UTAH DEPARTMENT OF HEALTH

Utah Health Status Update:

Environmental Determinants of Physical Health and Obesity

April 2013

Individuals who exercise regularly receive tangible health benefits, including benefits to the musculoskeletal, metabolic, endocrine, and immune systems, and a decreased risk for heart disease, diabetes, and some cancers. These benefits are relevant in both the short- and long-term. Many ailments experienced by older adults can be ameliorated by lifelong regular physical activity, and health problems resulting from a sedentary lifestyle are being seen in younger adults and even children.[1]

Healthy People 2020 includes the following goals for physical activity:

Adults: Increase the proportion of adults who engage in aerobic physical activity of at least moderate intensity for at least 150 minutes/week, or 75 minutes/week of vigorous intensity, or an equivalent combination. (PA-2.1)

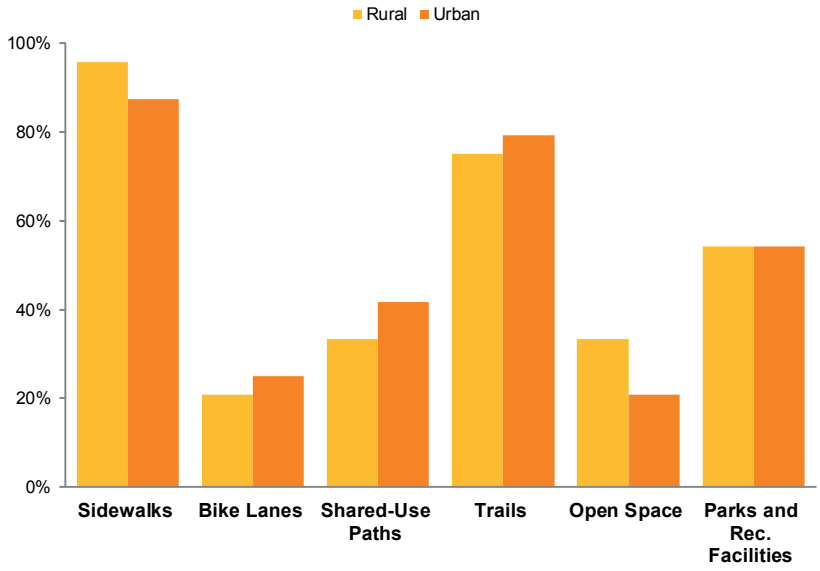
Children and adolescents: Increase the proportion of adolescents who meet current Federal physical activity guidelines for aerobic physical activity (PA-3). Children and adolescents should get 60 minutes or more of physical activity daily, most of which should be either moderate- or vigorous-intensity aerobic activity.[2]

Individuals' type, intensity, and duration of physical activity are all impacted by the environments where they live, work, and play. Physical activity is impacted by availability and perceptions of recreational equipment, the distance a person lives from recreational areas, traffic safety, and the existence and quality of sidewalks, bike lanes, and controlled street crossings.[3-4]

- **Physically active individuals receive short- and long-term health benefits.**
- **The environments where a person lives, works, and plays impacts how they exercise.**
- **In 2011, the UDOH and Metro Analytics created and distributed the Utah Bicycle & Pedestrian Master Plan Design Guide as a resource for city planners.**

Active Transport Policies

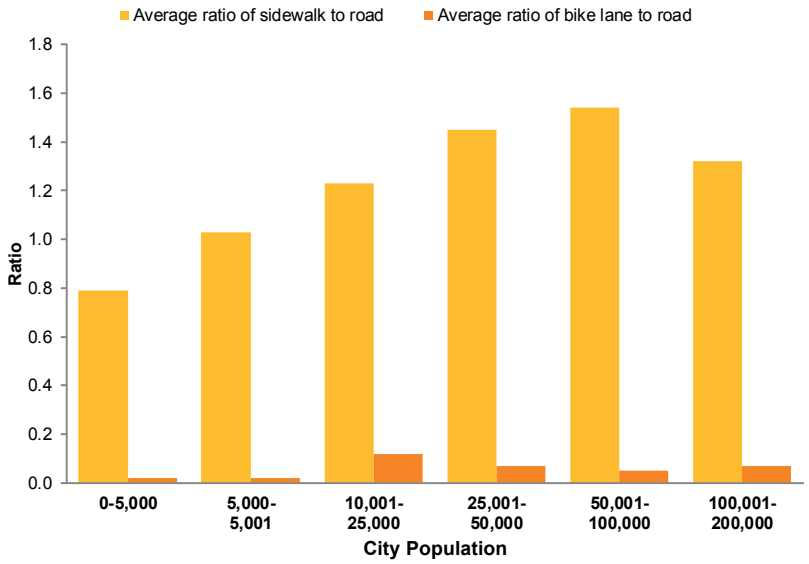
Figure 1. Percentage of cities with active transport policies, rural and urban cities, Utah, 2009



Source: Metro Analytics, 2009. *2009 Inventory of ACE Criteria for the State of Utah – Final Report*

Sidewalks and Bike Lanes

Figure 2. Average ratio of sidewalks and bike lanes to paved roads in cities, by population size, Utah, 2009



Source: Metro Analytics, 2009. *2009 Inventory of ACE Criteria for the State of Utah – Final Report*

In 2009, 79 Utah cities reported their active transport policies (Figure 1): nearly every city addressed sidewalks (95.8% of rural cities; 87.5% of urban cities) and trails (75.0% rural; 79.2% urban). Far fewer cities addressed parks and recreation facilities (54.2% rural; 54.2% urban), shared-use paths

(33.3% rural; 41.7% urban), or bike lanes (20.8% rural; 25.0% urban). Urban cities had a higher ratio of miles of sidewalk to miles of paved roads (1.25 miles of sidewalk per mile of paved road, meaning some roads have sidewalk on both sides) as compared to rural cities (1.03) (Figure 2). The ratio for miles of bike lanes per mile of paved roads was similarly higher in urban areas (.06 miles of bike lane per mile of paved road in urban cities, compared to .02 in rural cities).

In 2011, the Utah Department of Health and Metro Analytics created the Utah Bicycle & Pedestrian Master Plan Design Guide as a resource for city planners.[5] Each planner in the state received a copy of this guide and a survey about their intentions for addressing active transportation (Figure 3). Of the 54 respondents, 55.6% planned to pursue policies to address active transportation in their cities within the next 6 to 12 months. A smaller proportion, 26.9%, planned to actually make environmental changes within the next 6 to 12 months, while 94.3% of respondents planned to share this guide with their coworkers.

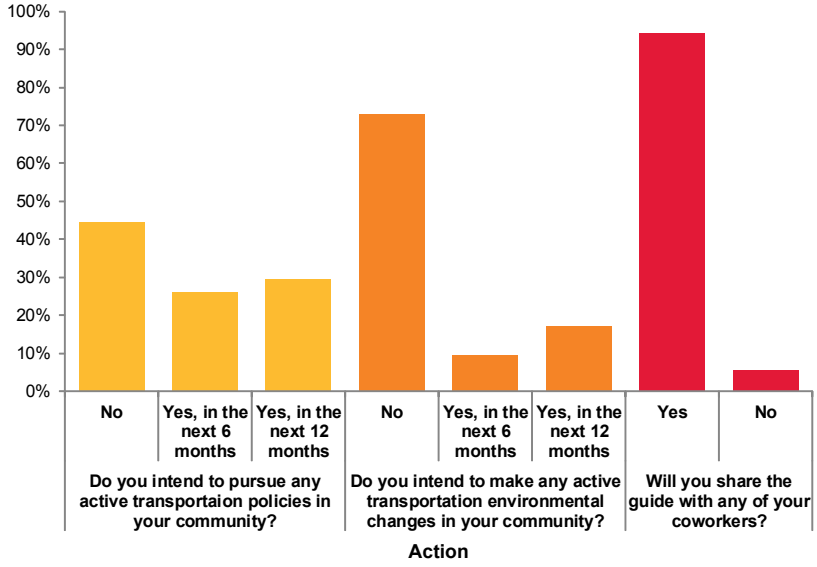
On the 2011 Behavioral Risk Factor Surveillance System survey, respondents were asked whether their neighborhoods had sidewalks and whether they would like more sidewalks, if possible (Figure 4). While most respondents had sidewalks (only 17.9% of total respondents had no sidewalks in their neighborhoods), 45.8% of respondents said they would like more sidewalks. These findings suggest that if planners make environmental changes to promote active transport, individuals would likely use them.

References

1. *Surgeon General's Report on Physical Activity and Health.* http://www.cdc.gov/nccdphp/sgr/pdf/execsumm.pdf
2. *2008 Physical Activity Guidelines for Americans.* http://www.health.gov/paguidelines/guidelines/chapter3.aspx
3. Timperio, A., Crawford, D., Telford, A., & Salmon, J. (2004). Perceptions about the local neighborhood and walking and cycling among children. Preventive Medicine, 38, 39 - 47.
4. Boarnet, M. G., Anderson, C. L., Day, K., McMillan, T., & Alfonzo, M. (2005). Evaluation of the California Safe Routes to School legislation: Urban form changes and children's active transportation to school. American Journal of Preventive Medicine, 28(2), 134-140.

City Planner's Intentions to Act

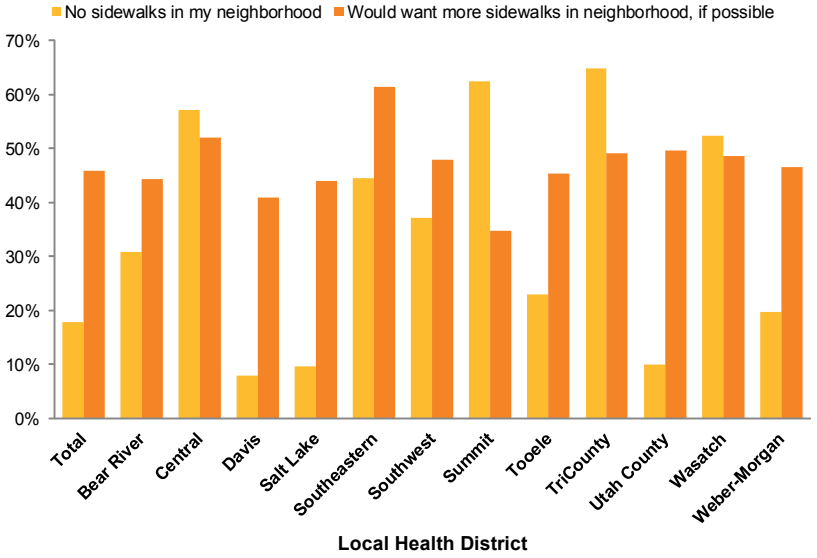
Figure 3. Percent of city planners intending to act on the Utah Bicycle & Pedestrian Master Plan Design Guide in the next 12 months, Utah, 2011



Source: Utah Department of Health, City Planner Intention Survey, 2011.

Neighborhood Sidewalks

Figure 4. Percentage of respondents with no neighborhood sidewalks and who would like more neighborhood sidewalks, by local health district, Utah, 2011



Source: Utah Behavioral Risk Factor Surveillance System, 2011

5. Utah Bicycle & Pedestrian Master Plan Guide. http://health.utah.gov/obesity/documents/Utah%20Bike%20Ped%20Guide.pdf

April 2013 Utah Health Status Update

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Breaking News, April 2013

Reducing Utah Medicaid Costs for Preterm Birth

Utah has joined a challenge by the Association of State and Territorial Health Officers and the March of Dimes to reduce the rate of preterm births (PTB) by eight percent by 2014. This would amount to preventing approximately 600 PTBs. To examine the costs of early care for PTBs to the Utah Medicaid program, we've reviewed Utah's Fee for Service (FFS) Medicaid claims data. These data include only newborn hospitalization claims billed directly to Medicaid and does not include costs for clients enrolled in managed care organizations. The average cost per preterm infant (DRGs 790-792) was $22,807 versus $1,477 for a full term newborn (DRGs 793, 795). The total amount reimbursed by FFS Medicaid for PTBs during 2009-2011 was $39,707,843, an average of more than $13.2 million per year. Preventing PTBs in Utah could result in cost savings to our state.

At a recent Prematurity Summit in Utah, stakeholders in perinatal healthcare from across the state identified four evidence-based strategies to prevent PTBs in Utah. They include: 1) Optimization of inter-pregnancy interval; 2) Early identification of high-risk pregnant women and implementation of evidence-based protocols to provide optimal care; 3) Increasing the appropriate intervention of progesterone supplementation during high-risk-for-PTB pregnancies to reduce recurrent PTBs; and 4) Increasing single embryo transfers for in vitro fertilization (IVF) to reduce selective multiple gestations and resultant PTBs

Reducing the number of preterm births by implementing these strategies could result in fewer preterm babies and reduce the associated costs for Medicaid and other insurers.

Utah Medicaid Fee For Service Claims Data 2009-2011 by Diagnosis Related Group*

DRG Code	# of Infants	Cost Per Infant*	Total Cost
790 - Extreme Immaturity	612	$43,132	$26,396,784
791 - Prematurity with Major Problems	413	$18,803	$7,765,639
792 - Prematurity without Major Problems	716	$7,745	$5,545,420
793 - Full Term Neonate with Major Problems	1,159	$7,923	$9,182,757
795 - Normal Newborn	14,821	$973	$14,420,833

*Fee for service cost data excluding claims paid by a third party payer

Community Health Indicators Spotlight, April 2013

Utah's Health Care Safety Net – 2013

Utah's Health Care Safety Net serves an important role in providing health care to Utah's underserved and uninsured populations. Safety Net members include medical and dental providers, mental health providers, and advocacy groups. Our goal at UDOH is to help make Utah citizens the healthiest people in the country. The Safety Net is just one way the UDOH promotes healthy living. Providing our citizens with access to appropriate and essential health care is one of our top priorities. We believe that when people have good information they will be able to make good choices about their health care. We want to be sure that, with all the talk about health care reform, an individual's health is the key concern.

The Institute of Medicine's 2000 report, *America's Health Care Safety Net: Intact But Endangered*, defines "core safety net providers" as having two distinguishing characteristics: (1) By legal mandate or explicitly adopted mission, they maintain an "open door," offering patients access to services regardless of their ability to pay; and (2) A substantial share of their patient mix is uninsured, Medicaid, and other vulnerable patients.

The Utah Department of Health hosts Health Care Safety Net Summits in Salt Lake City twice a year. Both rural and urban Safety Net providers from throughout the state meet to discuss issues and initiatives pertinent to the medical, dental, and mental health of Utah's vulnerable populations.

Monthly Health Indicators Report

(Data Through February 2013)

Monthly Report of Notifiable Diseases, February 2013	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)	30	18	62	38.4	1.6
Shiga toxin-producing Escherichia coli (E. coli)	2	2	6	5	1.2
Hepatitis A (infectious hepatitis)	0	0.6	0	1.6	0.0
Hepatitis B, acute infections (serum hepatitis)	0	1.6	0	2.8	0.0
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/flu				
Meningococcal Disease	0	0.8	0	1.2	0.0
Pertussis (Whooping Cough)	25	45.6	93	86.4	1.1
Salmonellosis (Salmonella)	11	15.6	23	37.2	0.6
Shigellosis (Shigella)	2	1.4	3	3.8	0.8
Varicella (Chickenpox)	25	58.6	50	120.4	0.4
Quarterly Report of Notifiable Diseases, 4th Qtr 2012	**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†	2	29	72	111	0.6
Chlamydia	1,678	1,639	7,474	6,333	1.2
Gonorrhea	133	107	461	445	1.0
Syphilis	14	8	35	31	1.1
Tuberculosis	6	8	37	31	1.2
Medicaid Expenditures (in Millions) for the Month of February 2013	**Current Month**	**Expected/ Budgeted‡ for Month**	**Fiscal YTD**	**Budgeted‡ Fiscal YTD**	**Variance - over (under) budget**
Capitated Mental Health	$ 13.6	$ 12.1	$ 92.0	$ 89.7	$ 2.3
Inpatient Hospital	$ 11.8	$ 38.9	$ 190.4	$ 220.1	$ (29.7)
Outpatient Hospital	$ 4.7	$ 5.0	$ 44.3	$ 60.9	$ (16.6)
Long Term Care	$ 13.0	$ 18.1	$ 105.0	$ 107.6	$ (2.6)
Pharmacy§	$ 8.3	$ 9.2	$ 100.0	$ 84.5	$ 15.5
Physician/Osteo Services	$ 4.9	$ 3.0	$ 55.1	$ 56.7	$ (1.5)
TOTAL HCF MEDICAID	$175.6	$ 178.0	$1,316.3	$1,329.6	$ (13.3)

Program Enrollment for the Month of February 2013	Current Month	Previous Month	% Change¶ From Previous Month	1 Year Ago	% Change¶ From 1 Year Ago
Medicaid	259,786	258,904	+0.3%	252,822	+2.8%
PCN (Primary Care Network)	11,627	11,841	-1.8%	13,269	-12.4%
CHIP (Children's Health Ins. Plan)	35,216	35,254	-0.1%	37,061	-5.0%
	Annual Visits			Annual Charges	
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 (2011)	280,830	9.3%	+0.8%	$ 5,818.8	+7.4%
Non-maternity Hospitalizations (2011)	175,847	5.7%	+3.8%	$ 4,909.9	+7.9%
ED Encounters - Not Admitted (2010)	645,962	22.1%	-7.8%	$ 1,160.9	+7.4%
Outpatient Surgery (2009)	311,442	10.9%	+1.2%	$ 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+)	2011	472,400	24.4%	+1.3%	12 (2011)
Cigarette Smoking (Adults 18+)	2011	229,300	11.8%	+2.7%	1 (2011)
Influenza Immunization (Adults 65+)	2011	147,400	56.9%	-15.5%	41 (2011)
Health Insurance Coverage (Uninsured)	2011	377,700	13.4%	+26.4%	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+)	2011	129,600	6.7%	-1.8%	6 (2011)
Poor Mental Health (Adults 18+)	2011	315,300	16.3%	-0.4%	17 (2011)
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)

† Diagnosed HIV infections, regardless of AIDS diagnosis.
‡ Budget has been revised to include supplemental funding from 2011 General Session.
§ Includes only 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 2013 season.