

Utah Health Status Update:

Economic Impact of Obesity

May 2012

Eighty percent of Americans recognize that obesity is a significant and growing challenge for the country¹. In Utah, 9.7% of public elementary school students are obese², 8.6% of public high school students are obese³, and 23.2% of adults are obese⁴.

Obesity rates impact both individuals and the health care delivery system. Obesity is related to many major chronic conditions, including diabetes, hypertension, stroke, heart disease, arthritis, asthma, and some cancers. Obese individuals generally have higher health care expenses compared to individuals at ideal weight due to obesity-related diseases. The national 2006 estimate of per capita medical spending for an obese adult was 42% higher (approximately \$1,429)⁵ than for an adult at ideal weight.

In the U.S. in 2006, obesity-related medical expenses were estimated to be 9.1% of total annual medical spending, or approximately \$85.7 billion. The obesity-related expenses by type of health care service were also estimated; inpatient expenses were estimated at \$27.4 billion; non-inpatient services expenses were estimated at \$26.4 billion; and prescription drug expenses were estimated at \$32.7 billion⁵ (Figure 1).

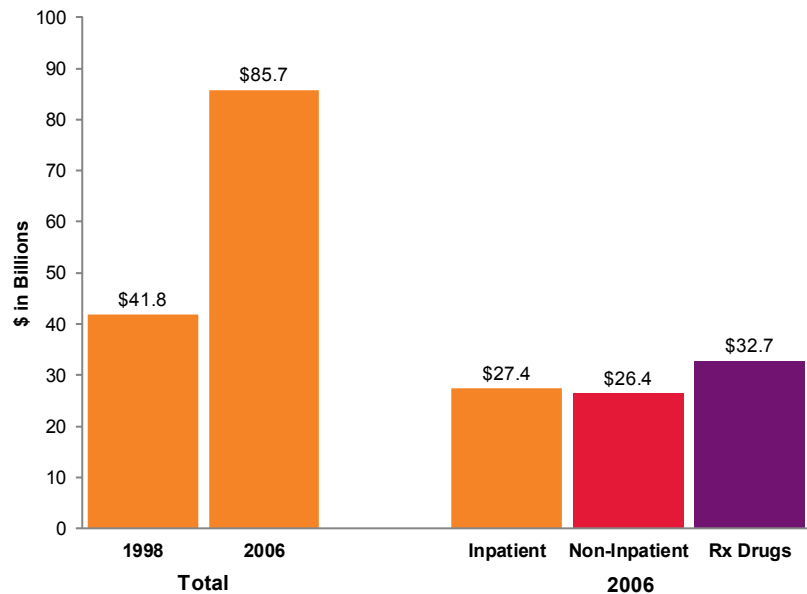
In Utah, obesity-related adult health care expenses were estimated to be \$485 million in 2008⁶. This estimate was calculated using Medical Expenditures Panel Surveys (MEPS) data, which includes data from private insurance companies, Medicaid, and Medicare. The estimate controls for age, gender, race, ethnicity, marital status, education, income, health insurance status, geographic region, and smoking status.

By 2018, assuming the current obesity trend continues, Utah's obesity-related adult health care

- **In Utah, obesity-related adult health care expenditures were estimated at \$485 million in 2008.**
- **If obesity prevalence continues to increase, Utah's obesity-related adult health care expenditures will be \$2.4 billion by 2018.**

U.S. Obesity-Related Medical Expenditures

Figure 1. Total, 1998 and 2006; and by type of service, 2006



Note: Based on Medical Expenditures Panel Surveys (MEPS) Data; Expenses are adjusted to 2008 dollars; Individual type of service estimates are based on attributable fractions and therefore the sum of all type of service estimates will not add-up to the total.
 Source: Finkelstein, 2009

expenses are projected to be \$2.4 billion, representing a \$1.9 billion increase. However, if the obesity prevalence rate stabilizes at the 2008 rate of 23.2%, the 2018 Utah obesity-related adult health care expenses are estimated to be \$946 million, a savings of \$1.4 billion (Figure 2). The 2010 Utah adult obesity rate is 23.0%⁴, which is not statistically different than the 2008 rate of 24.0%.

These cost estimates could be underestimated because the MEPS data uses a narrow definition of expenditures as payments made for health care services. Specifically, the data omit administrative costs, does not account for services for which no explicit payment or charge was recorded, does not adjust for payments to providers not linked to a service event, and the system is prone to attrition of high-cost cases, underreporting, and some misclassification of expenditures across the board^{7,8,9}.

There are three factors that increase the cost of treating obesity: an increase in the number of obese individuals, an increase in the cost of treating obesity-related illnesses, and the demographic shift of the population with a general trend for older individuals to be obese. Data have shown that the increase in the obesity rate is the main driver for the increase in obesity-related expenses between 1998 and 2006⁵.

Stabilizing Utah's adult obesity rate can drastically reduce health care spending. Individuals, families, community leaders, elected officials, employers, schools, and health care professionals can work together to stabilize and decrease this rate. Preliminary data from the 2011 Utah

Behavioral Risk Factor Surveillance System show that the majority of the public believes that health care providers have a lot or some responsibility in addressing the problem of obesity in Utah (81.4%), as do individuals (96.0%), parents (96.3%), and schools (80.4%) (Figure 3).

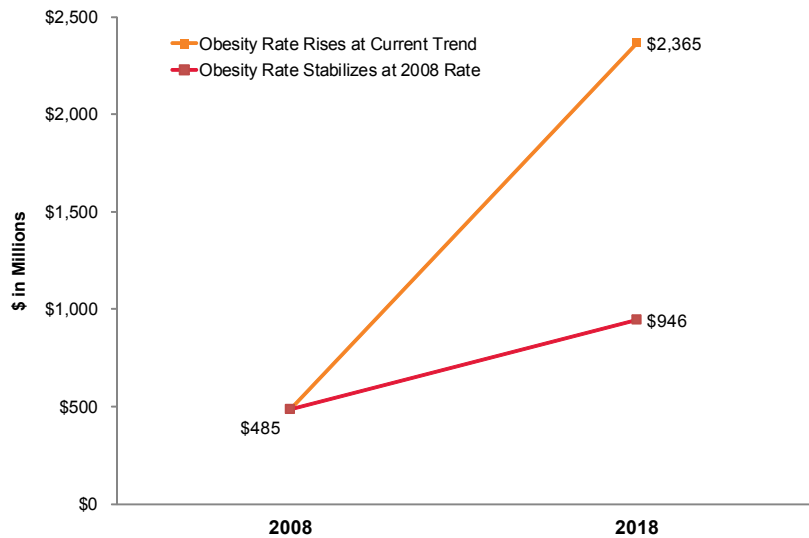
Stabilizing and reducing the Utah obesity rate is an important strategy to control the increasing cost of health care. A decrease in obesity-related health care expenses can help contain overall health care costs. Individuals, parents, health care providers, employers, insurers, and society as a whole can help contain the obesity epidemic. Working through schools, communities, worksites, and health care organizations to develop social norms and a built environment that supports healthy behaviors and active living will allow individuals to adopt a healthy lifestyle.

References

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Utah’s Obesity-Related Medical Expenditures

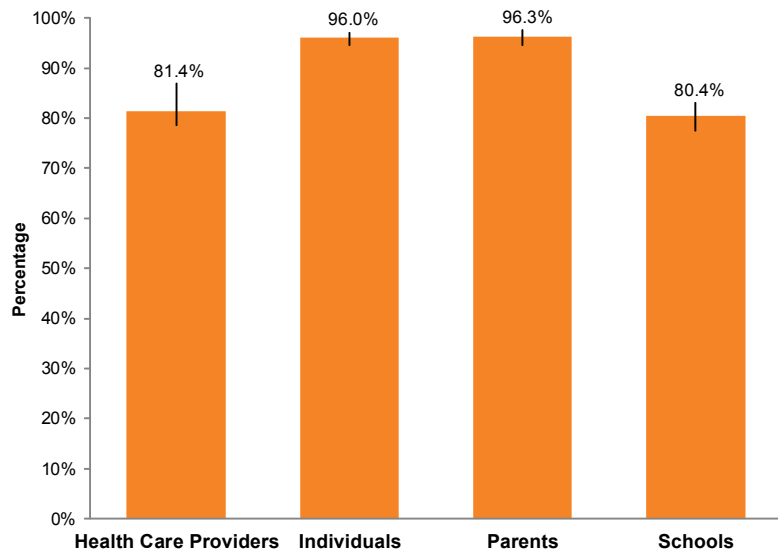
Figure 2. Cost estimate if the obesity rate continues to increase at the current rate and if the rate stabilizes at the 2008 rate



Source: Thorpe, 2009.

Responsibility For Addressing the Obesity Epidemic

Figure 3. Percentage by responsible group, Utah, 2011 preliminary data



Note: Each responsible group was asked as a separate question.
Source: Utah Behavioral Risk Factor Surveillance System, Preliminary Data, 2011

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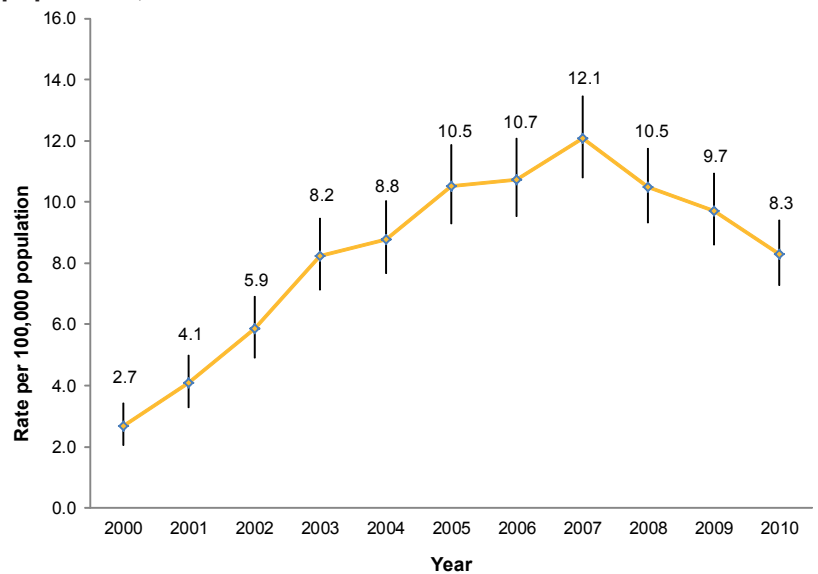
Breaking News, May 2012

Integration of Accidental Drug Overdose Deaths into the Utah Violent Death Reporting System

Utah has seen a significant decrease in the rate of prescription opioid overdose deaths from 2007 to 2010 (Figure 1). One time funding appropriated in 2007 by the Utah State Legislature to address prescription drug overdose deaths was expended by 2010. This barrier made it critical to streamline Prescription Pain Medication Program (PPMP) and Violence and Injury Prevention Program (VIIPP) activities thereby eliminating duplication of data collection, allowing for leveraging staff resources, and providing a richer data collection system useful for understanding prescription drug overdose deaths.

Accidental drug overdose death data is being incorporated into VIIPP's Utah Violent Death Reporting System (UTVDRS), which previously only captured deaths of undetermined intent, homicides, and suicides. As a result, this initiative will provide a unique opportunity to look at the overall picture of drug overdose deaths in Utah. The array of UTVDRS variables collected allows Utah to identify circumstances surrounding drug overdose deaths and focus prevention efforts throughout the state. This initiative has been selected as a finalist for the "Innovative Initiative of the Year" Award by the Safe States Alliance. It has provided Utah a platform to serve as an example to other states by demonstrating how limited resources and program activities can be sustained.

Rate of Prescription Opioid Overdose Deaths per 100,000 population, Utah 2000-2010



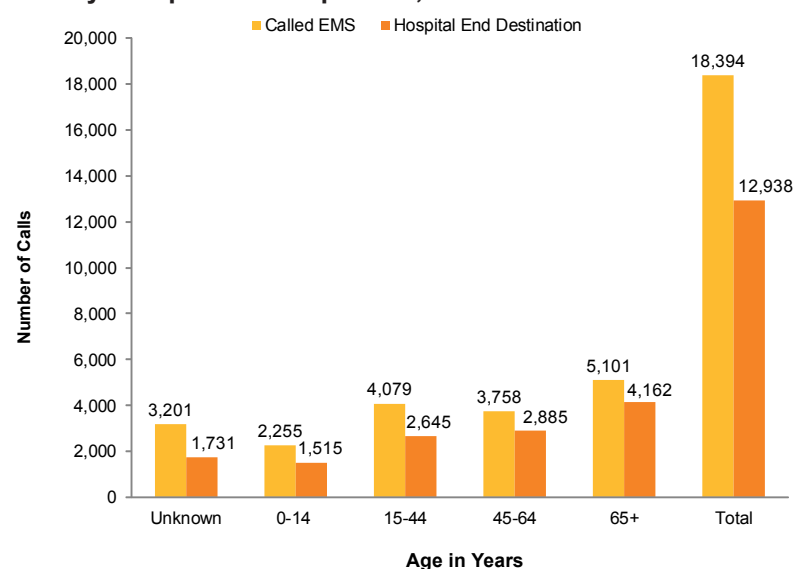
Community Health Indicators Spotlight, May 2012

Connecting EMS Calls for Breathing Problems with Hospital Use

Patient data for Emergency Medical Service (EMS) calls in Utah has been recorded in the National EMS Information System since 2008. Currently, 83% of all EMS agencies in Utah submit data to this database. The Utah Asthma Program has begun looking at asthma-related EMS calls and subsequent Emergency Department visits. Future efforts will be made to develop an EMS asthma measure with an evaluation of sensitivity/specificity.

The graph below provides an overview of EMS calls in which breathing problems were the caller's primary complaint. About 18,400 people contacted EMS with the primary complaint of breathing problems and over 70% of these patients had the hospital listed as the ending destination. Of the 12,938 who ended up at the hospital, the majority (12,315) were treated and transported by EMS to the hospital. The highest number of calls were made by those aged 65 and over. About 2,300 callers were treated and released by EMS on scene. For asthma, treatment on scene is possible as ambulances are equipped with albuterol. To avoid using EMS for asthma, people should keep a relief inhaler with them at all times and know correct inhaler technique. Calling EMS is necessary if a person with asthma is struggling to talk, stay awake, has blue lips, or doesn't have medication on hand.

Emergency Medical Service Calls with Breathing Problems as Primary Complaint to Dispatcher, 2009-2010



Monthly Health Indicators Report

(Data Through March 2012)

Monthly Report of Notifiable Diseases, March 2012	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)	12	34	47	71	0.7
Shiga toxin-producing Escherichia coli (E. coli)	0	4	6	9	0.7
Hepatitis A (infectious hepatitis)	0	0	0	2	0.0
Hepatitis B, acute infections (serum hepatitis)	0	0	0	3	0.0
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/flu				
Meningococcal Disease	0	1	0	3	0.0
Pertussis (Whooping Cough)	0	28	64	96	0.7
Salmonellosis (Salmonella)	12	22	38	59	0.6
Shigellosis (Shigella)	0	4	1	8	0.1
Varicella (Chickenpox)	19	81	78	242	0.3
Quarterly Report of Notifiable Diseases, 4th Qtr 2011	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV/AIDS†	20	31	86	116	0.7
Chlamydia	1,848	1,520	7,079	5,934	1.2
Gonorrhea	81	138	277	567	0.5
Syphilis	4	6	14	33	0.4
Tuberculosis	6	9	34	31	1.1
Medicaid Expenditures (in Millions) for the Month of March 2012	Current Month	Expected/Budgeted‡ for Month	Fiscal YTD	Budgeted‡ Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 13.8	\$ 13.5	\$ 109.5	\$ 109.2	\$ 0.3
Inpatient Hospital	\$ 28.3	\$ 15.1	\$ 239.8	\$ 226.6	\$ 12.2
Outpatient Hospital	\$ 7.2	\$ 10.0	\$ 66.2	\$ 73.9	\$ (7.7)
Long Term Care	\$ 15.8	\$ 11.4	\$ 118.2	\$ 113.7	\$ 4.5
Pharmacy§	\$ 18.7	\$ 13.1	\$ 133.9	\$ 114.7	\$ 19.2
Physician/Osteo Services	\$ 10.1	\$ 9.4	\$ 68.3	\$ 69.2	\$ (0.9)
TOTAL HCF MEDICAID	\$184.7	\$ 190.6	\$1,356.9	\$1,410.7	\$ (53.9)

Program Enrollment for the Month of March 2012	Current Month	Previous Month	% Change¶ From Previous Month	1 Year Ago	% Change¶ From 1 Year Ago
Medicaid	254,102	252,822	+0.5%	239,280	+6.2%
PCN (Primary Care Network)	13,570	13,269	+2.3%	21,172	-35.9%
CHIP (Children's Health Ins. Plan)	36,995	37,061	-0.2%	37,416	-1.1%
Health Care System Measures	Annual Visits			Annual Charges	
	Number of Events	Rate per 100 Population	% Change¶ From Previous Year	Total Charges in Millions	% Change¶ From Previous Year
Overall Hospitalizations (2010)	274,576	9.0%	-2.6%	\$ 5,416.2	+5.9%
Non-maternity Hospitalizations (2010)	167,340	5.3%	-0.9%	\$ 4,552.5	+5.9%
Emergency Department Encounters (2009)	684,176	23.3%	-1.1%	\$ 1,081.4	+22.9%
Outpatient Surgery (2009)	311,442	10.6%	+1.9%	\$ 1,465.7	+14.7%
Annual Community Health Measures	Current Data Year	Number Affected	Percent/Rate	% Change¶ From Previous Year	State Rank# (1 is best)
Obesity (Adults 18+)	2010	454,700	23.1%	-4.0%	11 (2010)
Cigarette Smoking (Adults 18+)	2010	180,100	9.1%	-6.9%	1 (2010)
Influenza Immunization (Adults 65+)	2010	175,900	68.2%	-0.8%	23 (2010)
Health Insurance Coverage (Uninsured)	2010	301,900	10.6%	-5.6%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2010	231	8.1 / 100,000	+0.1%	19 (2009)
Poisoning Deaths	2010	342	12.0 / 100,000	-38.1%	47 (2009)
Suicide Deaths	2010	479	16.8 / 100,000	+5.8%	n/a
Diabetes Prevalence (Adults 18+)	2010	128,000	6.5%	+6.2%	15 (2010)
Poor Mental Health (Adults 18+)	2010	296,100	15.0%	-0.2%	17 (2010)
Coronary Heart Disease Deaths	2010	1,488	52.2 / 100,000	-0.4%	2 (2008)
All Cancer Deaths	2010	2,791	98.0 / 100,000	+7.9%	1 (2008)
Stroke Deaths	2010	736	25.8 / 100,000	-1.4%	13 (2008)
Births to Adolescents (Ages 15-17)	2010	876	14.3 / 1,000	-13.2%	17 (2009)
Early Prenatal Care	2010	38,124	73.1%	+2.1%	n/a
Infant Mortality	2010	251	4.8 / 1,000	-9.0%	3 (2008)
Childhood Immunization (4:3:1:3:3:1)	2010	38,900	70.6%	-7.8%	12 (2010)

* Influenza activity remains minimal in Utah. Influenza-like illness activity is below baseline statewide. As of November 16, 2011, 1 influenza-associated hospitalization has been reported to the UDOH. More information can be found at <http://health.utah.gov/epi/diseases/flu>.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

‡ Budget has been revised to include supplemental funding from 2011 General Session.

§ Only includes the gross pharmacy costs. Pharmacy Rebate and Pharmacy Part-D amounts are excluded from this line item.

¶ % Change could be due to random variation.

State rank based on age-adjusted rates.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile virus has ended until the 2012 season.