

UNINTENTIONAL INJURIES

Public Health Issue

Unintentional injuries refer to injuries that are unplanned [1] and typically preventable when proper safety precautions are followed [2]. The Center for Disease Control and Prevention (CDC) defines unintentional injury as “the physical damage that results when a human body is suddenly subjected to energy in amounts that exceed the threshold of physiologic tolerance-or else the result of a lack of one or more vital elements, such as oxygen [2].”

Due to their size, development, inexperience, and natural curiosity, children and teenagers are especially vulnerable to unintentional injury [2]. Some of the most common types of unintentional injuries in the United States include: motor vehicle accidents, suffocation, drowning, poisoning, fire/burns, falls and sports and recreation [2]. Unintentional injuries are the leading cause of death among Florida residents ages 1-44 and the fourth leading cause of death overall [3].

Magnitude and Trend

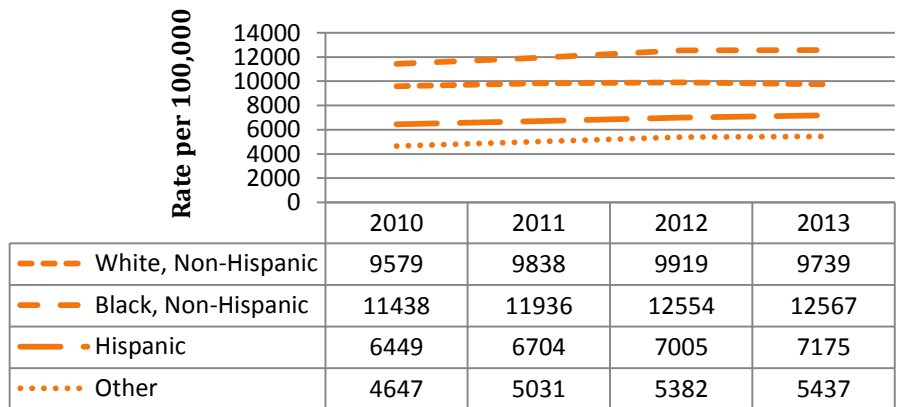
Each year in Florida, 1 in 10 children (ages 19 years and younger) are injured seriously enough to require a visit to the emergency room or admission to the hospital [4]. While statewide unintentional injury rates remained steady in recent years (Figure 1), Florida’s age-adjusted injury death rates are higher than the national average. In 2011,

Florida’s age-adjusted injury death rate for all unintentional

injuries was higher than the national average by 7.4% [3]. Among children, the trend worsens. Florida’s age-adjusted injury death rate for unintentional drowning among children 1-4 years of age was 266, which was 7% higher than the national average [3].

Racial/ethnic disparities exist such that unintentional injury rates are substantially higher among non-Hispanic (NH) black children than among NH white and Hispanic children [Figure 1].

Figure 1: Non-Fatal Unintentional Injury Age-Adjusted Rate for Inpatient Visits by Race/Ethnicity for Children Age 0-24, 2010-2013



Source: Florida Department of Health, Injury Prevention

National and State Goals

There are currently 17 Healthy People 2020 Objectives (measures IVP-11 through IVP-28) aimed at decreasing unintentional injuries ranging from increasing age-appropriate vehicle restraint system use in children to reducing sports and recreation injuries [5]. Florida has identified three priority areas within unintentional injury that correspond with HP 2020 objectives: motor vehicle safety and injury prevention, drowning and near-drowning and helmet safety.

Additionally, the Florida State Health Improvement Plan 2012-2015 identified the following objectives associated with their Health Promotion Goal 4: Prevent and Reduce Unintentional and Intentional Injuries [6]:

- OBJECTIVE HP4.1.2 By Dec. 31, 2012, develop and implement annually thereafter a statewide early childhood (ages 1–4) safety and drowning prevention campaign.
- OBJECTIVE HP4.1.3 By Dec. 31, 2015, reduce the rate of deaths from all causes of external injury among Florida resident children ages 0–14 from 9.0 per 100,000 to 7.6 per 100,000 in those Florida counties with existing state-local injury prevention partnerships.
- OBJECTIVE HP4.2.1 By Dec. 31, 2012, and annually update data sources in the Florida Injury Surveillance Data System and disseminate annual injury data report.
- OBJECTIVE HP4.3.1 By Dec. 31, 2015, reduce the statewide trauma mortality rate from 6.5% to meet the average U.S. trauma mortality rate of 4.4% or less.

Current State Programs and Initiatives

Safe Kids Florida, led by the Injury Prevention Program at the Florida Department of Health, uses local coalitions to provide and promote leadership in their communities to reduce unintentional childhood injury and death [4]. Safe Kids Florida works to reduce unintentional injury and death by promoting community awareness and education, supporting public policies and programs that reduce injury and providing safety education on various risk areas including traffic and water safety [4]. Currently, there are 11 Safe Kids coalitions across the state covering 77% of Florida’s population 19 and under [4].

Florida leads the country in drowning deaths of children age 1-4 years. Thus in 2011, the Injury Prevention Program launched the Waterproof FL: Pool Safety is Everyone’s Responsibility initiative. This campaign, focusing on early childhood drowning prevention, identifies supervision, barriers, and emergency preparedness as three layers to increase pool safety. The *WaterproofFL* website (<http://www.floridahealth.gov/alternatesites/waterprooffl/>) also offers an online toolkit for partners, advocates, and parents across the state [3]. In May 2014, the Florida Department of Children and Families (DCF) launched its “Eyes on the Kids” campaign, also targeting water safety.

Public Health Strategies and Practices

Unintentional injury and death during childhood is largely preventable. A common strategy to approaching unintentional injury and death is the “Three Es”: education, enforcement and engineering [2]. Education involves informing the public, including children, about potential risk and safety options. Enforcement uses the legal system to influence behavior and the environment to create conditions to reduce injury. Engineering refers to the use of environmental and product design strategies to reduce the chance of injury or to reduce the amount of energy to which someone is exposed [2]. This multifaceted approach engages several sectors of the community and creates an integrated way to prevent unintentional injury. Many of the traditional injury

prevention products, such as helmets and seat belts, have proven to be cost effective. On average, a \$46 child safety seat generates \$1,900 in cost benefits [7].

Unintentional injury and death varies by the age of the child: suffocation is the leading cause of unintentional injury death among infants less than 1 year, drowning is the most common among young children age 1-4 years and motor vehicle crashes are the most common cause of unintentional injury death in children over 5 years, adolescents and young adults [8]. Thus, effective prevention strategies targeting unintentional injuries should be tailored according to age and risk.

DOH Capacity

The 2009-2013 Florida Injury Prevention Strategic Plan provides the prioritizing steps to reducing injury across the state. The 2009-2013 Florida Injury Prevention Strategy Plan serves as a successor to Florida's 2004-2008 Injury Prevention Strategic Plan, which serves as a model for other states nationwide. Florida is the first state injury prevention program to complete the implementation of an existing five year strategic plan while drafting a successor plan [9]. The development and implementation of the state plan is funded by the competitive Core Violence and Injury Prevention Program grant awarded for 2011-2016 by the Centers for Disease Control and Prevention. The Florida Injury Prevention Advisory Council (FIPAC) includes over 50 individuals from organizations across the state, and serves to guide the implementation of the state plan.

References

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