

# **Childhood Unintentional Injuries in San Diego County: *A Report to the Community***



**Safe Kids San Diego**  
September 2009

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## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Acknowledgements**

Safe Kids San Diego gratefully acknowledges the contributions of the following agencies who made this report possible.

**Safe Kids San Diego**

**Rady Children's Hospital, San Diego**

**The County of San Diego, Public Health Services, Emergency Medical Services**

**The County of San Diego, Public Health Services, Community Epidemiology**

**The California Department of Public Health, Epidemiology and Prevention for Injury Control Branch**

### **The San Diego Injury Surveillance System**

The County of San Diego, Public Health Services Injury Surveillance System monitors both intentional and unintentional injury in children, adults, and seniors. Data used for this report include emergency department discharge, hospitalization, and death. For additional information on the Injury Surveillance System, please contact:

Community Health Statistics Unit  
6255 Mission Gorge Road  
San Diego, CA 92120  
(619) 285-6429  
[www.sdhealthstatistics.com](http://www.sdhealthstatistics.com)



## Safe Kids San Diego Childhood Unintentional Injury Report

September 10, 2009

Dear Friends,

Safe Kids San Diego, in collaboration with the County of San Diego, Health and Human Services Agency, Public Health Services, Division of Emergency Medical Services, has produced a childhood unintentional injury report for San Diego County. This report to the community describes local injury among children ages 0-14 years. These data provide important information on the major mechanisms of injury and will drive the development of future prevention programs within the Safe Kids coalition. The report includes emergency department discharge, hospitalization, and death data.

The County of San Diego, Public Health Services, Injury Surveillance System data only capture injuries among children who encounter the medical system through either the emergency department, hospital, or medical examiner. Many non-life threatening injuries are treated at home or self-transported to urgent care or pediatricians. Injuries that occur at school are most often treated by a school nurse then referred to a pediatrician. These injuries are not captured in the Injury Surveillance System, but represent an important piece of the unintentional injury equation.

In the first Safe Kids injury report to the Community in 2000, unintentional injury was identified as a community problem that demanded a community solution. Safe Kids San Diego continues to raise awareness about unintentional injury in children. However, much work remains, especially in high risk populations. Community participation is essential to address the many causes of injury to children and serves as the keystone of our success.

We invite you to participate in our efforts toward creating an environment that reduces the risk of injury in children and encourages active and healthy lifestyles.

Sincerely,

Mary Beth Moran  
Coordinator  
Safe Kids San Diego  
(858) 576-1700 ext 3547



# Safe Kids San Diego Childhood Unintentional Injury Report

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# Safe Kids San Diego Childhood Unintentional Injury Report

## Introduction

Safe Kids San Diego is a coalition of community organizations and citizens devoted to providing advocacy, public awareness and education to prevent and reduce unintentional injuries and fatalities to children less than 14 years of age.

The **vision** of Safe Kids San Diego is to create a community where children ages 0-14 are free from unintentional injury and death. The **mission** of Safe Kids San Diego is to prevent and reduce unintentional injuries and fatalities of children ages 0-14 through education, public awareness and advocacy.

Safe Kids San Diego is part of a Worldwide Safe Kids organization. Safe Kids Worldwide was founded by Dr. Martin Eichelberger and Dr. C. Everett Koop at the Children's National Medical Center in Washington D. C. The San Diego Safe Kids Campaign was born out of the San Diego Safety Council which began in 1987. In 1992 Rady Children's Hospital became the lead agency and the coalition became Safe Kids San Diego. The coalition currently consists of the following organizations:

- ♥ American Red Cross
- ♥ Healthy Homes Collaborative
- ♥ Pacific Safety Council
- ♥ San Diego Unified School District
- ♥ Cox Communications
- ♥ Pool Safe Communications
- ♥ U.S. Consumer Product Safety Commission
- ♥ Bike Coalition of San Diego
- ♥ County of San Diego Health and Human Services Agency
- ♥ Altrusa International
- ♥ YMCA-Childcare Services

There is an ongoing campaign to expand our coalition and develop new task force initiatives. It is our intent that this report will increase awareness of the prevalence of injury and encourage community members to join a coalition task force to develop and implement educational and advocacy program to address these issues.

**Report Organization.** Children develop at different rates, but generalities about their physical, cognitive, and behavioral development can be made at different ages. Based on research presented by Safe Kids in "Raising Safe Kids: One Stage at a Time," injuries occurring during the following four stages of development will be examined in the *Safe Kids San Diego Childhood Unintentional Injury Report*: Infancy (0-12 months), Early Childhood (1-4 years), Middle Childhood (5-9 years), Early Adolescence (10-14 Years).

Introduction

## **Safe Kids San Diego Childhood Unintentional Injury Report**

The report does not describe injuries that are caused by intentional mechanisms such as homicide, suicide and assault. However, it should be noted that current California law states intent cannot be verified in overconsumption of over-the-counter or prescription medication, therefore they are deemed unintentional poisonings.

In addition to injury data, the report includes:

- ♥ Updates on Safe Kids San Diego; past, present and future activities
- ♥ Update on legislation that has passed since the last report
- ♥ Prevention Strategies and tips for parents and caregivers

The Safe Kids coalition suggests that you to use this information to assist in your efforts to support prevention activities in your home and community. By focusing on injuries that affect the greatest number of victims or pose the greatest risk to a specific population group, balanced with those injuries that have the greatest medical and societal impact, resources can be allocated to appropriate prevention efforts.

**Safe Kids San Diego Activities.** The focus of Safe Kids San Diego over the last 2 years has been threefold:

- ♥ Advocacy for public policy and legislative change
- ♥ Public Awareness Media Campaigns
- ♥ Program Development and implementation of prevention strategies

Safe Kids San Diego takes its role in child advocacy seriously. These activities range from seeking proclamations' for drowning prevention, the passage of new laws requiring bike helmets and child passenger restraints as well as laws that prohibit novelty lighters.

Media campaigns have proven an effective tool in raising public awareness to assist in these legislative changes. The proactive media department of the lead agency has worked with each task force to promote injury prevention messages with regular installments in morning news programming. Finally, but most importantly members of the Safe Kids Coalition have been working at the grass roots level with communities to educate parents on child passenger safety restraints and our frequent car seat check up events, educating parents on appropriate helmet fitting and safe biking, and educating schools systems on safe pedestrian habits through the Walk this Way events.

Throughout the report, each task force has described in detail the activities they completed and goals they accomplished in the last 2 years, as well as future programming. We hope that these descriptions will entice you to find your niche in a current or proposed task force initiative.

### **Introduction**

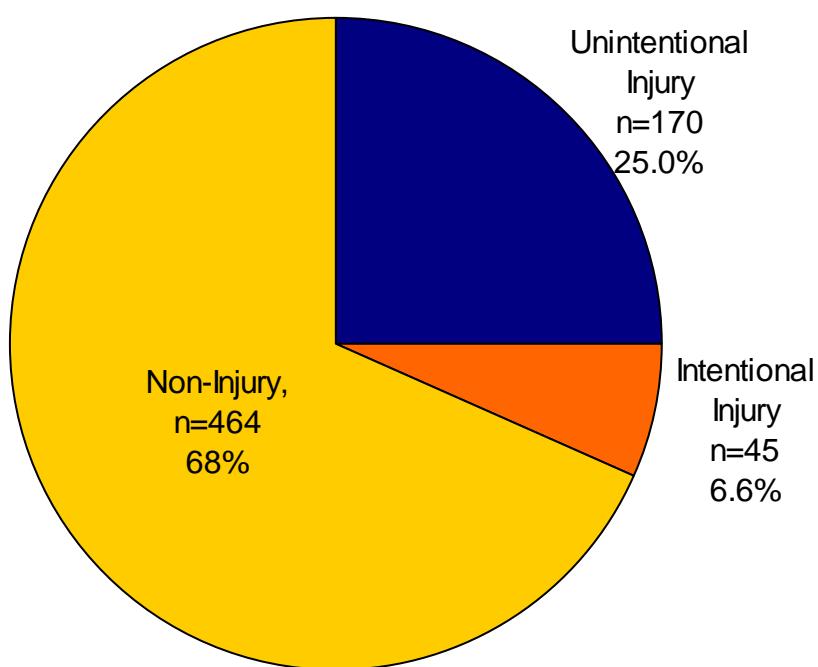
## Safe Kids San Diego Childhood Unintentional Injury Report

### Injury as a Proportion of All Childhood Death

Among children ages 0-14 years in San Diego County, injuries are a leading cause of death, the majority of which are due to unintentional injuries. From 2000-2007, 25% of all deaths among children ages 1-14 years were due to unintentional injuries. For infants, the proportion of deaths due to injury was much smaller (2.7%).

On average, approximately 25 children ages 0-14 years die as the result of unintentional injuries each year. From 2000-2007, there were 203 total childhood unintentional injury deaths, for an average rate of 4.0 per 100,000. In other words, for every 100,000 children ages 0-14 years in the population, 4 died due to unintentional injuries each year.

### Cause of Death by Injury Status and Intent, 1-14 Years<sup>‡</sup>, San Diego County, 2000-2007



Source: California Department of Public Health, Center for Health Statistics, Death Statistical Master Files; SANDAG Population estimates, 2000-2007; Prepared by CoSD HHSA Community Epidemiology, 3/19/2009. \*Children <1 year of age not included in analysis.

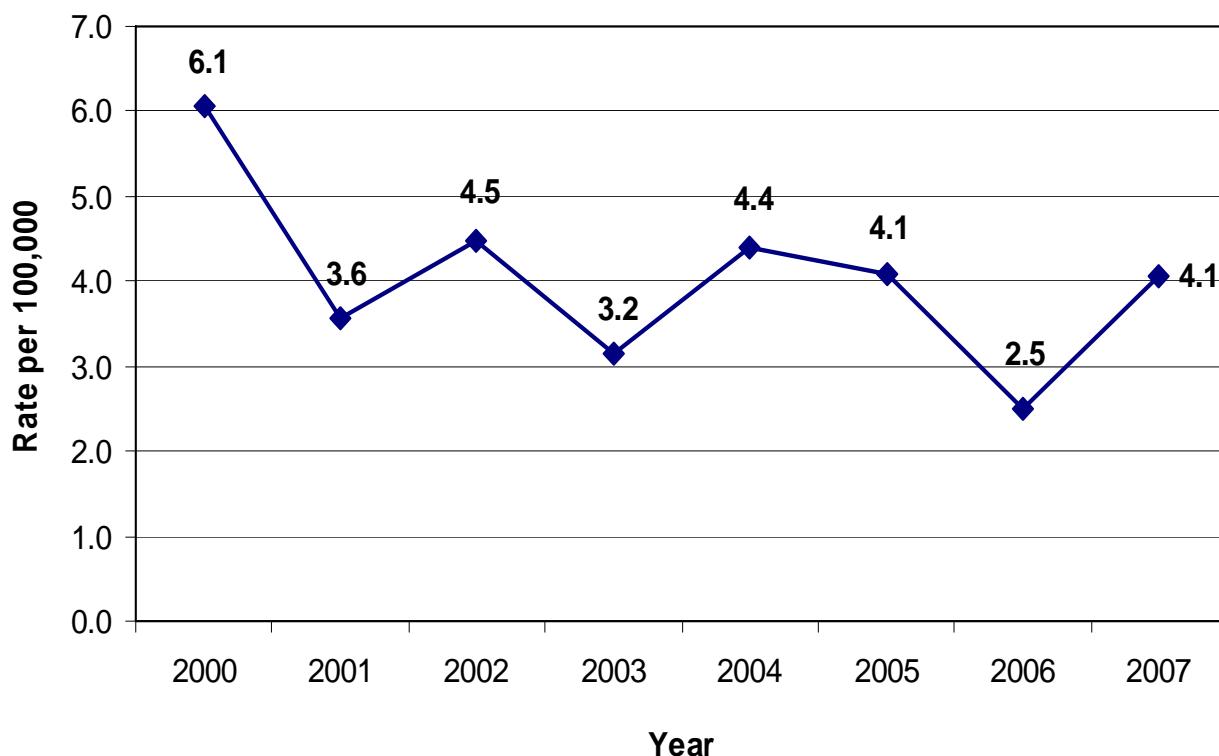
Overview

## Safe Kids San Diego Childhood Unintentional Injury Report

### Unintentional Injury Death Trends

Over time, the rate of both unintentional injury death among 0-14 year old children has fluctuated, but appears to be decreasing. In 2000, the unintentional injury death rate was 6.1 per 100,000, compared to 4.1 per 100,000 in 2007.

### Rate of Unintentional Injury Death by Year and Intent, San Diego County, Children Ages 0-14 Years, 2000-2007



Source: California Department of Public Health, Center for Health Statistics, Death Statistical Master Files; SANDAG Population estimates, 2000-2007; Prepared by CoSD HHSA Community Epidemiology, 3/19/2009. \*Rates not calculated on fewer than 5 events

Overview

## Safe Kids San Diego Childhood Unintentional Injury Report

### Leading Causes of Injury Death

The leading cause of injury death for all age groups was an unintentional injury. From 2000-2007, 33 infants died as the result of an unintentional injury. Unintentional suffocation (36%) and drowning (14%) were the most common causes of injury death. Eighty-eight children ages 1-4 years died due to an injury, most often the result of drowning (36%), and 127 older children ages 5-14 years died as the result of an injury during this time period, most often due to motor vehicle occupant crashes (20%), or pedestrian-related crashes (17%).

### Leading Causes of Injury<sup>†</sup> Death by Age Group, San Diego County, 2000-2007

Rank	Age Group of Victim			
	<1	1-4	5-9	10-14
1	Suffocation 18	Drowning/ Submersion 32	Motor Vehicle Occupant 13	Motor Vehicle Occupant 13
2	Homicide 17	Homicide 17	Pedestrian- Related 10	Pedestrian- Related* 12
3	Drowning/ Submersion 7	Pedestrian- Related 11	Motor Vehicle - Unspecified 7	Homicide 12*
4	Undetermined Intent 4	Motor Vehicle Occupant* 4	Drowning/ Submersion 4	Suicide 11
5	*Remaining deaths included one death each in six different categories.	Suffocation* 4	Homicide 3	Motor Vehicle - Unspecified 9

Source: California Department of Public Health, EPIC Branch, Vital Statistics Death Statistical Master File, 2000-07.  
Prepared by: COSD HHSA PHS EMS, June 2009

Note: Leading causes are determined by the total number of deaths in each category from 2000-2007.

\*Indicates a tie.

<sup>†</sup> All injuries are unintentional except for homicide and suicide categories, which were included for comparison.  
Cases in which the mechanism of injury was unknown are excluded.

Overview

## Safe Kids San Diego Childhood Unintentional Injury Report

### Leading Causes of Injury Hospitalization

In 2006, there were 1,146 children ages 0-14 years who were hospitalized as the result of an injury. Across all age groups, the leading cause of injury was fall, accounting for more than one-third of all hospitalizations (37%). The second leading cause for infants were suffocation (13%), while toddlers ages 1-4 years were hospitalized for unintentional poisoning (11%) or burn/scald injuries (8%). Struck by injuries were the second most common injury hospitalization for 5-14 year olds (11%). Struck by injuries include bumping into, colliding with, kicking against, stepping on or being struck by any object or person, whether moving or stationary.

### Leading Causes of Injury<sup>†</sup> Hospitalization by Age Group, San Diego County, 2006

Rank	Age Group of Victim			
	<1	1-4	5-9	10-14
1	Fall 29	Fall 114	Fall 150	Fall 130
2	Assault 23	Overdose/ Poisoning 33	Struck by Object 25	Struck by Object 55
3	Suffocation 13	Burn/Scald 24	Natural/ Environmental 20	Motor Vehicle Occupant* 38
4	Overdose/ Poisoning* 8	Drowning/ Submersion 19	Bicycle-Related 19	Transport - Other* 38
5	Burn/Scald* 8	Natural/ Environmental 17	Motor Vehicle Occupant 16	Self-Inflicted* 31
6	Struck by Object 4	Struck by Object 14	Pedestrian- Related 12	Bicycle-Related* 31

Source: California Office of Statewide Health Planning and Development, Patient Discharge Data, 2006. Prepared by: COSD HHSA PHS EMS, June 2009

Note: Leading causes are determined by the total number of hospitalizations in each category.

\*Indicates a tie.

<sup>†</sup> All injuries are unintentional except for assault and self-inflicted categories, which were included for comparison. Cases in which the mechanism of injury was unknown are excluded.

Overview

## Safe Kids San Diego Childhood Unintentional Injury Report

### Leading Causes of Injury Emergency Department Discharge

Emergency department (ED) discharges for injury are typically less serious than hospitalizations, but occur more frequently. In 2007, there were 38,550 children ages 0-14 years who were treated and discharged from the ED for an injury. Among all age groups, the most common mechanism of injury was fall (40%), followed by struck by injuries (22%).

### Leading Causes of Injury<sup>†</sup> ED Discharge by Age Group, San Diego County, 2007

Rank	Age Group of Victim			
	<1	1-4	5-9	10-14
1	Fall 1025	Fall 6238	Fall 4188	Fall 3960
2	Struck by Object 224	Struck by Object 2391	Struck by Object 2225	Struck by Object 3545
3	Burn/Scald 62	Overexertion 660	Cut/Pierce 589	Overexertion 1145
4	Overdose/ Poisoning 56	Natural/ Environmental 509	Natural/ Environmental 517	Cut/Pierce 700
5	Motor Vehicle Occupant 54	Cut/Pierce 503	Bicycle-Related 431	Bicycle-Related 621
6	Overexertion 46	Overdose/ Poisoning 489	Motor Vehicle Occupant 396	Motor Vehicle Occupant 462

Source: HASD&IC, CHIP, CoSD HHSA PHS EMS ED Database, 2007. Prepared by: CoSD HHSA PHS EMS, June 2009

Note: Leading causes are determined by the total number of ED discharges in each category.

\*Indicates a tie.

<sup>†</sup>All injuries are unintentional. Cases in which the mechanism of injury was unknown are excluded.

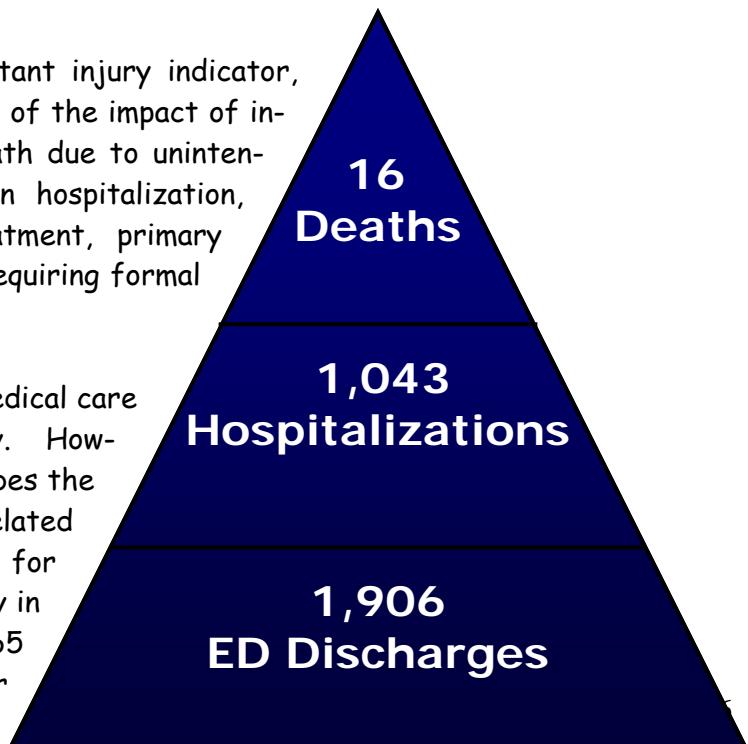
Overview

## Safe Kids San Diego Childhood Unintentional Injury Report

### The Injury Pyramid

While mortality data are an important injury indicator, they represent just a small fraction of the impact of injury on populations. For every death due to unintentional injury, many more result in hospitalization, emergency department (ED) treatment, primary care treatment or treatment not requiring formal medical care.

Unfortunately, primary care and informal medical care treatment for injury is difficult to quantify. However, the injury pyramid to the right describes the total number of unintentional injury-related deaths, hospitalizations, and ED discharges for children ages 0-14 years in San Diego County in 2006. For every one death, there were 65 hospitalizations and 119 ED discharges for unintentional injury.



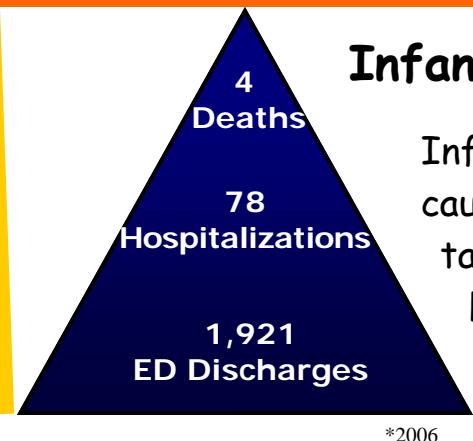
\*2006

A similar pyramid is presented at the beginning of each of the next four age-specific sections of this report to describe the ratio of unintentional injury-related deaths, to hospitalizations, to ED discharges for each age group in 2006.



Injury Pyramid

## Safe Kids San Diego Childhood Unintentional Injury Report



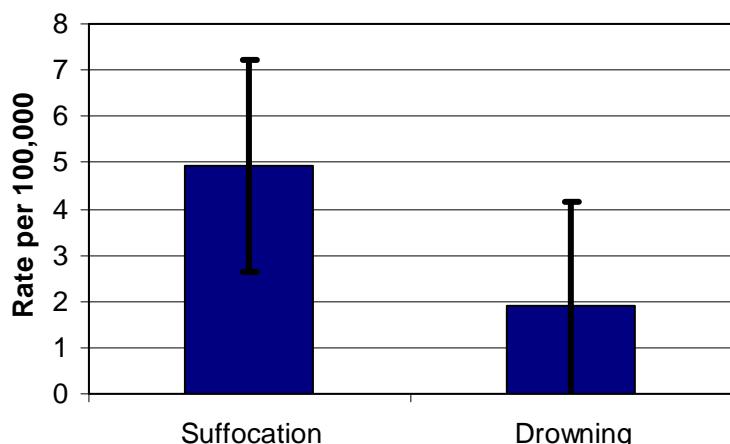
### Infancy: 0-12 Months

Infants are particularly vulnerable to injury because they are completely reliant on adult caretakers for their safety. Their small size and lack of physical and mental development further increase their risk for and the severity of many injuries.

*For every one unintentional injury related death in 2006, there were 20 hospitalizations and 480 ED discharges.*

Although injury is not the leading cause of infant death in San Diego County, the rate of unintentional injury death is higher than for children of other ages. On average, the rate of unintentional injury death was 9.1 per 100,000 from 2000-2007. There were an average of 4 infant deaths per year related to unintentional injury during this time period.

#### Unintentional Injury Death Rates by Type, 0-12 Months, San Diego County, 2000-2007



The leading causes of unintentional injury death among infants in San Diego County were suffocation and drowning. From 2000-2007, the rate of suffocation death among infants was 4.9 per 100,000, and the rate of drowning death was 1.9 per 100,000.

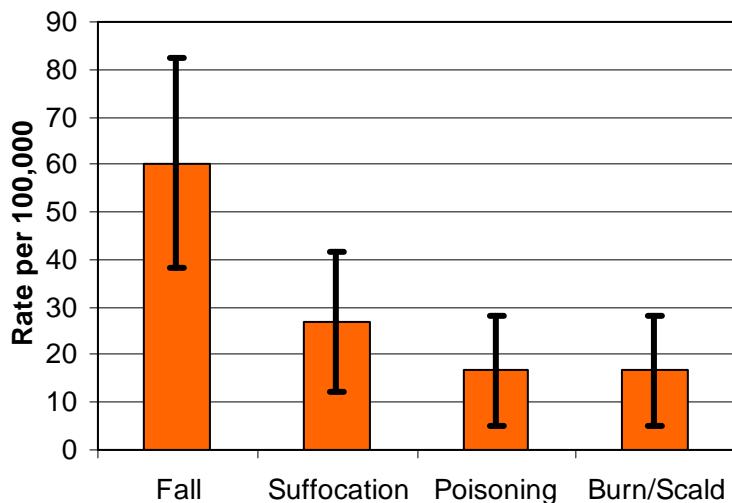
Source: CDPH EPIC, Death Statistical Master Files, 2000-2007.  
Prepared by: CoSD HHSA PHS EMS, June 2009

Infancy

## Safe Kids San Diego Childhood Unintentional Injury Report

The leading causes of unintentional injury hospitalization were falls, suffocation, poisoning, and burns/scalds. In 2006, 78 infants were hospitalized for unintentional injuries, for a rate of 162.3 per 100,000. Twenty-nine of these infants were hospitalized for a fall-related injury (60.4/100,000), the leading cause of unintentional injury hospitalization.

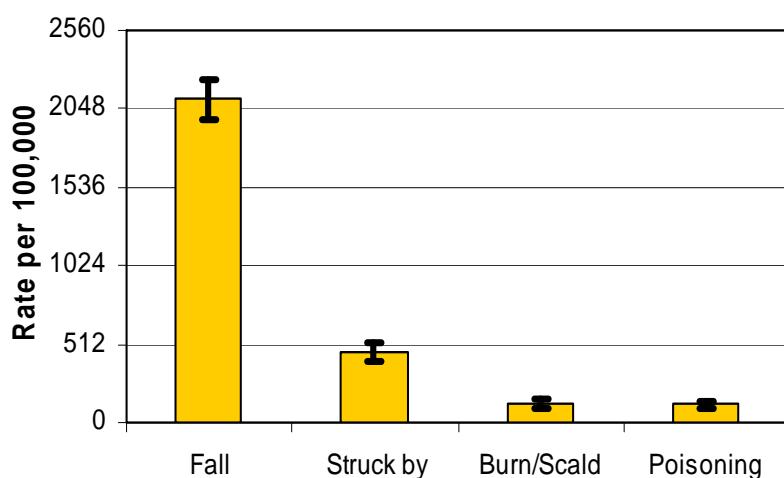
### Unintentional Injury Hospitalization Rates by Type, 0-12 Months, San Diego County, 2006



Source: CDPH EPIC, Patient Discharge Data, 2006.

Prepared by: CoSD HHSA PHS EMS, June 2009

### Unintentional Injury ED Discharge Rates by Type, 0-12 Months, San Diego County, 2007



Source: CoSD HHSA PHS EMS, ED Database, 2007.

Prepared by: CoSD HHSA PHS EMS, June 2009

While infants were more likely to be hospitalized for their injuries than older children, there are still a significantly greater number of ED discharges for unintentional injury than hospitalizations. The most common injury types were falls, struck by, burns and scalds, and poisonings. In 2007, 1,921 infants were treated in a San Diego County ED for an unintentional injury (3951.5/100,000), more than half of which were falls (2108.4/100,000).

Infancy

## Safe Kids San Diego Childhood Unintentional Injury Report

### Suffocation

Suffocation is the most common cause of injury death among San Diego County infants. From 2000-2007, 18 children less than one year of age died due to suffocation (4.9/100,000); 12 of these children suffocated while in bed.

Hospitalization and ED treatment for suffocation are more often due to respiratory obstructions, or choking. In 2006, there were 13 hospitalizations for suffocation, 10 of which were due to choking. In 2007, there were 26 ED discharges, all of which were due to choking on food or other objects.

Suffocation death can be prevented by putting infants to bed in appropriate cribs. Since infants learn by using their senses, they will explore by putting food and objects into their mouths. Respiratory obstruction, or choking injuries, can be prevented by supervising children while playing and eating, and giving children age appropriate toys to play with.



### Drowning

Drowning is the second leading cause of unintentional injury death among infants. From 2000-2007, 7 infants drowned in San Diego County, 4 of which occurred in a bathtub. Near-drowning statistics are difficult to capture, because most children who nearly drown do not seek medical care. In 2006, only one infant was hospitalized due to a near-drowning, and in 2007, 5 were treated in an ED.

Infant drowning deaths are highly preventable when utilizing prevention strategies such as careful caregiver supervision when bathing infants or when near bodies of water, such as pools or spas.

Infancy

## Safe Kids San Diego Childhood Unintentional Injury Report

### Falls

While fall-related deaths during infancy rarely occur, fall-related injuries are the most common cause of both injury hospitalization and treatment in the ED. On average, more than half of all injuries among infants treated in an emergency department are due to falls.

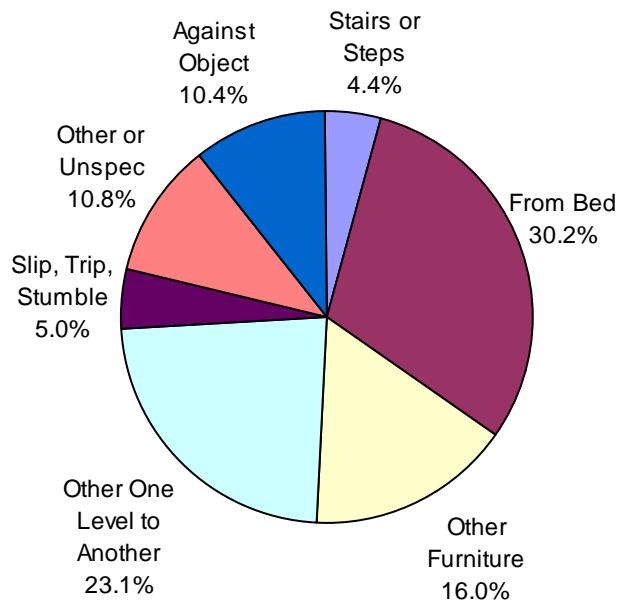
In 2006, 29 infants were hospitalized due to a fall injury. Forty-one percent were from furniture and 48% were from an unspecified object to another level.

In 2007, there were 1,025 infants who were treated in an ED for a fall injury (2108.4/100,000). Most injury types were unspecified (45%), however 33% had superficial injuries or contusions and 10% were open wounds. Nearly all injuries (85%) were to the head, face, or neck, and 5% were traumatic brain injuries (TBI). Thirty percent of injuries were due to falls from a bed.

As infants begin to crawl and walk, it is difficult to avoid a fall. However, serious injuries can be prevented by installing stair gates, securing furniture to the wall, and by never leaving a baby unattended on or near furniture.



**Fall ED Discharges by Mechanism,  
0-12 Months, San Diego County, 2007**



Source: CoSD HHSA PHS EMS, ED Database, 2007.  
Prepared by: CoSD HHSA PHS EMS, June 2009

Infancy

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Poisoning**

Poisoning deaths among infants are relatively uncommon, but the fourth leading cause of both hospitalization and ED discharge due to injury. In 2006, there were 8 hospitalizations due to poisoning, 6 of which were drugs or medicinal substances. In 2007, there were 56 infants treated in an ED for a poisoning, 71% of whom were poisoned by a drug or medicinal substance.

As infants learn to crawl and put things in their mouths, they are more likely to ingest chemicals or small items such as pills that are found within their reach. Poisoning can occur through ingestion or contact with the skin. When in contact with these substances, infants are at increased risk of poisoning compared to older children due to their young age and developing bodies. Prevention of poisoning injury or death includes locking poisons and medication out of sight and reach, and ensuring infants receive the proper dosage of medication for their weight.

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### **Burns and Scalds**

Burn or scald related deaths are uncommon among infants, with no deaths occurring from 2000-2007. Burn and scald injuries, however, do occur and can have serious long-term consequences due to the thin, sensitive skin of infants.

In 2006, there were 8 hospitalizations, all for scalds, 7 of which resulted from hot liquid, steam or tap water. In 2007, there were 62 ED discharges for burns and scalds. Only 4 of these injuries (6%) were burns from fire and flame, the remaining 58 were scalds due to hot substances (47%), hot liquid or steam (26%), or hot tap water (18%). Nearly half of all injuries were to the upper extremities (47%), 23% were to the lower extremities, and 15% were to the head, face or neck. Nearly three-quarters (71%) were male infants.

Burn and scald injuries can be prevented by checking water temperatures before placing infants in the bath, keeping hot beverages and surfaces out of their reach, never micro waving bottles, and educating caregivers not to drink or eat hot substances while holding a baby.

**Infancy**

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Home Safety**

#### **Safe Kids San Diego Prevention Activities: Past, Present and Future**

Since the last report in 2002 significant legislation has passed to protect children from lead exposure. The Lead Hazard Control Ordinance became effective May 2008 in San Diego. This ordinance requires the following:

- ♥ Childcare providers to ensure children's blood lead levels are tested prior to enrollment,
- ♥ Home improvement stores post warning signs and lead poisoning prevention education,
- ♥ Property owners inspect units for potential lead hazards upon turn over,
- ♥ Specific guidance preventing lead hazards from being created during renovations, which includes clearance sampling from certified lead inspectors after renovation.

As part of a city wide commitment to ensure safe homes for children, The Lead Safe Neighborhoods Program applied and received federal HUD funding. This funding is being used to provide comprehensive inspections of low income housing through The Healthy Homes Collaborative in San Diego (SDHHC). Safe Kids San Diego was contacted by SDHHC to provide training and ongoing education to augment the SDHHC program by providing information on strategies to prevent unintentional injuries in the home. Specifically Safe Kids will be providing instruction to inspectors, community based organizations, public health professionals and others committed to safe housing on identifying home safety hazards for children. This instruction will also provide strategies and recommend products to prevent the risk of injury to children in the home.

Altrusa International joined the task force in 2009 with their Kendall project. The Kendall Project is a campaign to educate the public of the risk of furniture tipping on young children. Altrusa joined the task force to distribute educational material along with the Healthy Homes Collaborative at the Healthy Homes Pavilion at Earth Day and the Linda Vista Cultural Fair.

The Home Safety Task force will expand their collaborations to include the Burn Institute and other appropriate and interested partners. A goal of this task force will be to maintain surveillance on legislation affecting home safety. A bill was introduced to the Senate in July 2008 banning the sale of novelty lighters (Protect Children from Dangerous Lighters Act, S. 3375). Eight states have already enacted this law. Safe Kids San Diego has appointed a policy/legislative representative to track legislation to report updates to the coalition. The Home Safety Task Force will use these reports to direct future activities.

**Home Safety**

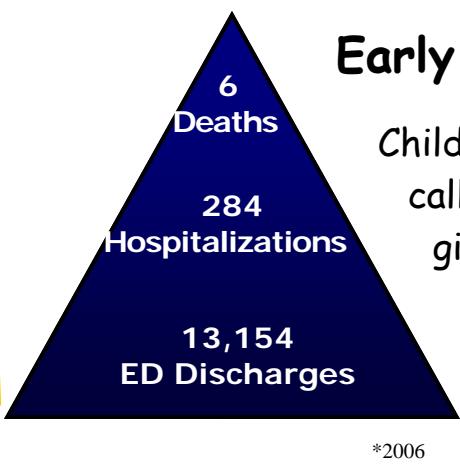
## Safe Kids San Diego Childhood Unintentional Injury Report

### Prevention Activities you Can Do

- ♥ Check all toys for potential choking hazards such as loose parts or pieces that can be easily removed. Use a small parts tester (such as the cardboard tube of a toilet roll) to test if a part is too small for your child to play with. If a toy can fit through the tube it's too small for a child under 4.
- ♥ Make sure that toys are appropriate for the age and development of your child.
- ♥ Change all blind cords so that they no longer form a continuous loop.
- ♥ When children of different ages are in the same area, monitor the items in the reach of small children. Objects appropriate for an 11 year old are usually not safe for a 2 year old.
- ♥ Keep plastic bags and balloons away from young children. Both can become lodged in the airway and cause suffocation.
- ♥ Encourage children not to chew on objects such as pens and other non-edible objects.
- ♥ Be sure food is appropriate for the child's age and development. Check with your pediatrician for recommendations on when to introduce specific foods to your child. Avoid hot dogs, small carrot or extremely chewy foods.
- ♥ Do not sleep with a young child in your bed. The Consumer Product Safety Administration has issued an alert with this advisement due to the increasing number of young children suffocating in adult beds as the result of being crushed by another individual, becoming entangled in the bedding or being wedged between the bed and the wall. Children who are suffocating may not be able to make audible sounds of distress.
- ♥ Place window stops in your windows and place furniture away from windows to prevent accidental falls.
- ♥ Secure televisions and tall furniture to the wall using wall straps.
- ♥ Place gates in front of stairs or other hazards.
- ♥ Place large outlet covers over electric outlets (make sure are large enough not to fit through the small parts tester).
- ♥ Turn down your water heater to 120 degrees and always test the water temperature before placing your child in a bath, the water temperature should not exceed 100 degrees.
- ♥ Place safety locks on all kitchen appliances such as the refrigerator, dishwasher and oven.
- ♥ When in doubt use door knob covers to keep your child out of a room or as a second barrier for safety.

Home Safety

## Safe Kids San Diego Childhood Unintentional Injury Report



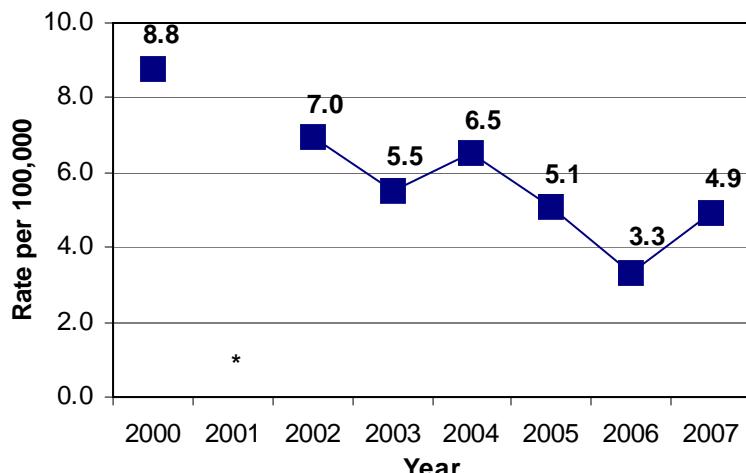
### Early Childhood: 1-4 Years

Children in early childhood are developing physically and mentally. Their increasing mobility gives them a newfound independence to explore their surroundings. However, children of this age are still unable to make appropriate decisions about safety, increasing their risk of injury.

*For every one unintentional injury related death in 2006, there were 47 hospitalizations and 2,192 ED discharges.*

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**Unintentional Injury Death Rates by Year,  
Ages 1-4 Years, San Diego County, 2000-2007**



Unintentional injury is the leading cause of death in San Diego County among children 1-4 years of age. On average, the rate of injury death was 5.3 per 100,000 from 2000-2007. While it fluctuated during this time period, there was a general decrease from 8.8 per 100,000 in 2000 to 4.9 per 100,000 in 2007.

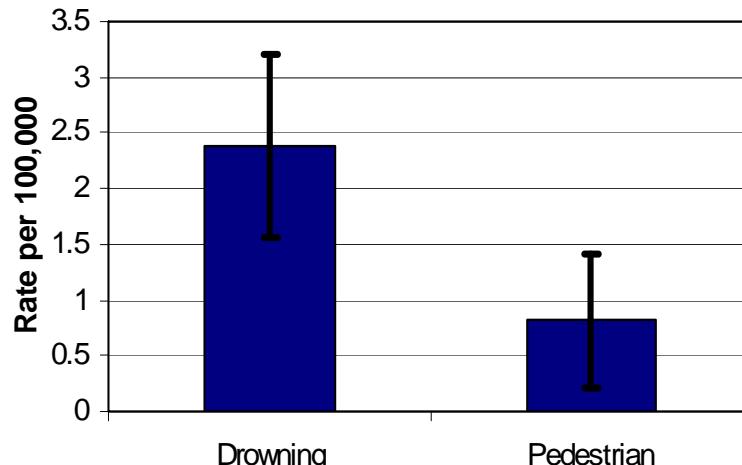
Source: CDPH CHS, Death Statistical Master Files, 2000-2007.  
Prepared by: CoSD HHSA Community Epidemiology, June 2009  
\*Rates not calculated on fewer than five events

Early Childhood

## Safe Kids San Diego Childhood Unintentional Injury Report

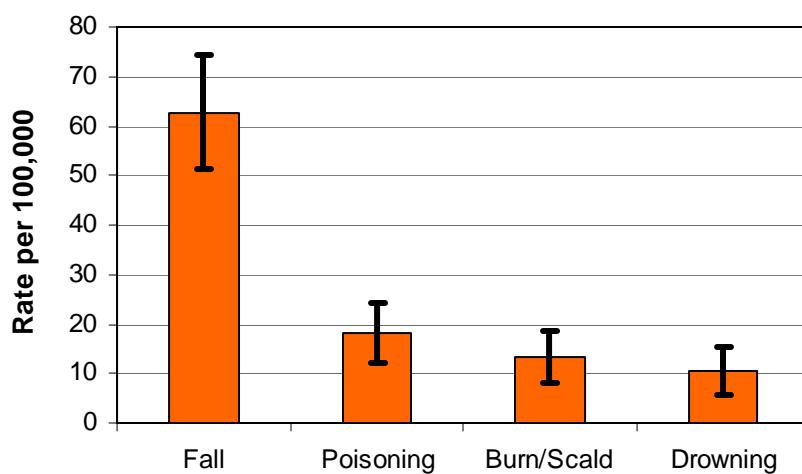
### Unintentional Injury Death Rates by Type, Ages 1-4 Years, San Diego County, 2000-2007

The leading causes of injury death among 1-4 year olds in San Diego County were drowning (2.4/100,000) and pedestrian-related crashes (0.8/100,000). While the mortality rates due to injury are low when compared to morbidity rates among this age group, injury deaths are highly preventable.



Source: CDPH EPIC, Death Statistical Master Files, 2000-2007.  
Prepared by: CoSD HHSA PHS EMS, June 2009

### Unintentional Injury Hospitalization Rates by Type, Ages 1-4 Years, San Diego County, 2006



Source: CDPH EPIC, Patient Discharge Data, 2006.  
Prepared by: CoSD HHSA PHS EMS, June 2009

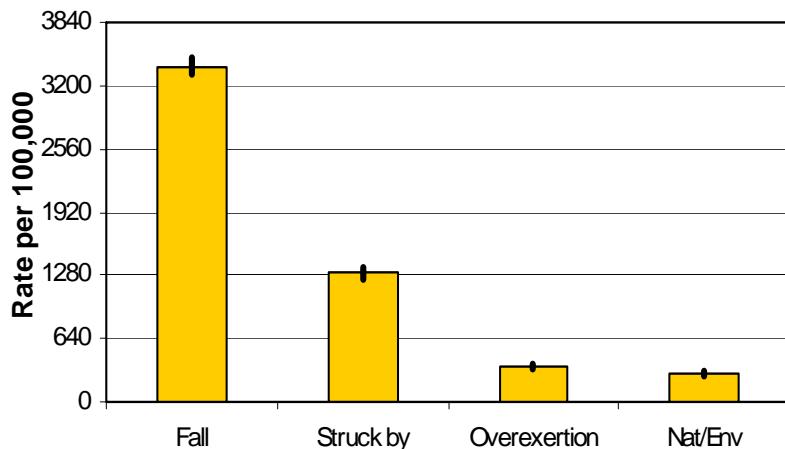
The leading causes of injury hospitalization were falls, poisoning, and burns and scalds. In 2006, 295 children ages 1-4 years were hospitalized for their injuries (162.6/100,000). Of these, 114 were fall-related injuries (62.8/100,000) and 33 were poisonings (18.2/100,000).

Early Childhood

## Safe Kids San Diego Childhood Unintentional Injury Report

The leading causes of injury ED discharge were falls, struck by, overexertion, and natural or environmental injuries. In 2007, 13,648 children ages 1-4 years received treatment in an ED for their injuries (7425.8/100,000). In other words, for every 13 children in this age group living in San Diego County, there was one injury-related ED discharge in 2007. The rate of fall-related ED discharge was 3394.1 per 100,000; or for every 29 children of this age living in San Diego County in 2007, there was one fall-related ED discharge.

### Unintentional Injury ED Discharge Rates by Type, Ages 1-4 Years, San Diego County, 2007



Source: CoSD HHSA PHS EMS, ED Database, 2007.

Prepared by: CoSD HHSA PHS EMS, June 2009

## Drowning



There are an average of 4 to 5 deaths each year among children ages 1-4 years due to drowning. From 2000-2007, 21 of 32 drowning deaths in San Diego County occurred in a swimming pool and 7 occurred in a bathtub. Near-drowning statistics are difficult to capture, because most children who nearly drown do not seek medical care. However, in 2006, 19 children were hospitalized due to a near-drowning, and in 2007, 28 were treated in an ED.

Drowning deaths are highly preventable when utilizing prevention strategies such as careful caregiver supervision, the use of appropriate pool safety equipment, and swimming lessons for young children.

Early Childhood

## Safe Kids San Diego Childhood Unintentional Injury Report

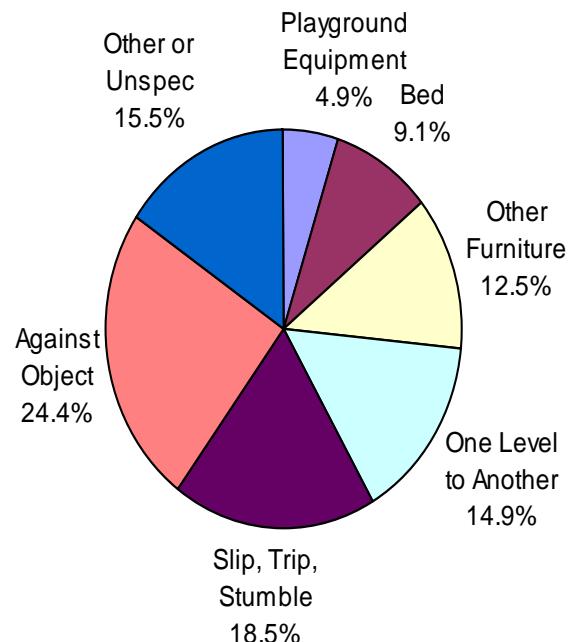
### Falls

While fall related deaths rarely occur in early childhood, fall-related injuries are the most common cause of both injury hospitalization and treatment in the ED. Due to their developing musculoskeletal system and sensory abilities, children of this age are still learning balance, and thus are at an increased risk for falls.

In 2006, of the 114 children ages 1-4 years who were hospitalized due to a fall (62.8/100,000), 61% were male. Most fall hospitalizations were for a fracture (71%) or an internal injury (16%) to either the upper extremities (39%), brain (28%), or the lower extremities (19%). More than one out of four children (28%) were injured due to falling from one level to another, such as from stairs or steps. Other common mechanisms of injury include slipping, tripping or stumbling (14%), fall from playground equipment (11%), fall from a bed (11%), and fall from a building (9%).

In 2007, for every 29 children ages 1-4 years in the population, there was one child treated in the ED for a fall injury (3394.1/100,000). Nearly one-quarter of these injuries were due to falling against an object (24%), and 19% were due to slipping, tripping or stumbling. The most common type of injury was an open wound (43%) or superficial injury/contusion (18%), and 71% of all injuries occurred to the head, face or neck.

**Fall ED Discharges by Mechanism,  
Ages 1-4 Years,  
San Diego County, 2007**



Source: CoSD HHSA PHS EMS, ED Database, 2007.  
Prepared by: CoSD HHSA PHS EMS, June 2009

Prevention of fall-related injuries in early childhood include installing stair gates, keeping toys off of furniture, securing furniture to the wall, and supervising children when at play, whether in the home or on a playground.

Early Childhood

## Safe Kids San Diego Childhood Unintentional Injury Report

### Overdose/Poisoning

Poisoning deaths in early childhood are not common; only one death occurred from 2000-2007. However, poisoning is the second leading cause of injury hospitalization. In 2006, 33 children ages 1-4 were hospitalized due to a poisoning; 79% of whom were poisoned by drugs or medicinal substances. Five of these children (15%) were hospitalized for more than one day.

Poisoning was the sixth leading cause of injury-related ED discharge. In 2007, 489 children received treatment in an ED for a poisoning; more than 9 per week. Three out of every four ED discharges for poisoning were due to drugs or medicinal substances.

While language and comprehension skills improve during early childhood, children of this age do not necessarily have the ability to control behavior and fully understand rules. Prevention tools such as child-resistant medication packaging and keeping poisons and medications out of reach will help to reduce the risk of poisoning in early childhood.

### Burns and Scalds

The number of hospitalizations due to burns and scalds has decreased dramatically since the early 1990's. In 1994, there were 103 hospitalizations, decreasing to 24 (13.2/100,000) in 2006. Almost all burn/scald hospitalizations in 2006 were for scalds (83%), the majority of which were due to hot liquid or steam (80%).

In 2007, there were 267 ED discharges for burn/scald injuries (145.3/100,000), 95% of which were scalds. Thirty percent of these were due to a hot liquid or steam, and 13% were due to hot tap water.

In early childhood, the concept of danger is not fully developed, especially among 1 and 2 year-olds who will reach for objects out of curiosity. Additionally, thin, sensitive skin makes a child of this age more vulnerable to burn and scald injuries. Maintaining a lower water heater setting and keeping hot objects and liquids out of the reach of children can help to reduce the rate of injury due to burns and scalds.



Early Childhood

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Drowning Prevention**

#### **Safe Kids San Diego Prevention Activities: Past, Present and Future**

Drowning is still a leading cause of death in children. Safe Kids San Diego has worked diligently in trying to increase public awareness regarding this preventable issue. In the last two years, Safe Kids San Diego assisted Safe Kids Worldwide, in legislation efforts to increase the safety standards of pools and spas throughout the Nation. The Pool and Spa Safety Act was passed and signed into Law in December 2007. That Law requires that anti-entrapment filters be put on pools and spas, and creates an incentive program for States to provide for laws requiring barriers such as fences, covers and alarms.

On a local level, Safe Kids San Diego has produced three public service announcements, which educate the community regarding the risk of drowning in bathtubs, kiddie pools and buckets. The message in all of the public service announcements is to always watch your children in or around the water. Safe Kids San Diego, in collaboration with Rady Children's Hospital and EPIC Medics also successfully re-designed and produced 3000 Water Watcher tags. The Water Watcher program encourages a designated adult to actively supervise the children while in the pool, and refrain from socializing and/or doing any other activities during that designated time.

Safe Kids San Diego has been quite successful, along with its partners, Rady Children's Hospital, San Diego Life Guards, and the Independent Pool Spa Service Association, in obtaining television airtime. This airtime has allowed Safe Kids San Diego to reach out and educate the San Diego community regarding the deviating reality that drowning happens quickly and silently.

Safe Kids San Diego's Drowning Prevention Task Force will continue to push forward with its advocacy and public awareness efforts. With Adult Supervision, Barriers, and Classes such as CPR and swim lessons; Drowning is Preventable.



**Drowning**

## Safe Kids San Diego Childhood Unintentional Injury Report

### Prevention Activities You Can Do

- ♥ Never leave a child unsupervised, even for a minute, around water. Brain damage can occur in as little as three minutes.
- ♥ Install a minimum 5 foot, non-climbable fence to prevent children from wandering into your pool area. Also, install a barrier fence between your house and the pool to protect your children and other child visitors.
- ♥ Keep outdoor furniture away from the fence so that it can not be used to climb on to gain access to the pool.
- ♥ Check the neighborhood to determine if any pools and spas are unfenced. Children often drown in other people's pools and spas.
- ♥ Make sure pool gates are self-locking and self-latching. Gates should be installed so that they must be pulled to open rather than pushed since toddlers instinctively push on objects to gain access.
- ♥ If your child is missing, be sure to check the pool area first and go to the edge and look down.
- ♥ Keep a phone by the pool at all times.



Drowning

## Safe Kids San Diego Childhood Unintentional Injury Report

### Middle Childhood: 5-9 Years

1  
Death  
291  
Hospitalizations  
10,153  
ED Discharges

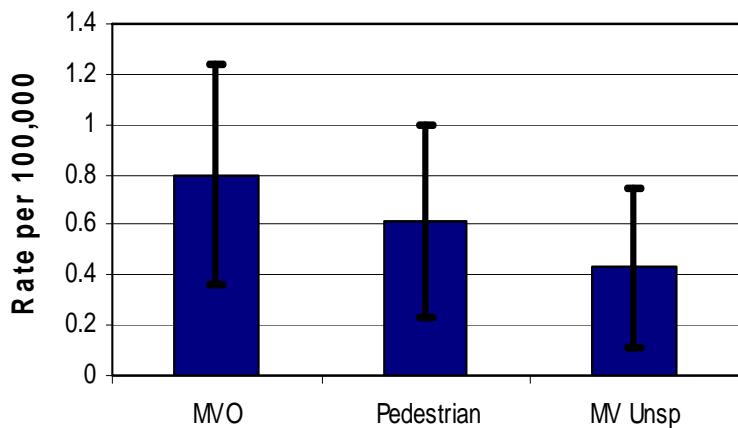
\*2006

During middle childhood, children are developing more rapidly, have become even more independent, often play in groups, and as a result engage in more risk-taking play. Thus, the rates of injury-related morbidity are higher than during early childhood.

*For every one unintentional injury related death in 2006, there were 291 hospitalizations and 10,153 ED discharges.*

The rate of unintentional injury death among San Diego County children ages 5-9 years of age is the lowest of all child and early adolescent age groups. There were a total of 43 unintentional injury deaths among children of this age from 2000-2007, for an average rate of 2.6 per 100,000. There was a general decrease in the rate of unintentional injury deaths per year during this time period, but the numbers were often too low to calculate reliable annual rates.

#### Unintentional Injury Death Rates by Type, Ages 5-9 Years, San Diego County, 2000-2007



The leading causes of unintentional injury death among 5-9 year-olds were motor vehicle occupant (MVO) (0.8/100,000) and pedestrian crashes (0.6/100,000). The injury mortality rates are low compared to the injury morbidity rates in this age group, however the deaths that did occur were preventable with appropriate supervision and safety equipment.

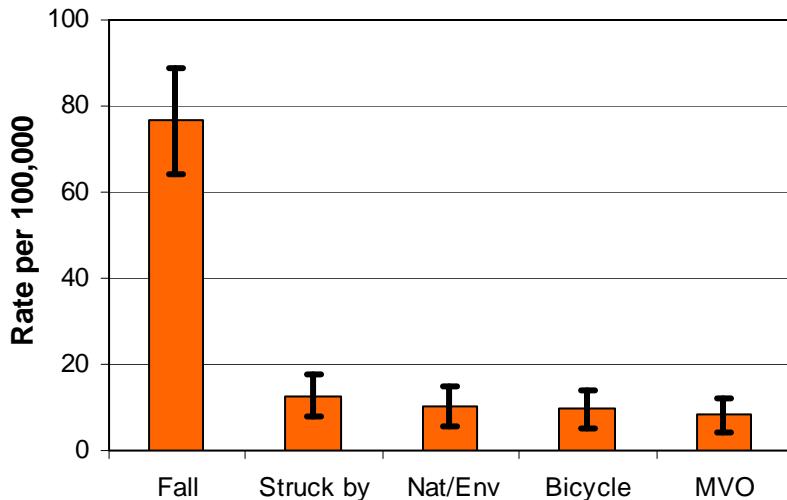
Source: CDPH EPIC, Death Statistical Master Files, 2000-2007.  
Prepared by: CoSD HHSA PHS EMS, June 2009

Middle Childhood

## Safe Kids San Diego Childhood Unintentional Injury Report

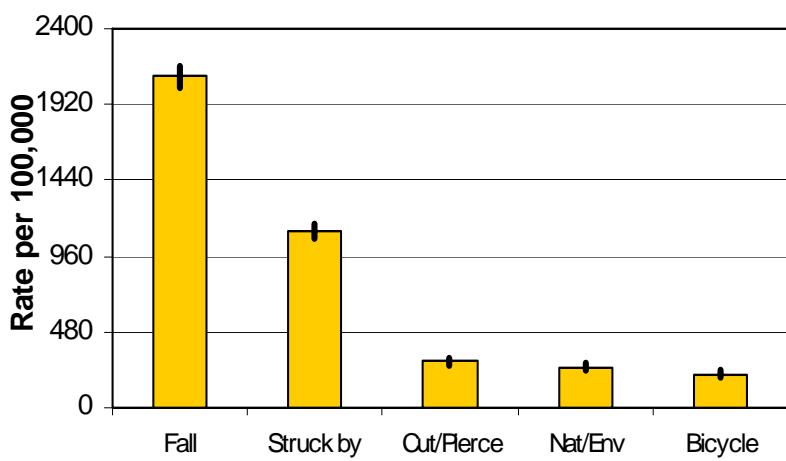
### Unintentional Injury Hospitalization Rates by Type, Ages 5-9 Years, San Diego County, 2006

The leading causes of unintentional injury hospitalization in 2006 were falls, struck by, natural or environmental, and bicycle-related. There were 291 children ages 5-9 years who were hospitalized due to an injury ( $148.6/100,000$ ), half of which were fall-related ( $76.6/100,000$ ).



Source: CDPH EPIC, Patient Discharge Data, 2006.  
Prepared by: CoSD HHSA PHS EMS, June 2009

### Unintentional Injury ED Discharge Rates by Type, Ages 5-9 Years, San Diego County, 2007



Source: CoSD HHSA PHS EMS, ED Database, 2007.  
Prepared by: CoSD HHSA PHS EMS, June 2009

In 2007, the leading causes of unintentional injury ED discharge were falls, struck by, cut/pierce, and natural or environmental injuries. The rate of fall-related ED discharges far exceeded all other injury types. In 2007, 4,188 children ages 5-9 years received treatment in an ED due to a fall-related injury ( $2094.5/100,000$ ), compared to 2,225 who received treatment for a struck by injury ( $1112.8/100,000$ ).

Middle Childhood

## Safe Kids San Diego Childhood Unintentional Injury Report

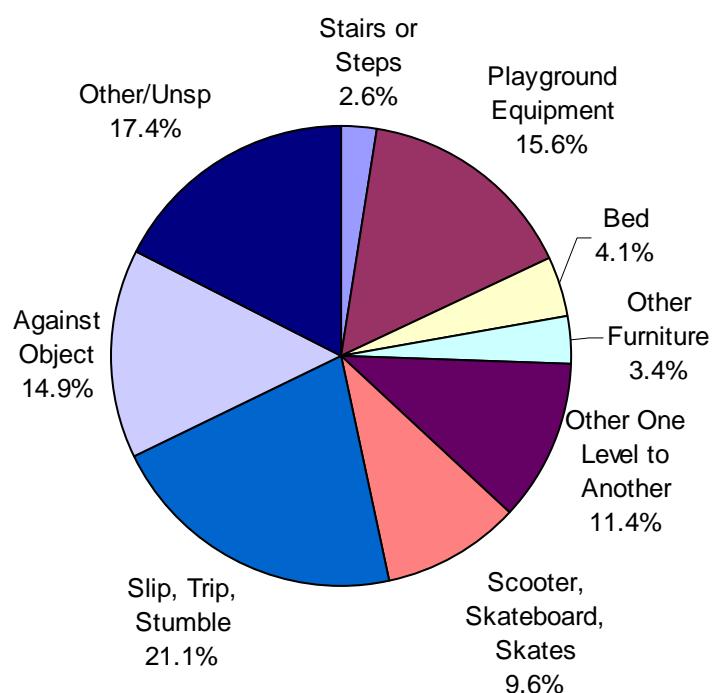
### Falls

Injury due to a fall is the leading cause of both hospitalization and ED discharge for 5-9 year old children in San Diego County. Many of the fall injuries that occur during middle childhood are due to their choice of more adventurous activities. In 2006, there were 150 children hospitalized for a fall injury (76.6/100,000), 59% of whom were male. One-third of these falls (33%) were from playground equipment. More than 80% of fall hospitalizations were for a fracture, and 67% were to the upper extremities.

ED treated fall injuries, while less severe, occurred more often. In 2007, for every 48 children ages 5-9 in the population, one received treatment in the ED for a fall injury. One-third were fractures, and 29% were open wounds. More than half of all injuries were to the extremities and 38% to the head, face or neck (not including traumatic brain injury). Sixteen percent of these falls occurred from playground equipment and 10% from scooters, skateboards or roller skates.



**Fall ED Discharges by Mechanism,  
Ages 5-9 Years,  
San Diego County, 2007**



Source: CoSD HHSA PHS EMS, ED Database, 2007.  
Prepared by: CoSD HHSA PHS EMS, June 2009

Middle Childhood

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Motor Vehicle Crashes**

Motor vehicle crashes were the most common cause of injury death for San Diego County children ages 5-9 years old from 2000-2007. On average, there were one to two deaths per year due to a motor vehicle crash.

In 2006, there were 16 children ages 5-9 years who were hospitalized due to a motor vehicle occupant injury. Nearly two-thirds (63%) were male, and the average length of stay was approximately 2 days. Half of all injuries were fractures.

Most motor vehicle crash injuries among this age group were treated in an ED rather than hospitalized. In 2007, there were 396 ED discharges for a motor vehicle crash injury, 54% of whom were female. ED treated injuries were most often superficial contusions (42%) or sprains and strains (17%). Thirty percent were to the head, face or neck (not including traumatic brain injuries) and 22% were to either the upper or lower extremities.

Motor vehicle occupant injuries and deaths are preventable with appropriate child safety seat and belt use, and education for parents. The enforcement of restraint-use laws, such as the use of booster seats for children of this age, is also critical to preventing motor vehicle crash injuries.

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### **Struck by Object or Person**

"Struck by" injuries include bumping into, colliding with, kicking against, stepping on or being struck by any object or person, whether moving or stationary. These injuries are typically less severe, and rarely cause death or hospitalization. In 2006, 25 children were hospitalized due to being struck by an object or person, 9 of which (36%) occurred during sports. Most struck by hospitalizations were for a fracture (60%), and 20% were for a traumatic brain injury.



Treatment in the ED for a struck by injury was far more common. In 2007, 2,225 children ages 5-9 years were treated and discharged from the ED for a struck by injury (1112.8/100,000), 68% of whom were male. Nearly half of injuries were open wounds (45%) and 25% were contusions. Sixty-one percent were to the head, face or neck, and 31% were to the extremities. Twenty percent of all struck by injuries occurred during sports.

Prevention of struck by injuries is difficult, but the occurrence and severity of injuries can be reduced with appropriate sports-related protective gear, the provision of safe places to play, and by teaching children appropriate play behavior in different environments.

**Middle Childhood**

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Natural or Environmental**

Natural or environmental injuries include bites, stings, and weather related injuries. The comfortable year-round weather in San Diego County means children are more likely to experience these injuries during outdoor play. In 2006, 20 children were hospitalized due to bites or stings by animals or insects (10.2/100,000).

More often, children are treated in an ED for these injuries. In 2007, 517 children ages 5-9 years were discharged from the ED with a natural or environmental injury (258.6/100,000), 58% of whom were male. Forty percent were for dog bites, 23% were for bee or wasp stings, and 21% were for a non-venomous spider bite.

Prevention of natural or environmental injuries include providing children with safe places to play and teaching them how to avoid animal or insect bites or stings.

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### **Bicycle-Related**

Bicycle-related injuries are the fourth leading cause of injury hospitalization and the fifth leading cause of injury ED discharge among 5-9 year-olds in San Diego County. In 2006, 19 children were hospitalized for a bicycle injury (9.7/100,000), 74% of whom were male. Fifty-eight percent of these injuries were fractures.

In 2007, there were 431 children ages 5-9 who were treated in an ED for a bicycle-related injury (215.6/100,000), 68% of whom were male. Thirty-six percent of these children suffered open wounds, 24% contusions and 24% fractures. Forty-two percent of injuries occurred to the head, face, or neck (not including traumatic brain injury) and 32% to the upper extremities.

Modeling safe bicycle behaviors, teaching children bicycle safety rules, and making sure they wear a properly fitting helmet can help to reduce the frequency and severity of bicycle-related injuries.



**Middle Childhood**

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Child Passenger Safety**

#### **Safe Kids San Diego Prevention Activities: Past, Present and Future**

The role of the Child Passenger Safety (CPS) task force is to provide education to families on car seat safety, train and retain current technician candidates and raise public awareness to advocate for appropriate change in legislation.

The CPS Task Force continues to provide Car Seat Check up events to families around the community. A car seat installation Inspection Station was set up in 2007 at Bob Baker Chevrolet providing a consistent location for car seat inspections. This program concluded in August 2007. Since that time special events have been provided at a My Gym facility in Chula Vista and a car seat check up in collaboration with UCSD for the graduates of their NICU program. The task force also provided four CPS technician training courses and the chair of the task force maintains a list serve of all technicians in the county and provides regular updates on continuing education, check up events and meetings.



The CPS task force receives grant funding annually through the Buckle Up Program at Safe Kids USA. This funding is distributed quarterly for use at events planned by the task force. This year the task force intends to use funds for CPS events in zip codes associated with high injury and fatality rates such as South Bay, North Inland and East County.

The task force also plans on hosting additional training programs, refresher courses and a mentoring program for new CPS technicians.

Future advocacy will be directed towards the growing trend of unintentional falls from a car seat situated in shopping carts. Additional public awareness and media events will be focused on booster seat safety as consistent with the current focus of Safe Kids USA.

**Child Passenger**

## Safe Kids San Diego Childhood Unintentional Injury Report

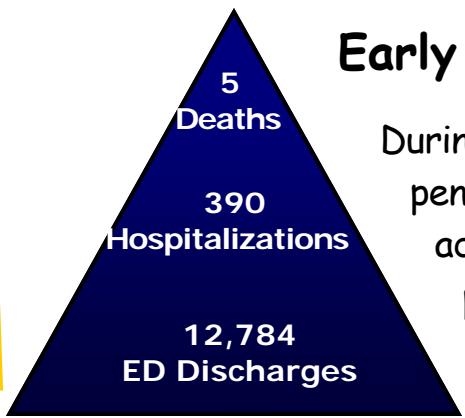
### Prevention Activities You Can Do

- Be a role model by making sure you wear your seat belt each and every time you ride in a motor vehicle. Children look to adults to set the example.
- Children under 13 years old should always ride in the back seat
- California State Law requires children should ride rear facing until they are 1 year and 20 pounds, it is recommended that they remain rear facing to the maximum weight allowed by the car seat
- Children should be in an appropriate child restraint until they are 6 years or 60 pounds. The American Academy of Pediatrics recommends 8 years or 80 pounds.
- Make sure that your car seat is properly installed. If in doubt, have your seats checked at a Safe Kids Safety Seat Check Up Event.
- Remove the clutter from your vehicle, every object in your vehicle is a potential projectile hazard in a crash.



Child Passenger

## Safe Kids San Diego Childhood Unintentional Injury Report



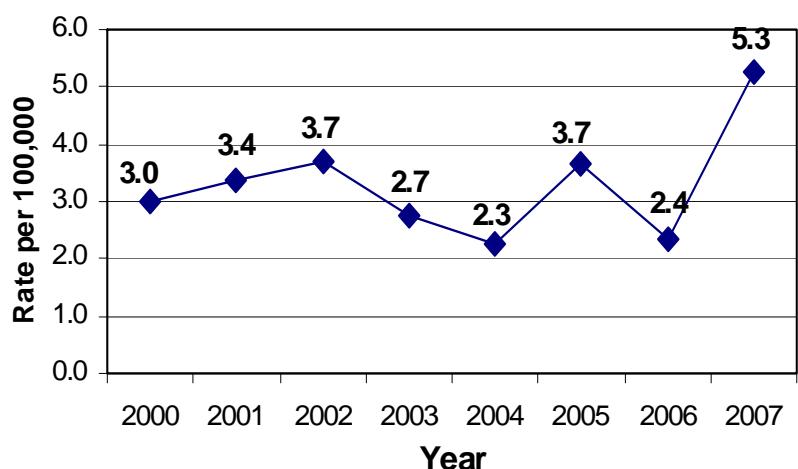
### Early Adolescence: 10-14 Years

During early adolescence, children strive for independence and control. They often receive less adult supervision and are influenced heavily by peers. This puts them at greater risk for injury as they engage in more risk-taking behaviors.

*For every one unintentional injury related death in 2006, there were 78 hospitalizations and 2,557 ED discharges.*

**Unintentional Injury Death Rates by Year,  
Ages 10-14 Years,  
San Diego County, 2000-2007**

Unintentional injury is the leading cause of death among early adolescents ages 10-14 years. The average rate of unintentional injury death was 3.3 per 100,000 from 2000-2007. The rate of unintentional injury death fluctuated from 2000-2007, increasing to 5.3 per 100,000 in 2007.



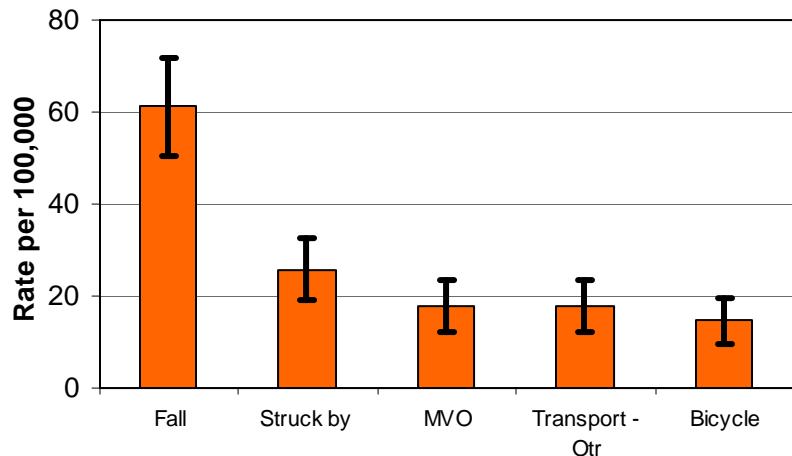
Source: CDPH CHS, Death Statistical Master Files, 2000-2007.  
Prepared by: CoSD HHSA Community Epidemiology, June 2009

Early Adolescence

## Safe Kids San Diego Childhood Unintentional Injury Report

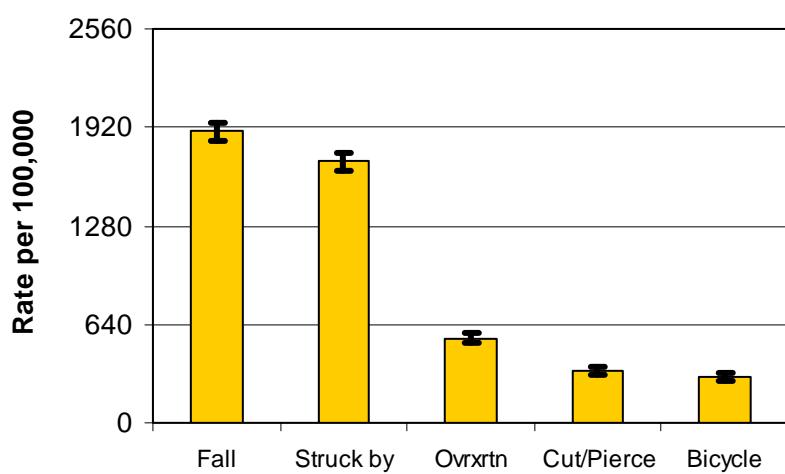
### Unintentional Injury Hospitalization Rates by Type, Ages 10-14 Years, San Diego County, 2006

The leading causes of unintentional injury hospitalization were falls, struck by, motor vehicle, other transport, and bicycle-related. In 2006, there were 390 children ages 10-14 years who were hospitalized due to an unintentional injury (183.3/100,000), most of which were due to a fall (61.1/100,000).



Source: CDPH EPIC, Patient Discharge Data, 2006.  
Prepared by: CoSD HHSA PHS EMS, June 2009

### Unintentional Injury ED Discharge Rates by Type, Ages 10-14 Years, San Diego County, 2007



Source: CoSD HHSA PHS EMS, ED Database, 2007.  
Prepared by: CoSD HHSA PHS EMS, June 2009

In 2007, the leading causes of unintentional injury ED discharge were falls, struck by object, overexertion, cut/pierce and bicycle-related injuries. During early adolescence, the rate of ED discharge for a fall-related injury was only slightly higher than the rate for struck-by injuries. In 2007, 3,960 children ages 10-14 years received treatment in an ED for a fall-related injury (1895.3/100,000), compared to 3,545 who received treatment for a struck by injury (1696.7/100,000).

Early Adolescence

## Safe Kids San Diego Childhood Unintentional Injury Report

### Motor Vehicle Crashes

Motor vehicle crashes are the most common cause of unintentional injury death for San Diego County children ages 10-14 years, and the third leading cause of unintentional injury hospitalization. On average from 2000-2007, there were one to two deaths per year due to a motor vehicle crash. In 2006, there were 38 children 10-14 years old who were hospitalized due to a motor vehicle occupant injury, 58% of whom were female. The average length of stay was just under 2 days.

Many more children involved in motor vehicle crashes were treated in the ED. In 2007, there were 462 children ages 10-14 years who were treated in the ED for a motor vehicle occupant crash injury, 60% of whom were female. More than one out of every four children sustained a vertebral column injury (28%), 22% had an injury to the head, face or neck (not including traumatic brain injury), and 13% to the upper extremity. Thirty-six percent of injuries were superficial or contusions and 33% were sprains and strains.

Children in early adolescence will often stop using booster seats before they have reached a height and weight appropriate for adult seat belts, leading to more severe injury during a crash. Front passenger airbags can also increase the risk of injury and death for underdeveloped children sitting in the front seat during a motor vehicle crash. Modeling and teaching safety belt use and encouraging all children under the age of 13 years to sit in the back seat can help to reduce motor vehicle crash injuries.

### Pedestrian Injuries

Pedestrian injuries were the second leading cause of unintentional injury death among children ages 10-14 years in San Diego County from 2000-2007. On average, there were 1 to 2 pedestrian deaths per year among children of this age. Pedestrian injury hospitalization and ED discharge were more common. In 2006, 16 children were hospitalized for a pedestrian injury and in 2007 131 were treated in an emergency department.



Children in early adolescence are more independent in their play and supervised less carefully when they are around motor vehicles, which may contribute to pedestrian injury and death. Teaching children traffic skills and offering safe places for them to play and walk can help to decrease the rates of pedestrian death.

Early Adolescence

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Falls**

Injury due to a fall is the leading cause of both hospitalization and ED discharge for 10-14 year old children in San Diego County. In 2006, there were 130 children hospitalized for a fall injury (61.1/100,000), 71% of whom were male. Two-thirds (68%) of fall hospitalizations were for a fracture.

ED treated fall injuries, while less severe, occurred far more often. In 2007, for every 53 children ages 10-14 in the population, one received treatment in the ED for a fall injury (1895.3/100,000). Thirty-nine percent of these injuries were fractures, and 16% were contusions. More than half of all injuries were to the upper extremities (55%) and 20% to the lower extremities. Twenty-nine percent occurred due to slipping, tripping or stumbling while running or walking, and 21% fell from a scooter, skateboard or skates.

Falls are difficult to prevent during early adolescence, however many of the fall injuries that occur are due to sporting and recreational activities. The severity of these injuries can be significantly reduced through the use of appropriate safety equipment.

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### **Bicycle-Related**

Bicycle-related injuries are the sixth leading cause of injury hospitalization and the fifth leading cause of injury ED discharge among 10-14 year-olds in San Diego County. In 2006, 31 children were hospitalized for a bicycle injury, 84% of whom were male. Forty-two percent of all injuries were fractures and 32% were internal injuries.

In 2007, there were 621 children ages 10-14 who were treated in an ED for a bicycle-related injury, 80% of whom were male. Thirty-one percent of these children suffered fractures, 23% contusions and 22% open wounds. Forty-three percent of injuries occurred to the upper extremities and 22% to the lower extremities. Ten percent involved a motor vehicle.

Modeling safe bicycle behaviors, teaching children bicycle safety rules for the road, and making sure they wear a properly fitting helmet can help to reduce the frequency and severity of bicycle-related injuries among children of this age.



**Early Adolescence**

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Pedestrian Safety**

#### **Safe Kids San Diego Prevention Activities: Past, Present and Future**

Safe Kids San Diego continues to participate in the annual International Walk to School, in collaboration with their national partner, Fed Ex. Through this Fed Ex collaboration Safe Kids San Diego created reflective Halloween treat bag that is now used nationally by Safe Kids USA.

This year Safe kids San Diego will again participate in Walk to School day in collaboration with the City Heights Development Corporation and Fed-Ex corporation. Additional funds will be provided for ongoing pedestrian safety programs through the NFL-Fed Ex Air and Ground contest. This national contest nominates the best air (quarterback) and ground (running back) weekly, fans vote on their favorite, the coalition of the winning NFL team earns \$1000 which is earmarked for pedestrian initiatives. In 2009 Safe Kids San Diego was awarded \$3000 from the NFL contest for pedestrian safety programming.

Over the next few years Safe Kids San Diego will be participating with pedestrian safety programs in collaboration with Rady Children's Hospital in South East San Diego as a component of a federally funded Safe Routes to School program.

#### **Prevention Activities You Can Do**

- ♥ Never allow children under the age of 10 to walk in traffic unaccompanied by an adult. Children lack the ability to adequately assess the dangers posed by motor vehicle traffic. Teaching your child to look both ways before they cross is not enough to keep them safe.
- ♥ Walk with your child. Children need you to model safe pedestrian behavior and to determine if the route they are taking is a safe one.
- ♥ Make sure your child knows and follows the rules of the road. Local research has shown that children are most likely injured "not crossing in the crosswalk"
- ♥ As a driver, always be aware of the potential danger of pedestrians and travel at safe speeds, allowing sufficient time to stop safely, if necessary.
- ♥ Anticipate children playing in residential areas and around schools.
- ♥ Teach your child to make eye contact with an oncoming driver before they enter the road even if they have the right of way. Drivers do not normally look for pedestrians.

**Pedestrian**

## **Safe Kids San Diego Childhood Unintentional Injury Report**

### **Sports and Recreation Safety**

#### **Safe Kids San Diego Prevention Activities: Past, Present and Future**

The Passage of the California State Law that requires that every child under the age of 18 wear a bike helmet has created an increase need for helmets in the community, especially in low income families. Safe Kids San Diego has partnered with the Cox Kids Foundation to distribute helmets through annual events in the last 2 years. The passage of this law appreciated an immediate reduction in the number of children seriously injured or killed as a result of brain injury from severe head trauma. Safe Kids San Diego was a strong supporter of this legislation and has been working to increase the use of bicycle helmets since that time. A new law was just passed in 2007 requiring that all cyclists have at minimum a rear light when riding at dusk or night. Safe kids discourage all children under 14 from riding at dusk or nighttime.

Helmet use is only a small piece of the puzzle. Safe Kids San Diego has invited the Bike Coalition of San Diego to participate in Safe Kids programming. Currently the bike coalition has been providing interactive bike safety "Rodeos" through the lead agency. These rodeos currently focus on new rider skills and safety awareness. Proposed programming will focus on "tweens" with road safety and bicycling to prepare them for driver's education. Safe Kids San Diego will continue to collaborate with the Cox Foundation and bicycle helmet distribution with three scheduled events in Kearny Mesa, Oceanside and El Cajon. These events distributed the current law and remind families that ALL wheeled vehicles fall under this legislation, including "heelys". Children will be fitted with both bike and multisport helmets and families will be educated in proper helmet style for their sport. Through these helmet distribution events parents and children were instructed in safety in and around cars, focusing on prevention of back over injuries, emphasis of never leaving a child or pet in a vehicle unattended and awareness of stopping times in vehicles.

The sports and recreation task force is now working with the physicians from the lead agency to promote helmet use and use of mouth guards in contact sports such as soccer. This year the task force distributed information on helmets and mouth guards at the Charity Cup Soccer tournament.

Safe Kids San Diego continues to work with media in providing television segments on use of helmets with various activities. Continued bike safety rodeos are scheduled to encourage active prevention and use of helmets. Concurrent with these programs attitudinal surveys will be distributed to assess public awareness and compliance with the law.

**Sports and Recreation**

## Safe Kids San Diego Childhood Unintentional Injury Report

### Prevention Activities You Can Do

- ♥ Always wear a helmet when bicycling. Wear a multisport helmet whenever skateboarding, rollerblading, skating or wearing heelys. Model safety behavior for your children. Children learn from what they observe, chances are if you don't wear a helmet, your children won't once they are out of your sight. Organize a neighborhood watch to encourage other parents to watch children's behavior to report children not adhering to the helmet law.
- ♥ Make sure your child's helmet fits properly. A properly fitted helmet must sit flat on the head, not tilted to the front or rear, the front rim rests just above your eyes. The chin strap should fit snugly, such that when you open your mouth fully, it tips the helmet a bit. If the helmet is not comfortable with these guidelines, try a different brand as the shape might not fit your head.
- ♥ Be sure your child always wears their helmet. Many injuries occur in a driveway or on the patio.
- ♥ Make sure your child wears a helmet even when driving motorized kiddie carts, tricycles or big wheels.
- ♥ Before your child rides in traffic, make sure your child knows the rules of the road for your community. Local traffic laws vary between law enforcement jurisdictions and rules change over time.
- ♥ Ride with your child until you are confident in their abilities to ride safely. Stress to your child that riding a bicycle is a serious responsibility and that they must conform to traffic laws.
- ♥ Wear bright colors and reflective garments, even during the day.
- ♥ Avoid riding at dusk and at night. If this cannot be avoided make sure you have a rear light and wear bright reflective clothing.
- ♥ Children should never ride at night, keep to the adage "be home before the street light comes on."



Sports and Recreation

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- ♥ Make sure your child always wears appropriate protective gear and clothing, whether they are competing or just practicing.
- ♥ Talk with your child's coach to make sure that the activities are developmentally appropriate and injury prevention strategies (such as limiting the number of pitches) are incorporated into all activities.
- ♥ Helmets, elbow pads and knee pads should be worn at all times when rollerblading, skating, and skateboarding. Ski helmets should be worn while skiing and snowboarding. Certified riding helmets should be worn while riding horses or other animals.
- ♥ Encourage skateboarding in controlled skateboard parks. City streets and sidewalks increase the likelihood of injuries due to irregular surfaces and other uncontrolled conditions.
- ♥ Inspect the playgrounds in your neighborhood for worn or old equipment, chipped paint and unsafe surfaces. There should be at least 12 inches of impact absorbent ground cover such as wood chips or sand OR a rubberized playground mat surface.
- ♥ Be sure the child is well hydrated, wears sun-screen and avoids playing during the hottest time of the day (10am to 4pm).
- ♥ Make sure your child is condition appropriate for the level of play and that warm up and stretching are part of the activity.
- ♥ All passengers in watercraft should wear coast guard approved personal floatation devices at all times. Floaties, water wings, or other inflatable toys cannot provide the same level of protection as life jackets.



Sports and Recreation

## Safe Kids San Diego Childhood Unintentional Injury Report

### SUMMARY: CHILDHOOD UNINTENTIONAL INJURY IN SAN DIEGO COUNTY

Unintentional injuries are a leading cause of mortality and morbidity among children in San Diego County, and thus a serious public health problem. However, childhood injuries cannot only be predicted, they can be prevented. Recognizing the physical, behavioral, and cognitive changes that children experience as they grow help to predict the type of injuries they might incur. Understanding the risk factors associated with injury at different ages, such as gender, race/ethnicity, poverty, lack of education, substance abuse, lack of supervision, bullying, and community of residence is the first step in prevention.

The leading cause of unintentional injury death differed by age group. For infants less than one year of age, suffocation accounted for one-third of all deaths. Children ages 1-4 years were more likely to die due to drowning than any other injury, and children ages 5-14 years were most likely to die due to motor vehicle crashes or pedestrian injuries. The leading cause of hospitalization and ED discharge for all age groups, 0-14 years, was fall-related injury.



This report focuses only on age and gender related risk factors, using death, hospitalization and ED discharge data. While these data do not capture the burden of all injuries, such as those treated at primary care sites, other medical care clinics, or at home, this information is incredibly valuable. It can be used to help local governmental and community groups prioritize programs targeting high-risk population groups, better direct resources, identify and evaluate prevention activities, and track trends.



For more detailed data on childhood unintentional injuries, contact the County of San Diego, Public Health Services, Community Health Statistics Unit at (619) 285-6429, or visit [www.sdhealthstatistics.com](http://www.sdhealthstatistics.com).

Summary

## Safe Kids San Diego Childhood Unintentional Injury Report

### Injury Categories

The injury categories used in this report were developed by the EPIC Branch of the CDPH by making slight changes to the CDC's recommended cause groupings for ICD-9 and ICD-10. Hospitalization and ED discharge data use ICD-9-CM e-codes and death data use ICD-10 definitions to identify the mechanism of injury. The mechanism of injury identifies the agent, product, instrument or activity that led to the injury. For the purpose of this report, only unintentional injuries are described. For a detailed description of the injury category definitions, go to: <http://www.applications.dhs.ca.gov/epicdata/help/icd.htm>.

### Unintentional Injury Definitions

**Burn/Scald:** Asphyxia or poisoning due to conflagration or ignition, burning by fire, secondary fires resulting from explosion; damage caused by hot substance/object, caustic/corrosive material, and steam (ICD-9 E-Codes E890-E899, E924).

**Cut/Pierce:** Injury caused by cutting and piercing instruments or objects, such as power tools, knives, or glass (ICD-9 E-Codes E920).

**Drowning/Submersion:** Injury caused by cutting lack of oxygen resulting from insufficient air and ingestion of water (ICD-9 E-Codes E830, E832, E910).

**Fall:** Injury caused by a fall from different levels or the same level, such as tripping, stumbling, fainting; also includes jumping (ICD-9 E-Codes E880-E888).

**Motor Vehicle Occupant (MVO):** Injury caused by a collision on a public street or roadway harming vehicle occupants (ICD-9 E-Codes E810-819(.0,.1)).

**Pedestrian-Related:** Injury caused by a collision on a public street or roadway harming pedestrians; collision in private spaces such as driveways or parking lots harming pedestrians (ICD-9 E-Codes E810-819(.7), E800-E807(.2), E820-E825(.7), E826-E829(.0)).

**Bicycle-Related:** Injury caused by a collision on a public street or roadway harming bicyclists; collision in private spaces such as driveways or parking lots harming bicyclists, or damaging spills by bicyclists without motor vehicle involvement (ICD-9 E-Codes E810-819(.6), E800-E807(.3), E820-E825(.6), E826-E829(.1), E826.9).

**Other Transport:** Injury caused by an incident involving other means of transportation, such as trains, planes, boats, or buses to persons other than pedestrians or bicyclists, (ICD-9 E-Codes E800-E807(.0, .1, .8, .9), E820-E825(.0-.5, .8, .9), E826(.2-.8), E827-E829(.2-.9), E831, E833-E845).

Definitions & Sources

## Safe Kids San Diego Childhood Unintentional Injury Report

**Natural/Environmental:** Injury caused by excessive heat or cold, lightning or other environment factors; includes animal bites & insect bites and stings (ICD-9 E-Codes E900-E909, E928(0-2)).

**Overexertion:** Injury caused by excessive physical and/or strenuous movements (ICD-9 E-Codes E927).

**Struck by:** Injury caused by striking by or against a blunt object or person (ICD-9 E-Codes E916-E917).

**Suffocation:** Injury caused by the inhalation or ingestion of objects causing obstruction of the respiratory tract (ICD-9 E-Codes E911-913).

### Rate Calculations

Rates are used to compare groups of unequal size in order to reveal disparities. All rates presented in this report are calculated as the number of injuries per 100,000 population, and can be interpreted as follows: "In 2007, for every 100,000 children aged 5 to 9 in the population, X number were discharged from the ED with an injury," or "the rate of injury ED discharge was X per 100,000 population in 2007."

### Data Sources

**Death Data:** Cause of death by injury status and intent, and trend data were obtained from the California Department of Public Health, Center for Health Statistics (CDPH CHS), Death Statistical Master Files, and prepared by the County of San Diego, Health and Human Services Agency (CoSD HHSA), Community Epidemiology. Leading causes of injury death and age-specific causes of injury death were obtained from the CDPH, Epidemiology and Prevention for Injury Control (EPIC) Branch, Vital Statistics Death Statistical Master File, and prepared by the County of San Diego, Health and Human Services Agency, Public Health Services, Emergency Medical Services (CoSD HHSA PHS EMS). Death data presented in this report are for the years 2000-2007.

**Hospitalization Data:** Hospitalization data used in this report were obtained from the CDPH, EPIC Branch, Office of Statewide Health Planning and Development, Patient Discharge Data. All hospitalization data is for the year 2006.

**Emergency Department (ED) Discharge Data:** ED data used in this report were obtained from the Hospital Association of San Diego and Imperial Counties (HASD&IC); the Community Health Improvement Partners (CHIP); the County of San Diego Health and Human Services Agency, Public Health Services, Emergency Medical Services (CoSD HHSA PHS EMS) ED database. All ED data is for the year 2007.

Definitions & Sources



# Safe Kids San Diego

Lead Agency:

