Utah Health Status Update: Environmental Public Health Tracking Network

July 2010

Utah Department of Health

Until recently, data on health and the environment existed only in separate databases, making it difficult for health professionals to study and analyze the data. In 2000 the Pew Environmental Health Commission wrote "America's Environmental Health Gap, Why the Country Needs a Nationwide Health Tracking Network." This report called for a shift of focus to environmental health problems and hazards. It described America as having an environmental health gap: a lack of basic information on environmental health hazards that could be used to find relationships between health and the environment, to detect trends in public health, and to plan and evaluate public health programs.

Many Americans are concerned about the potential health impacts of exposures to environmental hazards. Citizens and policy makers want access to current, relevant, and accurate information about environmental exposures and health outcomes to facilitate individual, community, state, and national decision-making. This information could then guide the adoption of strategies to reduce the burden of disease attributable to the environment. The mission of the Environmental Public Health Tracking Program is to provide information that communities can use to improve their health.



Grantee States in the Tracking Network

Figure 1. Map of programs funded by the National Environmental Public Health Tracking program



📒 Data Linkage Demonstration Projects

The Tracking Network is a launching pad for further research because it connects environmental and health information from multiple states and national sources. The Tracking Network consists of 22 states, one city, and four partners for academic excellence, with the Centers for Disease Control (CDC) leading the effort. Many other non-government organizations are also involved.

The Tracking Network consists of a CDC maintained national portal as well as individual state portals that integrate health and environmental data. Utah's IBIS-PH (Indicator-Based Information System for Public Health) web portal is part of this nationwide network. The Tracking Program is working to provide data for more states on the national portal. The state and national portals are accessible to anyone and are completely free of charge.

The national portal contains information that is broken down into three areas—*Environments*, *Health Effects*, and *Info by Location*. These areas have in-depth information and data on several different health topics. Users can look at health indicators or set up a custom query to find the most recent data about a specific health topic. Utah's portal also has three areas where information is found—*Indicators*, *Publications*, and *Custom Queries*. Utah has a separate secure portal where users who apply and are approved can query data at smaller geographic levels. Users should review the public metadata or descriptive information about the datasets, prior to applying for access so they can be sure the secure queries meet their information needs.

Health data on the state and national portals include:

- Asthma
- Birth defects
- Cancer
- Carbon monoxide
- Childhood lead poisoning
- Heart attacks
- Reproductive and birth outcomes
- Air quality
- Water quality

You can access the national portal at <u>http://ephtracking.cdc.gov</u>. Utah's state portal can be accessed by going to <u>http://ibis.health.utah.gov</u>.

The Tracking Network in Action

The Utah Tracking Network has, in only a few years, provided needed information and data to successfully identify public health emergencies across Utah's unique environments. It has also been used to dispel concerns and claims regarding health outcomes and environmental factors.

The Eureka Valley was heavily mined from 1870 to 1965. Several large mine waste piles are located on the south side of town next to residences and businesses. Mine waste was distributed throughout the town during mining activity and subsequent housing construction exposing residents to lead from the Eureka Mills Superfund site. Blood lead data in the Utah Tracking Network showed highly elevated blood lead levels in children in Eureka. Soil sampling by the U.S. Environmental Protection Agency and the Utah Department of Environmental Quality also showed elevated levels of lead in this community. The Environmental Protection Agency responded with an emergency clean up of the area. During the clean up period, the Utah Department of Health's Health Hazard Assessment team and the Blood Lead Poisoning Prevention Program conducted free quarterly blood lead testing and provided community education. The number of children with elevated blood lead levels has decreased significantly since the clean up began. In response, the Blood Lead Poisoning Prevention Program has been able to decrease the frequency of testing from every three months to once a year. In addition, the Utah Tracking Program continues to collaborate with the Central Utah Public Health Department, the Utah Department of

Elevated Blood Levels Among Children

Figure 2. Prevalence of children with blood lead levels $\geq 10 \text{ mcg/dL}$, Utah children aged 0-5 years, 1996–2008



Health, and the Health Hazard Assessment Team to provide blood lead testing to children living in Eureka until the year 2013.

Tracking allows scientists to view community health over time and communities to learn about their area conditions, identify health issues, and support local public health actions. Environmental Public Health Tracking also allows health officials to put their resources to best use, drive practice, and create regulations and program evaluations.

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For additional information about this topic, contact Emily Stembridge, Disease Control and Prevention, Environmental Epidemiology Program, Utah Department of Health, Box 142104, Salt Lake City, UT 84114-2104, (801) 538-9341, email: <u>estembridge@utah.gov</u>, or the Office of Public Health Assessment, Utah Department of Health, Box 142101, Salt Lake City, UT 84114-2101, (801) 538-9191, email: <u>chdata@utah.gov</u>

Breaking News, June 2010

The HIV/AIDS Epidemic: The New Generation

Next year will mark 30 years since the initial AIDS cases were reported to the Centers for Disease Control and Prevention (CDC). During the last three decades, the epidemic has shifted from being one dominated by a deadly disease to one involving a treatable infection due to the introduction of anti-retroviral medications in the mid-1990s. Despite prevention efforts and treatment services, HIV continues to affect thousands of people in the U.S. each year. CDC estimates that approximately 56,300 new HIV infections occur each year and that there are more than 1 million people currently living with the virus. The number of people living with an HIV infection continues to increase due to the advancement of treatments and fewer deaths.

In Utah, recent data suggest that new HIV/AIDS cases are affecting age groups differently than previously observed. Prior to 2000, the majority of those affected by HIV/AIDS was those aged 30-39 years. During the last 10 years, the number of new cases among this age group has declined, but the number of new cases among other age groups has continued to rise. Data from the last five years show the number of newly-diagnosed cases in the 20-29 year age group has surpassed the number in the 30–39 year age group for the first time and the number of new cases in the older age groups (40-49 years and 50-59 years, respectively) has continued to increase as well. These data suggest that there is a broader distribution of HIV/AIDS among the age spectrum in Utah, which will likely require public health officials to find new ways to focus prevention and treatment services.





Community Health Indicators Spotlight, June 2010

Oral Health Care and Pregnancy

Researchers continue to uncover the relationship between oral health and pregnancy outcomes. The hormonal changes associated with pregnancy can affect a woman's oral health and poor oral health can in turn impact her pregnancy. Pregnant women should adhere to recommendations for oral health care for adults, which include visiting a dentist twice a year. It is recommended that the second trimester is the best time for routine dental visits.

From 2004–2008, the Utah Pregnancy Risk Assessment Monitoring System (PRAMS) asked women if they had ever had their teeth cleaned, if they had their teeth cleaned by a dentist or dental hygienist during their most recent pregnancy, and if a health care worker had talked to them about how to care for their teeth and gums. Survey results indicate that in that time period, 7.6% of pregnant women in Utah never had their teeth cleaned and 47.8% had their teeth cleaned during pregnancy. Only 42.0% of women reported a health care provider had discussed oral health care with them. Additionally, 26.8% of women indicated they needed to see a dentist for a problem during pregnancy, but only 65.2% of those women who needed to see a dentist actually went to the dentist. Lack of insurance and poverty negatively impacted these rates.

Oral health care is safe for women during pregnancy. Health care providers should encourage women to continue to visit their dentist during pregnancy and advise them about good oral health care practices.

Monthly Health Indicators Report (Data Through May 2010)

Monthly Report of Notifiable Diseases, May 2010	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)	40	26	144	105	1.4
Shiga toxin-producing Escherichia coli (E. coli)	0	4	0	14	0.0
Hepatitis A (infectious hepatitis)	0	1	3	6	0.5
Hepatitis B, acute infections (serum hepatitis)	0	2	5	8	0.6
Measles (Rubeola, Hard Measles)	0	0	0	0	
Meningococcal Disease	0	1	1	5	0.2
Norovirus	11	2	21	10	2.0
Pertussis (Whooping Cough)	12	29	85	192	0.4
Salmonellosis (Salmonella)	34	49	129	128	1.0
Shigellosis (Shigella)	1	4	9	15	0.6
Varicella (Chickenpox)	23	62	205	436	0.5
Viral and Aseptic Meningitis	2	6	7	18	0.4
West Nile (human cases)	0	0	0	0	0.0
Notifiable Diseases Reported Quarterly, 1st Qtr 2010	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, 1st Qtr 2010 HIV	Current Quarter # Cases	Current Quarter # Expected Cases 1 (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Notifiable Diseases Reported Quarterly, 1st Qtr 2010 HIV AIDS	Current Quarter # Cases 15	Current Quarter # Expected 21 (5-yr average)	Cases XID # 27 12	# Expected YTD675 <td< td=""><td>YTD Standard Morbidity Ratio (0bs/exp)</td></td<>	YTD Standard Morbidity Ratio (0bs/exp)
Notifiable Diseases Reported Quarterly, 1st Qtr 2010 HIV AIDS Chlamydia	Current Quarter # Cases 12 1,591	Current Quarter Current Quarter # Expected 14 (5-yr average)	Cases XID # Cases XID 12 1,591	# Expected YTD # Expected YTD 94 42 1,370	YTD Standard Morbidity Ratio0.30.31.2
Notifiable Diseases Reported Quarterly, 1st Qtr 2010 HIV AIDS Chlamydia Gonorrhea	Current Quarter Current Quarter Cases Cases Current Quarter Current Quare	Current Quarter Current Quarter # Expected # 12.4r average) (5-vr average)	Cases XID # Cases XID 12 1,591 70	# Expected YTD # Expected YTD # 94 42 1,370 170	XID Standard Morbidity Ratio0.30.30.31.20.4
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Notifiable Diseases Reported Quarterly, 1st Qtr 2010 HIV AIDS Chlamydia Gonorrhea Tuberculosis Program Enrollment for the Month of May 2010	Current Quarter # Cases # Cases # Cases # Cases	Previous Month 8 (5-yr average)	% Change [§] From Previous # Month # Cases YTD #	1 Year Ago # Expected YTD 1 78 8 (5-yr average) 8 8	% Change [§] From 1 Year Ago (obs/exp) 200 200 200 200 200 200 200 200 200 20
Notifiable Diseases Reported Quarterly, 1st Qtr 2010 HIV AIDS Chlamydia Gonorrhea Tuberculosis Program Enrollment for the Month of May 2010 Medicaid	Current Quarter # Cases Month 4 Current Quarter 5 1 1 1 1 1 1 1 1	Current Quarter Current Quarter 14 12 12 12 12 12 12 12 12 12 12 12 12 12	Clauge Clauge Clauge Cases XID Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Clauge Cl	1 Xear Ago 1 Xear Ago 1 Xear Ago 1 1 1 Xear Ago 1 1 Xear Ago 1	% Changes % Changes <td< td=""></td<>
Notifiable Diseases Reported Quarterly, 1st Qtr 2010 HIV AIDS Chlamydia Gonorrhea Tuberculosis Program Enrollment for the Month of May 2010 Medicaid PCN (Primary Care Network)	# Cases # Cases Wouth 4 27 12 1,591 70 4 4 205,884 205,884 11,004	Current Quarter Current Quarter Curren	Clases ALD # Cases ALD # Cases ALD # Cases ALD # Cases ALD # Cases ALD * Cases ALD * Cases	(22,453)	Morbidity Ratio % Change

Medicaid Expenditures (in Millions) for the Month of May 2010	Current Month	Expected/ Budgeted for Month [×]	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 10.1	\$ 13.4	\$ 103.2	\$ 109.5	\$ (6.3)
Inpatient Hospital	\$ 26.7	\$ 33.1	\$ 232.1	\$ 213.6	\$ 25.1
Outpatient Hospital	\$ 9.3	\$ 12.1	\$ 101.3	\$ 98.8	\$ 2.5
Long Term Care	\$ 17.2	\$ 16.9	\$ 152.3	\$ 149.9	\$ 2.4
Pharmacy ^β	\$ 14.8	\$ 22.1	\$ 138.6	\$ 129.9	\$ 8.7
Physician/Osteo Services [‡]	\$ 7.8	\$ 8.5	\$ 77.0	\$ 69.7	\$ 7.4
TOTAL HCF MEDICAID	\$ 166.1	\$ 190.8	\$ 1,485.4	\$ 1,518.6	\$ (33.2)
Health Care System Measures	Number of Events	Rate per 100 Population	% Change ^s From Previous Year	Total Charges in Millions	% Change [§] From Previous Year
Overall Hospitalizations (2008)	279,504	9.4%	-2.7%	\$ 4,703.3	+10.3%
Non-maternity Hospitalizations (2008)	164,602	5.4%	-3.0%	\$ 3,924.7	+10.4%
Emergency Department Encounters (2008)	681,958	23.4%	-2.9%	\$ 879.5	+12.6%
Outpatient Surgery (2007)	296,596	10.5%	-5.7%	\$ 1,109.0	+8.6%
Annual Community Health Measures	Current Data Year	Population at Risk	Number Affected	Percent/ Rate	% Change [§] From Previous Year
Overweight and Obesity (Adults 18+)	2009	1,939,721	1,125,900	58.0%	-0.2%
Cigarette Smoking (Adults 18+)	2009	1,939,721	188,600	9.7%	+4.4%
Influenza Immunization (Adults 65+)	2009	253,594	175,600	69.2%	-5.5%
Health Insurance Coverage (Uninsured)	2009	2,800,089	314,300	11.2%	+4.7%
Motor Vehicle Crash Injury Deaths	2008	2,781,954	268	9.6 / 100,000	-3.3%
Suicide Deaths	2008	2,781,954	384	13.8 / 100,000	+1.3%
Diabetes Prevalence (Adults 18+)	2009	1,939,721	123,200	6.3%	+4.1%
Coronary Heart Disease Deaths	2008	2,781,954	1,514	54.4 / 100,000	-4.0%
All Cancer Deaths	2008	2,781,954	2,478	89.1 / 100,000	-5.6%
Births to Adolescents (Ages 15-17)	2008	61,727	1,122	18.2 / 1,000	-2.0%
Early Prenatal Care	2008	55,605	43,997	79.1%	-0.4%
Infant Mortality	2008	55,605	264	4.7 / 1,000	-7.9%
Childhood Immunization (4:3:1:3:3:1)	2009	55,120	42,200	76.6%	+4.1%

§ % Change could be due to random variation.

★ The Medicaid program service budget numbers by month are not available at this time.

 β The Pharmacy Expenditure and Budget amount only includes the gross pharmacy costs. The Pharmacy Rebate and Pharmacy Part-D amounts are excluded from this line item.

‡ Medicaid payments reported under Physician/Osteo Services do not include enhanced physician payments. Notes: 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 2010 season.