Miami-Dade County Health Department
Office of Epidemiology and Disease Control

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Epi Monthly Report

Motor Vehicle Crashes and Injury among High School and College Aged Drivers: Miami-Dade County, FL 2005

Maria X. Bustamante, Guoyan Zhang, Erin O'Connell, Diana Rodriguez, Rene Borroto-Ponce, Fermin Leguen

Background

The Miami-Dade County population is approximately 2.4 million with almost 14% between the ages of 15-24. During 2003-2005 young drivers had the highest rate of motor vehicle related emergency department visits (164 per 100,000) and hospitalizations (24 per 100,000), and the third highest death rate (27 per 100,000) as compared to all other age groups. In Miami-Dade County approximately 48,000 crashes involving over 70,000 drivers were reported to the Florida Department of Highway Safety and Motor Vehicles in 2005. Almost a quarter were among high school and college aged drivers. The objective of this study was to describe motor vehicle crashes and injuries occurring among high school and college aged drivers in order to guide prevention efforts targeted toward reducing motor vehicle related injuries among the young population.

Methods

The 2005 crash data used in this study was obtained from the Florida Department of Highway Safety and Motor Vehicles. Data was analyzed using SAS by age, injury severity, alcohol/drug involvement, restraint use, day of week, and time of day. Ethnicity was not analyzed due to the inconsistent reporting of ethnicity on the crash reports.

Results

There were 16,311 drivers between the ages of 15-24 involved in motor vehicle crashes. Of these, over 37% were injured, 14% were unrestrained, and 1.5% were alcohol and/or drug related. Alcohol and/or drug use among college aged drivers 20-24 years of age was higher than that in other age groups. The majority of crashes (38%) occurred between the hours of 12 PM and 5 PM. Friday and Saturday accounted for 30% of all crashes in this age group. High school and college aged drivers were less likely to use safety restraints as compared to all other age groups. Those without restraints were 5 times more likely to suffer incapacitating or fatal injuries. Drivers who used alcohol and/or drugs were twice as likely to be unrestrained and three times more likely to be severely injured during a crash. Among those using alcohol and/or drugs 27% were not restrained. Over half of drivers using alcohol and/or drugs crashed between the hours of 12 AM and 5 AM.

Conclusions

Intervention campaigns targeting 15-24 year olds should focus on increasing safety belt use in this age group. Furthermore, college based interventions should also focus on reducing impaired driving due to alcohol and/or drugs.

Public Health Implications

There are over 40 high schools and 5 colleges and universities throughout the county. Since the majority of crashes

FLORIDA DEPARTMENT OF HEALTH

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Fermin Leguen MD, MPH
Chief Physician, Miami-Dade County Health Department
Director, Office of Epidemiology and Disease Control

8600 NW 17th Street
Suite 200
Miami, Florida 33126

Tel: (305) 470-5660
Fax: (305) 470-5533
E-mail:
fermin_leguen@doh.state.fl.us

occurred between the hours of 12 PM and 5 PM, intervention campaigns should target students as they leave the school premises for lunch or after class. In addition, localities should make use of readily available data such as the Florida Department of Highway Safety and Motor Vehicles crash database in order to enhance injury surveillance activities and program planning and evaluation.

Figure 1. Percent of Drivers 15-24 Years of Age by Injury Severity: Miami-Dade County, FL 2005

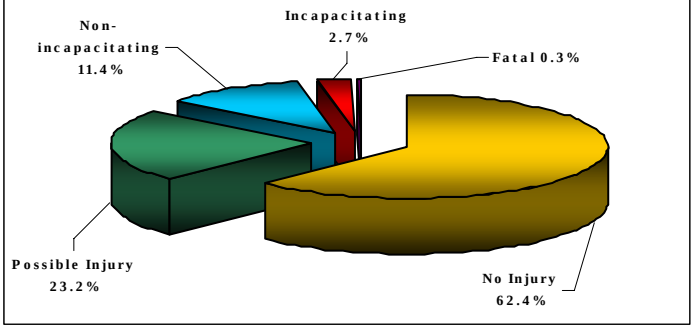


Figure 2. Percent of Alcohol and/or Drug Use Among Drivers Involved in Motor Vehicle Crashes by Age Group: Miami-Dade County, FL 2005

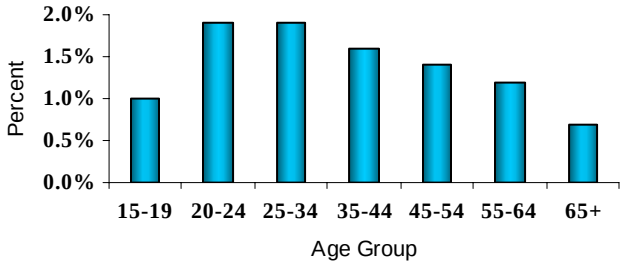


Figure 3. Percent Motor Vehicle Crashes by Time of Day and Alcohol /Drug Use Among Drivers 15-24 Years of Age: Miami-Dade County, FL 2005

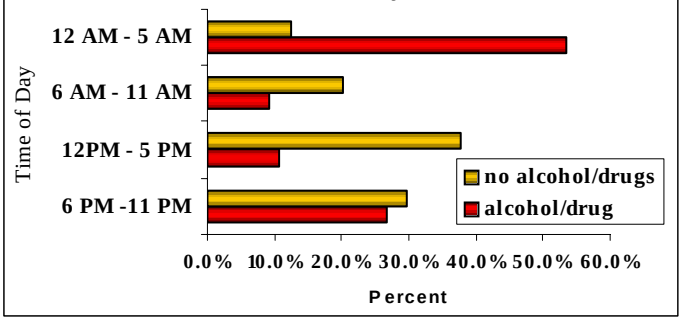
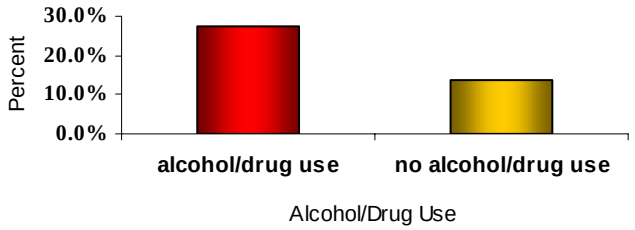


Figure 4. Percent of Unrestrained Drivers 15-24 Years of Age Involved in Motor Vehicle Crashes by Alcohol/Drug Use: Miami-Dade County, FL 2005

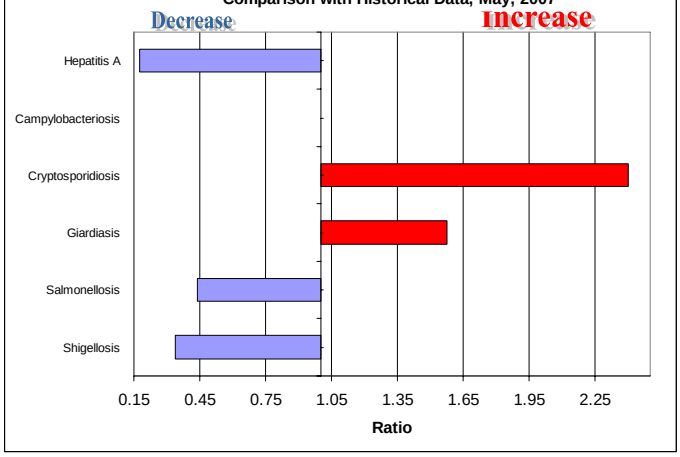


TO REPORT ANY DISEASE AND FOR INFORMATION CALL:

Office of Epidemiology and Disease Control

Childhood Lead Poisoning Prevention Program	(305) 470-6877
Hepatitis	(305) 470-5536
Other diseases and outbreaks	(305) 470-5660
HIV/AIDS Program	(305) 470-6999
STD Program	*(305) 325-3242*
Tuberculosis Program	*(305) 324-2470*
Special Immunization Program	(786) 845-0550

Selected Notifiable Disease Reports, Miami-Dade County, Comparison with Historical Data, May, 2007



AVIAN FLU WATCH

Unless indicated, information is current as of June 25, 2007



- **Since 2003, 315 human cases of avian influenza (H5N1) have been confirmed** by the World Health Organization (WHO). Of these, 191 have been fatal.
- **Countries with confirmed *human* cases** include Cambodia, China, Djibouti, Indonesia, Thailand, Vietnam, Iraq, Azerbaijan, Egypt, Turkey, and Lao People's Democratic Republic.
- **No human cases of avian influenza (H5N1) have been reported in the United States.**
- **The most recent confirmed case of human infection with H5N1 avian influenza is from Indonesia.** A 3 year old girl became symptomatic June 18 and later recovered. Three additional cases from Indonesia were a 26 year old male, 16 year old female and 45 year old male; all died after being hospitalized with symptoms. Egypt has confirmed two cases of human infection with H5N1. One was a 10 year old girl who died after hospitalization. The second, a 4 year old girl is in stable condition after treatment was given upon being admitted to the hospital. In China, a 4 year old boy was hospitalized June 21 after developing symptoms and is in stable condition. Also, in China, a 19 year old male soldier, died after being hospitalized with fever and pneumonia-like symptoms. There is no indication that he had contact with sick or dead poultry; close contacts are doing well and remain under observation. However, for the other cases, exposure to dead or sick poultry is believed to be the source of infection.
- **The United Kingdom Health Protection Agency has confirmed four cases of human infection with *A/H7N1* from a poultry farm in Wales. The investigation is ongoing.**
- **H5N1 has been confirmed in *birds* in several other countries since 2003.** H5N1 has been documented in birds in more than 30 countries in Europe & Eurasia, South Asia, Africa, East Asia and the Pacific, and the Near East. For a list of these countries, visit the World Organisation for Animal Health Web Site at http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm.
- **No restrictions on travel to affected countries have been imposed.** Travelers should avoid contact with live poultry and monitor their health for ten days after returning from an affected country.

SOURCES: World Health Organization; World Organisation for Animal Health; Centers for Disease Control and Prevention

PARTICIPATE IN INFLUENZA SENTINEL PROVIDER SURVEILLANCE

The Miami-Dade County Health Department NEEDS Influenza Sentinel Providers!!

Sentinel providers are key to the success of the Florida Department of Health's Influenza Surveillance System. Data reported by sentinel providers gives a picture of the influenza virus and ILI activity in the U.S. and Florida which can be used to guide prevention and control activities, vaccine strain selection, and patient care.

- Providers of any specialty, in any type of practice, are eligible to be sentinel providers.
- Most providers report that it takes **less than 30 minutes a week** to compile and report data on the total number of patients seen and the number of patients seen with influenza-like illness.
- Sentinel providers can submit specimens from a subset of patients to the state laboratory for virus isolation **free of charge**.

For more information, please contact **Erin O'Connell** at 305-470-5660.

About the Epi Monthly Report

The Epi Monthly Report is a publication of the Miami-Dade County Health Department, Office of Epidemiology and Disease Control, The publication serves a primary audience of physicians, nurses, and public health professionals. Articles published in the Epi Monthly Report may focus on quantitative research and analysis, program updates, field investigations, or provider education. For more information or to submit an article, contact Diana Rodriguez, Managing Editor at 305-470-5660.

Monthly Report
Selected Reportable Diseases/Conditions in Miami-Dade County, May 2007

Diseases/Conditions	2007 this Month	2007 Year to Date	2006 Year to Date	2005 Year to Date	2004 Year to Date	2003 Year to Date
AIDS *Provisional	63	360	522	622	567	446
Campylobacteriosis	14	46	57	47	47	49
Ciguatera Poisoning	0	0	0	0	0	0
Cryptosporidiosis	4	13	6	12	4	5
Cyclosporosis	0	0	0	0	0	0
Dengue Fever	1	1	0	0	3	0
E. coli, O157:H7	0	1	0	0	1	0
E. coli, Non-O157	0	0	0	0	0	0
Encephalitis (except WNV)	0	0	0	0	1	0
Encephalitis, West Nile Virus	0	0	0	0	0	0
West Nile Fever	0	0	0	0	0	0
Giardiasis, Acute	32	92	83	65	110	61
Hepatitis A	1	12	16	26	13	16
Hepatitis B	2	7	11	23	16	17
HIV *Provisional	122	582	453	639	705	671
Influenza A (H5)	0	0	0	0	0	0
Influenza Isolates	0	0	0	0	0	0
Influenza Novel Strain	0	0	0	0	0	0
Influenza, Pediatric Death	0	0	0	0	0	0
Lead Poisoning	22	69	65	63	104	81
Legionnaire's Disease	0	1	1	2	3	0
Leptospirosis	0	0	0	0	0	0
Lyme disease	0	0	0	0	1	1
Malaria	0	0	4	0	8	5
Measles	0	0	0	0	1	0
Meningitis (except aseptic)	0	5	9	3	2	2
Meningococcal Disease	0	3	7	3	8	3
Mumps	0	1	0	0	0	0
Pertussis	0	11	4	2	2	1
Rubella	0	0	0	0	0	0
Rubella, Congenital	0	0	0	0	0	0
Salmonellosis	20	121	179	150	118	152
Shigellosis	7	46	37	113	77	132
Streptococcus pneumoniae, Drug Resistant	8	41	48	6	31	47
Tetanus	0	0	0	0	0	0
Toxoplasmosis	0	1	0	0	1	4
Tuberculosis *Provisional	10	60	93	68	91	104
Typhoid Fever	0	0	2	2	1	1
Vibrio cholera Type O1	0	0	0	0	0	0
Vibrio cholera Non-O1	0	0	0	0	0	0

* Data on AIDS are provisional at the county level and are subject to edit checks by state and federal agencies.
** Data on tuberculosis are provisional at the county level.