

PREVENTION OF UNINTENTIONAL INJURIES IN CHILDREN IN TEXAS

Where We Are and Where We Can Go

By Erin McManus
May 2014



Children's Hospital Association of Texas

An Association for the Advancement of Children's Healthcare in Texas

823 Congress Avenue, Suite 1500, Austin, Texas 78701 • 512-320-0910
www.childhealthtx.org

Foreword

The Children’s Hospital Association of Texas (CHAT) commissions occasional public policy research reports on issues related to the health and well-being of children in Texas. This report was written by Erin McManus, a masters level student in the LBJ School of Public Affairs at the University of Texas at Austin. CHAT thanks David C. Warner, Professor of Public Affairs and Wilbur J. Cohen Professor in Health and Social Policy at the LBJ School of Public Affairs, for his assistance in the development of this report.

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Executive Summary

Each year, an estimated 875,000 children worldwide are killed from unintentional injuries, and an additional 10 to 30 million children suffer non-fatal unintentional injuries.¹ Within the United States, unintentional and intentional injuries are the leading cause of death for people under age 44.² In 2008 alone, one child died every hour in the United States from preventable injuries.³ It is no exaggeration to state that injuries in children are an epidemic.

Among all states, Texas ranks 25th in the number of fatal unintentional injuries suffered by children of all ages. For children ages 1 to 19, Texas has higher rates of fatal unintentional injuries than national averages. Texas also has higher rates of deaths of children from motor vehicle occupant injuries, drowning, poisoning, and pedestrian injuries than national averages.⁴

Fortunately, unintentional injuries, such as those sustained in motor vehicle accidents or while riding a bicycle, can be prevented by adopting safe behaviors or by utilizing safety equipment. Texas state agencies, hospitals, and injury prevention coalitions seek to reduce the incidence of unintentional injuries in children through educational programs, publication of safety guides, safety equipment distribution programs, research into the causes, prevalence, and prevention of injuries, and advocacy to modify or enact new laws to promote child safety. These organizations invest millions of dollars and considerable time into reducing child unintentional and intentional injuries in Texas.

However, despite current efforts, public health campaigns to reduce injuries in children can be improved. This report surveys child injury prevention activities in the state and provides recommendations to improve the state response to child injuries. Sections 1 to 6 of the report present discussion of specific injury prevention programs, funding, and research initiatives. Because this report addresses the management of the state's injury prevention response and allocation of injury prevention resources, the recommendations presented in Section 7 provide suggestions to improve the

¹ Margie Peden et al., *World Report on Child Injury Prevention* (World Health Organization, 2008), http://whqlibdoc.who.int/publications/2008/9789241563574_eng.pdf?ua=1.

² *State of the States: 2011 Report* (Safe States), accessed February 28, 2014, <http://www.safestates.org/?235>.

³ Stacy Biddinger et al., *Children's Hospitals Combat #1 Killer of Kids* (Children's Hospital Association, 2011), http://www.childrenshospitals.net/AM/Template.cfm?Section=Injury_Prevention1&Template=/CM/ContentDisplay.cfm&ContentID=61891.

⁴ Nagesh Borse et al., *CDC Childhood Injury Report: Patterns of Unintentional Injuries among 0-19 Year Olds in the United States, 2000-2006* (Centers for Disease Control and Prevention, December 2008), http://www.cdc.gov/safekid/child_injury_data.html.

administration, development, and implementation of injury prevention programming in Texas.

Research conducted for this report reveals several distinct trends in the management and delivery of child injury prevention initiatives in Texas.

- Texas lacks a broad mandate for injury and violence prevention programming.
- State government sponsored injury prevention programs and data collection mechanisms are heavily dependent upon federal funding sources.
- Local responses to different types of injuries are robust, with injury prevention coalitions active in many areas of the state.
- The content, method of delivery, and geographic spread of injury prevention programs varies considerably throughout the state, complicating efforts to ensure the same quality of programming in different regions of Texas.

These trends have created an environment that has fostered strong local support of injury prevention activities, but weak cohesion among injury prevention groups and public health officials across the state. Texas lacks a coordinating agency or group for statewide injury prevention programs, which hinders the ability to collect data on injuries, plan and develop injury prevention initiatives, or evaluate the effectiveness of programs in actually preventing injuries in children. State-sponsored child injury monitoring and prevention programs are spread throughout many state agencies, further inhibiting coordination of activities. As a result of the lack of cohesion in injury prevention programming, the state lacks comprehensive resources for policymakers interested in becoming involved in child injury prevention activities.

To address these deficiencies, recommendations in the report include:

- Reestablishing a state child injury surveillance and prevention office at the Department of State Health Services (DSHS).
- Establishing a state-level coalition of hospitals and other injury prevention organizations to help encourage collaboration on statewide injury prevention initiatives, advocacy at the local and state level, and research addressing the mechanisms and prevention of injuries in children.
- Collaboratively developing injury prevention program evaluation best practices by hospitals and state health officials engaged in injury prevention so funding and staff resources can be allocated towards programs that are proven to reduce the incidence of injuries.

- Establishing stronger working relationships with medical professional organizations, industry groups, universities, and insurance companies to help spread injury prevention programs and raise awareness of the high numbers of preventable injuries in children.
- Developing educational materials for policymakers to help raise awareness of the prevalence of preventable injuries sustained by children and to help facilitate future advocacy for state and local changes to law.

Each of these recommendations is designed to help develop the infrastructure, collaborative channels, and assessment mechanisms to help better develop and spread effective injury prevention programs and initiatives throughout the state.

Section 1: Child Injuries in Texas: Causes, Mortality, and Data Collection Efforts

In Brief

- Each year, approximately 12,000 children in the United States die from unintentional injuries.
- Unintentional injuries in children create an estimated \$17 billion annually in medical costs.
- Nationally, motor vehicle incidents cause the greatest number of unintentional injury deaths in infants and children less than 19 years of age.
- Within Texas, children under the age of one and between the ages of 15 to 19 have the highest death rates from unintentional injuries.
- Texas is above national averages for deaths in children under 19 years of age from drowning, poisoning, motor vehicle occupant injuries, and pedestrian injuries.

DEFINING INJURIES AND CHILDREN

The World Health Organization (WHO) defines injuries as “the physical damage that results when a human body is suddenly subjected to energy in amounts that exceed the threshold of physiological tolerance – or else the result of a lack of one or more vital elements, such as oxygen.”⁵ Injuries can be unintentionally caused, resulting from an error or mistake made by another person or from forces outside of the control of the victim, or intentionally caused, resulting from neglect or abuse by another person. Although both unintentional and intentional injuries constitute threats to the health and wellbeing of children, this report will focus upon prevention efforts for unintentional injuries.

Most scholarship addressing child injuries define children as individuals aged zero to 18 or 19. In Article One of the Convention on the Rights of the Child, the United Nations defines a child as an individual less than 18 years of age.⁶ Analyses of child injuries, including those conducted by the Centers for Disease Control and Prevention (CDC) and DSHS, define children as individuals less than 19 years of age.^{7,8}

UNINTENTIONAL INJURIES

Globally, the WHO estimates that 875,000 children are killed from unintentional injuries, and an additional 10 to 30 million children sustain non-fatal unintentional injuries each year. For children aged 10 to 19, unintentional injuries are the leading cause of death worldwide.⁹ In the United States, unintentional injuries kill approximately 12,000 children each year, more than the number of children killed by all diseases combined, and create an estimated \$17 billion annually in medical treatment costs.¹⁰

Unintentional injuries have many causes, including motor vehicle, bicycle, and pedestrian accidents, being hit by or colliding with an object, falls, drowning, poisoning, burns, and suffocation. Children who sustain unintentional injuries may suffer only mild wounds, or they may be permanently disabled or even killed. Unintentional injuries can also cause long-term complications for children as they age, such as decreased or lost

⁵ Peden et al., *World Report on Child Injury Prevention*.

⁶ “Fact Sheet: A Summary of the Rights under the Convention on the Rights of the Child” (United Nations Children’s Fund, February 26, 2014), http://www.unicef.org/crc/files/Rights_overview.pdf.

⁷ Borse et al., *CDC Childhood Injury Report: Patterns of Unintentional Injuries among 0-19 Year Olds in the United States, 2000-2006*.

⁸ Susan Rodriguez, Dorothy Mandell, and Clint Moehlman, *Texas Child Fatality Review Team Annual Report 2012* (Texas Department of State Health Services, 2012), http://www.dshs.state.tx.us/mch/child_fatality_review.shtm.

⁹ Peden et al., *World Report on Child Injury Prevention*.

¹⁰ Borse et al., *CDC Childhood Injury Report: Patterns of Unintentional Injuries among 0-19 Year Olds in the United States, 2000-2006*.

work earnings. Productivity loss estimates for children aged zero to 14 who sustain both unintentional and intentional fatal and non-fatal injuries total \$38.7 billion.¹¹

The CDC monitors and reports on the number of fatal and non-fatal unintentional injuries suffered by children in the United States. The reports produced by the CDC detail the frequency of unintentional injuries sustained by children by age, sex, injury type, and geographic area. Data for unintentional injury deaths suffered by children are available from the CDC National Vital Statistics System, a data portal through which state health departments report births, deaths, marriages, divorces, and fetal deaths.¹² The U.S. Consumer Product Safety Commission maintains information about the occurrence of non-fatal injuries in its National Electronic Injury Surveillance System (NEISS).¹³ The CDC uses injury data from the NEISS database to monitor non-fatal injuries nationally.

In 2008, the CDC produced a comprehensive report detailing the incidence of both fatal and non-fatal injuries in every state. Among children of all age cohorts surveyed, the most common cause of unintentional injury deaths was motor vehicle accidents. Nationally, motor vehicle injuries accounted for 8% of unintentional injury deaths among children under the age of one, 10% among children between one and four years of age, 19% among children between five and nine years of age, 22% among children between 10 and 14 years of age, and 38% between 15 and 19 years of age.¹⁴

The common causes of unintentional injury deaths throughout all states differed by age cohort. Suffocation was the leading cause of unintentional injury death for children age one or younger, and accounted for 67% of all unintentional injury deaths for this group. For children between one and four years of age, drowning accounted for 29% of all unintentional injury deaths. Motor vehicle accidents were the most common cause of unintentional deaths for children ages five to 19. Other common causes of unintentional injury deaths for children of all ages included falls, poisoning, and injury from fires or burns.¹⁵

National unintentional injury death rates vary widely among different racial categories, and between girls and boys. Among all races surveyed, boys were more likely to die from unintentional injuries than girls. American Indian and Alaska Native boys suffered the greatest number of unintentional injury deaths, at 29.8 deaths per 100,000

¹¹ P Corso et al., "Incidence and Lifetime Costs of Injuries in the United States," *Injury Prevention* 12, no. 4 (August 2006): 212–18, doi:10.1136/ip.2005.010983.

¹² "NVSS - National Vital Statistics System Homepage," accessed February 18, 2014, <http://www.cdc.gov/nchs/nvss.htm>.

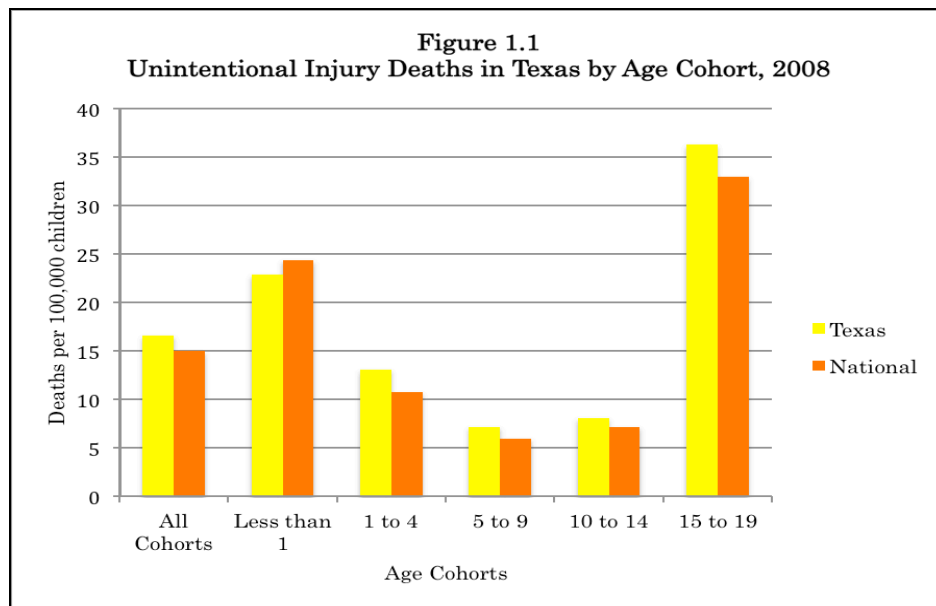
¹³ "National Electronic Injury Surveillance System (NEISS)," *U.S. Consumer Product Safety Commission*, accessed February 18, 2014, <http://www.cpsc.gov/en/Research--Statistics/NEISS-Injury-Data/>.

¹⁴ Borse et al., *CDC Childhood Injury Report: Patterns of Unintentional Injuries among 0-19 Year Olds in the United States, 2000-2006*.

¹⁵ *Ibid.*

individuals. Asian or Pacific Islander girls were the least likely to die from unintentional injuries, at 5.4 deaths per 100,000 individuals.¹⁶

Among all 50 states and the District of Columbia, Texas ranked 25th in the number of unintentional injury deaths suffered by children of all ages. As shown in Figure 1.1, the number of unintentional injury deaths in Texas among all age cohorts is 16.6 deaths per 100,000 individuals, only slightly higher than the national average of 15 deaths per 100,000 individuals. Across all age cohorts, Texas is above the national average in unintentional injury deaths, with the exception of children under one year of age.¹⁷



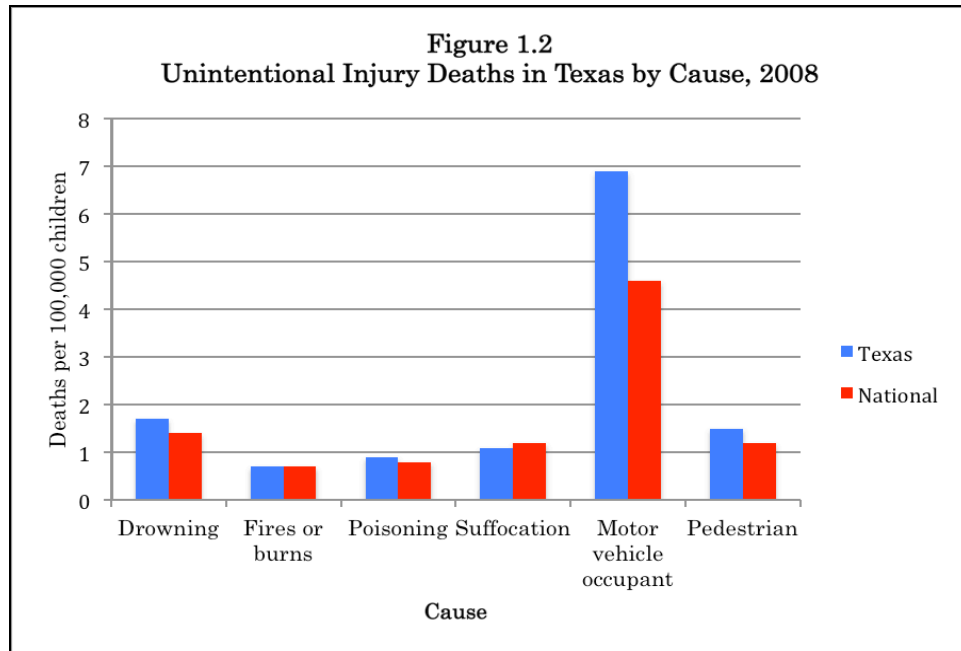
Data source: CDC, 2008

The CDC report provides death rates per state for certain types of unintentional injuries. As with unintentional injury deaths by age cohort, Texas' rates of unintentional injury deaths by cause are generally close to national averages. As shown in Figure 1.2, Texas has similar rates of occurrence to national occurrence rates for deaths caused by drowning, fires or burns, poisoning, suffocation, and pedestrian injuries. However, Texas does have a higher rate of occurrence for motor vehicle occupant fatalities than the national average, ranking 32nd among all 50 states and the District of Columbia.¹⁸

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.



Data source: CDC, 2008

Because of how NEISS data is aggregated, no Texas-specific estimates are available through the CDC for the incidence of non-fatal unintentional injuries. For non-fatal unintentional injuries, the CDC found nationally that among children of all ages, the most common cause of injury was from falling, with a rate of 3,420 injured per 100,000 children. The second most common cause of injury was from being hit by an object or colliding with an object, with a rate of 2,463 injured per 100,000 children. Among all age cohorts, falling and being hit by an object or colliding with an object were the two most common causes of non-fatal unintentional injuries. Other causes of non-fatal injuries that had high rates of occurrence were bites or stings, being cut or pierced, motor vehicle occupant injuries, overexertion, and bicycle injuries.¹⁹

Similar to the rates for fatal unintentional injuries, boys suffered higher rates of unintentional injuries than girls across all age cohorts, except for children under the age of one, where non-fatal unintentional injury rates were almost equal for boys and girls. Among all non-fatal unintentional injury causes, boys suffered higher rates of injuries than girls, with the exception of motor vehicle occupant injuries.²⁰

Within Texas, the State Child Fatality Review Team Committee (SCFRT) produces annual reports detailing the frequency and causes of child fatalities in Texas. The Texas Department of State Health Services coordinates child fatality review activities.²¹

¹⁹ Ibid.

²⁰ Ibid.

²¹ "Maternal & Child Health (MCH) - Texas Child Fatality Review," *Texas Department of Health and Human Services*, January 27, 2014, <http://www.dshs.state.tx.us/mch/>

Committee members have a diversity of professional backgrounds, and the Committee includes doctors, nurses, law enforcement officers, educators, public health officials, and child and family advocates.²² Local review teams throughout the state conduct investigations of child deaths and provide SCFRT members with comprehensive reports of their findings.²³ Participation in local review teams is voluntary, and not all counties in Texas possess a review team.²⁴ SCFRT members use data collected on child fatalities to make safety and public health recommendations to the Legislature and the Governor's Office in an effort to reduce the number of preventable child deaths.²⁵

In its 2012 report, the SCFRT noted that death rates for accidental deaths decreased each year from 2006 to 2010, dropping from 11.8 deaths per 100,000 children to 8.7 deaths per 100,000 children. The overall decline in accidental deaths was attributed to decreases in the death rates of children aged one to four and aged 15 to 17, the two age cohorts that have traditionally had the highest rates of death in Texas. For children one to four years of age, drowning rates decreased markedly from 2009 to 2010, from 4.6 deaths per 100,000 children to 2.9 deaths per 100,000 children, accounting for the primary drop in accidental deaths in children aged one to four. For children 15 to 17 years of age, motor vehicle deaths have steadily decreased from 2005 to 2010, from 17.6 deaths per 100,000 children to 11.8 deaths per 100,000, accounting for the primary drop in accidental deaths in children aged 15 to 17.

The SCFRT report provided breakout analysis for motor vehicle fatalities, drowning deaths, and sleep-related deaths. In examining motor vehicle fatalities, local review teams found that 51% of children killed were backseat passengers, and of those children killed, 33% were not wearing seatbelts. For children killed while driving, 34% were not wearing a seatbelt. Speed and reckless driving were determined to be the two most prevalent factors contributing to the motor vehicle accidents reviewed, and were especially common factors when a child was the driver.

For drowning deaths, local review teams discovered that 47% of children who drowned did so in a private pool. Of those children, 74% were one to four years of age. In 19% of the drowning deaths in private pools, the pool did not have a fence or gate to limit access to the water. The local teams also found evidence of little to no adult supervision in 53% of drowning deaths in children less than five years of age.

Finally, for sleep-related deaths, local review teams found that 95% of sleep related deaths occurred to children less than one year of age. Of all sleep related deaths, 50% occurred while the child is sleeping in an adult bed, and 28% occurred while the child is

child_fatality_review.shtm.

²² "Texas State Child Fatality Review Team Committee Membership," 2014, http://www.dshs.state.tx.us/mch/child_fatality_review.shtm.

²³ "Maternal & Child Health (MCH) - Texas Child Fatality Review."

²⁴ Susan Rodriguez, interview by Erin McManus, Telephone, March 28, 2014.

²⁵ Rodriguez, Mandell, and Moehlman, *Texas Child Fatality Review Team Annual Report 2012*.

sleeping in a crib or bassinette. In 71% of sleep related deaths, death certificates listed the cause of death as Sudden Infant Death Syndrome (SIDS), a diagnosis made when no other cause of death can be determined for a child less than one year of age.²⁶ The local review teams disagreed with the cause of death in 56% of SIDS-listed deaths.²⁷

Overall, comprehensive data about the prevalence and geographic spread of child injuries does not exist in Texas. Information about child fatalities is limited to areas of the state where local fatality review teams are currently operating. Data for non-fatal child injuries is not gathered by the state, and the lowest level that federal NEISS data is aggregated is at the state level.

INTENTIONAL INJURIES

Although unintentional injuries are the focus of this report, intentional injuries caused through abuse and neglect affect thousands of children nationally and in Texas each year. At the federal level, the Administration on Children and Families (ACF) serves as the analogue to the CDC, monitoring and reporting upon the occurrence of abuse and neglect cases, referred to in aggregate as maltreatment, throughout the United States. For the past 26 years, the ACF has published an annual report addressing child maltreatment. Data on state-level child abuse and neglect is collected through the National Child Abuse and Neglect Data System (NCANDS), a portal administered by ACF through which states report child and protective service data.²⁸

At the state level, the Texas Statewide Blue Ribbon Task Force (SBRTF), a group comprised of state experts on child abuse, works to develop priorities and strategies to help reduce the incidence of child abuse. The Texas Legislature originally formed the SBRTF in 2009. In 2012, SBRTF produced a report that detailed current efforts to combat child abuse and provided recommendations for improving the state response to child abuse.²⁹

In 2013, the Texas Legislature passed SB 66 to create the Protect Our Kids Commission, The Commission is charged with developing recommendations and identifying resources necessary to reduce fatalities from child abuse and neglect for implementation by state and local agencies and private sector and nonprofit organizations, including recommendations to implement a comprehensive statewide strategy for reducing those fatalities. The Commission's report is due December 15, 2015.

²⁶ "CDC - Sudden Infant Death Syndrome (SIDS) and Sudden, Unexpected Infant Death (SUID) - Reproductive Health," accessed February 26, 2014, <http://www.cdc.gov/sids/>.

²⁷ Rodriguez, Mandell, and Moehlman, *Texas Child Fatality Review Team Annual Report 2012*.

²⁸ "NCANDS," *Administration for Children and Families Children's Bureau*, accessed February 26, 2014, <http://www.acf.hhs.gov/programs/cb/research-data-technology/reporting-systems/ncands>.

²⁹ Christopher Greeley et al., *The Texas Statewide Blue Ribbon Task Force Final Report* (Texas Statewide Blue Ribbon Task Force, December 1, 2012), http://www.childhealthtx.org/pdfs/SBRTF_Report2012%20final.pdf.

Section 2: Texas Laws that Address Child Injury Prevention

In Brief

- Over the years, the Texas Legislature has passed bills that help to prevent injuries in children.
- Texas currently has laws in place to require booster seat use for young children, to establish booster seat and bicycle helmet distribution programs, to develop bicycle safety educational materials, to require fencing around neighborhood and apartment pools, to establish poison control centers at hospitals, to create a model program to help prevent Sudden Infant Death Syndrome (SIDS), to monitor the incidence of traumatic brain and spinal cord injuries, to monitor the incidence of developmental disabilities in children, and to investigate child fatalities within the state.

INTRODUCTION

In 2011, the Safe States Alliance, a national coalition of public health professionals working in injury prevention, administered its fourth Safe States Alliance State of the States Survey. The survey gathered information about the scope and funding of injury prevention programs within each state. Survey results showed that only nine states, or 17% of the total states surveyed, had a state mandate for a comprehensive injury and violence prevention program. Of states with some injury and violence prevention programming, prevention programs were overwhelmingly housed within state health departments.³⁰

Texas currently does not possess a broad mandate for injury and violence prevention programming, and state monitoring and prevention activities are housed in many different state agencies. However, the state does have statutory provisions to help prevent or mitigate specific mechanisms of unintentional and intentional injuries. Statutes addressing injury and violence prevention are scattered throughout the state codes, and are administered by several state agencies.

MOTOR VEHICLE SAFETY

The Texas Transportation Code establishes a fine for parents or guardians who do not use a child safety seat for young children. The fine may be dismissed if the parent or guardian presents evidence in court of owning a car seat.³¹ Complementing these provisions in Texas Transportation Code, the Texas Health & Safety Code authorizes the Health and Human Services Commission (HHSC), formerly the Texas Department of Health, to establish a booster seat distribution program to provide seats to families that otherwise could not afford to purchase a seat.³²

The Texas Penal Code provides specific penalties for people who drive while intoxicated with a child passenger, defined as a child less than 15 years of age. Under the Texas Penal Code, this offense is punishable as a state jail felony, and carries a sentencing range of 180 days to two years in a state jail.³³

³⁰ *State of the States: 2011 Report.*

³¹ *Tex. Transp. Code §§545.412-545.4121*, accessed February 28, 2014, <http://www.statutes.legis.state.tx.us/Docs/TN/htm/TN.545.htm>.

³² *Tex. Health & Safety Code §§45.001-45.003*, accessed February 28, 2014, <http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.45.htm>.

³³ *Tex. Penal Code §§49.02-49.045*, accessed February 28, 2014, <http://www.statutes.legis.state.tx.us/Docs/PE/htm/PE.49.htm>.

BICYCLE SAFETY

The Texas Health & Human Safety Code authorizes the Department of Public Safety (DPS) to establish a bicycle safety education program. The program is required to include instruction on the safe handling and use of bicycles, high risk traffic situations, bicycle and traffic handling skills, on-bike training, correct use of bicycle helmets, and traffic laws and regulations. DPS is also authorized to collect a nominal fee from program participants to defray costs associated with administering the program, to provide free-of-charge bicycle safety courses to children under the age of 10 who come from low-income families, and to provide free-of-charge or low-cost bicycle helmets to low-income children.³⁴

WATER SAFETY

The Texas Health & Human Safety Code also includes provisions to prevent accidental drowning. The Texas Attorney General's Office, local health departments, municipalities, and counties are authorized to enforce requirements for adequate pool enclosures at apartment complex or neighborhood association swimming pools. Pools are required to have fences at least 48 inches in height, and to have a latch or lock on the gate.³⁵

POISON CONTROL

The Texas Health and Human Safety Code provides for the creation of regional poison control centers located at six teaching hospitals. Each poison control center operates a 24-hour hotline to provide referrals and information for poisoning victims. The poison control centers conduct community outreach to prevent poisonings, and also provide poisoning prevention guides to new parents.³⁶

The Texas Health and Human Safety Code also empowers DSHS to monitor incidents of lead poisoning in children under age 15. DSHS is granted the authority to implement procedures to reduce the number of child lead poisoning cases, and to improve public awareness of the danger of lead poisoning to children.³⁷

³⁴ *Tex. Health & Safety Code §§758.001-758.003*, accessed February 28, 2014, <http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.758.htm>.

³⁵ *Tex. Health & Safety Code §§757.001-757.017*, accessed February 14, 2014, <http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.757.htm>.

³⁶ *Tex. Health & Safety Code §§777.001-777.013*, accessed March 25, 2014, <http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.777.htm>.

³⁷ *Tex. Health & Safety Code §§88.001-88.009*, accessed March 25, 2014, <http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.88.htm>.

SLEEP SAFETY

Numerous studies have established a strong link between incidences of Sudden Infant Death Syndrome (SIDS) and infant sleep position and location. While sleep position does not account for all incidences of SIDS, many cases of SIDS occur while the infant is sleeping, and is classified by the American Academy of Pediatrics as a sleep-related cause of death.³⁸

The Texas Health & Human Safety Code includes provisions for the creation of a SIDS model program by the HHSC. The model program is required to provide information about SIDS and to provide resources for follow-up consultation for parents who have lost a child to SIDS.³⁹

BRAIN AND SPINAL CORD INJURIES

The Texas Health & Safety Code requires HHSC to report upon the incidence of spinal cord injuries, traumatic brain injuries, and submersion injuries that cause brain damage. To aid in data collection, the Texas Department of Insurance (TDI), the Rehabilitation Council of Texas, and the Texas Traumatic Brain Injury Advisory Council are directed to provide relevant data to HHSC. HHSC uses the injury reports to provide recommendations to minimize the occurrence of brain and nervous system injuries.

DEVELOPMENTAL DISABILITIES

The Human Resources Code includes provisions that address developmental disabilities, defined as a severe and chronic disability that is attributable to a mental or physical impairment, is manifested in a person before age 22, is anticipated to continue indefinitely, and results in substantial functional limitations. Through the Human Resources Code, the Texas Office of Developmental Disabilities (TOPDD) is charged with monitoring the prevalence of developmental disabilities in Texas and with developing policies and public education campaigns to reduce the incidence of developmental disabilities.⁴⁰

GENERAL INJURY PROVISIONS

Intentional injuries caused to children are punishable under the Texas Penal Code. If a person intentionally, knowingly, or recklessly causes bodily injury or serious mental

³⁸ *SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Sleeping Environment* (American Academy of Pediatrics Task Force on Sudden Infant Death Syndrome, October 17, 2011), pediatrics.aappublications.org/content/early/2011/10/12/peds.2011-2284.

³⁹ *Tex. Health & Safety Code §§673.001-673.004*, accessed February 28, 2014, <http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.673.htm>.

⁴⁰ *Tex. Hum. Res. Code §§ 112.001-112.051*, accessed March 21, 2014, <http://www.statutes.legis.state.tx.us/Docs/HR/htm/HR.112.htm>.

deficiency, impairment, or injury to a child, the offense is a felony violation. Abandonment or endangerment of a child is similarly punishable as a felony offense. Depending upon the severity of the crime, these felonies have a sentencing range of 180 days to 99 years in a state jail or prison.⁴¹

To reduce the number of child fatalities in the state each year, the Texas Family Code provides for the creation of the State Child Fatality Review Team (SCFRT). As noted in the Section 2, the SCFRT investigates child deaths and makes safety recommendations to the Legislature and the Governor's Office.⁴²

⁴¹ *Tex. Penal Code §§22.04-22.041*, accessed February 28, 2014, www.statutes.legis.state.tx.us/Docs/PE/htm/PE.22.htm.

⁴² *Tex. Fam. Code §§264.501-264.515*, accessed February 28, 2014, <http://www.statutes.legis.state.tx.us/Docs/FA/htm/FA.264.htm#00>.

Section 3: State-Led Injury Prevention Programs

In Brief

- State agencies sponsor programs to help promote motor vehicle occupant safety, bicycle and pedestrian safety, safe sleep in infants, and poisoning prevention.
- No single state agency is responsible for coordinating statewide child injury monitoring and prevention activities.
- The Texas Department of Transportation (TXDOT) and Department of State Health Services (DSHS) operate the Safe Riders program, which provides motor vehicle safety educational materials and booster seats to low-income families.
- The Texas Office for the Prevention of Developmental Disabilities (TOPDD) and Department of Public Safety both host bike rodeos with local partners throughout the state to promote bicycle safety and to give away free bicycle helmets.
- DSHS and the Department of Family and Protective Services (DFPS) jointly sponsor the Safe Sleep for Babies program, which provides training manuals for health educators on safe sleep for infants, safe sleep checklists for parents and caregivers, and short videos about safe sleeping habits for infants.
- The Commission on State Emergency Communications (CSEC) manages the state poison control network, which provides poison prevention educational materials and supports the six hospitals in Texas designated as poison control centers.

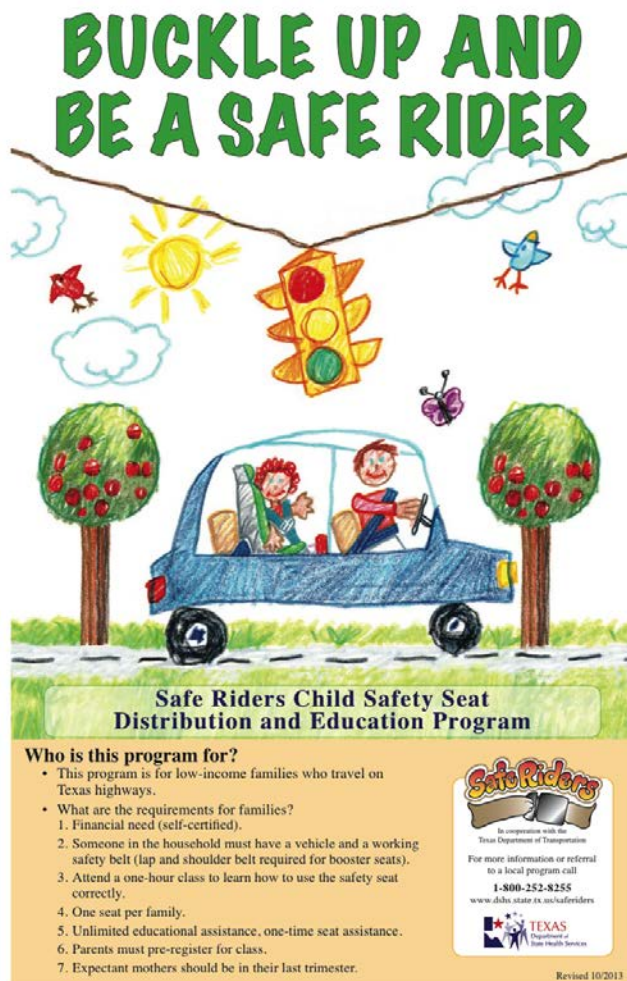
INTRODUCTION

State agencies in Texas operate a variety of injury prevention outreach programs to help promote motor vehicle, bicycle, and pedestrian safety, safe sleep for infants, and reduction of poisonings among children. Many of these programs have their basis in state law. Some state agencies also provide educational videos and online modules for handling injuries once they have already occurred. The summaries of state-run programs in this section will only highlight programs that specifically address injury prevention.

MOTOR VEHICLE

DSHS sponsors the Safe Riders program in conjunction with the TXDOT. Funding for the Safe Riders program is provided through grants from TXDOT.⁴³ The Safe Riders program focuses on promoting seat belt and booster seat use among children, and accomplishes these goals through media campaigns, targeted grant funding to local partners, and booster seat distribution events. DSHS produced a short video in English and in Spanish, titled "Securing Our Future," which encourages parents to use booster seats for young children and to buckle up any older children.⁴⁴ The Safe Riders program also partners with local organizations, such as hospitals, law enforcement, and non-profits, to distribute booster seats to low-income families who otherwise could not afford to purchase a seat. As a condition of

Figure 3.1



Source: Safe Riders, TXDOT

⁴³ *Texas Highway Safety Annual Report FY 2012* (Texas Department of Transportation Traffic Operations Division, January 22, 2013),

<https://www.txdot.gov/apps/egrants/eGrantsHelp/Reports/TexasTrafficSafetyAnnualReport-2012.pdf>.

⁴⁴ *Securing Our Future* (Department of State Health Services), accessed March 22, 2014, <http://www.dshs.state.tx.us/saferiders/default.shtm>.

receiving a booster seat, a parent or caregiver must attend a one-hour class about child passenger safety.⁴⁵ Safe Riders also provides promotional materials, as shown in Figure 3.1, to its local partners.⁴⁶

Although TXDOT does not have any formal injury prevention programs of its own, the agency does provide millions of dollars each year to third parties to support the

Figure 3.2



Source: Save Me with a Seat, TXDOT

prevention of motor vehicle injuries in children. For May 2012, TXDOT provided additional funding to support police departments across the state in a Click It Or Ticket mobilization that resulted in 2,853 child safety seat citations. In the same year, TXDOT also provided funding to develop and distribute educational lunch tray liners and car window shades, billboards, radio spots, online banners, and mall kiosk advertising (Figure 3.2) centered on child passenger safety as part of a statewide “Save Me with a Seat” campaign. TXDOT also partnered with Hillcrest Baptist Medical Center, Injury Prevention Center of Greater Dallas, Scott and White Memorial Hospital, Texas A&M AgriLife Extension Service, Texas Children’s Hospital, and University Medical Center of El Paso to train additional child passenger safety technicians and to offer booster seats to low-income families.⁴⁷

BICYCLE AND PEDESTRIAN SAFETY

TOPDD partners with local organizations to offer periodic bike rodeos to promote helmet use in children.⁴⁸ In April 2014, TOPDD will be co-hosting a bike rodeo in Dallas with the Rotary Club of Dallas and the Texas Scottish Rite Hospital for Children. Children who attend the bike rodeo will receive a free helmet and will have their bikes inspected by police from the Dallas Police Department.⁴⁹

⁴⁵ “Child Safety Seat Distribution and Education Program,” *Dshs.texas.gov*, accessed March 22, 2014, <http://www.dshs.state.tx.us/saferiders/distribution.shtm>.

⁴⁶ *Ibid.*

⁴⁷ *Texas Highway Safety Annual Report FY 2012.*

⁴⁸ “Texas Office for the Prevention of Developmental Disabilities,” *Topdd.state.tx.us*, 2014, <http://www.topdd.state.tx.us/events/>.

⁴⁹ “Bike Rodeo,” *Dallasrotary.org*, accessed March 22, 2014, <http://www.dallasrotary.org/bike-rodeo>.

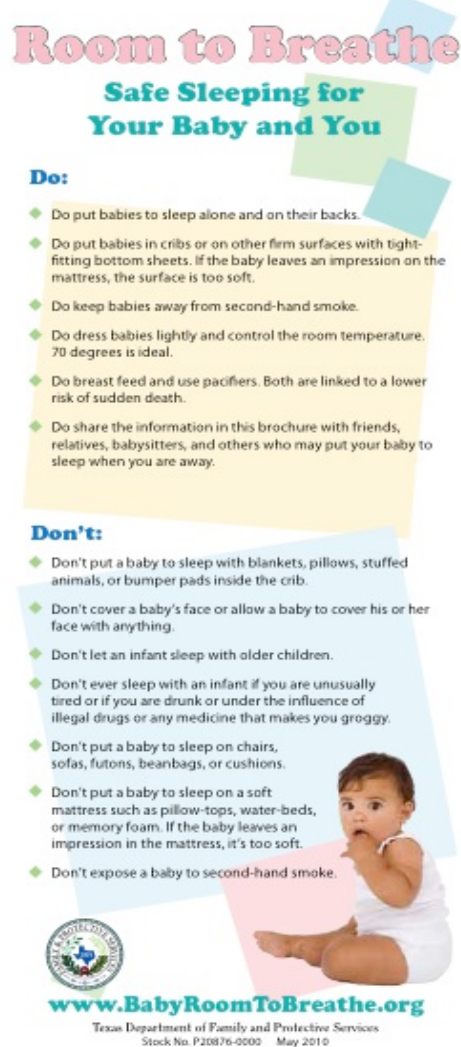
As with motor vehicle safety programs, TXDOT does not operate formal bicycle safety programs, but rather provides funding to local partners to help improve their safety programs. In 2012, TXDOT provided funding to the Cities of Lubbock and Abilene to educate 10,100 elementary age students about bicycle and pedestrian safety.⁵⁰

Similar to the periodic bike rodeos sponsored by TOPDD, DPS cosponsors bike “rodeos” to educate children about bicycle safety and to distribute free-of-charge helmets. Schools and civic groups are also encouraged to contact DPS to schedule presentations by state troopers on bicycle and pedestrian safety topics.⁵¹

SAFE SLEEP

DSHS and the Texas Department of Family and Protective Services (DFPS) jointly operate the Safe Sleep for Babies program to reduce the incidence of suffocation and Sudden Infant Death Syndrome (SIDS). The program offers a training manual for public health educators on safe sleep for infants, a safe sleep checklist for parents and caregivers, and a brochure detailing safe sleep procedures.⁵² DFPS also provides additional resources through its “Room to Breathe” website. The website offers parents and caregivers fact sheets on safe sleep, such as the brochure in Figure 3.3, links to national safe sleep resources, and short videos highlighting the risks of suffocation and SIDS.⁵³ The safe sleep resources provided by DSHS and DFPS are all web-based, and do not involve any community outreach.

Figure 3.3



Source: Room to Breathe, DSHS

⁵⁰ *Texas Highway Safety Annual Report FY 2012.*

⁵¹ “TxDPS - THP Education and Awareness,” *Txdps.state.tx.us*, accessed March 22, 2014, <http://www.txdps.state.tx.us/tle/awareness.htm>.

⁵² Maria Pena et al., “Safe Sleep for Babies: A Community Training” (Department of Family and Protective Services), accessed March 22, 2014, http://www.dfps.state.tx.us/Room_to_Breathe/Safe_Sleep_Training-English.pdf.

⁵³ “Room to Breathe: Risk Factors for Sudden, Unexplained Infant Deaths,” *Dfps.state.tx.us*, accessed March 22, 2014, https://www.dfps.state.tx.us/Room_to_Breathe/default.asp.

POISONING

The Commission on State Emergency Communications (CSEC) operates the state poison control network. The network has six hospitals that act as regional poison control centers. As part of its mission to reduce the number of poisonings in Texas each year, CSEC has produced a number of poisoning prevention pamphlets. Some of the poisoning prevention pamphlets are designed for parents or caregivers who have young children. As with the safe sleep materials provided by DSHS and DFPS, the poisoning prevention materials are web-based, and no community outreach is done by CSEC.⁵⁴

DSHS hosts the Texas Childhood Lead Poisoning Prevention Program. The program monitors the incidence of lead poisoning in children under age 15, and also provides brochures and fact sheets for parents and caregivers addressing what items may contain lead and the effects of lead poisoning on child development. The brochures and fact sheets are available online, and no prevention outreach is conducted.⁵⁵

GENERAL INJURY PREVENTION

Several state agencies operate general injury prevention programs. HHSC maintains “Healthy Child Care Texas,” a program that promotes child safety and welfare in out-of-home child care programs. “Healthy Child Care Texas” provides training and additional resources on safe child care to child care health consultants and providers. The training portion of “Healthy Child Care Texas” has been discontinued, but the resources are web-based and still available for viewing.⁵⁶

DSHS is home to the SCFRT Committee and the Governor’s EMS and Trauma Advisory Council Injury Prevention Committee (GETAC). As referenced in previous sections, the local review teams composed of law enforcement, emergency services, and medical personnel investigate and report on the incidence of child fatalities throughout the state. The SCFRT Committee uses data gathered from investigations to offer recommendations to the Legislature, healthcare providers, and parents and caregivers on how to prevent unintentional injuries causing death. To date, the SCFRT Committee has produced recommendations for the prevention of abuse and neglect, substance abuse dependence, burns, suicides, drowning, motor vehicle incidents, and sleep-related fatalities.⁵⁷ Local review teams are also involved in many varied injury prevention activities. The Harris County and Bexar County CFRTs sponsor an April Pools Day media campaign in early April to raise awareness of water safety. The

⁵⁴ “Commission on State Emergency Communications - Poison Control Pamphlets,” *Csec.texas.gov*, 2013, <http://www.csec.texas.gov/educational-resources/poison-control-education/poison-control-pamphlets>.

⁵⁵ “Texas Childhood Lead Poisoning Prevention Program,” *Dshs.texas.gov*, January 8, 2014, <http://www.dshs.state.tx.us/lead/parents.shtm>.

⁵⁶ “Healthy Child Care Texas,” *Healthychildcaretexas.org*, accessed March 23, 2014, <http://www.healthychildcaretexas.org/>.

⁵⁷ “Maternal & Child Health (MCH) - Texas Child Fatality Review.”

Colorado/Austin/Waller Counties CFRT has partnered with the Texas A&M AgriLife Extension Service to conduct child safety days in local elementary schools to address horse, gun, agricultural machinery, and all-terrain vehicle (ATV) safety. The Panhandle CFRT is currently working with local Catholic churches to help prevent child trafficking and furniture tip-over deaths in young children.⁵⁸

The GETAC provides the Governor's Office with recommendations for improving the delivery of emergency services in Texas. The governor appoints GETAC Council members for specified terms. The GETAC Council receives technical assistance from committees whose members have expertise in different aspects of emergency services and care. The Injury Prevention Committee produces periodic reports on the prevalence of different types of injuries in Texas, as well as practical recommendations to prevent these injuries from occurring. The Injury Prevention Committee has issued recommendations for the prevention of alcohol-related motor vehicle crashes, injuries to child motor vehicle passengers, child maltreatment, concussions, drowning, intimate partner violence, fire-related injuries, older adult falls, pedestrian injuries, and teen driving accidents.⁵⁹ These recommendations may be used as reference for the trauma, EMS and injury prevention communities.

While the state government operates a variety of injury prevention programs, and supports injury advisory councils, the programs and councils are housed at several state agencies. The lack of centralized coordination of child injury prevention activities has resulted in some duplication of program messages and outreach, as has occurred with motor vehicle injury prevention activities at DSHS, TXDOT, and DPS. With the exception of the Safe Riders and Safe Sleep for Babies programs, injury prevention programs are operated by a single state agency with little to no collaboration from other state agencies.

⁵⁸ Rodriguez, interview.

⁵⁹ "Injury Prevention Committee Member List & Resources - Texas Department of State Health Services, EMS and Trauma Systems," *Dshs.texas.gov*, March 5, 2014, <https://www.dshs.state.tx.us/emstraumasystems/injurypreventioncommittee.shtm>.

Section 4: Local Injury Prevention Activities

In Brief

- Although Texas does not have a state-level Safe Kids coalition, the state is home to nine local Safe Kids coalitions, all led by a hospital or medical center. Texas also has two Injury Free coalitions, located in Austin and San Antonio.
- Six hospitals in Texas receive substantial funding for injury prevention programs through the Kohl's Cares for Kids program, a fundraising initiative of the Kohl's department store company.
- Children's hospitals in Texas primarily focus their prevention efforts upon motor vehicle occupant injuries, pedestrian injuries, bicycle injuries, and water injuries.
- In addition to their work to reduce the occurrence of common injuries, children's hospitals also devote time and resources to helping to reduce injuries that are more regional in their distribution. For example, Cook Children's Medical Center in Fort Worth has recently treated an increased number of children who suffered stick injuries from used needles found in playgrounds. The hospital coordinated with the Fort Worth Fire and Police Departments to ensure that used needles found in playgrounds were gathered as evidence and then properly disposed.
- Many other injury prevention coalitions exist outside the hospital setting. These coalitions tend to be devoted to preventing a single injury type, and do maintain large networks of affiliate organizations.

INTRODUCTION

Throughout the state, healthcare providers and civic organizations have teamed up to establish regional injury prevention programs. Local injury prevention coalitions understand the unique health needs of their communities, and are able to provide parents and caregivers with the assistance and resources that they need. Every major injury prevention coalition in the state is affiliated with or is lead by a local hospital or medical group. This section will identify injury prevention coalitions and their areas of work, and will provide in-depth discussion of injury prevention activities at hospitals throughout the state. The information provided in this section is not comprehensive, and there are many other hospitals, local coalitions, and groups in Texas actively engaged in child injury prevention.

SAFE KIDS

Safe Kids Worldwide is an international unintentional injury prevention organization whose mission is to improve child safety and strengthen injury prevention laws. Safe Kids Worldwide is comprised of a network of local Safe Kids coalitions in 25 countries.⁶⁰ Although Texas does not have a state-level Safe Kids coalition, there are nine Safe Kids groups in the state, as summarized in Table 4.1. Each Safe Kids group in Texas is led by a hospital, and each group can set its injury prevention priorities.

The Safe Kids groups frequently partner with other local organizations to maximize their community outreach and education efforts. For example, in Del Rio, the Safe Kids Val Verde group works with the Texas A&M AgriLife Extension Service to provide small grants to families to reduce the cost of purchasing a booster seat and to offer booster seat installation checks.⁶¹

Table 4.1: Local Safe Kids Coalitions in Texas

Coalition	Lead organization
Safe Kids Austin	Dell Children’s Medical Center
Safe Kids Mid-Texas	McLane Children’s Hospital (Baylor Scott and White)
Safe Kids Greater Houston	Texas Children’s Hospital
Safe Kids San Antonio	University Health System
Safe Kids Tarrant County	Cook Children’s Medical Center
Safe Kids Coastal Bend	Driscoll Children’s Hospital
Safe Kids Val Verde	Val Verde Regional Medical Center
Safe Kids El Paso	University Medical Center of El Paso
Safe Kids San Angelo	San Angelo Community Medical Center

⁶⁰ “Around the World Safe Kids Worldwide,” *Safekids.org*, accessed March 25, 2014, <http://www.safekids.org/around-world>.

⁶¹ “Extension Education in Val Verde County” (Texas A&M AgriLife Extension, 2013), http://odfiles.tamu.edu/odfiles/CountyAnnualReports_2013/2013%20Val%20Verde%20County%20Report.pdf.

INJURY FREE COALITION FOR KIDS

The Injury Free Coalition for Kids is comprised of 42 participating hospitals throughout the United States. The national office, housed at the Columbia University Mailman School of Public Health, supports each participating hospital. Within Texas, the Dell Children's Medical Center of Central Texas and the University of Texas Health Science Center of San Antonio (UTHSCSA) both operate Injury Free sites.⁶²

Dell Children's Safe Baby University infant safety training is its signature program developed for the Injury Free Coalition for Kids of Austin. Safe Baby University is focused on prevention of common causes of infant injury death among teen-parent led families.

As part of its Injury Free Coalition for Kids of San Antonio, UTHSCSA operates the *A Su Salud* program. This program promotes awareness of and provides education about cervical cancer, colorectal cancer, and child injury prevention. The *A Su Salud* program produced segments each week on Univision to promote injury prevention strategies. The *A Su Salud* program also places advertisements with injury prevention tips in the San Antonio Express-News, La Prensa, and The Southside Reporter, and produces its own health and wellness newsletter to promote cancer screenings, vaccinations, and child injury prevention.⁶³ The Injury Free Coalition for Kids of San Antonio also sponsors a "How Do I Stay Safe?" calendar design contest for children ages four to 11, and a training program for community leaders to learn more about preventing intentional and unintentional injuries to children.⁶⁴

KOHL'S CARES FOR KIDS PROGRAM

The Kohl's department store group is a major financial partner for several Texas children's hospitals in their injury prevention initiatives. Nationally, Kohl's has partnered with 160 hospitals to help provide funding for health and injury prevention programs. When Kohl's expands its stores into a new market, the company attempts to establish a relationship with a children's hospital that participates in the Children's Hospital Association, formerly known as the National Association of Children's Hospitals and Related Institutions (NACHRI).⁶⁵

⁶² "About Injury Free," *Injuryfree.org*, 2014, www.injuryfree.org/about.cfm.

⁶³ "University Health System A Su Salud," *Asusaludsanantonio.com*, accessed April 5, 2014, <http://www.asusaludsanantonio.com/index.html>.

⁶⁴ "Injury Free Coalition for Kids of San Antonio," *Injuryfree.org*, 2014, http://www.injuryfree.org/site_display.cfm?PermanentId=156AB997-CB84-4D33-8DDF53C32F243761.

⁶⁵ "Kohl's Cares - Hospital Partnerships FAQs," *Kohlscorporation.com*, 2014, <http://www.kohlscorporation.com/communityrelations/Community03F.htm>.

In Texas, six hospitals receive funding through the Kohl's Cares for Kids program to specifically address injury prevention. Dell Children's Medical Center of Central Texas receives money through the Kohl's Cares for Kids program for use in purchasing and distributing booster seats to low-income families.⁶⁶ In 2012, Kohl's Cares provided Dell Children's with \$143,060 for use in its Booster Buddies booster seat distribution program.⁶⁷ McLane Children's Scott & White Hospital received a grant through the Kohl's Cares for Kids program for use in conducting outreach and education on safe sleep and shaken baby syndrome.⁶⁸ Texas Children's Hospital receives funding from the Kohl's Cares for Kids program to educate parents on safe sleep techniques for infants and on ways to childproof homes for children under six years of age.⁶⁹ Last year, Kohl's Cares for Kids provided Driscoll Children's Hospital with funding to purchase and distribute booster seats and bicycle helmets to children in the Corpus Christi area. To date, Kohl's Cares for Kids has provided Driscoll Children's with \$385,000 for its injury prevention programs.⁷⁰ Similarly, Kohl's Cares for Kids has provided the Children's Hospital at Northwest Texas Healthcare System with enough money to purchase and distribute 26,700 bicycle helmets to low-income children in the Amarillo area since 2006.⁷¹ Finally, Kohl's Cares for Kids partnered with the Texas Tech University Health Sciences Center at El Paso and El Colegio de Chihuahua to develop the Safe Child Initiative, an online interactive program for parents and children to learn about how to prevent injuries or unintentional deaths and to promote general child wellness. The website is available in English and Spanish, and combines games, fact sheets, and questionnaires to help educate parents and their children about child development and safety.⁷²

DELL CHILDREN'S MEDICAL CENTER OF CENTRAL TEXAS

Dell Children's is based in Austin and serves a 46-county region in Central Texas.⁷³ In addition to providing specialty medical treatment to children, Dell Children's also operates a wide array of injury prevention programs and research that evaluates injury

⁶⁶ Stewart Williams and Karla Lawson, interview by Erin McManus, February 27, 2014.

⁶⁷ "Kohl's Cares Program with Dell Children's to Provide Up To 1,500 Families Access to Free Booster Seats in 2012," *Dellchildrens.net*, April 10, 2012, https://www.dellchildrens.net/about_us/news/2012/04/10/kohls_cares_program_with_dell_childrens_to_provide_up_to_1500_families_access_to_free_booster_seats_in_2012.

⁶⁸ "Safe Babies - McLane Children's Scott & White," *Swchildrens.org*, 2013, <http://www.swchildrens.org/health-safety/safety-programs/safe-babies>.

⁶⁹ "Kohl's Safe at Home Program," *Texaschildrens.org*, 2014, <http://www.texaschildrens.org/Locate/In-the-Community/Injury-Prevention/Kohl-s-Safe-at-Home-Program/>.

⁷⁰ "Kohl's Department Stores Donates More than \$42,000 to Driscoll's Keep Your Kids Safe Program," *Driscollchildrens.org*, November 18, 2013, <http://www.driscollchildrens.org/news/?newsid=2325>.

⁷¹ "Kohl's Cares Helmet Safety Program Northwest Texas Healthcare," *Nwtexashealthcare.com*, 2014, <http://www.nwtexashealthcare.com/kohls-cares-helmet-safety-program>.

⁷² "Kohl's Safe Child Initiative," *Colech.edu.mx*, 2009, <http://sites.colech.edu.mx/kohls/English/Public/Default.aspx>.

⁷³ "About Dell Children's Medical Center of Central Texas," *Dellchildrens.net*, 2014, http://www.dellchildrens.net/about_us/.

prevention programs and treatment strategies. Much of Dell Children’s injury prevention work involves a combination of community outreach and advocacy.

At the hospital, Dell Children’s provides child safety resources to families. Families can purchase sleep sacks and booster seats from a station near the main entrance. These items are priced using a sliding fee schedule so that they are priced in accordance with what a family can reasonably pay. Trauma services staff meets with children who are admitted to the emergency room for injury treatment. The trauma services staff also meets with the child’s family to conduct safety screenings to help correct any unsafe behaviors.⁷⁴

Dell Children’s partners with the Austin, Manor, and Del Valle Independent School Districts to offer Safe Baby University, a program that teaches newly expectant teen parents about child safety. Each year, 50 to 100 students participate in Safe Baby University. The one-day program features four safety modules, including modules to address shaken baby syndrome and safe sleep, as well as hands-on activities. Students learn how to correctly install booster seats, and participate in a lunch panel with healthcare professionals to learn about what health issues they can expect with a young child. Staffers at Dell Children’s follow up with participants after Safe Baby University to ensure that booster seats are installed correctly, to conduct a safety resources need assessment, and to provide free-of-charge booster seats, outlet covers and stair gates.⁷⁵

Through its involvement as the lead organization for Safe Kids Austin, Dell Children’s works closely with the City of Austin to create safer bicycle and pedestrian routes for children to area schools. Recently, Dell Children’s was able to assist in lobbying the City of Austin to construct a pedestrian bridge and fill in missing sections of sidewalks to allow children to be able to safely walk to their elementary school.⁷⁶

COOK CHILDREN’S MEDICAL CENTER, FORT WORTH

Cook Children’s Medical Center is the lead organization for Safe Kids Tarrant County. Currently, Safe Kids Tarrant County is working to prevent injuries and deaths from water accidents, motor vehicle accidents, and poisoning incidents. In addition to leading Safe Kids Tarrant County, Cook Children’s also participates in the Fort Worth Safe Communities Coalition, an injury prevention group organized through the National Safety Council.⁷⁷ The Fort Worth Safe Communities Coalition works to address community safety needs as they occur, and is focusing on child passenger safety and needle sticks sustained in neighborhood parks. Cook Children’s is helping the Fort Worth

⁷⁴ Williams and Lawson, interview.

⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ “About Safe Communities America,” *Nsc.org*, 2014, http://www.nsc.org/safety_work/SafeCommunitiesAmerica/Pages/AboutUs.aspx.

Fire and Police Departments better respond to calls they receive about used needles in public places.⁷⁸

Cook Children's has forged an especially close relationship with the Fort Worth Fire Department, and receives considerable financial support from the Fire Department and the Fire Department Foundation for its injury prevention initiatives. The Fort Worth Fire Department provides funding to purchase car seats and helmets for low-income families. Cook Children's is working with the Fort Worth Fire Department to expand this program to include free-of-charge life vests to low-income families. About 30 volunteer firefighters also work with Cook Children's to provide helmets, booster seats, and educational programs to Fort Worth area families.⁷⁹

Cook Children's has also partnered with the City of Fort Worth on its Special Needs Assistance Program (SNAP). The SNAP program created a portal for people with age-related, physical, or mental health needs to register their name, address, and health condition, so that first responders can better assist them in the event of an emergency or local disaster. The SNAP registry was used during the ice storms in early 2014 to alert first responders of the need to deliver power generators to families with children with special health needs. Cook Children's hopes that the SNAP registry will help prevent injuries to children with special needs during emergencies or local disasters.⁸⁰

McLANE CHILDREN'S HOSPITAL AT BAYLOR SCOTT & WHITE, TEMPLE

About 6 years ago, the Scott & White Memorial Hospital, now Baylor Scott & White, concluded that injury prevention programs in the northern Central Texas area could be better developed through the formation of a local Safe Kids coalition. The hospital contacted the national Safe Kids office, and after negotiations, received permission to establish the Safe Kids Mid-Texas coalition. Safe Kids Mid-Texas currently serves 19 counties, from the north Austin area to the Waco area.⁸¹

In addition to its role as the lead organization for Safe Kids Mid-Texas, Baylor Scott & White operates its own grant-funded injury prevention programs for children and adults separate from those run through Safe Kids Mid-Texas. Baylor Scott & White is a recipient of a Kohl's Cares for Kids grant, which the hospital uses to provide outreach and community education on safe sleep and shaken baby syndrome. The hospital offers its education classes in classrooms and at health fairs.⁸²

Similar to Safe Baby University at Dell Children's, Baylor Scott & White works with school districts in the Temple-Killeen area to offer parenting prep classes to pregnant

⁷⁸ Sharon Evans, interview by Erin McManus, Telephone, March 28, 2014.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Susan Burchfield, interview by Erin McManus, Telephone, April 13, 2014.

⁸² Ibid.

teenagers. The classes are voluntary, and are mostly attended by expectant mothers. The curriculum includes a variety of half-day modules taught by health educators, and includes training for home safety, sleep safety, car seat installation, and family skills. Targeting the same age group, the hospital's Safe Sitters program provides children who baby sit with education about young child development and infection control, among other topics. Children who participate in Safe Sitters also receive introductions training for child choking and CPR.⁸³

TEXAS CHILDREN'S HOSPITAL, HOUSTON

Texas Children's Hospital boasts a robust child passenger safety program, and has one of the largest car seat inspection networks in the United States. The hospital sponsors a minimum of 25 free check-up events at different locations each year, in addition to the car seat inspections offered at its almost 20 permanent locations. Texas Children's partners with EMS providers, law enforcement, healthcare professionals, churches and community organizations to operate their permanent Inspection Sites. Using grant funds from the Texas Department of Transportation (TXDOT), Texas Children's also trains approximately 45 Certified Child Passenger Safety Technicians each year.⁸⁴

Texas Children's uses its Kohl's Cares grant to support the Kohl's Safe at Home Program, which promotes safe sleep and general home safety. The Safe at Home program has two full-time staff and 17 community partners who help implement the program throughout the Greater Houston area. The program staff provides educational classes on safe sleep techniques and child proofing, with pre and post surveys to gauge participants' increase in knowledge. After completing the initial educational class, participants are invited for a short refresher course, and those who are eligible based on their income are provided with a Pack 'n Play so their newborn has a safe sleep environment.⁸⁵

Each year, Texas Children's partners with the Houston-Galveston Area Council to provide helmets to children receiving bikes through the Elves and More program. This program provides free bicycles and bike safety education to low-income children in the Houston area who meet a reading target for the year. The program encourages children to read throughout the year, and students who meet the reading goal are rewarded with a bicycle in December. Texas Children's provides free bicycle helmets to children who receive a bicycle through the Elves and More program. Texas Children's purchases its helmets through the Texas Medical Association's Hard Hats for Little Heads, a program described in a later portion of this section.⁸⁶

⁸³ Ibid.

⁸⁴ Kristen Beckworth, interview by Erin McManus, Telephone, April 22, 2014.

⁸⁵ Ibid.

⁸⁶ Ibid.

Texas Children's is also very involved in drowning prevention campaigns. Safe Kids Greater Houston designed and began the April Pools Day program, a one-day media and outreach blitz held each April 1st to highlight drowning prevention efforts. The coalition works with a variety of community partners, such as swim schools, the Houston Apartment Association, local officials, and news outlets to offer an informative media event. Additionally, throughout the year, the Safe Kids Greater Houston's water safety team offers education and resources for adults and children .⁸⁷

INJURY PREVENTION CENTER OF GREATER DALLAS AT PARKLAND HOSPITAL

Founded in 1994 to address the rapidly rising rate of trauma-related deaths in the Dallas-Fort Worth area, the Injury Prevention Center of Greater Dallas (IPC), housed at Parkland Hospital, works to reduce unintentional and intentional injuries through extensive community outreach and evidence-based injury prevention initiatives.⁸⁸ Since 1999, the IPC has partnered with the Dallas Fire-Rescue Department on Operation Installation, a program that uses fire-related death and injury data to target free fire alarm installations. As of 2011, the program had provided 26,000 fire alarms to Dallas residents.⁸⁹ In 2012, the IPC and its community partners conducted weekly parent meetings, staged parenting interventions, and organized parent-led support groups in the largely immigrant and refugee neighborhood of Vickery Meadow to reduce the incidence of injuries stemming from child abuse. The IPC also partnered middle school students from the Vickery Meadow neighborhood with professional photographers to document hazardous areas for pedestrians. The students' photographs were presented to city officials in support of sidewalk and street crossing improvements.⁹⁰ Additionally, the IPC receives funding from TXDOT for its Give Kids a Boost program. The Give Kids a Boost program trains educators and parents to be booster seat advocates.⁹¹

The IPC also works to train affiliate organizations on how to design impact evaluations for injury prevention programs. The IPC uses impact evaluations of its own injury prevention programs to help determine which programs to continue operating. For its Give Kids a Boost program, an IPC staff member who is a trained child passenger safety technician observed booster seat usage among parents at Dallas elementary schools. The data gathered by the observer was used to determine actual booster seat usage rates at elementary schools where the Give Kids a Boost program was active.⁹²

⁸⁷ Ibid.

⁸⁸ Shelli Stephens-Stidham, interview by Erin McManus, Telephone, April 8, 2014.

⁸⁹ "2011 IPC Programs" (Injury Prevention Center of Greater Dallas), accessed April 8, 2014, http://www.injurypreventioncenter.org/resource_images/9532011%20Program.pdf.

⁹⁰ *The Injury Prevention Center of Greater Dallas 2012 Annual Report* (Injury Prevention Center of Greater Dallas, 2012), http://www.injurypreventioncenter.org/resource_images/741Final%20IPC_Annual_Report.pdf.

⁹¹ Stephens-Stidham, interview.

⁹² Ibid.

OTHER INJURY PREVENTION COALITIONS

Professional medical associations in Texas also sponsor injury prevention programs. The Texas Medical Association (TMA) began its Hard Hats for Little Heads program in 1994 through donor support from Blue Cross Blue Shield of Texas, Prudential, and two additional anonymous contributors. The program provides low-cost bicycle helmets to doctors engaged in bicycle safety initiatives, and will match the number of helmets purchased with additional free helmets.⁹³ For its members, the Texas Academy of Family Physicians (TAFP) will provide funding in addition to the match guarantee from TMA so doctors may purchase more helmets.⁹⁴

The Texas Drowning Prevention Alliance (TXDPA) was founded in 2011 to help reduce the number of child drowning deaths within the state. TXDPA has developed partnerships with hospitals, cities, state agencies, and businesses in the Dallas-Fort Worth and Houston areas to provide educational materials and resources to parents and caregivers concerning water safety.⁹⁵ Currently, TXDPA is working with several pediatricians to distribute a water safety checklist. The checklist is designed to help facilitate discussions about water safety when a child visits a pediatrician for a well child exam.⁹⁶

Local injury prevention groups focus upon promoting the prevention of specific types of injuries. In Central Texas, Colin's Hope works to prevent drowning incidents in young children. The organization provides water safety training, produces water safety resources for parents and caregivers, and fosters awareness of drowning prevention through a yearly golf tournament and an 11K swim race in Lake Austin.⁹⁷ Colin's Hope also partners with Dell Children's and Safe Kids Austin on their drowning prevention initiatives.⁹⁸

Local coalitions also try to promote injury prevention in more rural or remote parts of the state. UTHSCSA works with school districts, hospitals, and local law enforcement to support motor vehicle, bicycle, and pedestrian safety through its Madrina-Padrino

⁹³ "Hard Hats for Little Heads," *Texmed.org*, 2013, http://www.texmed.org/Hard_Hats_for_Little_Heads/.

⁹⁴ "TAFP - Hard Hats for Little Heads," *Tafp.org*, 2012, <http://www.tafp.org/membership/giving-back/hard-hats-for-little-heads>.

⁹⁵ "Texas Drowning Prevention Alliance - About Us," *Txdpa.com*, accessed May 5, 2014, http://www.txdpa.com/about_txdpa.html.

⁹⁶ Beckworth, interview.

⁹⁷ *Colin's Hope 2012-2015 Strategic Plan* (Colin's Hope), accessed April 8, 2014, http://www.colinshope.org/Documents/COLINS_HOPE_STRATEGIC_PLAN.pdf.

⁹⁸ Williams and Lawson, interview.

Traffic Safety Program. The program operates in San Antonio, McAllen, and El Paso, and trains community members who act as *madrinas* (godmothers) or *padrinos* (godfathers) to local children. The program also provides all bicycle and pedestrian safety resources in both Spanish and English.⁹⁹ In the Bryan-College Station area, the Texas A&M AgriLife Extension Service supports the Brazos Valley Injury Prevention Coalition (BVICP). The BVICP works with area school districts to hold safety days, booster seat installation checks, and shows, such as pageants, to reduce the number of injuries caused by motor vehicle accidents. The BVICP also provides an online form on its website for residents to report sightings of unrestrained children.¹⁰⁰

⁹⁹ "Madrina-Padrino Traffic Safety Project," *Injury.uthscsa.edu*, October 19, 2011, <http://www.injury.uthscsa.edu/mp.asp>.

¹⁰⁰ "Brazos Valley Injury Prevention Coalition," *Brazosvalleyinjuryprevention.tamu.edu*, accessed April 8, 2014, <http://brazosvalleyinjuryprevention.tamu.edu/>.

Section 5: Federal Funding Received by the State for Injury Prevention Activities

In Brief

- State agencies receive funding from the federal government to help support injury prevention programs.
- The Centers for Disease Control and Prevention (CDC) is a major funder of state-level injury prevention initiatives, and many state health agencies report strong working ties with the CDC.
- Texas allocates some of the Title V Maternal and Child Health Block Grant funding it receives from the U.S. Department of Health and Human Services (HHS) to support injury prevention programs.
- Texas also receives funding from two sources administered by the National Highway Traffic Safety Administration (NHTSA). The NHTSA is the largest federal funder of injury prevention programs in Texas.
- Despite current federal funding for state injury prevention programs, Texas has one of the lowest spending levels per person on injury prevention programs among all states.

FEDERAL FUNDING

Federal funding is crucial for continued state-level injury prevention programming. All states questioned in the Safe States State of the States 2011 Survey reported receiving federal funding for injury prevention programs. Thirty-six states reported receiving a combination of both federal and state funding for their injury programs. Only nineteen states reported receiving funding for injury programs from private sources.¹⁰¹

The CDC is a key federal partner for state agencies engaged in injury prevention, and it provides many grants to establish and maintain injury prevention programs. In the State of States 2011 Survey, 38 states reported that they had a strong working relationship with the CDC.¹⁰² The CDC supports most injury prevention programs and research through its Core Violence and Injury Prevention (VIPP) program. The Core VIPP program provides funding to 20 states for infrastructure development, injury data collection and analysis, injury program design, program implementation, and evaluation, technical support and training, and public education. Texas is not currently a recipient of Core VIPP funding.¹⁰³

The CDC also provides injury prevention funding through its Preventive Health and Health Services (PHHS) Block Grant. PHHS Block Grants provide funding to all states, the District of Columbia, two Native American tribes, and 8 territories for use in disease prevention and health promotion.¹⁰⁴ In 2013, approximately 7.8% of PHHS Block Grant funds, or \$5.4 million, was allocated for injury prevention and research.¹⁰⁵ Within Texas, DSHS receives PHHS Block Grant funding. DSHS disburses PHHS Block Grant funding to local health departments for use in health education and outreach, disease surveillance, and development of public health policies. Additional PHHS Block Grant funding is used to support the Behavioral Risk Factor Surveillance System (BRFSS), the EMS/Trauma Registry, efforts to collect health data from the 15 U.S.-Mexico border counties in Texas, and to develop public health infrastructure in 8 rural health service regions not currently served by a local health department.¹⁰⁶

Funding for injury prevention programs is available through allocation of Title V Maternal and Child Health (MCH) Block Grants. Authorized by the Social Security Act of

¹⁰¹ *State of the States: 2011 Report.*

¹⁰² *Ibid.*

¹⁰³ "Core Violence & Injury Prevention Program 2011-2016" (Center for Disease Control and Prevention National Center for Injury Prevention and Control), accessed February 7, 2014, http://www.cdc.gov/injury/pdfs/Core_VIPP_factsheet-a.pdf.

¹⁰⁴ "CDC - Chronic Disease - PHHS Block Grant- At A Glance," accessed March 4, 2014, <http://www.cdc.gov/chronicdisease/resources/publications/AAG/blockgrant.htm>.

¹⁰⁵ "CDC - 2013 Overview - Preventive Health and Health Services Block Grant (PHHSBG)," accessed March 4, 2014, <http://www.cdc.gov/phhsblockgrant/funding/blockgrant13.htm>.

¹⁰⁶ "Public Health Improvement - Background on the Regional PHHSBG Project," October 1, 2010, <https://www.dshs.state.tx.us/rls/phi/phibackground.shtm>.

1935, the MCH Program is the oldest federal-state funding partnership in existence.¹⁰⁷ MCH Block Grant funding may be used by states for a wide range of public health initiatives, including health program development and outreach, and injury prevention programs.¹⁰⁸ The amount of MCH Title V Block Grant funding a state receives is based primarily upon the number of children living in the state as compared to the total number of children living in the United States.¹⁰⁹ For every \$4 of MCH Block Grant funding that a state or jurisdiction receives from the federal government, it must match that amount with a \$3 contribution.¹¹⁰

MCH Title V Block grant funding is used in Texas to support a variety of injury prevention activities. The SCFRT, the Safe Riders motor vehicle injury prevention program operated by DSHS and TXDOT, the TOPDD bicycle safety program, and the Safe Sleep for Babies training program provided by DSHS and DFPS are all funded in part or in full through MCH Title V Block grant funding.¹¹¹

Another source of injury prevention funds is through SAFETEA-LU grants, which are administered by the National Highway Safety Traffic Administration (NHTSA). The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) was passed in 2005, and includes yearly funding to states for transportation improvement projects. Each year, a certain amount of SAFETEA-LU grants funds are designated for use on child bicycle and pedestrian safety programs, as well as general motor vehicle safety programs.¹¹² TXDOT is currently a recipient of SAFETEA-LU grant funds. In 2012, TXDOT spent \$20.4 million in SAFETEA-LU funding on motorcycle safety, occupant protection, and pedestrian and bicycle safety programs and initiatives. Of this amount, TXDOT allocated funding to support the Safe Riders program and its Save Me With a Seat booster seat media outreach campaign.¹¹³

Additional funding for transportation safety projects is appropriated through the Moving Ahead for Progress in the 21st Century Act (MAP-21), which was passed by Congress in 2012. MAP-21 provided funding reauthorization for several transportation

¹⁰⁷ "Title V Maternal and Child Health Services Block Grant Program," accessed March 7, 2014, <http://mchb.hrsa.gov/programs/titlevgrants/>.

¹⁰⁸ *Department of Health & Human Services Fiscal Year 2014 Health Resources and Services Administration Justification of Estimates for Appropriations Committees* (U.S. Department of Health & Human Services), accessed March 7, 2014, <http://www.hrsa.gov/about/budget/budgetjustification2014.pdf>.

¹⁰⁹ *Understanding Title V of the Social Security Act* (U.S. Health Resources and Services Administration), accessed March 7, 2014, <http://www.amchp.org/AboutTitleV/Documents/UnderstandingTitleV.pdf>.

¹¹⁰ "Title V Maternal and Child Health Services Block Grant Program."

¹¹¹ *Texas Title V Five-Year Needs Assessment for the Maternal and Child Health Services Title V Block Grant Program* (Texas Department of State Health Services, July 15, 2010), <https://mchdata.hrsa.gov/tvisreports/Documents/NeedsAssessments/2011/TX-NeedsAssessment.pdf>.

¹¹² "Fact Sheets for Highway Provisions in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)" (Federal Highway Administration, October 25, 2007), <https://www.fhwa.dot.gov/safetealu/factsheets/factsheets-safetea-lu.pdf>.

¹¹³ *Texas Highway Safety Annual Report FY 2012*.

improvement and safety projects created through SAFETEA-LU, including the Safe Routes to School program. The Safe Routes to School program helps to make walking and bicycling to schools safer through sidewalk, roadway, bridge, and access ramp improvements.¹¹⁴ In 2012, Texas received \$14.2 million for Safe Routes to School projects.¹¹⁵

Although Texas receives millions in federal funding for injury and violence protection programs from the federal government, state spending on injury and violence prevention totals less than \$0.17 per person per year.¹¹⁶ Whether this low per capita spending amount is a result of lack of funding or of an inability to institute robust injury prevention programs is unclear. A later section of the report will provide additional information about federal and private funds available for injury prevention activities that are not currently received by state agencies in Texas.

¹¹⁴ "Safe Routes to School - Environment - FHWA," *Fhwa.dot.gov*, June 12, 2013, http://www.fhwa.dot.gov/environment/safe_routes_to_school/.

¹¹⁵ "Texas Federal SRTS Funding," *Saferoutesinfo.org*, accessed March 30, 2014, <http://www.saferoutesinfo.org/program-tools/find-state-contacts/texas>.

¹¹⁶ *State of the States: 2011 Report*.

Section 6: Injury Research in Texas

In Brief

- Children’s hospitals in Texas are actively engaged in research into the causes, prevalence, and prevention of injuries in children.
- Recent and prospective research topics include examining the ways in which Hispanic families gain and pass along information about infant safe sleep, developing and testing a booster seat education program for new doctors in pediatric resident programs, and evaluating the effectiveness of social media in helping to disseminate child safety information.

INTRODUCTION

Several children's and teaching hospitals in Texas conduct research into the causes of injuries in children, the effectiveness of injury prevention programs, and attitudes, expectations, and behaviors among parents and caregivers that can result in injuries to children. Research findings are used to develop new injury prevention programs or to restructure existing programs, to help guide policy recommendations, and to assist in better delivering trauma services to children and their families. As research tools, hospital staff frequently rely upon surveys, focus groups, incident or fatality data gathered by the hospital, and spatial and demographic analyses of where and among what communities different types of injuries are more common. This section will present an overview of research into child injuries being conducted at Dell Children's Medical Center in Austin, Texas Children's Hospital in Houston, and Children's Medical Center of Dallas, three Level I pediatric trauma facilities.¹¹⁷

Individual states set trauma level criteria and designate facilities within the state as meeting the criteria for each trauma level. In Texas, there are 16 Level I Comprehensive Trauma Facilities designated by the Department of State Health Services (DSHS).¹¹⁸ The American College of Surgeons (ACS) sets forth comprehensive guidelines for certification of a hospital at a given trauma level. ACS performs verifications of hospitals designated by their state health departments as trauma facilities. The ACS has verified 17 Texas hospitals as Level I Trauma Centers, of which Dell Children's Medical Center, Children's Medical Center of Dallas, Children's Memorial Hermann Hospital, and Texas Children's Hospitals are designated as Level I Pediatric Trauma Centers.¹¹⁹ In order to qualify for ACS verification as a Level I Pediatric Trauma Center, hospitals are required to conduct trauma research and support a pediatric injury prevention program.¹²⁰

DELL CHILDREN'S MEDICAL CENTER OF CENTRAL TEXAS, AUSTIN

Researchers at Dell Children's Medical Center have produced many recent studies that examine the possible causes and occurrence of unintentional injuries in children. The hospital focuses its research efforts on injuries that are prevalent in the Central Texas area. In one study published last year, the hospital examined how Hispanic teen mothers receive information about infant sleep to aid in developing culturally and linguistically appropriate educational programs and materials for Hispanic

¹¹⁷ "Verified Trauma Centers," *Facs.org*, accessed May 2, 2014, <http://www.facs.org/trauma/verified.html>.

¹¹⁸ "Texas Trauma Facilities," *Dshs.texas.gov*, April 30, 2014, <http://www.dshs.state.tx.us/emstraumasystems/etrahosp.shtm>.

¹¹⁹ "Verified Trauma Centers."

¹²⁰ "American College of Surgeons Consultation/Verification Program Reference Guide of Suggested Classification" (American College of Surgeons, 2006), <http://www.facs.org/trauma/vrc1.pdf>.

communities.¹²¹ Another recent study demonstrated that children are at risk for hyperthermia caused from overheating in a car even when outside temperatures are moderate.¹²²

Dell Children's has also examined how the behaviors of parents and caregivers can lead to injuries in children. A study conducted in part by researchers at Dell Children's concluded that risky alcohol use in parents, defined as the mother having had 4 or more drinks or the father having had 5 or more drinks at one time within the past 12 months, created a higher risk factor for injuries in their children. Risky alcohol use in parents was shown to be significant in bicycle injuries in children.¹²³

TEXAS CHILDREN'S HOSPITAL, HOUSTON

Texas Children's Hospital recently conducted two studies of submersion injuries in the Houston area. Previous submersion studies were about 25 years old, and were out of date. The submersion studies utilized hotspot analysis to determine where in Houston submersion injuries are likely to occur.¹²⁴ In a similar vein, Texas Children's partnered with the University of Texas School of Public Health in 2012 to conduct hotspot analysis to see where child motor vehicle occupant injuries occurred in Houston in relation to where booster seat inspection stations were located. The results from the study were used to move existing inspection sites or to establish new inspection sites in areas of the city where more child motor vehicle occupant injuries occurred.¹²⁵

Currently, Texas Children's is working with the Oregon Health and Science University to develop a comprehensive education curriculum addressing child motor vehicle occupant safety for young doctors training in pediatric residency programs. The interactive training will educate future pediatricians about booster seat installation, choosing the correct booster seat for a child, and providing motor vehicle safety information to parents and caregivers. Pediatric residents at Texas Children's will be divided into two study groups, with one group to receive the comprehensive training and another group to receive training through a webinar provided by the American Academy of Pediatrics. Because pediatricians are trusted and relied upon by parents and caregivers to provide information about all stages of child development, training pediatricians to be able to

¹²¹ Sarah Duzinski et al., "Sleep Behaviors of Infants and Young Children: Associated Demographic and Acculturation Characteristics Among Hispanic Teen Mothers," *Journal of Trauma Nursing* 20, no. 4 (December 2013): 189–98.

¹²² Sarah Duzinski et al., "Threat of Paediatric Hyperthermia in an Enclosed Vehicle: A Year-Round Study," *Injury Prevention*, November 18, 2013, www.injuryprevention.bmj.com.

¹²³ Amanda Barczyk et al., "Risky Drinking among Parents of Pediatric Trauma Patients," *Journal of Trauma Acute Care Surgery* 75, no. 4 (October 2013): 676–81.

¹²⁴ Rohit Sheno and Atoosa Kourosh, interview by Erin McManus, Telephone, April 22, 2014.

¹²⁵ Beckworth, interview.

provide correct and up-to-date motor vehicle safety information may increase behaviors in parents and caregivers that reduces child motor vehicle occupant injuries.^{126,127}

CHILDREN'S MEDICAL CENTER OF DALLAS

Children's Medical Center of Dallas has a variety of current and pending research projects that address child injuries and their prevention. Current projects include a randomized controlled trial that assesses how effective a handout developed by the hospital for booster seat installations has been in helping parents and caregivers to correctly install booster seats. Injury prevention team members are also working on a project to identify common mistakes in booster seat use and mistaken early graduation of children out of booster seats by parents and caregivers. Children's Medical Center is currently involved with a child passenger safety group on Facebook. The hospital is gathering information about common questions parents and caregivers have about motor vehicle occupant safety, as well as examining how online communities can be used to help change unsafe behaviors. A final project involves a reevaluation of Children's Medical Center's pediatric drowning education program. The hospital plans to introduce a new parent and child drowning prevention curriculum this summer.¹²⁸

In addition to its current projects, Children's Medical Center is developing many new projects, some of which address unintentional injuries in children. The hospital is working with EMS professionals in the Dallas-Fort Worth area to determine how organizations that provide pre-hospital emergency services can use injury prevention surveillance techniques and injury prevention education to help preempt injuries before they occur. As first responders, EMS professionals are uniquely positioned to be able to provide standardized injury prevention information to parents and caregivers at the scene of an injury.¹²⁹

¹²⁶ Rohit Sheno and Kourosh, interview.

¹²⁷ Beckworth, interview.

¹²⁸ Atoosa Kourosh and Marisa Abbe to Erin McManus, "Injury Prevention Research at CMC," April 23, 2014.

¹²⁹ Ibid.

Section 7: Recommendations for Improving Injury Prevention Programming in Texas

In Brief

- Child injury prevention activities at the state level are divided among many different agencies and their departments. The Legislature should consider reestablishing a state office for child injury surveillance and prevention at the Department of State Health Services (DSHS).
- Hospitals, state health agencies, and injury prevention groups lack a forum through which to collaborate on injury prevention program development and evaluation, injury research, and training and education. Public health professionals working in injury prevention in Texas should evaluate the funding sources and institutions available to assist in the creation of a state-level injury prevention coalition.
- Many injury prevention programs have not been evaluated to assess whether they are effective in reducing behaviors that lead to injuries. Hospitals, state health agencies, and injury prevention groups should develop program evaluation best practices to encourage continuation of programs that provide proven results.
- Injury prevention groups have established strong and lasting relationships with community partners. Groups should also cultivate working relationships with larger organizations that have a statewide presence in order to facilitate the distribution of programs and resources across the state.
- Texas lacks the resources for educating key policymakers on the prevalence and causes of injuries in children, as well as policies that may help reduce the prevalence of those injuries. Public health officials working in injury prevention should consider developing a resource guide for state legislators, city council members, county commissioners, and other policymakers who are able to influence and pass legislation designed to reduce injuries in children.

INTRODUCTION

As the sections of this report have demonstrated, there are many different injury prevention programs operated at the state and local level in Texas. The programs seek to reduce the incidence of injuries that are common statewide, such as those involving motor vehicles, bicycles, suffocation, and drowning, and injuries that are more common in certain regions of the state, such as All Terrain Vehicle (ATV) and farm equipment accidents. Although considerable time and money are spent on education, outreach, and financial assistance to prevent injuries to children, improvements can be made to help better serve children in Texas. As outlined in the executive summary and discussed at length in the body of the report, Texas has strong local responses to injury prevention, but lacks the cohesiveness needed to successfully develop and support statewide injury prevention initiatives. In this final section of the report, recommendations for improving the coordination, scope, and delivery of injury prevention programs throughout the state are provided.

Issue: The state government lacks a central office for the coordination of child injury prevention activities.

In interviews with public health officials, hospital staff, and doctors, the lack of centralized coordination of injury prevention activities either by the state health agencies or by a coalition of health providers was frequently cited as an impediment to improving the scope and effectiveness of injury prevention activities. Injury prevention activities at the Texas Department of Health (TDH), now reorganized as DSHS, were once centralized in the Injury Prevention Program (IPP). By 1998, the IPP had 19 staff members and a yearly budget of \$1.6 million. The IPP operated the Safe Riders program, and provided funding for a senior citizen driver safety program and a bicycle safety program.¹³⁰

In 1999, the Texas Legislature passed House Bill 2085, directing the Texas Sunset Commission to conduct a special purpose review of TDH.¹³¹ The Texas Sunset Commission provided 230 recommendations to the Legislature for improvements to the internal management and business operations of TDH.¹³² The recommendations resulted in a sweeping reorganization of TDH, consolidating job positions and

¹³⁰ Barb Alberson et al., *An Assessment of the Texas Department of State Health Services* (State and Territorial Injury Prevention Directors Association, December 8, 2008), <https://www.dshs.state.tx.us/emstraumasystems/injurypreventioncommittee.shtm>.

¹³¹ J.E. Brown, *HB 2085 Relating to the Continuation and Functions of the Texas Board of Health and Texas Department of Health, Including the Operation of Certain Boards and Councils Administratively Attached to the Department; Providing Penalties.*, 1999, <http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=76R&Bill=HB2085>.

¹³² *Texas Department of Health Special Purpose Review* (Texas Sunset Commission), accessed April 13, 2014, <https://www.sunset.texas.gov/public/uploads/files/reports/Department%20of%20Health%20Staff%20Report%202003%2078%20Leg.pdf>.

restructuring programs. The recommendations culminated in the Texas Legislature's passage of House Bill 2292 in 2003, which abolished TDH and placed the newly created DSHS, DFPS, the Department of Assistive and Rehabilitative Services (DARS), and the Department of Aging and Disability Services (DADS) under the oversight of HHSC.¹³³

The abolition of TDH and the streamlining of DSHS broke apart the IPP. Now, injury epidemiology and surveillance are in one division, and health promotion, including injury prevention programs, is housed in another division. This separation of divisions makes coordinating on injury prevention activities difficult.¹³⁴ Additionally, injury prevention programs are not centralized at DSHS, and are operated by many other state agencies.

Recommendation: The Legislature should reestablish a centralized office at DSHS to coordinate all child injury monitoring and prevention activities in Texas.

Of all the Texas state agencies, DSHS provides the greatest number of services related to child injury surveillance and prevention. The department houses the EMS/Trauma Registry and the Child Fatality Review Team (CFRT), provides administrative support to the Governor's EMS and Trauma Advisory Council (GETAC), and operates a variety of injury prevention programs, such as Safe Riders and Safe Sleep for Babies. DSHS also works with other state agencies, such as TXDOT, to coordinate statewide injury prevention efforts.

The Legislature should consider reestablishing a state child injury surveillance and prevention office at DSHS. This office would be responsible for determining state child injury prevention goals, collecting child injury data, and working with other state agencies to help develop and deliver injury prevention programming. Creating a central office for injury surveillance and prevention and delegating to the office the responsibility of reducing the incidence of injuries in children would establish a broad mandate for injury and violence prevention in the state. Centralized child injury data collection and injury program development would allow the state government to respond to increases in certain types of injuries more effectively. Additionally, with a central office, state health officials would be better able to identify regional or temporal trends in injury types, develop programs or strategies to help reduce those injuries, and communicate those strategies to local CFRT members or other health partners working throughout the state.

Issue: Texas hospitals and injury prevention coalitions lack a forum through which to share injury data, prevention strategies, and injury prevention program evaluations.

¹³³ Jane Nelson, *HB 2292 Relating to the Provision of Health and Human Services in This State, Including the Powers and Duties of the Health and Human Services Commission and Other State Agencies; Providing Penalties.*, 2003, <http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=78R&Bill=HB2292>.

¹³⁴ Tammy Sajak, interview by Erin McManus, Telephone, February 24, 2014.

As noted in a previous section, Texas lacks a state-level coalition designed to foster collaboration among hospitals and injury prevention groups. With a few exceptions, injury prevention activities in the state are localized, and specific programs are confined to relatively small geographic areas. This means that programs targeting common injuries in children are often duplicated by injury prevention coalitions throughout the state, resulting in the creation of similar injury prevention materials. Some programs, such as the April Pools Day campaign developed by Safe Kids Houston, have been shared and replicated throughout the state.¹³⁵ However, many programs are redeveloped by different injury prevention coalitions, tying up valuable staff and monetary resources.

Recommendation: Establish a state-level injury prevention coalition that can provide support and guidance to local coalitions.

Greater cooperation between hospitals and injury prevention groups through a state-level coalition has many potential benefits. A state-level coalition would be able to identify and communicate safety priorities for each year, and could provide a forum for hospital trauma services departments and injury prevention organizations to collaborate on the development of new injury prevention strategies or programs. A state-level coalition could also help prevent duplication of prevention efforts in areas where many hospitals operate their own injury prevention programs.

One way to promote statewide collaboration could be through establishing a state-level Safe Kids coalition. A state-level Safe Kids coalition would provide a forum for sharing resources and data that is under the umbrella of a national, well-established organization. More rural injury prevention coalitions could get better exposure to grant and professional development opportunities through the national Safe Kids coalition. With easier access to others working in injury prevention, hospitals and local injury prevention groups would be able to ascertain the different programs and injury prevention resources available throughout the state, potentially reducing the duplication of materials or program content. Most states have a state-level Safe Kids coalition. Only Idaho, Montana, Nevada, North Dakota, South Dakota, and Texas do not have state-level Safe Kids coalitions.¹³⁶

Another way to encourage better collaboration could be through applying for and establishing an Injury Control Research Center (ICRC) within Texas. ICRC grant funding is available for hospitals, universities, businesses, non-profits, and a wide range of government entities engaged in injury prevention, care, and rehabilitation activities.¹³⁷ Although ICRC funding is not targeted specifically for use in the prevention of injuries in

¹³⁵ Beckworth, interview.

¹³⁶ "Safe Kids Coalitions in the United States," *Safekids.org*, accessed April 30, 2014, <http://www.safekids.org/coalitions>.

¹³⁷ "CDC Injury - ERPO: ICRCs," accessed April 29, 2014, <http://www.cdc.gov/injury/erpo/icrc/index.html>.

children, the funding is available for use in the prevention of unintentional and intentional injuries in people of all ages. The CDC solicits applications for the ICRC grant program regularly. In 2013, the CDC offered grant funding for three comprehensive centers and two developmental centers. The comprehensive center awards provided \$900,000 per year for five years to fund an administrative core, a community outreach core, a training and education core, and multiple research projects. The developmental center awards provided \$450,000 per year for five years to fund the same core activities as provided by the comprehensive center awards, but with less funding for research projects.¹³⁸ Past ICRC grant recipients have used their funding to facilitate collaboration between professionals in injury prevention. The Center for Injury Research and Policy, at Nationwide Children's Hospital in Columbus, Ohio, used some ICRC funding to help establish the Midwest Injury Prevention Alliance (MIPA), an organization composed of public health officials from Illinois, Indiana, Minnesota, Michigan, Ohio, and Wisconsin interested in working together to plan and evaluate injury prevention programs, conduct research into the pathology of injuries in children, and provide outreach and training to others working in public health.¹³⁹

Establishing a state-level coalition for injury prevention in children is key to advancing the spread of injury prevention initiatives throughout the state. Without a state-level coalition, either led by the state health agencies or by hospitals and injury prevention groups, a targeted and effective statewide response to common injuries in children is unlikely to occur. Increased collaboration between public health professionals working in child injury prevention will create an environment that allows for better development and articulation of the statewide child injury prevention goals. While organizing a state-level coalition will require time and funding, working collaboratively on research, program development and evaluation, training, and education will allow scarce funding resources to be better allocated. Collaboration and coalition building will also provide the critical mass needed to advocate for changes to existing legislation. As several interviewees attested to, successfully shepherding legislation that made booster seat use mandatory for young children required concerted effort on the part of GETAC members, hospital trauma departments, and many other public health officials.^{140,141,142}

¹³⁸ "Grants for Injury Control Research Centers" (Center for Disease Control and Prevention National Center for Injury Prevention and Control, September 9, 2012), <http://www.grants.gov/web/grants/view-opportunity.html?oppId=233534>.

¹³⁹ "About - Midwest Injury Prevention Alliance," *Midwestinjury.com*, accessed April 29, 2014, <http://www.midwestinjury.com/about-1/>.

¹⁴⁰ Williams and Lawson, interview.

¹⁴¹ Stephens-Stidham, interview.

¹⁴² Evans, interview.

Issue: Not all injury prevention programs have been evaluated for their effectiveness in preventing injuries.

Several interviewees for this report spoke of the need to use evidence-based curricula in injury prevention programs.^{143,144} Evidence-based programs are those that have undergone evaluations to determine the effectiveness of the program in actually preventing injuries or risky behaviors. Evaluating injury prevention programs is often difficult. Program staff may have trouble following up with program participants to observe whether or not the participants are utilizing the training they received. Additionally, establishing a link between an injury prevention program and an injury prevented in a child can be difficult.

Some hospitals that develop their own content for injury prevention programs, such as Dell Children’s Medical Center and the Injury Prevention Center of Greater Dallas (IPC) at Parkland Hospital, evaluate the programs for their effectiveness in preventing injuries. As described in a previous section, the IPC utilized the expertise of a trained staff member when it evaluated the effectiveness of its booster seat training program at two Dallas elementary schools. Rather than relying upon exit surveys, in which participants may overestimate their adoption of safe behaviors, the IPC used a third party to objectively observe how often parents and caregivers used a booster seat after participating in the training program.¹⁴⁵

Recommendation: Develop easily replicable program evaluation criteria that a hospital or injury prevention organization could use to determine the effectiveness of their injury prevention programs.

Establishing basic evaluation guidelines or suggested best practices for conducting program evaluations could aid hospitals, state agencies, and injury prevention organizations in implementing injury prevention program evaluations. The development of injury prevention program evaluation guidelines provides an excellent opportunity for either the state health agencies or a group of Safe Kids coalitions to partner with a public health or medical school in Texas. The evaluation guidelines could then be provided to hospitals or injury prevention groups that lack the expertise or funding to develop their own program evaluation guidelines.

Evaluating injury prevention programs for their effectiveness in preventing injuries helps ensure that scarce funding is directed to programs that create the largest community impacts. Evaluations can also be used to demonstrate to interested policymakers, such as city council members, county commissioners, or state legislators, that injury prevention programs can make a demonstrable impact on the number of unintentional

¹⁴³ Williams and Lawson, interview.

¹⁴⁴ Stephens-Stidham, interview.

¹⁴⁵ Ibid.

injuries to children. A good evaluation can also have the added benefit of attracting new donors to a program, or of justifying the need for more staff or resources for particular initiatives.

Issue: Injury prevention groups rely most heavily upon local partners to promote and support their programs. While this is effective for local injury prevention programs, having support from larger organizations is beneficial for promotion of statewide injury prevention initiatives.

As previous sections of this report highlight, state agencies and injury prevention coalitions rely heavily upon partner organizations in communities to help sponsor events and outreach. Local businesses, non-profits, and government agencies are valuable participants in injury prevention efforts. However, in order to support statewide injury prevention campaigns, coalitions will need to develop partnerships with health organizations that have a larger presence throughout the state.

Recommendation: Establish partnerships with medical professional organizations, insurance providers, universities, and industry groups to help facilitate the spread of injury prevention programs, training, and educational materials.

Organizations such as the Texas Medical Association (TMA), Texas Hospital Association (THA), Texas Nurses Association (TNA), the Texas Association of Community Based Health Plans (TACHP) or the Texas Association of Health Plans (TAHP) are potential statewide partners in child injury prevention. Large hospital groups, such as Seton Healthcare Family or Memorial Hermann Health System, and insurance companies that operate throughout the state, like Blue Cross Blue Shield, are also possible partners. Given the billions of dollars spent each year on healthcare costs relating to injuries sustained by children, insurance companies are likely interested parties in the effort to reduce injuries in children. In one study of pediatric injuries conducted at Dell Children's Medical Center, 39.9% of the children included in the study were privately insured.¹⁴⁶ Universities and medical schools often possess the faculty, students, and research funding necessary to carry out large studies of pediatric injuries.

The organizations listed above all have large memberships, and possess the administrative infrastructure to pass along materials to their members efficiently. These organizations also have a statewide presence, and would be uniquely placed to help spread injury prevention programs in areas that are currently not well served. Their members are also involved in child healthcare, and would be able to effectively communicate information about injury prevention to the general public and to policymakers.

¹⁴⁶ Kelly Johnson et al., "Pediatric Injuries in Central Texas," *Texas Medicine* 105, no. 9 (September 2009): Electronic.

Issue: Texas currently does not have a one-stop injury prevention resource for key policymakers.

Among the injury prevention coalitions and groups surveyed, only the IPC has developed an injury prevention resource guide for legislators and other policymakers throughout the state.¹⁴⁷ Elected officials and their staff rarely have time to evaluate research or sift through copious amounts of information relating to a particular subject. Frequently, they become aware of public health and welfare issues only when concerned constituents or advocacy groups bring these issues to their attention. Lack of a comprehensive and uniform resource guide for child injury prevention forces policymakers to seek out information on the causes and prevalence of injuries on their own.

Recommendation: Create, publish, and distribute child injury prevention resource guides to legislators, city council members, county commissioners, and other elected officials.

Developing a simple and easily digestible injury prevention resource guide can alert policymakers about the causes and prevalence of injuries in children, programs throughout the state designed to prevent injuries, medical research on injuries in children, proposed best practices to prevent injuries, and whom to contact for expert testimony. The resource guide could be distributed to legislators' offices prior to the bill pre-filing period, and to city council members and county commissioners on a regular basis.

The Johns Hopkins Center for Injury Research and Policy (JHCIRP) developed an injury prevention guide for distribution to the Maryland General Assembly. The 2012 version of the guide provided legislators research on and policy proposals to address injuries caused by alcohol, all terrain vehicles (ATVs), distracted driving, falls among older adults, home fires, intimate partner violence, motorcycles, poisoning, and teen drivers. Each injury was presented within 3 pages, and included citations to medical research conducted on the particular injury type.¹⁴⁸ JHCIRP also administered a survey to determine if and how members of the Maryland State Assembly used the injury resource guide.¹⁴⁹

¹⁴⁷ Shelli Stephens-Stidham to Erin McManus, "Draft Child Injury Prevention Report - Children's Hospital Association of Texas," May 14, 2014.

¹⁴⁸ "Preventing Injuries in Maryland: A Resource of State Policy Makers" (Johns Hopkins Center for Injury Research and Policy, 2012), http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-injury-research-and-policy/publications_resources/CenterPubs/PolicyResource2012/JHCIRP_POSTbook.pdf.

¹⁴⁹ Williams and Lawson, interview.

Developing and distributing an injury prevention resource guide gives professionals working in child injury prevention an opportunity to interact with and educate policymakers. Creating an injury prevention guide would also have the added benefit of requiring hospitals, state health agencies, and injury prevention groups to prioritize which types of injuries present the greatest threats to children in the state.

Appendix A: Child Safety Web Resources

This appendix presents child safety web resources for parents and caregivers. The safety resources were developed by each organization listed. The Children’s Hospital Association of Texas (CHAT) has not verified the accuracy of these resources. For additional resources, please contact your healthcare provider or local injury prevention coalition.

NATIONAL RESOURCES

- Safe Kids – address all common injury causes
www.safekids.org
- Injury Free Coalition for Kids – address all common injury causes
www.injuryfree.org
- Children’s Hospital of Philadelphia Center for Injury Research and Prevention – a collection of 5 websites that address motor vehicle occupant injuries, teen driving, injury recovery, violence prevention, and concussion prevention
<http://injury.research.chop.edu/family-resources#.U2vuL8fcCkI>

TEXAS RESOURCES

- Safe Riders – address motor vehicle occupant safety
<http://www.dshs.state.tx.us/saferiders/>
- Room to Breathe – address safe sleep in infants
https://www.dfps.state.tx.us/Room_to_Breathe/more_tips.asp
- Safe Kids Austin – address motor vehicle occupant, water, sleep, bicycle, and pedestrian safety
http://www.dellchildrens.net/services_and_programs/safety_and_injury_prevention/safe_kids_austin/
- Safe Kids Greater Houston – address motor vehicle occupant, water, bicycle, pedestrian, fire, and general home safety
<http://www.safekidsgreaterhouston.org/>

- Safe Kids Tarrant County – address motor vehicle occupant, water, and poison safety
<http://www.cookchildrens.org/AboutUs/CHO/SafeKidsTarrantCounty/Pages/default.aspx>
- Injury Prevention Center of Greater Dallas – address motor vehicle, fire and home safety
www.injurypreventioncenter.org
- Texas Drowning Prevention Alliance – address water safety
www.txdpa.com
- Colin’s Hope – address water safety
www.colinshope.org
- Hard Hats for Little Heads – address bicycle safety
http://www.texmed.org/Hard_Hats_for_Little_Heads/
- Kohl’s Safe Child Initiative – address all common injuries
<http://sites.colech.edu.mx/kohls/>
- Brazos Valley Injury Prevention Coalition – address motor vehicle occupant safety
<https://brazosvalleyinjuryprevention.tamu.edu/>

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