# **EPI MONTHLY REPORT** Florida department of health in Miami-dade county www.dadehealth.org

## Summer is Here: Prevent Drowning Deaths and Injuries Anthoni Llau PhDc

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Unintentional Drowning Risk Factors, Miami-Dade County

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Selected Reportable Diseases/ Conditions in May 2013

Epidemiology ,Disease Control & Immunization Services 8600 NW 17th Street Suite 200 Miami, Florida 33126 Tel: (305) 470-5660 Fax: (305) 470-5533 Since 2000, approximately 40 Miami-Dade residents died annually from unintentional drownings. In addition, from 2005 - 2011 an average of 95 Miami-Dade residents per year were either treated in emergency departments (ED) or hospitalized due to nonfatal unintentional drownings. Nonfatal drownings may cause brain damage that result in long-term disabilities ranging from memory problems and learning disabilities to permanent loss of basic functioning.

### Groups at Risk

- **Males:** From 2000 2011, males accounted for 78% of fatal drownings in Miami-Dade County.
- **Children:** Drowning was the secondleading cause of unintentional injury-related death for children ages 1 to 17 years (followed by motor vehicle accidents).
  - Drowning was the leading cause of death among children aged 1 – 4 years.

• **Race/Ethnicity**: Since 2007, the overall fatal unintentional drowning 5 year cumulative rate for Miami-Dade African American residents was 1.45 times that of Hispanics. However, in certain age groups it was slightly higher. For example, the fatal unintentional drowning rate for 0-4 year old African Americans was nearly twice that of Hispanics in the same age group.

### **Other Risk Factors**

• **Location:** Children less than one year of age drown most often in bathtubs, buckets, or toilets (Brenner et al., 2001). Among Miami-Dade residents aged 1 to 4 years, most

drownings occurred in residential swimming pools. In contrast, the proportion of drownings in natural waters (oceans, lakes, and rivers) increased with age. These locations accounted for the majority of drownings among Miami-Dade residents aged 15 years and older.

• Lack of supervision: Many drownings occur while no one is watching. For example, most child drowning victims were missing from sight for less than 5 minutes and in the care of at least one parent prior to the event (Present, 1987).

• **Recreational boating:** Boating involves risk of injury. During 2012, the U.S. Coast Guard reported 4,515 boating accidents; 651 participants died and another 3,000 were injured. Approximately 71% of deaths resulted from drowning. Among those who drowned, 85% were not wearing a life jacket. (United States Coast Guard, 2013).

• Alcohol use: Alcohol has been detected in the blood for approximately 70% of drowning victims (Driscoll et al., 2004). Additionally, drowning risk increases with blood alcohol levels. Alcohol use can also impair judgment, resulting in increased risk of exposure to high risk situations around the water. Alcohol also influences balance and coordination, with its effects intensified by heat and sun exposure (Smith & Kraus, 1988).

• **Epilepsy:** For persons with epilepsy, the risk of drowning is 15 to 19 times higher compared to the general population (Bell et al., 2008) with the bathtub as the site of highest drowning risk (Quan & Cummings, 2003).



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### Prevention

Prevention tips include:

• Designate a responsible adult to closely supervise young children who are in the bathtub, pool, or any other body of water. Adults should not be involved in any other distracting activity (such as reading or talking on the phone) while supervising children. Supervising adults should always be within an arm's length of any child, regardless of their swimming ability.

• Never swim alone, regardless of the water depth. When swimming with a buddy, if one has a problem, the other may be able to help. Select swimming sites that have lifeguards on duty whenever possible.

- Avoid drinking alcohol during any recreational water activity. Additionally, refrain from drinking alcohol while supervising children.
- Learn to swim. The American Academy of Pediatrics supports swimming lessons for most children aged 4 years and older, however constant supervision and barriers such as pool fencing are still necessary even after children have completed classes.

• Learn cardiopulmonary resuscitation (CPR). CPR is vital in cases of drowning emergencies, because immediate restoration of oxygen to the brain can improve outcomes of drowning victims. CPR certifications should be renewed every two years to keep up with any new guidelines.

• Do not use air-filled swimming aids such as inflatable arm bands and tubes in place of life jackets. They can deflate and are not considered

effective in preventing drownings.

If you have a swimming pool at your home: Install a four-sided, isolation pool fence at least 4 feet high that completely separates the house and yard from the pool area. Use self-closing and self-latching gates that open outward, and are out of a child's reach. Consider additional layers of protection (barriers) such as automatic door locks or alarms to prevent or notify you regarding access to the yard or pool, however none should be used as a re placement for a fence.

•Toys and floating devices should be removed from the pool immediately after use. They may attract a child to enter the pool area or lean over the pool and potentially fall into the water.

If in or around natural bodies of water: •Know the local weather conditions and forecast before swimming or boating. •When boating, all riders should use US Coast Guard approved life jackets, regard less of distance to be traveled, size of boat, or swimming ability of boaters. •Heed colored beach warning flags and lifeguard orders.

 Watch for dangerous waves and signs of rip currents (e.g. water that is discolored and choppy, foamy, or filled with debris).
Rip currents can pull even the strongest swimmers out to sea. If you are caught in a rip current, swim parallel to shore until free from the current, then swim toward shore.

#### References

American Academy of Pediatrics (2010). AAP Gives Updated Advice on Drowning Prevention. Available from: http://www.aap.org/en-us/about-the-aap/aap-press-room/pages/AAP-Gives-Updated-Advice-on-Drowning-Prevent

Bell GS, Gaitatzis A, Bell CL, Johnson AL, Sander JW. (2008). Drowning in people with epilepsy: how great is the risk? Neurology. 71(8): 578-82.

Brenner RA, Trumble AC, Smith GS, Kessler EP, Overpeck MD. (2001). Where children drown, United States, 1995. Pediatrics: 108(1):85–89.

Centers for Disease Control and Prevention (2001). Lifeguard effectiveness: A report of the working group. Available from: <a href="http://www.cdc.gov/HomeandRecreationalSafety/pubs/LifeguardReport-a.pdf">http://www.cdc.gov/HomeandRecreationalSafety/pubs/LifeguardReport-a.pdf</a>

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Cummings P, Mueller BA, Quan L (2011). Association between wearing a personal floatation device and death by drowning among recreational boaters: a matched cohort analysis of United States Coast Guard data. *Injury Prevention*: 17(3):156-159.

Driscoll TR, Harrison JA, Steenkamp, M. (2004). Review of the role of alcohol in drowning association with recreational aquatic activity. Injury Prevention. 10(2): 107-113.

National Oceanic and Atmospheric Association (2011). Rip Current Safety. Available from: http://www.ripcurrents.noaa.gov/overview.shtml.

Present P. (1987). Child drowning study. A report on the epidemiology of drowning in residential pools to children under age five. Washington (DC): Consumer Product Safety Commission (US); 1987.

Quan L & Cummings P. (2003). Characteristics of drowning by different age groups. Injury Prevention. 9(2): 163-168.

Smith GS, Kraus JF. (1988). Alcohol and residential, recreational, and occupational injuries: A review of the epidemiologic evidence. Annual Review of Public Health. 9:99–121.



U.S. Coast Guard. (2013). Boating Statistics – 2012. Available from: http://www.uscaboating.org/assets/1/workflow\_staging/Page/705.PDF

U. S. Consumer Product Safety Commission. Safety barrier guidelines for home pools Available from: www.cpsc.gov/cpscpub/pubs/pool.pdf.

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#### Influenza-Like-Illness, All Age



During this period, there were 22,086 ED visits; among them 525 (2.4%) were ILI. At the same week of last year, 2.3% of ED visits were ILI.

#### PARTICIPATE IN INFLUENZA SENTINEL PROVIDER SURVEILLANCE

#### Florida Department of Health in Miami-Dade County 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 Lakisha Thomas at 305-470-5660.

### About the Epi Monthly Report

The Epi Monthly Report is a publication of the Florida Department of Health in Miami-Dade County: Epidemiology, Disease Control & Immunization Services. 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 Esther Bell at (305) 470-6918.



TO REPORT ANY DISEASE AND FOR

INFORMATION CALL: Epidemiology, Disease Control

& Immunization Services

Childhood Lead Poisoning

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Miami-Dade County Monthly Report Select Reportable Disease/Conditions May 2013

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	Diseases/Conditions	2013	2013	2012	2011
		Current Month	fear to Date	fear to Date	fear to Date
	HIV/AIDS				
	AIDS*	71	297	222	277
	HIV	120	636	436	573
	STD				
	Infectious Syphilis*	32	130	136	134
	Chlamydia*	921	4250	3915	3519
	Gonorrhea*	210	1039	1023	899
	IB Tuberculesist		50		40
	Tuberculosis	22	52	32	42
	Epidemiology, Disease Control &				
	Immunization Services				
	Epidemiology				
	Campylobacteriosis	16	99	109	185
	Ciguatera Poisoning	2	2	3	6
	Cryptosporidiosis	3	9	11	7
	Cvclosporiasis	0	1	0	1
	Dengue Fever	2	13	3	4
	E. coli, O157:H7	0	1	3	8
	E. coli, Non-O157	0	0	0	0
	Encephalitis, West Nile Virus	0	0	0	0
	Giardiasis, Acute	16	102	77	130
	Influenza Novel Strain	0	0	0	0
	Influenza, Pediatric Death	1	1	2	0
	Legionellosis	0	10	3	8
	Leptospirosis	0	0	0	0
	Listeriosis	0	1	1	0
	Lyme disease	1	1	4	0
	Malaria	0	5	5	7
	Meningitis (except aseptic)	4	11	8	15
	Meningococcal Disease	0	10	9	7
	Salmonellosis	43	167	146	125
	Shigellosis	3	21	20	48
	Streptococcus pneumoniae, Drug Resistant	11	48	36	44
	Toxoplasmosis	0	0	3	0
	Typhoid Fever	0	0	1	1
	Vibriosis	2	4	1	1
	West Nile Fever	0	0	0	0
	Immunization Preventable Diseases				
	Measles	0	0	0	0
	Mumps	0	0	1	0
	Pertussis	3	20	23	10
	Rubella	0	0	0	0
	Tetanus	0	0	0	0
	Varicella	4	40	26	20
	Henatitis				
		2	12	11	11
	Hepatitis B (Acute)	2	8	11	2
	Lead				
	Lead Poisoning	5	40	27	57
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\*\* Data on tuberculosis are provisional at the county level.

