



Drownings and Near-Drownings in Riverside County, 2009-2013

A monthly informational bulletin from Riverside County Department of Public Health

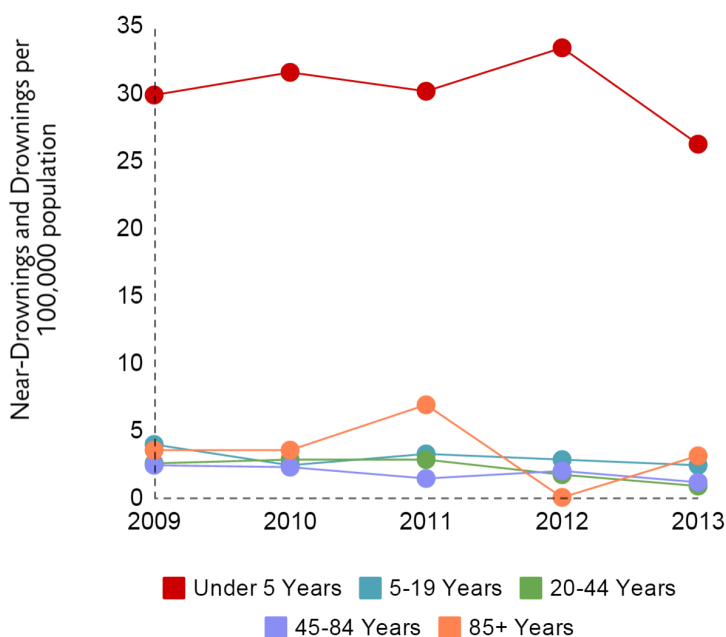
Introduction

In the United States and California, drowning is a leading cause of death among young children under the age of five. In Riverside County, drowning is the number one cause of injury-related death for children 1 to 4 years old. For children and adults who survive near-drowning experiences, there can often be long-term brain damage and life-long disabilities. These disabilities include varying levels of seizures, paralysis, and permanent medical problems including respiratory, cardiovascular, and neuromuscular disorders.

From 2009-2013, there were 97 injury-related deaths among Riverside County children five years and younger. Thirty percent of these deaths were due to drowning. The disproportionate impact on young children and huge potential for preventative interventions illustrates the public health importance of addressing drownings and near-drownings.

3 in 10
injury-related deaths among children 5 years and younger were due to drowning

Figure 1: Drownings and Near Drownings by Age, 2009-2013: Riverside County



Have Drowning Rates Changed in the Last 5 Years?

Over the last five years, there have been a total of 462 drowning-related incidents, of which 107 resulted in death by drowning. Additionally, 25% of drownings have been among young children under five years old. Furthermore, 61% of near-drownings also occur within this same age group.

The overall rate of drowning-related incidents has decreased from 6.2 incidents per 100,000 population in 2009 to 3.9 incidents in 2013. Specifically, the death rate for children under the age of 5 has also declined from 4.2 incidents per 100,000 population in 2009 to 3.1 incidents in 2013.

Although the overall death rate for children has decreased, drowning remains the leading cause of unintentional death in Riverside County for children 1-4 years of age. As compared to other age groups, it is clear that drowning-related incidents are disproportionately higher among young children (Figure 1).

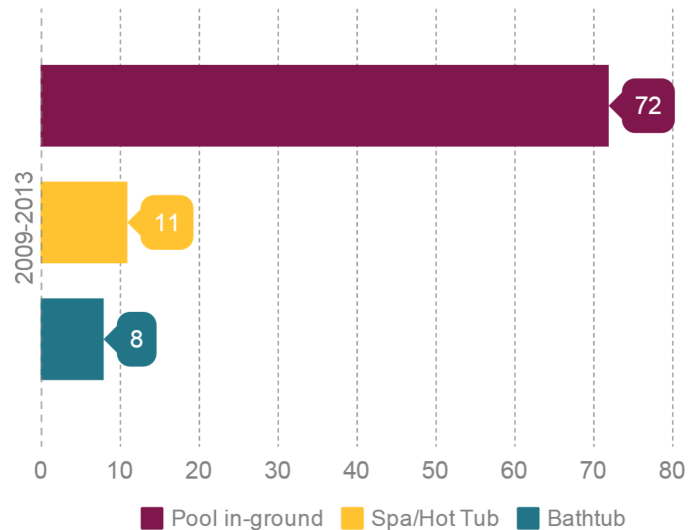
There have been 21 drowning deaths in Riverside County between January 2014 to August 2015.

When and Where do Drownings Occur?

Drowning cases have predominantly occurred in summer months between June to August. The highest number of death occurs in July, with an average of 4 to 5 deaths every year. Nearly 40% of drownings happened from noon to 6 P.M. while an additional 32% occurred between 6 P.M. and midnight. Drownings were most commonly noted to take place in a pool, spa/hot tub, or bathtub (Figure 2).

A majority of drowning incidents, nearly 60%, took place at the victim's residence. Additionally, 29% of adult-drownings showed evidence of victim's use of alcohol and/or drugs. Drowning incidence is slightly higher among Males (58.6%) and higher among Whites (46.4%) and Hispanics (36.2%). The Department of Public Health has been monitoring drowning-related incidents since April 2006 through the Submersion Incident Report Form (SIRF) Project, an ongoing multidisciplinary data collection project in Riverside County.

Figure 2: Drowning-related Incidents by Incident Site, 2009-2013: Riverside County



From the Desk of Erin Malone, MPH: Program Coordinator, Injury Prevention Services

The single most important factor in pediatric drowning is the level of child supervision. Many drowning incidents occur when a parent or caregiver leaves, even for only a brief period of time, or when they are nearby but not paying close attention. Young children need to be closely supervised around all bodies of water. Parents and caregivers should avoid any distracting activities when their children are in or around the water and always be within arms-reach. Consider installing a four-sided pool fence (at least four feet high) and installing self-closing

gates that are out of reach for children. Learn CPR and first aid. Even with swimming lessons, there needs to be an adult present at all times. In 2014, a total of 15 drownings occurred in Riverside County. As of August 2015, Riverside County had already experienced 6 drownings, including the deaths of three children age five and under. Most drowning deaths and injuries are preventable and the County of Riverside Department of Public Health is committed to keeping families safe.

For more information visit: www.rivcoips.org

RivCo Water Safety Coalition

After a series of drownings and near drownings, a collaborative of various Riverside County departments was formed in the summer of 2015 to create and implement a drowning prevention campaign. The health and well-being of children is everyone's responsibility and through the RivCo Water Safety Coalition the community can learn what it takes to keep the little ones safe. The campaign will feature written materials – in English and Spanish – that provides safety tips, links to drowning prevention websites and videos with safety messages.

Methodology

The data used in this brief is from two sources, EpiCenter data and SIRF Project data. EpiCenter is an online resource sourced by CDPH Vital Statistics Death Statistical Master Files. The County-wide SIRF Project was developed by the Riverside County Children's Injury Prevention Network and Drowning Task Force in June 2004. Funded through First 5 Riverside, The SIRF Project is an on-going, highly accurate, data collection project that utilizes first response agencies (law enforcement, fire departments, paramedics, EMTs) to report key information from all fatal and non-fatal drowning incidents that occur in Riverside County. Due to varying factors, such as deaths outside of Riverside County, guardians or adults going directly to a hospital following a near-drowning incident, and incomplete SIRF reports, 80% of drowning and near drowning cases are fully accounted for in the SIRF Project.

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References:

1. California Department of Public Health, Vital Statistics Death Statistical Master Files, Safe and Active Communities Branch
2. California Office of Statewide Health Planning and Development, Emergency Department Data
3. Riverside County Submersion Incident Report, 2009-2013