

# Utah Health Status Update:

## Fatalities of Utah Children Aged 0–19, 2002–2004

September 2006

Utah Department of Health

From 2002–2004, 1,441 Utah children aged 0–19 died, or 57.7 deaths per 100,000 children. The majority (65.0%) were classified as natural deaths,<sup>1</sup> just less than a third (31.5%) were the result of injuries, and for 3.5%, the cause of death was unknown. Figures presented come from a combination of the Utah Child Fatality Review (CRF) Committee and Utah Vital Statistics data.

The CFR Committee reviews all Utah child deaths and may gather additional information to identify risk factors and preventable deaths in order to develop strategies to reduce further deaths.

### Child Deaths by Age Group

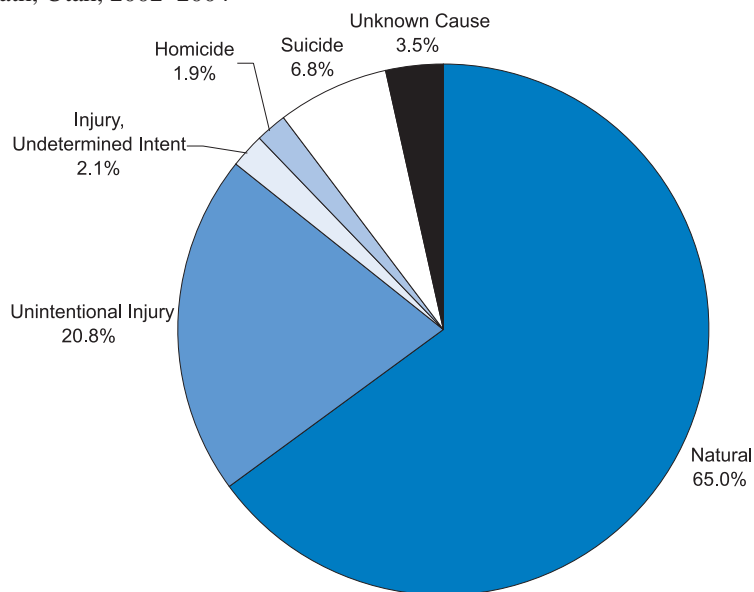
It is important to study the reasons children die by looking at the problem by age group, as the causes of death change dramatically as children age. Most deaths of children from birth to age one are classified as deaths due to “natural” circumstances. Natural causes include primarily disease, congenital defects, prematurity, and Sudden Infant Death Syndrome (SIDS). After the first year, injury becomes the leading cause of child death. Sometimes the cause of death remains unknown even after thorough investigation.

#### Infants

Of 763 deaths among Utah infants who died before reaching their first birthday, 91.0% were due to natural causes.<sup>2</sup> The remaining 69 infant deaths were due to unknown causes, unintentional injury, homicide, or were injuries of undetermined intent. The infant deaths with unknown causes were overwhelmingly “SIDS versus positional asphyxia” cases, labeled as such by the medical examiner. Of the injury deaths, 65.6% were due to unintentional injury, including co-sleeping with a parent, sleeping with a pillow or blanket, and motor vehicle crashes, and 21.9% were the result of intentional violence. In 12.5% of the infant injuries, the intent of the injury could not be determined.

### Cause of Death of Utah Children

Figure 1. Percentage distribution of deaths to children aged 0–19 by cause of death, Utah, 2002–2004



*Child Fatality Review Committee Findings* For most ages, motor vehicle crashes (MVCs) are the leading cause of death. However, MVCs accounted for only 0.5% of all infant deaths; homicides accounted for 0.9%. Sleep-related fatalities made up 12.3% of all infant deaths. Co-sleeping deaths made up 42.6% of all infant sleep fatalities and “SIDS versus positional asphyxia” made up 18.1% of all infant sleep fatalities.

#### Children Aged 1–19

Injuries are the leading cause of death for Utah children who survive their first year of life. The death of a child from injury is especially saddening as the majority of injuries can be predicted and therefore prevented.

Motor vehicle crashes are the single leading cause of unintentional injury death for U.S. children. For that reason they were broken out from the “Other unintentional injury” category.

*Ages 1–5* The unintentional injury death rate for this age group was 11.7 per 100,000.

Of the 89 injury fatalities among children aged 1–5, 47.2% were due to MVCs. Other unintentional injuries, including drowning, choking, and fires/burns, made up 43.8%. The remaining 9.0% were homicides; there were no fatal injuries of undetermined intent for this age group.

*Child Fatality Review Committee Findings*  
 More MVC victims in this age group were pedestrians (24) than passengers (18). The majority (62.5%) of these pedestrian victims were run over by a family member. Many of the drownings occurred when an unsupervised child wandered off during a large family gathering, and nearly all choking victims were 1-year-olds attempting solid foods.

Ages 6–13 The rate of all unintentional injury deaths for this age group was 4.4 per 100,000.

Of the 62 injury fatalities of children aged 6–13, 56.5% were due to MVCs. Suicide was the second most common cause at 21.0%, followed by other unintentional injuries (drowning for example), at 16.1%. All the suicides were at least 10 years of age. Hanging was the most common suicide method (66.7%).

*Child Fatality Review Committee Findings*  
 Sixty percent of the MVC victims were passengers, 17.1% were pedestrians, 8.6% were driving an ATV<sup>3</sup> and 5.6% were riding a bike when they were injured.

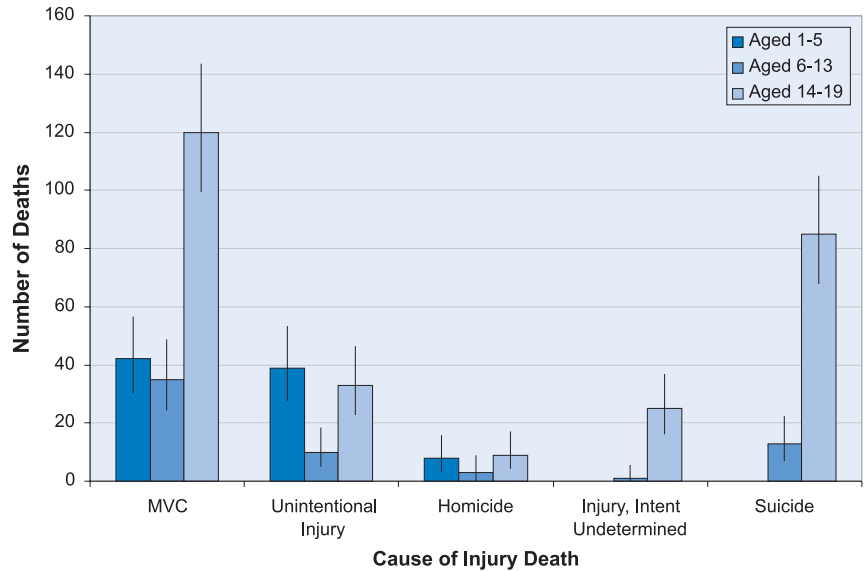
Ages 14–19 The unintentional injury death rate for this age group was 21.8 per 100,000.

Of the 272 injury fatalities of teens aged 14–19, 44.1% were due to MVCs. Suicide was the cause of death in 31.3% of cases. Of the teen suicides, firearms (47.6%) and hanging (41.5%) were the most common methods.

*Child Fatality Review Committee Findings*  
 Nearly half (46.7%) of the MVC victims were driving at the time of the crash. Additionally, 34.2% were MVC passengers, 6.7% were pedestrians, and 5.8% were ATV crash victims.

## Injury Deaths by Age Group

Figure 2. Number of injury deaths to children aged 1–19 by cause of death, Utah, 2002–2004



### Summary

The CFR Committee and the Violence and Injury Prevention Program recommend the following to reduce the risk of untimely injury death among children:

- In motor vehicles, put children in the proper safety restraints for their age and size.
- Insist they wear a helmet during all wheeled sports and while skiing, sledding, and snowboarding.
- Insist children wear life jackets and supervise them constantly around water.
- Keep matches and lighters away from a child's reach.
- Store firearms unloaded and locked away with ammunition stored separately.
- Get help for a child who is depressed or who talks of suicide.

### Notes:

- 1 Included here are a few deaths due to medical complications.
- 2 This includes a very small number of deaths due to medical complications.
- 3 All terrain vehicle

## September 2006 Utah Health Status Update

For additional information about this topic, contact Cyndi Bemis, Education Coordinator for the Utah Department of Health Violence and Injury Prevention Program, P.O. Box 142106, Salt Lake City, UT 84114-2106, (801) 538-6348, FAX (801) 538-9134, email: [cbemis@utah.gov](mailto:cbemis@utah.gov); or the Office of Public Health Assessment, Utah Department of Health, P.O. Box 142101, Salt Lake City, UT 84114-2101, (801) 538-9947, FAX (801) 538-9346, email: [phdata@utah.gov](mailto:phdata@utah.gov).

## Breaking News, August 2006

### West Nile Virus

As of August 17, West Nile virus (WNV) has been detected in Utah for the 2006 season in 14 counties. Activity was first detected in a dead bird on June 2, the earliest the virus has been found in a given season. Since first detection, activity has increased, including human cases.

As of August 17, 30 human cases have been reported to the Utah Department of Health. Human WNV cases were reported from the following counties: Davis (3), Salt Lake (9), Tooele (1), and Utah (16).

14 human cases (47%) have resulted in the more serious neuroinvasive form of the disease. Two fatalities have occurred in the 2006 season. Additionally, three potential blood donors were found to have WNV infection, but did not develop any symptoms of disease. Blood units donated by these individuals were destroyed to prevent them from entering Utah's blood supply.

As of August 10, WNV infection has been reported in 11 horses, 27 dead birds, 42 sentinel chickens, and 299 mosquito pools. So far in 2006, 14 Utah counties have reported WNV activity: Box Elder, Cache, Davis, Duchesne, Emery, Grand, Juab, Millard, Salt Lake, Tooele, Uintah, Utah, Washington, and Weber. Detected activity is higher than in previous seasons at this time.

**WNV Activity Detection as of August 17, Utah, 2003–2006**

	2006	2005	2004	2003
<b>Human</b>	30	4	5	0
<b>Horse</b>	11	7	2	2
<b>Bird</b>	27	2	1	0
<b>Chicken</b>	42	31	7	6
<b>Mosquito Pool</b>	299	34	44	2
<b>Counties With Detection</b>	14	9	8	4

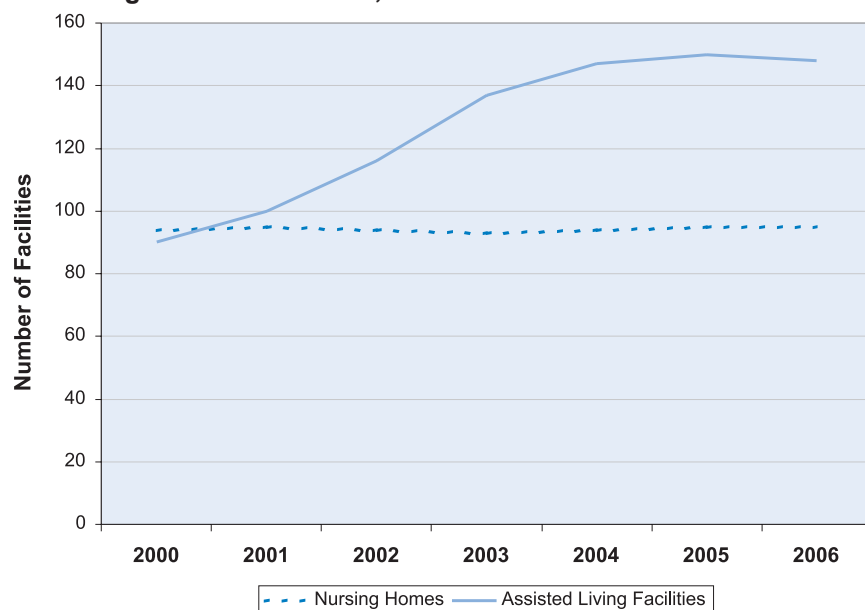
WNV risk will decrease with the onset of cooler weather in the fall, but may continue in southern Utah due to warmer temperatures.

## Community Health Indicators Spotlight, August 2006

### Long-term Care Growth in Utah

Long-term care in Utah includes both nursing and assisted living facilities. There has been significant growth in the number of assisted living facilities, which is reflected in the chart to the right. The projected growth in nursing care is expected to be minimal, with some increase in Medicare-only facilities that provide specialized rehabilitation care. A state moratorium, signed into law during the 2004 general legislative session, restricts new Medicaid nursing facilities unless insufficient bed capacity has been demonstrated. An occupancy rate of at least 90% of beds occupied is an indication of insufficient bed capacity. The current average census for nursing facilities remains at about 70% of beds occupied, while the average census for assisted living facilities is currently at 81%. Growth for assisted living facilities is expected to increase at a slow rate while growth for nursing facilities is expected to remain fairly constant.

**Utah Long-term Care Growth, 2000–2006**



# Monthly Health Indicators Report

(Data Through July 2006)

Monthly Report of Notifiable Diseases, July 2006	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (Campylobacter)	38	36	151	155	1.0
Enterotoxigenic Escherichia coli (E. coli)	17	15	50	37	1.3
Hepatitis A (infectious hepatitis)	1	4	11	28	0.4
Hepatitis B (serum hepatitis)	6	4	19	24	0.8
Measles (Rubeola, Hard Measles)	0	0	0	0	--
Meningococcal Diseases	0	1	4	5	0.8
Norovirus	0	4*	5	10*	0.5
Pertussis (Whooping Cough)	47	19	571	93	6.1
Salmonellosis (Salmonella)	29	27	168	144	1.2
Shigellosis (Shigella)	10	5	33	26	1.3
Varicella (Chickenpox)	11	12*	530	333*	1.6
Viral Meningitis	13	11	105	46	2.3
West Nile (Human cases/Equine cases)†	4 / 2	1 / 0*	4 / 2	1 / 0	3.0 / --
Notifiable Diseases Reported Quarterly, 2nd Qtr 2006	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV	33	26	56	32	1.7
AIDS	8	13	18	26	0.7
Chlamydia	1,061	917	2,252	1,534	1.5
Gonorrhea	196	116	419	188	2.2
Tuberculosis	11	8	17	15	1.2
Program Enrollment for the Month of July 2006	Current Month	Previous Month	% Change <sup>§</sup> From Previous Month	1 Year Ago	% Change <sup>§</sup> From 1 Year Ago
Medicaid	171,042	174,800	-2.1%	176,800	-3.3%
PCN (Primary Care Network)	16,525	16,043	+3.0%	17,632	-6.3%
CHIP (Children's Health Ins. Plan)	35,395	35,248	+0.4%	28,772	+23.0%

Medicaid Expenditures (in Millions) for the Month of July 2006‡	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	(\$ 5.0)	(\$ 0.1)	\$ 94.8	\$ 98.1	(\$ 3.3)
Inpatient Hospital	\$ 7.4	\$ 9.5	\$ 191.2	\$ 182.1	\$ 9.1
Outpatient Hospital	\$ 3.2	\$ 3.5	\$ 73.5	\$ 68.3	\$ 5.2
Long Term Care	\$ 4.3	\$ 3.8	\$ 171.2	\$ 167.4	\$ 3.8
Pharmacy	(\$ 0.6)	\$ 3.0	\$ 174.0	\$ 203.9	(\$ 29.9)
Physician/Osteo Services	\$ 3.8	\$ 3.3	\$ 64.8	\$ 65.8	(\$ 0.9)
TOTAL HCF MEDICAID	\$ 59.6	\$ 72.1	\$ 1,518.1	\$ 1,491.0	\$ 27.1
Health Care System Measures	Number of Events	Percentage of Utah Population	% Change <sup>§</sup> From Previous Year	Total Charges in Millions	% Change <sup>§</sup> From Previous Year
Overall Hospitalizations (2004)	266,195	10.1%	-0.3%	\$ 3,225.0	+11.1%
Non-maternity Hospitalizations (2004)	160,302	5.9%	0.0%	\$ 2,692.5	+12.0%
Emergency Department Encounters (2004)	627,078	24.2%	-4.2%	\$ 456.6	+14.7%
Outpatient Surgery (2004)	303,123	11.7%	+6.0%	\$ 845.3	+15.6%
Annual Community Health Measures	Current Data Year	Population at Risk	Number Affected	Percent/Rate	% Change <sup>§</sup> From Previous Year
Overweight and Obesity (Adults 18+)	2005	1,740,474	942,900	54.2%	-3.9%
Cigarette Smoking (Adults 18+)	2005	1,740,474	200,600	11.5%	+9.7%
Influenza Immunization (Adults 65+)	2005	212,582	148,300	69.7%	-7.6%
Health Insurance Coverage (Uninsured)	2005	2,528,926	292,800	11.6%	+13.5%
Motor Vehicle Crash Injury Deaths	2004	2,469,230	299	12.1 / 100,000	+4.3%
Suicide Deaths	2004	2,469,230	378	15.3 / 100,000	+10.1%
Diabetes Prevalence	2005	2,528,926	104,200	4.1%	+8.7%
Coronary Heart Disease Deaths	2004	2,469,230	1,603	64.9 / 100,000	-8.1%
All Cancer Deaths	2004	2,469,230	2,442	98.9 / 100,000	-2.0%
Births to Adolescents (Ages 15-17)	2004	57,505	857	14.9 / 1,000	-6.9%
Early Prenatal Care	2004	50,653	39,509	78.0%	0.0%
Infant Mortality	2004	50,653	263	5.2 / 1,000	+4.0%
Childhood Immunization (4:3:1:3:3)	2004	48,619	34,700	71.3%	-9.5%

\* Due to limited historical data, the average is based upon 3 years of data for norovirus, varicella, and West Nile virus infections.

† West Nile virus was detected first in wild birds in early June for the 2006 season. This is the earliest WNV has ever been detected in Utah for a given season.

§ % Change could be due to random variation.

‡ Medicaid claims paid in July for patient services provided in FY2006.

Note: Active surveillance has ended for influenza until the 2006 season.