# Nassau County Child Fatality Review Team Informational Release Volume 13: Issue 2

#### CHILDHOOD DROWNING PREVENTION

#### For Immediate Release:

May 5, 2013

The Nassau County Child Fatality Review Team (NCCFRT), in accordance with its Protocols and Procedures Manual, is distributing its third Informational Release with approval from the New York State Office of Children and Family Services (OCFS). The NCCFRT is a multidisciplinary team that has functioned since December 2008 as a NYS approved child fatality review team as provided in Social Services Law (SSL) §422-b. The team was created to review fatalities of Nassau County residents age 0-17 years whose death is unexpected or unexplained.

Membership in the CFRT is defined by SSL §422-b. This statute requires the participation of certain local governmental agencies and private individuals. SSL § 422-b also allows for the appointment of permissive members from various fields of practice. Mandatory team members include Nassau County Child Protective Services, Office of Children and Family Services (OCFS), Nassau County Department of Health, Nassau County Office of the Medical Examiner, Nassau County District Attorney's Office, Office of the Nassau County Attorney, Nassau County Police Department, Emergency Medical Services, New York State Law Enforcement and a pediatrician, or comparable medical professional, preferably with expertise in child abuse. The team has added additional members with expertise relevant to child fatality prevention and/or review.

The mission of the NCCFRT is to review child deaths to better understand the causes of these deaths and to make recommendations based on the team's findings in order to reduce future child fatalities. The NCCFRT meetings are confidential and closed to the public. A confidentiality statement is signed by each member, at the start of each team meeting. The team follows a protocol and procedure manual, in accordance with New York State Social Services Law §§ 20(5) and 422-b, along with OCFS guidelines. The Team has the authority to prepare Informational Releases to address various safety issues. As of May 2013, the team has reviewed a total of 66 cases due to a variety of causes. This report is *not* intended to function as an annual report, but rather as an Informational Release addressing certain NCCFRT cases. In this issue, the Informational Release will focus on those cases whose death was related to drowning.

## **Drowning in Children**

Since January 2009, the team reviewed six cases, occurring since 2007, where the cause of death was listed as drowning or asphyxia due to drowning. The age range of the deceased children spanned from 11 months to 17 years of age. Two of the children drowned in bathtubs, three in private pools and one in an open body of water. Two of the children were male, four were female. According to death certificate information, four of the drownings were considered accidental, one was considered a homicide and one remained undetermined. Risk factors identified in the reviews conducted included: inadequate/distracted supervision, filled bathtub, toys in water (tub), alcohol use by adult supervisors, broken gates/missing locks and adult supervisors unable to swim.

Drowning is the leading cause of injury death in United States children 1-4 years<sup>1</sup> and was the second leading cause of unintentional injury death in United States children ages 1-19 years from 2000-2006.<sup>2</sup> For every child death related to drowning, there are four children that require emergency room care for a nonfatal submersion injury.<sup>3</sup> These nonfatal drownings can cause brain damage leading to long-term disabilities. Age groups considered to be at the highest risk for drowning are toddlers and

male adolescents.<sup>2</sup> Racial disparities are greater after 5 years of age.<sup>2</sup> Drowning can happen in as little as 1 inch of water and is usually quick and silent.<sup>4</sup> After two minutes under water a child will loose consciousness and irreversible brain damage occurs within 4-6 minutes.<sup>4</sup>

Recently, the American Academy of Pediatrics (AAP) has relaxed its policy<sup>2</sup> regarding the age at which children should learn water survival skills. In the past, the AAP stated that children under the age of four years were not developmentally ready for swim lessons due to a lack of data, concerns that it would give a false sense of security and lead to inadequate supervision and that it might reduce a child's fear of water. The new guidelines recognize a study by the Eunice Kennedy Shriver National Institute of Child Health and Human Development that concluded that swimming lessons in those ages 1-4 years do not increase the risk of drowning and *may* provide a reduction in drowning risk. In the new guidelines the AAP stresses that swim lessons will not always prevent drowning and that they must be considered with other levels of protection, such as pool barriers and supervision. In addition, the Consumer Product Safety Commission (CPSC)<sup>2</sup> has identified large, inexpensive, inflatable or portable pools that are 18-48 inches deep as a risk factor for drowning. Such pools often fall outside of the local building codes for pool barriers and parents do not consider the need for fencing. In addition, soft sides on some of these pools allow a child to easily lean over and fall headfirst into the pool.

# What can you do?

A multifaceted approach should be used to prevent childhood drowning. Drowning Prevention Strategies from the AAP and Safe Kids include:

- 1. SUPERVISION: Never leave child unattended (or in the care of another child) while in the bathtub, pool, wading pool, spa or any standing water. NOT EVEN FOR A MOMENT. Empty pails and buckets. Do not leave young child unattended in bathroom to prevent drowning in toilet.
  - a. Designate a 'water watcher' a supervisor whose sole responsibility is to constantly observe children in or near the water.
  - b. An adult supervising young children in pool or open body of water should be in the water in arm's length.
  - c. Adult supervision of older children should be constant and without distraction such as the telephone, reading, socializing or drinking.
  - d. Adult supervisor should know how to swim, perform a rescue, start CPR and call for help.
  - e. An infant bath seat/ring is not a substitute for adult supervision. The bath seat can tip over or slip.
  - f. Consider using toilet seat locks (for infants and toddlers)
- 2. Barriers: 4-sided fencing, completely isolating the pool from the house and the yard, if properly used, can reduce drowning in young children by more than 50%.<sup>2</sup> In addition:
  - a. Move chairs and tables to prevent them from being used as a climbing aide.
  - b. Remove floats, balls and toys from the pool area.
  - c. Currently, NYS regulations do not require 4-sided **isolation** fencing for residential pools.<sup>5</sup> Isolation fencing is defined as fencing that completely isolates the pool from the house and yard.<sup>2</sup> However, individual localities may have additional regulations and should be checked prior to pool installation. NYS regulations requires pool fencing to be at least 4 feet high, allows for a building wall to be part of the barrier if other conditions are met, gates must be self closing and self latching and securely locked, and pool alarms are required for pools installed after 12/14/06.<sup>5</sup> See <a href="http://www.dos.nv.gov/DCEA/pdf/PoolsumUC0708.pdf">http://www.dos.nv.gov/DCEA/pdf/PoolsumUC0708.pdf</a> for full regulations.
  - d. Pool owners should also consider pool alarms and rigid pool covers
- 3. Install proper drain covers and filter pump equipment to prevent body entrapment and hair entanglement.

### 4. Swim lessons:

- a. AAP supports lessons for most children over 4 years.
- b. Current evidence does not support swim lessons for 1-4 year olds, but there is no longer an AAP advisory against it.
- 5. Learn CPR and keep a telephone and US Coast Guard approved equipment at poolside.
  - a. Air-filled swim aids (i.e. inflatable arm bands) should not be used in place of a life jackets/personal floatation device.
  - b. Any child on a boat or participating in water sports should wear a personal flotation device (PFD). U.S. Coast Guard PFD requirements can be found at <a href="http://www.uscgboating.org/safety/life\_jacket\_wear\_wearing\_your\_life\_jacket.aspx">http://www.uscgboating.org/safety/life\_jacket\_wear\_wearing\_your\_life\_jacket.aspx</a> NYS PFD requirements can be found at <a href="http://www.nysparks.com/recreation/boating/documents/NYSBoatersGuide.pdf">http://www.nysparks.com/recreation/boating/documents/NYSBoatersGuide.pdf</a>
- 6. When swimming in an open body of water—only select sites with lifeguards.
- 7. Recognize risk during cold seasons—do not walk, skate or ride on weak or thin ice.
- 8. Children with seizure disorders should be supervised closely in bathtub and while swimming by an adult.
- 9. Avoid alcohol use when swimming or supervising children around water.
- 10. Remove toys from in and around pool when not in use. Drain and remove toys from bathtub when not in use.
- 11. Instruct babysitters and any child care providers about water safety.

## The NCCFRT plans to:

- Increase public education regarding water safety.
- Support mandated 4-sided isolation pool fencing for all new and existing residential pools.
- Support efforts towards systematic reporting of immersion events to allow for consistent data collection which is critical for the development of drowning prevention strategies.

## For more information on water safety, visit:

- http://www.cdc.gov/safechild/Drowning/index.html
- http://www.poolsafely.gov/
- http://www.safekids.org/water-safety
- http://www.drowningpreventionfoundation.org/safety.asp
- <a href="http://www.healthychildren.org/English/health-issues/injuries-emergencies/Pages/Drowning.aspx">http://www.healthychildren.org/English/health-issues/injuries-emergencies/Pages/Drowning.aspx</a>
- http://www.cdc.gov/HomeandRecreationalSafety/Water-Safety/waterinjuries-factsheet.html
- http://www.health.nv.gov/publications/3112/

<sup>1</sup> Available at <a href="http://www.cdc.gov/homeandrecreationalsafety/water-safety/waterinjuries-factsheet.html">http://www.cdc.gov/homeandrecreationalsafety/water-safety/waterinjuries-factsheet.html</a> Accessed 5/30/2013.

<sup>&</sup>lt;sup>2</sup> American Academy of Pediatrics Committee on Injury, Violence, and Poison Prevention. Policy Statement—Prevention of Drowning. *Pediatrics*. Published online May 24, 2010; 1-8.

<sup>&</sup>lt;sup>3</sup> Available at <a href="http://www.cdc.gov/HomeandRecreationalSafety/Water-Safety/waterinjuries-factsheet.html">http://www.cdc.gov/HomeandRecreationalSafety/Water-Safety/waterinjuries-factsheet.html</a>. Accessed 12/6/2011.

<sup>&</sup>lt;sup>4</sup> Clear Danger: A National Study of Childhood Drowning and Related Attitudes and Behaviors; April 2004. Available at <a href="http://corpslakes.usace.army.mil/employees/watersafety/pdfs/2004%20National%20Study%20of%20Childhood%20Drowning%20&%20Related%20Attitudes.pdf">http://corpslakes.usace.army.mil/employees/watersafety/pdfs/2004%20National%20Study%20of%20Childhood%20Drowning%20&%20Related%20Attitudes.pdf</a>

<sup>&</sup>lt;sup>5</sup> NYS Fire Prevention And Building Codes available at: <a href="http://www.dos.ny.gov/DCEA/pdf/PoolsumUC0708.pdf">http://www.dos.ny.gov/DCEA/pdf/PoolsumUC0708.pdf</a>