Utah Health Status Update:

Soft Drink Consumption and Television Viewing Among Children and Adolescents Utah Department of Health

August 2008

Obesity is a growing threat to the current and future health of Utah's youth. In 2006, nearly 1 in 4 elementary students in Utah were at an unhealthy weight. The rate of overweight and obese Utah third graders increased 29% between 1994 and 2006. Childhood overweight and obesity strongly predicts obesity later in life and places children at risk for adult chronic diseases including diabetes and cardiovascular disease.

Inactivity and excessive calorie consumption are primary causes for the increasing rate of obesity among youth. To prevent childhood obesity, a 2007 Expert Committee found a consistent evidence base to recommend:²

- Limiting consumption of sugar-sweetened beverages.
- Limiting television and other screen time by allowing a maximum of 2 hours of screen time per day. (The American Academy of Pediatrics recommends no television viewing before 2 years of age and thereafter no more than 2 hours of television viewing per day.)

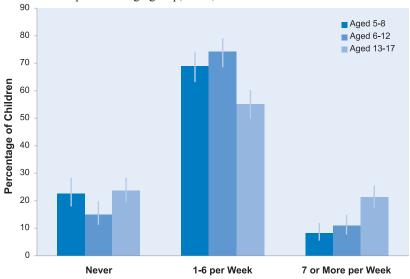
Soft Drink Consumption

Overall, 13.9% of parents reported their children consumed 7 or more soft drinks weekly. The percentage increased with age, with 23.6% of teens consuming at least 7 per week. The majority of children and teens consumed between 1 and 6 soft drinks per week and about 1 in 5 reported no soft drink consumption. The calories contributed by one 12-ounce soft drink per day can result in a weight gain of 15.6 pounds in one year. The sugar in one soft drink exceeds the daily discretionary calorie limit from sugars suggested in the 2005 Dietary Guidelines for Americans for all age and sex groups except boys aged 13–17.3 Given that the average diet of American children and adolescents includes multiple sources of sugars in addition to soft drinks, this level is likely to result in over-consumption of calories and contribute to obesity.

Beverages and snack foods are available to students through vending machines or school stores in most middle- and high schools throughout Utah. Sugar-sweetened beverages are available in nearly all high schools

Soft Drink Consumption

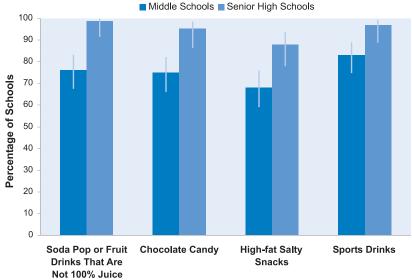
Figure 1. Percentage distribution of children aged 5-17 by frequency of soft drink consumption and age group, Utah, 2007



Source: Utah Behavioral Risk Factor Surveillance System, 2007

Availability of Specific Food or Beverages in Schools

Figure 2. Percentage of schools in which students could purchase specific food or beverages from vending machines or at school store, Utah, 2006



Source: Utah School Health Profiles Principal Survey, 2006

(98.7% offer soda or fruit drinks and 97.1% offer sports drinks), and the majority of middle schools (76.2% offer soda or fruit drinks and 83% offer sports drinks). Energy-dense snack foods are also available in nearly all high schools (95.4% offer chocolate candy and 87.8% offer high-fat salty snacks) and the majority of middle schools (74.9%

offer chocolate candy and 68% offer high-fat salty snacks). To prevent childhood obesity, the Institute of Medicine recommends that all foods and beverages sold or served to students in school should be healthful and meet an accepted nutritional content standard.⁴

Screentime Behaviors

Reasons for a positive association between the number of hours children watch television and the prevalence of overweight and obesity include a reduction of resting metabolic rate while watching TV, displacement of physical activity, excess energy intake while watching TV, and exposure to marketing of high calorie foods.^{5,6}

Over 40% of parents surveyed reported their children spent two or more hours each week-day watching TV and playing video games combined (not shown). Television viewing was significantly higher for both boys and girls on weekends (68.7% and 73.2% respectively) versus weekdays (30.0% and 32.0%). A small percentage (6.3% of boys and 6.1% of girls) reported watching no TV on weekdays, and even a smaller percentage on weekends (2.5% of boys and 0.9% of girls).

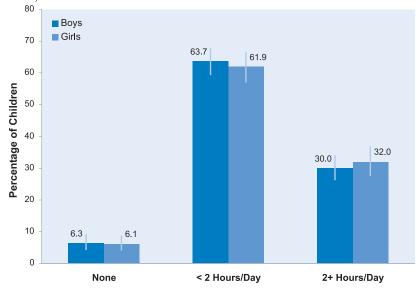
The CDC recommends in addition to limiting daily screen time, that children should engage in at least 60 minutes of physical activity on most, preferably all days of the week.³ Fully implementing the *Utah Blueprint to Promote Healthy Weight* would result in family-, school-, and community-based policy and environmental changes to support children in improving physical activity and eating patterns, and meeting national guidelines limiting sweetened beverage consumption and screen time.

References:

- 1. Childhood Overweight in Utah, 2006. Utah Department of Health. http://www.health.utah.gov/obesity/docs/2006HeightWeight_data.pdf
- 2. Barlow, SE et al. Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity. Pediatrics 120:3, December 2007, pp S163-S288.
- 3. U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2005. http://www.health.gov/dietaryguidelines/dga2005/document/
- 4. Institute of Medicine. Prevention Childhood Obesity: Health in the Balance. National Academies Press, 2005.
- 5. Roberts DF, Foehr UG, Rideout V. Generation M: media in the lives of 8–18 Year-olds. Menlo Park, CA: Henry J. Kaiser Family Foundation, 2005.

Weekday TV Hours

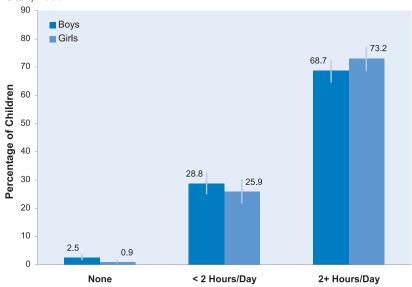
Figure 3. Reported hours of weekday TV among children aged 5–17 by sex, Utah, 2007



Source: Utah Behavioral Risk Factor Surveillance System, 2007

Weekend TV Hours

Figure 4. Reported hours of weekend TV among children aged 5–17 by sex, Utah, 2007



Source: Utah Behavioral Risk Factor Surveillance System, 2007

6. Marshall SJ, Biddle SJH, Gorely T, et al. Relationships between media use, body fatness, and physical activity in children and youth: a meta-analysis. Int J Obes 2004;28:1238-46.

August 2008 Utah Health Status Update

For additional information about this topic, contact Heather Borski, Bureau of Health Promotion, Utah Department of Health, Salt Lake City, (801) 538-6141, hborski@utah.gov; or the Office of Public Health Assessment, Utah Department of Health, Box 142101, Salt Lake City, UT 84114-2101, (801) 538-6108, FAX (801) 538-9346, email: phdata@utah.gov

Spotlights for July 2008

Breaking News, July 2008

National Survey of Children With Special Health Care Needs

Findings from the National Survey of Children with Special Health Care Needs, 2005/2006 were released in December 2007. According to the survey, 11.0% or 82,505 children in Utah have special health care needs (CSHCN). This Utah rate is much lower than the national average of 13.9%. While the percentage of children in Utah who have special health care needs remains virtually unchanged from the 2001 survey, the percentage of families who report having adequate insurance to pay for needed services has risen. In 2001, only 57.2% of Utah families with CSHCN reported having adequate private and/or public insurance to pay for the services they need. The most recent survey findings indicate that the percentage has increased to 59.5%. Although the increase is welcome news, Utah still lags behind the 62.0% reported by the nation as a whole. In terms of the percentage of children who receive coordinated, ongoing, comprehensive care within a medical home, Utah surpasses the nation (52.2% UT vs. 47.1% U.S.).

Percentage of Children Who Have Special Health Care Needs	State %	Nation %
CSHCN Prevalence by Age	11.0	13.9
Age 0-5 years	6.0	8.8
Age 6-11 years	12.2	16.0
Age 12-17 years	16.0	16.8
CSHCN Prevalence by Sex		
• Male	12.5	16.1
• Female	9.4	11.6
CSHCN whose families are partners in decision making and who are satisfied with the services they receive	55.1	57.4
CSHCN who receive coordinated, ongoing, comprehensive care within a medical home	52.2	47.1
CSHCN whose families have adequate private/public insurance to pay for the services they need	59.5	62.0
CSHCN whose services are organized in ways that families can use them easily	86.2	89.1
Youth with special health care needs who receive the services to make appropriate transition to adult health care, work and independence	42.5	41.2

The National Survey of CSHCN also reported that

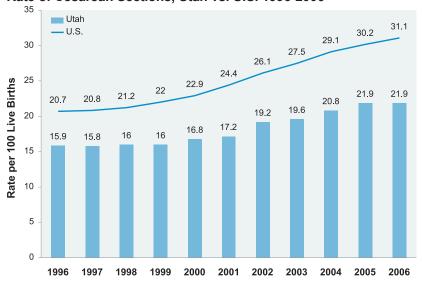
7.8% of children with special health care needs in Utah live in a rural or small town setting, compared to 14% for the nation. For more information please contact Harper Randall, MD (584-8239) or visit survey site at www.cshcndata.org.

Community Health Indicators Spotlight, July 2008

Increase in Cesarean Deliveries

Cesarean section is the most frequently performed major surgical procedure in the U.S. This rate has increased by 50% over the past decade. In 2006, the percentage of babies delivered by c-section in the U.S. reached an all time high of 31.1% (21.9% in Utah). C-section is a major surgery and carries increased risks for both mother and baby. The maternal risks include increased risk of death, surgical injury, infection, blood clots, hysterectomy, and hemorrhage. The newborn risks include difficulty with initiation of breastfeeding, prematurity, lacerations, and respiratory problems. Cesarean delivery in general requires a longer hospital stay and is significantly more expensive than the normal vaginal delivery (\$7,650 vs. \$4,489; 2006 Utah Hospital Discharge Database). The factors that have contributed to the increase in c-sections over the last decades are not completely known. The increase may be attributed

Rate of Cesarean Sections, Utah vs. U.S. 1996-2006



to fears of malpractice lawsuits following a difficult vaginal delivery, the preferences of mothers and physicians, and inability to offer vaginal births after cesareans (VBAC) due to American College of Obstetricians and Gynecologists recommendations. Although many strategies for lowering the cesarean rate are being explored, experts have identified VBAC as a key intervention in reducing repeat rates. In 2006, repeat c-sections accounted for close to half (47%) of all cesarean deliveries in Utah. For more information, please contact Reproductive Health Program (801-538-9970) or Office of Health Care Statistics (801-538-7048).

Monthly Health Indicators Report (Data Through June 2008)

Monthly Report of Notifiable Diseases, June 2008	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)	41	38	134	132	1.0
Enterotoxigenic Escherichia coli (E. coli)	8	10	19	26	0.7
Hepatitis A (infectious hepatitis)	0	1	1	13	0.1
Hepatitis B (serum hepatitis)	7	2	20	15	1.3
Measles (Rubeola, Hard Measles)	0	0	0	0	
Meningococcal Diseases	1	0	5	4	1.1
Norovirus	0	0*	8	9*	0.9
Pertussis (Whooping Cough)	19	30	147	197	0.7
Salmonellosis (Salmonella)	32	26	146	134	1.1
Shigellosis (Shigella)	3	3	11	20	0.5
Varicella (Chickenpox)	26	24*	521	448*	1.2
Viral Meningitis	3	9	22	35	0.6
West Nile (human cases)	1	_	4	_	
west tytic (numan cases)	I	0	1	0	
Notifiable Diseases Reported Quarterly, 2nd Qtr 2008	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Notifiable Diseases Reported	Quarter	arter ge)	Cases YTD		_ ii
Notifiable Diseases Reported Quarterly, 2nd Qtr 2008	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Notifiable Diseases Reported Quarterly, 2nd Qtr 2008	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Notifiable Diseases Reported Quarterly, 2nd Qtr 2008 HIV AIDS	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases AID #	# Expected YTD 99 (5-yr average)	YTD Standard Morbidity Ratio
Notifiable Diseases Reported Quarterly, 2nd Qtr 2008 HIV AIDS Chlamydia	# Cases 4 Cases 4 Cases 4 Cases 5 Cases 5 Cases 6 Cases 6 Cases 6 Cases 6 Cases 7 Case	Current Quarter Current Quarter Expected 10 10 12 6-yr average)	# Cases AID # 22 2,880	# Expected ALD 46 20 2,152	YTD Standard Morbidity Ratio 1.1 (obs/exp)
Notifiable Diseases Reported Quarterly, 2nd Qtr 2008 HIV AIDS Chlamydia Gonorrhea	# Current Quarter # Cases # Ca	Current Quarter # Expected # Expected 10 1,206 182	# Cases XID # 22 2,880 261	# Expected ALD 46 20 2,152 321	YTD Standard Norbidity Ratio (obs/exb)
Notifiable Diseases Reported Quarterly, 2nd Qtr 2008 HIV AIDS Chlamydia Gonorrhea Tuberculosis	# Cases 7 11 1,444 122 5	Current Quarter Custed 4 Expected 10 10 120 180 182 9	# 49 22 2,880 261 14	# Expected ALD 46 20 2,152 321 17	hanges Morbidity Ratio 1 Year Morbidity Ratio 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8 0
Notifiable Diseases Reported Quarterly, 2nd Qtr 2008 HIV AIDS Chlamydia Gonorrhea Tuberculosis Program Enrollment for the Month of June 2008	# Current Quarter # Cases Month 5 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Previous Current Quarter (Marter 2011) 10 12 10 10 10 10 10 10 10 10 10 10 10 10 10	% Changes # 49 22 2.880 261 14 Wonth	1 Year Ago # Expected YTD 46 5-yr average 14 17 17 17 17 17 17 17	% Change [§] From 1 Year 8.0 8.0 8.0 8.0 Ago (obs/exp)

Medicaid Expenditures (in Millions) for the Month of June 2008	Current Month	Expected/ Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 8.6	\$ 9.0	\$ 101.5	\$ 98.9	\$ 2.5
Inpatient Hospital	\$ 16.5	\$ 16.3	\$ 212.6	\$ 200.9	\$ 11.7
Outpatient Hospital	\$ 7.5	\$ 6.7	\$ 86.5	\$ 82.7	\$ 3.7
Long Term Care	\$ 17.0	\$ 16.5	\$ 187.6	\$ 195.0	(\$ 7.5)
Pharmacy	\$ 10.0	\$ 10.5	\$ 128.6	\$ 136.2	(\$ 7.7)
Physician/Osteo Services‡	\$ 5.6	\$ 5.5	\$ 70.3	\$ 67.3	\$ 2.9
TOTAL HCF MEDICAID	\$ 128.3	\$ 122.9	\$ 1,531.7	\$ 1,534.2	(\$ 2.5)
Health Care System Measures	Number of Events	Rate per 100 Population	% Change [§] From Previous Year	Total Charges in Millions	% Change [§] From Previous Year
Overall Hospitalizations (2006)	272,404	9.9%	-0.9%	\$ 3,874.8	+10.7%
Non-maternity Hospitalizations (2006)	161,398	5.7%	-2.5%	\$ 3,235.3	+11.0%
Emergency Department Encounters (2006)	670,168	24.7%	-1.3%	\$ 667.2	+20.6%
Outpatient Surgery (2006)	304,511	11.3%	-3.1%	\$ 1,020.9	+7.7%
Annual Community Health Measures	Current Data Year	Population at Risk	Number Affected	Percent/ Rate	% Change [§] From Previous Year
Overweight and Obesity (Adults 18+)	2007	1,861,147	1,077,600	57.9%	+5.5%
Cigarette Smoking (Adults 18+)	2007	4 004 447	047000	44 -0/	
	2001	1,861,147	217,800	11.7%	+19.4%
Influenza Immunization (Adults 65+)	2007	1,861,147	173,700	76.2%	+5.7%
Influenza Immunization (Adults 65+) Health Insurance Coverage (Uninsured)					
` '	2007	227,928	173,700	76.2%	+5.7% -10.4% -0.7%
Health Insurance Coverage (Uninsured)	2007 2007	227,928 2,699,554	173,700 287,200	76.2% 10.6%	+5.7% -10.4%
Health Insurance Coverage (Uninsured) Motor Vehicle Crash Injury Deaths	2007 2007 2006	227,928 2,699,554 2,582,371	173,700 287,200 296 357 127,000	76.2% 10.6% 11.5 / 100,000 13.8 / 100,000 4.7%	+5.7% -10.4% -0.7% +1.6% +15.0%
Health Insurance Coverage (Uninsured) Motor Vehicle Crash Injury Deaths Suicide Deaths	2007 2007 2006 2006	227,928 2,699,554 2,582,371 2,582,371	173,700 287,200 296 357	76.2% 10.6% 11.5 / 100,000 13.8 / 100,000	+5.7% -10.4% -0.7% +1.6%
Health Insurance Coverage (Uninsured) Motor Vehicle Crash Injury Deaths Suicide Deaths Diabetes Prevalence	2007 2007 2006 2006 2007	227,928 2,699,554 2,582,371 2,582,371 2,699,554	173,700 287,200 296 357 127,000	76.2% 10.6% 11.5 / 100,000 13.8 / 100,000 4.7%	+5.7% -10.4% -0.7% +1.6% +15.0%
Health Insurance Coverage (Uninsured) Motor Vehicle Crash Injury Deaths Suicide Deaths Diabetes Prevalence Coronary Heart Disease Deaths	2007 2007 2006 2006 2007 2006	227,928 2,699,554 2,582,371 2,582,371 2,699,554 2,582,371	173,700 287,200 296 357 127,000 1,563 2,600 1,165	76.2% 10.6% 11.5 / 100,000 13.8 / 100,000 4.7% 60.5 / 100,000	+5.7% -10.4% -0.7% +1.6% +15.0% -2.3%
Health Insurance Coverage (Uninsured) Motor Vehicle Crash Injury Deaths Suicide Deaths Diabetes Prevalence Coronary Heart Disease Deaths All Cancer Deaths	2007 2007 2006 2006 2007 2006 2006	227,928 2,699,554 2,582,371 2,582,371 2,699,554 2,582,371 2,582,371	173,700 287,200 296 357 127,000 1,563 2,600	76.2% 10.6% 11.5 / 100,000 13.8 / 100,000 4.7% 60.5 / 100,000 100.7 / 100,000	+5.7% -10.4% -0.7% +1.6% +15.0% -2.3% +1.4%
Health Insurance Coverage (Uninsured) Motor Vehicle Crash Injury Deaths Suicide Deaths Diabetes Prevalence Coronary Heart Disease Deaths All Cancer Deaths Births to Adolescents (Ages 15-17)	2007 2007 2006 2006 2007 2006 2006 2007	227,928 2,699,554 2,582,371 2,582,371 2,699,554 2,582,371 2,582,371 62,174	173,700 287,200 296 357 127,000 1,563 2,600 1,165	76.2% 10.6% 11.5 / 100,000 13.8 / 100,000 4.7% 60.5 / 100,000 100.7 / 100,000 18.7 / 1,000	+5.7% -10.4% -0.7% +1.6% +15.0% -2.3% +1.4% +12.7%

^{*} Due to limited historical data, the average is based upon 4 years of data for norovirus and varicella.

^{§ %} Change could be due to random variation.

[‡] Medicaid payments reported under Physician/Osteo Services do not include enhanced physician payments.

Note: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for influenza has ended until the 2008 season.