Drivers Fatally Injured in Traffic Crashes: Demographics, Miami-Dade County, 2005-2009


Motor vehicle traffic deaths are one of the leading causes of death to Miami-Dade County residents. Traffic crash reports from the FL Dept. of Highway Safety and Motor Vehicles were analyzed to describe the characteristics of crashes that occurred in Miami-Dade Co. during the years 2005-2009 and resulted in driver fatalities.

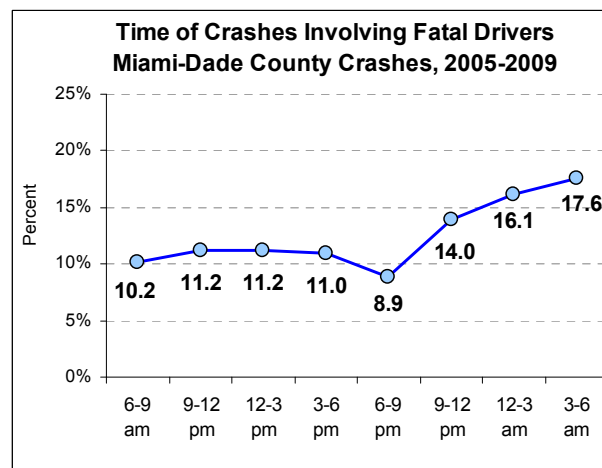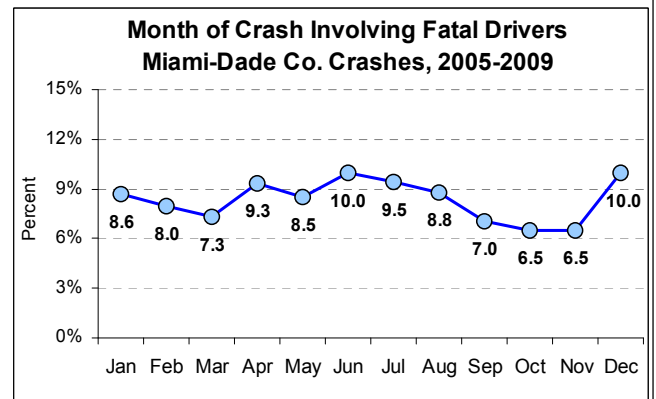**Driver Fatalities in Miami-Dade County by County of Residence, 2005-2009**
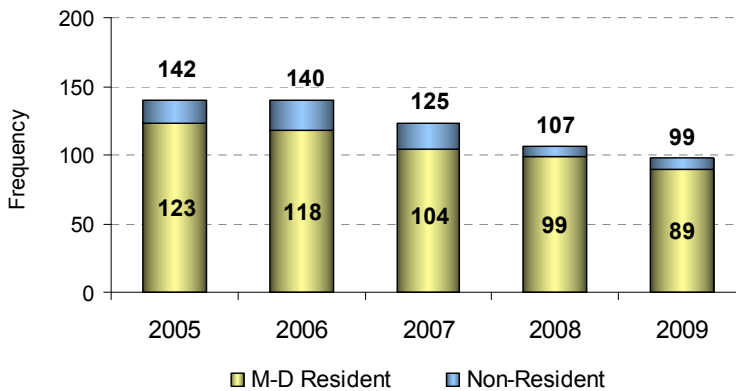
Between 2005-2009, 613 drivers of seat belt-equipped motor vehicles were killed in traffic crashes that occurred in the county.

Driver fatalities have declined every year since 2006.

Overall, 533 (87%) of the victims were residents of Miami-Dade County.

Month and Time of Crash

- Crashes that involved a fatal driver tended to decline between August and November then demonstrated the sharpest increase during the month of December.

Month of Crash Involving Fatal Drivers Miami-Dade Co. Crashes, 2005-2009

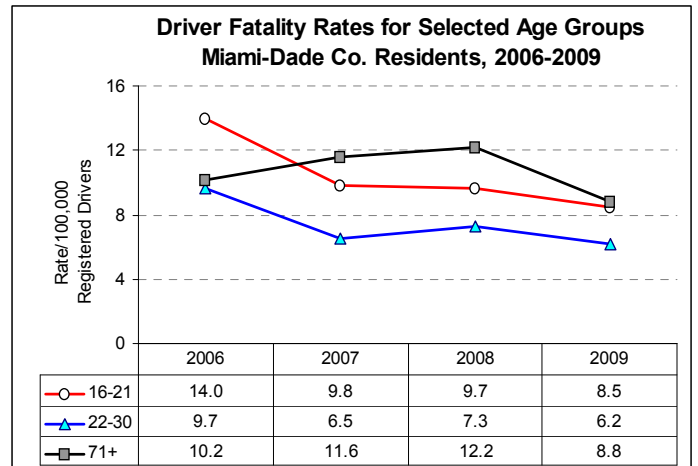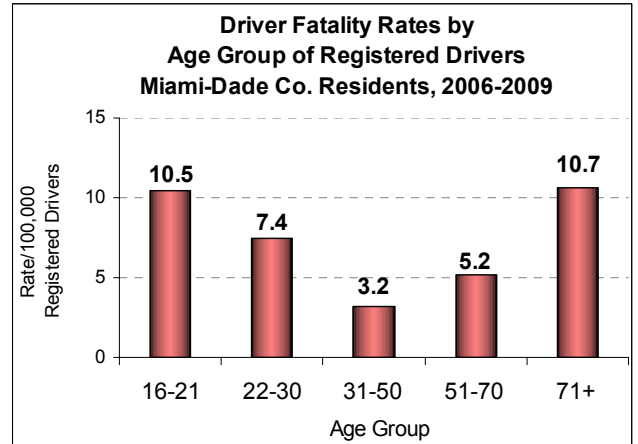**Time of Crashes Involving Fatal Drivers Miami-Dade County Crashes, 2005-2009**

- The percentage of fatal crashes involving drivers was lowest between the hours of 6pm-9pm then steadily increased throughout the evening, reaching its greatest risk after midnight. One-third of the deaths occurred between the hours of midnight and 6am.
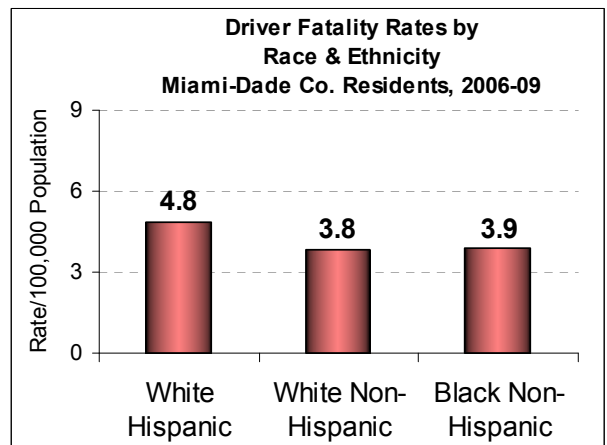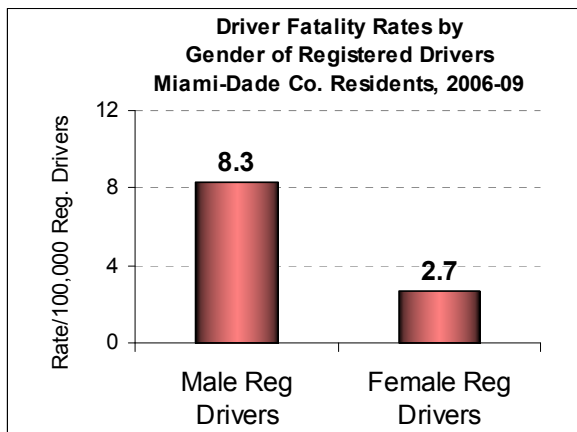
Who is Most at Risk?

Driver fatality rates were calculated for age and gender using the 529 fatalities that involved county residents (4 drivers <16 yrs. old were excluded) with the number of registered drivers in the county as the denominator. Driver registration data not available for the year 2005 or for race and ethnicity so these rates were calculated using population data.

Age of Driver

- Fatal drivers were distributed across a wide age spectrum: 15% were 16-21 yrs., 22% were 22-30 yrs., 26% were 31-50 yrs., 23% were 51-70 yrs. and 14% were 71 yrs. and older.

- Young drivers aged 16-21 years (10.5/100,000 registered drivers) and drivers older than 70 years old (10.7/100,000) were at greatest risk for a fatal crash over the five year period.

**Driver Fatality Rates by
Age Group of Registered Drivers
Miami-Dade Co. Residents, 2006-2009**

- Though registered drivers aged 16-21 had one of the highest 4-year average rates, their annual driver fatality rates have decreased 40% from 2006 to 2009 (14.0 vs. 8.5/100,000) (red line).

- Registered drivers aged 22-30 (blue line) also had a 36% decrease over the 4-year period.

- Older registered drivers aged 71+ yrs. declined to its lowest rate in 2009 after increases in fatality rates during 2007 and 2008 (black line). There was little change in rates over time for the 31-50 and 51-70 age groups.

**Driver Fatality Rates for Selected Age Groups
Miami-Dade Co. Residents, 2006-2009**

	2006	2007	2008	2009
16-21	14.0	9.8	9.7	8.5
22-30	9.7	6.5	7.3	6.2
71+	10.2	11.6	12.2	8.8

Gender, Race & Ethnicity of Driver

**Driver Fatality Rates by
Gender of Registered Drivers
Miami-Dade Co. Residents, 2006-09**

**Driver Fatality Rates by
Race & Ethnicity
Miami-Dade Co. Residents, 2006-09**

- Approximately 4 out of 5 fatal drivers were male. The male fatality rate per 100,000 registered drivers was nearly 3-times higher than the female rate (8.3 vs. 2.7/100,000).

- 67% of fatal drivers were white Hispanic, 18% black non-Hispanic, 15% white non-Hispanic. The white Hispanic rate (4.8/100,000) was higher than the rates for white and black non-Hispanics (3.8 and 3.9/100,000 respectively).

Residence of the Victim

These county zip codes experienced the most driver fatalities to its residents between 2005-2009:

- 33165 (Westchester area):   26 deaths
- 33012 (Hialeah area):   23 deaths
- 33177 (South Miami Hts. area):   20 deaths
- 33172 (Doral, Fountainbleau area):   16 deaths
- 33030 (Homestead area):   15 deaths
- 33032 (Princeton, S. Allapattha area): 15 deaths
- 33034 (Florida City, Homestead):   15 deaths

Preventing Traffic Deaths

The CDC reports[1] that there are effective measures to help <u>teens</u> become safer drivers.

- Among teen drivers, those at especially high risk of crashing are:
    1. <u>Teens driving with teen passengers</u>: Teen passengers increases the crash risk of unsupervised teen drivers. This risk increases with the number of teen passengers.
    2. <u>Driving at night</u>: The crash risk for teens driving at night is nearly twice as high as the crash risk during the day.
    3. <u>Newly licensed teens</u>: Crash risk is highest during the first year teens are eligible to drive.
- Graduated drivers licensing (GDL) programs are widely credited with contributing to recent declines in teenage crash fatalities. Evaluations of GDL programs have demonstrated reductions between 20-40% in fatal and injury crashes for teen drivers. [2]
- The most comprehensive GDL programs are associated with larger crash reductions. To further reduce crashes among young drivers, GDL programs should include all of the components with demonstrated effectiveness, including extended learner periods, nighttime driving restrictions, and passenger restrictions.[3]

Some existing protective factors that may help improve <u>older drivers'</u> safety include:

- Emphasize seat belt use: Nationally, 77% of older motor vehicle occupants (drivers and passengers) in fatal crashes were wearing seat belts at the time of the crash, compared to 63% for other adult occupants.[4]
- Drive during daylight and in good weather. Find the safest route with well-lit streets, intersections with left turn arrows, and easy parking. Plan your route before you drive.
- Leave a large following distance behind the car in front of you.
- Ask your doctor to review medicines (prescription and over-the counter) to reduce side effects.
- Have eyes checked by an eye doctor at least once a year. Wear glasses and corrective lenses as required.
- Avoid distractions in your car, such as listening to a loud radio, talking on your cell phone, eating in the car.

1. Centers for Disease Control and Prevention. "Injury Prevention & Control: Motor Vehicle Safety" (http://www.cdc.gov/motorvehiclesafety).
2. Sivak M. Is the U.S. on the path to the lowest motor vehicle fatalities in a decade? Ann Arbor, MI: University of Michigan Transportation Research Institute; 2008. (http://deepblue.lib.umich.edu/bitstream/2027.42/60424/1/100969.pdf).
3. Williams AF. Contribution of the components of graduated driver licensing to crash reduction. J Safety Res 2007;38:177.
4. National Highway Traffic Safety Administration, Dept. of Transportation (US). Traffic Safety Facts 2008: Older Population. Washington (DC): NHTSA; 2009.

Injury Free Coalition for Kids

Miami-Dade County HEALTH DEPARTMENT www.dadehealth.org

The Children's Trust