

Utah Violence and Injury Prevention Plan  
Across the Lifespan  
2011-2015

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DRAFT

# Violence and Injury Prevention Program

“We are a trusted and comprehensive resource for data related to violence and injury. Through education, this information helps promote partnerships and programs to prevent injuries and improve public health.”



UTAH DEPARTMENT OF  
**HEALTH**

## **Acknowledgements**

**This plan could not have been completed without the support and guidance of the Injury Community Planning Group (ICPG) and the following subcommittees:**

- Domestic Violence Fatality Review Committee
- Child Fatality Review Committee
- Pain Medication Education Advisory Group
- Sexual Violence Prevention
- Suicide Prevention Task Force
- Teen Driving Task Force
- Utah Falls Prevention Coalition
- Utah Safe Kids Coalition

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## Planning Process

The VIPP conducted a needs assessment, surveyed partners, held focus groups, and conducted strategic planning sessions to develop the plan. VIPP epidemiologists analyzed emergency department, hospital discharge, and death data by demographics (age, sex, race, ethnicity, small area, and local health district) to determine the magnitude, incidence, and prevalence of violence and injury in Utah. In addition to presenting and discussing these findings to the VIPP staff, Injury Community Planning Group (ICPG) and ICPG subcommittees, a survey of resources was also conducted to determine the violence and injury capacity in the state.

The ICPG subcommittees include: 1) Family Violence (Domestic Violence and Child Fatality ICPG members), 2) Sexual Violence Prevention, 3) Motor Vehicle ICPG (Teen Driving Task Force), 4) Pain Medication Education Advisory Group, 5) Suicide Prevention Task Force, 6) Utah Falls Prevention Coalition, and 7) Utah Safe Kids Coalition.

State plan priorities were established using the Hanlon Method, also known as the Basic Priority Rating System, which allowed VIPP staff and the ICPG to: 1) identify explicit factors to be considered in setting priorities, 2) organize the factors into groups that were weighted relative to each other, and 3) allow the factors to be modified as needed and scored individually.

Components that were considered for each topic consisted of the size of the problem, seriousness of the problem, effectiveness of intervention, and PEARL factors (propriety, economic feasibility, acceptability, resource availability, and legality). After these components were considered, a score was calculated for each. Through this process, it was determined that the plan should focus on prevention over the lifespan of Utah residents in order to most effectively use resources, collaborate with partners, and prevent injury. The injury priorities by lifespan are:

Age Group	Injury Priorities
Birth-14	<ul style="list-style-type: none"> <li>• Child Maltreatment</li> <li>• Infant Sleep Fatalities</li> <li>• School-related Injuries</li> </ul>
15-17	<ul style="list-style-type: none"> <li>• Motor Vehicle Crash Injuries and Fatalities</li> <li>• Suicide Attempts</li> <li>• Teen Dating Violence Injuries</li> </ul>
18-24	<ul style="list-style-type: none"> <li>• Motor Vehicle Crashes</li> <li>• Poisoning (Prescription and Illicit Drugs)</li> <li>• Sexual Assault and Family Violence</li> <li>• Suicide Attempts and Suicide Fatalities</li> </ul>
25-64	<ul style="list-style-type: none"> <li>• Motor Vehicle Crashes</li> <li>• Poisoning (Prescription Drugs) Injuries and Fatalities</li> </ul>

	<ul style="list-style-type: none"> <li>• Sexual Assault and Family Violence</li> </ul>
65+	<ul style="list-style-type: none"> <li>• Falls</li> <li>• Motor Vehicle Crashes</li> <li>• Suicide Fatalities</li> </ul>

The plan is organized by lifespan and sectioned into age groups. The following is discussed for each injury priority according to age group: 1) Overview, 2) Healthy People 2020 Objectives, 3) Data, Surveillance, and Costs, 4) Recommendations, 5) Implementing Organizations, and 6) Evidence-based Interventions/Best Practices. The plan also describes the methodology used to identify the priorities, gives an overall description of the magnitude, incidence, and prevalence of violence and injury in Utah, and includes a summary table with age-adjusted rates for each indicator that includes U.S., Utah, small area, local health district, and sex data. Age specific rates are also provided for each indicator. In addition, each of the rates is color-coded to signify whether they are higher, lower, or the same as the state rate.

Utah is comprised of 61 small areas that were determined by population size, political boundaries of cities and towns, and economic similarity. The small areas are ranked for each indicator based on the age-adjusted rate, denoting their position compared to other small areas in the state.

In addition, the plan illustrates the use of the ICPG and the ICPG subcommittees' knowledge and expertise to determine critical target areas for each priority. For example, along with the available sexual violence data presented, the Sexual Violence Prevention ICPG subcommittee conducted a needs assessment, focus groups, and capacity surveys to determine critical target areas in the sexual violence field. Due to this process, sexual violence priorities are targeted for persons 18-24 and 25-64 years of age. In addition, based on data and the additional work of the Sexual Violence ICPG subcommittee, disparate populations (geographic, race, sexual orientation, etc.), are also identified as critical target areas. As another example, feedback on what has been done in Utah to address Motor vehicle safety and what is planned for the future was obtained during focus group meetings in the summer of 2010 with the following:

- Utah Local Association of Community Health Educators,
- Utah Teen Traffic Safety Task Force,
- Utah Safe Kids & Local Safe Kids Chapters/Coalitions, and
- Seniors at the Riverton Senior Center

The following questions were asked of each group with respect to the population they targeted:

1. *What has public health and our allied partners done well related to motor vehicle safety in the last 2-3 years?*
2. *As public health or in coordination with our allied partners what would you like to see accomplished in Utah related to motor vehicle safety in the next five years?*

Responses to these questions helped to develop the recommended action steps for each age group. In sum, the data is used by each ICPG subcommittee to establish critical target areas by identifying geographic and demographic risk factors for each injury priority.

Geographic and demographic rates that were significantly higher compared to state rate for each injury priorities were utilized to set objectives and strategies. Specific, measurable, achievable, and realistic priorities (SMART) were developed with timeframes consistent with the state plan timeline. In addition, the National Registry of Evidence-based Programs and Practices (NREPP), along with other federal agencies that have identified evidence-based intervention strategies, were reviewed and recommended in the plan for each injury priority. Implementing organizations were identified by the ICPG and ICPG subcommittees based on the organization's knowledge, expertise, and ability to carry out priority strategies.

The plan is a framework that will guide surveillance, partnership building, prevention, and policy development in Utah. It will include additional injury focus areas in the future, dependent on data discoveries, trends, or emerging issues. The plan serves as a tool to build social capital and resources to support injury prevention efforts to reduce injuries and save lives. This plan is meant to be a working document and will be continually updated.

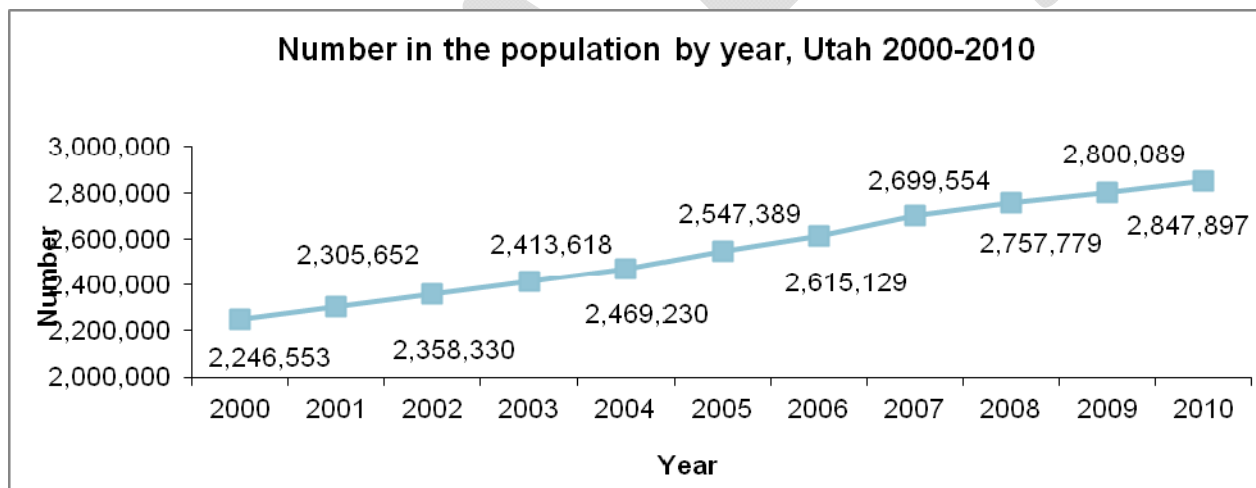
## Utah State Profile

The western state of Utah shares its borders with Arizona to the south, Idaho and Wyoming to the North, Colorado to the East, and Nevada to the west. The state contains a diverse mix of terrain that ranges from mountainous landscape to basins, canyons, and valleys. Utah is 84,900 square miles and ranked the 11th largest state (in terms of square miles) in the U.S. The name "Utah" comes from the Native American "Ute" tribe and means "people of the mountains."<sup>1</sup>

### Population

According to the 2000 census, the population of Utah, was 2,233,169.<sup>2</sup> Since then, the state's population has been steadily increasing. The Utah Governor's Office of Planning and Budget (GOPB) estimates population by fiscal year. The estimated population of Utah as of July 1, 2000 (2001 fiscal year) was 2,246,553. Since then the State has been increasing in population and is approaching three million residents (Figure X).

Figure X



Data Source: The Utah Population Estimates Committee (UPEC) and the Governor's Office of Planning and Budget (GOPB), Estimates for Counties by Sex and Single Year of Age. For more information, go to <http://www.governor.utah.gov/dea/demographics.html>

There are a total of 29 counties in Utah. There are four urban counties in Utah which make up an area called the Wasatch Front. This area consists of 75 percent of the population and includes Davis, Salt Lake, Utah, and Weber Counties (Figures X and X). Urban areas are

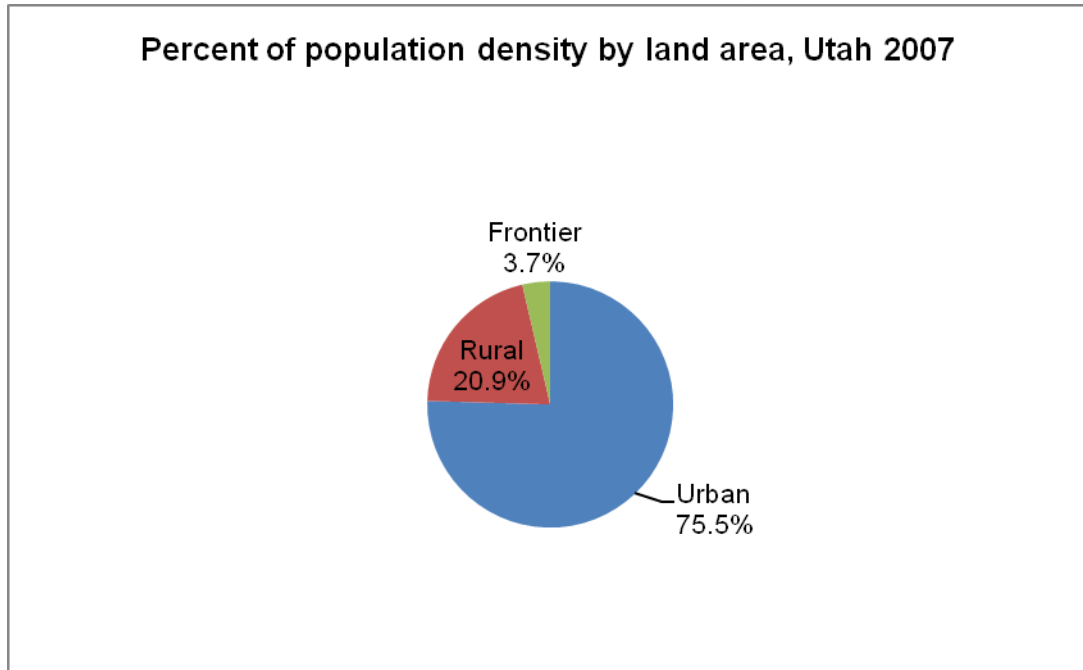
<sup>1</sup> "Quick Facts About Utah's History and Land" Utah.gov. 2009. 3 March 2009.

<http://www.utah.gov/about/quickfacts.html>

<sup>2</sup> "Utah:2000." U.S. Census Bureau, Census 2000. U.S. Department of Commerce, 2002

defined as having one hundred or more persons per square mile. Salt Lake City, the capital of Utah, is the largest city and is centered in the Wasatch Front area. Twelve counties make up the rural areas of Utah and consist of 21 percent of the population (Figures X and X). Rural areas are defined as having more than six but less than one hundred persons per square mile. Thirteen counties make up the frontier areas and consist of four percent of the population (Figures X and X). Frontier areas are defined as having six or fewer persons per square mile.

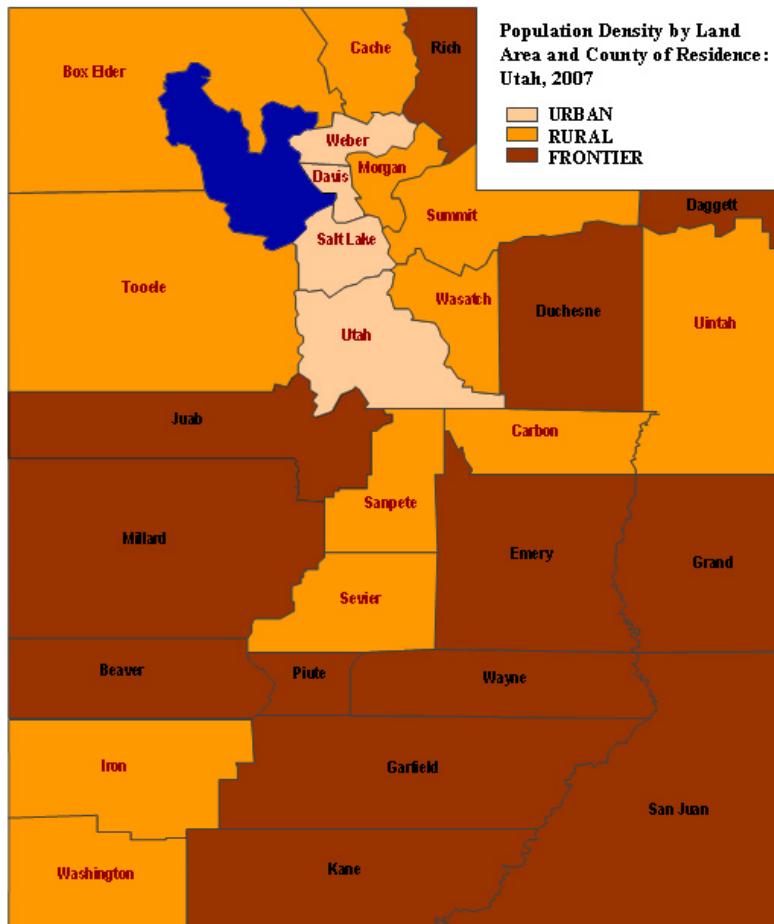
Figure X



Data Source: Office of Vital Records and Statistics, Utah Department of Health, U.S. Census, Utah Population Estimates Committee and the Governor's Office of Planning and Budget, 2008 Baseline Economic and Demographic Projections (Revised on 7-23-2008)

Figure X

### Population Density by Land Area, Utah 2007



### Age and Sex

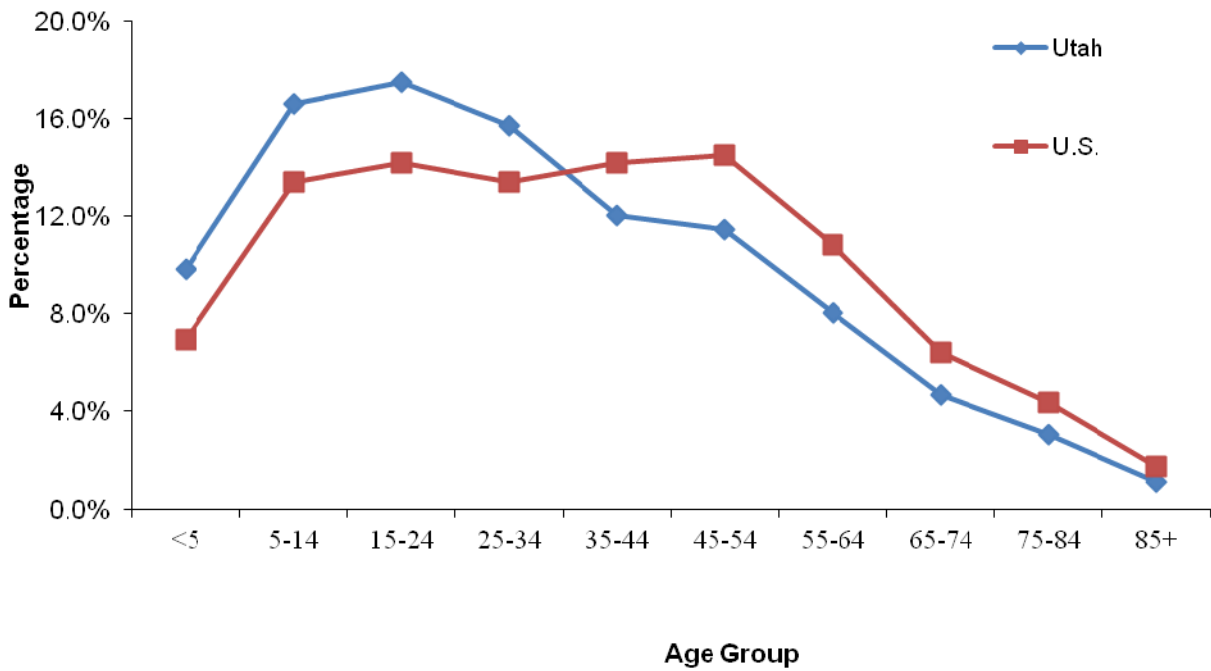
The table below shows a comparison of the distribution of gender within Utah and the U.S. Utah has a slightly higher proportion of males while the opposite is seen in the U.S. (Table X).

Percent of population by sex, Utah and U.S. 2007		
Sex	Utah	U.S.
Male	50.3%	49.3%
Female	49.7%	50.7%

The age distribution of Utah residents is slightly younger than that of U.S. residents overall (Figure X). According to the 2000 Census, the median age of Utah residents was 28 years old while the median age of U.S. residents was 37 years old. Half of the Utah population is between five and 34 years of age (Figure X).

Figure X

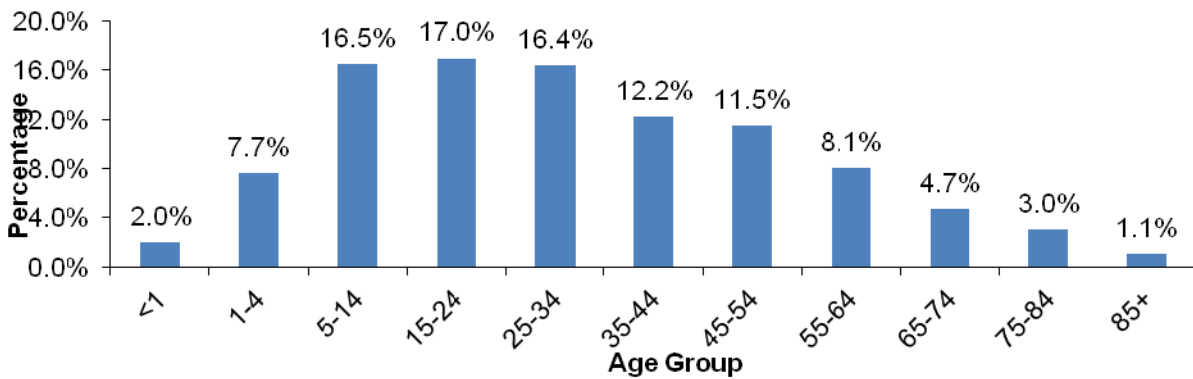
Percent of population by age group, Utah and U.S., 2007



Data Source: U.S. Census Bureau, Population Division

Figure X

Percent of population by age group, Utah 2007

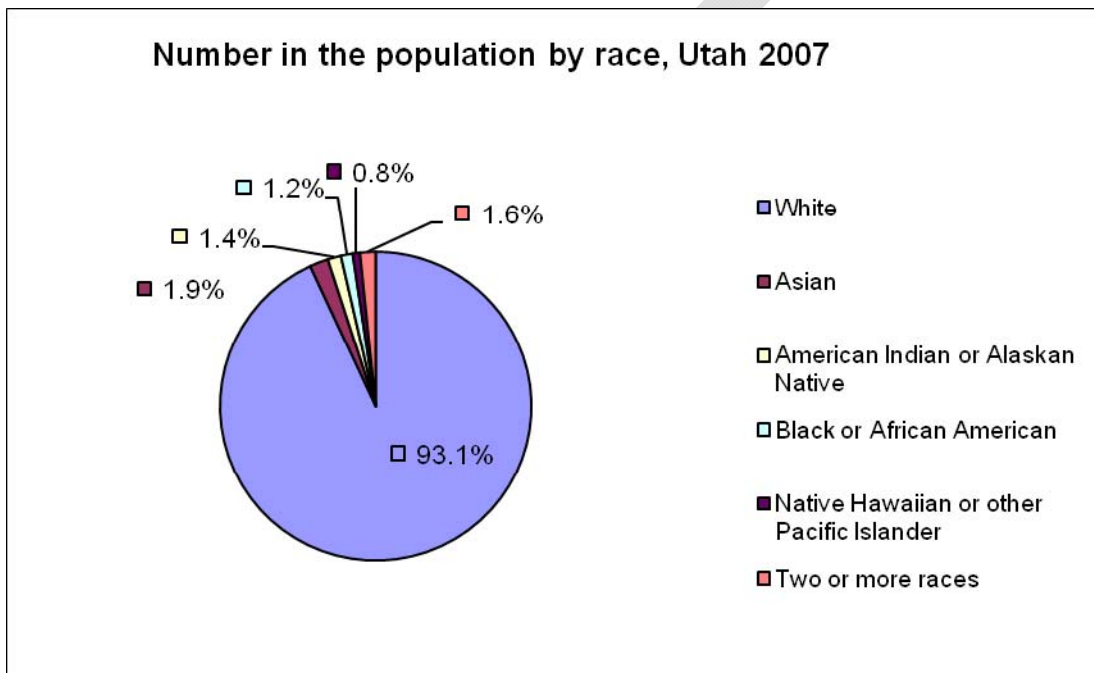


Data Sources: The Utah Population Estimates Committee (UPEC) and the Governor's Office of Planning and Budget (GOPB), Estimates for Counties by Sex and Single Year of Age. For more information, go to <http://www.governor.utah.gov/dea/demographics.html>.

## Race and Ethnicity

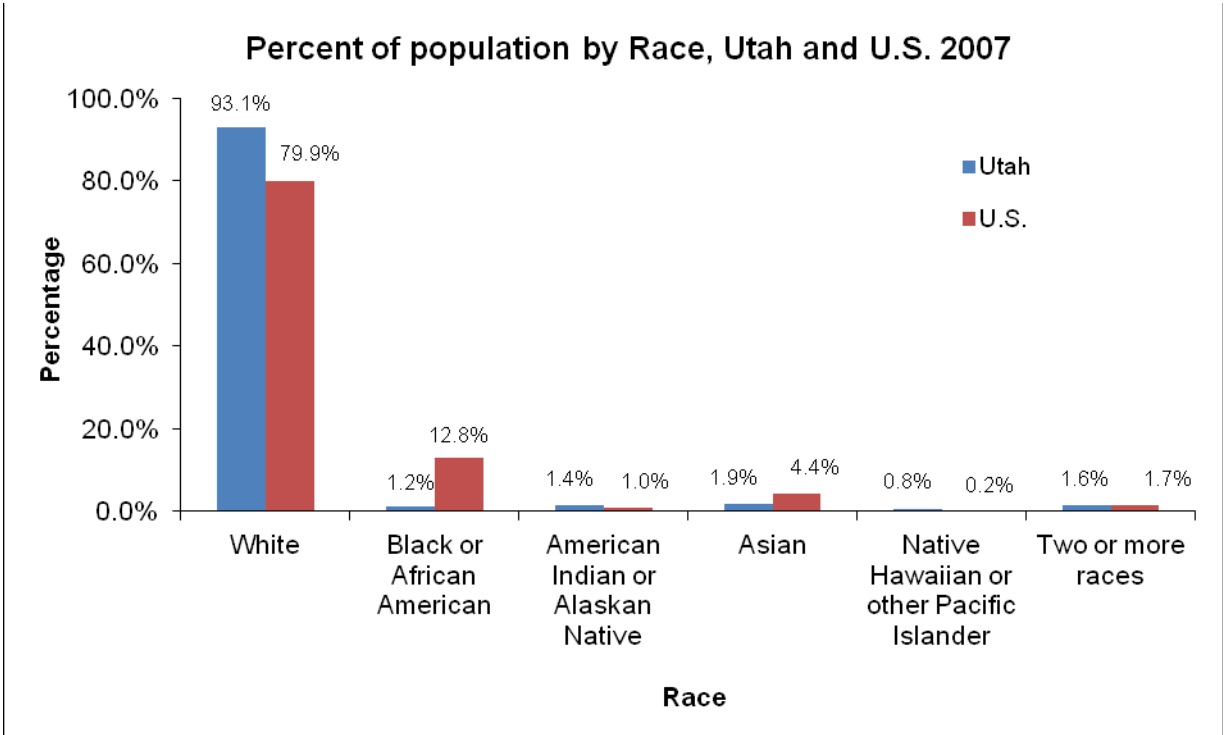
According to the 2000 Census, the majority (93%) of Utahns described themselves as White (Figure X). In the U.S., 80 percent of the population described themselves as White (Figure X). When asked about ethnicity, 12 percent of Utahns described themselves as being from Hispanic or Latino origin, while 88 percent of Utahns, reportedly, were of non-Hispanic or Latino origin (Figure X).

Figure X



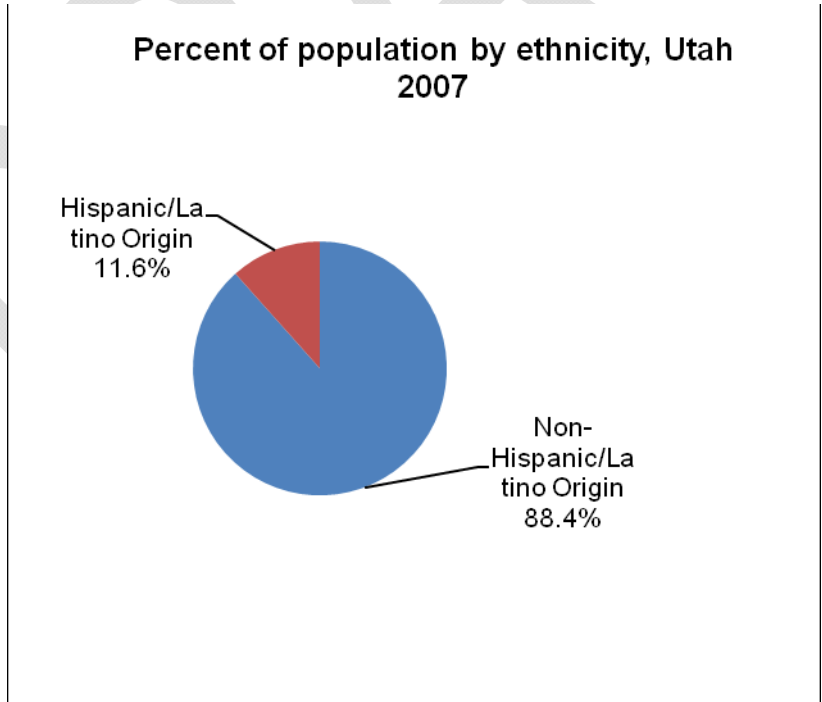
Data Source: Population Estimates Program, U.S. Bureau of the Census.

Figure X



Data Source: Population Estimates Program, U.S. Bureau of the Census.

Figure X



Data Source: Population Estimates Program, U.S. Bureau of the Census.

## **Nativity and Language**

In 2000, only 7 percent of Utahns were born in a foreign country as compared to 11 percent of U.S. residents. Among people five years and older 13 percent spoke a language other than English at home. This is lower than the U.S. percentage which was 18 percent.

## **Religion**

Utah is known for being one of the most religiously homogeneous states in the U.S. with over half (58%) of its adult inhabitants claiming membership in The Church of Jesus Christ of Latter-day Saints (commonly referred to as the Mormon church).<sup>3</sup>

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<sup>3</sup> "U.S. Religious Landscape Survey 2008", the Pew Forum on Religion & Public Life 2008. Accessed 12 March 2009. <http://religions.pewforum.org/pdf/report-religious-landscape-study-full.pdf>

**Ages Birth-14**

# Child Maltreatment

## Overview

Child maltreatment is a serious public health problem nationally and in Utah. From 2003-2007, the Utah Division of Child and Family Services investigated 102,114 cases of child maltreatment. Of these, 42% (42,888) were supported for child abuse or neglect. In 2007, 13,611 children were substantiated as abused or neglected in Utah. This is a rate of 16.7 per 1,000 children and is a 4.4% increase from 2006<sup>4</sup>. It is estimated that one in five children in the United States experience some form of child maltreatment<sup>5</sup>.

Child maltreatment includes child abuse and neglect and according to the CDC is "Any act or series of acts of commission or omission by a parent or other caregiver (e.g., clergy, coach, teacher) that results in harm, potential for harm, or threat of harm to a child<sup>6</sup>." There are four major types of maltreatment: physical abuse, child neglect, sexual abuse, and emotional abuse<sup>7</sup>. In Utah, domestic violence in the presence of a child or children is also against the law and is considered child maltreatment. In 2007, 11 children in Utah died as a result of abuse or neglect<sup>1</sup> and homicide was the fourth leading cause of death for children ages 1 to 14<sup>8</sup>.

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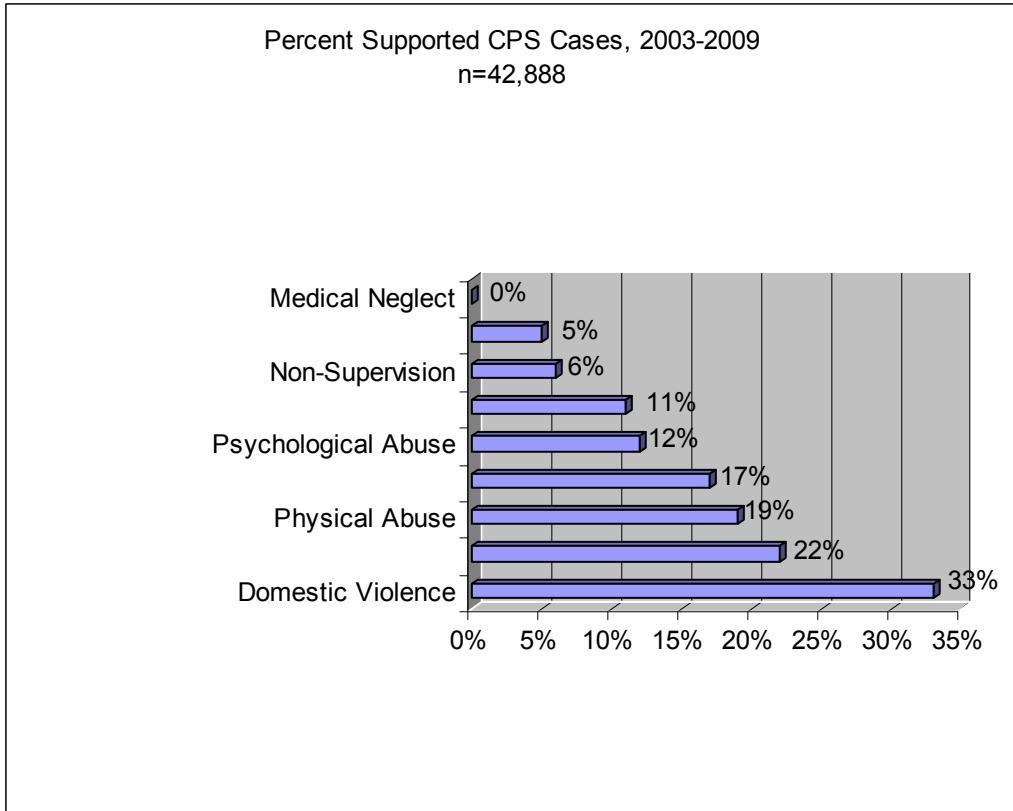
<sup>4</sup> <http://www.cwla.org/advocacy/statefactsheets/2010/utah.pdf> accessed 02/26/2011

<sup>5</sup> <http://www.cdc.gov/violenceprevention/pdf/CM-DataSheet-a.pdf> accessed 03/01/2011

<sup>6</sup> <http://www.cdc.gov/ViolencePrevention/childmaltreatment/definitions.html> accessed 02/28/2011

<sup>7</sup> Child Abuse Prevention and Treatment Act. U.S. Code 42 USC 5101 et seq; 42 USC 5116 et seq.

<sup>8</sup> WISQARS.



\* Note that one case may have more than one supported allegation; therefore, the percentages in the chart above add up to more than 100 percent.

**Healthy People 2020 Objectives**

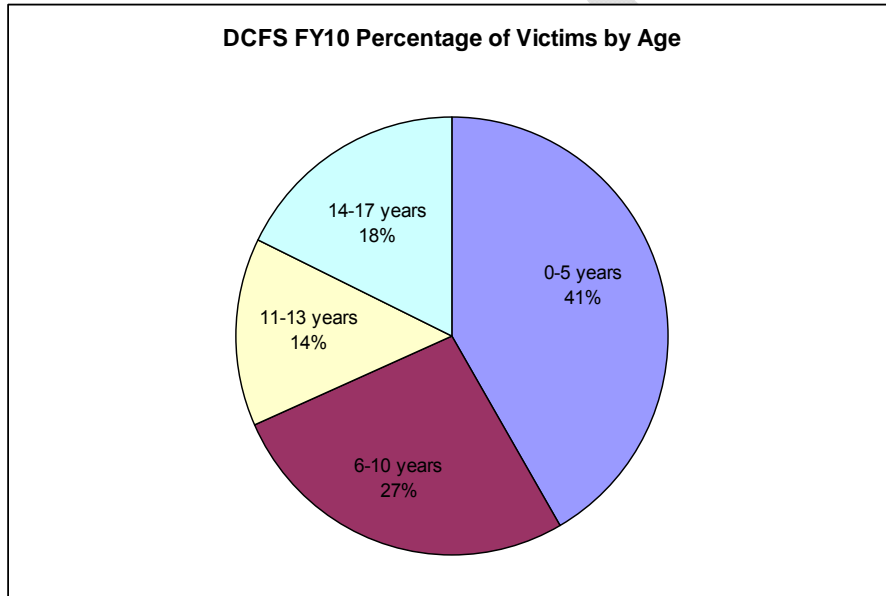
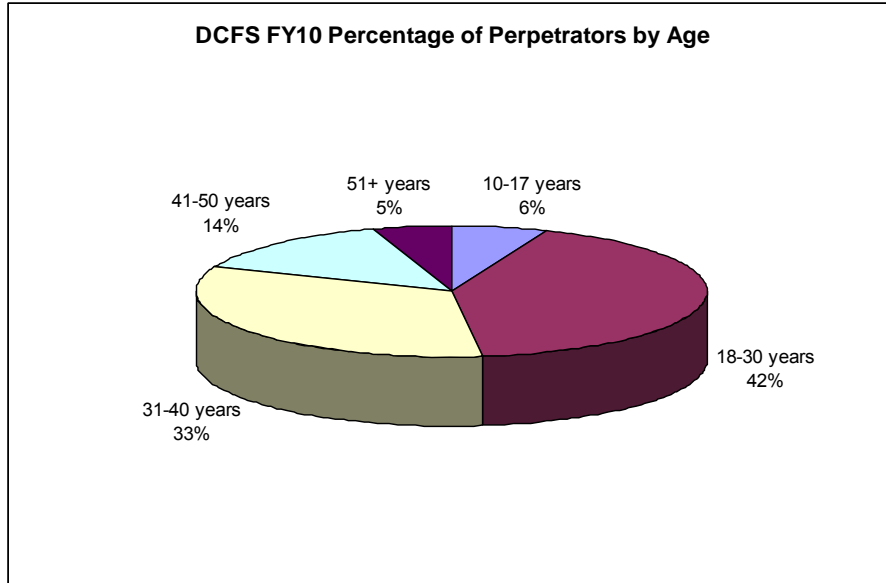
- IVP-37 Reduce Child Maltreatment Deaths
- IVP-38 Reduce nonfatal child maltreatment

**Data, Surveillance and Costs**

According to the Utah Department of Child and Family Services in FY10, of the substantiated child maltreatment cases, 53% were female and 47% were male. Children zero to five comprised 42% of all supported victims, and adults aged 18 to 30 years comprised 42% of supported perpetrators. Approximately 75% of perpetrators were the victim’s parents, stepparent, or adoptive parent.<sup>9</sup>

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<sup>9</sup> Child and Family Services, Department of Human Services, State of Utah, Annual Report 2010. [http://www.hsdscfs.state.ut.us/documents/annualreport2010\\_000.pdf](http://www.hsdscfs.state.ut.us/documents/annualreport2010_000.pdf) accessed 03/01/2011.



Much research has been done about the possible consequences of child abuse and neglect. The effects vary depending on the circumstances of the abuse or neglect, personal characteristics of the child, and the child's environment. Researchers have identified several negative outcomes of child maltreatment. Some of these include:

- Increased risk for victimization or perpetration of intimate partner violence as adults<sup>10</sup>.

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<sup>10</sup> Tjaden P, Thoennes N. Extent, Nature, and Consequences of Intimate Partner Violence: Findings from the National Violence Against Women Survey. Report for grant 93-IJ-CX-0012, funded by the National **Institute of Justice and the Centers for Disease Control and Prevention, National Institute of Justice; 1998.**

- More likely to suffer from physical ailments such as allergies, arthritis, asthma, bronchitis, high blood pressure and ulcers<sup>11</sup>.
- More likely to suffer from psychological consequences such as:
  - Poor mental and emotional health like depression, anxiety, eating disorders, panic disorders, dissociative disorders, ADD/Hyperactivity, PTSD, and suicide attempts<sup>12</sup>.
  - Cognitive difficulties like poor academic performance, poor language development and low classroom functioning<sup>13</sup>.
  - Antisocial traits, borderline personality disorders and violent behavior.
- Increased risk for juvenile delinquency and adult criminality<sup>14</sup>.
- Increased risk of alcohol and drug abuse<sup>15</sup>.

### Costs

There is no means available to assess the overall economic costs of child maltreatment. Numerous studies have documented the link between the maltreatment of children and a wide range of medical, emotional, psychological, and behavioral disorders. These problems follow abused children throughout their lives. Regardless of the economic costs associated with child maltreatment, it is impossible to overstate the tragic consequences endured by the children themselves. The costs of such human suffering are incalculable. Estimates of indirect and direct economic costs of child maltreatment total at least \$94 billion, which includes:

- Direct costs of child maltreatment which include hospitalizations, chronic health problems, mental health care, child welfare response, law enforcement, and judicial system costs are estimated at over \$24 billion.
- Indirect costs such as special education, mental health and health care, juvenile delinquency costs, lost productivity to society, and adult criminality total over \$69 billion<sup>16</sup>.

### Strategies

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<sup>11</sup> Springer, K. W., Sheridan, J., Kuo, D., & Carnes, M. (2007). Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women. *Child Abuse & Neglect*, 31, 517-530.

<sup>12</sup> Teicher, M. D. (2000). Wounds that time won't heal: The neurobiology of child abuse. *Cerebrum: The Dana Forum on brain science*, 2(4), 50-67.

<sup>13</sup> Zolotor, A., Kotch, J., Dufort, V., Winsor, J., Catellier, D., & Bou-Saada I. (1999). School performance in a longitudinal cohort of children at risk of maltreatment. *Maternal and Child Health Journal*, 3(1), 19-27.

<sup>14</sup> English, D. J., Widom, C. S., & Brandford, C. (2004). Another look at the effects of child abuse. *NIJ journal*, 251, 23-24.

<sup>15</sup> Swan, N. (1998). Exploring the role of child abuse on later drug abuse: Researchers face broad gaps in information. *NIDA Notes*, 13(2). Retrieved April 27, 2006, from the National Institute on Drug Abuse website: [www.nida.nih.gov/NIDA\\_Notes/NNVol13N2/exploring.html](http://www.nida.nih.gov/NIDA_Notes/NNVol13N2/exploring.html)

<sup>16</sup> Fromm, S. Total Estimated Cost of Child Abuse and Neglect In the United States Statistical Evidence, Prevent Child Abuse America, 2001.

**Objective 1: By 2011, form a statewide child maltreatment prevention coalition or increase and/or enhance participation in an existing coalition with child maltreatment prevention as their mission.**

**Activities**

1. By 2011, develop partnerships with the Office of Home Visiting, Prevent Child Abuse Utah, the Child Abuse Prevention Program at the Department of Human Services, public health, schools, healthcare providers and others.
2. By 2012, form coalition subcommittees to conduct and implement child maltreatment prevention activities as outlined in the state plan.
3. By 2013, convene a minimum of six, bi-monthly meetings to conduct assessments and surveys; develop the state plan; complete the activities outlined in the plan.
4. By 2014, conduct yearly satisfaction surveys with coalition members.

**Objective 2: By 2013, evaluate the quality of existing data and increase and enhance child maltreatment surveillance systems.**

**Activities**

1. By 2011, complete an analysis of the 2010 Behavioral Risk Factors Surveillance System (BRFSS), Adverse Childhood Experiences (ACE) module.
2. By 2011, publish a report on the findings of the 2010 ACE surveillance study.
3. By 2012, conduct a statewide survey of partners to identify child maltreatment prevention programs in each community.
4. By 2013, develop a list of data needs that are not being addressed by existing data sources.
5. Through 2015, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate child maltreatment data.
6. Through 2015, ensure capacity for the production and dissemination of data reports.

**Objective 3: By 2015, increase the education, training and awareness of child maltreatment in Utah using evidence-based programs and best practices for the prevention of child maltreatment.**

**Activities**

1. By 2011, identify evidence-based programs such as the Early Childhood Home Visitation Program, Nurse-Family Partnerships, evidence based parenting programs and other evidence based child welfare practices.
2. By 2012, develop Utah standards for the prevention of child maltreatment.
3. By 2013, secure funding to increase prevention efforts.
4. By 2014, develop contracts with selected partners.
5. By 2015, conduct comprehensive evaluation of prevention efforts.

Objective 3: By 2013, increase policy efforts for the prevention of child maltreatment.

**Activities**

1. By 2011, develop a child maltreatment, policy subcommittee.
2. By 2012, increase education to policy makers and legislators on child maltreatment incidence and prevention.
3. By 2012, develop child maltreatment policy objectives for inclusion into the state plan.

DRAFT

# Infant Sleep

## Overview

Infant sleep-related deaths include all sudden unexpected deaths without warning when the baby under one year of age was put down to sleep<sup>17</sup>. These include Sudden Infant Death Syndrome (SIDS), SIDS vs. Asphyxia, unintentional injury deaths during sleep, and undetermined deaths in a sleep environment.

Of the 131 infants who died from injuries and/or Sudden Infant Sleep Deaths (SIDS) during 2005-2007, 80.9% were sleep-related. These deaths have common risk factors including sharing a sleep surface with another person, sleeping on an adult mattress, bedding material/items in crib or ill-fitting mattresses, sleeping in a position other than on the baby's back, and having mothers who smoked during pregnancy.

## Healthy People 2020 Objectives

- IVP-4 (Developmental) Increase the number of States and the District of Columbia where 90 percent of deaths among children aged 17 years and under that are due to external causes are reviewed by a child fatality review team
- IVP-5 (Developmental) Increase the number of States and the District of Columbia where 90 percent of sudden and unexpected deaths to infants are reviewed by a child fatality review team
- IVP-24 Reduce unintentional suffocation deaths

## Data, Surveillance and Costs

The table below contains data for the leading cause of infant deaths in Utah from 2005-2007. Data for "Perinatal Conditions, Congenital Malformations, and Medical Conditions" come from IBIS (NCHS 130 selected causes of infant death).<sup>18</sup> Data for "Infant Sleep" and "Other Injuries" reflect cases in the Utah Child Fatality Database. Infant sleep deaths (N=106) accounted for 13.4% of these total deaths and were the third leading cause of death for Utah children in the first year of life.

General Infant Cause of Death	Number of Infant Deaths (age 364 days or less)	Number of Live Births	Infant Mortality Rate per 1,000 Infants by Major Causes (age 364 days or less)
Perinatal Conditions	325	160,055	2.03
Congenital Malformations	234	160,055	1.46

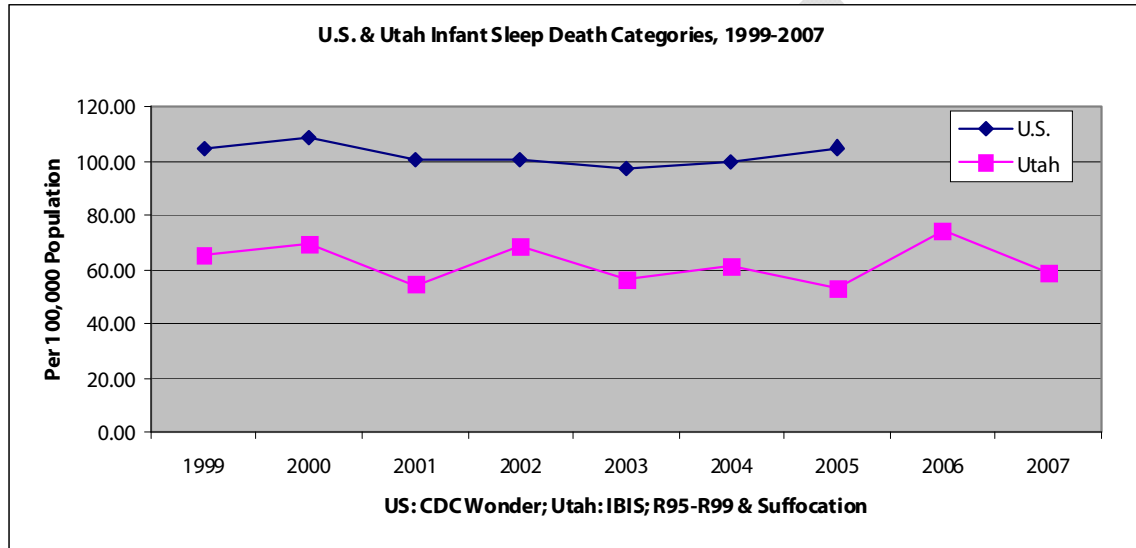
<sup>17</sup> Utah Child Fatality Review Committee database, Utah Department of Health, Violence & Injury Prevention Program

<sup>18</sup> Heron MP. Deaths: Leading causes for 2004. National vital statistics reports; vol 56 no 5. Hyattsville, MD: National Center for Health Data and Statistics. 2007.

Infant Sleep	106	160,055	0.66
Medical Conditions	83	160,055	0.52
Other Injuries	41	160,055	0.26

Utah has a significantly lower rate of infant sleep-related deaths than the U.S. (59.0 per 100,000 infants and 101.0 per 100,000 infants) (Figure X). However, sleep related deaths remain the third leading cause of death among infants in Utah (Figure X).

Figure X



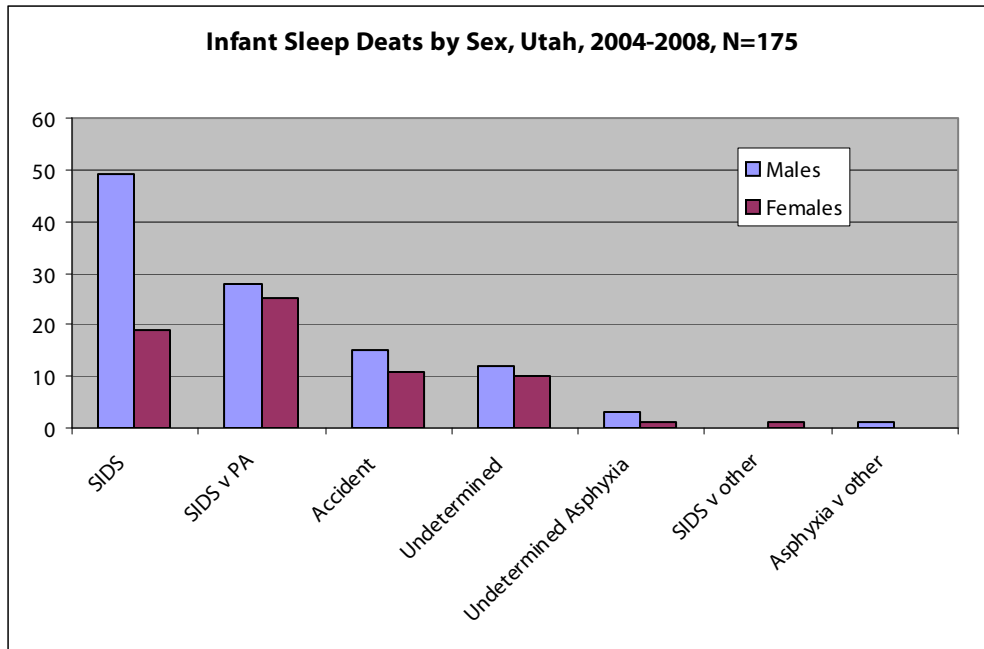
### Age and Sex

SIDS occurs more commonly in male infants than female infants (Figure X).<sup>19</sup> SIDS data overall suggest that infants between the ages of two to four months are at greatest risk. SIDS deaths are very rare under one month of age.<sup>20</sup>

Figure X

<sup>19</sup> Utah Child Fatality Review Committee database, Utah Department of Health, Violence & Injury Prevention Program

<sup>20</sup> National Institute of Child Health and Human Development [http://www.nichd.nih.gov/sids/upload/PART\\_II.pdf](http://www.nichd.nih.gov/sids/upload/PART_II.pdf)



### Race and Ethnicity

In 2007, the rate of infant sleep-related deaths for white non-Hispanics in Utah and Hispanics was 48.6 per 100,000 infants vs. 126.6 per 100,000 infants. However, the rate for Hispanic infants should be interpreted with caution.

### Costs

The total hospitalization charges for infant suffocation injuries in Utah from 1999-2007 was just over \$603,000 (53 cases). The total treat-and-release emergency department visits for infant suffocation injuries in Utah from 1999-2006 was just under \$80,000 (155 cases).

### Strategies

**Objective 1: By 2013, increase data collection on infant-sleep related deaths in Utah.**

#### Activities

1. By 2011, identify primary users of information, assess their needs, and prioritize according to the results of the assessment.
2. By 2011, develop a list of data needs that are not covered by existing data sources.
3. By 2012, determine feasibility of conducting a survey with parents/caregivers to determine reasons for co-sleeping with their infant.
4. By 2013, partner with the Pregnancy Risk Assessment Monitoring System to gather data on the prevalence and circumstances of co-sleeping.

**Objective 2: Through 2015, disseminate information from surveillance data to appropriate stakeholders.**

### **Activities**

1. Through 2015, update infant sleep fact sheets on an annual basis.
2. By 2013, produce an infant sleep-related deaths indicator for the Indicator Based Information System for Public Health (IBIS-PH).
3. Through 2015, disseminate data to appropriate partners for use in community assessments, strategic planning, etc.

<b>Objective 3: By 2015, educate parents/caregivers and healthcare providers about safe infant sleep practices.</b>
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### **Activities**

1. By 2013, conduct a survey with pediatricians, family practitioners, and other healthcare providers who care for infants (e.g. advanced practice nurses) to determine what information they are giving parents/caregivers on safe sleep.
2. By 2013, develop educational materials of best practices for safe sleep for healthcare providers to distribute to their patients.
3. By 2014, provide educational materials on safe infant sleep and sharing sleep surfaces to healthcare provider training programs.
4. By 2013, partner with the Utah Department of Health Child Care Licensing Program to educate child care centers/facilities staff about safe sleep practices.
5. By 2013, evaluate materials with women of childbearing age to determine their effectiveness and whether they are culturally appropriate.
6. By 2013, partner with the Utah Department of Health Baby Your Baby Program, Maternal and Infant Health Program, and Safe Kids Utah to distribute educational materials to women who are pregnant or of child bearing age.
7. By 2013, partner with the Utah Department of Health Tobacco Prevention and Control Program to increase education to pregnant and postpartum women about the dangers of smoking and secondhand smoke.

### **Implementing Organizations**

- Child care centers/facilities
- Child Fatality Review Committee
- Primary Children's Medical Center
- Safe Kids Utah
- Utah Chapter of the American Academy of Pediatrics
- Utah Department of Health
  - Baby Your Baby Program
  - Child Care Licensing Program
  - Maternal and Infant Health Program
  - Pregnancy Risk Assessment Monitoring System
  - Pregnancy Risk Line
  - Tobacco Prevention and Control Program
  - Violence and Injury Prevention Program

- Utah hospital nurseries and healthcare providers

### **Evidence-based Interventions/Best Practices**

The American Academy of Pediatrics<sup>21</sup> recommends the following to reduce the risk of infant sleep-related deaths:

- Back to sleep.
- Use a firm sleep surface.
- Keep soft objects and loose bedding out of the crib.
- Do not smoke during or after pregnancy.
- A separate but close sleeping environment is recommended.
- Consider offering a pacifier at nap time and bedtime.
- Avoid overheating.
- Avoid commercial devices marketed to reduce the risk of SIDS.
- Do not use home monitors as a strategy to reduce the risk of SIDS.
- Encourage tummy time, avoid excessive time in car seat carriers and “bouncers,” and alter the head position during sleep.

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<sup>21</sup> Policy Statement: The Changing Concept of Sudden Infant Death Syndrome: Diagnostic Coding Shifts, Controversies Regarding the Sleeping Environment, and New Variables to Consider in Reducing Risk. Task Force on Sudden Infant Death Syndrome. *Pediatrics* 2005;116(5):1245-1255; originally published online Nov 1, 2005; DOI 101542/peds.2005-1499.

# School-related Injuries

## Overview

From 2003-2007, Utah had a public school (K-12) injury rate of 12.2 injuries per 1,000 students. On average, 6,200 students are injured each year. Over 5,000 school days are missed each year, 9-1-1 is called twice every school day, and a student is hospitalized every other school day because of a school injury in Utah. Injuries are the most common health problem treated by school health personnel. Schools share in the responsibility of preventing school injuries and providing safe school environments for students.<sup>22</sup> School injuries are most likely to occur on playgrounds, athletic fields, or gymnasiums.

Nationally, an estimated 2.2 million children ages 14 and under sustain school-related injuries each year.<sup>23</sup> In Utah, 143 elementary school classrooms can be filled with elementary school students who are injured each year.

The Utah Department of Health Violence and Injury Prevention Program (VIPPP) identifies school injuries through the Student Injury Reporting System (SIRS). Through fact sheets and reports, SIRS data has helped schools identify risk factors for student injuries and develop safety guidelines to reduce the physical and financial impact of student injuries on the individual, family, school, and community.

Although participation in the SIRS is voluntary, compliance has been consistent year to year. However, school injuries may be underreported. A goal of the SIRS is to increase the number of reported injuries, which may suggest that school injuries are increasing when actually only the reporting of injuries is increasing.

## Healthy People 2020 Objectives

- **IVP-12** Reduce nonfatal unintentional injuries
- **IVP-26** Reduce sports and recreation injuries
- **IVP-27** Increase the proportion of public and private schools that require students to wear appropriate protective gear when engaged in school-sponsored physical activities.

## Data, Surveillance and Costs

### Geographic Data

During the 2006-2007 school -year, Southeastern Health District (HD) had the highest school injury rate at 16.3 per 1,000 students. Other Southwest District had the highest school injury rate at 21.3 per 1,000 students among small areas. Other HDs and small areas with

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<sup>22</sup> School Health Guidelines to Prevent Unintentional Injuries and Violence

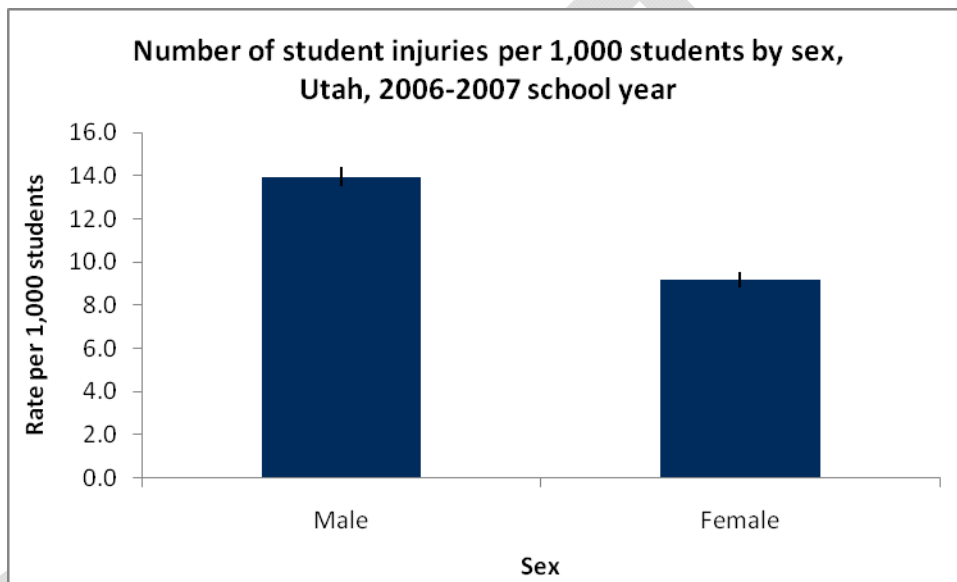
<sup>23</sup> National SAFE KIDS Campaign (NSKC). School Injury Fact Sheet. Washington (DC): NSKC, 2004.

significantly higher and lower school injury rates than the state rate can be found in Appendix X.

### Age and Sex

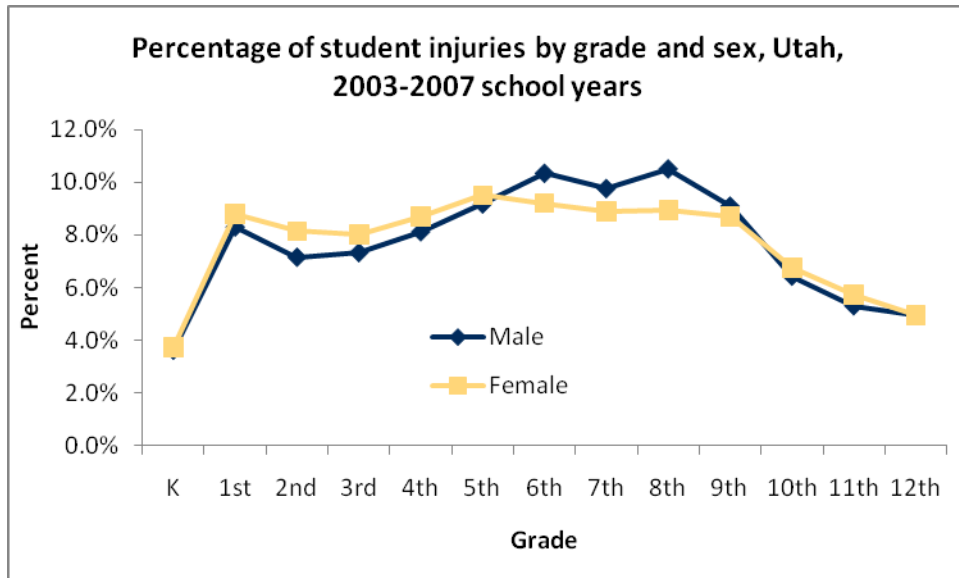
Males have a significantly higher school injury rate compared to females (13.9 and 9.2 per 1,000 students) (Figure X). Females have a higher percentage of school injuries through 5<sup>th</sup> grade and in 10<sup>th</sup> and 11<sup>th</sup> grades. Males have a higher percentage of school injuries in 6<sup>th</sup> through 9<sup>th</sup> grades (Figure x). Male and female kindergartners have the lowest percentage of injuries.

Figure X



Grades with significantly higher school injury rates than the state rate are 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> grades (Figure X). The number of school injuries peaks in 6<sup>th</sup> grade (10.1%), the majority of which are sustained by males, then declines among high school students.

Figure X



### Type of Injuries

Playground injuries are the leading cause of injury among children ages 5-14 in the school environment.<sup>24</sup> In Utah, falls were the cause of 30.7 percent of all playground injuries from 2005-2008. Two-thirds of elementary school injuries occur during recess while playing on bars, running, and walking.

Sports activities cause 34.0 percent of school-related injury hospitalizations. Among school athletes ages 5-14, approximately 20.0 percent of the players have been injured playing basketball, football, soccer, baseball, or softball. The percentage of these injuries increases as children get older. Three-fourths of all school-related spinal cord injuries occur during sports activities. The most common contributing factor in Utah for sports-related injuries are collisions at 46.9 percent. In Utah, males sustain the majority of sports-related injuries (70.4 percent). Sports-related re-injuries are of concern because they can lead to severe traumatic brain injuries or lasting disability in other parts of the body.

### Costs

The total annual cost of school-related injuries to children ages 14 and under exceeds \$74 billion, which includes medical spending, lost quality of life and future earnings.<sup>25</sup>

### Strategies

**Objective 1: By 2013, 100% of all schools participating in the Student Injury Reporting System (SIRS) will report school injuries via a web-based reporting system.**

<sup>24</sup> Ibid

<sup>25</sup> Ibid

### **Activities**

1. By 2011, develop a list of data needs and explore opportunities to add school injury components that are not covered by the current SIRS into the web-based system.
2. By 2011, develop a web-based SIRS.
3. By 2011, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate school injury data.
4. By 2011, identify a school district to test the web-based SIRS.
5. By 2011, train school personnel on reporting school injuries through the web-based SIRS.
6. By 2012, launch the web-based SIRS throughout Utah school districts.
7. By 2012, encourage school personnel to be more vigilant in completing SIR reports via the web-based system for every school injury that meets criteria.
8. By 2013, eliminate the SIRS paper forms and require that school injuries be reported via the web-based system.
9. Through 2015, ensure ongoing input from Utah State Office of Education, schools, local health departments, and Safe Kids Utah.

**Objective 2: Through 2015, information from surveillance data will be disseminated to appropriate stakeholders and updated annually.**

### **Activities**

1. By 2011, ensure capacity for the production and dissemination of school injury data publications.
2. By 2011, identify and target surveillance data for specific audiences (e.g., Utah State Legislature, schools, local health departments, etc.)
3. By 2012, develop audience and topic specific school injury fact sheets with a dissemination plan for each fact sheet.
4. By 2012, produce School District Reports.
5. By 2012, provide school district administration with guidelines for using the School District Reports to identify injury problems and implement prevention strategies.
6. By 2012, develop a publicly accessible data query system through the Indicator Based Information System for Public Health (IBIS-PH).
7. By 2013, evaluate School District Reports and fact sheets as to their usefulness in helping school administrators implement injury prevention strategies in their districts.
8. Through 2015, update general school injury fact sheets and indicators.

**Objective 3: By 2015, the number of schools implementing safety protocols will increase by a minimum of 10%.**

### **Activities**

1. Through 2015, through Risk Management, coordinate and schedule annual safety and hazard inspections on playgrounds, gym and sports fields including follow up on corrective actions by using standardized playground safety checklists and equipment

guidelines (U.S. consumer Product Safety Commission, National Program for Playground Safety).

2. Through 2015, promote National Playground Safety Week and distribute information to school districts on Safety Week activities.
3. By 2012, provide appropriate safety rules on all school injury publications.
4. By 2012, include information on the National Program for Playground Safety (NPPS) National Action Plan for the Prevention of Playground Injuries on Playground Injury Fact Sheets and encourage schools to use this document while developing playground supervision guidelines.
5. By 2012, districts will receive information on the health and safety requirements for public schools for equipment condition, first aid training, prescription medication storage, etc. outlined by state guidelines at [www.rules.utah.gov/publicat/code/r392/r392-200.htm#T7](http://www.rules.utah.gov/publicat/code/r392/r392-200.htm#T7).
6. By 2012, promote and support efforts of local health departments, schools, Safe Kids Utah, Utah PTA, Utah State Office of Education, Utah School Boards Association, Utah Office of Risk Management, and Utah School Superintendents Association to increase awareness of playground and sports safety and ways to reduce school injuries by posting event information on the Safe Kids Utah calendar at [www.safekidsutah.org](http://www.safekidsutah.org).
7. By 2012, educate athletes, parents, and coaches on how to recognize, treat, and prevent concussions through the use of school injury publications.
8. By 2012, include information on the CDC "Heads Up Concussion in Youth Sports" online training program in Sports-Related Injury Fact sheets to encourage coaches, athletic trainers, referees, and other school personnel who work with student athletes to take the training.
9. By 2013, develop concussion policy statements with school district superintendents and risk managers.
10. By 2015, evaluate the use of school injury fact sheets.

### **Implementing Organizations**

- Local elementary and middle schools
- Safe Kids Utah
- Utah Department of Health
  - Bureau of Health Promotion Schools Workgroup
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Utah Nurses Association
- Utah Office of Risk Management
- Utah PTA
- Utah School Boards Association
- Utah State Office of Education
- Utah School Superintendents Association

### **Evidence-based Interventions/Best Practices**

- Centers for Disease Control and Prevention Heads Up on Brain Injury  
<http://www.cdc.gov/TraumaticBrainInjury/>
- Centers for Disease Control and Prevention Protect the Ones You Love: Falls  
<http://www.cdc.gov/SafeChild/Falls/index.html>

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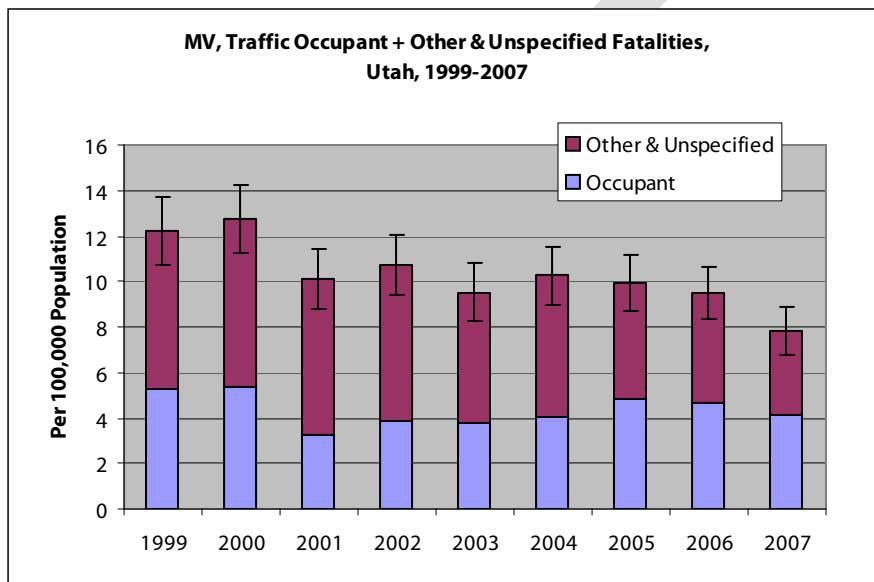
**Ages 15-17**

# Motor Vehicle Crashes

## Overview

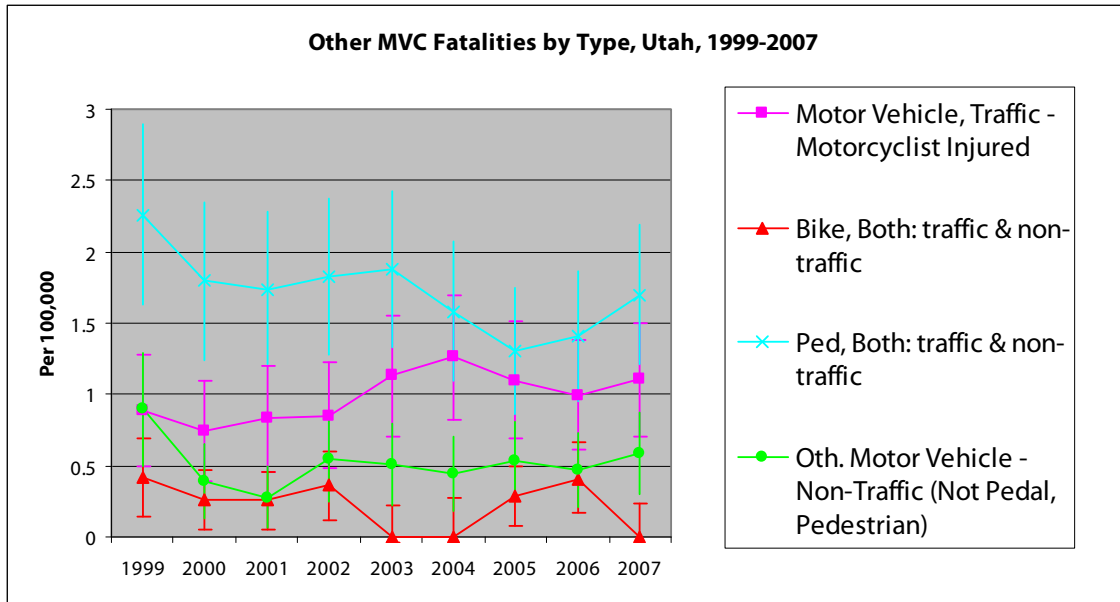
Motor vehicle crashes (MVCs) are the second leading cause of injury death, behind poisoning, for all ages in Utah.<sup>26</sup> Motor vehicle crash data includes eight categories: MV traffic-occupant injured, MV traffic-motorcyclist injured, MV traffic-pedal cyclist injured, MV traffic-pedestrian injured, MV traffic-other and unspecified, pedal cyclist MV non-traffic and other, pedestrian MV non-traffic and other, and other MV non-traffic and other. The last category listed includes all terrain vehicles, snowmobiles, and motor-cross-related injuries.

Since 1999, Utah's age-adjusted MVC traffic-occupant and MV traffic-other and unspecified death rate has decreased. However, motorcyclist fatalities, pedal cyclist fatalities, pedestrian fatalities, and other MV non-traffic (ATVs, snowmobiles, motor-cross) fatalities have remained fairly consistent during this time.<sup>27</sup>



<sup>26</sup> IBIS

<sup>27</sup> IBIS

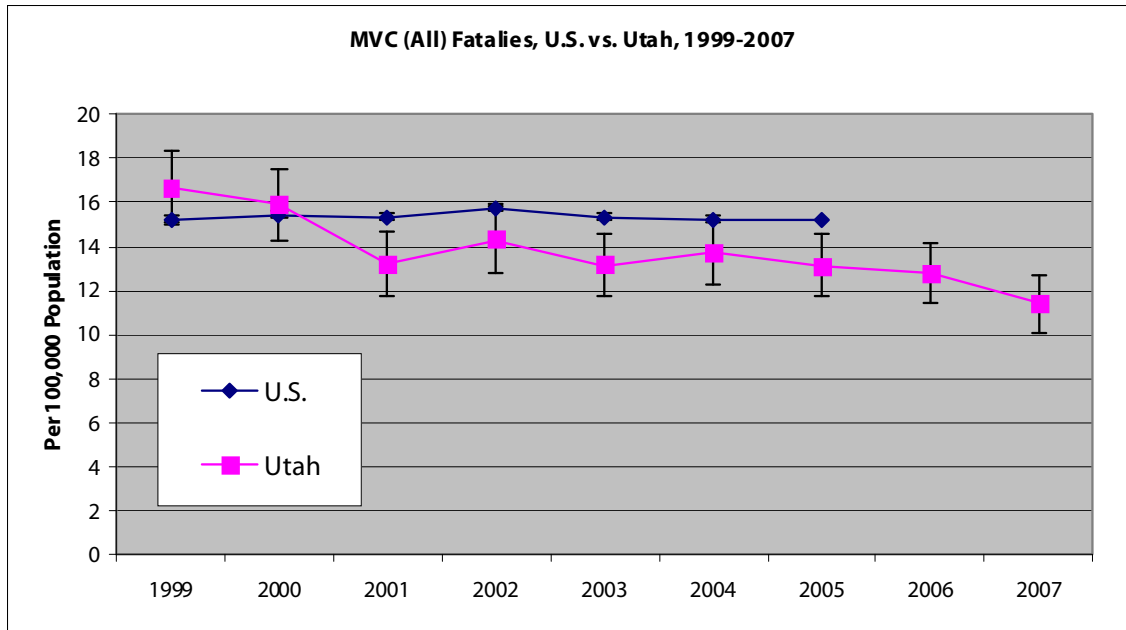


### Healthy People 2020 Objectives

- IVP-13 Reduce motor vehicle crash-related deaths
- IVP-14 Reduce nonfatal motor vehicle crash-related injuries
- IVP-15 Increase use of safety belts
- IVP-16 Increase age-appropriate vehicle restraint system use in children
- IVP-17 Increase the number of States and the District of Columbia with “good” graduated driver licensing (GDL) laws
- IVP-18 Reduce pedestrian deaths on public roads
- IVP-19 Reduce nonfatal pedestrian injuries on public roads
- IVP-20 Reduce pedal cyclist deaths on public roads
- IVP-21 Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders
- IVP-22 Increase the proportion of motorcycle operators and passengers using helmets

### Data, Surveillance and Costs

Since 2001, Utah has had a lower MVC death rate than the U.S. (NEED REFERENCES)



In 2005, Utah's MVC fatality rate was 13.2 per 100,000 population compared to the U.S. age-adjusted MVC death rate of 15.2 per 100,000 population. From 2003-2007, the MV traffic hospitalization rate for Utah was 6.4 per 10,000 population compared to 8.4 per 10,000 population for the U.S. From 2003-2007, the MV traffic emergency department visit (ED) rate for Utah was 76.8 per 10,000 population and 100.0 per 10,000 population for the U.S. **(NEED REFERENCES)**

### Geographic

From 2003-2007, Tricounty HD had the highest MVC fatality rate at 29.4 per 100,000 population and highest MVC hospitalization rate at 10.3 per 10,000 population among local health districts. Weber-Morgan HD had the highest MVC ED visit rate at 88.6 per 10,000 population among local health districts.

Among small areas, Grand/San Juan Co. had the highest MVC fatality rate at 30.6 per 100,000 population, Magna had the highest MVC ED visit rate at 116.3 per 10,000 population, and TriCounty HD had the highest MVC hospitalization rate at 10.3 per 10,000 population.

Other HDs and small areas with significantly higher and lower MVC rates than the state rate can be found in Appendix X.

### Age and Sex

The highest MVC death rate from 2003-2007 was among Utahns aged 65 years and older (20.4 per 100,000 population), followed by those aged 18-24 (16.7 per 100,000 population), Utahns aged 15-17 (15.0 per 100,000 population), and those aged 25-64 (12.2 per 100,000 population).

The highest MVC hospitalization rate from 2003-2007 was among Utahns aged 15-17 (10.8 per 10,000 population), followed by those aged 18-24 (9.6 per 10,000 population), Utahns aged 65 and older (8.2 per 10,000 population), and those aged 25-64 (6.7 per 10,000 population).

The highest MVC ED visit rate from 2003-2007 was among Utahns aged 18-24 (161.1 per 10,000 population), followed by those aged 15-17 (154.0 per 10,000 population), and Utahns aged 25-64 (83.6 per 10,000 population).

Males aged 15-17 had a significantly higher rate for all MVC data categories except MVC fatalities (five categories combined) and motorcyclist crash hospitalizations. Females aged 15-17 had a significantly higher rate for all MVC data categories except MVC fatalities (five categories combined), MVC fatalities occupant and other unspecified, motorcyclist hospitalizations, pedestrian hospitalizations, and pedal cyclists ED visits.

### **Seatbelt Use**

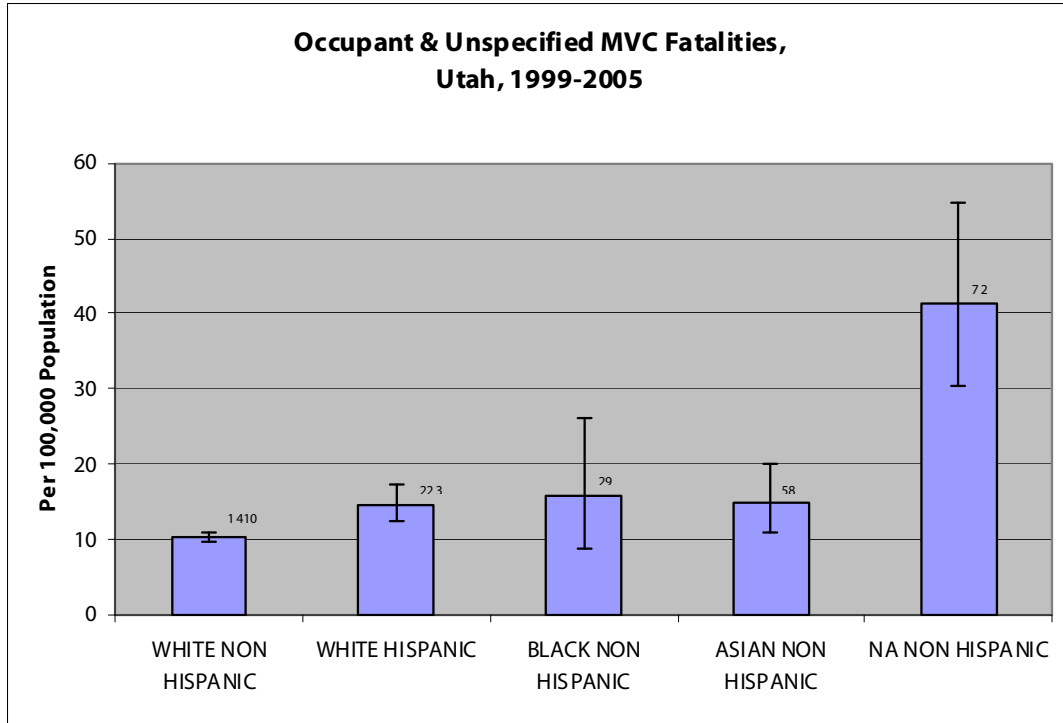
According to the Youth Risk Behavior Surveillance System (YRBSS) in 2007, 94% of Utah high school students reported that they sometimes, most of the time, or always wear a seatbelt. However, observation studies conducted at Utah high schools show seatbelt use varies greatly across the state, with rural and frontier areas tending to have lower seatbelt use than urban areas.<sup>28</sup>

### **Race and Ethnicity<sup>29</sup>**

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<sup>28</sup> YRBSS

<sup>29</sup> WISQARS, data years 2001-2005



### Costs

From 2003-2007, the emergency department visit charges for all eight categories of MVC data totaled more than \$250 million. Of this total, approximately \$39 million was due to ATV/snowmobile/motorcross injuries, \$32 million due to motorcyclist crashes, \$23 million due to pedestrian injuries, and \$16 million due to pedal cyclist crashes.<sup>30</sup>

From 2003-2007, the hospitalization charges for all eight categories of MVC data totaled more than \$270 million. Of this total, approximately \$43 million was due to ATV/snowmobile/motorcross injuries, \$35 million due to motorcyclist crashes, \$24 million due to pedestrian injuries, and \$17 million due to pedal cyclist crashes.<sup>31</sup>

### Strategies

**Objective 1: By 2015, continue implementation and evaluation of the “Don’t Drive Stupid” campaign for teens ages 15-19.**

### Activities

1. Through 2015, coordinate of efforts through the Utah Teen Driving Task Force.
2. Through 2015, ensure capacity and dedicated staff to implement the “Don’t Drive Stupid” campaign and to assist with school-related educational efforts across the state.

<sup>30</sup> IBIS

<sup>31</sup> IBIS

3. Through 2015, continue the teen memorial booklet each year.
4. Through 2015, provide support, grief counseling resources, and connections to community resources/opportunities to families who participate in the teen memorial booklet project.
5. Through 2015, disseminate the teen memorial booklet to stakeholders (e.g., driver education instructors, legislators and policymakers, partners, participating families, etc.).
6. Through 2015, brand community education efforts with the "Don't Drive Stupid" theme.
7. By 2012, identify outcome objectives (in addition to crash and fatality data) for the Zero Fatalities/Don't Drive Stupid campaigns to measure success.
8. By 2012, increase personalization of "Don't Drive Stupid" messages to local schools/communities (i.e. teen fatality memorial day event, teen memorial booklet stories, etc.).
9. By 2013, develop a booklet of examples of how families and communities have gotten involved around a teen motor vehicle-related tragedy in their area.
10. By 2013, increase social marketing efforts including development of a "Don't Drive Stupid" blog for sharing ideas among injury prevention professionals.
11. By 2014, develop a "best practice" parent component to supplement the "Don't Drive Stupid" educational activities with teens.
12. By 2014, expand social marketing activities and educational messages to include helmet use and all terrain vehicle (ATV) safety.
13. By 2015, increase access to low-cost ATV helmets.
14. By 2015, assess and revamp, if needed, Utah's driver education program and driving requirements for new drivers.
15. By 2015, increase educational efforts on the Ute tribal reservation.

**Objective 2: By 2015, expand the "Don't Drive Stupid" campaign to address children in grades 5-9.**

**Activities**

1. By 2013, determine effectiveness of the "Don't Drive Stupid" messaging for children in grades 5-9.
2. By 2012, personalize messages to communities based on local stories and local data.
3. By 2014, develop and implement a service learning project for students in grades 7-12 to educate children in grades K-6 about motor vehicle safety.

**Objective 3: By 2015, increase collaboration with community based organizations and other partners that work with teens.**

**Activities**

1. By 2011, identify and recruit additional partners who work with teens (e.g., EmpoweredParents.org, Prevention Dimensions, One Good Reason, etc.).

2. By 2011, increase local health department participation on the Utah Teen Driving Task Force.
3. By 2012, increase coordination and support of law enforcement's efforts to reach young drivers (e.g., Utah Highway Patrol's Adopt a High School program).
4. By 2012, further develop and define partnership between Safe Kids and Unified Fire Authority.
5. By 2014, explore ongoing partnerships with the Utah Auto Association and local car dealers.
6. By 2015, explore ongoing partnership with insurance companies.
7. By 2015, increase collaborative efforts with child-oriented organizations/agencies/groups and child-friendly businesses.

**Objective 4: By 2015, continue implementation of the "Alive at 25" Program.**

**Activities**

1. By 2011, ensure capacity to continue implementation of the "Alive at 25" Program.
2. By 2014, increase implementation of the "Alive at 25" Program.
3. By 2015, evaluate success of the "Alive at 25" Program and disseminate results to stakeholders.

**Objective 5: By 2015, enact policies/legislation regarding motor vehicle safety.**

**Activities**

1. By 2013, increase opportunities to educate elected officials and policy makers on motor vehicle-related trends and challenges.
2. Through 2015, provide data-driven fact sheets on MVC-related legislation to advocates, Utah Legislature, and other stakeholders.
3. Through 2015, maintain the current child booster seat law.
4. By 2015, pass legislation banning use of cell phones while driving.
5. By 2015, support policies/legislation regarding distracted driving, impaired driving, drowsy driving, and aggressive driving.
6. By 2015, pass a statewide child helmet law for ages 18 and under.
7. By 2015, explore legislation to strengthen Utah's graduated drivers license requirements.
8. By 2015, pass legislation requiring a mandatory educational class for teens who receive a ticket because they were not wearing a seat belt.
9. By 2015, explore legislation that would require teens to retake driver education again if they receive a certain number of tickets within a given time frame.

**Objective 6: By 2015, continue use of existing surveillance systems.**

**Activities**

1. By 2011, ensure capacity for the production and dissemination of motor vehicle crash-related data publications.

2. By 2011, collaborate with the Utah Highway Safety Office to identify and target surveillance data for specific audiences (e.g., Utah State Legislature, local health departments, etc.)
3. Through 2015, maintain publicly accessible data query system through the Indicator Based Information System for Public Health (IBIS-PH).

### **Implementing Organizations**

- American Automobile Association (AAA), Utah chapter
- Caring Connections
- Driver education schools and instructors
- Don't Drive Stupid campaign
- Insurance companies
- Law enforcement agencies
- Primary Children's Medical Center
- Safe Kids Utah
- Utah's 12 Local Health Departments
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah Department of Public Safety
  - Utah Highway Safety Office
- Utah PTA
- Utah Department of Transportation
- Utah Safety Council
- Utah State Office of Education
- Utah Teen Driving Task Force
- Zero Fatalities campaign

### **Evidence-based Interventions/Best Practices**

Zero Fatalities (<http://ut.zerofatalities.com/>) is a mutual effort from various states addressing the top behaviors that are killing people on America's roads. The focus varies by state, but includes behaviors such as drowsy driving, distracted driving, aggressive driving, impaired driving, and not buckling up. In 2006, the Utah Department of Transportation initiated the Zero Fatalities program along with the support of the Utah Department of Public Safety, the Federal Motor Carrier Safety Administration, FHWA, private businesses, and citizens, with the sole purpose of decreasing the number of deaths on Utah's roads.

The National Safety Council-designed Alive at 25 curriculum (<http://alivateat25.us/>) is a defensive driving education program proven to work with young drivers 15 to 24 years of age to take responsibility for their driving decisions. Since 1995, more than 400,000 young adults across the U.S. have learned life-saving defensive driving skills through Alive at 25. In a study conducted by the Colorado State Patrol in 2003, of 1000 random Alive at 25 graduates (500 voluntary and 500 court ordered), 89% of the respondents indicated they believed they

would be a safer driver as a result of taking the class and, 92% of the respondents identified that they believed the class helped them improve their driving knowledge and skills.

Teendriversource.org (<http://teendriversource.org/>) is a team of researchers, educators, and communicators from the Center for Injury Research and Prevention at The Children's Hospital of Philadelphia®(CHOP). Together with State Farm®, CHOP has created The Young Driver Research Initiative (YDRI), a unique industry-academic alliance committed to reducing teen driver crashes.

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# Suicide Attempts

## Overview

More people survive suicide attempts than actually die. In Utah from 2003-2007, there are an estimated 11 suicide attempts for each completed suicide. Those who survive suicide attempts are often seriously injured and need medical care. They often have depression and other mental health problems. Most people feel uncomfortable talking about suicide. Victims are frequently blamed and families stigmatized. Friends, families, and communities may feel shock, anger, guilt, and depression and are usually left devastated.<sup>32</sup>

From 2003-2007, the self-inflicted injury emergency department visit (ED) rate for Utah was 10.2 per 10,000 population compared to 4.2 per 10,000 population for the U.S. The self-inflicted injury hospitalization rate was 4.6 per 10,000 population for Utah and 5.8 per 10,000 population for the U.S.

## Healthy People 2020 Objectives

- **IVP-41** Reduce nonfatal intentional self-harm injuries

## Data, Surveillance and Costs

### Geographic Data

From 2003-2007, Tooele County Health District (HD) had the highest self-inflicted injury ED visit and hospitalization rate (13.3 and 7.6 per 10,000 population). Brigham City had the highest self-inflicted injury ED visit rate at 20.4 per 10,000 population among small areas and Carbon/Emery Counties had the highest self-inflicted hospitalization rate at 9.1 per 10,000 population among small areas. Other HDs and small areas with significantly higher and lower self-inflicted injury rates than the state rate can be found in Appendix X.

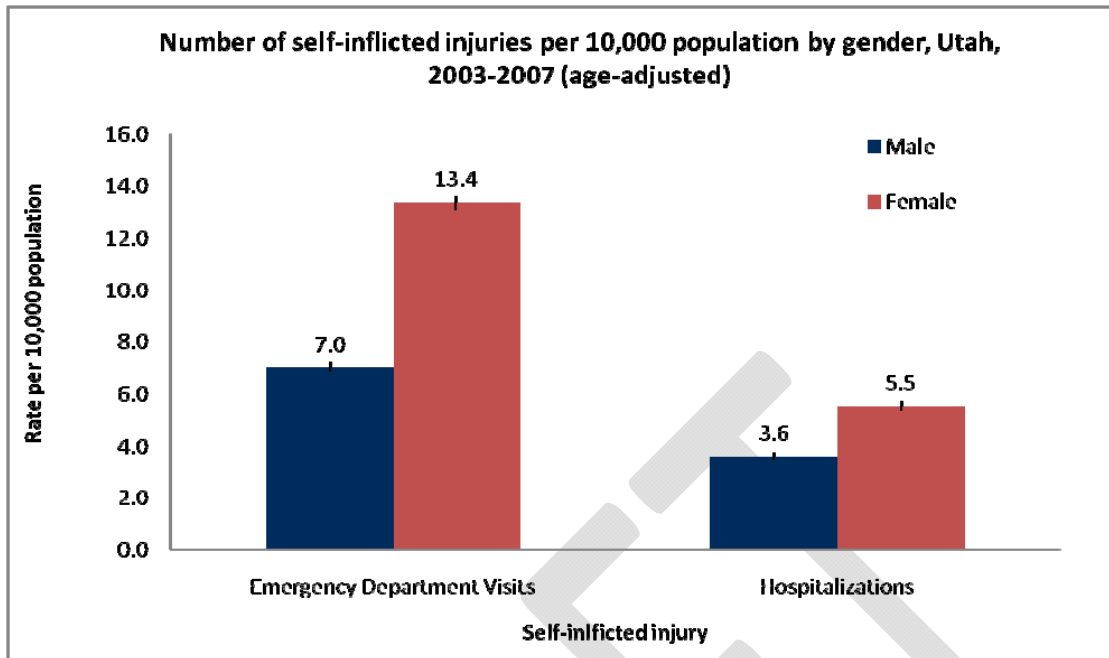
### Age and Sex

More females attempt suicide than males. In Utah, from 2003-2007, females had a significantly higher age-adjusted self-inflicted ED visit (13.4 per 10,000 population) and hospitalization (5.5 per 10,000 population) rate compared to males (7.0 and 3.6 per 10,000 population) (Figure X).

Figure X

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<sup>32</sup> Centers for Disease Control and Prevention. *Understanding Suicide Fact Sheet 2006*. National Center for Injury Prevention and Control.



When broken down by age group, 15-17 year old males (21.9 per 10,000 population) and females (52.6 per 10,000 population) had the highest self-inflicted ED visit rates among age groups (Figure X). For self-inflicted injury hospitalizations, 15-17 year old females (11.2 per 10,000 population) had the highest rate and 18-24 year old males (7.5) per 10,000 population) had the highest rates among age groups (Figure X)

Figure X

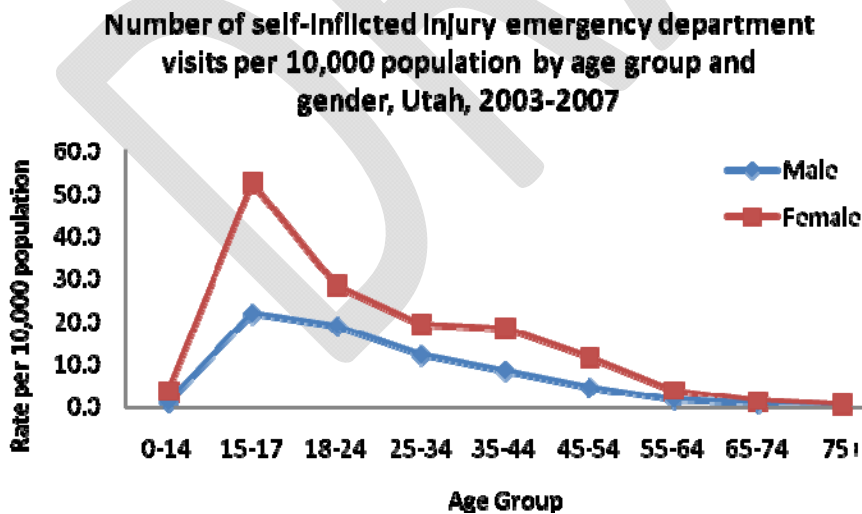
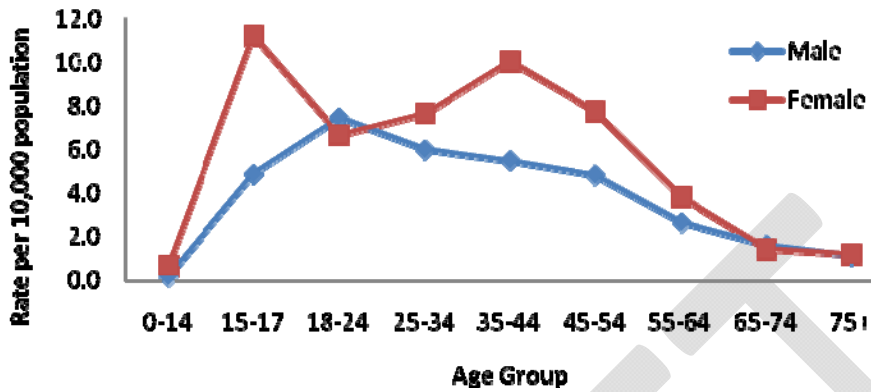


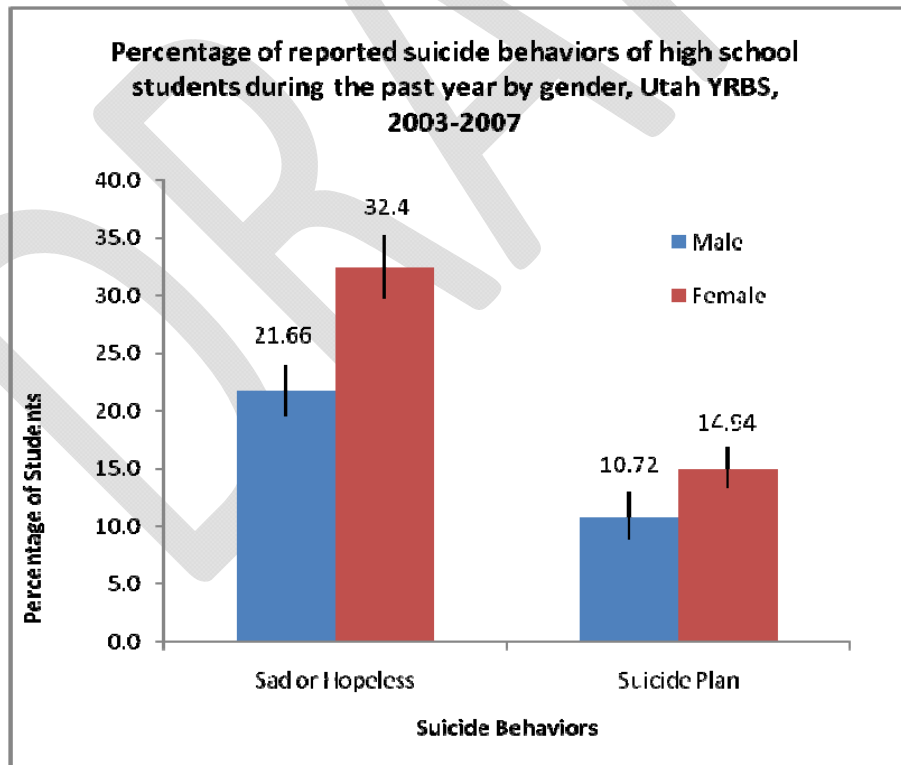
Figure X

**Number of self-inflicted injury hospitalizations per 10,900 population by age group and gender, Utah, 2003-2007**



According to the Youth Risk Behavior Survey (YRBS), females are more likely to report feeling sad or hopeless compared to males (32.4 percent and 21.7 percent). In addition, females are more likely to make a suicide plan compared to males (14.9 percent and 10.7 percent) (Figure X).

Figure X



**Method of Self-inflicted Injury**

The most common method of injury for self-inflicted injuries was poisoning followed by cut / pierce for both males and females.

## **Costs**

From 2003–2007, \$17 million was spent in Utah on hospital and emergency department charges for the treatment of self-inflicted injuries. From 2003 to 2007, there has been and 98.8 percent increase in total costs for hospitalizations and a 93.3 percent increase in total costs for ED visits.

## **Strategies**

**Objective 1: By 2013, at least one existing surveillance system will be improved to adequately monitor and measure suicide and suicide attempts in Utah.**

### **Activities**

1. By 2011, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate youth suicide data.
2. By 2011, identify primary users of information, assess their needs, and prioritize according to the results of the assessment.
3. By 2011, evaluate the Utah Violent Death Reporting System, Child Fatality Review Reporting System, and the Youth Risk Behavior Survey for their usefulness in monitoring suicide and attempted suicides in Utah.
4. By 2011, develop a list of data needs that are not covered by existing data sources.
5. By 2012, explore opportunities to add suicide components to existing data collection systems to gather more complete information about specialty populations at risk for suicide, to screen for distress and dysfunction associated with mental illness, and to close gaps in suicide data collection.
6. By 2013, assess the extent to which suicide and suicide attempts occur.

**Objective 2: Through 2015, information from surveillance data will be disseminated to appropriate stakeholders.**

### **Activities**

1. By 2011, ensure capacity for the production and dissemination of suicide data publications.
2. By 2011, identify and target surveillance data for specific audiences (e.g., Utah State Legislature, schools, local health departments, etc.)
3. By 2011, develop audience and topic specific suicide fact sheets with a dissemination plan for each fact sheet.
4. By 2012, develop, support, and/or disseminate lessons learned from the Utah Youth Suicide Study.
5. By 2013, evaluate suicide data publications as to their usefulness in helping school administrators, local health districts and community based organizations implement suicide prevention strategies.

**Objective 3: By 2015, more than half of Utah high school students will understand that suicide is a preventable public health problem.**

**Activities**

1. By 2011, promote efforts to reduce access to lethal means and methods of self-harm (including firearms, drugs, and poisons).
2. By 2011, continue statewide collaboration to implement the activities and recommendations of the Utah Suicide Prevention Plan and the Utah Suicide Prevention Action Network.
3. By 2011, designate a person with responsibility for coordinating safety activities at school and promoting a school climate that demonstrates respect, support, and caring that does not tolerate harassment or bullying.
4. By 2011, encourage schools to develop and implement written school policies regarding substance abuse, in addition to disciplinary policies that are implemented consistently.
5. By 2012, assess the knowledge, attitudes, and beliefs of teenagers towards being a consumer of mental health, substance abuse, and suicide prevention services.
6. By 2012, choose suicide prevention programs and curricula that are grounded in theory or that have scientific evidence of effectiveness.
7. Provide adequate staffing and resources, including budget, facilities, staff development, and time to implement suicide prevention curricula.
8. By 2013, implement suicide prevention curricula consistent with national and state standards for health education that help teenagers develop the knowledge, attitudes, behavioral skills, and confidence needed to adopt and maintain safe lifestyles and to advocate for health and safety.
9. Infuse youth suicide prevention into multiple school activities and classes.
10. Use active learning strategies, interactive teaching methods, and proactive classroom management to encourage involvement in learning about substance abuse, mental health, and suicide prevention.
11. By 2015, re-assess the knowledge, attitudes, and beliefs of teenagers towards being a consumer of mental health, substance abuse, and suicide prevention services.

**Objective 4: By 2015, partnerships between schools and community based organizations to provide suicide prevention resources and services will increase by half.**

**Activities**

1. By 2011, define minimum course objectives for providers of health care and counseling graduate programs in youth suicide risk and protective factors.
2. By 2011, ensure that staff members are knowledgeable about suicide and have the resources needed to prevent suicide.
3. By 2012, educate, support, and involve family members about risk and protective factors for suicide.

4. By 2012, train local media representatives to promote accurate and responsible representation of suicidal behaviors, mental illness, and related issues in compliance with national reporting guidelines.
5. By 2013, train clergy, educational staff, and law enforcement officers on identifying and responding to person in mental health crisis and/or risk for suicide.
6. By 2014, coordinate school-based counseling, psychological, social, and health services to meet the physical, mental, emotional, and social health needs of teenagers.
7. By 2014, identify and provide assistance to teenagers who have attempted suicide.

### **Implementing Organizations**

- Local junior high and high schools.
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Utah PTA
- Utah School Boards of Association
- Utah State Office of Education
- Utah School Superintendents Association
- Department of Human Services
  - Division of Substance Abuse and Mental Health
- National Alliance on Mental Illness - Utah

### **Evidence-based Interventions/Best Practices**

- CARE (Care, Assess, Respond, Empower) <http://www.reconnectingyouth.com>
- CAST (Coping and Support Training) <http://www.reconnectingyouth.com/cast>
- Lifelines Curriculum <http://www.hazelden.org/web/public/lifelines.page>,  
<http://www.state.me.us/suicide>
- Reconnecting Youth: A Peer Group Approach to Building Life Skills  
<http://www.reconnectingyouth.com>
- SOS Signs of Suicide <http://www.mentalhealthscreening.org/highschool>
- TeenScreen <http://www.teenscreen.org>

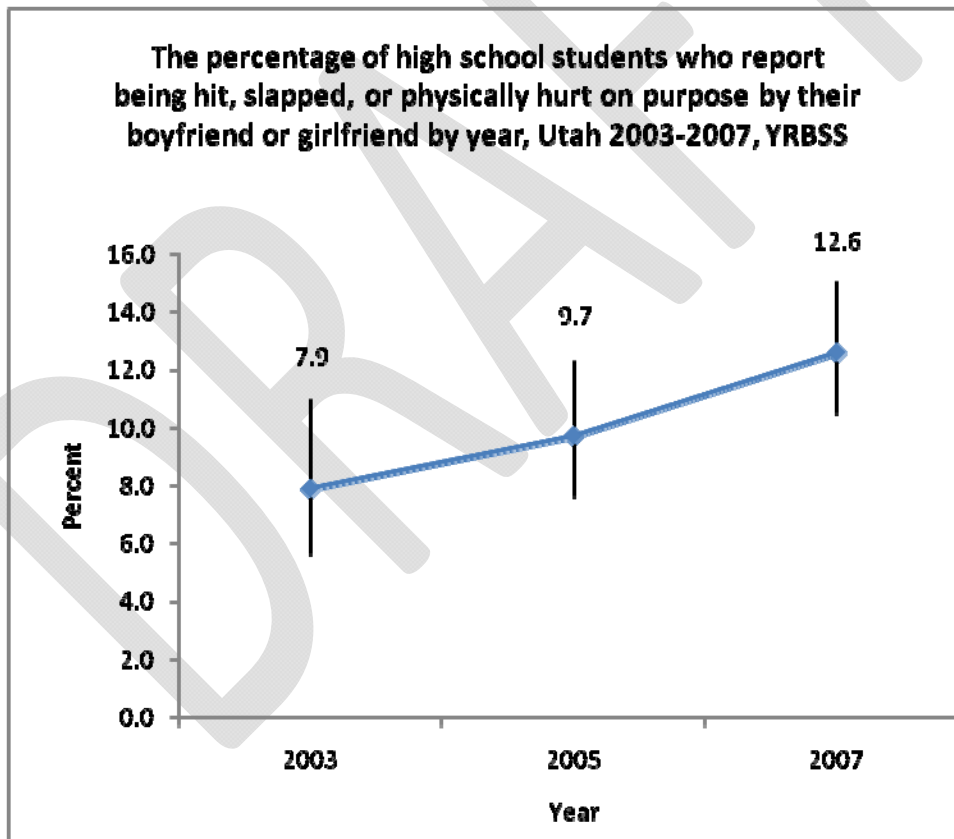
# Teen Dating Violence

## Overview

Dating violence is controlling, abusive, and aggressive behavior in a romantic relationship. It can happen in any relationship and includes verbal, emotional, physical, and/or sexual abuse. Dating violence is not a one-time incident but occurs again and again. It is not the same as having disagreements. In a dating violence relationship, one person is afraid or intimidated by the other person.

Nationally, one in three high school students have been or will be involved in an abusive relationship. In 2007, 12.6 percent of Utah high school students reported that they have been hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend<sup>33</sup>, an increase of 59.5 percent from 2003 (Figure X).

Figure X



## Healthy People 2020 Objectives

<sup>33</sup> 2007 Utah Youth Risk Behavior Survey.

- **IVP-34** Reduce physical fighting among adolescents
- **IVP-39** (Developmental) Reduce violence by current or former intimate partners
- **IVP-40** (Developmental) Reduce sexual violence

## Data, Surveillance and Costs

### Geographic Data

#### Age and Sex

Although there were no significant differences in the percentage of Utah high school students who reported they have been hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend between males (11.0 percent) and females (8.9 percent) from 2003-2007 (Figure X), it increased significantly between 9<sup>th</sup> and 12<sup>th</sup> grades, with 12<sup>th</sup> graders (15.8 percent) being significantly more likely to report dating violence compared to 9<sup>th</sup> graders (7.4 percent) (Figure X).

Figure X

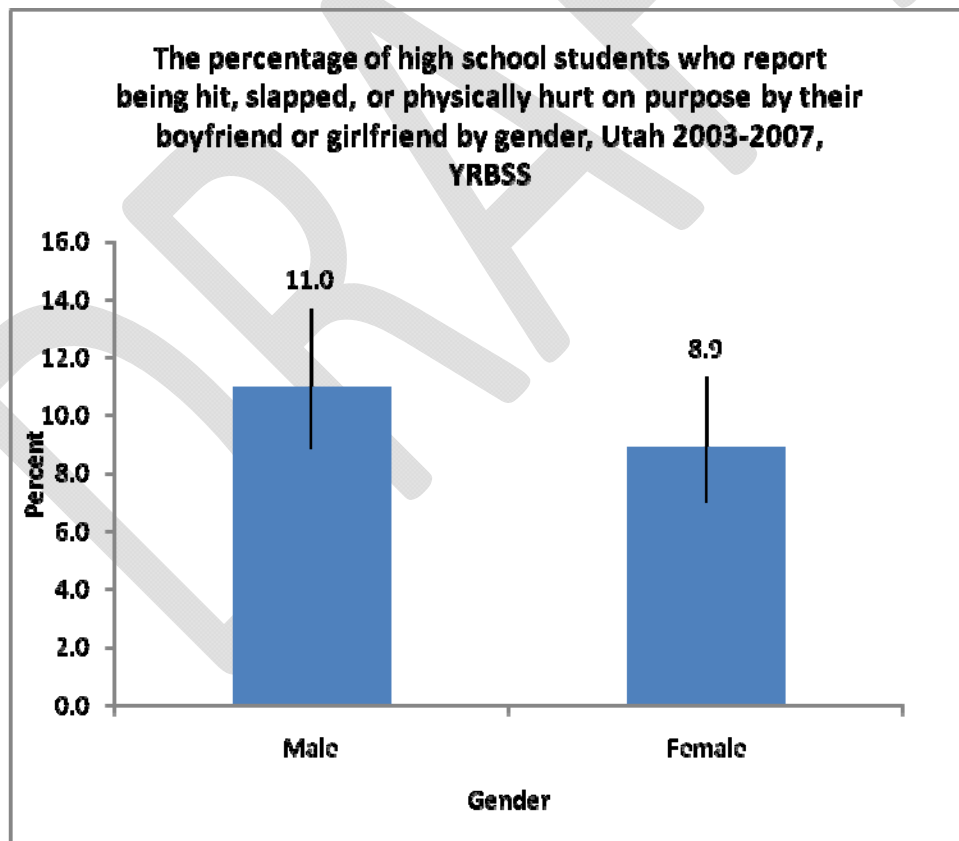
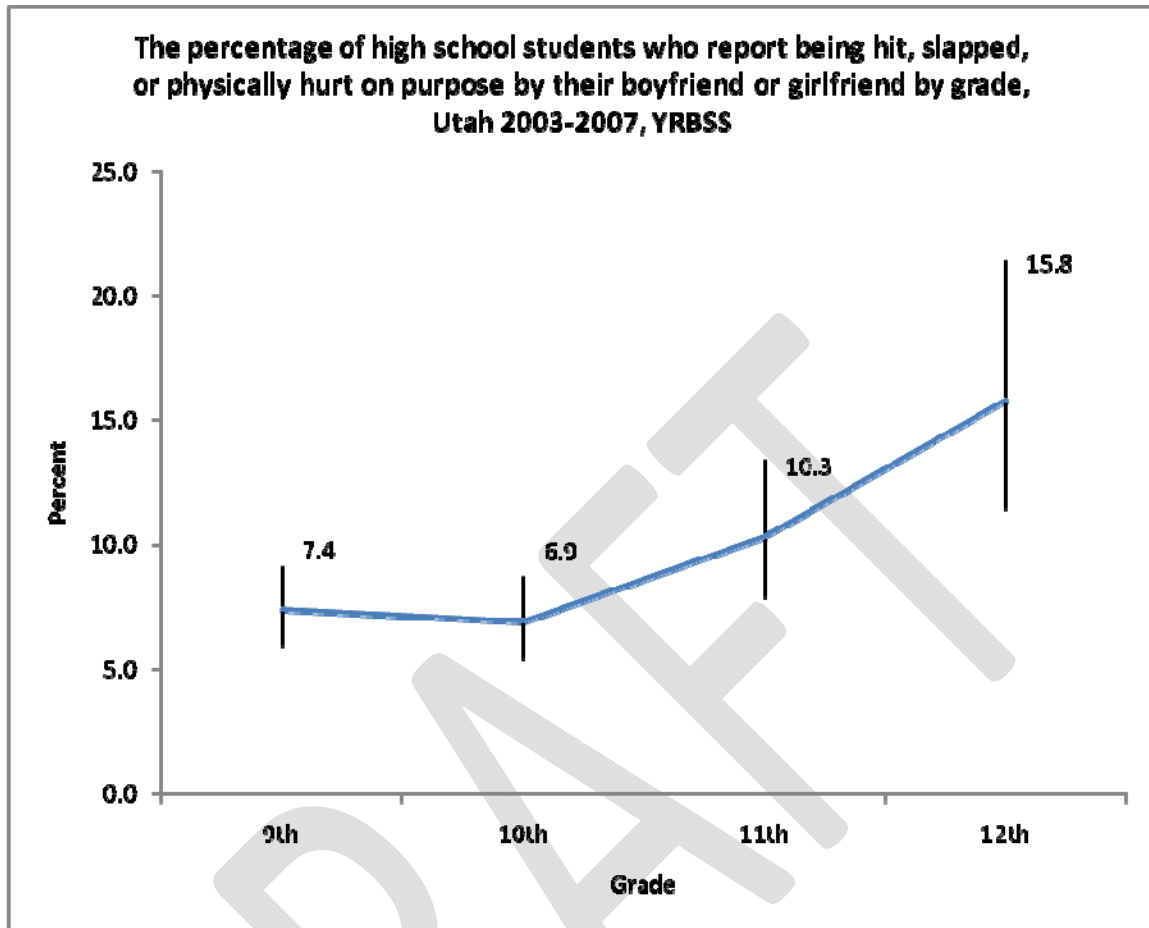


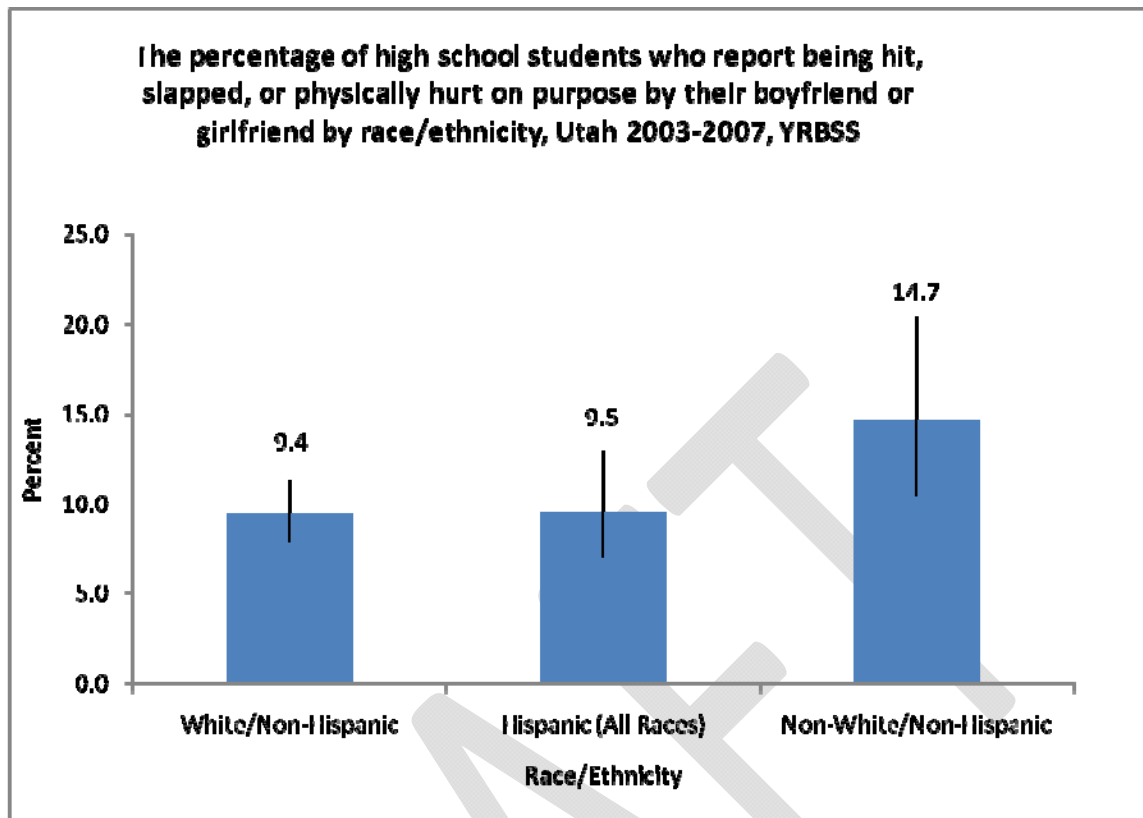
Figure X



### Race and Ethnicity

According to the 2003-2007 Utah YRBSS, non-White/non-Hispanic persons (14.7 percent) report being hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend more than White/non-Hispanic (9.4 percent) and Hispanic persons (9.5 percent). It is important to note that due to cultural, socio-economic, and educational reasons, some people may be more apt to seek help and report abuse than others.

Figure X



### **Pregnancy Risk Assessment Monitoring System (PRAMS)**

PRAMS is a surveillance project that collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. According to 2004-2005 Utah PRAMS data, women who were less than 17 years old reported the highest prevalence of physical abuse in the 12 months prior to pregnancy at 12.6%, compared to 2.7% of women who reported physical abuse during pregnancy overall. Women aged 17 or younger reported the highest rates of physical abuse by a current or former husband/partner during pregnancy (10.1%) followed by unmarried women (9.5%). Overall, 6.0% of PRAMS respondents reported emotional abuse. Nearly 25.0% of women aged 17 or younger reported emotional abuse.

### **Costs**

Domestic/dating violence costs the U.S. \$5.8 billion annually in health related costs, with \$4.1 billion for victims needing medical and mental health services.<sup>34</sup>

### **Strategies**

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<sup>34</sup> *Costs of Intimate Partner Violence Against Women in the United States*. 2003. Centers for Disease Control and Prevention, National Centers for Injury Prevention and Control. Atlanta, GA.

**Objective 1: By 2013, at least one new surveillance system will be developed or an existing surveillance system will be improved to adequately monitor and measure dating violence in Utah.**

**Activities**

1. By 2011, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate dating violence data.
2. By 2011, evaluate and improve the use and quality of existing dating violence surveillance systems.
3. By 2011, identify primary users of dating violence information, assess their needs, and prioritize according to the results of the assessment.
4. By 2011, develop a list of dating violence data needs that are not covered by existing data sources.
5. By 2012, explore opportunities to add dating violence components to existing data collection systems.
6. By 2012, develop a method of collecting dating violence data not measured in existing surveillance systems.
7. By 2013, assess the extent to which dating violence occurs in Utah.

**Objective 2: By 2015, social norms that support healthy relationships will increase by 25% in Utah schools.**

**Activities**

1. By 2011, designate a person with responsibility for coordinating safety activities at school and promoting a school climate that demonstrates respect, support, and caring, and does not tolerate harassment or bullying.
2. By 2011, encourage schools to develop and implement written policies regarding dating violence, in addition to disciplinary policies that are implemented consistently.
3. By 2011, increase the number of schools that participate in Utah's Dating Violence Awareness Week Activities and Media Contest.
4. By 2012, assess the knowledge, attitudes, and behaviors of teenagers towards healthy relationships and dating violence through a narrative evaluation project being conducted by the Utah Department of Health.
5. By 2012, choose dating violence prevention programs and curricula that are grounded in theory or that have scientific evidence of effectiveness.
  - a. Provide adequate staffing and resources, including budget, facilities, staff development, and time to implement dating violence prevention curricula.
6. By 2013, implement dating violence prevention curricula consistent with national and state standards for health education that help teenagers develop the knowledge, attitudes, behavioral skills, and confidence needed to adopt and maintain safe lifestyles and to advocate for health and safety.
  - a. Infuse dating violence prevention curricula into multiple school activities and classes.

- b. Use active learning strategies, interactive teaching methods, and proactive classroom management to encourage involvement in learning about healthy relationships and dating violence prevention.
7. By 2015, re-assess the knowledge, attitudes, and behaviors of teenagers towards healthy relationships and dating violence.
8. Through 2015, support and maintain Utah's Dating Violence Prevention Task Force.

**Objective 3: By 2015, partnerships between schools and community based organizations to provide dating violence resources and services will increase by half.**

### **Activities**

1. By 2011, ensure that staff members are knowledgeable about dating violence and have the resources needed to prevent violence at school, at home, and in the community.
2. By 2011, increase promotion of Utah's statewide DV and Rape crisis and information hotlines in schools.
3. By 2013, train and support all personnel to be positive role models for a healthy and safe lifestyle.
4. By 2013, establish strong links with community resources, such as local domestic violence and rape crisis programs, and identify providers to bring services aimed at victims and perpetrators into the schools.
5. By 2014, coordinate school-based counseling, psychological, social, criminal justice and health services to meet the physical, mental, emotional, and social health needs of teenagers.
6. By 2015, identify and provide assistance to teenagers who have witnessed domestic or dating violence, who have been the victims of dating violence or harassment, and who are being victimized or harassed. Coordinate and report to law enforcement to reduce risks and monitor for lethality and therefore, liability.

### **Implementing Organizations**

- Local junior high and high schools.
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Utah PTA
- Utah School Boards of Association
- Utah State Office of Education
- Utah School Superintendents Association
- Local domestic violence shelters
- Local rape crisis programs
- Utah Domestic Violence Coalition
- Utah Coalition Against Sexual Assault
- School Counselors
- Local Police Departments

- Sexual Assault Response Teams

### **Evidence-based Interventions/Best Practices**

- Safe Dates Prevention Program for Dating Abuse <http://www.hazelden.org/safedates>
- Men Can Stop Rape <http://www.mencanstoprape.org/>
- Peace Over Violence <http://peaceoverviolence.org/>
- The Green Dot <http://www.livethegreendot.com/>

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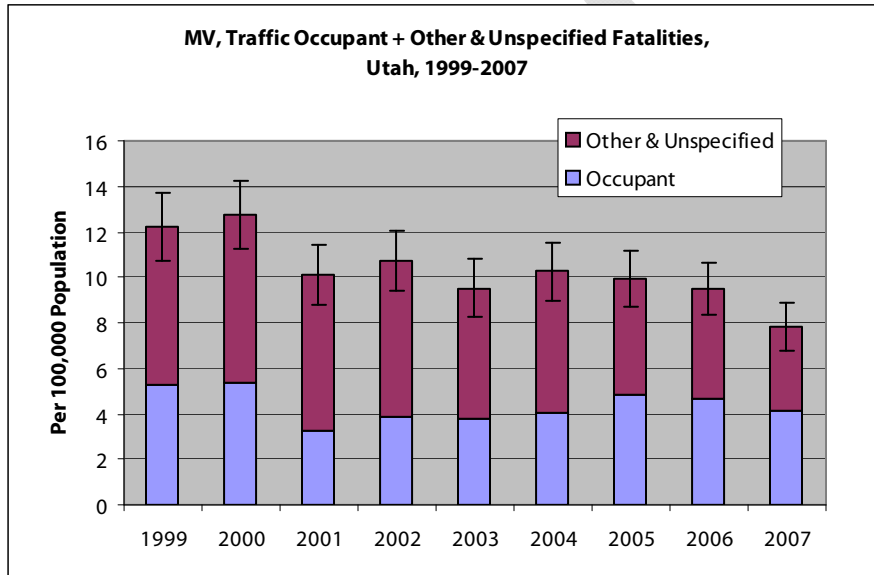
**Ages 18-24**

## Motor Vehicle Crashes

### Overview

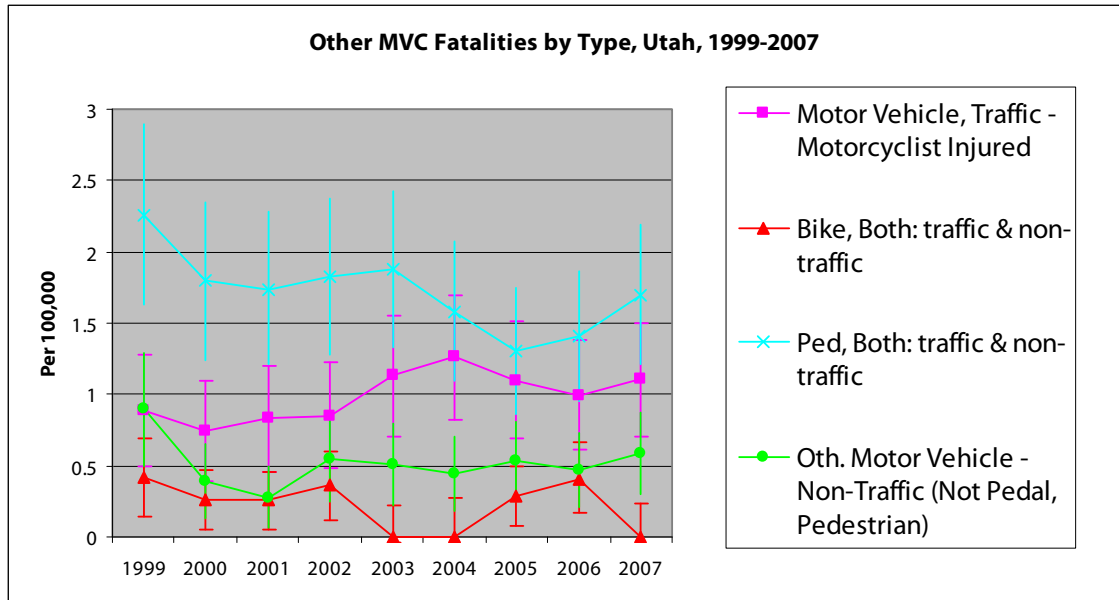
Motor vehicle crashes (MVCs) are the second leading cause of injury death, behind poisoning, for all ages in Utah.<sup>35</sup> Motor vehicle crash data includes eight categories: MV traffic-occupant injured, MV traffic-motorcyclist injured, MV traffic-pedal cyclist injured, MV traffic-pedestrian injured, MV traffic-other and unspecified, pedal cyclist MV non-traffic and other, pedestrian MV non-traffic and other, and other MV non-traffic and other. The last category listed includes all terrain vehicles, snowmobiles, and motor-cross-related injuries.

Since 1999, Utah's age-adjusted MVC traffic-occupant and MV traffic-other and unspecified death rate has decreased. However, motorcyclist fatalities, pedal cyclist fatalities, pedestrian fatalities, and other MV non-traffic (ATVs, snowmobiles, motor-cross) fatalities have remained fairly consistent during this time.<sup>36</sup>



<sup>35</sup> IBIS

<sup>36</sup> IBIS

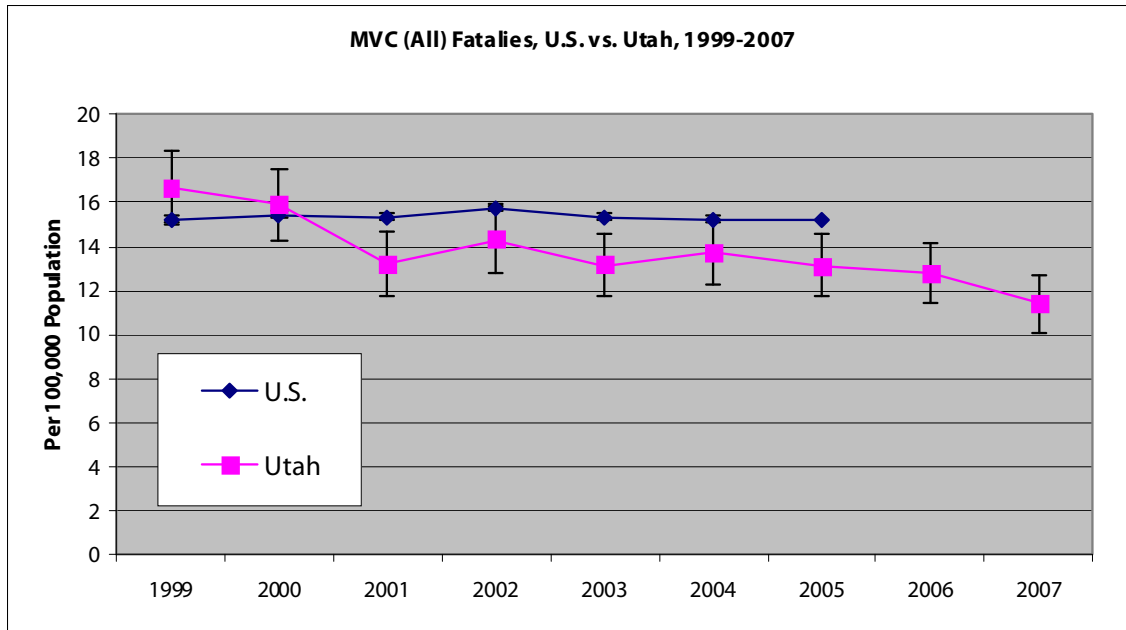


### Healthy People 2020 Objectives

- IVP-13 Reduce motor vehicle crash-related deaths
- IVP-14 Reduce nonfatal motor vehicle crash-related injuries
- IVP-15 Increase use of safety belts
- IVP-16 Increase age-appropriate vehicle restraint system use in children
- IVP-17 Increase the number of States and the District of Columbia with “good” graduated driver licensing (GDL) laws
- IVP-18 Reduce pedestrian deaths on public roads
- IVP-19 Reduce nonfatal pedestrian injuries on public roads
- IVP-20 Reduce pedal cyclist deaths on public roads
- IVP-21 Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders
- IVP-22 Increase the proportion of motorcycle operators and passengers using helmets

### Data, Surveillance and Costs

Since 2001, Utah has had a lower MVC death rate than the U.S. (NEED REFERENCES)



In 2005, Utah's MVC fatality rate was 13.2 per 100,000 population compared to the U.S. age-adjusted MVC death rate of 15.2 per 100,000 population. From 2003-2007, the MV traffic hospitalization rate for Utah was 6.4 per 10,000 population compared to 8.4 per 10,000 population for the U.S. From 2003-2007, the MV traffic emergency department visit (ED) rate for Utah was 76.8 per 10,000 population and 100.0 per 10,000 population for the U.S. **(NEED REFERENCES)**

### Geographic

From 2003-2007, Tricounty HD had the highest MVC fatality rate at 29.4 per 100,000 population and highest MVC hospitalization rate at 10.3 per 10,000 population among local health districts. Weber-Morgan HD had the highest MVC ED visit rate at 88.6 per 10,000 population among local health districts.

Among small areas, Grand/San Juan Co. had the highest MVC fatality rate at 30.6 per 100,000 population, Magna had the highest MVC ED visit rate at 116.3 per 10,000 population, and TriCounty HD had the highest MVC hospitalization rate at 10.3 per 10,000 population.

Other HDs and small areas with significantly higher and lower MVC rates than the state rate can be found in Appendix X.

### Age and Sex

The highest MVC death rate from 2003-2007 was among Utahns aged 65 years and older (20.4 per 100,000 population), followed by those aged 18-24 (16.7 per 100,000 population), Utahns aged 15-17 (15.0 per 100,000 population), and those aged 25-64 (12.2 per 100,000 population).

The highest MVC hospitalization rate from 2003-2007 was among Utahns aged 15-17 (10.8 per 10,000 population), followed by those aged 18-24 (9.6 per 10,000 population), Utahns aged 65 and older (8.2 per 10,000 population), and those aged 25-64 (6.7 per 10,000 population).

The highest MVC ED visit rate from 2003-2007 was among Utahns aged 18-24 (161.1 per 10,000 population), followed by those aged 15-17 (154.0 per 10,000 population), and Utahns aged 25-64 (83.6 per 10,000 population).

Males aged 18-24 had a significantly higher rate for all MVC data categories except pedestrian hospitalizations and pedal cyclist ED visits. Females aged 18-24 had a significantly higher rate for all MVC data categories except MVC fatalities (five categories combined), motorcyclist hospitalizations, pedestrian hospitalizations, and pedal cyclists ED visits.

### **Seatbelt Use**

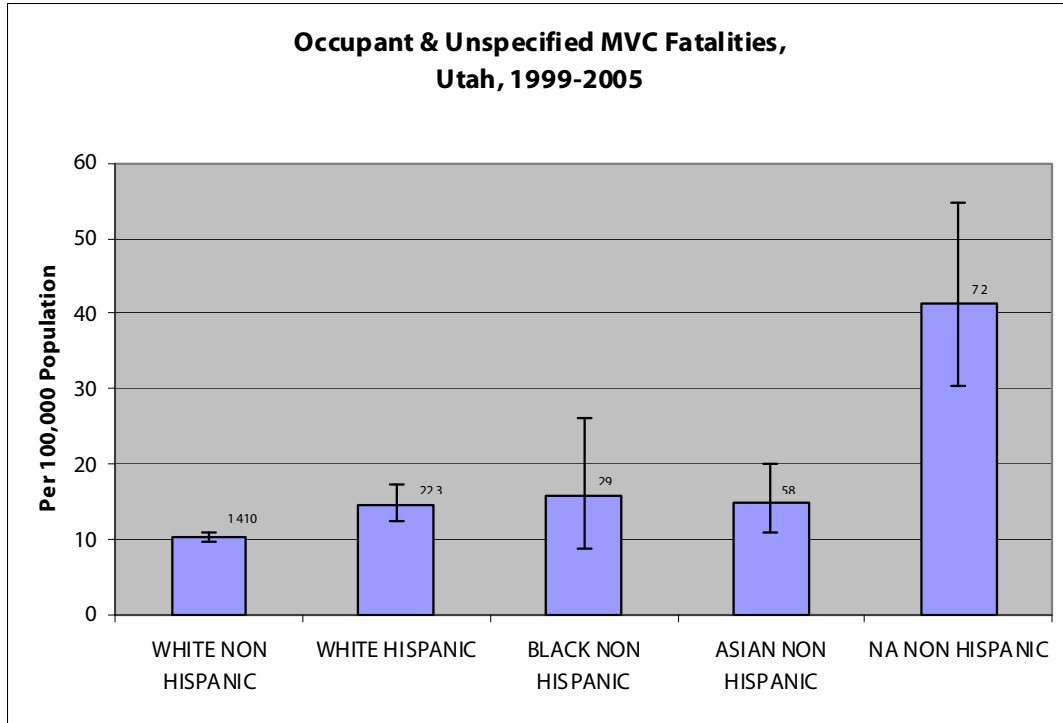
According to the Behavior Risk Surveillance System (BRFSS) more than 9 of 10 (91.9%) Utah adults reported always or nearly always wearing their seatbelts when they drove or rode in a car. Utah's rate was similar to the U.S. rate of 91.5%.<sup>37</sup> Self-reported seatbelt use among adults was about 5% higher for women at every age than for men. When the rate of self-reported seatbelt use for Utah's 61 small areas was plotted with the MVC fatality rate for the same small areas, a strong relationship was seen. Small areas with higher self-reported seatbelt use tended to have lower rates of MVC fatalities and areas with lower seatbelt use tended to have higher rates of MVC fatalities ( $R=.4200$ ,  $p<.0001$ ).

### **Race and Ethnicity<sup>38</sup>**

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<sup>37</sup> Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System (BRFSS) [Online]. (2008). National Center for Chronic Disease Prevention and Health Promotion, CDC (producer). [cited 2009 Jan 15]. 2002, 2006 Data Years. Available from : URL: <http://www.cdc.gov/BRFSS/>.

<sup>38</sup> WISQARS, data years 2001-2005



### Costs

From 2003-2007, the emergency department visit charges for all eight categories of MVC data totaled more than \$250 million. Of this total, approximately \$39 million was due to ATV/snowmobile/motorcross injuries, \$32 million due to motorcyclist crashes, \$23 million due to pedestrian injuries, and \$16 million due to pedal cyclist crashes.<sup>39</sup>

From 2003-2007, the hospitalization charges for all eight categories of MVC data totaled more than \$270 million. Of this total, approximately \$43 million was due to ATV/snowmobile/motorcross injuries, \$35 million due to motorcyclist crashes, \$24 million due to pedestrian injuries, and \$17 million due to pedal cyclist crashes.<sup>40</sup>

### Strategies

**Objective 1: By 2015, expand the “Don’t Drive Stupid” campaign to address young adults ages 18-24.**

### Activities

1. By 2013, determine effectiveness of the “Don’t Drive Stupid” messaging in changing driving behaviors for young adults ages 18-24.

<sup>39</sup> IBIS

<sup>40</sup> IBIS

2. By 2015, expand the “Don’t Drive Stupid” educational/grassroots efforts to college, university, and trade school program settings.
3. By 2012, personalize messages to communities based on local stories and local data.
4. By 2012, educate young drivers on the dangers of cell phone use and texting while driving through employment settings.
5. Through 2015, maintain consistent messaging with the Zero Fatalities campaign but recycle messages to keep them fresh.

**Objective 2: By 2015, continue implementation of the “Alive at 25” Program.**

**Activities**

1. By 2011, ensure capacity to continue implementation of the “Alive at 25” Program.
2. By 2014, increase implementation of the “Alive at 25” Program.
3. By 2015, evaluate success of the “Alive at 25” Program and disseminate results to stakeholders.

**Objective 3: By 2015, enact policies/legislation regarding motor vehicle safety.**

**Activities**

1. Through 2015, provide data-driven fact sheets on MVC-related legislation to advocates, Utah Legislature, and other stakeholders.
2. By 2013, promote workplace policies prohibiting employees from using cell phones while driving on company business.
3. By 2015, pass legislation banning use of cell phones while driving.
4. By 2015, support policies/legislation regarding distracted driving, impaired driving, drowsy driving, and aggressive driving.
5. By 2015, pass primary seatbelt law legislation.

**Objective 4: By 2015, continue use of existing surveillance systems.**

**Activities**

1. By 2011, ensure capacity for the production and dissemination of motor vehicle crash-related data publications.
2. By 2011, collaborate with the Utah Highway Safety Office to identify and target surveillance data for specific audiences (e.g., Utah State Legislature, local health departments, etc.)
3. Through 2015, maintain publicly accessible data query system through the Indicator Based Information System for Public Health (IBIS-PH).

**Implementing Organizations**

- American Automobile Association (AAA), Utah chapter
- Insurance companies

- Law enforcement agencies
- Utah's 12 Local Health Departments
- Utah colleges, universities, and trade school programs
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah Department of Public Safety
  - Utah Highway Safety Office
- Utah Department of Transportation
- Utah Safety Council
- Zero Fatalities campaign

### **Evidence-based Interventions/Best Practices**

Zero Fatalities (<http://ut.zerofatalities.com/>) is a mutual effort from various states addressing the top behaviors that are killing people on America's roads. The focus varies by state, but includes behaviors such as drowsy driving, distracted driving, aggressive driving, impaired driving, and not buckling up. In 2006, the Utah Department of Transportation initiated the Zero Fatalities program along with the support of the Utah Department of Public Safety, the Federal Motor Carrier Safety Administration, FHWA, private businesses, and citizens, with the sole purpose of decreasing the number of deaths on Utah's roads.

The National Safety Council-designed Alive at 25 curriculum (<http://aliveat25.us/>) is a defensive driving education program proven to work with young drivers 15 to 24 years of age to take responsibility for their driving decisions. Since 1995, more than 400,000 young adults across the U.S. have learned life-saving defensive driving skills through Alive at 25. In a study conducted by the Colorado State Patrol in 2003, of 1000 random Alive at 25 graduates (500 voluntary and 500 court ordered), 89% of the respondents indicated they believed they would be a safer driver as a result of taking the class and, 92% of the respondents identified that they believed the class helped them improve their driving knowledge and skills.

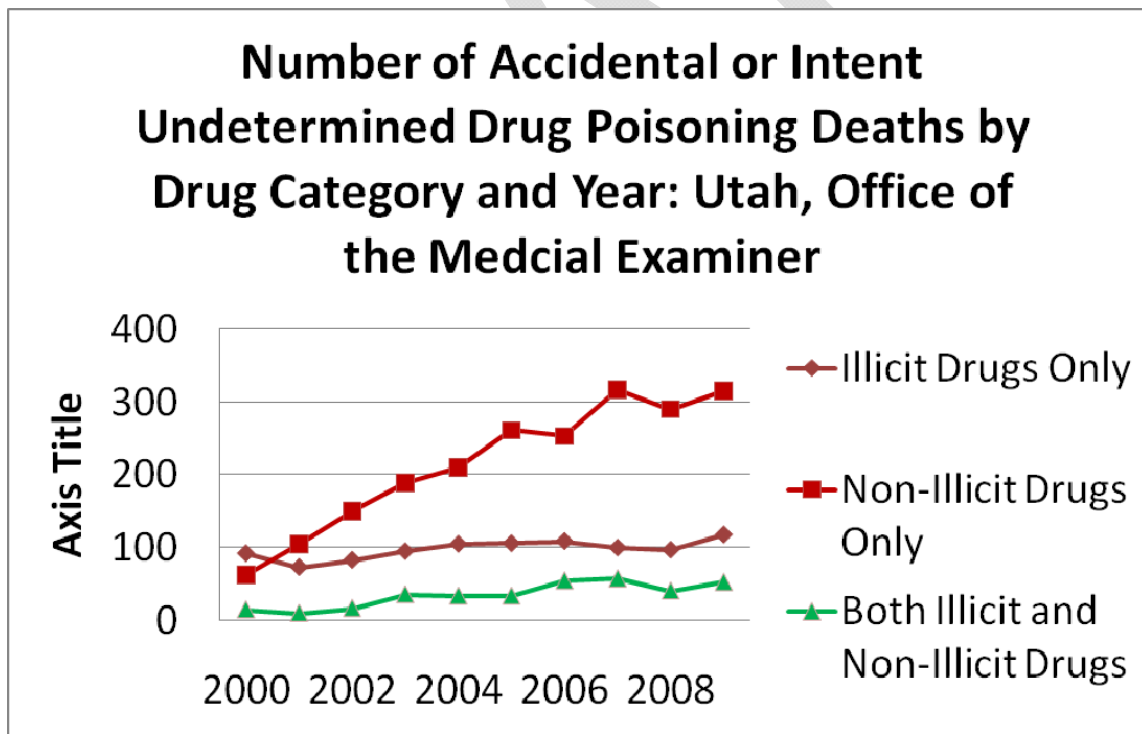
## Poisoning (Prescription and Illicit Drugs)

### Overview

From 2003-2007, the poison emergency department visit (ED) rate for Utah was 20.4 per 10,000 population compared to 16.3 per 10,000 population for the U.S. The poison hospitalization rate was 7.7 per 10,000 population for Utah and 8.1 per 10,000 population for the U.S.

The poison fatality rate for Utah during this same time period was 19.6 per 100,000 population and is significantly higher than the U.S. rate of 11.4 per 100,000 population. Utah ranked 2<sup>nd</sup> in the U.S. for poison fatalities from 2003-2007, New Mexico ranked 1<sup>st</sup>.

In Utah, the number of unintentional drug poisoning deaths increased over ten-fold during 1991-2009, from 41 to 451.<sup>1</sup> In 2003, the number of deaths resulting from poisoning deaths in Utah surpassed those occurring from motor vehicle accidents.<sup>2</sup> The majority of the increase in drug poisoning deaths occurred as a result of overdose of non-illicit drugs, which includes primarily prescription medications. In 2009, approximately 80% of the unintentional drug deaths in Utah were due to prescription pain relievers, such as oxycodone, methadone, and hydrocodone.



### Healthy People 2020 Objectives

- IVP-9 Prevent an increase in the rate of poisoning deaths

- IVP-10 Prevent an increase in the rate of nonfatal poisonings

## Data, Surveillance and Costs

### Geographic Data

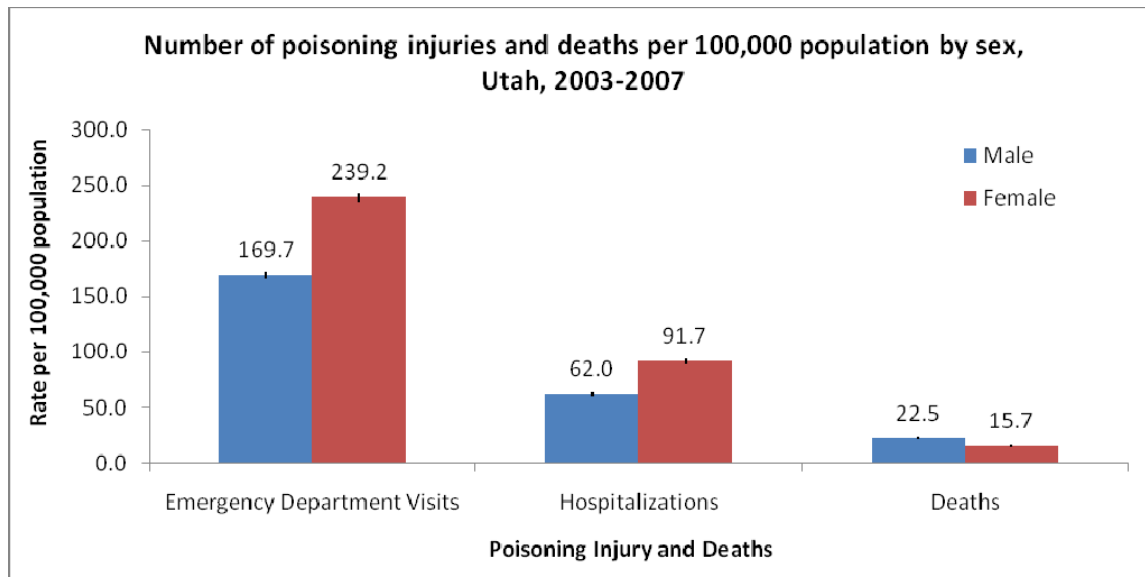
From 2003-2007, Salt Lake Valley HD had the highest poison ED visit rate at 23.2 per 100,000 population and Southeastern Utah HD had the highest poison hospitalization rate at 12.1 per 100,000 population among local health districts. Brigham City had the highest poison injury ED visit rate at 34.7 per 100,000 population and Carbon/Emery Counties had the highest poison hospitalization rate at 18.8 among small areas.

Southeastern Utah HD (26.1 per 100,000 population) and Salt Lake Valley Health District (HD) (21.4 per 100,000 population) had significantly higher poison fatalities compared to the state rate (19.1 per 100,000 population). South Salt Lake had the highest poison fatality rate at 51.0 per 100,000 population among small areas. Other HDs and small areas with significantly higher and lower self-inflicted injury and suicide rates than the state rate can be found in Appendix X.

### Age and Sex

Females have significantly higher emergency department visit and hospitalizations rates compared to males. However, males have significantly higher poison fatality rates compared to females (22.5 and 15.7 per 100,000 population) (Figure X).

Figure X



When broken down by age group, 15-17 year old males and females (32.8 and 65.4 per 10,000 population) had the highest poison ED visit rates among age groups (Figure X). For poison

hospitalizations, 18-24 year old males (9.2 per 10,000 population) and 35-44 year old females (14.8 per 10,000 population) had the highest rates among age groups (Figure X).

Figure X

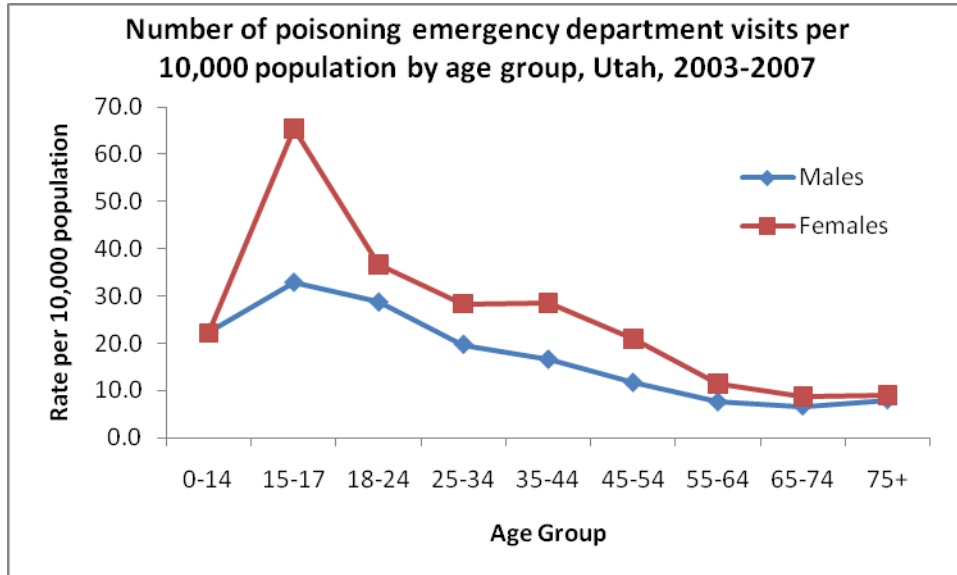
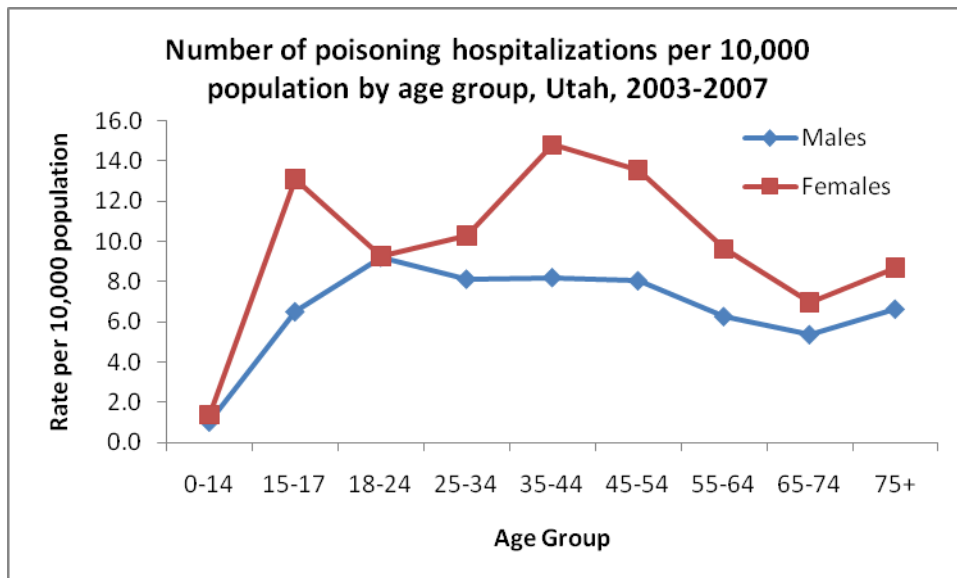
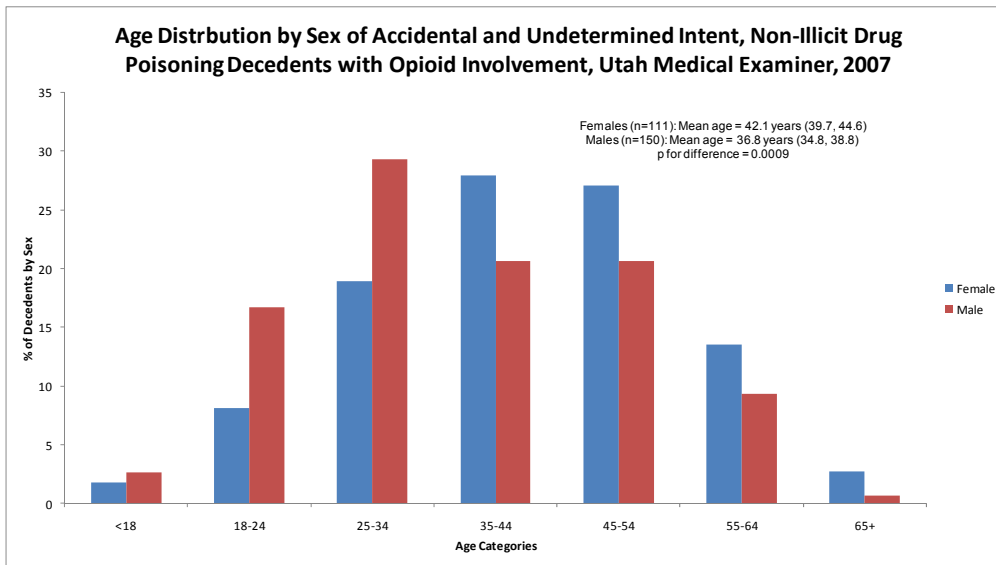


Figure X



Persons 45-54 had the highest poison fatality rate among males and females (42.2 and 35.5 per 100,000 population). Among individuals who died of a prescription opioid overdose between 2008-2009, the median age for females (46 years) was significantly higher than for males (38 years) ( $P < 0.01$ ). The proportion of females who died (49%) were approximately equal to the number of males who died (51%).



## Costs

From 2003-2007, \$121 million was spent in Utah on hospital and emergency department charges for the treatment of poisonings.

## Strategies

**Objective 1: By 2013, at least one existing surveillance system will be improved to adequately monitor prescription drug overdose fatalities in Utah.**

## Activities

1. By 2011, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate prescription drug overdose fatality data.
2. By 2011, identify primary users of information, assess their needs, and prioritize according to the results of the assessment.
3. By 2011, evaluate the Utah Violent Death Reporting System for its usefulness in monitoring prescription drug overdose fatalities in Utah.
4. By 2011, develop a list of data needs that are not covered by existing data sources.
5. By 2012, explore opportunities to add prescription drug overdose fatality components to existing data collection systems to gather more complete information about specialty populations at risk for prescription drug overdoses, including treatment data and criminal records in order to close gaps in prescription drug overdose fatality data collection.
6. By 2013, assess the extent to which prescription drug overdoses occur.

**Objective 2: Through 2015, information from surveillance data will be disseminated to appropriate stakeholders.**

**Activities**

1. By 2011, ensure capacity for the production and dissemination of prescription drug overdose data publications.
2. By 2011, identify and target surveillance data for specific audiences (e.g., Utah State Legislature, local health departments, etc.)
3. By 2011, develop audience and topic specific prescription drug overdose fact sheets with a dissemination plan for each fact sheet.
4. By 2012, develop, support, and/or disseminate lessons learned from the Utah Prescription Pain Medication Management and Education Program.
5. By 2013, evaluate prescription drug overdose data publications as to their usefulness in helping local health districts and community-based organizations implement poisoning prevention strategies.

**Objective 3: By 2015, more than half of Utah's general population will recognize that prescription drug overdose is a preventable public health problem.**

**Activities**

1. By 2011, promote efforts to educate on proper use, storage, and disposal of prescription pain medications.
2. Through 2011, continue statewide collaboration to implement the activities and recommendations of the Utah Pharmaceutical Drug Crime Project.
3. By 2011, convene conferences in local urban and rural areas.
4. By 2011, educate the general public through disseminating brochures and public service announcements on television and internet.
5. By 2012, compile a summary report on progress made regarding the Prescription Pain Medication Program activities.
6. By 2013, implement evidence-based substance abuse prevention programs that target persons that are identified as being at risk of death or harm from prescription pain medication overdose.
7. Through 2015, promote prescription drug overdose public awareness events sponsored by organizations such as Utah Pharmaceutical Drug Crime Project, Division of Substance Abuse and Mental Health, Department of Environmental Quality, and Drug Enforcement Agency.

**Objective 4: By 2015, train providers on proper prescribing of opioids including screening, treatment, and monitoring will increase by half.**

**Activities**

1. By 2011, define minimum course objectives for providers of health care and counseling graduate programs in drug overdose risk and protective factors.

2. By 2012, educate, support, and involve family members about risk and protective factors for drug overdoses.
3. By 2012, ensure that options for CME on proper prescribing of opioids are available to providers.
4. By 2013, review and revise Utah Clinical Guidelines on Prescribing Opioids for Treatment of Pain with any updated research findings.
5. Through 2015, continue to educate providers by disseminating the Guidelines and continuing to make CMEs available.

**Objective 5: By 2015, access to mental health and substance abuse services will increase by 20%.**

**Activities**

1. By 2012, improve access to substance abuse services for uninsured and non-Medicaid population.
2. By 2012, define and implement guidelines for substance abuse screening and referral of students in universities and colleges.
3. By 2012, support and implement guidelines for substance abuse assessment and treatment for individuals struggling with addiction from adult and juvenile incarcerated populations.
4. Through 2015, provide referrals for substance abuse services to the community.

**Objective 6: By 2015, increase availability and knowledge of options for proper disposal of prescription medications disposal options**

**Activities**

1. By 2011, educate the public not to flush leftover medication.
2. By 2011, educate public about locations for drop boxes and keep these locations updated at [useonlyasdirected.org](http://useonlyasdirected.org)
3. By 2012, support new legislation regarding options for disposal in other public locations.
4. Through 2015, provide information to public about disposal options and current best practices.

**Implementing Organizations**

- Local colleges and universities
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Utah's Local Substance Abuse Authorities
- Department of Human Services
  - Division of Substance Abuse and Mental Health
- National Alliance on Mental Illness – Utah

- Utah Poison Control Center
- Drug Enforcement Agency
- Department of Environmental Quality

### **Evidence-based Interventions/Best Practices**

- Celebrating Families <http://www.celebratingfamilies.net>

DRAFT

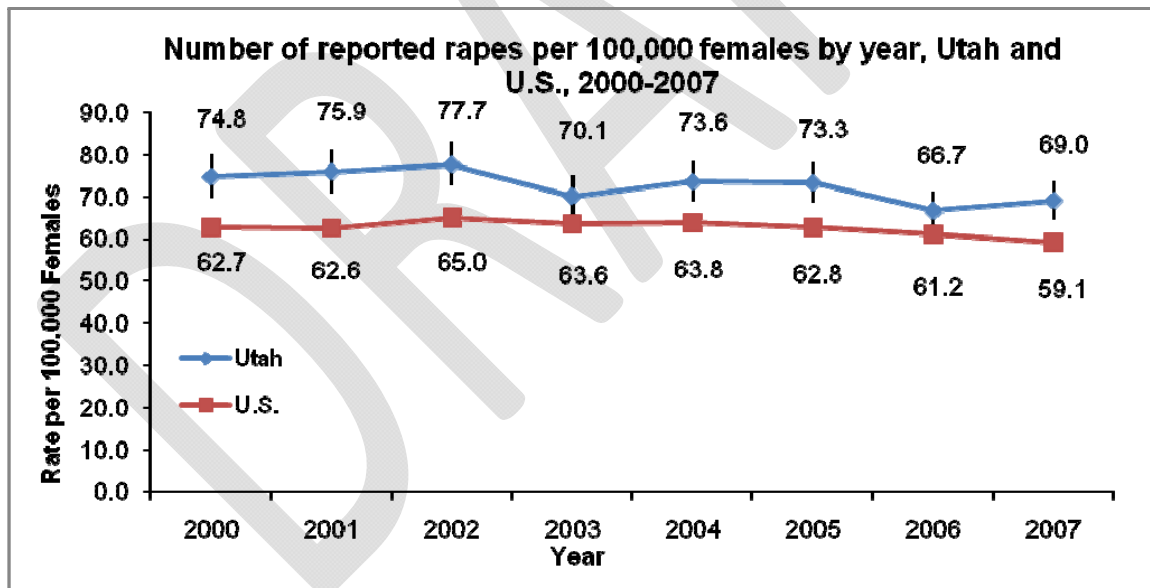
# Sexual Assault and Family Violence

## Overview

**Sexual Assault.** Sexual violence in Utah is a serious public health problem affecting thousands of residents each year. Studies in Utah indicate that one in eight women and one in 50 men will experience rape in their lifetimes<sup>41</sup> and nearly one in three women will experience some form of sexual violence during their lives.<sup>42</sup> Additionally, a national study showed one in four women and one in six men reported being a victim of child sexual abuse.<sup>43</sup> For the most part, sexual assault affects Utah's younger population.

Utah ranks 19<sup>th</sup> in the nation for reported forcible rapes.<sup>44</sup> Rape is the only violent crime in Utah that is higher than the national average. In a state where other violent crimes such as, homicide, robbery or aggravated assault, is historically half to three times lower than the national average, this is of concern. Since 2000, Utah's reported rape rate has been significantly higher than the U.S. reported rape rate. In 2007, Utah's reported rape rate was 69 per 100,000 females (n=927) and the U.S. rate was 59 per 100,000 females (n=90,427) (Figure X). During 2007, a rape was reported every 10 hours in Utah.<sup>45</sup>

Figure X



<sup>41</sup> Utah Department of Health. (2008). *Utah Health Status Update: Sexual Violence*. April 2008.

<sup>42</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

<sup>43</sup> Dube, S.R., Anda, R.F., Whitfield, C.L., et al. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine*, 28, 430-438.

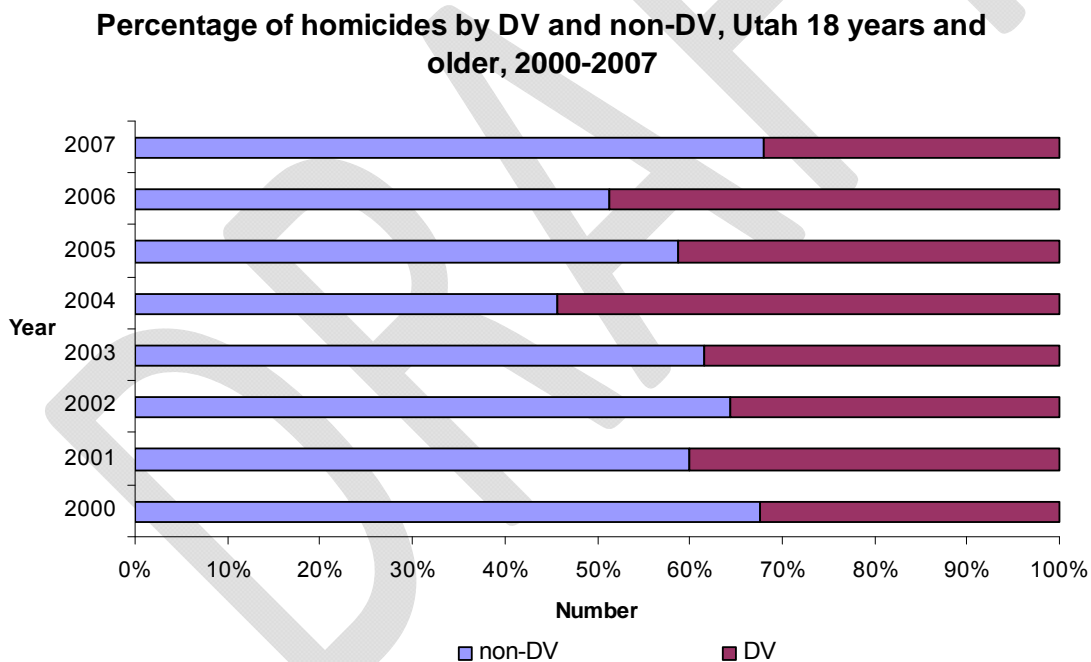
<sup>44</sup> U.S. Department of Justice. Federal Bureau of Investigation, (2008) *Crime in the United States, 2007*. <http://www.fbi.gov/ucr/cius2007/> Accessed April 2009.

<sup>45</sup> Utah Department of Public Safety, (2008). *Crime Statistics for the State of Utah*. <http://publicsafety.utah.gov/bci/crimestatistics.html> Accessed February 2008.

**Family Violence.** According to women surveyed in 2005, 37.0 percent reported having been a victim of some form of domestic violence at some point in their lives. This equates to 1 in 4 women, or 187,201 women in Utah who have suffered from domestic violence. In a 2005 survey, emotional abuse was the most common type of psychological abuse experienced by women at 25.0 percent.<sup>46</sup> According to the Domestic Violence Incidence and Prevalence Study, 5.0 percent of women have experienced pushing/shoving and 5.0 percent have experienced hitting/slugging/socking, 2.0 percent have reported strangling. The domestic violence-related incident rate was 456.0 per 100,000 population from 2003-2007.<sup>47</sup>

On average, domestic violence-related homicides account for approximately 40.0% of adult homicides in Utah from 2000-2007 (Figure X).<sup>48</sup> From 2000-2007, there were a total of 147 domestic violence-related homicides, an average of 18 per year (1.1 per 100,000 adults). From 2005-2008, there were 165 DV-related suicides, which accounted for 11.8 percent of suicide deaths involving persons 18 years of age and older in Utah.

Figure X



**Healthy People 2020 Objectives**

- **IVP-31**                 Reduce violence by current or former intimate partners.
- **IVP-32**                 Reduce sexual violence.

<sup>46</sup> 2005 Dan Jones & Associates Domestic Violence Incidence and Prevalence Study

<sup>47</sup> 2003-2007 Crime in Utah Reports

<sup>48</sup> DVFRC

## Data, Surveillance and Costs

### Geographic Data

**Sexual Assault.** According to the 2006 Utah BRFSS survey, there were no significant differences in lifetime prevalence of rape or attempted rape by locality. However, the residential county of the person at the time of the survey doesn't necessarily indicate the residential county of where the rape or attempted rape occurred. Using Uniform Crime Report data, the following counties have significantly higher reported rape rates than the state rate:

Location	Rate per 100,000 population
State	72
Uintah	101
Carbon	98
Salt Lake	95
Tooele	89
Weber	80

The following counties have significantly lower reported rape rates than the state rate:

Location	Rate per 100,000 population
State	72
Wasatch	22
Sanpete	31
San Juan	39
Utah	47
Washington	53
Cache	54
Iron	55
Davis	55

The following counties had too few reported rapes to meet UDOH standard for reliability: Beaver, Emery, Rich. The following counties did not have any reported rapes: Daggett, Garfield, Morgan, Piute, Wayne.

### Age and Sex

**Sexual Assault.** According to the 2006 Utah BRFSS, females have a significantly higher prevalence of rape or attempted rape than males (12% and 2%, respectively).<sup>49</sup> Among female victims who experienced rape or attempted rape, 99 percent were victimized by a male.<sup>50</sup> In the 2007 Rape in Utah Survey, 95 percent reported that the sexual assault was committed by

<sup>49</sup> Utah Department of Public Safety, (2008). Crime Statistics for the State of Utah. <http://publicsafety.utah.gov/bci/crimestatistics.html> Accessed February 2008.

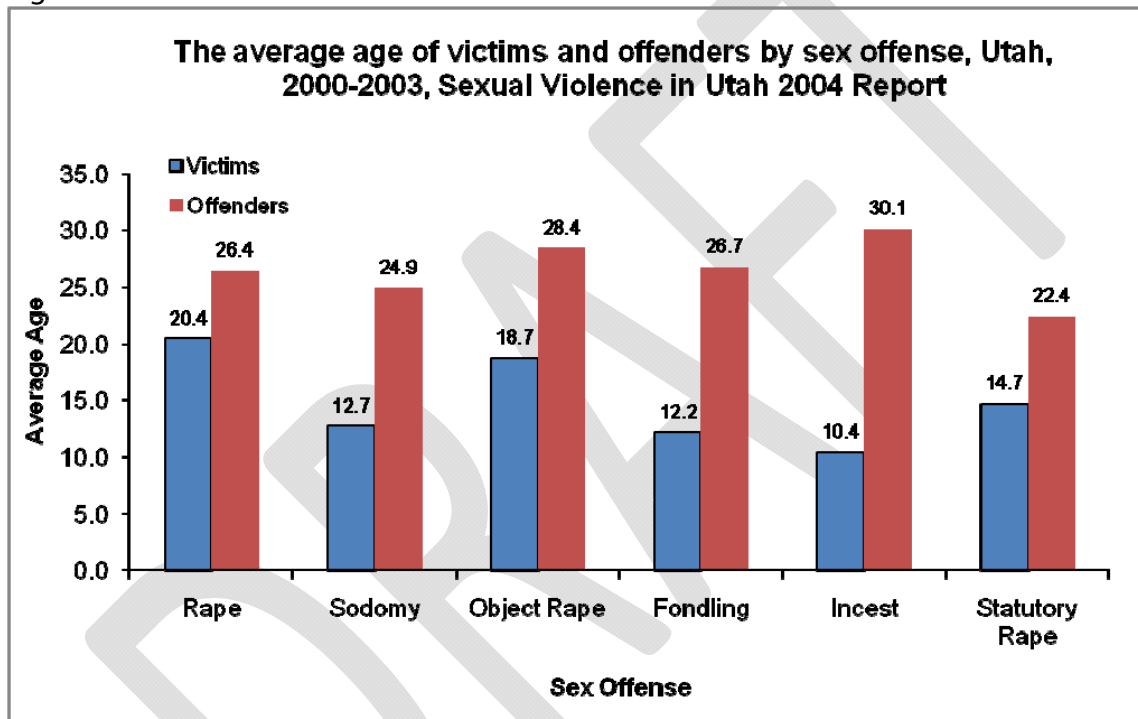
<sup>50</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

a male.<sup>51</sup> Among male victims who experienced rape or attempted rape, there was no difference in perpetrator gender.<sup>52</sup>

When males were victims of sex offenses they tended to be found in younger age groups (less than 16 years old). This is most pronounced among victims of sodomy and object rape. Same sex offenses accounted for 18 percent of all sexual assaults from 2000-2003.<sup>11</sup>

The average age of rape victims was 20 years old and for rape offenders was 26 years old. The biggest gap between victim and offender ages was seen in incest sex offenses. The average age of victims was 10 years old and the average age for offenders was 30 years old (Figure X).

Figure X



The 2007 Rape in Utah Survey indicated that the average age of a victim's first assault was 16 years old.<sup>53</sup>

Males between the ages of 15-19 are arrested more frequently for rape than any other age group (Figure 13).<sup>54</sup>

<sup>51</sup> Mitchell, C., & Peterson, B., (2007). *Rape in Utah, 2007*. Utah Commission on Criminal and Juvenile Justice.

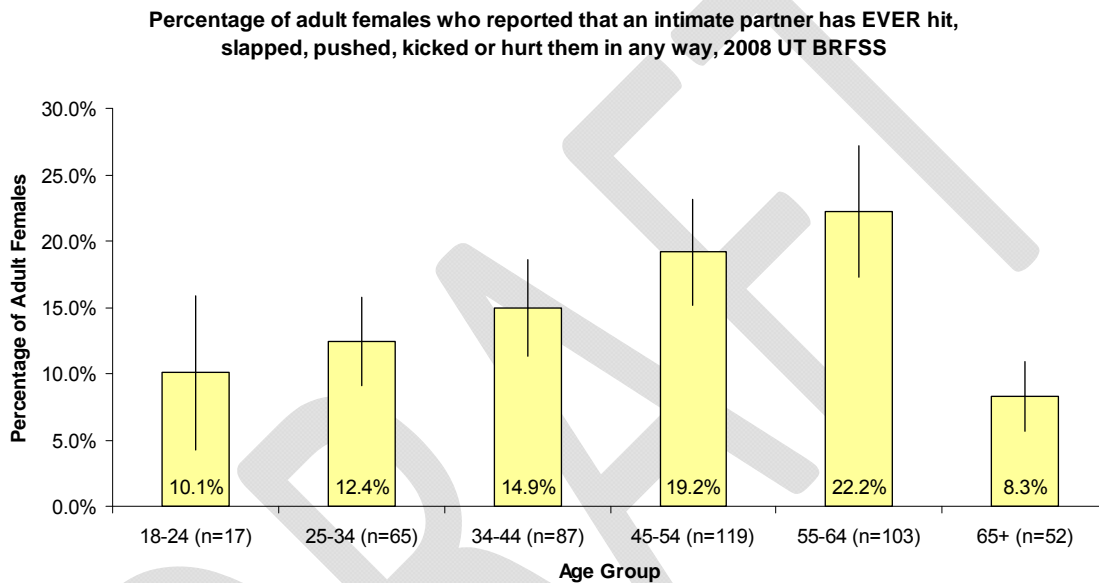
<sup>52</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

<sup>53</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

<sup>54</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

**Family Violence.** According to the 2008 Utah Behavioral Risk Factor Surveillance System, 98.2% females reported that they were in a safe place to answer questions regarding intimate partner violence. The survey found that 14.2% females reported that they have been hit, slapped, pushed, kicked, or hurt in any way by an intimate partner in their lifetime (Figure X).

Of the females who reported intimate partner violence (IPV), 7.8% indicated that they have experienced IPV in the past 12 months. Of these females, 39.1% of the perpetrators were husbands or a male live-in partner, 27.2% were former husbands or former live-in partners, and 25.7% were former boyfriends.



Males have a significantly higher domestic violence-related homicide perpetrator rate than females (1.6 and .3 per 100,000 adults, respectively).<sup>55</sup> There was not a significant difference among domestic violence-related homicide victims by gender and age group.<sup>56</sup>

Males also have a significantly higher domestic violence-related suicide rate than females (4.5 and 0.6 per 100,000 adults, respectively).<sup>57</sup> There were no significant differences among age groups in domestic violence-related suicide victims, homicide victims and homicide perpetrators.<sup>58</sup>

### Costs

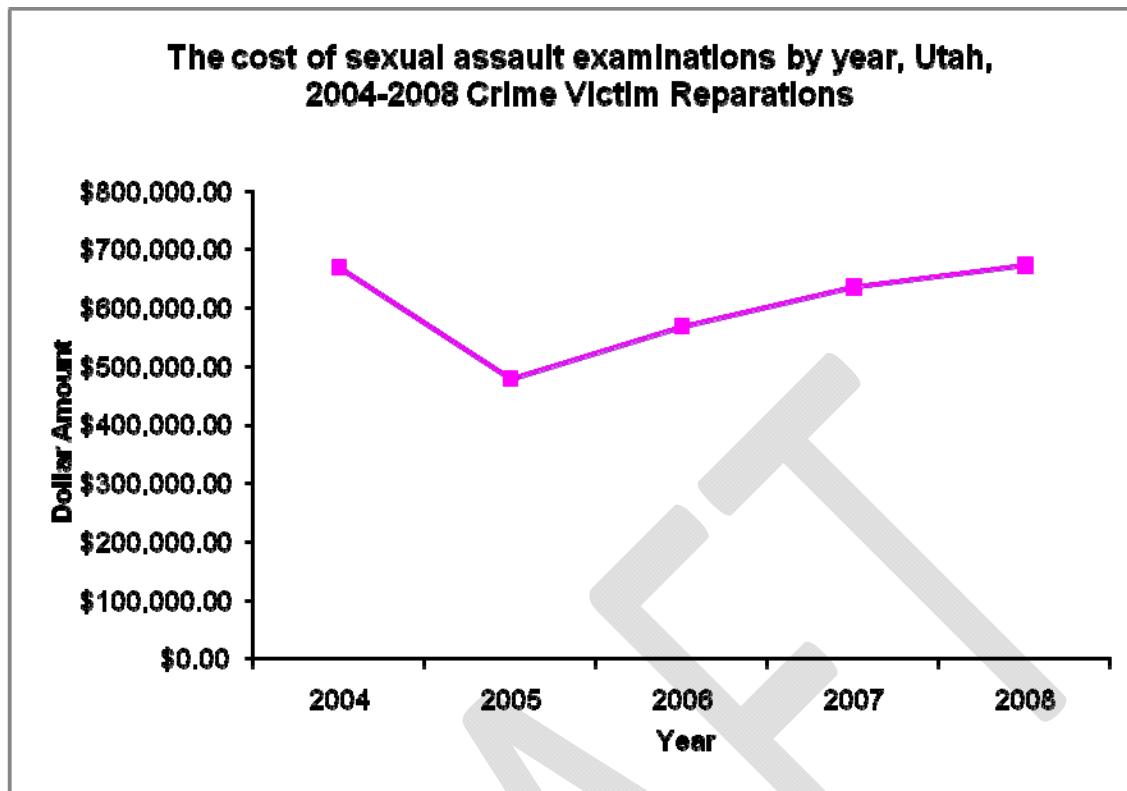
Figure X shows costs associated with administering sexual assault examinations in Utah.

<sup>55</sup> 2000-2002 Domestic Violence Fatalities in Utah Report

<sup>56</sup> 2000-2002 Domestic Violence Fatalities in Utah Report

<sup>57</sup> 2000-2002 Domestic Violence Fatalities in Utah Report

<sup>58</sup> 2000-2002 Domestic Violence Fatalities in Utah Report, 2005-2006 UTVDRS



## Strategies

**Objective 1: By 2014, social norms within Utah's younger population that is supportive of hostility toward women and girls, family violence, male superiority and sexual entitlement will decrease by half.**

### Activities

1. By 2011, collect baseline data on social norms surrounding relationships, violence, and gender roles as they exist in Utah.
2. By 2011, require all RPE funded programs to target youth ages 18-24 with evidence based curriculum and strategies for preventing sexual violence.
3. By 2012, develop state, regional, and community coalitions to:
4. Recruit community leaders to champion and advance the value of respect and healthy relationships
5. Reach the majority of the population with messages on respect, gender equality, and healthy relationships within their communities through:
  - i. Media messaging
  - ii. Training bystanders
  - iii. Modeling
  - iv. Educational seminars
  - v. In-service training
6. Establish primary prevention initiatives in their community.

7. In 2013, create a Sexual Violence Prevention Alliance of all state, regional, and community coalitions in Utah.
8. By 2014, partner with public and private schools to implement, evidence based programs into their schools to increase protective factors and reduce risk factors of sexual violence victimization and perpetration.
9. In 2014, create regular networking and training opportunities for The Sexual Violence Prevention Alliance to advance professional development, receive technical assistance, develop professionally, and to share successes and lessons learned with other professionals in the field.
10. Provide ongoing technical assistance and training on engaging men and boys in prevention efforts.

**Objective 2: By 2013, Sexual Violence Prevention Coalitions will be operating within Tooele, Uintah, and Carbon Counties.**

**Activities**

1. By 2010, identify key leaders and groups within the counties and work with their communities to establish coalitions on the prevention of sexual violence.
2. By 2011, conduct community needs assessments in each of the counties to determine the needs and conditions that must be addressed in order to prevent sexual violence.
3. By 2012, provide training and technical assistance to support the prevention coalitions in developing prevention initiatives.
4. By 2013, invite disparate communities to participate in the Sexual Violence Prevention Alliance.

**Objective 3: By 2013, build the understanding of sexual assault and family violence through collection of data on protective and risk factors.**

**Activities**

1. By 2011, conduct community needs assessments in each of the counties to determine the needs and conditions that must be addressed in order to prevent sexual assault and family violence.
2. By 2012, conduct surveillance on sexual violence (SV) and its relationship to adverse childhood experiences (ACE) through the SV and ACE modules of the BRFSS. Publish the findings.
3. By 2013, publish an analysis of the costs of sexual violence in Utah, using the methodology published by the Minnesota Department of Health.
4. Continue to encourage and support research into identifying the prevalence and dynamics of sexual assault and family violence in Utah.
5. Improve data collection around sexual assault and family violence perpetration and victimization.

**Objective 4: By 2013, increase the understanding of the beliefs, attitudes, behaviors, and impact of relationships, violence, and communication on the health of youth ages 18-24 in order to inform prevention strategies.**

**Activities**

1. By 2011, develop a pilot project to collect narratives on the beliefs, attitudes, and behaviors of young adults ages 18-24 that impact relationships and sexual violence using web 2.0 applications.
2. By 2013, publish initial findings of the narrative project.

**Objective 5: By 2013, increase state and community readiness for adoption of the Rape Prevention Education Model of Community Change in Utah.**

**Activities**

1. In collaboration with the Utah Coalition Against Sexual Assault (UCASA), disseminate information to RPE Grantees and other state and local agencies on the Rape Prevention Education Model of Community Change.
2. Coordinate with UCASA to identify new and existing prevention partners to support and participate actively in the implementation of the statewide strategic plan for sexual violence prevention.
3. UCASA staff will provide ongoing training and technical assistance to identified partners in state and local agencies on conducting community readiness assessments and implementing evidence based strategies for primary prevention of sexual violence within their communities.

**Objective 6: By 2015, regional or community Sexual Violence Prevention Coalitions will be functioning in all Utah communities.**

**Activities**

1. By 2011, identify partners in counties, cities, judicial districts, health districts, tribal or other organizations and invite them to attend a statewide sexual violence prevention partnership forum for the purpose of advancing coalition and capacity building as well as primary prevention. Provide support, tools, guidance, and technical assistance on conducting needs assessments.
2. By 2013, assist communities in Utah in developing a community needs assessment. By 2014, work with coalitions to research evaluated prevention strategies for use in their communities. Share model or best practice prevention policies.
3. By 2015, provide technical assistance and training on fund raising.

**Objective 7: By 2015, obtain dedicated sexual violence prevention funding, in addition to federal money already allocated to Utah, for state prevention efforts and community grassroots efforts.**

## **Activities**

1. By 2013, publish a document detailing the costs of sexual violence on the state of Utah to use as bargaining source for prevention funding.
2. By 2014, research opportunities for funding through state, local foundations, and other philanthropic organizations.
3. By 2015, provide technical assistance to communities or apply directly for funding for sexual assault and family violence prevention initiatives or strategies.

## **Implementing Organizations**

- Local colleges and universities
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Utah Coalition Against Sexual Assault
- Utah Domestic Violence Coalition
- Utah Commission on Criminal and Juvenile Justice
- Utah Sexual Violence Council

## **Evidence-based Interventions/Best Practices**

# Suicide Attempts and Suicide Fatalities

## Overview

More people survive suicide attempts than actually die. In Utah from 2003-2007, there are an estimated 11 suicide attempts for each completed suicide. Those who survive suicide attempts are often seriously injured and need medical care. They often have depression and other mental health problems. Most people feel uncomfortable talking about suicide. Victims are frequently blamed and families stigmatized. Friends, families, and communities may feel shock, anger, guilt, and depression and are usually left devastated.<sup>59</sup>

From 2003-2007, the self-inflicted injury emergency department visit (ED) rate for Utah was 10.2 per 10,000 population compared to 4.2 per 10,000 population for the U.S. The self-inflicted injury hospitalization rate was 4.6 per 10,000 population for Utah and 5.8 per 10,000 population for the U.S.

The suicide rate for Utah during this same time period was 15.2 per 100,000 population and is significantly higher than the U.S. rate of 11.0 per 100,000 population. Utah ranked 9<sup>th</sup> in the U.S. for suicide deaths from 2003-2007.

## Healthy People 2020 Objectives

- **IVP-41** Reduce nonfatal intentional self-harm injuries

## Data, Surveillance and Costs

### Geographic Data

From 2003-2007, Tooele County Health District (HD) had the highest self-inflicted injury ED visit and hospitalization rate (13.3 and 7.6 per 10,000 population). Brigham City had the highest self-inflicted injury ED visit rate at 20.4 per 10,000 population among small areas and Carbon/Emery Counties had the highest self-inflicted hospitalization rate at 9.1 per 10,000 population among small areas. Central and Southeastern Utah Health Districts (HD) had the highest suicide rates per 100,000 population among local health districts and Carbon / Emery Counties had the highest suicide rate at 28.1 per 100,000 population among small areas. Other HDs and small areas with significantly higher and lower self-inflicted injury and suicide rates than the state rate can be found in Appendix X.

### Age and Sex

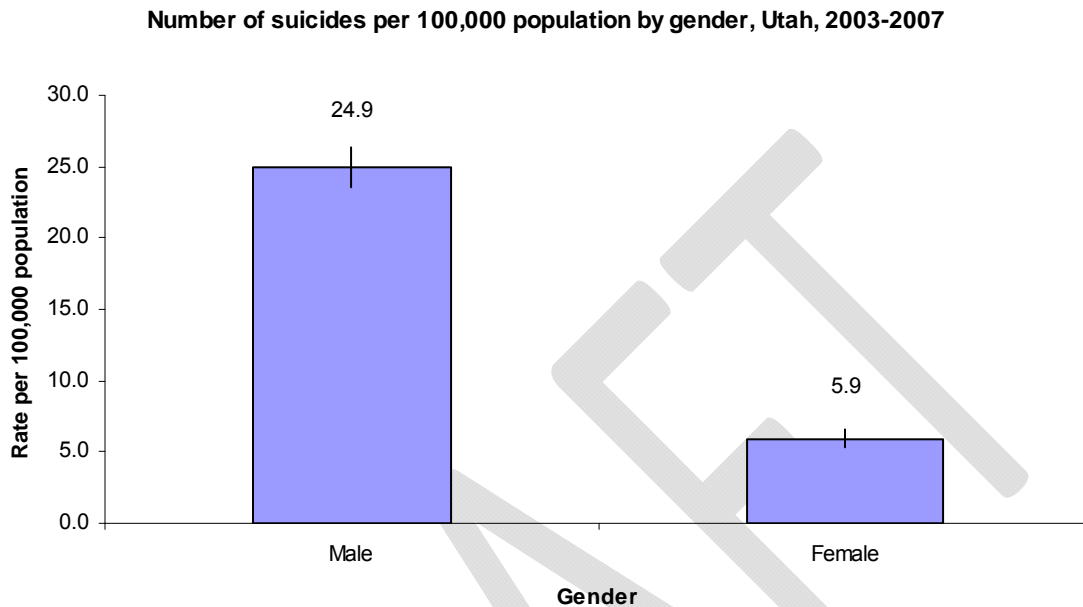
More females attempt suicide than males. In Utah, from 2003-2007, females had a significantly higher age-adjusted self-inflicted ED visit (13.4 per 10,000 population) and hospitalization (5.5 per 10,000 population) rate compared to males (7.0 and 3.6 per 10,000

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<sup>59</sup> Centers for Disease Control and Prevention. *Understanding Suicide Fact Sheet 2006*. National Center for Injury Prevention and Control.

population). However, males have a significantly higher suicide rate than females (24.9 and 5.9 per 100,000 population) (Figure X).

Figure X



Persons 35-44 and 45-54 had the highest suicide rate among age groups, both at 22.4 per 100,000 population (Figure X). When broken down by age group, 15-17 year old males (21.9 per 10,000 population) and females (52.6 per 10,000 population) had the highest self-inflicted ED visit rates among age groups. For self-inflicted injury hospitalizations, 15-17 year old females (11.2 per 10,000 population) had the highest rate and 18-24 year old males (7.5 per 10,000 population) had the highest rates among age groups (Figure X).

Figure X

Number of suicides per 100,000 population by age group, Utah, 2003-2007

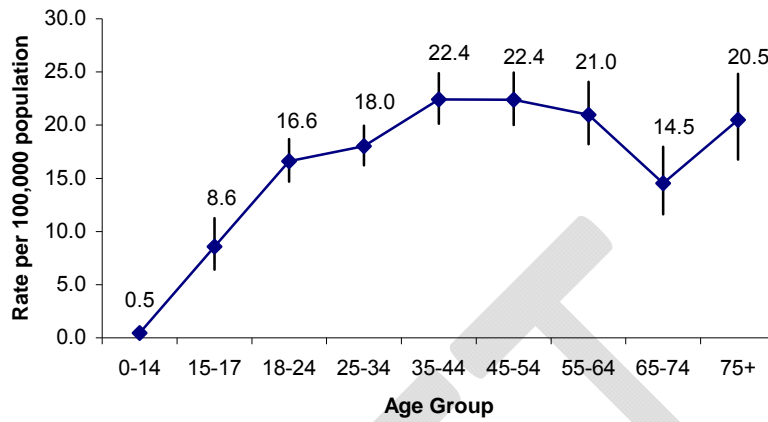
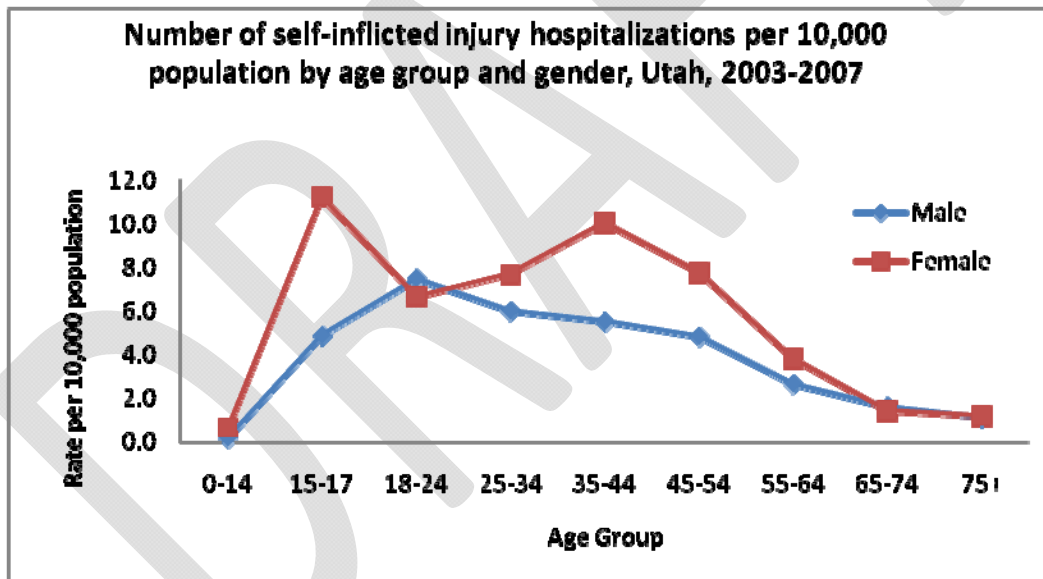


Figure X



**Method of Self-inflicted Injury**

The most common method of injury for suicide was firearm for males and poisoning for females.

**Costs**

From 2003-2007, \$17 million was spent in Utah on hospital and emergency department charges for the treatment of self-inflicted injuries. From 2003 to 2007, there has been a 98.8 percent increase in total costs for hospitalizations and a 93.3 percent increase in total costs for ED visits.

The annual cost of workforce-related suicides has been calculated to be approximately \$13 billion in 2005 dollars.<sup>60</sup>

## Strategies

**Objective 1: By 2013, at least one existing surveillance system will be improved to adequately monitor and measure suicide and suicide attempts in Utah.**

### Activities

1. By 2011, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate youth suicide data.
2. By 2011, identify primary users of information, assess their needs, and prioritize according to the results of the assessment.
3. By 2011, evaluate the Utah Violent Death Reporting System, Child Fatality Review Reporting System, and the Behavioral Risk Factor Surveillance System for their usefulness in monitoring suicide and attempted suicides in Utah.
4. By 2011, develop a list of data needs that are not covered by existing data sources.
5. By 2012, explore opportunities to add suicide components to existing data collection systems to gather more complete information about specialty populations at risk for suicide, to screen for distress and dysfunction associated with mental illness, and to close gaps in suicide data collection.
6. By 2013, assess the extent to which suicide and suicide attempts occur.

**Objective 2: Through 2015, information from surveillance data will be disseminated to appropriate stakeholders.**

### Activities

1. By 2011, ensure capacity for the production and dissemination of suicide data publications.
2. By 2011, identify and target surveillance data for specific audiences (e.g., Utah State Legislature, schools, local health departments, etc.)
3. By 2011, develop audience and topic specific suicide fact sheets with a dissemination plan for each fact sheet.
4. By 2012, develop, support, and/or disseminate lessons learned from the Utah Youth Suicide Study.
5. By 2013, evaluate suicide data publications as to their usefulness in helping school administrators, local health districts and community-based organizations implement suicide prevention strategies.

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<sup>60</sup> Research America, [www.researchamerica.org/uploads/factsheet21suicide.pdf](http://www.researchamerica.org/uploads/factsheet21suicide.pdf)

**Objective 3: By 2015, more than half of Utah's general population will understand that suicide is a preventable public health problem.**

**Activities**

1. By 2011, promote efforts to reduce access to lethal means and methods of self-harm (including firearms, drugs, and poisons).
2. Through 2011, continue statewide collaboration to implement the activities and recommendations of the Utah Suicide Prevention Plan and the Utah Suicide Prevention Action Network.
3. By 2011, convene conferences in local urban and rural areas.
4. By 2012, compile a summary report on progress made regarding the Utah Suicide Prevention Plan.
5. By 2012, choose suicide prevention programs that are grounded in theory or that have scientific evidence of effectiveness.
6. Provide adequate staffing and resources, including budget, facilities, staff development, and time to implement suicide prevention programs.
7. By 2013, implement evidence-based suicide prevention programs that target persons in the following settings:
8. Colleges and Universities
9. Workplace settings
10. Juvenile and Adult Correctional Facilities
11. Hispanic/Latino communities
12. Native American communities
13. Refugee communities
14. Gay, Lesbian, Bi-sexual, and Transgender communities
15. Through 2015, promote suicide public awareness events sponsored by organizations such as NAMI Utah, Utah Chapter of the Mental Health Association, and Hugs for Life.

**Objective 4: By 2015, training for reporting suicide and recognition of at-risk behavior and delivery of effective treatment will increase by half.**

**Activities**

1. By 2011, define minimum course objectives for providers of health care and counseling graduate programs in suicide risk and protective factors.
2. By 2012, educate, support, and involve family members about risk and protective factors for suicide.
3. By 2012, train local media representatives to promote accurate and responsible representation of suicidal behaviors, mental illness, and related issues in compliance with national reporting guidelines.
4. By 2013, train clergy, educational staff, and law enforcement officers on identifying and responding to person in mental health crisis and/or risk for suicide.
5. Through 2015, continue support services to all suicide survivors to address their exposure to suicide and the unique needs of suicide survivors.

**Objective 5: By 2015, access to mental health and substance abuse services will increase by 20%.**

### **Activities**

1. By 2012, improve access to mental health care for uninsured and non-Medicaid population.
2. By 2012, define and implement guidelines for mental health (including substance abuse) screening and referral of students in universities and colleges.
3. By 2012, support and implement guidelines for mental health assessment and treatment for suicidal individuals from adult and juvenile incarcerated populations.
4. Through 2015, provide referrals for mental health services to the community.

### **Implementing Organizations**

- Local colleges and universities
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Department of Human Services
  - Division of Substance Abuse and Mental Health
- National Alliance on Mental Illness – Utah
- Juvenile and Adult Corrections
- Faith-based Organizations

### **Evidence-based Interventions/Best Practices**

- Community Trials Intervention To Reduce High-Risk Drinking  
<http://www.pire.org/communitytrials/index.htm>
- Emergency Department Means Restriction Education  
<http://nrepp.samhsa.gov/ViewIntervention.aspx?id=15>
- Emergency Room Intervention for Adolescent Females  
<http://chipts.ucla.edu/interventions/manuals/interer.html>
- Seeking Safety <http://www.seekingsafety.org>
- United States Air Force Suicide Prevention Program  
<http://nrepp.samhsa.gov/ViewIntervention.aspx?id=121>
- Challenging College Alcohol Abuse <http://www.socialnorms.campushealth.net>,  
<http://www.health.arizona.edu>
- Coping With Work and Family Stress  
<http://www.theconsultationcenter.org/index.php/?/coping-with-work-a-family-stress.html>

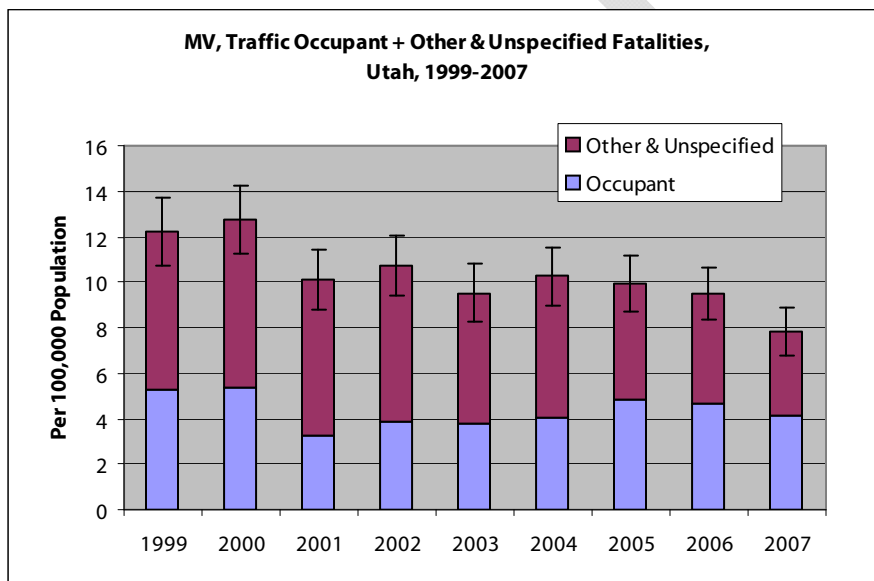
**Ages 25-64**

# Motor Vehicle Crashes

## Overview

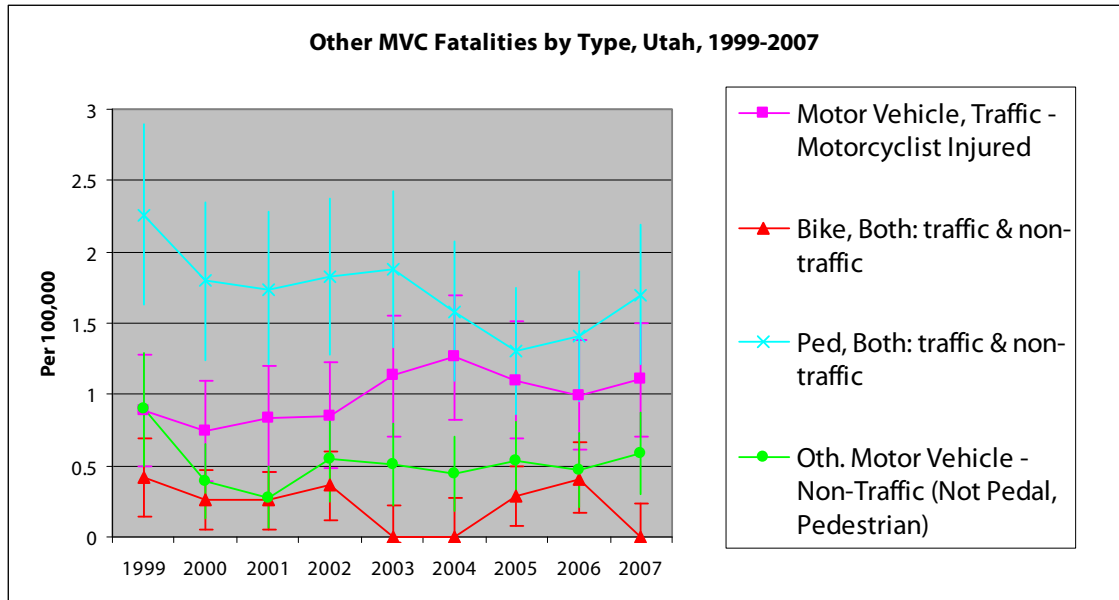
Motor vehicle crashes (MVCs) are the second leading cause of injury death, behind poisoning, for all ages in Utah.<sup>61</sup> Motor vehicle crash data includes eight categories: MV traffic-occupant injured, MV traffic-motorcyclist injured, MV traffic-pedal cyclist injured, MV traffic-pedestrian injured, MV traffic-other and unspecified, pedal cyclist MV non-traffic and other, pedestrian MV non-traffic and other, and other MV non-traffic and other. The last category listed includes all terrain vehicles, snowmobiles, and motor-cross-related injuries.

Since 1999, Utah's age-adjusted MVC traffic-occupant and MV traffic-other and unspecified death rate has decreased. However, motorcyclist fatalities, pedal cyclist fatalities, pedestrian fatalities, and other MV non-traffic (ATVs, snowmobiles, motor-cross) fatalities have remained fairly consistent during this time.<sup>62</sup>



<sup>61</sup> IBIS

<sup>62</sup> IBIS

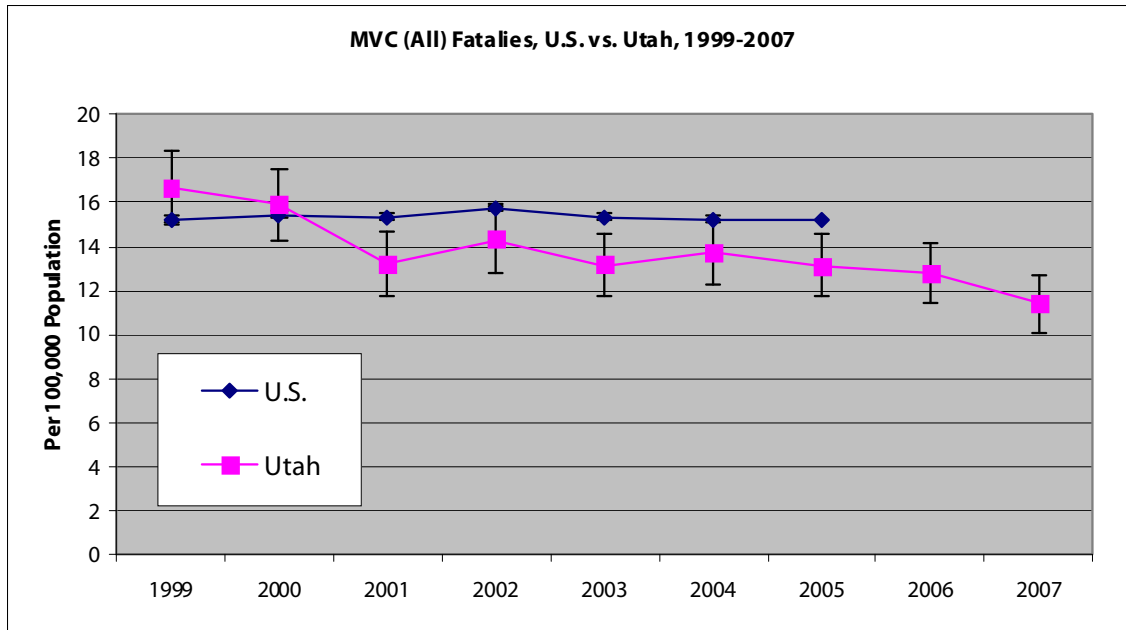


### Healthy People 2020 Objectives

- IVP-14 Reduce nonfatal motor vehicle crash-related injuries
- IVP-15 Increase use of safety belts
- IVP-16 Increase age-appropriate vehicle restraint system use in children
- IVP-17 Increase the number of States and the District of Columbia with “good” graduated driver licensing (GDL) laws
- IVP-18 Reduce pedestrian deaths on public roads
- IVP-19 Reduce nonfatal pedestrian injuries on public roads
- IVP-20 Reduce pedal cyclist deaths on public roads
- IVP-21 Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders
- IVP-22 Increase the proportion of motorcycle operators and passengers using helmets

### Data, Surveillance and Costs

Since 2001, Utah has had a lower MVC death rate than the U.S. (NEED REFERENCES)



In 2005, Utah's MVC fatality rate was 13.2 per 100,000 population compared to the U.S. age-adjusted MVC death rate of 15.2 per 100,000 population. From 2003-2007, the MV traffic hospitalization rate for Utah was 6.4 per 10,000 population compared to 8.4 per 10,000 population for the U.S. From 2003-2007, the MV traffic emergency department visit (ED) rate for Utah was 76.8 per 10,000 population and 100.0 per 10,000 population for the U.S. (NEED REFERENCES)

### Geographic

From 2003-2007, Tricounty HD had the highest MVC fatality rate at 29.4 per 100,000 population and highest MVC hospitalization rate at 10.3 per 10,000 population among local health districts. Weber-Morgan HD had the highest MVC ED visit rate at 88.6 per 10,000 population among local health districts.

Among small areas, Grand/San Juan Co. had the highest MVC fatality rate at 30.6 per 100,000 population, Magna had the highest MVC ED visit rate at 116.3 per 10,000 population, and TriCounty HD had the highest MVC hospitalization rate at 10.3 per 10,000 population.

Other HDs and small areas with significantly higher and lower MVC rates than the state rate can be found in Appendix X.

### Age and Sex

The highest MVC death rate from 2003-2007 was among Utahns aged 65 years and older (20.4 per 100,000 population), followed by those aged 18-24 (16.7 per 100,000 population), Utahns aged 15-17 (15.0 per 100,000 population), and those aged 25-64 (12.2 per 100,000 population).

The highest MVC hospitalization rate from 2003-2007 was among Utahns aged 15-17 (10.8 per 10,000 population), followed by those aged 18-24 (9.6 per 10,000 population), Utahns aged 65 and older (8.2 per 10,000 population), and those aged 25-64 (6.7 per 10,000 population).

The highest MVC ED visit rate from 2003-2007 was among Utahns aged 18-24 (161.1 per 10,000 population), followed by those aged 15-17 (154.0 per 10,000 population), and Utahns aged 25-64 (83.6 per 10,000 population).

Males aged 25-64 had a significantly higher rate for MVC fatalities (five categories combined), MVC occupant and other unspecified hospitalizations, motorcyclist hospitalizations, MVC ED visits (five categories combined), MVC occupant and other unspecified ED visits, and pedal cyclists ED visits. Females aged 25-64 had a significantly higher rate for motorcyclists hospitalizations, MVC ED visits (five categories combined), MVC occupant and other unspecified ED visits, and motorcyclists ED visits.

### **Seatbelt Use**

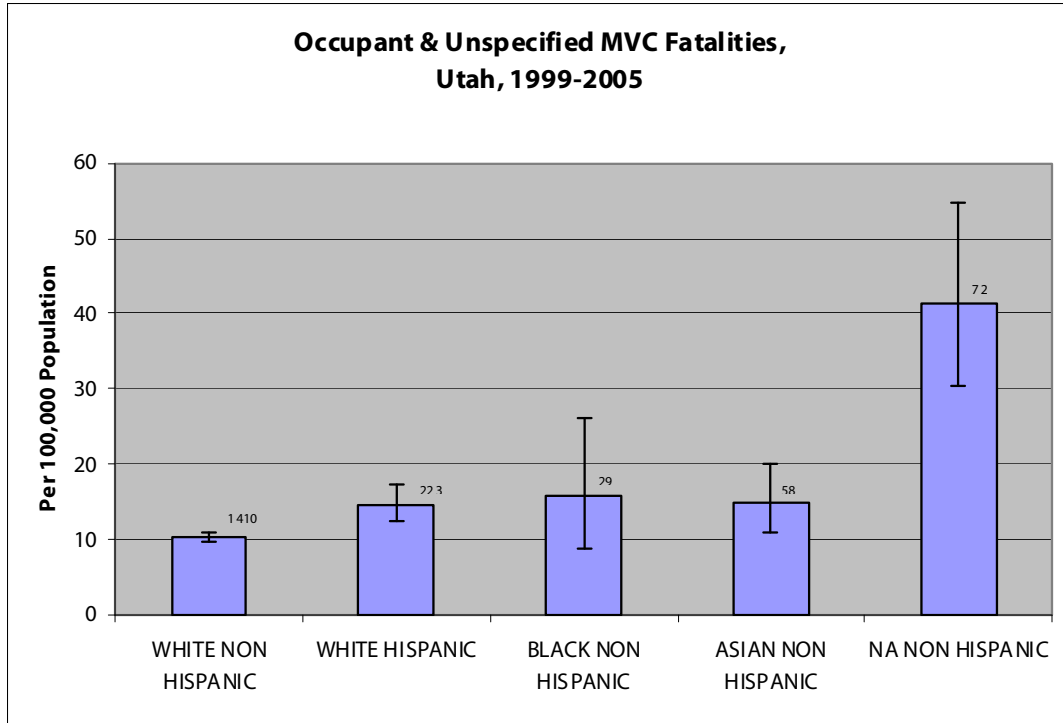
According to the Behavior Risk Surveillance System (BRFSS) more than 9 of 10 (91.9%) Utah adults reported always or nearly always wearing their seatbelts when they drove or rode in a car. Utah's rate was similar to the U.S. rate of 91.5%.<sup>63</sup> Self-reported seatbelt use among adults was about 5% higher for women at every age than for men. When the rate of self-reported seatbelt use for Utah's 61 small areas was plotted with the MVC fatality rate for the same small areas, a strong relationship was seen. Small areas with higher self-reported seatbelt use tended to have lower rates of MVC fatalities and areas with lower seatbelt use tended to have higher rates of MVC fatalities ( $R=.4200$ ,  $p<.0001$ ).

### **Race and Ethnicity<sup>64</sup>**

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<sup>63</sup> Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System (BRFSS) [Online]. (2008). National Center for Chronic Disease Prevention and Health Promotion, CDC (producer). [cited 2009 Jan 15]. 2002, 2006 Data Years. Available from : URL: <http://www.cdc.gov/BRFSS/>.

<sup>64</sup> WISQARS, data years 2001-2005



### Costs

From 2003-2007, the emergency department visit charges for all eight categories of MVC data totaled more than \$250 million. Of this total, approximately \$39 million was due to ATV/snowmobile/motorcross injuries, \$32 million due to motorcyclist crashes, \$23 million due to pedestrian injuries, and \$16 million due to pedal cyclist crashes.<sup>65</sup>

From 2003-2007, the hospitalization charges for all eight categories of MVC data totaled more than \$270 million. Of this total, approximately \$43 million was due to ATV/snowmobile/motorcross injuries, \$35 million due to motorcyclist crashes, \$24 million due to pedestrian injuries, and \$17 million due to pedal cyclist crashes.<sup>66</sup>

### Strategies

**Objective 1: By 2015, develop and/or expand existing safe driving educational messages and programs.**

### Activities

1. By 2012, develop and/or adapt existing materials for parents/guardians on how to teach teens safe driving.

<sup>65</sup> IBIS

<sup>66</sup> IBIS

2. By 2013, develop a course for parents/guardians of teens (ages 15-19) in driver education programs.
3. By 2015, pass legislation requiring parents/guardians take the parent/guardian course for teen drivers prior to their child receiving a driver's license.
4. By 2014, develop and provide a refresher education course to motorcycle users.
5. By 2012, personalize messages to communities based on local stories and local data.
6. Throughout 2015, continue to educate families attending car seat checks on all aspects of safe driving.

### **Objective 2: By 2015, enact policies/legislation regarding motor vehicle safety.**

#### **Activities**

1. Through 2015, provide data-driven fact sheets on MVC-related legislation to advocates, Utah Legislature, and other stakeholders.
2. By 2013, promote workplace policies prohibiting employees from using cell phones while driving on company business.
3. By 2015, pass legislation banning use of cell phones while driving.
4. By 2015, support policies/legislation regarding distracted driving, impaired driving, drowsy driving, and aggressive driving.
5. By 2015, pass legislation requiring drivers to retake the written driving at given intervals.
6. By 2015, pass primary seatbelt law legislation.

### **Objective 3: By 2015, continue use of existing surveillance systems.**

#### **Activities**

1. By 2011, ensure capacity for the production and dissemination of motor vehicle crash-related data publications.
2. By 2011, collaborate with the Utah Highway Safety Office to identify and target surveillance data for specific audiences (e.g., Utah State Legislature, local health departments, etc.)
3. Through 2015, maintain publicly accessible data query system through the Indicator Based Information System for Public Health (IBIS-PH).

#### **Implementing Organizations**

- American Automobile Association (AAA), Utah chapter
- Insurance companies
- Law enforcement agencies
- Safe Kids Utah
- Utah's 12 Local Health Departments
- Utah Department of Health
  - Violence and Injury Prevention Program

- Utah Department of Transportation
- Utah Department of Public Safety
  - Utah Highway Safety Office
- Utah Safety Council
- Zero Fatalities campaign

### **Evidence-based Interventions/Best Practices**

Zero Fatalities (<http://ut.zerofatalities.com/>) is a mutual effort from various states addressing the top behaviors that are killing people on America's roads. The focus varies by state, but includes behaviors such as drowsy driving, distracted driving, aggressive driving, impaired driving, and not buckling up. In 2006, the Utah Department of Transportation initiated the Zero Fatalities program along with the support of the Utah Department of Public Safety, the Federal Motor Carrier Safety Administration, FHWA, private businesses, and citizens, with the sole purpose of decreasing the number of deaths on Utah's roads.

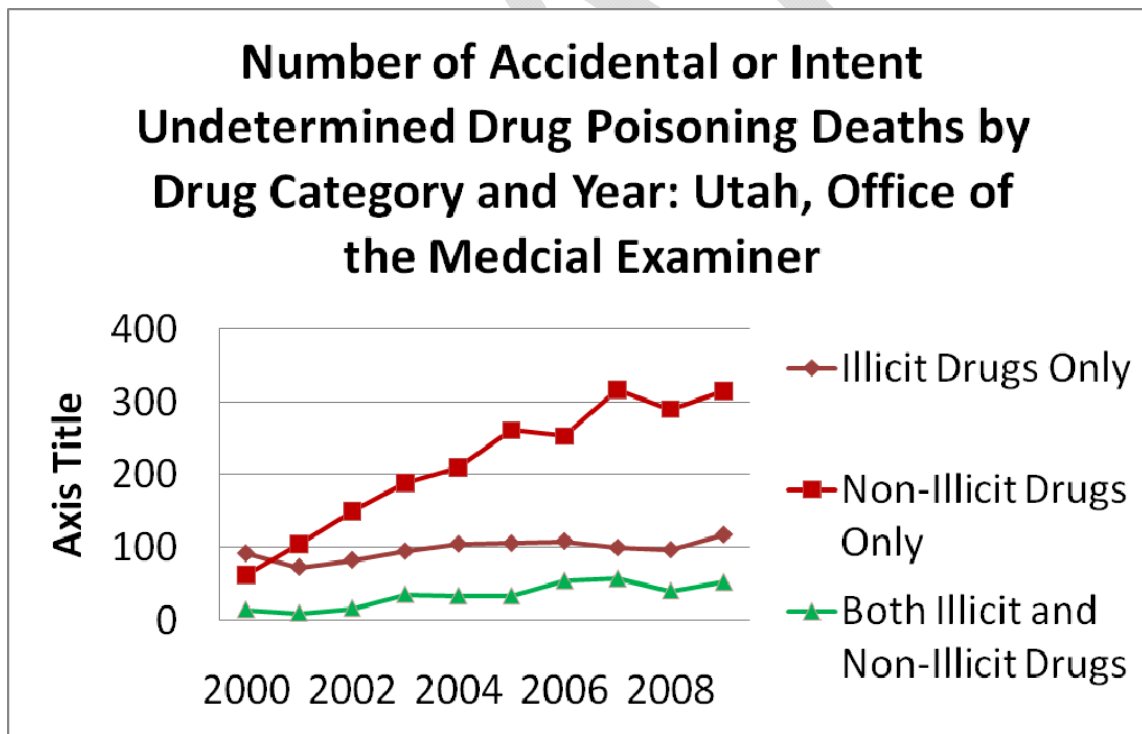
## Poisoning (Prescription Drugs)

### Overview

From 2003-2007, the poison emergency department visit (ED) rate for Utah was 20.4 per 10,000 population compared to 16.3 per 10,000 population for the U.S. The poison hospitalization rate was 7.7 per 10,000 population for Utah and 8.1 per 10,000 population for the U.S.

The poison fatality rate for Utah during this same time period was 19.6 per 100,000 population and is significantly higher than the U.S. rate of 11.4 per 100,000 population. Utah ranked 2<sup>nd</sup> in the U.S. for poison fatalities from 2003-2007, New Mexico ranked 1<sup>st</sup>.

In Utah, the number of unintentional drug poisoning deaths increased over ten-fold during 1991-2009, from 41 to 451.<sup>1</sup> In 2003, the number of deaths resulting from poisoning deaths in Utah surpassed those occurring from motor vehicle accidents.<sup>2</sup> The majority of the increase in drug poisoning deaths occurred as a result of overdose of non-illicit drugs, which includes primarily prescription medications. In 2009, approximately 80% of the unintentional drug deaths in Utah were due to prescription pain relievers, such as oxycodone, methadone, and hydrocodone.



### Healthy People 2020 Objectives

- IVP-9 Prevent an increase in the rate of poisoning deaths
- IVP-10 Prevent an increase in the rate of nonfatal poisonings

## Data, Surveillance and Costs

### Geographic Data

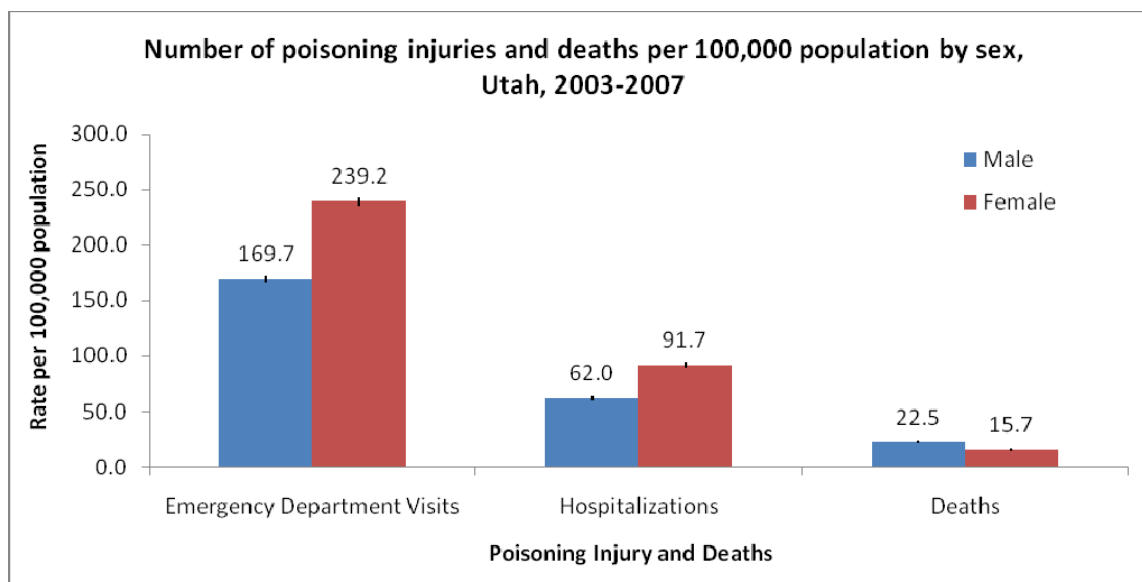
From 2003-2007, Salt Lake Valley HD had the highest poison ED visit rate at 23.2 per 100,000 population and Southeastern Utah HD had the highest poison hospitalization rate at 12.1 per 100,000 population among local health districts. Brigham City had the highest poison injury ED visit rate at 34.7 per 100,000 population and Carbon/Emery Counties had the highest poison hospitalization rate at 18.8 among small areas.

Southeastern Utah HD (26.1 per 100,000 population) and Salt Lake Valley Health District (HD) (21.4 per 100,000 population) had significantly higher poison fatalities compared to the state rate (19.1 per 100,000 population). South Salt Lake had the highest poison fatality rate at 51.0 per 100,000 population among small areas. Other HDs and small areas with significantly higher and lower self-inflicted injury and suicide rates than the state rate can be found in Appendix X.

### Age and Sex

Females have significantly higher emergency department visit and hospitalizations rates compared to males. However, males have significantly higher poison fatality rates compared to females (22.5 and 15.7 per 100,000 population) (Figure X).

Figure X



When broken down by age group, 15-17 year old males and females (32.8 and 65.4 per 10,000 population) had the highest poison ED visit rates among age groups (Figure X). For poison hospitalizations, 18-24 year old males (9.2 per 10,000 population) and 35-44 year old females (14.8 per 10,000 population) had the highest rates among age groups (Figure X).

Figure X

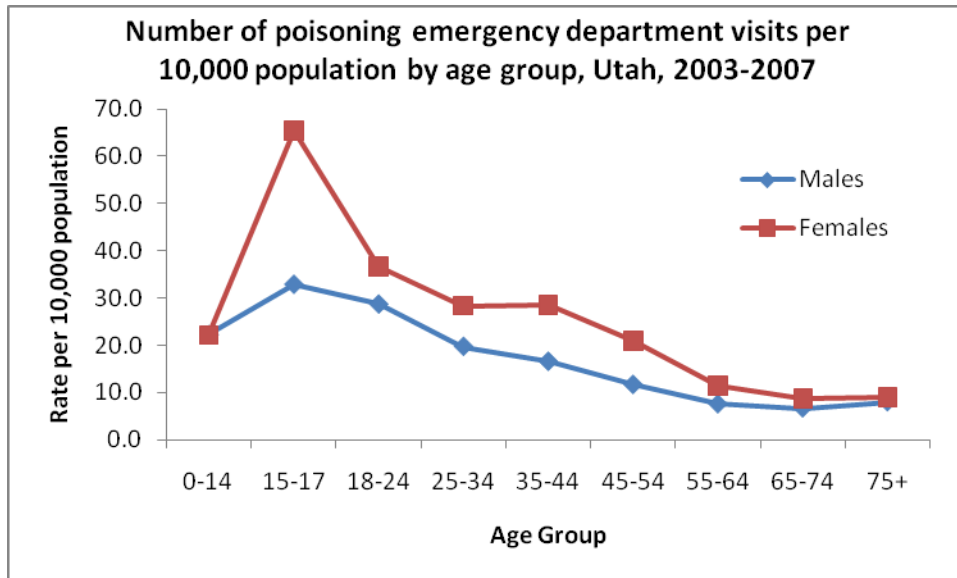
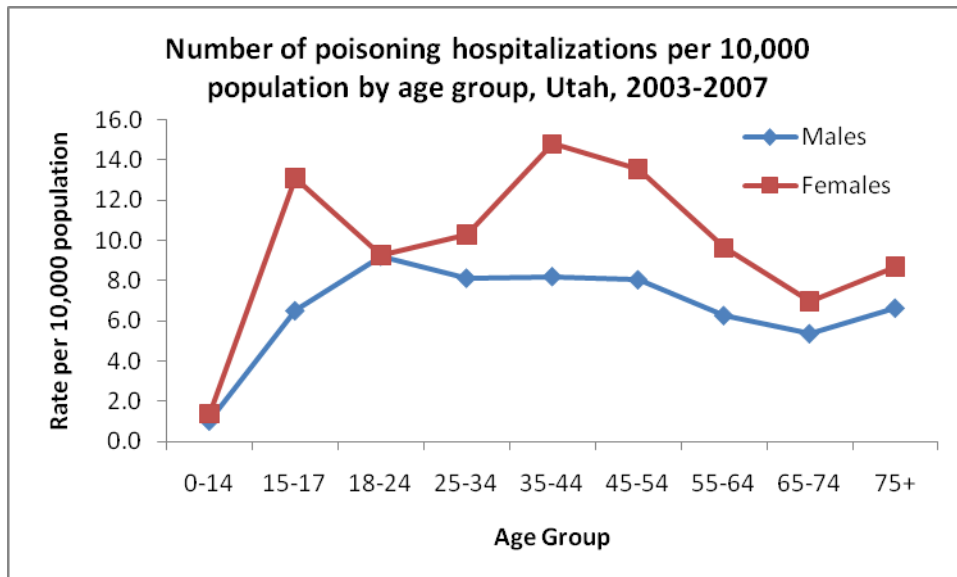
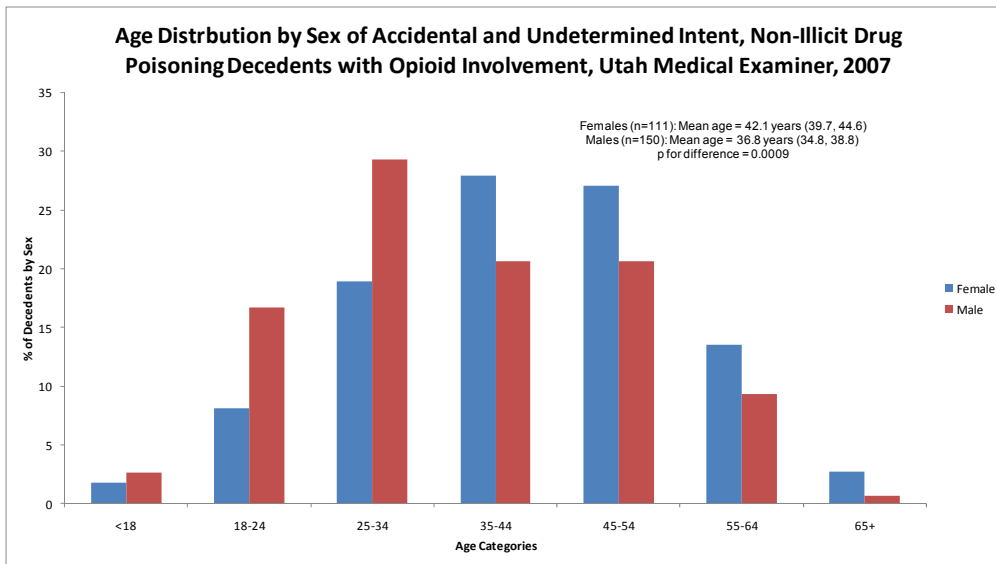


Figure X



Persons 45-54 had the highest poison fatality rate among males and females (42.2 and 35.5 per 100,000 population). Among individuals who died of a prescription opioid overdose between 2008-2009, the median age for females (46 years) was significantly higher than for males (38 years) ( $P < 0.01$ ). The proportion of females who died (49%) were approximately equal to the number of males who died (51%).



### Costs

From 2003-2007, \$121 million was spent in Utah on hospital and emergency department charges for the treatment of poisonings.

### Strategies

**Objective 1: By 2013, at least one existing surveillance system will be improved to adequately monitor prescription drug overdose fatalities in Utah.**

### Activities

1. By 2011, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate prescription drug overdose fatality data.
2. By 2011, identify primary users of information, assess their needs, and prioritize according to the results of the assessment.
3. By 2011, evaluate the Utah Violent Death Reporting System for its usefulness in monitoring prescription drug overdose fatalities in Utah.
4. By 2011, develop a list of data needs that are not covered by existing data sources.
5. By 2012, explore opportunities to add prescription drug overdose fatality components to existing data collection systems to gather more complete information about specialty populations at risk for prescription drug overdoses, including treatment data and criminal records in order to close gaps in prescription drug overdose fatality data collection.
6. By 2013, assess the extent to which prescription drug overdoses occur.

**Objective 2: Through 2015, information from surveillance data will be disseminated to appropriate stakeholders.**

### **Activities**

1. By 2011, ensure capacity for the production and dissemination of prescription drug overdose data publications.
2. By 2011, identify and target surveillance data for specific audiences (e.g., Utah State Legislature, local health departments, etc.)
3. By 2011, develop audience and topic specific prescription drug overdose fact sheets with a dissemination plan for each fact sheet.
4. By 2012, develop, support, and/or disseminate lessons learned from the Utah Prescription Pain Medication Management and Education Program.
5. By 2013, evaluate prescription drug overdose data publications as to their usefulness in helping local health districts and community-based organizations implement poisoning prevention strategies.

**Objective 3: By 2015, more than half of Utah's general population will recognize that prescription drug overdose is a preventable public health problem.**

### **Activities**

1. By 2011, promote efforts to educate on proper use, storage, and disposal of prescription pain medications.
2. Through 2011, continue statewide collaboration to implement the activities and recommendations of the Utah Pharmaceutical Drug Crime Project.
3. By 2011, convene conferences in local urban and rural areas.
4. By 2011, educate the general public through disseminating brochures and public service announcements on television and internet.
5. By 2012, compile a summary report on progress made regarding the Prescription Pain Medication Program activities.
6. By 2013, implement evidence-based substance abuse prevention programs that target persons that are identified as being at risk of death or harm from prescription pain medication overdose.
7. Through 2015, promote prescription drug overdose public awareness events sponsored by organizations such as Utah Pharmaceutical Drug Crime Project, Division of Substance Abuse and Mental Health, Department of Environmental Quality, and Drug Enforcement Agency.

**Objective 4: By 2015, train providers on proper prescribing of opioids including screening, treatment, and monitoring will increase by half.**

### **Activities**

1. By 2011, define minimum course objectives for providers of health care and counseling graduate programs in drug overdose risk and protective factors.
2. By 2012, educate, support, and involve family members about risk and protective factors for drug overdoses.

3. By 2012, ensure that options for CME on proper prescribing of opioids are available to providers.
4. By 2013, review and revise Utah Clinical Guidelines on Prescribing Opioids for Treatment of Pain with any updated research findings.
5. Through 2015, continue to educate providers by disseminating the Guidelines and continuing to make CMEs available.

**Objective 5: By 2015, access to mental health and substance abuse services will increase by 20%.**

**Activities**

1. By 2012, improve access to substance abuse services for uninsured and non-Medicaid population.
2. By 2012, define and implement guidelines for substance abuse screening and referral of students in universities and colleges.
3. By 2012, support and implement guidelines for substance abuse assessment and treatment for individuals struggling with addiction from adult and juvenile incarcerated populations.
4. Through 2015, provide referrals for substance abuse services to the community.

**Objective 6: By 2015, increase availability and knowledge of options for proper disposal of prescription medications disposal options**

**Activities**

1. By 2011, educate the public not to flush leftover medication.
2. By 2011, educate public about locations for drop boxes and keep these locations updated at [useonlyasdirected.org](http://useonlyasdirected.org)
3. By 2012, support new legislation regarding options for disposal in other public locations.
4. Through 2015, provide information to public about disposal options and current best practices.

**Implementing Organizations**

- Local colleges and universities
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Utah's Local Substance Abuse Authorities
- Department of Human Services
  - Division of Substance Abuse and Mental Health
- National Alliance on Mental Illness – Utah
- Utah Poison Control Center

- Drug Enforcement Agency
- Department of Environmental Quality

### **Evidence-based Interventions/Best Practices**

- Celebrating Families <http://www.celebratingfamilies.net>

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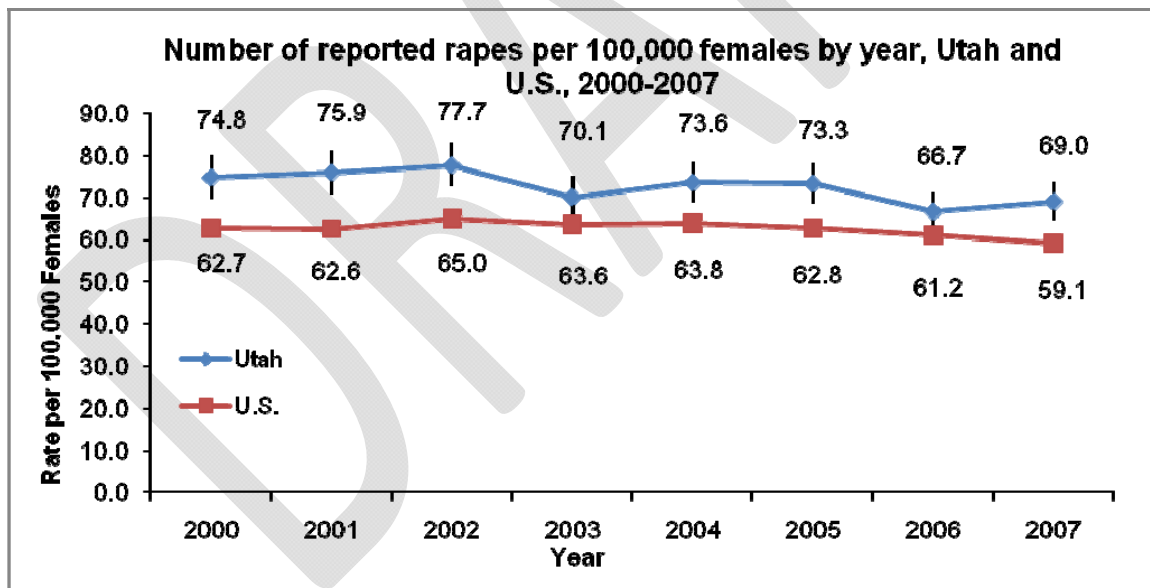
# Sexual Assault and Family Violence

## Overview

**Sexual Assault.** Sexual violence in Utah is a serious public health problem affecting thousands of residents each year. Studies in Utah indicate that one in eight women and one in 50 men will experience rape in their lifetimes<sup>67</sup> and nearly one in three women will experience some form of sexual violence during their lives.<sup>68</sup> Additionally, a national study showed one in four women and one in six men reported being a victim of child sexual abuse.<sup>69</sup> For the most part, sexual assault affects Utah's younger population.

Utah ranks 19<sup>th</sup> in the nation for reported forcible rapes.<sup>70</sup> Rape is the only violent crime in Utah that is higher than the national average. In a state where other violent crimes such as, homicide, robbery or aggravated assault, is historically half to three times lower than the national average, this is of concern. Since 2000, Utah's reported rape rate has been significantly higher than the U.S. reported rape rate. In 2007, Utah's reported rape rate was 69 per 100,000 females (n=927) and the U.S. rate was 59 per 100,000 females (n=90,427) (Figure X). During 2007, a rape was reported every 10 hours in Utah.<sup>71</sup>

Figure X



<sup>67</sup> Utah Department of Health. (2008). *Utah Health Status Update: Sexual Violence*. April 2008.

<sup>68</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

<sup>69</sup> Dube, S.R., Anda, R.F., Whitfield, C.L., et al. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine*, 28, 430-438.

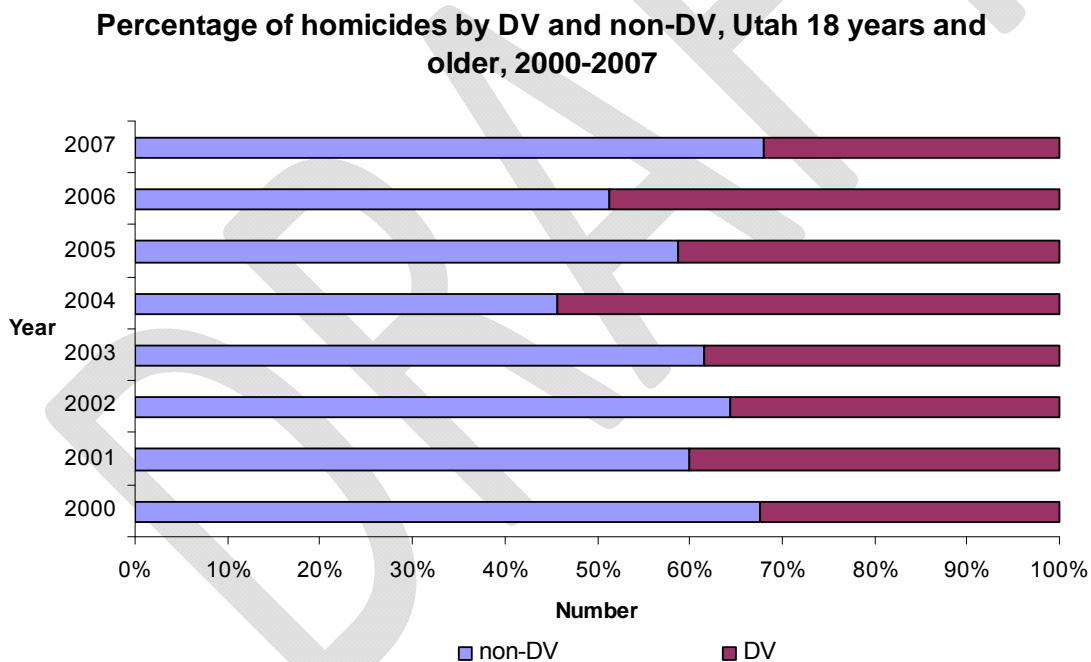
<sup>70</sup> U.S. Department of Justice. Federal Bureau of Investigation, (2008) *Crime in the United States, 2007*. <http://www.fbi.gov/ucr/cius2007/> Accessed April 2009.

<sup>71</sup> Utah Department of Public Safety, (2008). *Crime Statistics for the State of Utah*. <http://publicsafety.utah.gov/bci/crimestatistics.html> Accessed February 2008.

**Family Violence.** According to women surveyed in 2005, 37.0 percent reported having been a victim of some form of domestic violence at some point in their lives. This equates to 1 in 4 women, or 187,201 women in Utah who have suffered from domestic violence. In a 2005 survey, emotional abuse was the most common type of psychological abuse experienced by women at 25.0 percent.<sup>72</sup> According to the Domestic Violence Incidence and Prevalence Study, 5.0 percent of women have experienced pushing/shoving and 5.0 percent have experienced hitting/slugging/socking, 2.0 percent have reported strangling. The domestic violence-related incident rate was 456.0 per 100,000 population from 2003-2007.<sup>73</sup>

On average, domestic violence-related homicides account for approximately 40.0% of adult homicides in Utah from 2000-2007 (Figure X).<sup>74</sup> From 2000-2007, there were a total of 147 domestic violence-related homicides, an average of 18 per year (1.1 per 100,000 adults). From 2005-2008, there were 165 DV-related suicides, which accounted for 11.8 percent of suicide deaths involving persons 18 years of age and older in Utah.

Figure X



**Healthy People 2020 Objectives**

- **IVP-31**                 Reduce violence by current or former intimate partners.
- **IVP-32**                 Reduce sexual violence.

<sup>72</sup> 2005 Dan Jones & Associates Domestic Violence Incidence and Prevalence Study

<sup>73</sup> 2003-2007 Crime in Utah Reports

<sup>74</sup> DVFRC

## Data, Surveillance and Costs

### Geographic Data

**Sexual Assault.** According to the 2006 Utah BRFSS survey, there were no significant differences in lifetime prevalence of rape or attempted rape by locality. However, the residential county of the person at the time of the survey doesn't necessarily indicate the residential county of where the rape or attempted rape occurred. Using Uniform Crime Report data, the following counties have significantly higher reported rape rates than the state rate:

Location	Rate per 100,000 population
State	72
Uintah	101
Carbon	98
Salt Lake	95
Tooele	89
Weber	80

The following counties have significantly lower reported rape rates than the state rate:

Location	Rate per 100,000 population
State	72
Wasatch	22
Sanpete	31
San Juan	39
Utah	47
Washington	53
Cache	54
Iron	55
Davis	55

The following counties had too few reported rapes to meet UDOH standard for reliability: Beaver, Emery, Rich. The following counties did not have any reported rapes: Daggett, Garfield, Morgan, Piute, Wayne.

### Age and Sex

**Sexual Assault.** According to the 2006 Utah BRFSS, females have a significantly higher prevalence of rape or attempted rape than males (12% and 2%, respectively).<sup>75</sup> Among female victims who experienced rape or attempted rape, 99 percent were victimized by a male.<sup>76</sup> In the 2007 Rape in Utah Survey, 95 percent reported that the sexual assault was committed by

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<sup>75</sup> Utah Department of Public Safety, (2008). Crime Statistics for the State of Utah. <http://publicsafety.utah.gov/bci/crimestatistics.html> Accessed February 2008.

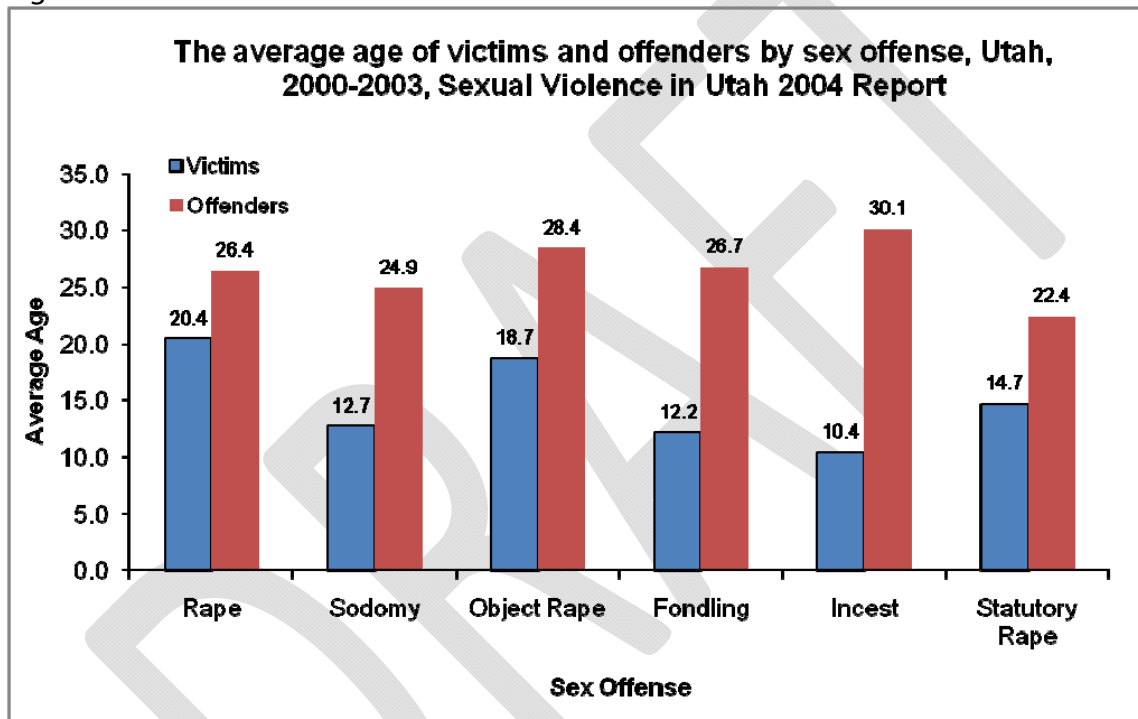
<sup>76</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

a male.<sup>77</sup> Among male victims who experienced rape or attempted rape, there was no difference in perpetrator gender.<sup>78</sup>

When males were victims of sex offenses they tended to be found in younger age groups (less than 16 years old). This is most pronounced among victims of sodomy and object rape. Same sex offenses accounted for 18 percent of all sexual assaults from 2000-2003.<sup>11</sup>

The average age of rape victims was 20 years old and for rape offenders was 26 years old. The biggest gap between victim and offender ages was seen in incest sex offenses. The average age of victims was 10 years old and the average age for offenders was 30 years old (Figure X).

Figure X



The 2007 Rape in Utah Survey indicated that the average age of a victim's first assault was 16 years old.<sup>79</sup>

Males between the ages of 15-19 are arrested more frequently for rape than any other age group (Figure 13).<sup>80</sup>

<sup>77</sup> Mitchell, C., & Peterson, B., (2007). *Rape in Utah, 2007*. Utah Commission on Criminal and Juvenile Justice.

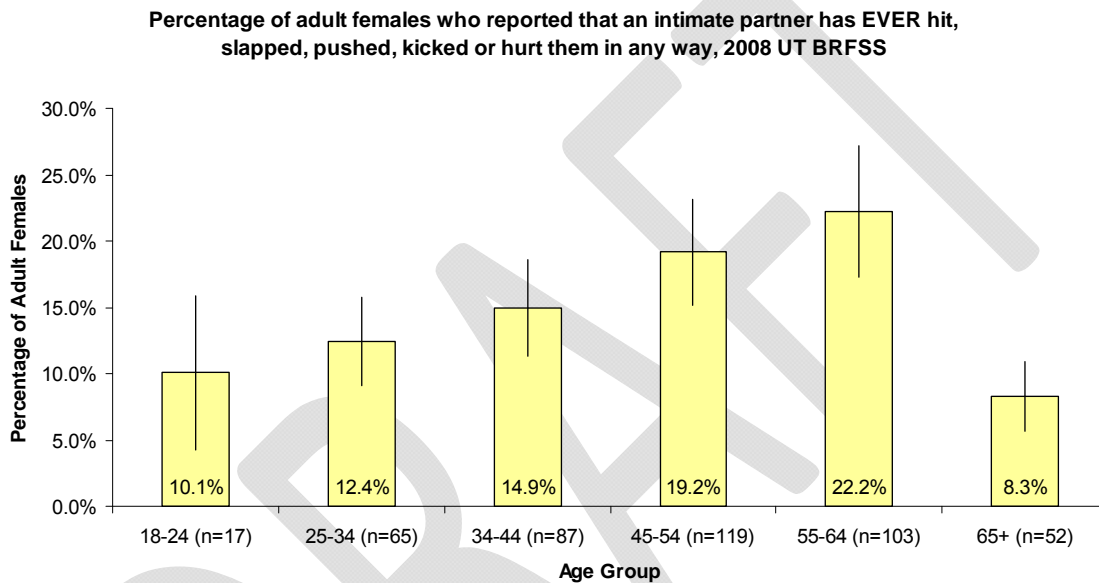
<sup>78</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

<sup>79</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

<sup>80</sup> Haddon, M., & Christenson, J (2005). *Rape in Utah*. Utah Commission on Criminal and Juvenile Justice.

**Family Violence.** According to the 2008 Utah Behavioral Risk Factor Surveillance System, 98.2% females reported that they were in a safe place to answer questions regarding intimate partner violence. The survey found that 14.2% females reported that they have been hit, slapped, pushed, kicked, or hurt in any way by an intimate partner in their lifetime (Figure X).

Of the females who reported intimate partner violence (IPV), 7.8% indicated that they have experienced IPV in the past 12 months. Of these females, 39.1% of the perpetrators were husbands or a male live-in partner, 27.2% were former husbands or former live-in partners, and 25.7% were former boyfriends.



Males have a significantly higher domestic violence-related homicide perpetrator rate than females (1.6 and .3 per 100,000 adults, respectively).<sup>81</sup> There was not a significant difference among domestic violence-related homicide victims by gender and age group.<sup>82</sup>

Males also have a significantly higher domestic violence-related suicide rate than females (4.5 and 0.6 per 100,000 adults, respectively).<sup>83</sup> There were no significant differences among age groups in domestic violence-related suicide victims, homicide victims and homicide perpetrators.<sup>84</sup>

### Costs

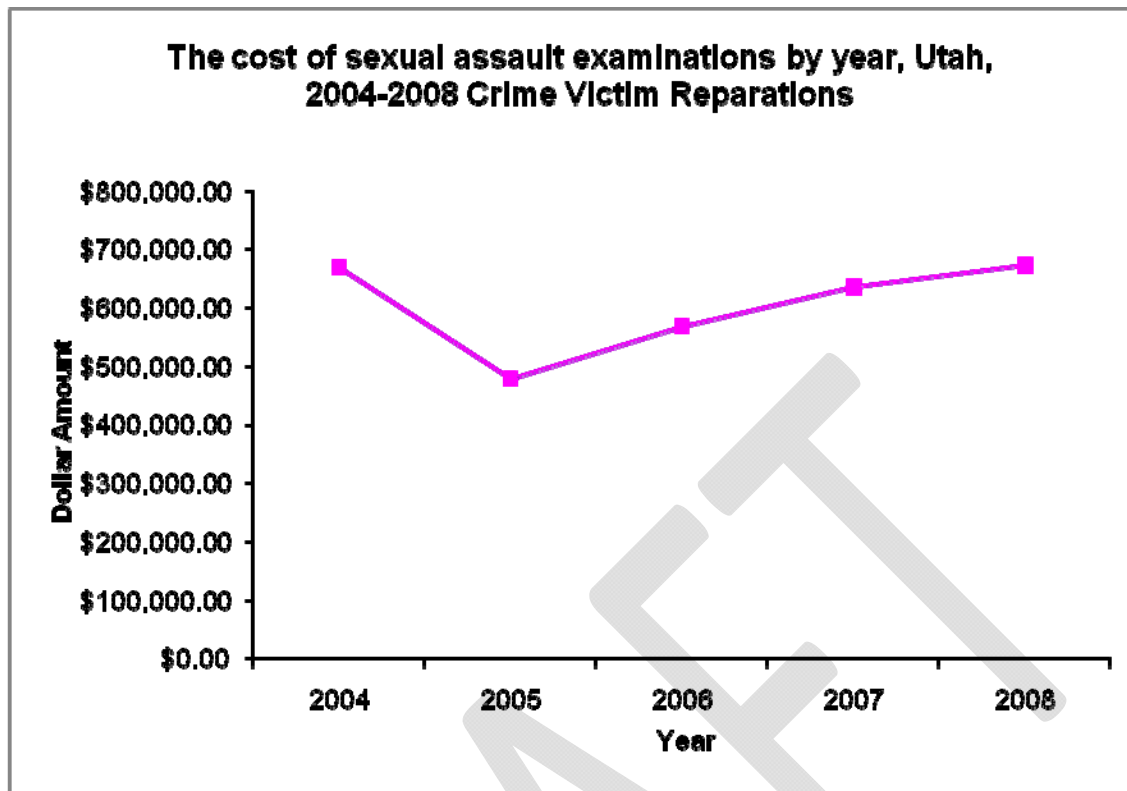
Figure X shows costs associated with administering sexual assault examinations in Utah.

<sup>81</sup> 2000-2002 Domestic Violence Fatalities in Utah Report

<sup>82</sup> 2000-2002 Domestic Violence Fatalities in Utah Report

<sup>83</sup> 2000-2002 Domestic Violence Fatalities in Utah Report

<sup>84</sup> 2000-2002 Domestic Violence Fatalities in Utah Report, 2005-2006 UTVDRS



## Strategies

**Objective 1: By 2013, Sexual Violence Prevention Coalitions will be operating within Tooele, Uintah, and Carbon Counties.**

### Activities

1. By 2010, identify key leaders and groups within the counties and work with their communities to establish coalitions on the prevention of sexual violence.
2. By 2011, conduct community needs assessments in each of the counties to determine the needs and conditions that must be addressed in order to prevent sexual violence.
3. By 2012, provide training and technical assistance to support the prevention coalitions in developing prevention initiatives.
4. By 2013, invite disparate communities to participate in the Sexual Violence Prevention Alliance.

**Objective 2: By 2013, build the understanding of sexual assault and family violence through collection of data on protective and risk factors.**

### Activities

1. By 2011, conduct community needs assessments in each of the counties to determine the needs and conditions that must be addressed in order to prevent sexual assault and family violence.

2. By 2012, conduct surveillance on sexual violence (SV) and its relationship to adverse childhood experiences (ACE) through the SV and ACE modules of the BRFSS. Publish the findings.
3. By 2013, publish an analysis of the costs of sexual violence in Utah, using the methodology published by the Minnesota Department of Health.
4. Continue to encourage and support research into identifying the prevalence and dynamics of sexual assault and family violence in Utah.
5. Improve data collection around sexual assault and family violence perpetration and victimization.

**Objective 3: By 2013, increase state and community readiness for adoption of the Rape Prevention Education Model of Community Change in Utah.**

**Activities**

1. In collaboration with the Utah Coalition Against Sexual Assault (UCASA), disseminate information to RPE Grantees and other state and local agencies on the Rape Prevention Education Model of Community Change.
2. Coordinate with UCASA to identify new and existing prevention partners to support and participate actively in the implementation of the statewide strategic plan for sexual violence prevention.
3. UCASA staff will provide ongoing training and technical assistance to identified partners in state and local agencies on conducting community readiness assessments and implementing evidence based strategies for primary prevention of sexual violence within their communities.

**Objective 4: By 2015, regional or community Sexual Violence Prevention Coalitions will be functioning in all Utah communities.**

**Activities**

1. By 2011, identify partners in counties, cities, judicial districts, health districts, tribal or other organizations and invite them to attend a statewide sexual violence prevention partnership forum for the purpose of advancing coalition and capacity building as well as primary prevention. Provide support, tools, guidance, and technical assistance on conducting needs assessments.
2. By 2013, assist communities in Utah in developing a community needs assessment. By 2014, work with coalitions to research evaluated prevention strategies for use in their communities. Share model or best practice prevention policies.
3. By 2015, provide technical assistance and training on fund raising.

**Objective 5: By 2015, obtain dedicated sexual violence prevention funding, in addition to federal money already allocated to Utah, for state prevention efforts and community grassroots efforts.**

## **Activities**

1. By 2013, publish a document detailing the costs of sexual violence on the state of Utah to use as bargaining source for prevention funding.
2. By 2014, research opportunities for funding through state, local foundations, and other philanthropic organizations.
3. By 2015, provide technical assistance to communities or apply directly for funding for sexual assault and family violence prevention initiatives or strategies.

## **Implementing Organizations**

- Local colleges and universities
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Utah Coalition Against Sexual Assault
- Utah Domestic Violence Coalition
- Utah Commission on Criminal and Juvenile Justice
- Utah Sexual Violence Council

## **Evidence-based Interventions/Best Practices**

**Ages 65+**

# Falls

## Overview

Falls are the most common cause of injury hospitalization and the leading cause of unintentional injury death for Utahns aged 65 and older. From 2003-2007, there were 401 fall-related deaths and 13,890 fall hospitalizations in Utah among Utahns aged 65 and older.<sup>85</sup>

Falls can have a significant impact on an individual's health and well-being. It is estimated that each year, 1 in 500 Utahns age 65 and older will be hospitalized from a traumatic brain injury (TBI) resulting from a fall. Only about one-third (32%) of older adults who sustained a TBI due to a fall and required at least hospitalization returned home under self-care. Most required on-going care either in-home or at another facility and 14% died during from their injury.<sup>86</sup>

## Healthy People 2020 Objectives

- IVP-23 Prevent an increase in the rate of fall-related deaths
- OA-5 Reduce the proportion of older adults who have moderate to severe functional limitations
- OA-6 Increase the proportion of older adults with reduced physical or cognitive function who engage in light, moderate, or vigorous leisure-time physical activities
- OA-11 Reduce the rate of emergency department visits due to falls among older adults

## Data, Surveillance and Costs

In Utah, from 2003-2007 the rate of emergency department (ED) visits due to unintentional falls among Utahns ages 65 and older was 341.0 per 10,000 population.<sup>87</sup> For hospitalizations, the rate was 126.6 falls per 10,000 population.<sup>88</sup> For fall-related deaths, the rate was 36.6 deaths per 100,000 population.<sup>89</sup>

In 2006, Utah's age-adjusted rate of unintentional fall hospitalization was higher than the U.S. rate (23.5 compared to 19.6 per 10,000 population).<sup>90</sup> More than 1 out of every 7 (15.3%) Utah

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<sup>85</sup> IBIS-PH

<sup>86</sup> 2008 Utah Traumatic Brain Injury Surveillance System, Falls Module

<sup>87</sup> IBIS-PH

<sup>88</sup> IBIS-PH

<sup>89</sup> IBIS-PH

<sup>90</sup> Centers for Disease Control and Prevention (CDC). Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. (2008). National Center for Injury Prevention and Control, CDC (producer). [cited 2008 Aug 4]. 2006 Data Year. Available from: URL: [www.cdc.gov/ncipc/wisqars](http://www.cdc.gov/ncipc/wisqars).

adults aged 45 and older reported falling in the past three months.<sup>91</sup> This is similar to the U.S. age-adjusted percentage of 14.3%.<sup>92</sup>

### **Geographic Data**

From 2003-2007, Southeastern Health District (HD) had the highest rate of ED visits due to unintentional falls among Utahns aged 65 and older at 423.8 per 10,000 population. Salt Lake Valley HD had the highest rate of fall hospitalizations at 141.8 per 10,000 population. Central Utah HD had the highest rate of fall-related fatalities at 47.6 per 100,000 population. Among Utah's small areas, Carbon/Emery Counties had the highest rate of ED visits at 542.9 per 10,000 population. South Jordan had the highest rate of fall hospitalizations at 208.8 per 10,000 population and Midvale had the highest rate of fatalities at 85.5 per 100,000 population. Other HDs and small areas with significantly higher and lower unintentional fall ED, hospitalization, and fatality rates than the state rate can be found in Appendix X.

From 2003-2007, Summit County had the highest self-reported percentage of falling among Utahns aged 45 and older at 19.0%. When the percentage of self-reported falls for Utah's 61 small areas was compared with unintentional fall hospitalizations in the same areas, a correlation was found. Areas with higher self-reported falls tended to have higher unintentional fall hospitalizations ( $R=0.2764$ ,  $p<0.0001$ ) (Figure X).<sup>93</sup>

### **Figure X**

### **Age and Sex**

Among Utahns aged 65 and older, men have a higher percentage of falling. The percentages of falling appear to increase with age among men but remain fairly stable among women (Figure X).<sup>94</sup>

### **Figure X**

Among Utah adults aged 65 and older, 20.3% of men and 40.1% of women reported being injured seriously enough to limit regular activities for at least a day or to see a doctor.<sup>95</sup> Females aged 85 and older have a significantly higher fall hospitalization rate than males. Females are injured more often in falls than males, but males die more often from their injuries.<sup>96</sup>

### **Costs**

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<sup>91</sup> 2003 and 2006 Utah BRFSS

<sup>92</sup> Centers for Disease Control and Prevention (CDC). Behavior Risk Factor Surveillance System (BRFSS) [Online]. (2008). National Center for Chronic Disease Prevention and Health Promotion, CDC (producer). [cited 2008 Dec 23]. 2003, 2006 Data Years. Available from: URL: <http://www.cdc.gov/BRFSS/>.

<sup>93</sup> 2003 and 2006 Utah BRFSS

<sup>94</sup> 2003 and 2006 Utah BRFSS

<sup>95</sup> 2003 and 2006 Utah BRFSS

<sup>96</sup> Utah Inpatient Hospital Discharge Data, Office of Health Care Statistics, Utah Department of Health, 2006

The total hospitalization charges from 2003-2007 for unintentional fall hospitalizations among Utahns aged 65 and older was over \$252 million.<sup>97</sup>

## Strategies

### **Objective 1: By 2011, form a statewide falls prevention coalition.**

#### Activities

1. By 2011, identify appropriate partners for coalition in aging services, public health, academia, research, clinical/healthcare, nursing, occupational/physical therapy, community-based organizations, etc.
2. Through 2015, convene a minimum of two coalition meetings annually.
3. By 2012, develop goals, objectives, and strategies for inclusion in the Utah Violence and Injury Prevention Plan.
4. By 2012, form subcommittees as desired by the coalition to implement falls prevention strategies outlined in the Utah Violence and Injury Prevention Plan.
5. Through 2015, conduct yearly satisfaction surveys with coalition members.

### **Objective 2: By 2012, conduct pilot tests and evaluate the effectiveness of evidence-based falls prevention programs, as outlined in the "Preventing Falls: What Works CDC Compendium of Effective Community-based Interventions from Around the World."**

#### Activities

1. By 2011, identify evidence-based program for pilot test based on funding, organizational capacity, political interest, etc.
2. By 2011, secure funding to conduct pilot tests.
3. By 2011, identify appropriate partner(s) and venues to conduct pilot test(s).
4. By 2011, develop contracts with selected partners.
5. By 2011, obtain Institutional Review Board (IRB) approval prior to implementation.
6. By 2011, attend trainings as required to implement the selected program.
7. By 2012, conduct the pilot test of the selected evidence-based falls intervention in at least one small area with a higher falls hospitalization rate than the state rate.
8. By 2012, evaluate the effectiveness of the pilot test to determine if the program reduced the number of falls among participants, decreased participants' fear of falling, fidelity of the program, etc.
9. By 2012, determine how to modify the program for rural communities (i.e. Telemedicine).
10. By 2012, provide a statewide training to other interested partners/organizations so they can also begin implementation of the selected falls prevention program.
11. By 2012, present results of the pilot test to the Utah Falls Prevention Coalition and at major public health/aging services conferences.

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<sup>97</sup> IBIS

**Objective 3: By 2015, educate Utahns aged 65 and older about their risk of falling and prevention strategies.**

**Activities**

1. By 2013, develop culturally and age appropriate educational and screening tools, based on best practices and medical models, that describe a “continuum of fall risk” and suggested prevention strategies for each level of risk.
2. By 2013, evaluate educational and screening tools with target populations to determine their effectiveness.
3. By 2015, disseminate educational and screening tools to healthcare professionals (i.e. geriatricians, general practice, geriatric nurses, physical therapy, occupational therapy, etc).
4. By 2015, increase geriatrician training available to public health professionals and healthcare providers.
5. Through 2015, ensure capacity for the production and dissemination of materials.

**Objective 4: By 2015, evaluate and improve the use and quality of existing surveillance systems.**

**Activities**

1. Through 2015, produce appropriate fact sheets/data reports on unintentional falls among Utahns aged 65 and older.
2. Through 2015, update fact sheets/data reports on an annual basis.
3. By 2012, conduct a statewide assessment of falls prevention resources, interventions, geriatrician and geriatric nurse practitioner training programs, agencies with an interest in falls prevention, treatment options, etc.
4. By 2013, develop a list of data needs (such as health of individual prior to the fall, co-morbid conditions present, location and circumstances of the fall, long-term impact of fall on the individual and healthcare system, etc) that are not covered by existing data sources.
5. By 2013, explore opportunities to partner with researchers to collect data not covered by existing sources.
6. Through 2015, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate falls data.
7. Through 2015, ensure capacity for the production and dissemination of reports.

**Implementing Organizations**

- Intermountain Healthcare
- University of Utah
  - Center on Aging
  - College of Nursing
  - Department of Physical Therapy
  - Division of Geriatrics

- Division of Occupational Therapy
- University of Utah Faint and Falls Clinic
- Utah's Area Agencies on Aging
- Utah Commission on Aging
- Utah Division of Aging and Adult Services
- Utah Department of Health
  - Arthritis Program
  - Physical Activity, Nutrition, and Obesity Program
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
  - Davis County Health Department
  - Salt Lake Valley Health Department
  - Summit County Health Department
  - Utah County Health Department
- VA Medical Center

### **Evidence-based Interventions/Best Practices**

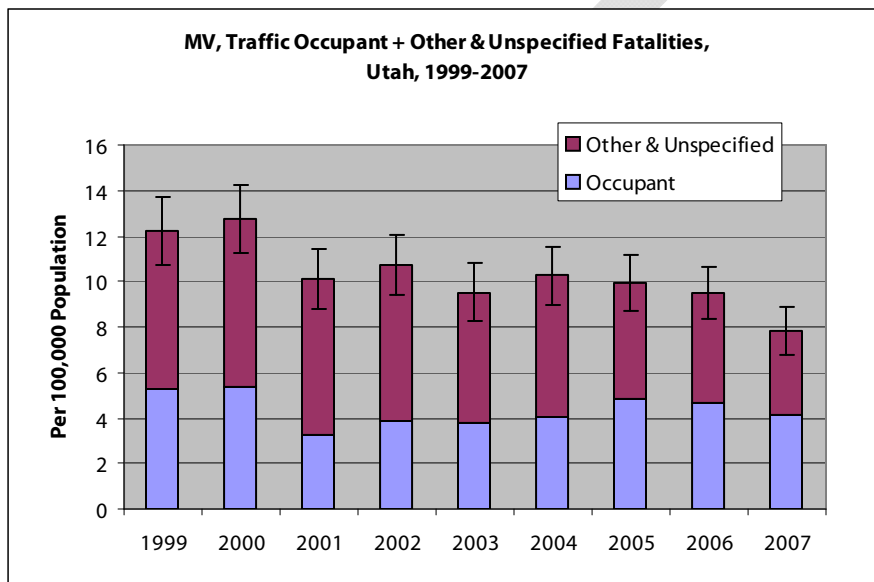
The U.S. Centers for Disease Control and Prevention has developed a compendium 14 evidence-based interventions designed for public health practitioners and community-based organizations to help them address falls among older adults. The compendium is available at [http://www.cdc.gov/HomeandRecreationalSafety/images/CDCCompendium\\_030508-a.pdf](http://www.cdc.gov/HomeandRecreationalSafety/images/CDCCompendium_030508-a.pdf).

# Motor Vehicle Crashes

## Overview

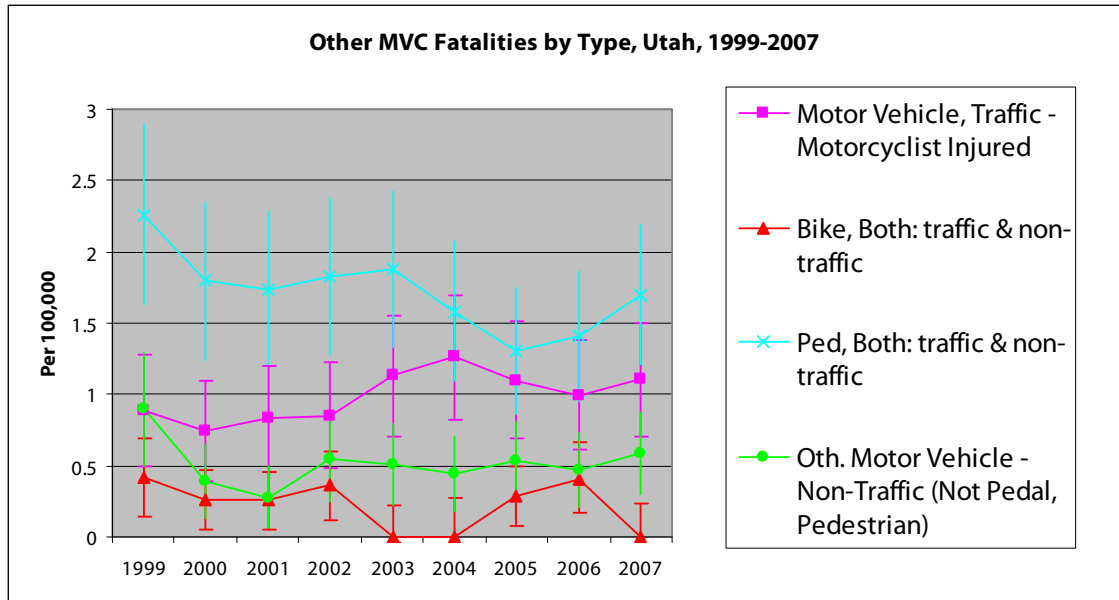
Motor vehicle crashes (MVCs) are the second leading cause of injury death, behind poisoning, for all ages in Utah.<sup>98</sup> Motor vehicle crash data includes eight categories: MV traffic-occupant injured, MV traffic-motorcyclist injured, MV traffic-pedal cyclist injured, MV traffic-pedestrian injured, MV traffic-other and unspecified, pedal cyclist MV non-traffic and other, pedestrian MV non-traffic and other, and other MV non-traffic and other. The last category listed includes all terrain vehicles, snowmobiles, and motor-cross-related injuries.

Since 1999, Utah's age-adjusted MVC traffic-occupant and MV traffic-other and unspecified death rate has decreased. However, motorcyclist fatalities, pedal cyclist fatalities, pedestrian fatalities, and other MV non-traffic (ATVs, snowmobiles, motor-cross) fatalities have remained fairly consistent during this time.<sup>99</sup>



<sup>98</sup> IBIS

<sup>99</sup> IBIS

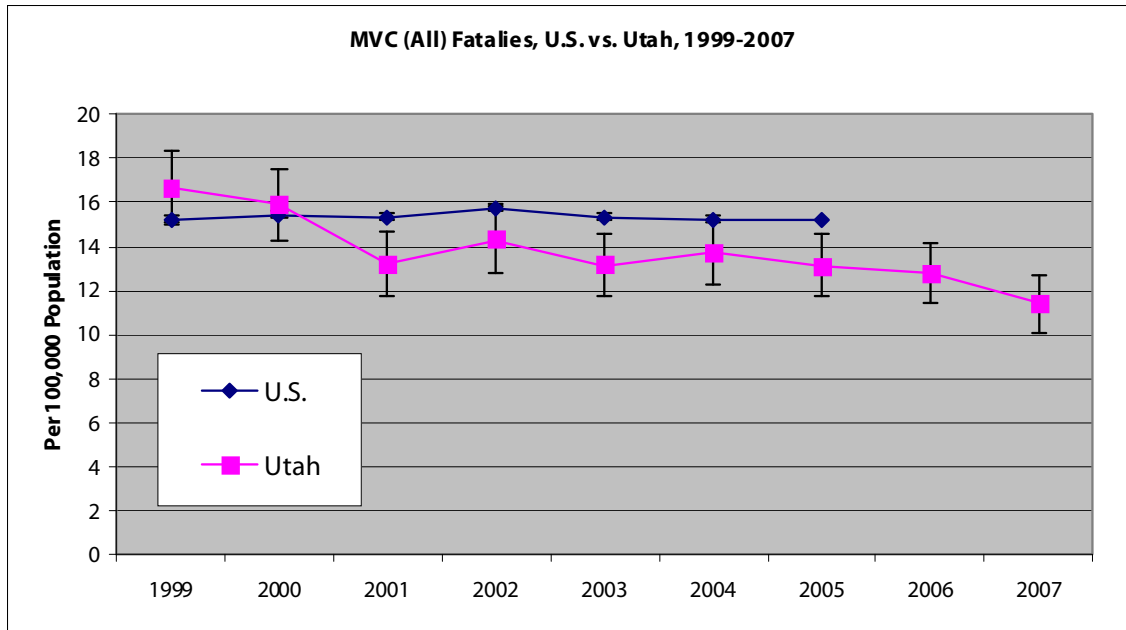


## Healthy People 2020 Objectives

- IVP-13 Reduce motor vehicle crash-related deaths
- IVP-14 Reduce nonfatal motor vehicle crash-related injuries
- IVP-15 Increase use of safety belts
- IVP-16 Increase age-appropriate vehicle restraint system use in children
- IVP-17 Increase the number of States and the District of Columbia with “good” graduated driver licensing (GDL) laws
- IVP-18 Reduce pedestrian deaths on public roads
- IVP-19 Reduce nonfatal pedestrian injuries on public roads
- IVP-20 Reduce pedal cyclist deaths on public roads
- IVP-21 Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders
- IVP-22 Increase the proportion of motorcycle operators and passengers using helmets

## Data, Surveillance and Costs

Since 2001, Utah has had a lower MVC death rate than the U.S. (NEED REFERENCES)



In 2005, Utah's MVC fatality rate was 13.2 per 100,000 population compared to the U.S. age-adjusted MVC death rate of 15.2 per 100,000 population. From 2003-2007, the MV traffic hospitalization rate for Utah was 6.4 per 10,000 population compared to 8.4 per 10,000 population for the U.S. From 2003-2007, the MV traffic emergency department visit (ED) rate for Utah was 76.8 per 10,000 population and 100.0 per 10,000 population for the U.S. **(NEED REFERENCES)**

### Geographic

From 2003-2007, Tricounty HD had the highest MVC fatality rate at 29.4 per 100,000 population and highest MVC hospitalization rate at 10.3 per 10,000 population among local health districts. Weber-Morgan HD had the highest MVC ED visit rate at 88.6 per 10,000 population among local health districts.

Among small areas, Grand/San Juan Co. had the highest MVC fatality rate at 30.6 per 100,000 population, Magna had the highest MVC ED visit rate at 116.3 per 10,000 population, and TriCounty HD had the highest MVC hospitalization rate at 10.3 per 10,000 population.

Other HDs and small areas with significantly higher and lower MVC rates than the state rate can be found in Appendix X.

### Age and Sex

The highest MVC death rate from 2003-2007 was among Utahns aged 65 years and older (20.4 per 100,000 population), followed by those aged 18-24 (16.7 per 100,000 population), Utahns aged 15-17 (15.0 per 100,000 population), and those aged 25-64 (12.2 per 100,000 population).

The highest MVC hospitalization rate from 2003-2007 was among Utahns aged 15-17 (10.8 per 10,000 population), followed by those aged 18-24 (9.6 per 10,000 population), Utahns aged 65 and older (8.2 per 10,000 population), and those aged 25-64 (6.7 per 10,000 population).

The highest MVC ED visit rate from 2003-2007 was among Utahns aged 18-24 (161.1 per 10,000 population), followed by those aged 15-17 (154.0 per 10,000 population), and Utahns aged 25-64 (83.6 per 10,000 population).

Males aged 65 and older had a significantly higher rate of MVC fatalities (five categories combined), MVC occupant and other unspecified fatalities, MVC occupant and other unspecified hospitalizations, and other MV non-traffic and other (e.g., ATVs, snowmobiles, motorcross, etc.) ED visits. Females aged 65 and older had a significantly higher rate of MVC fatalities (five categories combined), MVC occupant and other unspecified fatalities, MVC hospitalizations (five categories combined), MVC occupant and other unspecified hospitalizations, and pedestrian hospitalizations.

### **Seatbelt Use**

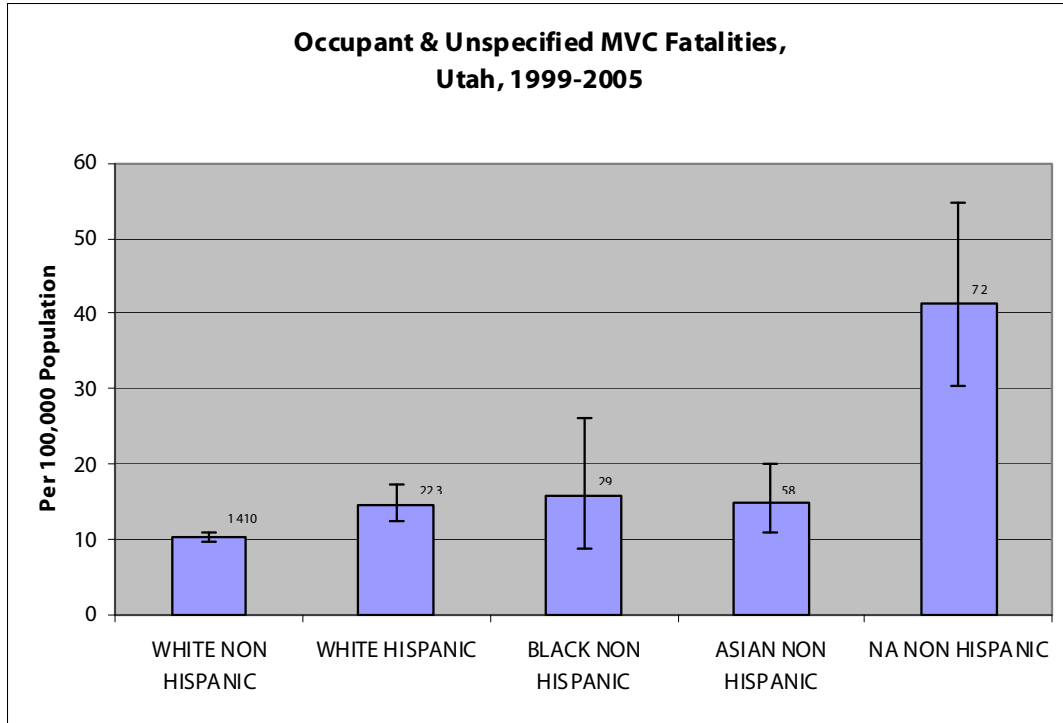
According to the Behavior Risk Surveillance System (BRFSS) more than 9 of 10 (91.9%) Utah adults reported always or nearly always wearing their seatbelts when they drove or rode in a car. Utah's rate was similar to the U.S. rate of 91.5%.<sup>100</sup> Self-reported seatbelt use among adults was about 5% higher for women at every age than for men. When the rate of self-reported seatbelt use for Utah's 61 small areas was plotted with the MVC fatality rate for the same small areas, a strong relationship was seen. Small areas with higher self-reported seatbelt use tended to have lower rates of MVC fatalities and areas with lower seatbelt use tended to have higher rates of MVC fatalities ( $R=.4200$ ,  $p<.0001$ ).

### **Race and Ethnicity<sup>101</sup>**

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<sup>100</sup> Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System (BRFSS) [Online]. (2008). National Center for Chronic Disease Prevention and Health Promotion, CDC (producer). [cited 2009 Jan 15]. 2002, 2006 Data Years. Available from : URL: <http://www.cdc.gov/BRFSS/>.

<sup>101</sup> WISQARS, data years 2001-2005



### Costs

From 2003-2007, the emergency department visit charges for all eight categories of MVC data totaled more than \$250 million. Of this total, approximately \$39 million was due to ATV/snowmobile/motorcross injuries, \$32 million due to motorcyclist crashes, \$23 million due to pedestrian injuries, and \$16 million due to pedal cyclist crashes.<sup>102</sup>

From 2003-2007, the hospitalization charges for all eight categories of MVC data totaled more than \$270 million. Of this total, approximately \$43 million was due to ATV/snowmobile/motorcross injuries, \$35 million due to motorcyclist crashes, \$24 million due to pedestrian injuries, and \$17 million due to pedal cyclist crashes.<sup>103</sup>

### Strategies

**Objective 1: By 2015, implement “best practice” programs for older drivers in community settings and healthcare provider offices.**

### Activities

1. By 2012, expand child passenger safety programs to senior centers, grandparents, and other child caregiver programs.
2. By 2013, increase collaboration with state and local Aging Service programs.

<sup>102</sup> IBIS

<sup>103</sup> IBIS

3. By 2014, identify and implement “best practice” programs for older drivers in senior centers and assisted living centers.
4. By 2014, expand the AAA Car Fit Program.
5. By 2013, distribute the American Academy of Family Physicians aging driver educational materials to community organizations that work with older adults.
6. By 2014, develop media campaigns to increase awareness among children of older drivers on recognizing signs of unsafe driving behaviors in their parents and resources that can help them make alternative transportation arrangements or safe driving practices.
7. By 2013, distribute the American Medical Association “Physician's Guide to Assessing and Counseling Older Drivers” guidelines to healthcare providers.
8. By 2015, increase overall educational outreach efforts through healthcare provider offices.
9. By 2015, evaluate “best practice” programs and educational outreach efforts.

<b>Objective 2: By 2015, continue use of existing surveillance systems.</b>
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### **Activities**

1. By 2011, ensure capacity for the production and dissemination of motor vehicle crash-related data publications.
2. By 2011, collaborate with the Utah Highway Safety Office to identify and target surveillance data for specific audiences (e.g., Utah State Legislature, local health departments, etc.)
3. Through 2015, maintain publicly accessible data query system through the Indicator Based Information System for Public Health (IBIS-PH).
4. Through 2015, develop and update fact sheets and data reports on annual basis.

### **Implementing Organizations**

- American Automobile Association (AAA), Utah chapter
- AARP, Utah chapter
- Insurance companies
- Law enforcement agencies
- Utah’s 12 Local Health Departments
- Utah Department of Public Safety
  - Utah Highway Safety Office
- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah Department of Transportation
- Utah Safety Council
- Zero Fatalities campaign

### **Evidence-based Interventions/Best Practices**

There are several organizations that provide educational materials, resources, and programs for older drivers, including the:

- AAA Senior Drivers program and materials  
<http://www.seniordrivers.org/home/>
- American Academy of Family Physicians  
<http://www.aafp.org/online/en/home/clinical/publichealth/agingdriver.html>
- American Medical Association  
<http://www.ama-assn.org/ama/pub/physician-resources/public-health/promoting-healthy-lifestyles/geriatric-health/older-driver-safety.shtml>

Zero Fatalities (<http://ut.zerofatalities.com/>) is a mutual effort from various states addressing the top behaviors that are killing people on America's roads. The focus varies by state, but includes behaviors such as drowsy driving, distracted driving, aggressive driving, impaired driving, and not buckling up. In 2006, the Utah Department of Transportation initiated the Zero Fatalities program along with the support of the Utah Department of Public Safety, the Federal Motor Carrier Safety Administration, FHWA, private businesses, and citizens, with the sole purpose of decreasing the number of deaths on Utah's roads.

# Suicide Fatalities

## Overview

The suicide rate for Utah from 2003-2007 was 15.2 per 100,000 population and is significantly higher than the U.S. rate of 11.0 per 100,000 population. Utah ranked 9<sup>th</sup> in the U.S. for suicide deaths during this time period.

## Healthy People 2020 Objectives

- **IVP-41** Reduce nonfatal intentional self-harm injuries

## Data, Surveillance and Costs

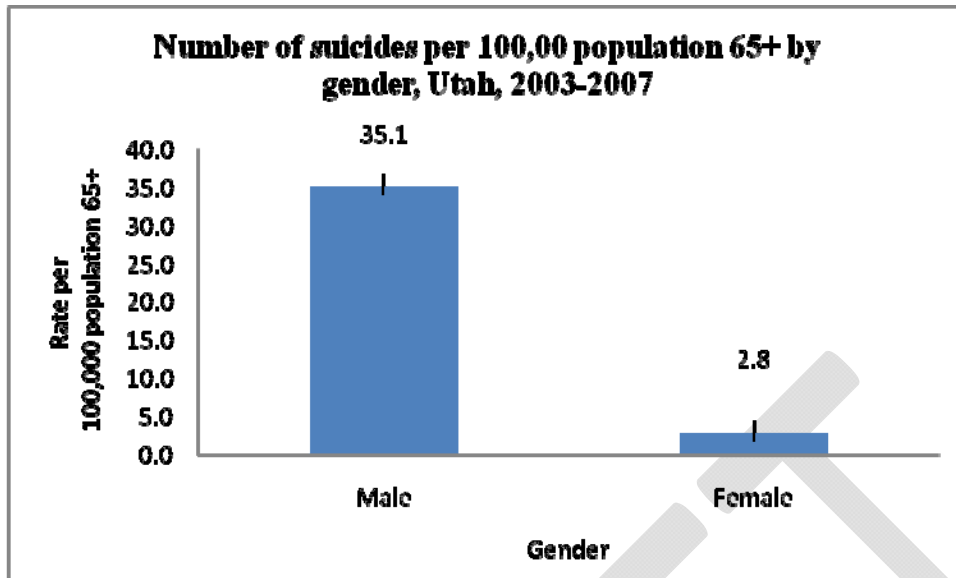
### Geographic Data

From 2003-2007, Tooele County Health District (HD) had the highest self-inflicted injury ED visit and hospitalization rate (13.3 and 7.6 per 10,000 population). Brigham City had the highest self-inflicted injury ED visit rate at 20.4 per 10,000 population among small areas and Carbon/Emery Counties had the highest self-inflicted hospitalization rate at 9.1 per 10,000 population among small areas. Central and Southeastern Utah Health Districts (HD) had the highest suicide rates per 100,000 population among local health districts and Carbon / Emery Counties had the highest suicide rate at 28.1 per 100,000 population among small areas. Other HDs and small areas with significantly higher and lower self-inflicted injury and suicide rates than the state rate can be found in Appendix X.

### Age and Sex

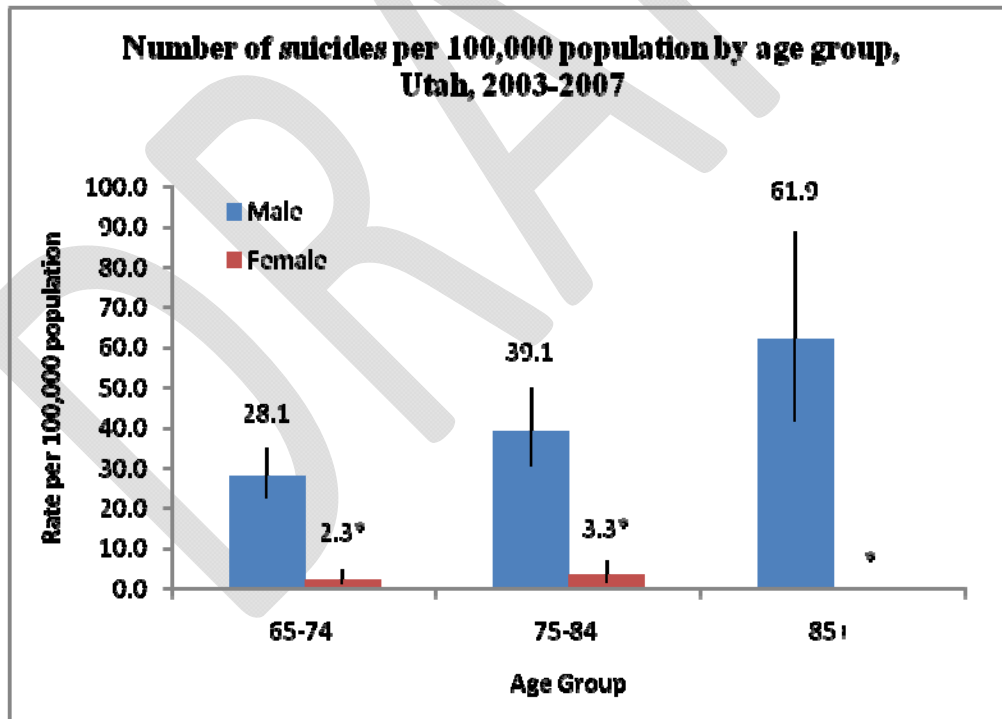
Males 65 years and older have a significantly higher suicide rate than females 65 years and older (35.1 and 2.8 per 100,000 population) (Figure X).

Figure X



When broken down by age group, 85+ year old males (61.9 per 10,000 population) had the highest suicide fatality rate, which is significantly higher than the overall elderly male suicide rate (35.1 per 100,000 population) (Figure X).

Figure X



\*Insufficient number of cases to meet the UDOH standard for data reliability; interpret with caution.

### Method of Self-inflicted Injury

The most common method of injury for elderly suicides was firearm for males and poisoning for females.

## Costs

From 2003-2007, \$17 million was spent in Utah on hospital and emergency department charges for the treatment of self-inflicted injuries. From 2003 to 2007, there has been and 98.8 percent increase in total costs for hospitalizations and a 93.3 percent increase in total costs for ED visits.

The annual cost of workforce-related suicides has been calculated to be approximately \$13 billion in 2005 dollars.<sup>104</sup>

## Strategies

**Objective 1: By 2013, at least one existing surveillance system will be improved to adequately monitor and measure elder suicide fatalities in Utah.**

### Activities

1. By 2011, ensure sufficient capacity of epidemiological and support staff to collect, analyze, interpret, and evaluate elder suicide data.
2. By 2011, identify primary users of information, assess their needs, and prioritize according to the results of the assessment.
3. By 2011, evaluate the Utah Violent Death Reporting System and the Behavioral Risk Factor Surveillance System for their usefulness in monitoring elder suicide fatalities and ideation in Utah.
4. By 2011, develop a list of data needs that are not covered by existing data sources.
5. By 2012, explore opportunities to add suicide components to existing data collection systems to gather more complete information about specialty populations at risk for suicide, to screen for distress and dysfunction associated with mental illness, and to close gaps in suicide data collection.
6. By 2013, assess the extent to which elder suicide fatalities occur.

**Objective 2: Through 2015, information from surveillance data will be disseminated to appropriate stakeholders.**

### Activities

1. By 2011, ensure capacity for the production and dissemination of suicide data publications.
2. By 2011, identify and target surveillance data for specific audiences (e.g., adult protection services, mental health facilities, nursing homes, local health departments, etc.)
3. By 2011, develop audience and topic specific suicide fact sheets with a dissemination plan for each fact sheet.

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<sup>104</sup> Research America, [www.researchamerica.org/uploads/factsheet21suicide.pdf](http://www.researchamerica.org/uploads/factsheet21suicide.pdf)

4. By 2013, evaluate suicide data publications as to their usefulness in helping local health districts and community-based organizations implement elder suicide prevention strategies.

**Objective 3: By 2015, more than half of Utah's general population will understand that suicide is a preventable public health problem.**

#### **Activities**

1. By 2011, promote efforts to reduce access to lethal means and methods of self-harm (including firearms, drugs, and poisons).
2. Through 2011, continue statewide collaboration to implement the activities and recommendations of the Utah Suicide Prevention Plan and the Utah Suicide Prevention Action Network.
3. By 2011, convene conferences in local urban and rural areas.
4. By 2012, compile a summary report on progress made regarding the Utah Suicide Prevention Plan.
5. By 2012, choose suicide prevention programs that are grounded in theory or that have scientific evidence of effectiveness.
6. Provide adequate staffing and resources, including budget, facilities, staff development, and time to implement suicide prevention programs.
7. By 2013, implement evidence-based suicide prevention programs that target persons in the following settings:
  - a. Workplace settings
  - b. Adult Correctional Facilities
  - c. Hispanic/Latino communities
  - d. Native American communities
  - e. Refugee communities
  - f. Gay, Lesbian, Bi-sexual, and Transgender communities
  - g. Nursing/Retirement Homes
8. Through 2015, promote suicide public awareness events sponsored by organizations such as NAMI Utah, Utah Chapter of the Mental Health Association, and Hugs for Life.

**Objective 4: By 2015, training for reporting suicide and recognition of at-risk behavior and delivery of effective treatment will increase by half.**

#### **Activities**

1. By 2011, define minimum course objectives for providers of health care and counseling graduate programs in elder suicide risk and protective factors.
2. By 2012, educate, support, and involve family members about risk and protective factors for elder suicide.
3. By 2012, train local media representatives to promote accurate and responsible representation of suicidal behaviors, mental illness, and related issues in compliance with national reporting guidelines.

4. By 2013, train clergy, educational staff, and law enforcement officers on identifying and responding to person in mental health crisis and/or risk for suicide.
5. Through 2015, continue support services to all suicide survivors to address their exposure to suicide and the unique needs of suicide survivors.

**Objective 5: By 2015, access to mental health and substance abuse services will increase by 20%.**

### **Activities**

1. By 2012, improve access to mental health care for uninsured and non-Medicaid population.
2. By 2012, define and implement guidelines for mental health (including substance abuse) screening and referral of residents in nursing homes and retirement communities.
3. By 2012, support and implement guidelines for mental health assessment and treatment for suicidal individuals from adult incarcerated populations.
4. Through 2015, provide referrals for mental health services to the community.

### **Implementing Organizations**

- Utah Department of Health
  - Violence and Injury Prevention Program
- Utah's Local Health Departments
- Department of Human Services
  - Division of Substance Abuse and Mental Health
  - Adult Protective Services
- National Alliance on Mental Illness – Utah
- Adult Corrections
- Faith-based Organizations
- Assisted Living Facilities

### **Evidence-based Interventions/Best Practices**

- Community Trials Intervention To Reduce High-Risk Drinking <http://www.pire.org/communitytrials/index.htm>
- Emergency Department Means Restriction Education <http://nrepp.samhsa.gov/ViewIntervention.aspx?id=15>
- Emergency Room Intervention for Adolescent Females <http://chipts.ucla.edu/interventions/manuals/interer.html>
- Seeking Safety <http://www.seekingsafety.org>
- United States Air Force Suicide Prevention Program <http://nrepp.samhsa.gov/ViewIntervention.aspx?id=121>
- Challenging College Alcohol Abuse <http://www.socialnorms.campushealth.net>, <http://www.health.arizona.edu>

- Coping With Work and Family Stress  
<http://www.theconsultationcenter.org/index.php?/coping-with-work-a-family-stress.html>

DRAFT