

CHILDHOOD UNINTENTIONAL INJURY PREVENTION IN JOHNSON COUNTY, KANSAS

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by

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Abstract

Unintentional childhood injuries are a largely unrecognized and underfunded problem in public health. The burden of childhood injury in mortality and morbidity relative to that of infectious disease has been growing steadily over the past few decades. Prevention efforts are disconnected and competing messages abound, confusing children, parents, and caregivers about safety practices. There is also a dearth of research into the effectiveness of injury prevention strategies, making the implementation of evidence-based interventions difficult. The purpose of this project was the creation of educational presentation materials for health educators serving Charlie's House, a nonprofit organization dedicated to preventing childhood injuries in the greater Kansas City area. This was accomplished through a review of journal articles and online materials pertinent to childhood injury prevention strategies and interventions, as well as the inclusion of input of content experts. The main unintentional injury risks to children are motor vehicle accidents, where children are injured as passengers, cyclists, and pedestrians; drowning; fires and burns; suffocation; and poisoning. Injury morbidity and mortality risks are further stratified by age: children under 1 year old tend to die from unintended suffocation or accidental strangulation; children aged 1-4 are most likely to die from drowning; and older children mostly die from traffic injuries, as occupants, pedestrians, or cyclists. Educational materials were designed to be compelling, accessible, and modifiable to fit the needs of diverse audiences. As the foundation of much of public health, education is a valuable tool to inform the public about potential risks and safety measures, and can help change attitudes and behaviors. This, in turn, can create a community culture of safety and heighten awareness of the environmental and policy changes needed to effectively protect children from unintentional injuries.

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Introduction

Unintentional injuries are costly in terms of morbidity and mortality, and present public health practitioners with a great opportunity for intervention in that they are almost always preventable. Childhood injury is especially costly in terms of years of life lost and Years of Potential Life Lost (YPLL). Medical advances over the past century have lessened the burden of many childhood diseases in the US and worldwide; these successes are widely publicized, and tend to attract public and media attention. Conversely, unintentional injuries are often overlooked as “accidents.” However, injuries to children occur at a relatively high rate and cost society billions of dollars. In addition to financial costs, injury mortality, disability, and the high prevalence of unintentional injury have unquantifiable emotional and social effects on the child, the family, the community, and society at large. Child injuries, while largely absent from US and global public health agendas, are preventable, and should become a more prominent focus of public health research and interventions.

This report describes a public health project designed to assist local health educators in raising awareness of and educating the public about the risks and burden of unintentional childhood injuries, as well as injury prevention strategies. It gives background information on the epidemiology and costs of childhood injuries in the US and on their prevalence and the prevalence of risk factors in the state and the community. The report goes on to discuss public health strategies used by practitioners in developing injury interventions, focusing on proven risk and protective factors and on the potential impacts of an educational approach to prevention. This information is then integrated into the context of the specific public health project. The report describes the roles and functions of the various project stakeholders and details the process by which the final products were envisioned and created. Finally, the report includes observations on the limitations of the project’s focus on education rather than on public policy or environmental change and on how participation in the project contributed to the author’s education and understanding of public health.

It is important to note that childhood is defined differently in various reports and statistical observations. The Convention on the Rights of the Child defines children as individuals under the age of 18; however, data disaggregation is facilitated by the use of an age cut-point of under 20 years old.¹ In this report, children include people from 0 to 19 years of age, unless otherwise specified. This report does not cover injuries that are purposefully inflicted, such as those resulting from suicide, homicide, or maltreatment. It also does not explore injuries among special needs children, for whom very limited data is available and who may differ in injury patterns and prevention requirements.

Chapter 1: Childhood Unintentional Injury

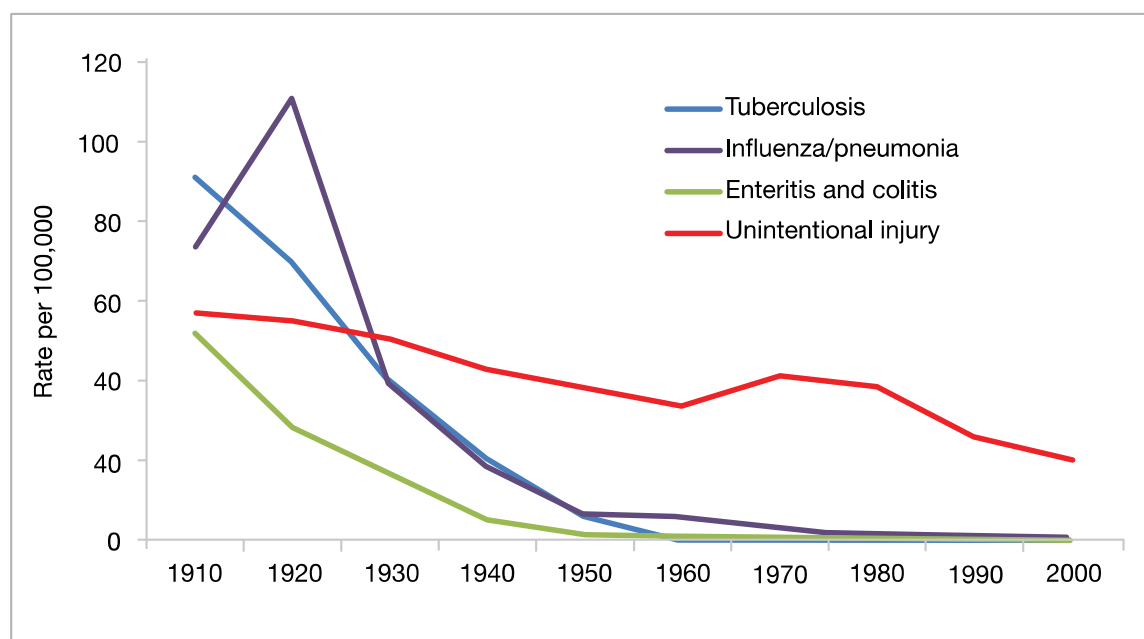
Unintentional injuries for which data are collected at the national level include drowning, fires or burns, falls, poisoning, suffocation, transportation-related injuries, and sports or recreation-related injuries. Transportation-related injury is further subdivided into the categories motor vehicle traffic occupant, motor vehicle traffic unspecified, pedestrian, pedal cyclist, and other transportation in some reports through the use of modified death code matrices.² The tables and statistics presented in this report, however, reflect the most current available data (2009), which report transportation-related injuries sustained on public roads (Motor Vehicle Traffic) and in other areas, such as driveways and sidewalks (Transportation – Other); both categories include injuries sustained by vehicle occupants and by cyclists and pedestrians struck by vehicles. These categories are delineated on the basis of ICD-10 codes listed on death certificates, in the case of mortality, and on National Electronic Injury Surveillance System–All Injury Program (NEISS-AIP) diagnostic codes, in the case of morbidity. Morbidity data collected by the Consumer Product Safety Commission through NEISS is based on a probability sample of emergency departments; data is entered electronically by staff at participating hospitals.³

Childhood Unintentional Injury in the United States

In the United States, unintentional injury is the leading cause of death and disability among children.^{2,4} In the US, about 25 children per day die as the result of unintentional injury; this is greater than childhood mortality for all diseases combined.^{1,5} As Figure 1 illustrates, while unintentional injury deaths among children have declined over the last century, the rate of their decline has not kept pace with declines in death rates for common infectious causes. Today, unintentional child injuries were responsible for 42% of all YPLL between 2000-2009.⁴ Medical care and activity restriction affect about 20 million children annually, at a cost of more than \$300 billion.^{2,4}

According to the Centers for Disease Control and Prevention², an average of 12,175 children died annually due to unintentional injury during the period of 2000-2006. During this period, it is estimated that 9.2 million children were treated in emergency rooms for nonfatal unintentional injuries yearly. Consequences of nonfatal injury range from temporary pain and functional limitation to permanent disability, chronic pain, and psychiatric problems.⁴ In addition to morbidity and mortality, childhood injuries are economically costly. These costs include both those incurred by necessary medical care and by lost productivity for caregivers.

Figure 1. US death rates for persons 1-24 years of age, by cause and year, 1910-2000.



Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. National Action Plan for Child Injury Prevention.⁴

Unintentional Childhood Injury Mortality

Transportation-related deaths, specifically motor vehicle traffic-related deaths, are the leading cause of unintentional injury death among children.^{2,5} For children under 1 year old, most unintentional injury deaths were due to suffocation (77%). Motor vehicle traffic (MVT) related deaths accounted for 8% of injury deaths in this age group, followed by drowning (4%). Among 1- to 4-year-olds, drowning was the leading cause of injury death (31%), followed by MVT-related (25%), fire/burns (12%), and other transportation injuries (10%). Children between 5 and 19 years old were most likely to die as a result of being an occupant in a motor vehicle traffic collision. Among 5- to 9-year olds, drowning (15%), and fire/burns (11%), and other transportation injuries (9%) were the next most frequent causes of injury death. Children aged 10 to 14 exhibited next leading causes of death of other transportation injuries (15%), drowning (10%), and fires/burns (6%). For children aged 15-19, the next most frequent causes of death were poisoning (15%), drowning (6%), and other transportation injuries (4%).

Table 1. Leading causes and number of unintentional child injury deaths, 2009.

Rank	Age <1	Ages 1-4	Ages 5-9	Ages 10-14	Ages 15-19
1	Suffocation 907 (77%)	Drowning 450 (31%)	Motor Vehicle (MV) Traffic 378 (49%)	MV Traffic 491 (68%)	MV Traffic 3,242 (67%)
2	MV Traffic 91 (8%)	MV Traffic 363 (25%)	Drowning 119 (15%)	Transportation - Other 117 (15%)	Poisoning 715 (15%)
3	Drowning 45 (4%)	Fire/Burns 169 (12%)	Fire/Burns 88 (11%)	Drowning 90 (10%)	Drowning 279 (6%)
4	Fire/Burns 25 (2%)	Transportation - Other 147 (10%)	Transportation - Other 68 (9%)	Fire/Burns 53 (6%)	Transportation - Other 203 (4%)
5	Poisoning 22 (2%)	Suffocation 125 (9%)	Suffocation 26 (3%)	Suffocation 41 (5%)	Fall 58 (1%)

Source: National Vital Statistics System from the National Center for Health Statistics, Centers for Disease Control and Prevention; accessed through WISQARS.⁵

Table 2, below, displays the number of childhood deaths attributed to the top five leading causes of unintentional childhood injury. It also shows the total medical costs and work loss costs of these deaths. Medical costs include treatment, rehabilitation, and other medical costs incurred per injury. Work loss costs include a lifetime of lost wages, benefits, and household services. These figures were calculated based on injury-specific estimates developed by the Pacific Institute for Research and Evaluation for the Centers for Disease Control and Prevention.⁶ Motor vehicle traffic injury-related deaths are most frequent and thus costliest in terms of both medical care (\$56 million) and work loss (\$8.2 billion). Despite their lower frequency, fire and burn deaths are disproportionately costly. More medical costs are incurred per fatal fire/burn injury than by any other type of fatal injury.

Table 2. Mechanism of Injury, Fatalities, and Costs of Fatal Childhood Injuries, 2005.

Mechanism	Number of Deaths	Total Medical Cost	Total Work Loss Cost
Motor Vehicle – Traffic	6,781	\$56 million	\$8.2 billion
Drowning	1,120	\$5.7 million	\$1.2 billion
Suffocation	1,047	\$5.4 million	\$987 million
Poisoning	729	\$3.4 million	\$924 million
Fire/Burn	529	\$7.1 million	\$547 million
TOTAL	10,206	\$77.6 million	\$11.9 billion

Source: National Vital Statistics System from the National Center for Health Statistics, Centers for Disease Control and Prevention; accessed through WISQARS.⁵

In 2009, US emergency departments treated almost 9 million children with unintentional injuries.⁴ More than 200,000 of these children required hospitalization⁵. For children ages 0 to 9, the leading causes of nonfatal injuries were falls, being struck by or against an object, and animal bites or insect stings. The leading causes of nonfatal injury in children from 10 to 14 years old were falls, being struck by or against an object, and overexertion. Children 15 to 19 years old were most likely to be nonfatally injured by being struck by or against an object, falls, and being a motor vehicle occupant. Due to differences in reporting causes of death and mechanisms of injury, comparisons and trends are difficult to calculate.

Table 3. The five leading causes and number of nonfatal unintentional injuries among children treated in emergency departments, 2009.

Rank	Age <1	Ages 1-4	Ages 5-9	Ages 10-14	Ages 15-19
1	Fall 147,280 (59%)	Fall 955,381 (45%)	Fall 631,381 (37%)	Fall 615,145 (29%)	Struck by/ against 617,631 (24%)
2	Struck by/ against 31,360 (13%)	Struck by/ against 372,402 (18%)	Struck by/ against 406,045 (24%)	Struck by/ against 574,267 (27%)	Fall 468,967 (18%)
3	Bite/sting 10,922 (4%)	Bite/sting 137,352 (7%)	Cut/pierce 104,940 (6%)	Overexertion 276,076 (13%)	Overexertion 372,035 (14%)
4	Foreign Body 8,860 (4%)	Foreign Body 126,060 (6%)	Bite/sting 92,590 (5%)	Cut/pierce 118,440 (6%)	Motor Vehicle Occupant 341,257 (13%)
5	Fire/Burns 7,846 (3%)	Cut/pierce 84,095 (4%)	Pedal Cyclist 84,590 (5%)	Pedal Cyclist 118,095 (6%)	Cut/pierce 184,972 (7%)

Source: National Electronic Injury Surveillance System–All Injury Program (NEISS-AIP) from the Consumer Product Safety Commission; accessed through WISQARS.⁵

Table 4 displays the number of emergency department visits for the five leading causes of nonfatal unintentional childhood injury, as well as estimates of associated lifetime medical and work loss costs. As the most frequently occurring nonfatal unintentional childhood injury, falls incur the greatest costs both in terms of medical (\$5.0 billion) and work loss costs (\$10 billion). Falls are also the costliest of the leading five causes of nonfatal unintentional childhood injury per ED visit.

Table 4. Mechanism of Injury, ED Visits, and Costs of Nonfatal Childhood Injury, 2005.

Mechanism	Number of ED Visits	Total Medical Cost	Total Work Loss Cost
Fall	2,624,153	\$5.0 billion	\$10 billion
Struck By/Against	1,875,890	\$2.6 billion	\$5.2 billion
Overexertion	799,129	\$787 million	\$1.6 billion
Motor Vehicle – Occupant	588,689	\$496 million	\$991 million
Cut/Pierce	571,269	\$361 million	\$722 million
TOTAL	6,459,130	\$9.2 billion	\$18.5 billion

Source: NEISS All Injury Program (NEISS-AIP) from the Consumer Product Safety Commission (CPSC) for numbers of nonfatal injuries.⁵

Childhood Unintentional Injury in Kansas and Johnson County

Unintentional injury death rates were higher for Kansas children than the national average (19.5 per 100,000 vs. 15.0 per 100,000).² These rates were correspondingly higher for children aged under 1 year (27.9 vs. 24.4), 1-4 years (14.2 vs. 10.8), children aged 5-9 (7.6 vs. 6.0), children aged 10-14 (10.1 vs. 7.2), and children aged 15-19 (41.9 vs. 33.0). In almost every injury category, the death rate in Kansas exceeded the national rate. In 2009, more than 365,000 Kansans lived in poverty; 10% of those lived in Johnson County.⁷ The poverty rate in Kansas was 14.3% in 2010, less than that of the US as a whole (15.1%).⁸

Johnson County is the most populous county in Kansas, comprising 19% of the state population (544,179 people) according to the 2010 Census.⁹ Children represent 25.5% of Johnson County's population.¹⁰ For Johnson County children over one year of age, unintentional injuries were the leading cause of death.⁹

While 86% of Johnson County residents are white, the proportions of non-white residents are increasing.⁹ Residents of Johnson County are less diverse than Kansas residents overall.⁹ A greater proportion of residents graduate high school and college compared to the Kansas and US populations, and median household income is higher than that of Kansas and the US.⁹ At least 95% of the Johnson County population speak English as a first or second language; Spanish is the primary language of 5% of the population, and 50% of these residents speak English well.⁹ Among Johnson County residents, 4.4% of the population over age 5 report speaking English "less than very well"; the majority of these were Spanish speakers.¹⁰

Seventeen percent (17%) of the population of Johnson County were living in poverty in 2010.⁸ Children and young adults are disproportionately poor, representing 34% of the population and 54% of the poor. Nineteen thousand, or 21%, of Johnson County school-age children participate in the National School Lunch Program, for eligibility in which family income must be at or below 185% of the federal poverty level.¹⁰ Seventeen percent (17%) of children live in a single parent household; they are four times more likely to be poor.¹⁰ More than 8% of Johnson County children from 0-17 years old were poor (<100% FPL) in 2010; more than 20% were low-income (<200% FPL).⁸ Nearly 1 in 4 children living with a single mother is poor.⁷ Minorities in Johnson County are also disproportionately poor; among whites, the 2009 poverty rate was 5.2%, for African Americans the rate was 12.8%, and for Latinos the rate was 25.5%.⁷

Ten percent of all infant deaths in Johnson County were attributed to SIDS; among African Americans, 16% of infant deaths were SIDS-related.⁹ This disparity is mirrored in rates for Kansas as a whole.

Risk and Protective Factors

Understanding the demographic distribution of unintentional injury causes is important for the allocation of resources of preventive and educational efforts designed to reduce childhood injury by targeting messages to at-risk populations on individual, family, and community levels. In the US, children who are at greater risk of injury-related death and disability are males, those of lower socioeconomic status, and those from certain racial/ethnic groups.

Across age groups, male children had death rates almost twice those of female children, and they had higher nonfatal injury rates from 1 to 19 years of age.^{2,4} American Indian and Alaska Native children had the highest injury death rates, while Asians or Pacific Islanders had the lowest.^{2,4} Overall childhood injury-related death rates were approximately equal for white and black children, except in the case of drowning.¹ In 2009, African-American children's age-adjusted drowning rates were 45% higher than white children's (1.6 versus 1.1 per 100,000, respectively).⁵ These differences can be hypothesized to stem from various sources, such as confounding by other socio-demographic factors such as family income, differential access to timely and adequate medical care for injuries, or differences in cultural norms related to child-rearing.

Children living in poverty have disproportionately high rates of unintentional injury. Economic and social factors associated with greater risk of childhood injury include lower household income, single-parent households, and lower maternal age and education.^{4,11} In addition, living in a multi-family dwelling or in a low income neighborhood are associated with higher rates of childhood injury.⁴ Caregivers faced with financial problems and poor living conditions spend less time supervising children.¹²

Caregiver literacy is another factor influencing child injury risk. More than 40% of the US adult population read at or below basic literacy levels.¹³ Compounding risk to children, 43% of adults with the lowest literacy levels also live in poverty.¹⁴ Safety education for this population of parents and caregivers needs to be consistent, relevant, and easy to understand and implement.

Risks for different types of unintentional injuries vary according to age. Children under 1 year of age are most likely to sustain suffocation injuries.⁵ It is important to note that the number of nonfatal suffocation and choking injuries is underestimated due to underreporting.⁴ Young children have narrower airways, their chewing and swallowing coordination is not fully developed, and they often put non-food items in their mouths; these factors increase their risk for choking injuries.¹⁵

Fire/burn and drowning injury rates are highest among children under 5 years old.⁵ Young children's natural curiosity and lack of experience in assessing danger and risk contribute to their high fire and burn injury rates.¹⁶ Younger children are also reliant on assistance in escaping structural or residential fires. Drowning occurs in different settings based on the age and developmental ability of the affected child. Most infant drownings occur in bathtubs, children aged 1 to 4 are more likely to drown in swimming pools, and older children more often drown in natural bodies of water, like lakes and rivers.¹⁷

Nonfatal fall and poisoning rates are highest among children aged 1 to 4.⁵ United States poison control centers receive more than 1.6 million calls regarding children annually; almost 80 percent of these calls were for children younger than 5 years old.¹⁸ Most fall-related injuries occur at home.¹⁹ Falls from windows, stairs, playgrounds, and bunk beds are common among children. Injuries related to motor vehicles are the leading cause of death for children aged 5 to 19, and are responsible for over half of all unintentional injury deaths.⁵ Nonfatal motor vehicle injury rates are highest in children aged 15 to 19.⁵ Children in this age group are injured as both drivers and passengers. Inexperience, distraction, and risk-taking behaviors typical of this age group are likely factors in this pattern.

Chapter 2: Childhood Injury Prevention

Most childhood injuries can be prevented. There are also recognized practices that can reduce the severity of childhood injuries. Examples of successful and ongoing childhood injury prevention (CIP) interventions include the use and/or policies enforcing the use of bike helmets, child passenger safety seats, smoke alarms, graduated driving license policies, and pool/spa drain covers (VGBA 2008). These and other CIP interventions have saved many lives.⁴

In addition to the unquestionable benefit of saving children from injury-related death and disability, child injury prevention also creates cost savings for society. Interventions to prevent childhood injury compare favorably to many widely used public health interventions, such as immunization and water fluoridation programs, in terms of cost effectiveness.⁴ Cost saving prevention strategies include smoke alarm distribution programs, standards for child-resistant cigarette lighters, and laws regarding child occupant protection in motor vehicles. As shown in Table 5, below, the use of safety products is associated with significant savings in terms of healthcare and other costs.

Table 5. Estimated cost savings by select child injury intervention, 2009.

Every Dollar Spent On	Saves Society
Childproof Cigarette Lighter	\$72
Booster Seat	\$71
Bicycle Helmet	\$48
Child Safety Seat	\$42
Zero Alcohol Tolerance, Driver Under 21	\$25
Smoke Alarm	\$17
Pediatrician Counseling	\$9
Poison Control Center	\$7

Source: Children's Safety Network. Injury prevention: what works? A summary of cost outcome analysis for injury prevention programs (2010 update).²⁰

The Public Health Model

The public health model involves identification of the extent of the problem, as well as risk and protective factors. On the basis of this evidence, practitioners develop, implement, and evaluate interventions. The next step is the promotion of widespread adoption of evidence-based best practices and policies.

As with other public health issues, childhood injury prevention requires strategies for different points in the event timeline. These include preventing the injury from happening, such as by avoiding drinking and driving or removing hazards in the home; preventing or minimizing injury after an adverse event through the protection provided by child safety seats in a crash, smoke alarms in a fire, soft playground surfaces in a fall, or bike helmets when cycling; and reducing long-term consequences of injury through emergency medical services, trauma care, and rehabilitation. This latter category is most applicable in rural and international settings, where quality and access to these services is more limited.¹²

Behavior Change and Injury Prevention Theory

Behavior change theories identify factors which contribute to the acceptance or rejection of recommended health and safety behaviors. These include approaches directed at individuals, such as targeting children or caregivers; community approaches, designed to influence behavior through changes in social norms; and macroeconomic or cultural approaches, which seek to address the underlying social factors that contribute to injury risk. Major behavior change theories relevant to the prevention of childhood unintentional injury are described briefly in this section.

Social-Ecological Model

In injury prevention, as in a variety of other health issues, focus has begun to incorporate environmental context factors as well as individual behaviors. Injuries generally result from multiple causes. A four-level social-ecological model can clarify our understanding of childhood unintentional injuries, as well as predict the effect of potential prevention interventions at different levels.²¹ This model considers the interactions between individual, interpersonal, community, and society in changing the outcome of health issues. The model allows us to address the multiple layers of causality that result in childhood unintentional injury.

Social-Cognitive Theory

Another behavioral model that addresses the influence of both individual and environmental factors on behavior is Bandura's social cognitive theory. The term reciprocal determinism is used to describe the interactions between personal and environmental factors on behavior.²² This theory also delineates several constructs that can influence behavior change. These include outcome expectations, an individual's judgment of the likely consequences of a particular behavior; reinforcements, which can increase or decrease the likelihood of continuing a behavior; and observational learning, by which individuals adopt a behavior through observation of others.²² These constructs can be applied to educational initiatives designed to prevent unintentional childhood injury.

Another important construct of social cognitive theory is self-efficacy, a person's judgment of his or her ability to perform a recommended behavior. One strategy for changing behavior is to increase self-efficacy. The provision of resources and support is key to raising individuals' confidence that they can perform recommended actions, and that these behaviors will successfully mitigate the threat of unintentional childhood injury.²³ Even with a strong sense of efficacy, however, incentives and reinforcements may be important in changing behavior.²² It is also important to shape the environment to encourage behavior change, which includes the recognition of environmental factors that serve as deterrents to change.

Theory of Planned Behavior

This model focuses on the interplay of intentions to perform a behavior, attitudes about the outcome of the behavior, subjective norms, and perceived behavioral control, which is related to the concept of self-efficacy.²⁴ The most important

variable in predicting behavior change is intention.²⁵ Thus, the presentation of information should stress supportive subjective norms and positive attitudes toward a preventative behavior.

Transtheoretical Model

The transtheoretical model conceptualizes behavior change as a process comprised of six stages.²⁶ During precontemplation, there is no intention to change behavior in the near future. In the contemplation stage, people intend to change and are aware of the benefits and costs of the change. The preparation stage includes a plan of action and an intention to change in the immediate future; behavior change occurs during the action stage; the maintenance stage involves continuation of the new behavior. Termination involves total efficacy to maintain behavior. According to this model, interventions must be aligned to the stage of the individual in order to facilitate movement into the next stage of change.²⁶ In precontemplation, for example, raising awareness about the need for a change in behavior is necessary. This can be accomplished through education and media campaigns. Reevaluation of self and the environment, through which individuals clarify their values and the impact of their behavior on the social environment, can also be used to assist in progression through the stages.²⁶ Strategies to facilitate reevaluation include the provision of positive models, the use of imagery, and the relation of personal stories.²⁶ In the absence of planned interventions, individuals will lack the motivation to progress through the stages and change their behaviors.

Communications Approaches

Communication strategies can be used to accomplish different objectives with different audiences. At their best, communication strategies are coordinated, audience-specific, and culturally appropriate.⁴ Communication about unintentional childhood injuries to raise awareness of their burden to society and preventability can initiate community action and support policy designed to prevent these injuries. Informing the actions of policy makers, organizations, and families is an important role of public health. Legislation to protect children from injury and approaches to injury prevention that are consistent and coordinated are needed at the policy and organizational levels. Parents and caregivers need to be informed about evidence-based strategies to prevent injuries at home and in the community. Communication strategies can increase awareness of and demand for proven prevention products and actions. Attitudes about benefits of and barriers to interventions can also be influenced by communication strategies, which can lead to increased use of prevention measures.⁴

Educational and communications strategies are necessarily intertwined. Education combines information dissemination with behavior change. Skill acquisition is a component of educational strategies. The identification of educational gaps and the development of training capacity among educators are important to the success of a prevention program. Educational interventions impact all facets of injury prevention.⁴ Education is needed for those who care for or influence children, including teachers, the public, caregivers, and parents. Strategies directed at lay audiences should employ both traditional and innovative informational channels.⁴ Messages should be concise, relevant, and actionable.⁴ Equally important, messengers should be credible, relatable, and possess subject matter expertise.⁴

A component of the Centers for Disease Control and Prevention's National Action Plan for Child Injury Prevention⁴ is to educate the public about injury risks and effective strategies to prevent child injuries. Parents and caregivers can only make

better choices to ensure children's safety through better knowledge. Through education, public health professionals can illustrate risks to child safety and best practices to reduce those risks. Caregivers can use this information to create safer environments for children in various settings. For example, parent education on home hazard reduction has been shown to be effective in changing behavior.²⁷ Exposure to prevention messages has been associated with safety behaviors and the use of safety equipment such as helmets, safety seats, and smoke detectors.²⁸

Strategic Communication

Health education must be based on consideration of communication principles to ensure efficacy. Strategic communication involves applying social marketing principles to health communication. These principles include target audience research, the adaptation of messages to target audiences, and interventions designed to be culturally sensitive. Strategic communication highlights the need to segment the audience for health education interventions based on culture, social demographics, and risk factors for childhood injuries.

The first step in the process of designing health education messages to the needs and communication preferences of target audiences is audience research. Messages should be consistent with audience beliefs, attitudes, and values. The use of familiar and accepted language, images, and examples is also important.²⁹ Evaluating the efficacy and acceptance of health education messages through pre-testing with target audiences can help refine messages and increase adoption of recommended behaviors.²⁹ Different audiences may also respond more positively to different information sources and communication channels.²⁹ The use of multiple communication channels for reaching targeted audiences with health education information increases exposure to and impact of messages, according to the communication principles of redundancy and reinforcement.²⁹

The audiences whose socio-economic characteristics make them more vulnerable to unintentional childhood injuries are more likely to struggle with health literacy.²⁹ Non-native English speakers also face language barriers to accessing and understanding safety messages and recommended prevention practices. These factors make communication that is culturally sensitive and linguistically accessible necessary for reaching the most vulnerable populations. To accomplish this, educators must identify relevant cultural issues that may influence the way these populations respond to childhood injury prevention messages. Cultural factors that can influence the outcomes of health messaging include health beliefs, values, norms, and expectations.²⁹ Audience assessment should also include the evaluation of language skills, health literacy, health seeking behavior, and media usage.²⁹

One strategy for addressing these challenges is the use of social math, which involves the communication of statistics and numbers in a way that is meaningful to target audiences. This is accomplished through reference or comparison to familiar numbers or costs, numbers associated with dramatic events, or numbers related to other issues.²¹ In this way, social math can aid in audience comprehension of the magnitude or cost of childhood injury issues and interventions. As with all health education messages, reference numbers must be relevant to the target audience.²¹

To evaluate the efficacy of health education interventions, baseline measures of awareness, knowledge, and behaviors must be quantified prior to implementation. This can be accomplished through secondary sources like literature reviews and published studies or through data collection activities like interviews and surveys.²¹ Gains in knowledge and changes in

attitudes can then be assessed through various strategies, including surveys and focus groups. This data can also be used in the further refinement of messaging.

Concept Framing

In general, the public does not value injury prevention as much as some other public health issues.²¹ According to framing theory, perceptions of an issue are created largely by what people already know and associate with that issue based on sources like advertising, news media, TV, movies, interpersonal communication, internet, and personal experience. These dominant frames create challenges for individuals in hearing and valuing messages about injury prevention.²¹ To change the dominant frame, health educators and the materials they create can employ message framing. This helps audiences to view issues through a new perspective and to establish new associations. Linking an issue to a widely held societal value helps start the framing process, which is then reinforced through consistent, repetitive, continued communication. The CDC²¹ recommends a coordinated message strategy that includes the integration of a broad overarching statement that expresses a core societal value, or a concept frame. The concept frame can be adapted and integrated into injury prevention communication and education through the use of audience-specific messages.

Engaging Communities

Community-based approaches fit well with the challenges of preventing childhood injuries.^{11,28} Injury prevention encompasses a wide range of injury types, settings, and partners. There are a vast number of possible preventive interventions, and without a range of initiatives, involving stakeholders from government, non-profit, and health sectors, observable differences in morbidity and mortality are unlikely. The goal of a community-based approach is to change behavior and norms throughout the community. This can be accomplished through networking, mutual support, and cooperative advocacy for changes in local policy.²⁸ According to the World Health Institute's World Report on Child Injury Prevention¹¹, "The use of multiple interventions, repeated in different forms and contexts, can lead to a culture of safety being developed within a community."

A health promotion research model that incorporates community members into research decision-making and the dissemination of findings is community-based participatory research (CBPR). CBPR is designed to respond to perceived community needs, build community research capacity through training, and involve community members in decisions throughout the research process.³⁰ Building a partnership between researchers and community members allows for the formation of trust and can aid in the process of intervention adoption and behavior change.³⁰

A key tenet of CBPR is to address the needs identified by the community, instead of researcher preconceptions of those needs.³⁰ Pre-testing health promotion materials is one strategy for increasing audience participation in health education efforts. Engaging with targeted communities in this way can increase the cultural relevance of health messaging, increasing the likelihood of audience understanding and acceptance.³⁰ Another facet of CBPR is the emphasis placed on environmental determinants of health, rather than a focus on the individual.³⁰ CBPR engages community members in research, building community capacity, knowledge, and cohesion regarding health problems or disparities.³⁰ This enables communities to use research findings to lobby for changes in policy and the built environment.

The ultimate goal of educating the public about child injury prevention is to engage communities and change norms about what confers protection and what is considered responsible behavior. This can lead to changes in community policy and legislation to support caregivers in their efforts to keep children safe and to implement environmental changes in public spaces. Historically, policies regarding safe environments, products, and behaviors, have changed norms locally and nationally, and have been an important component in preventing unintentional childhood injury.⁴

Prevention Frameworks

The most attractive prevention opportunities are those that focus on injuries that create the most social burden, for which there are evidence-based interventions available, and for which outcomes can be easily measured. This encompasses motor vehicle-related injury, suffocation, drowning, poisoning, fires and burns, falls, and injuries related to sports and recreation.

Haddon Matrix

The Haddon Matrix, developed by William Haddon Jr. in the 1960s, has been used to develop injury interventions in various settings and at various levels. It describes the relationship between hosts, agents or vehicles, physical environment, and social environment at each stage of possible intervention.^{31,32} The matrix allows for the identification of strategies, priorities, costs, and effects of injury prevention; the documentation of existing research and research needs; and the allocation of resources for optimal efficacy. Haddon also described 10 injury prevention countermeasures that seek to prevent or control the harmful transfer of energy that results in unintentional injury.³³ Table 6, below, aligns Haddon's 10 strategies to childhood unintentional injury prevention.

Table 6. Haddon's countermeasures and examples of child injury interventions.

Strategy	Example related to child injury prevention
1 Prevent the creation of the hazard in the first place	Banning the manufacture and sale of inherently unsafe products
2 Reduce the amount of energy contained in the hazard	Speed reduction
3 Prevent the release of the hazard	Child-resistant medicine containers
4 Modify the rate or spatial distribution of the hazard from its source	Use of seat-belts and child restraints
5 Separate people in time or space from the hazard and its release	Bicycle and pedestrian pathways
6 Separate people from the hazard by interposing a material barrier	Window bars, pools fencing, covering wells
7 Modify the relevant basic qualities of the hazard	Softer playground surfaces
8 Make the person more resistant to damage	Good nutrition for children
9 Counter the damage already done by the hazard	First aid treatment for scalds – "cool the burn"
10 Stabilize, repair and rehabilitate the injured person	Burn grafting, reconstructive surgery and physical therapy

Source: World Health Organization's World Report on Child Injury Prevention.¹¹

Public health practitioners can use a “Three Es” approach to childhood injury prevention.^{4,11} This approach focuses on the interrelated elements of education, enforcement, and engineering. Much of public health is founded on education; it can inform different audiences about risks to child safety and options they can employ to decrease the likelihood of unintentional childhood injury. Enforcement comprises the ways in which the legal system can be used to influence behavior and the environment to prevent injuries. When combined with education, enforcement can be highly effective in preventing unintentional childhood injuries.⁴ Enforcing protective laws and regulations increases their effectiveness. In engineering, design is used to reduce injury risks. This can comprise strategies implemented in both products, such as the manufacture of toys without small parts to minimize choking hazards, and the built environment, such as safety surfacing on playgrounds to ameliorate fall injuries. Technological interventions may be passive, as in the above examples, or may require education on how to implement the solution safely and effectively, as is the case with child passenger safety seat and smoke alarm installation and maintenance.

Countries with the best child safety records can provide important lessons in preventing unintentional injury. Their experience indicates that positive leadership and widespread, multisectoral efforts to provide safer physical and social environments are the keys to producing sustained reductions in injury mortality and morbidity.¹¹ For example, Sweden’s success in lowering rates of unintentional childhood injury emphasizes the need for good surveillance data, ongoing research, legislation to support the creation of safer environments, and broad-based safety education campaigns.³⁴ Injury interventions that have proven effective share an emphasis on behavior change, correct and consistent use of safety devices, and safety legislation.³⁵

Experimental Interventions

Randomized controlled trials are considered the most rigorous way to assess the effectiveness of specific injury interventions. However, this type of experimental protocol is not typically used to assess efficacy of unintentional childhood injury.¹¹ Randomized controlled trials are often unfeasible due to the scope of injury types and settings and the relative rarity of serious injury outcomes. Ethical considerations also prohibit the use of a non-intervention comparison sample in cases where intervention benefits are obvious, as is the case in many unintentional childhood injury prevention initiatives.

However, some research has been conducted along experimental lines. Significant differences in safety knowledge have been observed in intervention and control groups in community-based interventions, and increased community awareness has been measured in post-intervention groups.²⁸ Prevention initiatives focused on awareness and the use of safety devices have been shown to significantly reduce injury rates and injury severity as a result of multiple community-based programs.²⁸ One study also found significant increases in the ownership of safety equipment in intervention communities.²⁸ A summary of evidence-based interventions, aggregated by leading type of childhood unintentional injury, can be found in Appendix A.

Chapter 3: Field Experience

Prior to beginning the field experience, a Field Experience Agreement (Appendix B) was outlined and agreed upon by Katie Schatte, the agency mentor, the MPH student, and MPH program representatives (the program director and the student's major professor and advisory committee members.) In addition to the responsibilities listed in the Field Experience Description, the student also updated information regarding CPS seat fittings and installations in Johnson County; participated in CPS Seat Check-Up events, helping trained child safety seat technicians adjust and install car seats and teach parents and caregivers about child safety issues in and around cars; and researched and created media materials regarding ongoing CIP issues in the community.

Johnson County Department of Health and Environment

The mission of the Johnson County Department of Health and Environment (JCDHE) is "to prevent disease and to protect and promote the health of the community."³⁶ Departmental programs and services derive from this mission; some are state-mandated and some are discretionary. They are developed based on community needs as determined through ongoing Community Health Assessments, which rely on Behavioral Risk Factor Surveillance System data. This data is also used in conjunction with program and client evaluations to evaluate the success of interventions. Programs are funded through county, state, and federal government, client payments, and grants.

Divisions of JCDHE are Disease Containment, Family Health Services, Child Care Licensing, Administrative Operations, Environmental, and Health Education.

Health Education Division

The Health Education Division of JCDHE employs classes, presentations, programs, and workshops to promote healthy behaviors. Programs include Chronic Disease Risk Reduction, Nursing Continuing Education Provider Staff Training, Targeted Case Management and Sexuality Training, Community Health Assessment Process, Media Relations and Social Media Outreach, Injury Prevention, Senior Wellness, and Community Wellness. In 2011, Health Education programming served 61,935 Johnson County residents.³⁶ This accounts for more than half of the health department's outreach.

Safe Kids Worldwide and Safe Kids Johnson County

Safe Kids Worldwide, founded in 1987, was the first national organization solely focused on preventing unintentional childhood injury. Today, it works through over 600 coalitions in 23 countries to reduce and mitigate unintentional childhood injury globally.³⁷

Although more than half of childhood injury deaths occur among children aged 15-19 through MVT-related injuries, Safe Kids focuses on interventions targeting children aged 0 to 14 years old. The organization conducts research on safety practices, organizes events, and creates educational materials. The information they disseminate is accessible by risk area and age group, and is tailored to parent, educator, media, and safety professional audiences. They focus on pre-event protection from injury (e.g., child safety gates, product recall information) and protection during an injury event (e.g., child passenger safety seats, bike helmets) through research, education, and policy. Safe Kids covers all leading causes of childhood

unintentional injury and promotes well-established, proven means for injury prevention, such as correct and consistent use of bicycle helmets, smoke alarms, four-sided pool fencing, and child passenger safety seats.¹¹

For example, the Safe Kids Buckle Up program has promoted correct and consistent use of child passenger restraints for the past 15 years. Through the over 80,000 events held to date, 505 permanent inspection stations have been established, 137 mobile car seat checkup vans are operational nationwide, and more than 1.5 million car seats have been inspected.³⁷ Safe Kids also certifies CPS seat technicians and instructors. Recent research, educational, and policy efforts have focused on medication safety, button battery ingestion, sports injury prevention, and correct installation of CPS seats.³⁷

JCDHE is the lead agency for Safe Kids Johnson County (SKJC), which is partially supported by local government funding and is partially funded through various grants. SKJC is a coalition of agencies, organizations, and businesses in Johnson County that work for unintentional childhood injury prevention. Safe Kids activities include child passenger safety (CPS) seat checkups and technician training, bike rodeos and bike helmet fitting demonstrations, and National Safe Kids Week. SKJC also uses grant-obtained funds to purchase and distribute bicycle helmets, CPS seats, and portable safe sleep cots to WIC-referred clients. Distribution of CIP educational materials to parents, medical practitioners, and community stakeholder partners is another important activity. The organization's objectives include education and awareness for the public, media, professionals, parents, and caregivers regarding childhood injury prevention.

Charlie's House

Charlie's House is a safety demonstration project with a focus specifically on child safety in the home. Its name comes from Charlie Horn, a 2-year-old Kansas City boy, who was killed on November 1, 2007, while attempting to climb a 30" dresser in his home. Charlie's House is a 501 (c)(3) organization "dedicated to keeping the community informed and engaged" in preventing childhood injuries in the home.³⁸ Currently, the organization uses a model home in Johnson County provided by a subdivision developer as a safety demonstration house. It is open to the public daily, and provides room-by-room safety tips and hands-on examples of dangers in the home and the use of safety devices. Founding community partners included SKJC and Children's Mercy Family Health Partners. Activities center around planning for the construction of a new, permanent safety demonstration home, the provision of furniture safety straps for securing large or tip-prone items to walls, and the development of educational materials for parents focusing on practical childhood injury prevention measures.

The Charlie's House education committee consists of community stakeholders, including pediatric physicians and nurses, representatives from CIP non-profit organizations, local government and local fire departments, and parents. The intersectoral group meets monthly to assess current research on childhood unintentional injury, develop goals to address the education-related needs of Charlie's House, and collaborate on upcoming education and awareness initiatives. Members with content expertise also deliver child home safety presentations to community groups as requested.

Internship Responsibilities

The values that informed the student's field experience work on childhood injury prevention were guided by JCDHE and Safe Kids Worldwide principles, as well as by public health ideals learned through Masters of Public Health coursework and related activities and interactions. First, all children should have the opportunity to grow up without suffering preventable

unintentional injury. Public health interventions must be based on current evidence, and organizational partnerships are vital to the coordination of prevention programs. Through working on this project, the student also came to believe firmly that the prevention of childhood injuries and related mortality is possible. In addition, preventing childhood injuries is important in reducing health disparities and increasing social equity.

Project priorities were determined by the needs of the Charlie's House education committee. Katie Schatte, education committee chair and SKJC representative working out of JCDHE, oversaw project responsibilities. The student's activities on behalf of Charlie's House included developing standardized, modifiable educational presentations on home safety for use with public audiences, cataloging and sharing CIP best practices and available materials, and creating educational documents appropriate for use as supplements to presentations or dissemination through a variety of media channels. The goals underlying these activities were to raise public awareness about the burden, risks, and effects of unintentional childhood injuries and to highlight opportunities and best practices for injury prevention.

The initial step in this process was a thorough review and documentation of appropriate content related to the leading causes of unintentional childhood injury already developed by reliable organizations and available for free public dissemination. A review of JCDHE's on-hand materials, including pamphlets, literature, and reports yielded some of the desired products. Additional material was found through internet searches and recommendations from local content experts in health care, fire departments, and non-profit organizations. Sites yielding the most useful materials included the Centers for Disease Control and Prevention, the National Fire Prevention Association's Public Education Division, the Consumer Product Safety Commission, and Safe Kids Worldwide. Topical materials were also gathered from the US Fire Administration, the National Capital Poison Center, the US Department of Agriculture, the Nemours Foundation's KidsHealth, the Food and Drug Administration's Consumer Health Information, and the National Highway Traffic Safety Administration.

This review of available materials was accompanied by intensive research into content for project products. The student's knowledge about unintentional childhood injury prevention was, at the outset of the field experience, limited to the vague ideas about ensuring proper in-vehicle restraints, keeping lighters and matches out of children's reach, labeling toxic household substances with Mr. Yuk stickers, and supervising children while they cross the street. Incidentally, Mr. Yuk stickers have been found to attract rather than discourage children from handling household poisons.³⁹ Throughout the field experience and the development of project products, the student was guided by the Centers for Disease Control and Prevention's National Action Plan for Child Injury Prevention.⁴ This document provides guidance on the effective design and transmission of injury prevention messages and information, and on creating materials designed to increase knowledge, change attitudes, and promote behavior change related to preventing injuries among target audiences.

The quantity and quality of collected materials was deemed appropriate by the agency mentor. Materials were found that were targeted to Spanish-speaking, minority, and low-literacy audiences. Upon analysis, the student found that most materials addressed childhood injury prevention in one of the following ways: a focus on one childhood injury prevention topic (e.g. fires/burns, pedestrian/cyclist safety, poisoning, drowning), a focus on a specific aspect of an injury prevention topic (e.g. microwave safety, helmet fitting, safe storage of medications, pool/spa entrapment), a geographic approach addressing injuries in the context of the room of a house in which they were most likely to occur (e.g. fire prevention in the kitchen, drowning prevention in the bathroom), or an age-based approach which provided injury prevention information based on

epidemiologic data on age-specific injury patterns (e.g. suffocation and choking prevention for infants, water safety for 1-5 year-olds). As valuable as these materials were as informative tools, the student was concerned about their utility in an educational setting.

Due to the wide range of injury types and the variety of possible interventions within a given setting, an injury-specific approach was felt to have limited utility on its own; similarly, sub-topical materials, while important, would not be applicable to all audiences nor to all audience members. The geographical approach described was problematic in that it relies on a standardized two-bedroom home model that would not match the reality of many family living arrangements, and in that injuries of every type can and do occur in every room of the home. For example, burns may occur when a child touches a hot radiator, when a hot liquid is spilled, when smoke alarms are not properly installed or maintained, when water heater thermostats are set too high, or when lighters or matches are not properly secured out of sight and reach. These are only a few examples of a specific category of injury that can occur in almost any room of the house. Age-specific materials are useful, but have a similar limitation in that multiple children in different age/risk brackets often live and/or are cared for simultaneously.

After discussing these concerns with the agency mentor, the student and mentor decided on an approach based on the seasonality of childhood injuries. This approach takes into account the fact that specific risks are more likely to be present at different points in the year. For example, sports and recreation injuries are more frequent in summer months, when children are outdoors⁴, while burn risks from flames are highest in winter months, when most home fires occur.⁴⁰ Year-round risks also display a season-specific character. Cooking-related injuries and food-related poisonings can be put in context of a busy holiday kitchen in winter months, while in summer months a focus on grilling and picnic safety is more relevant. The CDC's National Action plan highlights the need for a bank of relevant, thematic messages that are timed to coincide with seasons.⁴ The fact that the student's field experience coincided with winter holidays also factored into this decision.

This approach, too, is limiting for a variety of reasons. For example, the focus on hazards posed by Christmas décor in holiday-themed materials introduces cultural bias that may potentially alienate audiences of other religious backgrounds. Audiences may also see winter-specific materials as relevant only to Christmastime due to the emphasis on holiday hazards. Winter and summer holidays are typically busy times for families and caregivers; audiences may feel that the demands on their time during these seasons preclude attention to or implementation of child safety precautions.

Caregivers were chosen as the primary target audience for these educational materials. A caregiver is the person or people who take primary responsibility for someone who cannot care fully for themselves, in this case a child or children. A caregiver may be a parent or other family member; a trained professional, such as a daycare provider or teacher; or another individual, like a babysitter, neighbor, or friend. This group is most likely to be responsible for undertaking modifications to a child's immediate environment to improve safety. In addition, caregiver inattention or distraction is involved in many unintentional childhood injuries and resulting deaths.¹¹ Even in the presence of the best childhood injury prevention interventions, both active and passive, nothing can replace adult supervision in terms of injury prevention. Evidence associates (though does not yet correlate) supervision with decreased injury risk: a child's risk for injury is significantly increased in situations that compromise a caregiver's ability to supervise, such as being the sole caregiver, caring for multiple children, or abusing substances.¹¹ Supervision of younger children by older children is not similarly associated with decreased injury risk.¹¹

Supervision entails continuous attention and proximity. Despite the probable importance of supervision in reducing unintentional childhood injuries, there is no one supervisory style that is agreed to be uniformly protective, as a child's age and the setting are important variables. A caregiver's capacity for supervision is affected by his or her mental health status, complacency, distractibility, and use of alcohol or drugs. In addition, factors like poverty, unemployment, and the disruption of social networks can negatively affect the quality of child supervision.¹¹ A caregiver's perception of what constitutes adequate supervision may also be inconsistent with epidemiological evidence. Therefore, interventions designed to increase knowledge and good practices among caregivers are an important part of childhood injury prevention.

Infants, among whom only 4% of deaths are attributable to unintentional injury², were not included as a prevention target in this project. This decision was made on the basis of the volume of available and appropriate materials regarding unintentional suffocation prevention; the composition of the Charlie's House education committee, which includes Safe Sleep content experts; and the fact that infants face very different risks than do children over the age of one. Similar factors underlay the choice not to include in-depth information on child passenger safety and the appropriate use of safety seats in project materials. Due to the strategic focus of SKJC and Charlie's House, as well as the fact that parents and caregivers have significantly less control over the actions and environments of this age group, children over the age of 15 were also not targeted in project materials.

The student initiated work on seasonally-based, customizable PowerPoint presentations for Charlie's House educators to use in outreach activities designed for public audiences. This format allows educators to tailor messages to specific audience interests, informational needs, and literacy levels. Thus, it was felt that more was better in terms of both topics and content, since educators could easily remove or rearrange slides. Per CDC recommendations, slides were developed with consideration of potential low-literacy audiences, and so where possible were designed to be easy-to-read and highly pictorial to improve attention to and comprehension of key safety messages. Care was exercised in the choice of prevention opportunities presented. Emphasis was placed on evidence-based practices, where possible (see Appendix A). Suggestions from local content experts and from the agency mentor were also incorporated into project materials.

These presentations went through multiple revisions, first under the direction of the agency mentor. The student then reviewed topics and slides with the Charlie's House education committee, who evaluated their style and content for impact, accuracy, and thoroughness. The final products, entitled *Holiday Safety* and *Summer Safety*, can be found in Appendices C and E, respectively, of this document.

The use of multiple information channels allows unintentional childhood injury prevention messages to reach a wider audience, and increases the chances for multiple exposures. This increases the chance that the target audience will understand and act on prevention messages.⁴ With this in mind, the student concurrently developed educational materials related to the seasonal childhood injury prevention topics addressed in the PowerPoint presentations (see Appendices D and F). These documents were designed for dissemination via social and print media or for use as handouts to accompany educational presentations. All materials and resources were also disseminated through the Health Education division of JDCHE for use in potentially appropriate programs focused on caregivers (e.g. WIC, Empowering Futures). Finally, the student organized materials that had been created and downloaded into electronic files, which were copied onto thumb drives for the use of Charlie's House health educators.

Limitations

Data collection systems on childhood injuries are frustratingly imperfect. For example, injury categories and age range reporting are not standardized, creating difficulties in comparing data from federal, state, and local sources. Gaps exist in data collection, especially regarding types and circumstances of injuries. For example, Kansas childhood injury data is collected by the CDC, which does not disaggregate the data to the county or local level. This creates limitations for the identification of local problem areas, as well as for intervention design, implementation, and evaluation.

Local injury surveillance is important both to identify focus areas for intervention within a community and to evaluate program outcomes. This type of post-intervention data would be far more useful in evaluating program effectiveness than the measures of knowledge or behavior typically assessed. In addition, local morbidity and mortality data can be used to generate public, media, and political interest and motivate community involvement, ensuring resources are available to address unintentional childhood injury.²⁸ Additional research on how injuries occur, best practices for preventing injuries, and strategies for implementing preventative measures is needed.

Another frustrating aspect of this project was the direction and emphasis of the Charlie's House executive board. In a climate of scarce resources for addressing childhood unintentional injuries, their focus on education and skills training to prevent in-home injury is not supported by any empirical evidence.¹¹ While the idea of a safety demonstration house is interesting and has the potential to generate community support for childhood unintentional injury prevention, no standalone educational intervention has ever been shown to reduce the incidence of childhood injury. Education is a valuable component of injury prevention strategies, but only as part of a broader strategy involving legislation and environmental modification.

Their focus on Charlie's death and the provision of furniture straps is also misplaced. Though Charlie's story adds human interest to the project, the fatal injuries he sustained are not representative of the burden of childhood injury in the population. Furniture tip-over fatalities are relatively rare. In their guide to creating effective injury and violence prevention messages²¹, the CDC recommends, "Do not describe injury problems using a single situation (e.g., a specific child abuse case). Instead, describe the context around how injury and violence happens over the long term and not as a single event." Providing safety equipment, in this case furniture straps, especially without concurrent training or installation, has not been found to reduce childhood injuries.²⁸ In addition, one or two furniture straps are not sufficient to remove all of the furniture tip-over hazards in a home.

Charlie's House board members also expressed the desire for a website that would be the "go-to" clearinghouse for childhood home safety information. At the same time, they were unwilling to consider co-branding with or endorsement by Safe Kids Worldwide or the JCDHE. Frankly, excellent comprehensive web-based resources already exist. Examples include SafeKids.org and KidsHealth.org, both of which provided copious source material for project products. Much more useful would be a focus on local issues and the identification and targeting of hard-to-reach (e.g. non-English speaking, at-risk, low-literacy) populations in the community or the Kansas City metro area.

1. **Make child injuries a health priority** by applying an amount of financial and human resources proportionate to their burden in the community. Funding and emphasis should reflect the impact of unintentional childhood injury as a leading cause of death, disability, and illness in this age group.
2. **Integrate injury into child health and development programs** across divisions of Johnson County Department of Health and Environment. Interventions to prevent unintentional childhood injury have a place in clinic services, childcare licensing, WIC programs, adolescent health and development services, senior services, and environmental inspections.
3. **Develop data collection systems** to identify the most prevalent types of injuries in Johnson County, as well as risk factors for unintentional childhood injury, the geographic distribution of these injuries, and prevention programs or policies already in place. Use standardized codes based on national and international models of injury surveillance to ensure that local data is comparable. Employ systems that are able to collect data from all relevant sources, including police departments, healthcare settings, and community surveys.

Data on the extent and nature of childhood unintentional injury at the local level are essential in the identification of intervention priorities, the understanding of causal factors of injury, and the determination of target groups at higher injury risk. Data limitations create difficulties in engaging the public and policy-makers in the unintentional childhood injury issue. Without data, priorities may not reflect community needs and the effectiveness of prevention initiatives cannot be evaluated.

4. **Develop research priorities for the future** that include economic and cost-benefit analyses, healthcare service utilization, and ongoing local childhood injury surveillance. Research and interventions should be grounded in accepted theories of behavior change and developmental science perspectives.
5. **Recognize the impacts of non-fatal injuries** to the local economy, healthcare systems, community, and individuals. Though death is the most visible measure of injury, it is not the most common; thus, it is important to quantify the effects of hospitalized and non-hospitalized unintentional childhood injuries. Hospital admissions, presentations at emergency departments, and days of school missed are commonly used as measures of the severity of unintentional childhood injury. Physical, mental, and psychological disabilities resulting from unintentional injury can affect injured children, their families, and the community long after an injury event.
6. **Implement interventions known to prevent and mitigate child injuries**, adapting them to local needs and audiences. Childhood injury prevention programming should be based on evidence and should be pre-tested locally prior to implementation. Evaluation of interventions is key in sustaining program support and ensuring resources are allocated effectively. In the absence of specific interventions, educational campaigns are unlikely to reduce the burden of unintentional childhood injury in the community. Develop a plan outlining specific actions and measurable outcomes, and allocate resources accordingly.
7. **Use strategic communication and participatory methodologies** to engage communities in the process of preventing unintentional childhood injuries. Audience feedback on prevention initiatives both enhances communication efficacy and increases knowledge retention and positive attitudes among participants. Tailoring programming to specific vulnerable populations improves comprehension and acceptance. It is also recommended that children be included in the development and implementation of injury prevention

interventions, and that their abilities and attitudes are considered in prevention messages through a strategic communications framework.

8. **Aim to raise awareness** about the preventable nature of unintentional childhood injuries in the public, among policy-makers, and in the donor community. The active championship of unintentional injury prevention by local media or political figures would be extremely influential. Media reports guided by the communication and behavioral frameworks discussed in this document can also aid in raising this awareness, as can the inclusion of injury prevention into school curricula.
9. **Expand injury prevention partnerships** to include government entities responsible for transportation, planning, agriculture, and education to coordinate activities and collaborate on program development, implementation, and evaluation. Strong partnerships for child injury prevention with law enforcement, fire, and healthcare sectors are already in place and should be used as the basis for expanding involvement. Interdisciplinary collaboration can further strengthen childhood unintentional injury prevention; in addition to current relationships with nonprofit representatives, clinicians, media, and educators, the inclusion of epidemiologists, program evaluators, civil engineers, and academicians in injury prevention is recommended.
10. **Look towards future needs** when implementing the recommendations outlined above. Demographic trends predict growth in minority and non-English-speaking populations in Johnson County; these groups are also at greater risk for unintentional injury. As socio-economic inequality continues to expand, the gap in childhood injury rates between the most affluent and most marginalized groups will progress apace. The size of this disparity will provide a measurement of how well Johnson County is preventing unintentional childhood injuries. An important component of addressing this disparity is ensuring access to and affordability of all healthcare services for children.

Lessons Learned

The most eye-opening part of this field experience was realizing the extent and burden of unintentional childhood injury, both in the US and worldwide. Prior to this experience, I had never thought much about injuries in a public health context. As a student whose interests lie predominantly in maternal and child health in low-income countries, I naturally gravitated toward international public health priority topics as delineated by the Millennium Development Goals and by the major funders of international public health. This meant I considered tuberculosis, HIV/AIDS, and malaria to be the most important public health topics. After beginning work on this project, I continued to think of childhood injury as a major issue mainly in high-income countries. My reasoning was that because medical advances have reduced the mortality burden of infectious disease among children in these countries (see Figure 1), childhood injury accounted for a greater share.

This, however, is only partially true. While the leading causes of childhood mortality in middle- and low-income countries are mostly infectious diseases, for children between 1 and 19 years of age the contribution of road traffic injuries, drowning, burns, and falls is startling.¹¹ Though morbidity data is inconsistent and often unavailable in these countries, one can only imagine the magnitude of the non-fatal childhood injury problem, compounded by lack of medical care that is available to victims, financially or geographically. I had failed to consider that children in low- and middle-income countries were more likely to live in environments that increased their injury risks.

I also learned about myself through this process, including what I want from my career in public health. First, I want to work for an organization whose resources are used to contribute to knowledge of its field and to implement interventions based on available evidence. Safe Kids Worldwide provided a terrific example of this type of agency. They collaborate across agencies and disciplines to produce change at the international, national, state, and local levels, and integrate education and research, community activism for environmental change, and advocacy for protective policy and legislation in their efforts to prevent childhood injury. Second, I gained a greater understanding of the importance of my verbal communication skills in the workplace. Fluency in social interaction and expectations is not one of my strengths, but this is a skill I can build upon for the future.

In the end, I was surprised by the energy and passion of many child safety advocates I encountered from healthcare, law enforcement, non-profit, and local government sectors. Through this field experience, I encountered a possible career or research path. Unintentional childhood injury prevention is actually an exciting field, because of the need for so much more research and the opportunity to prevent so much childhood morbidity and mortality. Research into unintentional injury prevention also piqued my interest in other public health topics related to childhood mortality, such as the burden of self-inflicted injuries among adolescents and its implications for mental health services, as well as relatively unexplored subtopics within the scope of unintentional injury, such as childhood snakebite morbidity in Southeast Asia.

Overall, this field experience was a great opportunity for me. It opened my eyes to facets of public health I had not previously explored. I was able to experience working not only with a local health department, but also with a fledgling local non-profit organization and a well-established multinational public health organization. My agency mentor connected me with injury experts from various public and private sectors and allowed me a lot of latitude to come up with creative ways to meet the needs of the organization.

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Appendix A: Childhood Injury Prevention Strategy Effectiveness, by Injury Type

Strategy	Effective	Promising	Insufficient Evidence	Ineffective
Motor Vehicle Traffic				
Legislate and enforce minimum drinking age	X			
Legislate and enforce lower blood alcohol concentration limits for novice drivers and zero tolerance for offenders	X			
Use appropriate child restraints	X			
Use motorcycle and bicycle helmets	X			
Reduce speed limits around school, residential, and play areas	X			
Physical separation of child cyclists from other road users	X			
Graduated licensing systems	X			
Roadside skills and cycle skills development (6-8 years)		X		
Designated driver programs			X	
Increase visibility of pedestrians			X	
In-school instruction on dangers of drink-driving			X	
School-based driver education				X
Drowning				
Remove or cover water hazards	X			
Isolation fencing (4-sided) around swimming pools	X			
Personal flotation devices	X			
Immediate resuscitation	X			
Lifeguards at swimming areas		X		
Targeted drowning awareness initiatives		X		
Swimming lessons for children over 5 years			X	
Legislate pool fencing			X	
Legislate wearing personal flotation devices			X	
Drowning prevention promotion by physicians			X	
Restricted access to unsafe swimming areas			X	
Swimming lessons for children under 5 years			X	
Legislate blood alcohol content for swimmers			X	
Prevention campaigns such as advertising hoardings				X
Burns				
Legislate and enforce use of smoke alarms	X			
Develop standards for child-resistant lighters	X			
Legislate and enforce hot-water temperature with public education	X			
Treat patients at dedicated burn centers	X			
Separate cooking areas from living areas		X		
Develop standards for fire-retardant garments		X		
Ban manufacture and sale of fireworks		X		
Promote use of safe light, heating, and cooking devices		X		
Provide appropriate first aid for scalds		X		
Conduct home visitation programs for at-risk families			X	
Install residential sprinklers			X	
Distribute smoke alarms (without legislation)			X	

Strategy	Effective	Promising	Insufficient Evidence	Ineffective
Community-based interventions			X	
Correct storage of flammable substances			X	
Home alterations			X	
School-based burn prevention programs			X	
Falls				
Multifaceted community programs such as “Children Can’t Fly”	X			
Redesign of nursery furniture and other products	X			
Playground standards for depth of surfacing material, height of equipment, and maintenance	X			
Legislate use of window guards	X			
Use of stair gates and guard rails		X		
Supportive home visitation and education for at-risk families		X		
Mass media campaigns targeting parents, health workers		X		
Appropriate pediatric acute care		X		
Educational campaigns to raise awareness			X	
Housing and building codes			X	
Removing hazards, covering wells and ditches			X	
Poisoning				
Remove the toxic agent	X			
Legislate and enforce child-resistant packaging of medicines and poisons	X			
Package drugs in non-lethal quantities	X			
Poison control centers	X			
Lock away medicines and toxic substances		X		
Remove or regulate availability of toxins that are easily mistaken for edible items			X	
Teach children to avoid poisonous substances			X	
Reduce attractiveness of medications and poisonous products			X	
Provide home safety education and equipment			X	
Clearly label toxic products				X

Source: *World Report on Child Injury Prevention*. World Health Organization, 2008.



Master of Public Health Program

Field Experience Agreement

Agreement needs approval, see Page 5

Student Information:

Name	Clara Marshall	E-mail	cclara@ksu.edu
Address	800 Pottawatomie Ave.	City, State, Zip	Manhattan, KS 66502
MPH Emphasis Area	Infectious Diseases/Zoonoses	Phone	713-410-1074
Emergency Contact	Jeff Sackrider	Phone	785-456-9900
Relationship	Husband	E-mail	jeffs@wamego.net

Major Professor Information:

Name	Dr. Walter Renberg	Department	VMTH/CS
Title	Director	Phone	785-532-5690
Campus Address:	B131 Mosier Hall		
E-mail	renberg@vet.k-state.edu	Fax	

Agency Information:

Agency Name and Location	Johnson County Department of Health & Environment		
Agency Director	Lougene Marsh	Title	Director
Street Address	11875 S. Sunset Dr., Olathe, KS 66061	Phone	913-826-1200
Website	http://jcdhe.jocogov.org/	Fax	913-826-1300

Preceptor/Mentor Information:

Preceptor/Mentor Name	Katie Schatte	Department	Health Education
Title	Safe Kids Coordinator	Phone	913-477-8312
Preceptor's Public Health Background (e.g., degree(s), training, experience)	I have a degree in Community Health from KU and have worked in public Health for 25 years! My areas of expertise include: injury prevention, heart disease, nutrition, chronic disease, and tobacco. I am a graduate of the Kansas Public Health Leadership Institute.		
Office Address	11875 S. Sunset Dr.	City, State, Zip	Olathe, KS 66061
Preceptor E-mail	Katie.Schatte@jocogov.org	Fax	913-477-8053

Field Experience Information:

Beginning Date	November 26, 2012	Ending Date	February 1, 2013
Total number of projected hours	240	Total number of Field Experience credit hours	6

Payment Type (check all that apply):

<input checked="" type="checkbox"/> Unpaid	<input type="checkbox"/> Monthly Stipend	<input type="checkbox"/> Lump sum payment for field experience
<input type="checkbox"/> Hourly Rate	<input type="checkbox"/> Work Study	<input type="checkbox"/> Scholarship, fellowship, or traineeship
<input type="checkbox"/> Other: _____		

Field experience is an application of knowledge in a practice setting; therefore, the preferred timing for field experience is at the end of the MPH coursework. Please list below the courses and experiences you have had that qualify you for your field experience:

Check MPH Core Courses Completed:

<input checked="" type="checkbox"/>	Biostatistics: (STAT 701)	<input checked="" type="checkbox"/>	Environmental Health Sciences: (DMP 806)	<input checked="" type="checkbox"/>	Social and Behavioral Sciences: (KIN 818)
<input checked="" type="checkbox"/>	Epidemiology: (DMP 754 OR DMP 708 and DMP 854)	<input checked="" type="checkbox"/>	Health Services Administration: (HMD 720)		

Other MPH Courses Completed:

Number and Name of
MPH Emphasis Area
Required Courses
Completed:

See above.

Number and Name of
MPH Emphasis Area
Elective Courses
Completed:

Principles of Veterinary Immunology (DMP 705), Emerging Diseases (DMP 770), Multidisciplinary Thought and Presentation (DMP 815), Global Health (DMP 844), Pathogenic Mechanisms (DMP 860), Food Safety/Security (FDSCI 730), General Virology (BIOL 730), Human Parasitology (BIOL 545)

Public Health
Experience(s):

Member of Kansas State University Public Health Club. Interviews/shadowing experiences with hospital administrators and physicians. Volunteering experiences with international NGO in childhood development.

Instructions: Briefly describe your overall field experience below and what you anticipate doing/experiencing during your placement. Include details about your capstone project you expect to complete during your placement.

Scope of Work or Primary Focus:

Working with the Safe Kids Johnson County program in the Johnson County Department of Health & Environment, my primary focus will be the research and development of home safety educational materials related to childhood injury prevention targeted at both educators and the general public. I will also assist with Safe Kids Assessment data research and projects for Safe Kids Johnson County as time allows.

I also plan to shadow members of the Charlie's House Education Committee and Johnson County Department of Health & Environment programs such as Immunizations, Clinical Services, and Disease Reporting. I will attend meetings per the field experience agreement.

Instructions: In consultation with your agency mentor/preceptor and major professor, determine the **Learning Objectives** for your field experience, the **Activities to be Performed** to accomplish the objectives, and the **Anticipated Products** (reports, surveys, etc.) that will be submitted to your faculty advisor and supervisory committee at the end of your field experience.

Learning Objectives:

- Apply and synthesize knowledge and skills gained from MPH coursework, relevant public health experiences, and other educational/work experience
- Develop an understanding of how a regional health department (JCDHE) serving a large population is organized and operates
- Learn about funding, collaboration, and organization in large-scale public health projects

Activities to be Performed:

- Research and create home safety educational presentations (ex: toy safety) for Charlie's House, assist with data collection for Safe Kids Johnson County and update the Safe Kids Johnson County CPS Fitting Station List.
- Research, write and develop audience-appropriate home safety handouts and article for parents and caregivers.
- Shadow other members of the Charlie's House Committee, Health Education Division and other public health professionals in Immunization, Clinical Services, and Disease Reporting divisions of JCDHE
- Interact with public health professionals within JCDHE, the community, the greater Kansas City area, and other regional organizations to receive or provide relevant research, background, and materials
- Attend meetings with project collaborators, regional Safe Kids organizations, and other organizations

Anticipated Products:

- Powerpoint presentations on home safety topics(Examples:toy safety, lead safety, water safety, fire safety, play ground safety, seasonal safety) and the development of home safety handouts and articles for the website. Assistance with pulling data collection for the Safe Kids Johnson County Injury Assessment and a updated list of Child Passenger Safety Fitting Stations in Johnson County.
- Oral and written reports describing my field experience and how the knowledge and skills I gained complement my educational experiences in K-State's MPH program



**Making the
Holidays
Safe**

**Presented by Katie Schatte
Safe Kids Johnson County**



Topics in Holiday Safety

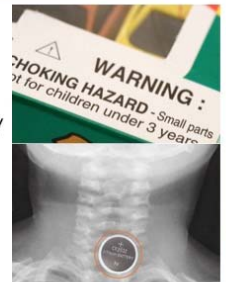


- ❖ With literally hundreds of thousands of toys on the market, it's not easy to be sure you're getting safe products.
- ❖ Today's toys are safer than they have ever been, but you still must be careful. Buy the right toys for your child's age and skill level, and check often to make sure your child's toys have not been recalled.



Choking

- ❖ Choking is a leading cause of injury among children ages 3 and under.
- ❖ In 2009, choking and suffocation accounted for one-third of all toy-related fatalities reported to the U.S. Consumer Product Safety Commission.
- ❖ Small play balls and balloons account for many choking deaths among children.
- ❖ Coin lithium batteries can cause severe injuries when swallowed.



Riding

- ❖ Riding toys, including nonmotorized scooters and tricycles, are associated with more injuries than any other toy group.



Accident Prevention Tips for Parents and Caregivers

Reduce Choking Risk

- Read and follow age and safety labels. Toys labeled for children 3 years and older may have small parts that could cause choking if placed in the mouth.
- Keep un-inflated balloons and broken balloon pieces away from children.
- Small, rounded objects like balls and marbles are a choking hazard.

Reduce Strangulation Risk

- Crib toys with strings, cords, or ribbons are a strangulation hazard for babies.
- Remove all crib toys that are strung across a crib or playpen when babies begin to push up on their hand and knees or are 5 months old, whichever occurs first.

General Toy Safety

- Repair or remove damaged toys immediately.
- Store toys intended for older children away from younger children.
- Store toys safely.
- Choose toys that are age- and skill-appropriate.



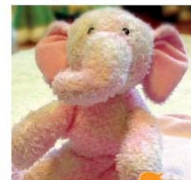
Finding Suitable Toys for Your Children

Choose toys according to a child's age, interests and skill level.

Ages 0 to 1

explore with hands, mouths and eyes, and enjoy toys they can squeeze.

- Crib gyms
- Floor activity centers
- Activity quilts
- Squeaky toys
- Stuffed animals



Ages 1 to 3

climb, jump, walk, and throw and play rough-and-tumble games.

- Soft blocks
- Large blocks
- Push and pull toys
- Pounding and shaping toys
- Books

Ages 5 to 9 like complex games that teach specific skills and concepts.

- Arts and crafts kits
- Puppets
- Jump ropes
- Non-toxic art supplies
- Mini dolls or action figures

Ages 3 to 5

experiment with imaginary situations and have toys that are companions.

- Non-toxic art supplies
- Pretend toys
- Teddy bears or dolls
- Outdoor toys

Ages 9 to 14

develop lifelong skills and hobbies, and enjoy team sports.

- Handheld electronic games
- Board games
- Sports gear
- Model kits
- Musical instruments



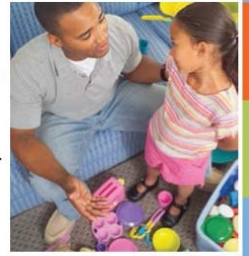
Supervision

- ✳ Remove and throw away the packaging from the toy before giving to a baby or small child.
- ✳ Always supervise children while they play to avoid injury.
- ✳ Keep toys for older children away from younger children.



Storage and Maintenance

- ✳ Teach children to put toys away after playing.
- ✳ Check toys regularly for damage such as sharp edges or loose small parts.
- ✳ Store toys for older and younger children separately.
- ✳ Sign up to receive product recalls with the Consumer Product Safety Commission at www.cpsc.gov.



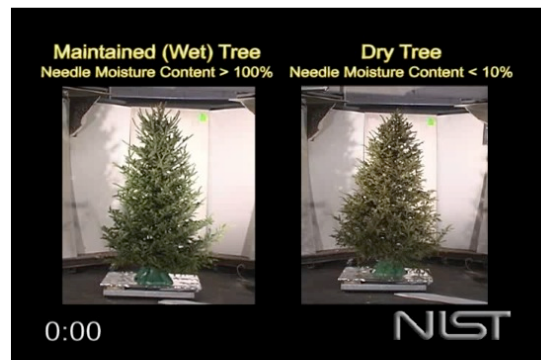
Christmas Tree Safety



FACTS

- ❗ One of every three home Christmas tree fires are caused by electrical problems.
- ❗ Although Christmas tree fires are not common, when they do occur, they are more likely to be serious.
- ❗ A heat source too close to the tree causes roughly **one in every six** of the fires.

- ✳ Choose a fresh, green tree without falling needles.
- ✳ Cut 2 inches from the base of the trunk before placing the tree in a stand.
- ✳ Make sure the tree is at least 3 feet away from any heat source, like fireplaces, candles, radiators, or heat vents.
- ✳ Make sure the tree isn't blocking an exit.
- ✳ Water your tree daily.



Many artificial trees are fire resistant. If you buy one, look for a statement specifying this protection.



After Christmas

Get rid of the tree after Christmas or when it is dry. Dried-out trees are a fire danger and should not be left in the home or garage, or placed outside against the home. Check with your local community to find a recycling program. Bring outdoor electrical lights inside after the holidays to prevent hazards and make them last longer.



Winter Holiday Safety

HOLIDAY DECORATING

- ❗ Be careful with holiday decorations. Choose decorations that are flame resistant or flame retardant.
- ❗ Keep lit candles away from decorations and other things that can burn.
- ❗ Some lights are only for indoor or outdoor use, but not both.
- ❗ Replace any string of lights with worn or broken cords or loose bulb connections. Connect no more than three strands of mini light sets and a maximum of 50 bulbs for screw-in bulbs. Read manufacturer's instructions for number of LED strands to connect.
- ❗ Use clips, not nails, to hang lights so the cords do not get damaged.
- ❗ Keep decorations away from windows and doors.

FACTS

- ❗ Almost half of all home decoration fires are started by candles.
- ❗ Half of holiday decoration fires happen because decorations are placed too close to a heat source.





LIGHTING THE TREE

- » Use lights that have the label of an independent testing laboratory. Some lights are only for indoor or outdoor use.
- » Never use electric lights on a metallic tree.
- » Keep "bubbling" lights away from children.
- » Don't overload indoor or outdoor electrical outlets.
- » Don't let your child touch holiday lights. Electrical cords may contain lead.
- » Always turn off Christmas tree lights before leaving home or going to bed.



Overloading Circuits

A Crash Course in Electricity



How can you tell if you are overloading a circuit? Check the electrical specifications of your home and the devices you plug into outlets.

Remember that more than one outlet may be connected to the same circuit. Check your fuse box.

To avoid overloading, you should only use 80 percent of the available current in a single circuit. For a 20 amp circuit, this means that you can plug in a maximum of 2000 watts of power.

Christmas lights usually run about 25 watts for a string of 50 bulbs.



Trimming the Tree

- ❖ Tree ornaments, light bulbs, icicles, tinsel, and small toys are potential choking hazards for small children.
- ❖ These decorations should be put out of reach of young children.
- ❖ Choose decorations that are non-combustible or flame-resistant and made of non-leaded materials. Old or imported ornaments may have high lead contents; check for flaking paint before using them.
- ❖ Avoid breakable decorations and those with small parts.
- ❖ Avoid edible decorations, including popcorn chains and candy canes, since children may think that all of the decorations are edible. Also avoid decorations that resemble candy or food.



Winter Holiday Safety

To minimize risks to young children, place baby gates around the tree so kids cannot touch decorations and lights.



Keep away from children!

- ❖ Angel hair (made from finely spun glass)
- ❖ Ornament hangers
- ❖ Artificial snow and flocking materials
- ❖ Artificial snow sprays
- ❖ "Fire salts," which produce colored flames
- ❖ "ScentSicles," as their toxicity has not been studied

After opening gifts...

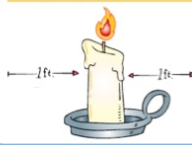
- ❖ Remove all wrapping paper from tree and fireplace areas immediately after presents are opened.
- ❖ Do not burn papers in the fireplace. Wrappings may ignite suddenly and burn intensely, causing a flash fire.



Candle Safety

FACTS

- ① On average, a candle fire in the home is reported to a U.S. fire department every 40 minutes.
- ① More than half of all candle fires start when things that can burn are too close to the candle.



- ❖ Use sturdy candle holders that won't tip over easily.
- ❖ Never leave a child alone in a room with a burning candle.
- ❖ Keep matches and lighters up high, out of a child's reach, in a locked cabinet.
- ❖ Keep candles at least 12 inches away from anything that can burn.



Flameless Candles and Lithium Coin Batteries

Batteries from flameless candles can be easily swallowed by children and cause severe internal burns in only 2 hours.

- ✳ Secure coin lithium battery-controlled devices out of sight and reach of children and keep loose batteries locked away.
- ✳ Use strong tape to secure compartments children can open or that might open if dropped.
- ✳ Only purchase products that require a tool to open the battery compartment, or that have a child-resistant locking mechanism.
- ✳ These batteries can also be found in singing holiday cards.



FOCUS ON FIRE SAFETY

Novelty and Toylike Lighters



Children are attracted to these lighters because many look like toys or have entertaining features, like flashing lights or sound effects.



- ✳ Do not keep toylike lighters in homes with young children.
- ✳ Watch children when shopping at gas stations, hardware stores, pharmacies, and Walmart, where novelty lighters are often displayed on counters in easy reach of children.



- ✳ **Blow out** lit candles when you leave the room or go to bed.

Don't forget!

- ✳ **Turn off** all light strings and decorations before leaving home or going to bed.



Avoid Holiday Poisoning

Potentially Poisonous Plants

Mistletoe Yew Jerusalem cherry



Tip: Program the National Poison Center hotline number into your phone.



Potentially Poisonous Decorations

- ✳ "Bubble lights" (even if labeled nontoxic)
- ✳ Snow sprays
- ✳ Lamp oil
- ✳ Button batteries



Keep these items out of children's reach!



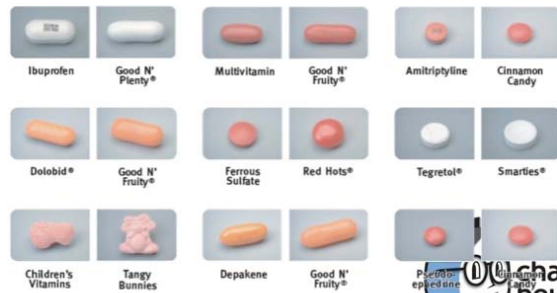
Medication & Household Poisons

- Many adult medicines can poison children who swallow only one or two pills.
- Lock up medicines and household products out of children's sight and reach.
- Keep medicines in their original, labeled containers.
- Use child-resistant packaging. Close the caps tightly after use.

Top 5 Causes of Poisoning*



Is it candy or medicine?



POISON PURSE

BE WARY OF THE DANGER YOU MAY CARRY



POISON PURSE

BE WARY OF THE DANGER YOU MAY CARRY

Baby powder:
May cause eye and throat irritation; if inhaled could cause serious breathing problems

Toothpaste:
May cause stomach upset if swallowed

Pepper spray:
May irritate eyes, skin & cause breathing problems

Cigarettes:
May cause severe stomach upset and vomiting if swallowed

Insect repellent:
May irritate eyes and mouth; possible seizures if swallowed

Ink pen:
May cause eye and mouth irritation

Batteries:
May cause severe irritation or burns if chewed; also a choking hazard

Eye drops:
May cause a variety of mild to serious symptoms if swallowed

"Chocolate" laxatives:
May cause severe diarrhea

Hand cream:
May cause stomach upset and diarrhea if swallowed

Remind holiday guests to store their medications, toiletries, and handbags out of the reach of a child. This is especially important when families visit. Older adults may forget how fast and curious children can be.



Party Safety

Alcohol poisoning is a common risk for children during the holiday season. Because kids imitate adults, they may drink the beverages they see adults drinking. Children become "drunk" much more quickly than adults -- even small amounts of alcohol can be dangerous.



- ❖ Remove all empty and partially empty cups as soon as possible.
- ❖ Clean up food, alcoholic beverages, and ashtrays right after a party, so that children won't sample them in the morning.
- ❖ Appoint one person to monitor each child during a gathering.



Cooking Safety

A lot of cooking goes on during the holiday season, so there are many opportunities for burns and scaldings.

- ❖ To prevent accidents, keep children out of the kitchen while you bake or cook.
- ❖ If children must be in the kitchen, ensure that they are actively supervised.
- ❖ Keep pot handles turned away from the front of the stove and always keep the oven door closed.
- ❖ Common holiday foods such as peanuts and popcorn are potential choking hazards and should not be given to children under age 4.



Holiday Food Safety

Food poisoning is another potential holiday hazard.

- ❖ Be aware of visitors' food allergies.
- ❖ Practice food safety by washing hands, utensils, dishes, and anything else that comes in contact with raw meat, poultry, fish, or raw eggs before and after use.
- ❖ Don't contaminate a serving dish with raw meat.
- ❖ Store leftovers properly and heat thoroughly before serving.



Defeat Bacteria

You can't see, taste, or smell bacteria, but it can be on food and multiply rapidly in moist, warm conditions. If consumed, harmful bacteria can cause foodborne illness.

Be Egg-tra Cautious!

Around the holidays, people eat some foods which may contain uncooked or lightly-cooked eggs. But even clean, uncracked, grade A eggs can be contaminated with Salmonella Enteritidis bacteria.

Always cook eggs thoroughly to kill any bacteria that may be present, or use pasteurized or powdered eggs.

Keep refrigerated:

- ✱ Eggnog
- ✱ Cheesecake
- ✱ Cream pies
- ✱ Cakes with whipped-cream or cream-cheese frostings



- Wash hands before and after handling food.
- Wash surfaces that food has touched.
- Rinse fruits and veggies.
- Do not rinse raw meat or poultry.



- Keep foods that won't be cooked separate from raw eggs, meat, poultry, and seafood.
- Use separate kitchen utensils and cutting boards for these foods.
- Wash plates that have touched raw eggs, meat, poultry, or seafood before using them to eat from.



- Use a food thermometer to make sure meat is cooked to a safe internal temperature.
- Bring sauces, soups, and gravy to a full boil when reheating.
- If a recipe calls for raw eggs, use eggs or egg substitutes that have been pasteurized.
- Don't eat uncooked foods that contain raw eggs.



- Do not leave food out of the refrigerator for more than 2 hours.
- Set your fridge at or below 40° F and the freezer at 0° F.
- Thaw frozen food in the fridge, under cold water, or in the microwave.
- Use leftovers within 3 to 4 days, unless frozen.



Heating Safety

FACT

Half of home heating fires are reported during the months of December, January, and February.



- ✱ Teach children to maintain a three-foot "kid-free zone" around open fires and space heaters.
- ✱ Keep anything that can burn at least three feet away from heating equipment.
- ✱ Plug space heaters directly into an outlet. Do not use an extension cord.
- ✱ Turn off portable heaters when leaving the room or going to bed.
- ✱ Remember that older space heaters may not include safety features like tip-over sensors and auto shutoff.



Heating Safety

- ✱ Have your fireplace inspected before you light your first fire of the season.
- ✱ Use a sturdy fireplace screen.
- ✱ Never use your oven to heat your home.
- ✱ Have a family emergency plan in the event of a fire.
- ✱ Check smoke detectors before you put up your holiday decorations.
- ✱ Dispose of cooled ashes in a lidded metal container at least 10 feet from buildings.



Avoiding Accidents

There is an increased incidence of car accidents and injuries to children during the holiday season.

- ✱ **Make sure the kids are buckled up securely during car rides.**
- ✱ **Do not drive after drinking alcohol; make sure to appoint a designated driver.**
- ✱ **Be careful when traveling during the evenings of holidays since there is a higher incidence of drunk-driving accidents on these days.**
- ✱ **Be prepared for inclement weather: keep an emergency kit with water, food, and blankets in your car. Keep your gas tank full.**



Parking Lot Safety



- **Pay attention.** Make sure your child remains with you at all times.
- **Eliminate distractions.** Whenever you enter a parking lot, put away your cell phone, shopping list, or whatever it is that may take your eyes off of your child, even for a minute.
- **Use a stroller.** If you cannot keep a firm grip on your child's hand while in a parking lot, play it safe and buckle him into a stroller.
- **Teach your children.** Teach your child that parked vehicles may move, and remind children that even though they can see a vehicle, the driver may not see them.
- **Watch for other people's children.** Before getting into your vehicle, walk around and behind the vehicle. Keep a careful eye out for children as you back out and maneuver through the parking lot.
- **Buckle up.** Even a low-speed collision can result in injuries. Make sure that everyone is strapped in a seat belt or child car seat while the car is in motion, even if it's just a short trip to another part of the parking lot.



Holiday Shopping Safety

- When in a mall or other public facility, always supervise children.
- Don't let children play with or around displays and platforms.
- On escalators, hold your child's hand. Children should stand still and face forward. Check for loose clothing and shoelaces. Take the elevator when using a stroller.



- On elevators, make sure the elevator is level with the floor before exiting. Never let children touch or lean on elevator doors; stand at the back of the car if possible.
- Keep kids out of shopping cart baskets. Use the fold-down seat or a cart with a low seat in front.



Holiday Shopping Safety

- **Keep your child occupied.** Take along books and small toys to entertain him while you shop. A bored child is more likely to wander off when you're distracted.
- **Give him your cell-phone number.** Write the digits on a piece of paper and put it in his pocket so that anyone who finds him will be able to contact you right away.
- **Have an action plan.** Make sure your child knows what to do if he loses you. Tell him to stay where he is and to call your name. If he can't find you, he should alert a store employee (explain how he can identify workers and security guards by their name tags or uniforms). If he's very young, teach him to look for another "mommy" and ask for help.
- **Don't panic.** If your child wanders off, alert store personnel and mall security -- they may have procedures in place to help you find him. In addition, go back to the last place you saw him, calling his name as you go.



Safety Tips: Sledding

Sledding injuries send tens of thousands of kids to hospital emergency rooms each year. More than half of all sledding injuries are head injuries, which can be very serious and even deadly.

Get the Right Kind of Sled



The best sleds can be steered by their riders and have brakes to slow them down. Avoid sleds that can't be steered, such as saucers or plastic toboggans, and never use a sled substitute like an inner tube, lunch tray, or cardboard box.



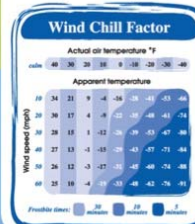
Dress for Cold Temperatures

- Kids should wear winter clothing that is waterproof and warm, and change into something dry if their clothes get wet.



- Don't let kids wear scarves or any clothing that can get caught in a sled.

- Anyone sledding should wear a helmet, particularly if they're 12 or under.



- Take wind chill into account when evaluating how long kids can safely play outdoors.



A waterproof, multi-sport helmet is best, but a bike helmet is better than nothing.



Choose the Right Sledding Hill

- Select a hill that is not too steep and has a long flat area at the bottom for your kids to glide to a stop.
- Avoid hillsides that end near a street or parking lot.
- Avoid hillsides that end near ponds, trees, fences, or other hazards.
- Make sure the hill is free of obstacles such as jumps, bumps, rocks, or trees before your kids begin sledding.
- Choose hills that are snowy rather than icy. Icy slopes make for hard landings.



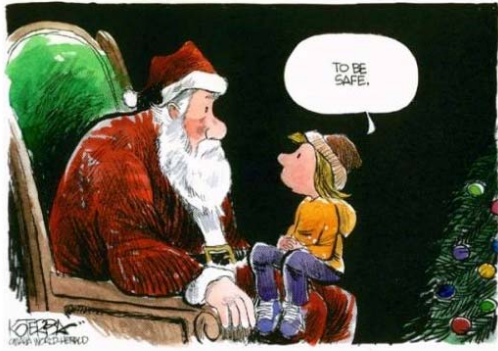
- Have your kids sled during the daytime. When sledding at night, make sure the hillside is well lit and all potential hazards are visible.



Some Simple Safety Rules

- Be sure a responsible adult is present to supervise.
- Young kids (5 and under) should sled with an adult, and kids under 12 should be actively watched at all times.
- Children should always sit face-forward on their sleds. Never let them sled down a hill backwards or while standing, and make sure they don't go down the hill face-first, as this greatly increases the risk of a head injury.
- Insist that kids go down the hill one at a time and with only one person per sled (except for adults with young kids).
- Don't let kids build an artificial jump or obstacle on a sledding hill.
- Remind kids to keep their arms and legs within the sled at all times. Teach them that if they're on a sled that won't stop, to roll off it and get away from it.
- Never allow a child to ride a sled that is being pulled by a moving vehicle.







**12
Days of
Christmas Safety**

On the first day of Christmas...
sign up to receive products recall alerts with the Consumer Product Safety Commission at www.cpsc.gov.

On the second day of Christmas...
water your Christmas tree daily.

On the third day of Christmas...
replace worn light strings or those with broken or loose bulb connections.

On the fourth day of Christmas...
always turn off Christmas lights before leaving home or going to bed.

On the fifth day of Christmas...
keep small or breakable ornaments, light bulbs, icicles, and tinsel out of reach of children. To minimize risks to young children, place baby gates around the tree.

On the sixth day of Christmas...
dispose of cooled ashes in a covered metal container at least 10 feet from buildings.

On the seventh day of Christmas...
keep candles at least 12 inches away from anything that can burn. Keep matches and lighters locked up, out of reach of children. Blow out lit candles when leaving the room or going to bed.

On the eighth day of Christmas...
remind visitors to keep medications in their original, childproof containers and to secure them out of the reach of children. Remove unattended purses from places children can access.

On the ninth day of Christmas...
practice food safety by washing hands, utensils, dishes, and anything else that comes into contact with raw meat, poultry, fish, or eggs before and after use. Refrigerate leftovers promptly and heat them thoroughly before serving.

On the tenth day of Christmas...
keep oven doors closed and pot handles turned away from the front of the stove while cooking.

On the eleventh day of Christmas...
keep alcohol, including visitors' glasses, out of the reach of children.
Monitor children while alcohol is being served.

On the twelfth day of Christmas...
remove all wrapping paper from tree and fireplace ornaments immediately after opening presents.
Do not burn papers in the fireplace.

Have a safe and happy holiday!

New Year's Safety Resolutions

In 2013, resolve to...

Practice heating safety. Have a family emergency plan, and check smoke and CO detectors regularly. Teach children to maintain a three-foot “kid-free zone” around any heating equipment. Also keep anything flammable at least three feet away from heating sources. Use a sturdy screen around the fireplace to prevent contact burns. Never use your oven to heat your home, and be careful when using space heaters. Plug them directly into outlets rather than using an extension cord. Remember to turn off portable heaters before leaving the room or going to bed.

Secure potential poisons in the home. Store cosmetics, toiletries, and laundry, kitchen, bathroom, and home cleaning products in locked cabinets out of a child's reach. Store both prescription and over-the-counter medications in their original, labeled, child-proof containers and secure them in locked cabinets or away from a child's reach. Don't forget to apply these rules to your purse if you keep medications or cosmetics inside. Remind relatives and caregivers of these precautions, and ensure that safety measures are in place in any place your child spends time. Keep the phone number of the National Poison Center (1-800-222-1222) programmed into your cell phone and near land lines at home.

Be aware of the dangers of coin lithium button batteries. When swallowed, they cause severe and potentially life-threatening internal burns. Search the house, including toys, novelty greeting cards, mini remote controls, watches, key fobs, calculators, flameless candles, scales, diabetes meters, and other electronics, for coin-sized batteries. Secure battery compartments that are accessible without tools with strong tape, and keep these devices out of sight and reach. Keep loose batteries locked away.

Keep the kitchen safe for kids. When possible, keep children out of the kitchen during baking or cooking. Otherwise, actively supervise kids in the kitchen at all times. Keep pot handles turned toward the back of the stove and the oven door closed. Avoid foodborne illness by washing hands and surfaces before and after contact with food, keeping raw meat separated from other foods, and refrigerating or freezing perishable foods within two hours.

Keep kids safe around water. Always watch kids in and around water, including in the bathtub or near buckets of water, where the majority of infant drowning deaths occur. Install door locks and toilet latches in the home. When supervising, maintain continuous visual and auditory contact with children in or near water, and should stay waterside. When near swimming pools, keep children who can't swim within arm's reach at all times, and keep a phone with emergency numbers with you. Use fences and other barriers

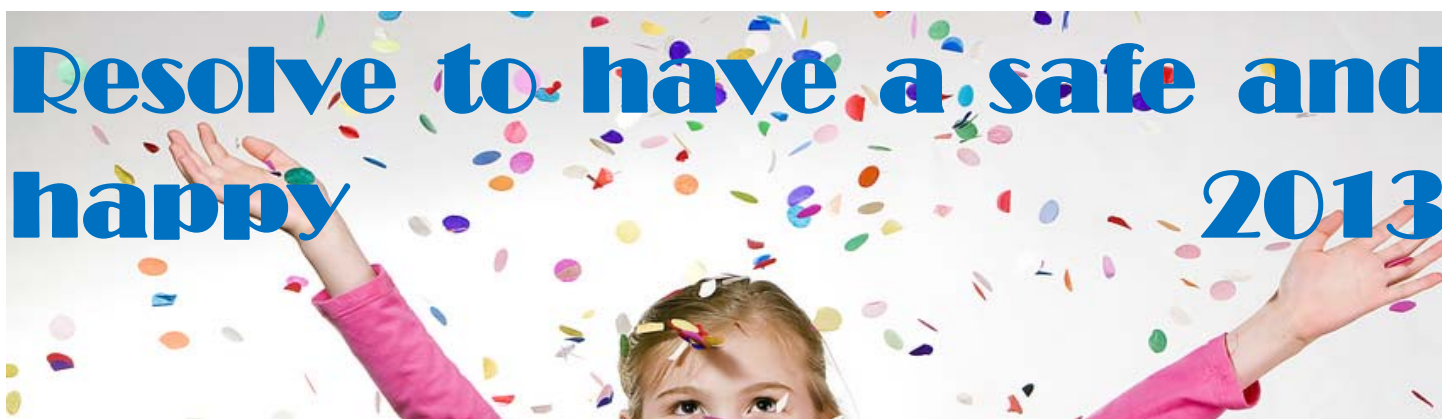
to keep kids away from pools when you're not around, and use life jackets when you're in or near open bodies of water. Learn infant and child CPR. Enroll kids in swimming lessons between ages 4 and 8, and to stay away from pool and hot tub drains.

Teach kids how to avoid being injured by pets. Never leave your child alone with any animal. Make sure your pets are spayed or neutered, up to date on vaccinations, and free of fleas and ticks. Both children and adults should wash their hands after touching or cleaning up after any animal. Teach children to be gentle with pets, not to surprise or sneak up on an animal, and not to try to take a toy, bone, or other treat from an animal. Warn children to stay away from animals who are eating, caring for young, growling or showing teeth, or acting strangely. Teach kids to always ask permission before touching someone else's pet, to let a new dog sniff their closed hand before trying to pet it, and to stand quietly and back away slowly if they see signs of aggression. Kids should be taught to never approach or touch any wild animal.

Practice driveway safety. Look around and behind your vehicle, and make sure children are in full view and are supervised by another adult, before you moving it. Teach kids to never enter the street for any reason, to never play in, around, or behind cars, and to never leave toys, bikes, or chalk in the driveway. Never leave a child alone in or around the car, even for a moment.

Prevent furniture tip-overs. The most common tip-over accidents involve toddlers who have climbed onto, fallen against, or pulled themselves up on furniture. To prevent injuries, anchor furniture to the wall or the floor and place TVs on sturdy, low bases, or position the TV as far back on top of furniture as possible. Keep items like remote controls, toys, and other items that children might want to climb to reach off of TV stands and furniture. Keep TV and cable cords out of children's reach.

Keep children safe around guns. Guns are kept in more than one-third of US households, so they're a danger to children whether you own one or not. If you keep guns in your home, make sure it is unloaded and locked away in a cabinet, safe, gun vault or storage case. Lock and store ammunition separately. Consider using gun locks on firearms. Teach young children not to touch guns and to tell an adult if they find one. Hide the keys where children cannot find them. When your child visits the homes of others, ask adults if guns are safely stored.






Presented by Katie Schatte
Safe Kids Johnson County



Topics in Summer Safety

Eat	Play	Travel	Other
Food	Water	Pedestrian	Holiday
Cooking	Sports	Driveway	Pets & Animals
Kitchen	Bikes & Wheels	Car Travel	Sun & Heat
Grilling	Playground	Air Travel	
Party	Camping & Wilderness	Railroad	





CHILL:
REFRIGERATE
FOOD PROMPTLY

CHECK YOUR STEPS



CLEAN:
WASH HANDS,
UTENSILS,
AND SURFACES
OFTEN.

CHECK YOUR STEPS



COOK:
COOK TO
THE RIGHT
TEMPERATURE.



SEPARATE:
DON'T CROSS-
CONTAMINATE.

Food Safety Basics



• Do not leave food out of the refrigerator or cooler for more than 2 hours (one hour if its hotter than 90° out).

• Thaw frozen food in the fridge, under cold water, or in the microwave.

• Pack extra ice or freezer packs in your cooler.

• Use leftovers within 3 to 4 days or freeze.

Chill

• Wash hands before and after handling food.

• Wash surfaces that food has touched.

• Rinse fruits and veggies.

• Do not rinse raw meat or poultry.

Clean

• Use a food thermometer to make sure meat is cooked to a safe internal temperature.

• Bring sauces, soups, and gravy to a full boil when reheating.


Cook

• Keep foods that won't be cooked separate from raw eggs, meat, poultry, and seafood.

• Use separate kitchen utensils and cutting boards for these foods.


• Wash plates that have touched raw eggs, meat, poultry, or seafood before using them to eat from.

Separate

Prevent food poisoning by following food safety guidelines.

- ❖ **Do not leave food out of the fridge or cooler for more than 2 hours.**
- ❖ **Wash hands, utensils, dishes, and surfaces that come into contact with raw meat, poultry, fish, or raw eggs before and after use.**
- ❖ **Don't put cooked meat on a plate that has been holding raw meat.**
- ❖ **Store leftovers properly and heat thoroughly before serving.**



Cooking Safety



Cooking fires are the number one cause of home fires and home fire injuries.

"COOK WITH CAUTION"

- ❗ Be on alert! If you are sleepy or have consumed alcohol don't use the stove or stovetop.
- ❗ Stay in the kitchen while you are frying, grilling, or broiling food. If you leave the kitchen for even a short period of time, turn off the stove.
- ❗ If you are simmering, baking, roasting, or boiling food, check it regularly, remain in the home while food is cooking, and use a timer to remind you that you are cooking.
- ❗ Keep anything that can catch fire — oven mitts, wooden utensils, food packaging, towels or curtains — away from your stovetop.

❗ The leading cause of fires in the kitchen is unattended cooking.

❗ Most cooking fires in the home involve the stovetop.

Cooking Safety & Children

Young children face a higher risk of death from cooking fires that do other age groups. Their risks of thermal burns and scalds from cooking equipment, cookware, tableware, or hot foods and beverages is very high.

Why are young children at greater risk for burns in the kitchen?

- Their skin is thinner than adults' so hot liquids or pans can burn them more quickly.
- Young children are driven to explore their world and do not understand they need to stay away from hot items.
- One- and two-year olds can often reach the counter or stove but cannot see if something hot is there.



- ❖ **Active supervision is the best prevention for cooking-related injury.**
- ❖ **Keep young children at least three feet away from the stove and from areas where hot food or drink is being prepared or carried.**
- ❖ **Place hot objects where kids can't pull or knock them over.**



- ❖ Keep pot handles turned away from the front of the stove.
- ❖ Use the stove's back burners.
- ❖ Keep hot foods and liquids away from table and counter edges.
- ❖ Keep appliance cords away from counter edges.
- ❖ Always keep the oven door closed.

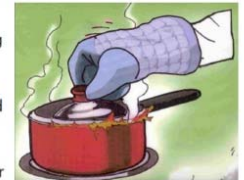


Childproofing and Preventing Household Accidents



IF YOU HAVE A COOKING FIRE...

- » Just get out! When you leave, close the door behind you to help contain the fire.
- » Call 9-1-1 or the local emergency number after you leave.
- » If you try to fight the fire, be sure others are getting out and you have a clear way out.
- » Keep a lid nearby when you're cooking to smother small grease fires. Smother the fire by sliding the lid over the pan and turn off the stovetop. Leave the pan covered until it is completely cooled.
- » For an oven fire turn off the heat and keep the door closed.
- » If the fire has spread beyond the skillet or pan, you should not fight the fire. More than half of cooking fire injuries occur when people try to fight cooking fires themselves.
- » If your clothing catches fire, STOP, DROP, and ROLL.
- » Treat a burn right away with cool water for 3 to 5 minutes. If the burn is bigger than your fist, get medical help immediately.



Microwave Oven Safety

Always **supervise** children when they are using a microwave oven.

- » **PURCHASE** a microwave oven that has the label of an independent testing laboratory. Make sure to complete and return the product registration card. This way the manufacturer can reach you if there is a recall on the product.
- » **PLUG** the microwave oven directly into the wall outlet — never use an extension cord.
- » **MAKE** sure the microwave oven is at a safe height, within easy reach of all users.
- » **OPEN** food slowly, away from the face. Hot steam or the food itself can cause burns.
- » **FOOD** heats unevenly in microwave ovens. Stir and test before eating or giving to children.

Use only **microwave-safe** food containers or dishes. Never use aluminum foil or metal in a microwave oven.

If you have a **fire** in the microwave, leave the door closed, turn the oven off and unplug it from the wall. If the fire does not go out, get outside and call the fire department.





Grilling Safety

SAFETY TIPS

- » Propane and charcoal BBQ grills should only be used outdoors.
- » The grill should be placed well away from the home, deck railings and out from under eaves and overhanging branches.
- » Keep children and pets at least three feet away from the grill area.
- » Keep your grill clean by removing grease or fat buildup from the grills and in trays below the grill.
- » Never leave your grill unattended.
- » Always make sure your gas grill lid is open before lighting it.

- 1 July is the peak month for grill fires.
- 1 More than half of home grill structure fires begin on either a courtyard terrace or patio, or an exterior balcony or open porch.
- 1 Roughly half of the injuries involving grills are thermal burns.



CHARCOAL GRILLS

- » There are several ways to get the charcoal ready to use. Charcoal chimney starters allow you to start the charcoal using newspaper as a fuel.
- » If you use a starter fluid, use only charcoal starter fluid. Never add charcoal fluid or any other flammable liquids to the fire.
- » Keep charcoal fluid out of the reach of children and away from heat sources.
- » There are also electric charcoal starters, which do not use fire. Be sure to use an extension cord for outdoor use.
- » When you are finished grilling, let the coals completely cool before disposing in a metal container.

ALWAYS

- ✳ Use equipment with the mark of an independent testing laboratory.
- ✳ Follow manufacturers' instructions on how to set up and maintain the grill.
- ✳ Wear an insulated fire-retardant barbecue mitt.
- ✳ Store propane cylinders away from buildings or garages.

PROpane Grills

Check the gas tank hose for leaks before using it for the first time each year. Apply a light soap and water solution to the hose. A propane leak will release bubbles. If your grill has a gas leak, by smell or the soapy bubble test, and there is no flame, turn off the gas tank and grill. If the leak stops, get the grill serviced by a professional before using it again. If the leak does not stop, call the fire department. **If you smell gas while cooking, immediately get away from the grill and call the fire department.** Do not move the grill.



Party Safety

Alcohol poisoning is a risk for children during parties. Because kids imitate adults, they may drink the beverages they see adults drinking. Children become "drunk" much more quickly than adults -- even small amounts of alcohol can be dangerous.



- ✳ Remove all empty and partially empty cups as soon as possible.
- ✳ Clean up food, alcoholic beverages, and ashtrays right after a party, so that children won't sample them in the morning.
- ✳ Appoint one person to monitor each child during a gathering.



Water Safety

- ✳ Drowning is the third leading cause of unintentional injury-related death among children ages 14 and under. It is the leading cause of accidental injury death among children aged 1-4.
- ✳ Children under 5 years of age represent 76 percent of reported fatalities and almost 80 percent of emergency department-treated submersion injuries.
- ✳ Two-thirds of drowning deaths occur in the summer, between May and August, and most commonly on the weekends.
- ✳ Approximately 72 percent of pool submersion deaths and 55 percent of pool submersion injuries occur at a home.



Prevent Pool Drownings

- Practice **ACTIVE** supervision
- Install barriers
- Avoid entrapment
- Know life-saving skills



Supervision

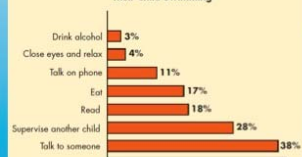
Stay Close, Be Alert and Watch

- Always watch your children and never leave them unattended
- Keep children away from pool drains, pipes and other openings
- Have a phone close by at all times
- If a child is missing, check the pool first
- Share safety instructions with family, friends and neighbors

- Never allow children to swim without adult supervision.
- Always designate a responsible adult to serve as the "water watcher" -- a supervisor whose sole responsibility is to constantly observe children in or near the water.

- Supervisors should maintain continuous visual and auditory contact with children in or near the water, and should stay in close proximity (waterside)
- Supervisors should keep children who cannot swim within arm's reach at all times.

Self-Reported Activities of Parents While Supervising Their Child Swimming



- Supervisors should not engage in distracting behaviors such as talking on the phone, preparing a meal or reading.



Barriers

Four-sided isolation fencing around home pools could prevent **50 to 90 percent** of childhood drownings and near-drownings. When used properly, door alarms, pool alarms and automatic pool covers add an extra layer of protection.

Have the Appropriate Equipment

- Install a fence around the perimeter of the pool and spa of at least four feet in height
- Use self-closing and self-latching gates
- Make sure the pools and spas you use have compliant drain covers
- Install a door alarm from the house to the pool area
- Maintain pool and spa covers in working order
- Have life-saving equipment such as life rings or reaching poles available for use



Entrapment

Entrapment occurs when part of a child's body becomes attached to a drain because of its powerful suction, or a child puts an arm or leg in a drain with a missing or broken cover. Death or serious injury can occur when the suction force overpowers the child's ability to get away from the drain and rise to the surface of the water. Often, the strength of adult is still not enough to remove a child trapped by a pool or spa drain. A child's hair, swimsuit, or jewelry may also get trapped in the drain.

Entrapment Prevention

- Teach children to stay away from pool and spa drains, and tie up long hair securely to guard against entanglement and entrapment.
- If you own a pool or spa, install anti-entrapment drain covers and a safety vacuum release system. For new pools or spas, install more than one drain. Maintain drain covers properly.
- If you find a drain cover that is loose, broken or missing, do not enter the pool or spa; notify the owner or operator.



Drain covers should be labeled **VGBA compliant** or **VGB 2008**.



Safety Skills

Learn and Practice Water Safety Skills

- Learn to swim; it's fun and good exercise
- Know how to perform CPR on children and adults
- Understand the basics of life saving so that you can assist in a pool emergency

Formal swimming lessons can reduce the risk of drowning among young children aged 1 to 4 years, who are at greatest risk of drowning. The decision to begin swimming lessons should be based on the individual child's exposure to water, emotional maturity, physical limitations, and health concerns.



However, even when children have had formal swimming lessons, constant, careful supervision when in the water, and barriers to prevent unsupervised access are necessary to prevent drowning.



Portable Pools

Fence Them! Cover Them! Put Them Away!

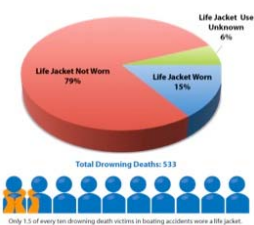
- Empty and put away smaller portable pools after every use.
- Once the pool is set up, ensure high levels of supervision.
- Fence portable pools and encourage your neighbors to do the same.
- Cover larger portable pools and put access ladders away when adults are not present.
- Install alarms on doors leading from the house to the pool area that will alert you when someone enters the pool area.
- Teach children to swim, float and other basic life-saving skills; do not consider young children "drown-proof" because they have had swimming lessons.
- Make sure your neighbors, babysitters and visitors know about the pool's presence in your yard.
- Learn and practice CPR so you can help in an emergency.



Boating

- Children should always wear appropriately sized U.S. Coast Guard-approved PFDs when on boats, in or near open bodies of water or participating in water sports. The PFD should fit snugly and not allow the child's chin or ears to slip through the neck opening.
- Air-filled swimming aids, such as "water wings" and inner tubes, are not safety devices and should never be used as a substitute for a PFD.

2011 Recreational Boating Drownings



Half of all drownings among recreational boaters could have been prevented if personal flotation devices were worn.



Protect the ones you love SPORTS INJURIES

Taking part in sports and recreation activities is an important part of a healthy, physically active lifestyle for kids. But injuries can, and do, occur.

More than 2.6 million children 0-19 years old are treated in the emergency department each year for sports and recreation-related injuries.



Thankfully, there are steps that parents can take to help make sure kids stay safe on the field, the court, or wherever they play or participate in sports and recreation activities.



Prevention Tips

- **Gear up.** Make sure children use the right protective gear for their activity, such as helmets, wrist guards, knee or elbow pads.
- **Use the right stuff.** Be sure that sports protective equipment is in good condition and worn correctly all the time—for example, avoid missing or broken buckles or compressed or worn padding. Poorly fitting equipment may be uncomfortable and may not offer the best protection.
- **Practice makes perfect.** Have children learn and practice skills they need in their activity, for example knowing how to tackle safely and practicing proper form. Be sure to slowly increase activities to improve physical fitness; being in good condition can protect kids from injury.
- **Pay attention to temperature.** Allow time for children to gradually adjust to hot environments to prevent heat-related injuries. Pay close attention to make sure that players are hydrated and appropriately dressed.
- **Be a good model.** Communicate positive safety messages and serve as a model of safe behavior, including wearing a helmet and following the rules.



Concussions

WHAT IS A CONCUSSION? A concussion is a brain injury caused by a bump or blow to the head. If your child reports any symptoms of concussion, or if you notice the symptoms yourself, **seek medical attention right away.**

HOW CAN YOU HELP YOUR CHILD PREVENT A CONCUSSION? Every sport is different, but there are tips to protect children from concussion.

- Ensure that they follow their coach's **rules for safety** and the rules of the sport.
- Encourage them to practice **good sportsmanship** at all times.
- Make sure they wear the right **protective equipment** for their activity (such as helmets, padding, shin guards, and eye and mouth guards). Protective equipment should fit properly, be well maintained, and be worn **consistently and correctly.**
- Learn the **signs and symptoms** of a concussion.



Signs and Symptoms

Signs Observed by Parents or Guardians

- Appears dazed or stunned
- Is confused about assignment
- Forgets an instruction
- Is unsure of game, score, or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness (even briefly)
- Shows behavior or personality changes
- Can't recall events prior to hit or fall
- Can't recall events after hit or fall

Symptoms Reported by Athlete

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Sensitivity to light
- Sensitivity to noise
- Feeling sluggish, hazy, foggy, or groggy
- Concentration or memory problems
- Confusion



Bike and Wheeled Sports Safety

- Your child must wear safety gear—including a helmet—every time he or she rides. Make a firm rule that your child cannot ride without it.
- Before each ride, you or your child should check the wheels, brakes, and other equipment.
- Be sure your child understands and obeys all traffic signs and signals.
- Children under 10 years old should ride on the sidewalk, not on the road.
- Your child should never wear headphones while riding.
- Allow your child to ride only during daylight (never at dusk or at night).



Helmets

A CPSC-compliant bicycle helmet is safe for bicycling, recreational roller or in-line skating, and riding a non-powered scooter.

- Helmet use is the most effective way to reduce bicycle-related fatalities.
- When worn, bicycle helmets cut the risk of severe brain damage by 88%.

Ways to Get Your Child to Wear a Helmet, Every Ride

- Make it a habit from the first time your child rides a tricycle, bike or roller skates. Be sure he or she wears a helmet every time.
- Enforce the rule: "No helmet, No bike" (or skateboard, roller skates, or scooter).
- Let your child pick out the helmet so he is more likely to wear it.
- Wear one yourself. A child is more likely to wear her helmet when you do too!



Take the helmet fit test

Put your helmet flat on your head. If it moves when you shake your head, you need to tighten your helmet or get a smaller one. Check:



Eyes: The helmet should sit low on your forehead—two finger widths above your eyebrows.



Ears: With the helmet buckled, the straps should meet just below the ears.



Mouth: When buckled, you should be able to fit no more than two fingers between the buckle and chin.

If you buy a helmet for a child, bring the child with you so that the helmet can be tested for a good fit. Carefully examine the helmet and accompanying instructions and safety literature.

Bicycle helmets are designed to protect against a single impact. Even if there are no visible signs of damage to the helmet, you must replace it.

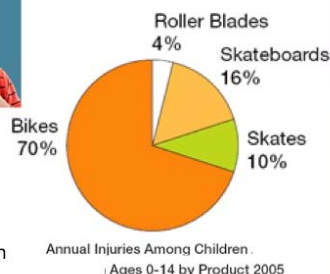
Universal bike helmet use among children ages 14 and under would prevent an estimated 212 to 294 deaths and 382,000 to 529,000 injuries each year.



Bike Safety



- Every year, more than 200,000 children are treated in emergency rooms for cycle-related injuries.
- More children ages 5 to 14 are seen in emergency departments for injuries related to bicycling than for any other sport.
- In 2009, 91 percent of bicyclists killed were not wearing a helmet.
- Almost half of bicycle crashes occur in driveways or on sidewalks.
- For motor vehicle-related bicycle crashes among children, 75 percent of injuries occur during the warm-weather months of April through September.



- **Wear a Bicycle Helmet.** *Everyone* – at every age – should wear bicycle helmets.
- **Adjust Your Bicycle to Fit.** The height should be adjusted to allow a slight bend at the knee when the leg is fully extended.
- **Check Your Equipment.** Before riding, inflate tires properly and check that the brakes work.
- **Watch for and Avoid Road Hazards.** Look for hazards like potholes, broken glass, gravel, puddles, leaves, and dogs.



- **See and Be Seen.** Make yourself visible to others by wearing neon, fluorescent or other bright colors, using reflective tape or markings, and wearing flashing lights.
- **Avoid Riding at Night.** It's hard for road users to see bicyclists at dusk, dawn, and nighttime. Use reflectors on the front and rear of your bicycle. White lights and red rear reflectors or lights are required by law in all states.
- **Control the Bicycle.** Ride with two hands on the handlebars, except when signaling a turn. Place books and other items in a bicycle carrier or backpack.



Rules of the Road: Bicycling on the Road

- **Go With the Traffic Flow.** Ride on the right in the same direction as other vehicles.
- **Obey All Traffic Laws.** A bicycle is a vehicle and you're the driver.
- **Yield to Traffic.** If there is no stop sign or traffic signal and you are coming from a smaller roadway (out of a driveway, from a sidewalk, a bike path, etc.), you must slow down and look to see if the way is clear before proceeding. Yield to pedestrians in a crosswalk.
- **Be Predictable.** Ride in a straight line, not in and out of cars. Signal your moves to others.
- **Stay Alert at All Times.** Use your eyes and ears.
- **Look Before Turning.** When turning, always look behind you for a break in traffic, and signal before making the turn. Watch for turning traffic.
- **Watch for Parked Cars.** Ride far enough out from the curb to avoid the unexpected from parked cars (like doors opening, or cars pulling out).



Sidewalk Riding (for children under 10)



- Watch for vehicles coming out of or turning into driveways.
- Stop at corners of sidewalks and streets to look for cars and to make sure the drivers see you before crossing.
- Enter a street at a corner and not between parked cars.
- Alert pedestrians that you are nearby, saying, "Passing on your left," or use a bell or horn.



Skateboarding Why Safety Is Important



- More than 25,000 people are treated in hospital emergency rooms for skateboard-related injuries every year. Some of those injuries are severe, and skateboarders have been killed by head injuries and collisions with cars.
- Kids and beginners are the most likely to get hurt. More than half of skateboard injuries happen to people under the age of 15. One-third happen to those who have been skateboarding less than a week.
- Experienced skaters get hurt, too. As the difficulty of tricks increases, so does the risk of injury, and things like rocks and poor riding surfaces are always a threat.





Skateboarding Gear Guidelines

- **Skateboard.** Make sure all the parts are in working order and check for cracks, sharp edges, damaged wheels, and loose parts before use.
- **Helmet.** Get a helmet that is specifically meant for skateboarding. Look for a sticker inside the helmet saying it meets the ASTM F1492 skateboard helmet standard.
- **Shoes.** Make sure the soles are made of grippy gum rubber, not regular shoe rubber, and make sure the shoes fit properly.
- **Pads.** Knee and elbow pads are recommended for riders of all levels. They should have a hard plastic shield and should not hinder movement.
- **Other Gear.** Wrist guards, hip pads, skateboard gloves, and padded jackets and shorts are all available and are a good idea for beginners. Mouthguards are good protection against concussions and broken teeth.



Safety Tips Skateboarding

- The greatest threat to skateboarders is cars. Kids should never ride in the street.

- Any place kids skate should be dry and cleared of anything that might interfere with the board's wheels.
- Before they start skating, teach kids to be sure it's their turn and that no one is in the way. Collisions can happen if skaters don't communicate. And they should never ride with someone else on their skateboard. One rider per board, period.
- Learning how to fall properly can help reduce the chances of injury. Kids should know that when they start to lose their balance, crouching down will mean they won't have as far to fall. They also should learn to try to land on the fleshy parts of their body and roll rather than breaking a fall with their arms and hands.



Playground Safety

- Each year in the United States, emergency departments treat more than **200,000** children ages 14 and younger for playground-related injuries.
- Children **ages 5 to 9** have higher rates of emergency department visits for playground injuries than any other age group.
- **75%** of injuries on playground equipment occur on public playgrounds.
- On public playgrounds, more injuries occur on **climbers** than on any other equipment.
- Most of playground-related deaths (**70%**) occurred on home playgrounds.
- On home playgrounds, swings are responsible for most injuries.



Protect the ones you love FALLS



Prevention Tips

- **Play safely.** Falls on the playground are a common cause of injury. Check to make sure that the surfaces under playground equipment are safe, soft, and well-maintained (such as wood chips, rubber mats, or sand, not dirt or grass). The cushioned surface should extend at least 6 feet past the equipment. Additional coverage may be needed, depending on how high a slide is or how long a swing is.
- **Supervision is key.** Supervise young children at all times around fall hazards, such as playground equipment, whether you're at home or out to play.
- the greater the height of the equipment, the more likely kids are to get injured if they fall from it.



Design and Spacing

Playground equipment should be designed for three different age groups: infants and toddlers under 2, 2- to 5-year-olds (preschoolers), and 5- to 12-year-olds (school-age kids). In the safest playgrounds, play areas for younger children are separated from those meant for older kids and signs clearly designate each area to prevent confusion.

- To prevent injuries, younger children should not play on equipment designed for older kids, and older kids shouldn't play on equipment designed for younger ones.
- Guardrails and barriers should be in place for elevated surfaces.
- Play structures more than 30 in high should be spaced at least 9 ft apart.
- Swings, seesaws, and other equipment with moving parts should be located in an area separate from the rest of the playground.
- All openings (like rungs on a ladder or bars on a guardrail) should measure less than 3½ inches or wider than 9 inches.



Maintenance and Inspection

- There should be no broken equipment: wooden equipment should not be cracking or splintering, and metal equipment should not be rusted. All hardware on equipment should be secure, with no loose or broken parts.
- The fence surrounding a public playground should be in good condition to prevent kids from running into surrounding traffic.
- Check for objects (like hardware, S-shaped hooks, bolts, and sharp or unfinished edges) that stick out on equipment and could cut a child or cause clothing to become entangled.
- If the playground has a sandbox, check for hazardous debris such as sharp sticks or broken glass, and be sure that the sand is free of bugs. Sandboxes should be covered overnight to prevent contamination.
- If a part seems broken, loose, or in need of other maintenance, designate it as off-limits immediately and report the problem to the appropriate authorities.



Teach Kids About Playground Safety

Teach your kids to:

- Never push or roughhouse while on jungle gyms, slides, seesaws, swings, and other equipment.
- Use equipment properly — slide feet first, don't climb outside guardrails, no standing on swings, etc.
- Check to make sure no other kids are in the way if they're going to jump off equipment, and land on both feet with their knees slightly bent.
- Never use playground equipment that's wet.
- Check the temperature of metal playground equipment in the summertime. Contact burns can occur within seconds.
- Wear clothes that do not have drawstrings or cords. Drawstrings, purses, and necklaces could get caught on equipment and strangle a child.



Swing Safety

Swings are the most frequent source of childhood injuries from moving equipment on a playground.

- Swings should be limited to two per bay.
- Tot swings with full bucket seats should have their own bay.
- Swings should be made of soft material such as rubber or plastic, not wood or metal.
- Kids should always sit in the swing, not stand or kneel. They should hold on tightly with both hands while swinging, and when finished swinging, stop the swing completely before getting off.
- Children should not to run or walk in front of or behind moving swings.
- Kids should never ride with more than one child to a swing. Swings are designed to safely hold only one person.



Slide Safety

- Children should take one step at a time and hold onto the handrail when climbing the ladder to the top of the slide. They should not climb up the slide itself to get to the top.
- Kids should always slide down feet first and sitting up, never head first on their back or stomach.
- Only one child should be on the slide platform at a time, and kids shouldn't slide down in groups.
- Kids should always check that the bottom of the slide is clear before sliding down. When they reach the bottom, they should get off and move away from the end of the slide so it's clear for other kids to slide down.



Climbing Equipment Safety

- Be sure your kids are aware of a safe way down in case they can't complete the climb.
- Teach kids to use both hands, to stay well behind the person in front of them, and to beware of swinging feet. When they drop from the bars, kids should be able to jump down without hitting the equipment on the way down. Remind kids to have their knees bent and land on both feet.
- Too many kids on the equipment at one time can be dangerous. Everyone should start on the same side of the equipment and move across it in the same direction.
- When climbing down, kids should watch for those climbing up.
- Children younger than 5 may not have the upper-body strength necessary for climbing and should only be allowed to climb on age-appropriate equipment. Preschoolers should only climb 5 feet high and school-age kids should only climb 7 feet high.



Unsafe Playground Equipment

These types of equipment are not safe for playgrounds:



Camping Safety

Be aware of camping safety issues, such as bug bites and stings; plants that may cause rashes and allergic reactions; exposure to elements; and getting lost.

Teach your kids how to recognize landmarks at the campsite and on hikes. Teach them to remain where they are and stay calm if they are lost. Kids should wear whistles (whistles can be heard farther away than the human voice) and know the universal help signal of three blows or loud sounds. Take your cell phone along in case you can get a signal.



Pack for Safety

- To protect against sudden temperature and weather changes, wear multi-layered clothing made of polyester, polypropylene, and wool. To protect against rain and wind, bring breathable, lightweight waterproof jackets and pants.
- All family members need comfortable hiking shoes to prevent blistering. When hiking, tuck pant cuffs into socks and boots to protect against ticks. Kids should wear brightly colored clothes to increase visibility. Caps or hats will help guard against the sun and protect against insects.
- Bring extra food and water or water purification tablets.



Setting Up Camp

- Natural hazards such as forest fires and fallen trees are less likely at campgrounds that can be accessed by cars. But check for broken glass, discarded needles, and other hazardous trash.
- Scout the area before setting up a tent. In wilderness areas, look for signs of animal and insect use; for example, yellowjacket wasps build their nests in the ground. If berries are plentiful at a site, bears may forage for food there.
- Always use a flame retardant tent and set up camp far away from the campfire.
- To build a firepit, look for a clearing and previous firepits. Clear all vegetation and dig a pit surrounded by rocks. During fire-hazard periods and dry seasons, use portable stoves rather than campfires.
- Always build your campfire down wind away from your tent.
- Store liquid fire starter (not gasoline) away from your tent and campfire and only use dry kindling to freshen a campfire.
- Always put out a campfire when going to sleep or leaving the campsite. To extinguish the fire, cover with dirt or pour water over it.



Bring a first-aid kit that includes:

- adhesive and butterfly bandages
- self-adhesive roller bandages
- sterile gauze pads
- a cold pack
- splinting materials
- blister dressings
- nonadhesive dressings
- cloth-based adhesive tape
- elastic bandages (Band-Aids)
- thermometer
- non-latex gloves
- large plastic bag
- safety pins
- scissors
- tweezers and needles (to remove splinters or ticks)
- topical antibiotic cream
- oral antihistamine (ex, Benadryl)
- medications for pain or fever, such as acetaminophen or ibuprofen
- hydrocortisone cream (1%)
- alcohol pads
- Liquid antiseptic soap to clean wounds.



Poisonous Plants



Poison Ivy

Can grow as a vine or shrub. Each leaf has 3 glossy leaflets, with smooth or toothed edges. Leaves are reddish in spring and green in summer. May have white berries.



Poison Oak

Grows as a low shrub. Fuzzy green leave in clusters of 3 are lobed or deeply toothed with rounded tips. May have yellow-white berries.



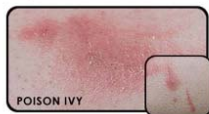
Poison Sumac

Grows as a tall shrub or small tree in bogs or swamps. Each leaf has clusters of 7 to 13 smooth-edged leaflets. Leaves are orange in spring and green in summer. May have yellow-white berries.



Poisonous Plants

- Show your kids pictures of these plants before your trip, and if in doubt, avoid touching any unknown plants. Dress your kids in long-sleeved shirts and pants to protect the skin from exposure to plants that may cause allergic reactions. You can apply protective products before hiking that will act as a barrier.
- Any area that comes in contact with a poisonous plant should be washed immediately with cool water to help remove the oil that causes the allergic reaction. Calamine lotion or hydrocortisone cream (1%) may help to stop the itching that's common with poison ivy.
- Antihistamines taken by mouth are effective for allergic reactions or itchy rashes — from contact with poison ivy to mosquito bites to bee and wasp stings.



POISON IVY



Signs and Symptoms

- an itchy red rash that appears within 4 hours to 4 days after touching the plant oil
- blisters that ooze clear fluid
- bumps and blisters that may be different sizes and look like streaks on the child's skin
- rash may begin to look crusty as it heals



What to Do:

- Remove any clothing that has touched the plant or rash and wash all clothing recently worn.
- Gently wash skin and scrub under fingernails right away with soap and water.
- Cut fingernails short to keep the child from breaking the skin when scratching.
- Place cool compresses on the child's skin as needed.
- For itching: add oatmeal to the bath; use calamine lotion (avoid using on the face or on the genitals); and, if needed, give the child diphenhydramine.

Seek Medical Care if:

- the rash covers a large portion of the body or is on the face or genitals
- the rash is getting worse despite home treatment
- the skin looks infected (increasing redness, warmth, pain, swelling, or pus)

Seek Emergency Medical Care if the Child:

- has a known severe allergy to poison ivy/oak/sumac
- develops swelling of the tongue or throat
- complains of chest tightness or difficulty breathing
- develops widespread redness or swelling
- was given a shot of epinephrine (EpiPen)



Insect Stings and Bites



Think Prevention!

Use citronella-based products to repel insects, or choose a repellent that contains 10% to 30% DEET. Put repellent on clothing instead of skin whenever possible. Be sure to follow the directions on the label. DEET products should only be used on children older than 2 years.



What to Do:

- If the child was stung and the insect's stinger is visible, remove it as quickly as possible by scraping the skin horizontally with the edge of a credit card or your fingernail.
- Wash the area with soap and water.
- Apply ice or a cool wet cloth to the area to relieve pain and swelling.

Seek Medical Care if:

- the sting or bite is inside or near the mouth
- the child has a known severe allergy to a stinging or biting insect
- injectable epinephrine (EpiPen) was used
- the site looks infected (increasing redness, warmth, swelling, pain, or pus occurring several hours or longer after the sting or bite)



Tick Bites



- From May through July, people get tick bites and tickborne diseases more often than any other time of year in the United States.
- Missouri is one of the top 5 states for Rocky Mountain Spotted Fever.



Think Prevention!

- Check kids' skin and hair every night for ticks – especially the scalp, behind the ears, the neck, and under the arms.
- Children should wear long-sleeved shirts and tuck pant legs into their socks.
- Use insect repellent with 10-30% DEET on kids older than 2.



Signs and Symptoms of Tick-Related Diseases:

- a red bump ringed by an expanding red rash, which looks like a bull's-eye (Lyme disease)
- red dots on the ankles and wrists (Rocky Mountain spotted fever)
- flu-like symptoms such as fever, headache, fatigue, vomiting, and muscle and joint aches



What to Do:

If the tick is still attached to the skin, remove it:

- Using fine-tipped tweezers, grasp the head of the tick close to the skin.
- Firmly and steadily pull the tick straight out of the skin. **Do not twist the tick** or rock it from side to side while removing it.
- Put the tick in a sealed container or zip-locked bag it and save it to show the doctor if your child becomes ill.
- **Do not use petroleum jelly or a hot match** to kill and remove the tick.
- Wash your hands and the site of the bite with soap and water.
- Swab the skin with alcohol.

Seek Medical Care if:

- The tick might have been on the skin for more than 24 hours.
- Part of the tick remains in the skin after attempted removal.
- A rash of any kind develops (especially a red-ringed bull's-eye rash or red dots on wrists and ankles).
- The bite area looks infected (increasing redness, warmth, swelling, pain, or oozing pus).
- Symptoms like fever, headache, fatigue, chills, stiff neck or back, dizziness, or joint aches develop.



Wild Animals

- Kids should not approach wild animals, even small ones, and should **never** feed them. Don't leave kids unsupervised. Instruct them to stay calm and call loudly for help if they encounter a wild animal.
- Wild animals can transmit disease to humans that handle them, and are likely to have ticks that may also transmit disease.
- Always ask the park rangers about wild animals. Do not bring food into tents. Pack food in your cars overnight; if you're going on a long camping trip, pack food in resealable plastic bags and animal-resistant containers.



PEDESTRIAN SAFETY

BY THE NUMBERS

- Since 2000, an average of 355 unintentional pedestrian fatalities among children ages 14 and under have occurred each year.
- Since 2001, an average of more than 15,500 children under 15 were nonfatally injured as pedestrians each year.
- Seventy-four percent of child pedestrian deaths occur at non-intersection locations.



SAFETY TIPS FOR PEDESTRIANS

Young children move quickly and are often unaware of danger. Children 10 and under need guidance and supervision when playing and walking near traffic.

When crossing a street your child should always:

- Cross at the corner or at an intersection.
- Stop at the edge of parked cars, the curb, or other vehicles.
- Look LEFT-RIGHT-LEFT for moving cars.
- Cross when clear, and keep looking left and right.
- Walk, don't run or dart, into the street.
- Look for signs that a car is about to move (rear lights, exhaust smoke, sound of motor, wheels turning).
- Walk alertly; use eyes and ears to increase safety.
- Stop using cell phones or listening to music while crossing the street.



Young Kids and Pedestrian Safety

Most preschoolers are injured near their homes, on their own streets or even in their own driveways, and most traffic crashes involving preschoolers occur in fair and warm weather.

- **Supervise preschoolers at all times.** Preschoolers should NOT be allowed to cross the street alone. Teach them who can help them cross the street safely (generally adults or siblings over the age of 12). Always hold the hand of a preschooler when crossing the street. Ensure your children are properly supervised at all times, especially wherever motor vehicles are present. Teach children not to play in, around, or under vehicles – ever.



Teach Children Safe Behavior



Teach by explaining. Explain to your child the safe way you cross a street. Say, "When I cross a street, I always stop at the curb. I look and listen for cars. I look left for any traffic coming, and then I look right for traffic coming that way. Then I look left again for any traffic coming. When it is clear, I cross the street, and keep looking left and right and listening for cars coming." You can also explain how you look and listen for vehicles where they may be backing up (out of a driveway, parking lot, etc.). Say: "Sometimes I can hear trucks backing up because they make a loud beeping sound to warn me. I also can look for a car or truck moving backward, and I can look and see white lights in the back of the car that tell me the driver is getting ready or is going backwards." Use life as a teaching opportunity; quietly point out to your child when you notice others using safe pedestrian and unsafe pedestrian behavior. This reinforces your message and is also helpful for visual learners.



Be a Role Model

Teach by example. Your child watches and notices your actions as an adult. They think if you do the behavior it must be correct. Always do the right thing and show safe behavior.



When walking, always: • Walk on the sidewalk, if one is available. • Walk facing traffic if no sidewalk is available.

When crossing the street, always: Obey all traffic signs and signals. • Cross at a corner or crosswalk with the walk signal. • Stop at the curb. • Exaggerate looking LEFT-RIGHT-LEFT for traffic in all directions before and while crossing the street. • Hold your child's hand when crossing the street. • Cross when it is clear. • Keep looking for cars as you cross. Encourage your child. As you safely cross the street together, praise the child for copying your safe actions.

Practice what you teach at ALL times.



Child Age	Abilities/Characteristics	Practices
4-6	Limited judgment	Walk with an adult, holding hands while crossing.
	Impulsive	
	Lose concentration easily	Repeat safe walking skills with an adult.
7-9	Cannot judge traffic speed	
	Need supervision	Walk with an adult.
	Can begin to identify safe crossing sites	Teach pedestrian safety skills.
10+	Are learning more complex pedestrian safety skills	Repeat safe walking skills with an adult.
	Need specific instruction and modeling	Walk together until they consistently demonstrate safe pedestrian skills.
	Can identify safe crossing sites with help and practice	Revisit safety issues often to make sure they are still practicing safe behavior.
	Can stay focused while crossing the street	



Driveway Safety



Many children are killed or seriously injured in backover incidents. A backover occurs when a vehicle coming out of a driveway or parking space backs over an unattended child because the driver did not see him or her.

All Vehicles Have Blind Spots

- The blind spot is the place behind your vehicle that you cannot see in the rear or side view mirrors, or even by craning your neck out the driver's side window. The larger the vehicle, the larger the blind spot.



Driveway Safety Tips



- Teach children not to play in, under, or around cars, EVER.
- Supervise children carefully when in and around vehicles.
- Teach your children to keep their toys and bikes out of the driveway. Avoid making your driveway a "playground." If you allow children in this area, do so only when there are no vehicles present. To further protect children who may be outside playing, separate the driveway from the roadway with a physical barrier to prevent any cars from entering.
- Never leave vehicles running, and keep all vehicles, even those in driveways and garages, locked up tight.
- Always walk around your vehicle and check the area around it before backing up.
- Teach children to move away from a vehicle when a driver gets in it or if the car is started.



- When backing up, always know where all children are and have them stay in your full view and well away from your vehicle.
- Make sure to look behind you while backing up slowly in case a child dashes behind your vehicle unexpectedly. Actively check your mirrors while backing up.
- Take extra care if you drive a large vehicle. Roll down your windows while backing out of your driveway or parking space so that you'll be able to hear what is happening outside of your vehicle.
- Many cars are equipped with detection devices like backup cameras or warning sounds, but they cannot take the place of you actively walking around your car to make sure your children are safely out of the way. Do not rely solely on these devices to detect what's behind your vehicle.

Protect your kids around driveways this summer

- ✓ Separate play areas from the driveway.
- ✓ Know where your kids are before you get in the car.
- ✓ Check and check again before driving out.



Motor vehicle crashes were the leading cause of death for children age 4 and ages 11 to 14 years old.



Road Rules for Little Passengers

An average of 3 children age 14 and younger were killed and 469 were injured every day in the United States in motor vehicle crashes during 2010.

Research has shown that lap/shoulder seat belts, when used, reduce the risk of fatal injury to front seat occupants (age 5 and older) of passenger cars by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and the risk of moderate-to-critical injury by 65 percent.

Over the period 1975 through 2010 an estimated 9,611 lives were saved by child restraints (child safety seats or adult seat belts) for children under the age of 5 in passenger vehicles.

Child safety seats reduce the risk of fatal injury by 71 percent for infants and by 54 percent for toddlers in passenger cars.

Correctly installed and properly used child safety seats (car seats) and booster seats — or seatbelts, depending on a child's age — are the first line of defense in protecting kids on the road. Couple that with defensive driving habits and you're helping to ensure that your kids travel safely.



Road Rules for Little Passengers

Kids also have some responsibilities when it comes to staying safe in a car or on a school bus. Most are in these vehicles every day and so should be taught simple rules for traveling to help ensure their safety. Be sure to explain to your kids that these rules must be followed every time, no matter who is driving or how short the ride may be.

- **A seatbelt must be worn during every car trip.** It should be fastened before the car is in motion and should be left on until the end of the trip.
- **Use all seatbelts.** Most cars have lap and shoulder belts that buckle as a unit, but some have two separate belts, one lap and one shoulder. Some have a lap belt only. Teach your kids to look for and secure every belt. Also teach them not to tuck the belt under their armpit, even if they think it is more comfortable that way.
- **Never share seatbelts.** It might seem like fun, but two kids should never buckle up as a pair.



Important Safety Reminders

- Failure to read the child safety seat instructions, in addition to vehicle owner's manual instructions regarding seat belts, could result in death or serious injury as a result of a failure of the child safety seat to be properly secured and/or properly restrained.
- Children in rear-facing child seats should not be placed in the front seat of vehicles equipped with passenger-side air bags. The impact of a deploying air bag striking a rear-facing child seat could result in injury to the child. NHTSA also recommends that children 12 and younger sit in the rear seat away from the force of a deploying air bag.
- Children age 12 and younger are safest when properly buckled in the back seat of a motor vehicle.
- Always read the child restraint manufacturer instructions and the vehicle owner manual instructions.

- **Sit in the back seat.** Kids under 13 should always ride in the back seat. Explain that air bags could seriously hurt a small child because they are designed to protect a bigger person.
- **Play it cool.** Kids should understand the importance of staying calm in the back seat. If they are jumping around or yelling, it can distract the driver and put all the passengers at risk.
- **Follow the rules in every car.** Kids need to follow the rules if they are in a friend's or relative's car, even if other passengers don't follow the rules. If asked to sit in the front seat of someone else's car, your child should politely decline the offer and tell the driver that he or she would prefer to sit in the back seat.



STAYING HEALTHY WHILE YOU TRAVEL

Be Prepared

When you pack, include any medications and other medical supplies you and your family use regularly. Don't forget inhalers, allergy medication, and insulin, if needed.

- Other items you might want to pack:
- sunscreen
 - over-the-counter (OTC) pain reliever like acetaminophen
 - a small first-aid kit that includes antiseptic, antibiotic ointment, bandages, and other OTC medications your doctor may recommend
 - insect repellent (10-30% DEET)
 - waterless alcohol-based hand rubs



STAYING HEALTHY WHILE YOU TRAVEL

Carry a written copy of your child's medical history, including:

- your name, your child's name, your address and phone number
- your child's blood type
- immunization records
- your doctor's name, address, and office and emergency phone numbers
- the name, address, and phone number of your health insurance carrier, including your policy number
- a list of any ongoing health problems, such as diabetes or asthma
- a list of any medications your child takes and your pharmacy's name and phone number
- a list of allergies to medications, food, insects, and animals
- a prescription for glasses or contact lenses
- the name, address, and phone number of a relative other than you



Prevent Common Travel Troubles

Jet Lag

- Adjust your family's sleep schedules 2-3 days before travel.
- Get plenty of rest before your trip. If possible, sleep on the flight.
- Make sure everyone drinks plenty of water during the flight.
- On a long flight, stretch regularly and walk up and down the aisles when it's OK to do so.
- After arrival, encourage kids to be active outside or in brightly lit areas during daylight hours.
- Try to follow local time at your destination (for example, try to keep kids awake until their usual bedtime).

Ear Pain

- It's common for kids to experience ear discomfort during a plane's takeoff and descent. Encourage kids to swallow, yawn, or, if they're old enough, chew gum. It may help infants to nurse or suck on a bottle.
- You may also want to give your child a pain reliever, such as acetaminophen, 30-60 minutes before takeoff or, if it's a long flight, before landing.



Prevent Common Travel Troubles

Motion Sickness

- Before you leave, have kids eat a light meal or snack. Provide foods that are easily digested, such as carbohydrates, and avoid fatty foods.
- Try to avoid eating during short trips. For longer trips, sip drinks and eat light, small meals and snacks.
- If your child is feeling sick, provide some bland foods, like crackers.
- Encourage kids to look outside the car. They should focus on still objects — not moving ones (like other cars) — or a distant point.
- Keep the window open a little to allow fresh air to circulate.
- Use a headrest to minimize head movement.
- Make frequent stops. If your child complains of feeling sick and it's safe to stop, a short walk for some fresh air might help.
- Ask your doctor about medicines to prevent travel sickness.



Prevent Common Travel Troubles

Diarrhea

Take precautions to ensure the water is safe:

- Consider drinking only bottled water when traveling.
- Use only purified water for drinking, making ice cubes, brushing teeth, and mixing infant formula and foods.
- If you use tap water, boil it first or purify it with an iodine tablet.

Other ways to prevent diarrhea and GI distress:

- If you're breastfeeding your infant, continue to do so.
- Remind kids to use good hand-washing techniques.
- Keep pacifiers, teething rings, and toys clean.
- Keep an alcohol-based hand sanitizer handy.
- Make sure all dairy products are pasteurized.
- Fresh fruits and vegetables should be adequately cooked or washed well and peeled.



Prevent Common Travel Troubles

While you're away, it's important to take the same health and safety precautions as you do at home, including:

- **Sun smarts.** Watch kids' sun exposure. UV light is most intense near the equator, at high altitudes, from 10 a.m. to 4 p.m., and where light is reflected off water or snow. Apply broad-spectrum sunscreen of at least SPF 15 every 2 hours, especially after sweating and water exposure. Bring a hat and sunglasses to keep the sun off of your child's face.
- **Water safety.** It's vital to watch kids at all times around any body of water. Because water safety devices — such as life jackets and goggles — may not be available at your destination, consider bringing these from home if you're planning to spend time on or near water.
- **Buckle up.** If you'll rent a car, you might want to bring your child's car seat with you, as well-maintained and approved seats may be unavailable. Car seats from rental car companies are not always safe, because you don't know the crash history of available seats. Try the Bubble Bum for a portable, inflatable booster seat.



Travel Abroad

If you're heading overseas, start preparing well in advance. Find out what vaccinations your kids (and you) might need because:

- Different countries have different risks and requirements and may require specific vaccines.
- Some vaccines require more than one dose and are given in a series over a period of days or sometimes weeks.
- Most vaccines take time to become effective in your body.
- Most immunizations should be given at least 1 month before travel, so try to schedule a doctor's visit 4-6 weeks before your trip.
- Ask your doctor or visit the Centers for Disease Control and Prevention (CDC) website for a list of recommended or required vaccinations, and be sure to take your child's immunization records with you.



Passengers

- **STAY ALERT.** Trains can come from either direction at any time and can be very quiet. Around train tracks or in stations, obey all warning signs and signals and use caution when using headsets or cell phones.
- **WATCH THE OVERHANG.** Trains are wider than the tracks; never sit on the edge of a station platform.
- **STAND AWAY FROM THE PLATFORM EDGE.** Pay attention to painted or raised markings at the platform edge, and stay at least three feet from the train while it is coming in or out of the station.
- **WHEN ON BOARD, HOLD ON.** Hold on tight to poles or seats, and listen carefully to directions from the train operator or conductor.
- **WATCH YOUR STEP.** Be careful getting on and off the train - there may be a gap between the train and platform or steps.
- **DON'T TAKE SHORTCUTS WITH YOUR LIFE!** Follow directional signs and markings that let you know where it is safe to cross the tracks.





Pedestrians



- **The ONLY safe place** to cross is at a designated public crossing with either a crossbuck, flashing red lights or a gate.
- **It can take a mile or more to stop** a train, so a locomotive engineer who sees someone on the tracks will likely be unable to stop in time.
- **Trains overhang the tracks** by at least three feet in both directions; loose straps hanging from rail cars may extend even further.
- **Do not cross the tracks** immediately after a train passes. Wait until you can see clearly around the first train in both directions.
- **Flashing red lights** indicate a train is approaching. Never walk around or behind lowered gates at a crossing, and **DO NOT** cross the tracks until the lights have stopped flashing.
- **Trestles are not** meant to be sidewalks or pedestrian bridges!
- **Do not attempt to hop aboard** railroad equipment at any time. A slip of the foot can cost you a limb or your life.
- **Be aware trains do not follow set schedules.** Any Time is Train Time!



Bicyclists



- **CROSSING TRACKS ON A BICYCLE REQUIRES CAUTION AND EXTRA ATTENTION!** Narrow wheels can get caught between the rails. Walk - don't ride - across. Always cross at a 90-degree angle.
- **USE ONLY DESIGNATED RAILROAD CROSSINGS.**
- **TURN OFF MUSIC AND REMOVE EARPHONES AT ALL RAIL CROSSINGS.** Music can be a deadly distraction near the tracks - preventing you from hearing an approaching train.
- **WET TRAIN TRACKS CAN BE SLIPPERY.** Dismount and walk your bike across the tracks. Step over the tracks - not on them - to avoid slipping.
- **WATCH OUT FOR THE SECOND TRAIN.** Wait after the first train passes until you can see clearly in both directions.
- **IF YOU SEE A TRAIN COMING, WAIT!** Flashing lights or a lowering gate means a train is coming. Wait until the gates go completely up and the lights go off.



Drivers

- **Trains and cars don't mix.** Never race a train to the crossing.
- **The train you see is closer and faster-moving** than you think.
- **Trains cannot stop quickly.** Even if the engineer sees you, a train can take a mile or more to stop once the brakes are applied.
- **Never drive around lowered gates** — it's illegal and deadly.
- **Do not get trapped on the tracks;** proceed only if you are sure you can completely clear the crossing without stopping.
- **If your vehicle ever stalls on a track** with a train coming, get out immediately and move quickly away from the tracks in the direction from which the train is coming.
- **At a multiple track crossing,** watch out for a second train on the other tracks, approaching from either direction.
- **When you need to cross train tracks,** go to a designated crossing, look both ways, and cross the tracks quickly, without stopping. It isn't safe to stop closer than 15 feet from a rail.
- **ALWAYS EXPECT A TRAIN!** Freight trains do not follow set schedules.



Holiday Safety

- The greatest number of child injuries that result in emergency room visits occur on Labor Day, followed by Memorial Day and the Fourth of July.
- Most of these injuries are associated with sports and recreation activities and are not holiday-specific.
- Prevent holiday injuries by using the same safety practices you use throughout the year. **Actively supervise kids at play!**



Fireworks Safety

The safest way to enjoy fireworks is by letting the professionals handle the explosives, and attend a public fireworks display. If you plan to shoot your own fireworks, pay particular attention to safety tips to help reduce the chances of a destructive fire and/or injury:

- Purchase fireworks only from a licensed & approved dealer.
- Read and follow the directions on fireworks packages.
- Make sure adults supervise all use of fireworks. Young children should not play with fireworks. Even sparklers can cause a serious burn injury.
- Be sure other people are out of range before lighting fireworks.
- Do not point or throw fireworks at people.
- Don't hold fireworks or have any part of your body over them while lighting.
- Use fireworks in an open area away from dry grass and other flammable materials. Keep a bucket of water or a hose nearby for emergencies.
- Light fireworks one at a time. Do not try to re-ignite fireworks. Soak fireworks that did not ignite with water. Do not attempt to repair broken fireworks.
- Store fireworks in a cool, dry place. Keep fireworks out of your pockets.



Dangerous Pets

Just because you can buy a pet from the pet store doesn't mean it's safe for homes with kids. Animals that may not be child-safe include:

- reptiles (turtles, snakes, lizards, iguanas)
- rodents (hamsters, gerbils, guinea pigs, chinchillas, hedgehogs, prairie dogs, mice, rats)
- amphibians (frogs, toads, salamanders)
- ferrets
- baby poultry (chicks, ducklings, goslings, turkeys)
- monkeys
- exotic animals



Selecting Safe Pets



Choosing pets that fit with your family's lifestyle, home, and yard can help prevent bites.

- Find out how much space and exercise a pet needs, because animals can be dangerous when these needs are not met.
- Talk to a professional (such as a veterinarian, reputable breeder, or pet shelter) to discuss what type of pet or breed is best for your household.
- Ask questions about the pet's temperament and health. An animal with a history of aggression is not suitable for a household with kids.
- Spend time with a pet before buying or adopting it. Use caution when bringing a pet into the home of an infant or toddler.
- Don't get a pet if a child shows signs of fear or anxiety around it.
- Spay/neuter all dogs and cats (this reduces aggressive tendencies).
- Properly socialize and train any pet entering the household.



DOG BITES FACTS & FIGURES



50% OF DOG ATTACKS INVOLVED CHILDREN UNDER 12 YEARS OLD



82% OF DOG BITES TREATED IN THE EMERGENCY ROOM INVOLVED CHILDREN UNDER 15 YEARS OLD



70% OF DOG BITE FATALITIES OCCURRED AMONG CHILDREN UNDER 10 YEARS OLD



Since dogs are so common as pets, injuries from dogs are frequent and because of their jaw strength, bites can be serious, requiring hospitalization or surgery.

- Children's natural behaviors, including running, yelling, grabbing, hitting, quick and darting movements, and maintaining eye contact, put them at risk for dog bite injuries.
- As weather gets warmer and children spend more time outside, their risk of being bitten increases.
- Half of all bites are inflicted by the family dog; less than 10% are by unknown dogs.

Dog bites are largely preventable, and adults and children can learn to reduce their chances of being bitten.



Tips for Pet Owners

A lot of the responsibility for preventing bites falls to the owner. If your family has a pet:

- Make sure it gets all required immunizations and regular checkups.
- Have dogs and cats spayed or neutered.
- Consider obedience school to train and socialize your dog.
- Allow your dog to meet and interact with different types of people under calm and positive circumstances.
- When you take your dog out in public, always keep it on a leash.
- **Do not** discipline your dog with physical or violent punishments.
- Closely supervise kids when they're around any pet and **never** leave an infant or toddler alone with your pet.

Remember, every pet, even the friendliest one, has the potential to bite, especially if the pet feels threatened, scared, or becomes overly excited.



Teach Kids...



- **how to handle and pick up pets** — to never squeeze them too tight, drop them, fall on them, or pick them up too fast.
- **never to tease animals or pull their tails or ears.**
- **never to bother animals** while they're eating, sleeping, or tending to their young.
- **never to take a toy or bone away from a dog.**
- **not to surprise** or sneak up on an animal.
- **not to play aggressive games** with dogs (e.g., wrestling).
- **not to feed a dog a treat with their fingers**, but to use their palm.
- **never to put pets into scary situations.** For example, never crowd a dog or back it into a corner.
- **to wash their hands** with soap and water after handling pets.



Warning Signs that Animals Give

Dogs	Cats
Growling, baring teeth	Hissing and/or low yowling
Ears back	Arching back
Hair on back standing up	Ears back flat
Staring	Baring teeth



Preventing Dog Bites

Other People's Pooches

No matter how well you know the dog, always supervise your kids around someone else's pet. To reduce the risk of bites, teach kids these safety guidelines:

- Always ask the owner if it's OK to pet the dog.
- Let the dog see and sniff you before petting it.
- Do not run toward or away from a dog.
- Do not play with a dog unless supervised by an adult.
- Immediately report stray dogs or dogs displaying unusual behavior to an adult.
- If an unfamiliar dog approaches you, stay calm, don't look it in the eye, and stand still or back up slowly.
- If a dog tries to bite you, put anything you can between you and the dog. If knocked over by a dog, roll into a ball, cover your face, and lie still.
- If bitten, immediately report the bite to an adult.



HOW NOT TO GREET A DOG

THE CORRECT WAY:

- No Eye contact
- Let the dog approach you in his own time
- Keep either your **SIDE** or **BACK** towards the dog (non-threatening posture)
- Pet or stroke him on the **SIDE** of his face or body. Or on his back.

charlie's house
The Home Safety Site

Wildlife

Children are often curious about wild animals and may want to approach or feed them. Since wild and feral animals can carry diseases (such as rabies) that can be passed to people, it is important to teach your children:

- Never approach any wild animal, including feral cats, stray dogs, and birds.
- If they find any injured animal, do not touch it, but tell an adult and have them call the local animal control agency instead.

Although the animals your child sees in the woods or parks may be cute, they can be dangerous as pets — they aren't used to being around people and may carry diseases. Some people mistakenly believe they can tame a wild animal. Instead, you should teach kids to stay away from animals in the wild, and **never** to touch, feed, or try to take an animal home.

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The Home Safety Site

Animal Bites

Animal bites and scratches that break the skin can sometimes cause infection. Some bites need to be closed with stitches while others heal on their own. Rarely, animal bites (particularly from wild animals) can lead to rabies, a life-threatening disease. Bats, raccoons, skunks, and foxes transmit most cases of rabies.

What to Do:

- Wash the bite area with soap and water; apply pressure with sterile gauze or a clean cloth if the bite is bleeding.
- If the bleeding has stopped, apply antibiotic ointment.
- Cover the area with a bandage or sterile gauze.
- Offer the child acetaminophen or ibuprofen for pain.

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Seek Medical Care if:

- the bite was from
 - a wild or stray animal
 - an animal that isn't up-to-date on rabies shots
 - an animal that is acting strangely
- the bite has broken the skin
- the bite is on the face, head, neck, hand, foot, or near a joint
- a bite or scratch becomes red, hot, swollen, or increasingly painful
- the child is behind on shots or has not had a tetanus shot within 5 years

When seeking treatment, have the following information on hand:

- the kind of animal that bit the child
- the date of the animal's last rabies vaccination, if known
- any recent unusual behavior by the animal
- the animal's location, if known
- if the animal was a stray or wild, or was captured by a local animal control service
- the child's immunization (shots) record
- a list of the child's medication allergies

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Dehydration

If your child is sweating a lot on a hot day or during intense physical activity, watch for signs of dehydration, which can include:

- dry or sticky mouth
- few or no tears when crying
- lack of urine or wet diapers for 6 to 8 hours in an infant (or only a very small amount of dark yellow urine)
- lack of urine for 8 hours (or only a very small amount of dark urine)
- dry, cool skin
- lethargy or irritability
- fatigue or dizziness in an older child

Think Prevention!

- Make sure kids get plenty of fluids — they should consume more fluids than they lose from sweating.
- It's important that kids drink often during hot weather.
- By the time a child feels thirsty, he or she may already be dehydrated. And thirst can be quenched before the necessary body fluids have been replaced. That's why kids should start drinking before thirst develops and consume fluids even after thirst is quenched.

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What to Do:

- Learn to recognize the early signs of dehydration and to respond quickly if they develop. Younger infants and children should be watched very carefully because they're more likely to become dehydrated than older kids or teens.
- The goal in treating dehydration is to replace fluids in order to restore the levels of body fluids to normal. An older child who's mildly dehydrated due to overexertion will probably be thirsty and should be allowed to drink as much as he or she wants. Plain water is the best option for the first hour or two. After this, the child might need drinks containing sugar and electrolytes (salts) or regular food. Also, the child should rest in a cool, shaded environment until the lost fluid has been replaced.

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Most kids rack up a lot of their lifetime sun exposure before age 18, so it's important to teach children how to enjoy fun in the sun safely. With the right precautions, you can greatly reduce your child's chance of developing skin cancer.

- UV rays are strongest during summer. Extra protection is also required at high altitudes, where the air and cloud cover are thinner.
- Ensure kids wear skin protection **whenever** they are exposed to the sun, including hats, sunscreen, sunglasses, and cotton clothes.
- Sunscreen should be rated at least SPF 15 and be labeled "broad spectrum."
- Remember, *any* tanning or burning causes skin damage.

Sunburn

Sunburn can happen within 15 minutes of being in the sun, but the redness and discomfort may not be noticed for a few hours. Repeated sunburns can lead to skin cancer. Unprotected sun exposure is even more dangerous for kids who have many moles or freckles, very fair skin and hair, or a family history of skin cancer.



Think Prevention!

- Minimize kids' summer sun exposure between 10 AM and 5 PM.
- Have kids wear protective clothing, sunglasses, and a hat.
- Apply sunscreen that provides UVB and UVA protection with a sun protection factor (SPF) of at least 15.
- Apply sunscreen 15 to 30 minutes **before** sun exposure and 30 minutes after exposure begins, then reapply after kids have been swimming or sweating.



Signs and Symptoms

Mild

- skin redness and warmth
- pain
- itchiness

Severe:

- skin redness and blistering
- pain and tingling
- swelling
- headache
- nausea
- fever and chills
- dizziness



What to Do:

- Remove the child from the sun right away.
- Place the child in a cool (not cold) shower or bath – or apply cool compresses as often as needed.
- Give extra fluids for the next 2 to 3 days.
- Give the child ibuprofen or acetaminophen as directed, if needed, to relieve pain.
- Use moisturizing creams or aloe gel to provide comfort.
- When going outside, all sunburned areas should be fully covered to protect the child from the sun until healed.

Seek Emergency Medical Care if:

- a sunburn forms blisters or is extremely painful
- a child has facial swelling from a sunburn
- a sunburn covers a large area
- a child has fever or chills after getting sunburned
- a child has headache, confusion, or a feeling of faintness
- you see signs of dehydration (increased thirst or dry eyes and mouth)



Excessive heat can be a problem for young children, whose sweat glands are not fully developed until adolescence.



Think Prevention!

- Teach kids to always drink plenty of fluids before and during any activity in hot, sunny weather – even if they aren't thirsty.
- Make sure kids wear light-colored, loose clothing.
- Do not have your child participate in heavy activity outdoors during the hottest hours of the day.
- Teach kids to come indoors immediately whenever they feel overheated.

- ▶ **Never** leave a child unattended in a vehicle.
- ▶ Do not let your children play in an unattended vehicle. Teach them that a vehicle is not a play area.
- ▶ Make a habit of looking in the vehicle - front and back - before locking the door and walking away.
- ▶ If you are dropping your child off at childcare, and normally it's your spouse or partner who drops them off, have your spouse or partner call you to make sure the drop went according to plan.



Signs and Symptoms

Of heat exhaustion:

- increased thirst
- weakness
- fainting
- muscle cramps
- nausea and vomiting
- irritability
- headache
- increased sweating
- cool, clammy skin
- elevation of body temperature to less than 105° F (40.5° C)

Of heatstroke:

- severe headache
- weakness, dizziness
- confusion
- rapid breathing and heartbeat
- loss of consciousness leading to coma
- seizures
- may not be sweating
- flushed, hot, dry skin
- elevation of body temperature to 105° F (40.5° C) or higher



What to Do:

For a child with symptoms of heatstroke, **seek emergency medical care immediately**. In cases of heat exhaustion or while awaiting help for a child with possible heatstroke:

- Bring the child indoors or into the shade immediately.
- Undress the child.
- Have the child lie down; elevate feet slightly.
- If the child is alert, place in cool bath water. If outside, spray the child with mist from a garden hose.
- If the child is alert and coherent, give frequent sips of cool, clear fluids.
- If the child is vomiting, turn onto his or her side to prevent choking.



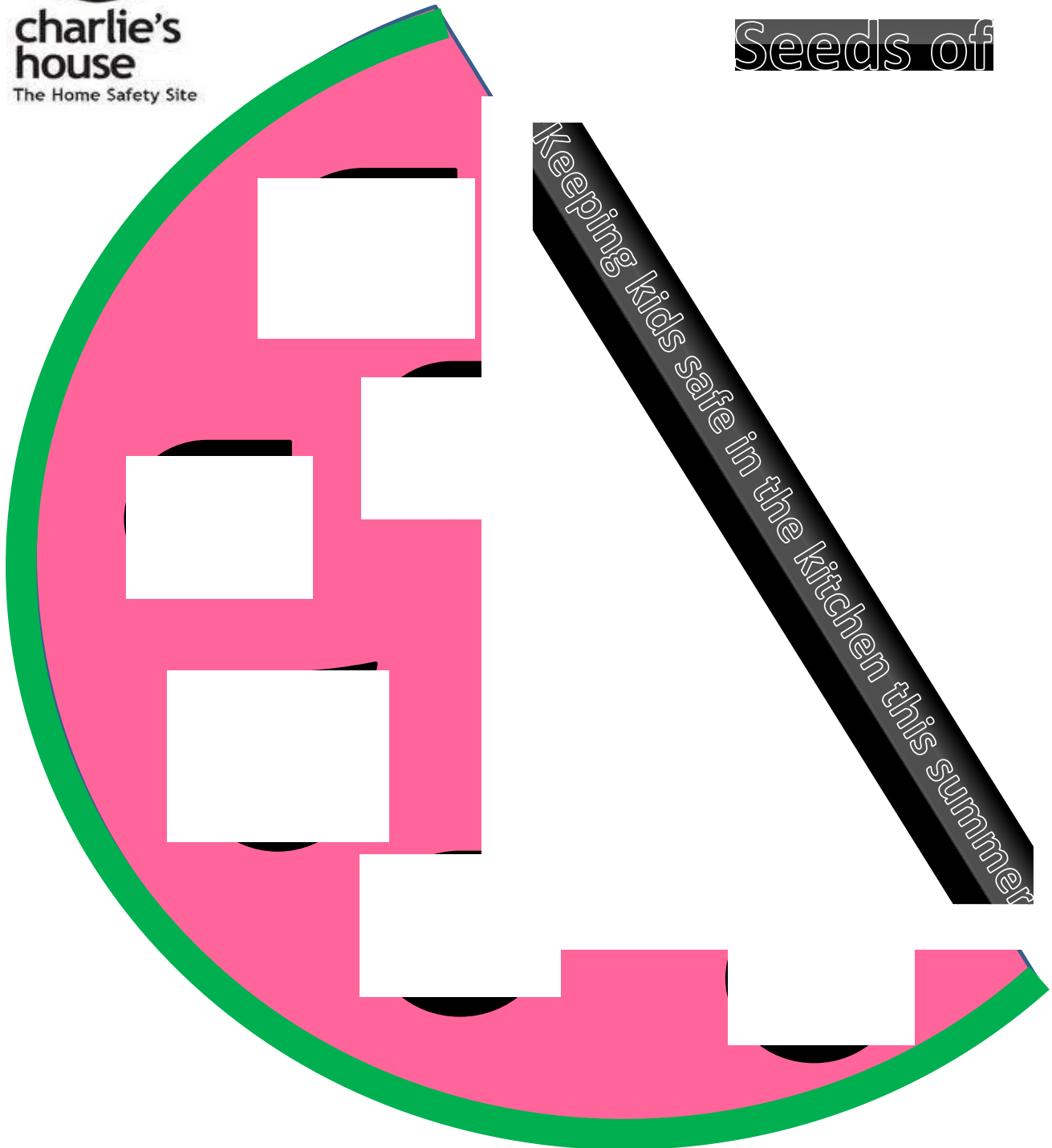


Look Forward to a Safe Summer!

Driveway Safety and Preventing Backovers



Seeds of





Steps to Summer Safety

Pedestrian Safety for Your Child





Steps to Summer Safety

Pedestrian Safety for Your Child

