

Utah Health Status Update:

Senior Falls

August 2006

Utah Department of Health

Falls are a serious public health problem among older adults. More than one third of adults aged 65 and older fall each year.^{1,2} Most fall injuries are caused by falls on the same level (not from falling down stairs) and from a standing height (for example, by tripping while walking).³

In 2003, questions relating to falls were included on the Behavioral Risk Factor Surveillance Survey (BRFSS). The BRFSS is a statewide, random-digit dialed telephone survey of adults in households from which state and national prevalence data can be derived. The Utah BRFSS data showed that more than 29,000 respondents (14.5 percent) aged 65 and older reported a fall in the past three months. The rates were similar for males (15.2 percent) and females (13.8 percent), and across all senior age groups (65 to 74, 75 to 85, and 85 and older) (Figure 1).

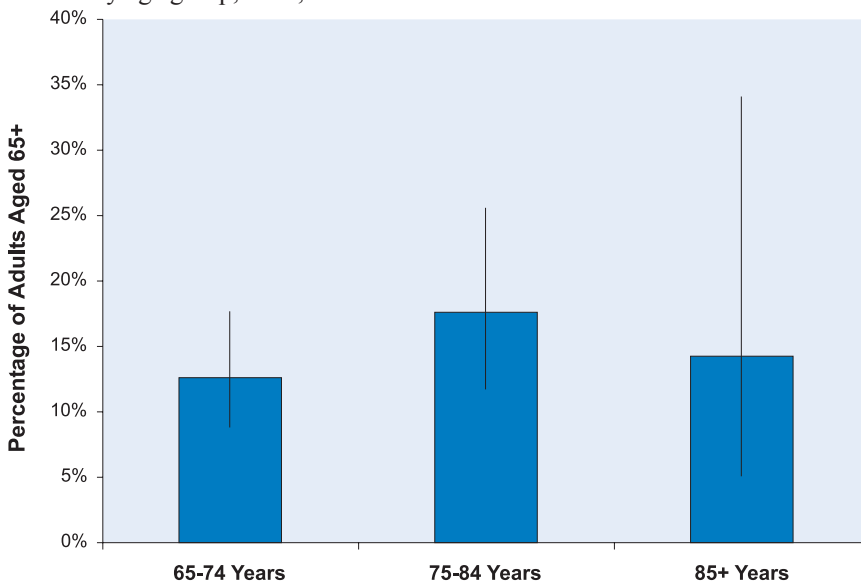
Seniors who fall can suffer fatal injuries (fatal falls) or non-fatal injuries (non-fatal falls). The National Center for Injury Prevention and Control reports that, among adults aged 65 and older, fatal falls are the leading cause of injury deaths nationwide. This is also true in Utah for both males and females. From 1999 to 2003, 26 percent (174/677) of older Utah males who suffered an injury-related death died due to a fall; the proportion for females was 29 percent (158/536). As would be expected, Utah's rate of fatal falls increased with age (Figure 2).

Of the adults aged 65 and older who reported having fallen in the past three months, 17.5 percent reported being examined by a doctor because of the fall and 33.6 percent reported being injured seriously enough to limit their regular activities for at least a day. In this age group, women were nearly five times more likely to report being injured (12.3 percent for males and 52.2 percent for females) and to report seeing a doctor (6.0 percent for males and 27.0 percent for females).

Adults aged 65 and older who reported falling in the past three months also reported poorer

Falls in Past Three Months

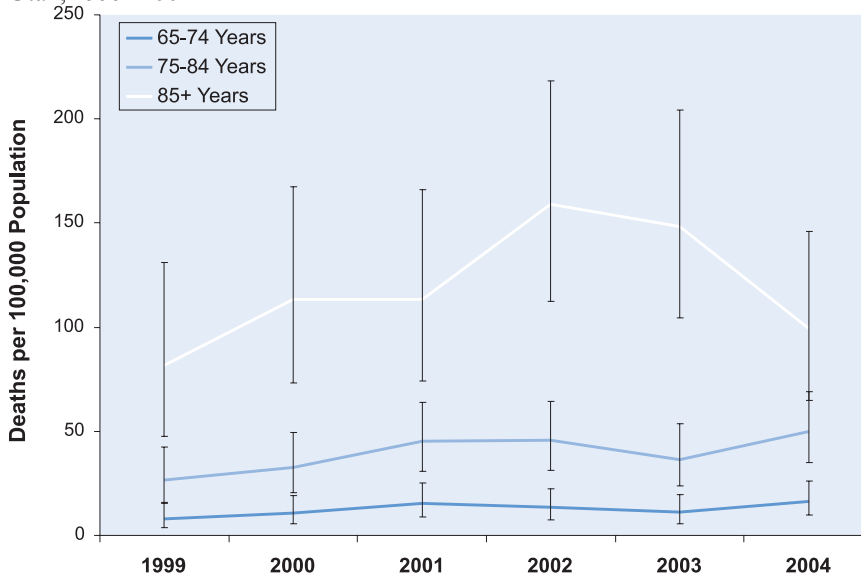
Figure 1. Percentage of adults aged 65+ who reported falling in the past three months by age group, Utah, 2003



Note: Vertical lines indicate 95% confidence intervals.

Death Rates by Age Group and Year

Figure 2. Senior fall deaths per 100,000 population by age group and year, Utah, 1999–2004



Note: Vertical lines indicate 95% confidence intervals.

health status than those who did not fall. Fair or poor health was reported by 31.9 percent of those who had fallen. In addition, 41.3 percent reported poor physical health for seven or more of the past 30 days. When asked if the respondent's usual activities were limited in any

way because of physical, mental, or emotional problems, more than half (51.3%) of those who reported falling said their activities were limited, compared with 26.0 percent of those who did not fall (Figure 3).

In 2004, total annual hospital charges for treatment due to fatal and non-fatal falls in Utah was \$47.4 million. Between 1999 and 2004, the average hospital charge for a fall depended on the age and sex of the patient. In general, the average hospital charge was highest for males aged 75 to 84 years at \$14,800 and lowest for females aged 85 and older at \$13,100. These data include emergency room visits (treat and release) and hospital admissions (Figure 4).

Summary

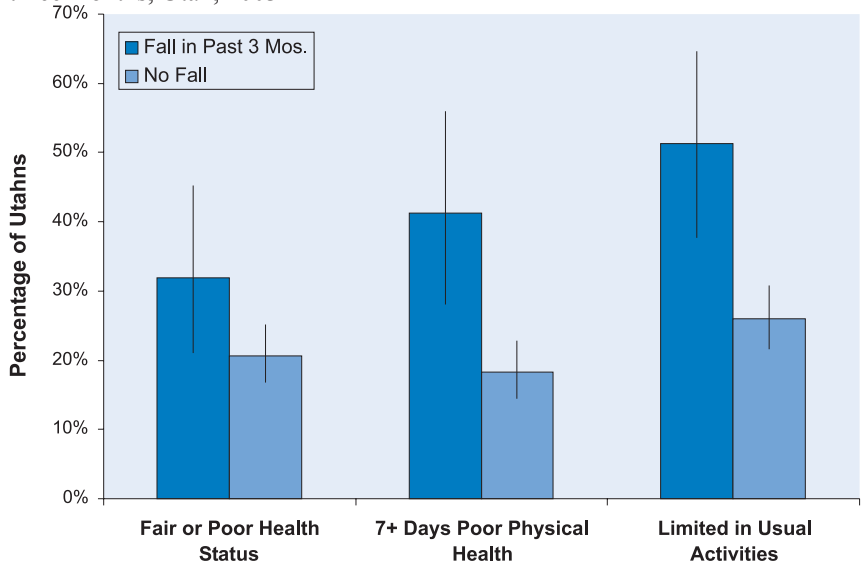
Falls are a significant threat to the health and safety of older Utahns, resulting in debilitating injuries, death, and poorer quality of life. Women are especially prone to suffer an injury in a fall and to see a doctor for treatment. Fall hospitalizations are a significant financial burden costing over \$47 million annually in Utah and over \$13,000 for each hospitalization. All older adults are advised to work with their health care providers to learn how to reduce their risk of fall injury. Fall prevention information is available at <http://health.utah.gov/vipp/olderAdults/falls.html>.

References:

1. Hornbrook, M.C., Stevens, V.J., Wingfield, D.J., Hollis, J.F., Greenlick, M.R., and Ory, M.G. (1994) Preventing falls among community-dwelling older persons: Results from a randomized trial. *The Gerontologist*. 34(1):16-23.
2. Hausdorff, J.M, Rios, D.A., and Edelber, H.K. (2001) Gait variability and fall risk in community-living older adults: A 1-year prospective study. *Archives of Physical Medicine and Rehabilitation*. 82(8):1050-6.
3. Ellis, A.A., and Trent, R.B. (2001) Do the risk and consequences of hospitalization fall injuries among older adults in California vary by type of fall? *Journal of Gerontology: Medical Sciences*. 56A(11):M686-92.

Health Status and Falls

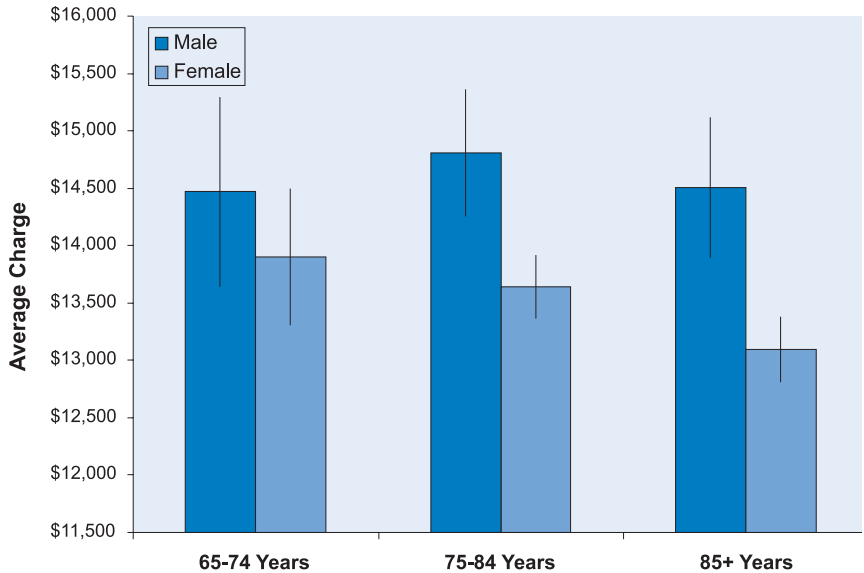
Figure 3. Selected measures of health status by fallen or not fallen in the past three months, Utah, 2003



Note: Vertical lines indicate 95% confidence intervals.

Hospital Charges for Falls

Figure 4. Average hospitalization charge due to falls by sex and age group, Utah, 1999–2004



Note: Vertical lines indicate 95% confidence intervals.

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Breaking News, July 2006

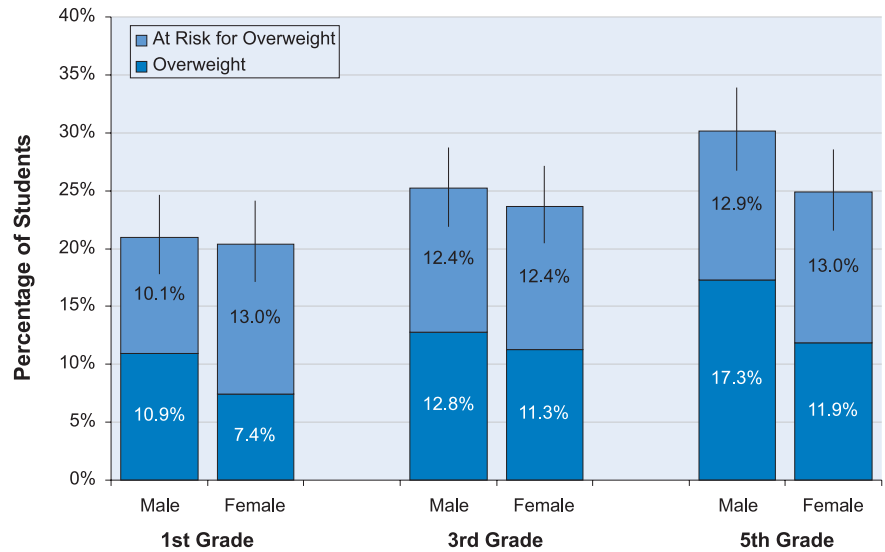
Childhood Obesity

Overweight among Utah grade school students was determined through a study by the Utah Department of Health (UDOH), school districts, and school nurses. After receiving parental consent, 4,250 1st, 3rd, and 5th grade students from 68 schools had height and weight measured on calibrated equipment supplied by the UDOH. Overweight for children was defined as greater than or equal to the 95th percentile for BMI (body mass index) based on the revised 2000 CDC Growth Charts. ‘At risk of becoming overweight’ was defined as greater than or equal to the 85th but less than the 95th percentile.

One in four 1st, 3rd, and 5th grade students were overweight or at risk of becoming overweight (24.0%). Boys were more likely to be overweight or at risk for overweight than girls (25.2% vs. 22.8%, $p=.1007$). Boys were significantly more overweight than girls (13.5% vs. 10.0%, $p=.0013$). The prevalence of overweight or at risk of overweight increased by grade from 20.7% of 1st grade students to 27.6% of 5th grade students (p for trend =.0001). A similar study in 2002 found that 21.3% of 1st, 3rd, and 5th grade students were overweight or at risk.

These data demonstrate that children in Utah, particularly boys, are increasingly likely to be overweight. In order to reverse this trend, it is necessary to address nutrition and physical activity in children’s homes, schools and communities. In these settings, healthy eating and physical activity habits need to be promoted and modeled. For more information, visit www.health.utah.gov/obesity.

Percentage of Children Who Were Overweight or at Risk of Overweight by Grade and Sex, Utah, 2006



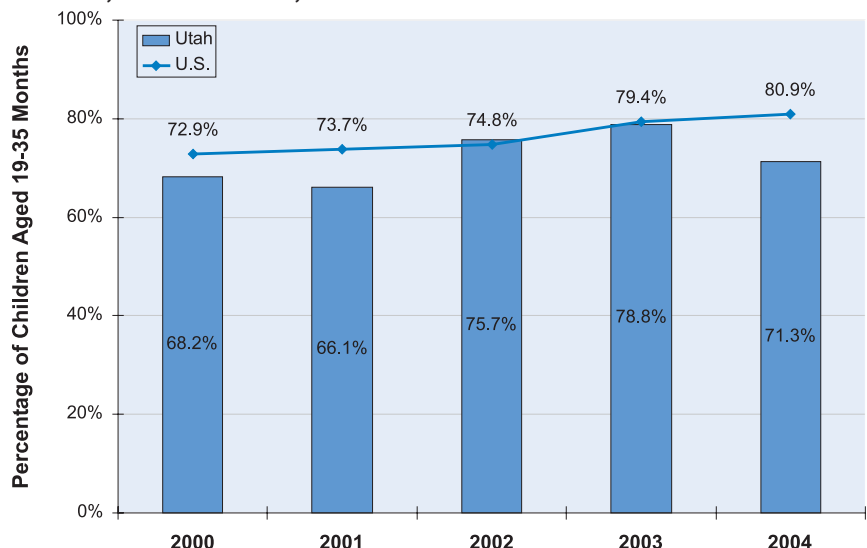
Community Health Indicators Spotlight, July 2006

Childhood Immunization Coverage in Utah

Utah is the fourth healthiest state according to the United Health Foundation’s (UHF) *America’s Health Rankings™* 2005 report. While Utah’s standing is high in overall health, statistics for childhood immunization levels are not as impressive. According to the National Immunization Survey (NIS), Utah ranks 49th in the nation, with 71.3% of the two-year-old population fully immunized for the 4:3:1:3:3 (4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 Hepatitis B) series by 24 months of age.

Nationally, immunization rates are at an all-time high with 80.9% of two-year-olds immunized, which exceeds the Healthy People 2010 objective of 80%. While the high U.S. rate is a significant accomplishment, Utah has room to improve. As a result of a statewide immunization summit, strategies are now being implemented through the joint efforts of health care providers, parents, and the community to ensure that Utah’s children are protected from vaccine-preventable diseases.

Estimated Vaccine Coverage With 4:3:1:3:3 Among Children 19–35 Months, Utah and U.S., 2000–2004



Source: National Immunization Program and the National Center for Health Statistics, Centers for Disease Control and Prevention

Monthly Health Indicators Report

(Data Through June 2006)

Monthly Report of Notifiable Diseases, June 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)	37	32	116	119	1.0
Enterotoxigenic Escherichia coli (E. coli)	21	8	33	22	1.5
Hepatitis A (infectious hepatitis)	0	5	8	23	0.3
Hepatitis B (serum hepatitis)	3	3	13	20	0.6
Measles (Rubeola, Hard Measles)	0	0	0	0	--
Meningococcal Diseases	1	0	4	4	1.1
Norovirus	0	0*	5	6*	0.9
Pertussis (Whooping Cough)	93	13	529	74	7.1
Salmonellosis (Salmonella)	32	22	139	116	1.2
Shigellosis (Shigella)	4	3	23	21	1.1
Varicella (Chickenpox)	35	29*	520	322*	1.6
Viral Meningitis	20	9	92	35	2.7
West Nile (Human cases/Equine cases)**	0 / 0	0 / 0	0 / 0	0 / 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 June 2006	Current Month	Previous Month	% Change^s From Previous Month	1 Year Ago	% Change^s From 1 Year Ago
Medicaid	174,800	176,737	-1.1%	179,299	-2.5%
PCN (Primary Care Network)	16,043	15,647	+2.5%	18,311	-12.4%
CHIP (Children's Health Ins. Plan)	35,248	35,514	-0.7%	27,890	+26.4%

Medicaid Expenditures (in Millions) for the Month of June 2006	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 1.7	\$ 8.5	\$ 99.8	\$ 98.2	\$ 1.6
Inpatient Hospital	\$ 18.3	\$ 15.7	\$ 167.8	\$ 172.6	(\$ 4.7)
Outpatient Hospital	\$ 7.3	\$ 6.0	\$ 70.3	\$ 64.8	\$ 5.5
Long Term Care	\$ 12.2	\$ 13.7	\$ 167.1	\$ 163.7	\$ 3.4
Pharmacy	\$ 12.6	\$ 14.8	\$ 174.9	\$ 200.9	(\$ 26.0)
Physician/Osteo Services	\$ 5.9	\$ 5.7	\$ 68.5	\$ 62.5	\$ 6.1
TOTAL HCF MEDICAID	\$ 148.0	\$ 120.9	\$ 1,459.1	\$ 1,418.0	\$ 41.1
Health Care System Measures	Number of Events	Percentage of Utah Population	% Change^s From Previous Year	Total Charges in Millions	% Change^s 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^s 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 and varicella infections.
 ** West Nile virus has been detected in wild birds and mosquitoes in Salt Lake and Utah counties for the 2006 season. This is the earliest West Nile has been detected in Utah for a given season.

\$ % Change could be due to random variation

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