper Ext. Contusion, 7%
Lower Ext. Contusion, 3%	Upper Ext. Contusion, 6%	Lower Ext. Contusion, 7%	Head/Neck: Open Wound, 7%

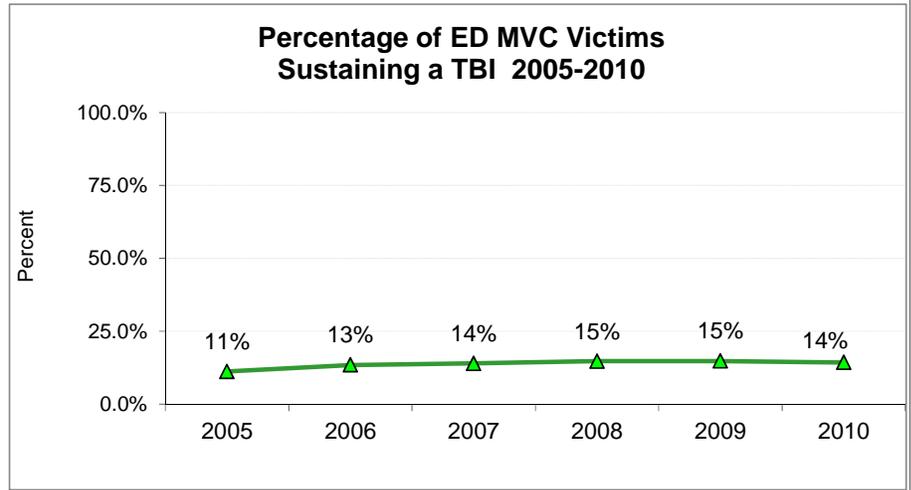
ED Charges for Child MVC Victims

- ED MVC injuries to children age 0-17 resulted in nearly 3.8 million dollars in hospital charges during 2010.
- Contusions and superficial injuries were responsible for 1.3 million dollars (35%) of the total ED charges, followed by 0.78 million dollars (20%) for sprain/strain/dislocation injuries and 0.34 million dollars (9%) for open wounds.

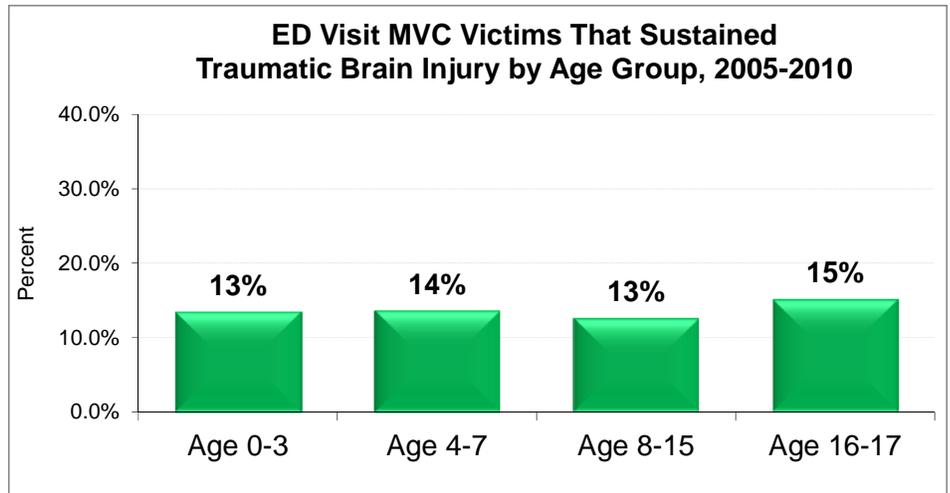


Traumatic Brain Injury Incidence for ED Visit Child MVC Victims

- Overall, 14% of the child ED visits for MVC injury were diagnosed with a TBI.
- There has been little change in TBI incidence for ED MVC injuries since 2006.



- There was little difference in MVC-related TBI between the four age groups over the 6-year period.

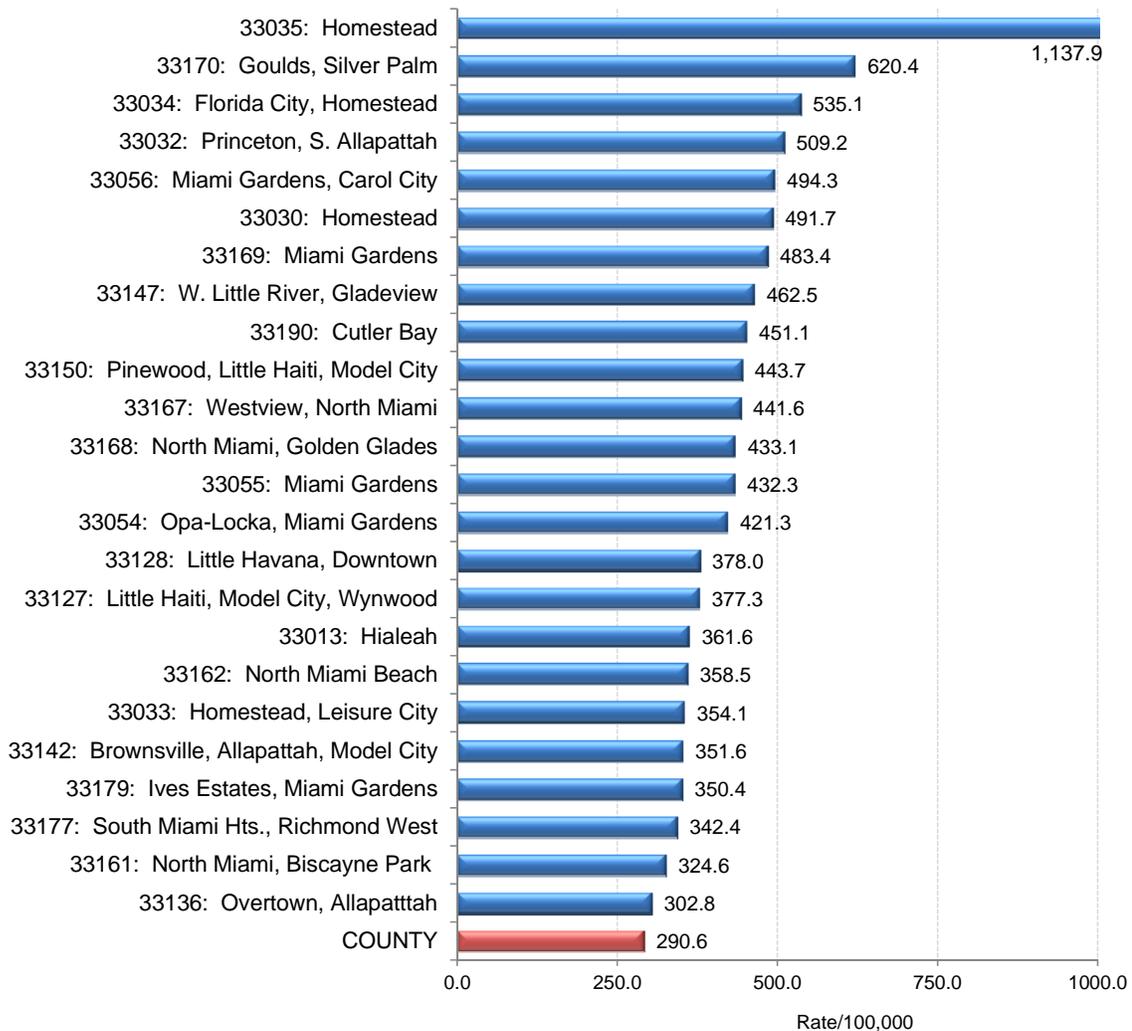


Zip Code of Residence for ED Visit Child MVC Injury, 2005-2010

Rates for child MVC injuries that resulted in an ED visit during the 6-year period 2005-2010 were calculated for the victim’s zip code of residence. The graph below shows those zip codes that had a MVC injury rate that was greater than the county MVC injury rate.

- Three zip codes in the Homestead/Florida City area were among the 6 highest child MVC injury rates: 33035 (74 ED visits), 33034 (184 ED visits) and 33030 (296 ED visits). The child injury rate for zip code 33035 was nearly 4-times greater than the county MVC injury rate.
- Four zip codes in the Miami Gardens area were among the 14 highest child MVC injury rates in the county: 33056 (333 ED visits), 33169 (317 ED visits), 33055 (326 ED visits) and 33054 (231 ED visits).
- Three zip codes in southernmost Miami-Dade were among the 9 highest MVC injury rates in the county: 33170 in the Goulds and Silver Palm communities (107 ED visits), 33032 in the Princeton and S. Allapattah communities (310 ED visits) and 33190 in Cutler Bay (63 ED visits).

MVC-Occupant Injury Rate by Zip Code of Residence
ED Visits to Residents Aged 0-17 Years, 2005-2010
6-Year Avg. Rate/100,000, Miami-Dade Co., FL



Prevention Points

- Everybody needs a child safety seat, booster seat, or safety belt - on every ride.
- Not properly restraining a child is against the law and punishable by a fine.
- Never hold a child on your lap in a car! You could crush him/her in a crash, or the child may be torn from your arms. You are not as strong as the force of the vehicle and its speed.
- All children under 13 years old should ride properly restrained in the back seat:
 - Children 0-24 months should be in rear facing car seats.
 - Children older than 24 months and less than 40 pounds in weight should travel in a forward facing car seat with a harness.
 - Children more than 40 pounds should use a booster seat with the car's lap/shoulder belt or a car seat with a five point harness that accommodates children over 40 pounds.
 - Children between 8-11 years old or at least 4'9" tall are ready to use the adult lap/shoulder belt if:
 1. The shoulder belt lies across the middle shoulder and chest (not against the neck).
 2. The lap belt lies low across the upper thighs (not across the stomach).
 3. The child is tall enough to sit against the vehicle seat back with knees bent naturally over the edge of the seat without slouching and can stay in that position throughout the trip.
- Each child must be in a car seat sized according to the child's age, height and weight. Check with a Certified Passenger Safety Technician to help you choose the correct car seat and make sure you are using it properly. Child Passenger Safety Programs and Technicians are available in Miami-Dade County at:
 1. Injury Free Coalition for Kids of Miami 305-243-3928
 2. City of Miami Beach Fire Rescue Child Passenger Safety Program 305-673-4935
 3. Florida Highway Patrol Child Car Seat Program 305-470-2260
 4. Miami Dade Fire Rescue Child Car Seat Program 786-331-4927
 5. Miami Dade Police Department Child Car Seat Program 305-471-3055
 6. To locate a child safety seat inspection station outside the Miami area call 866-SEAT-CHECK

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 Data, Agency for Health Care Administration
 PHONE (IFCK): 305-804-7212 (MDCHD): 305-470-5649
 E-MAIL: stephen.dearwater@jhsmiami.org
 WEBSITE: <http://dadehealth.org/injury/INJURYintro.asp>

