

Utah Health Status Update:

Syndromic Surveillance in Utah Using BioSense 2.0

August 2014

The vision of the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 is to improve the health of Americans and the performance of the nation's health system through health information technology. It is no longer enough for health care providers to purchase an electronic medical records system; the purpose of HITECH is to ensure that these systems are interoperable

and that providers use them in a meaningful way that positively affects patient care.

One of the HITECH goals is to improve Population and Public Health. Achieving this goal requires that:

- providers use certified records systems with the capability to exchange information among disparate systems;
- nationwide standards for information exchange are established and used; and
- patient record privacy and security are maintained.

Currently, Medicare-Medicaid Electronic Health Record (EHR) Incentive programs offer payments to promote the demonstration of meaningful use (MU) of EHR. These programs consist of three stages. Eligible professionals and hospitals must complete at least one of the available core public health objectives to meet Stage 1 MU. Available core public health objectives include submission of electronic data to immunization registries, reportable lab results to public health agencies, and electronic syndromic surveillance data to public health agencies.

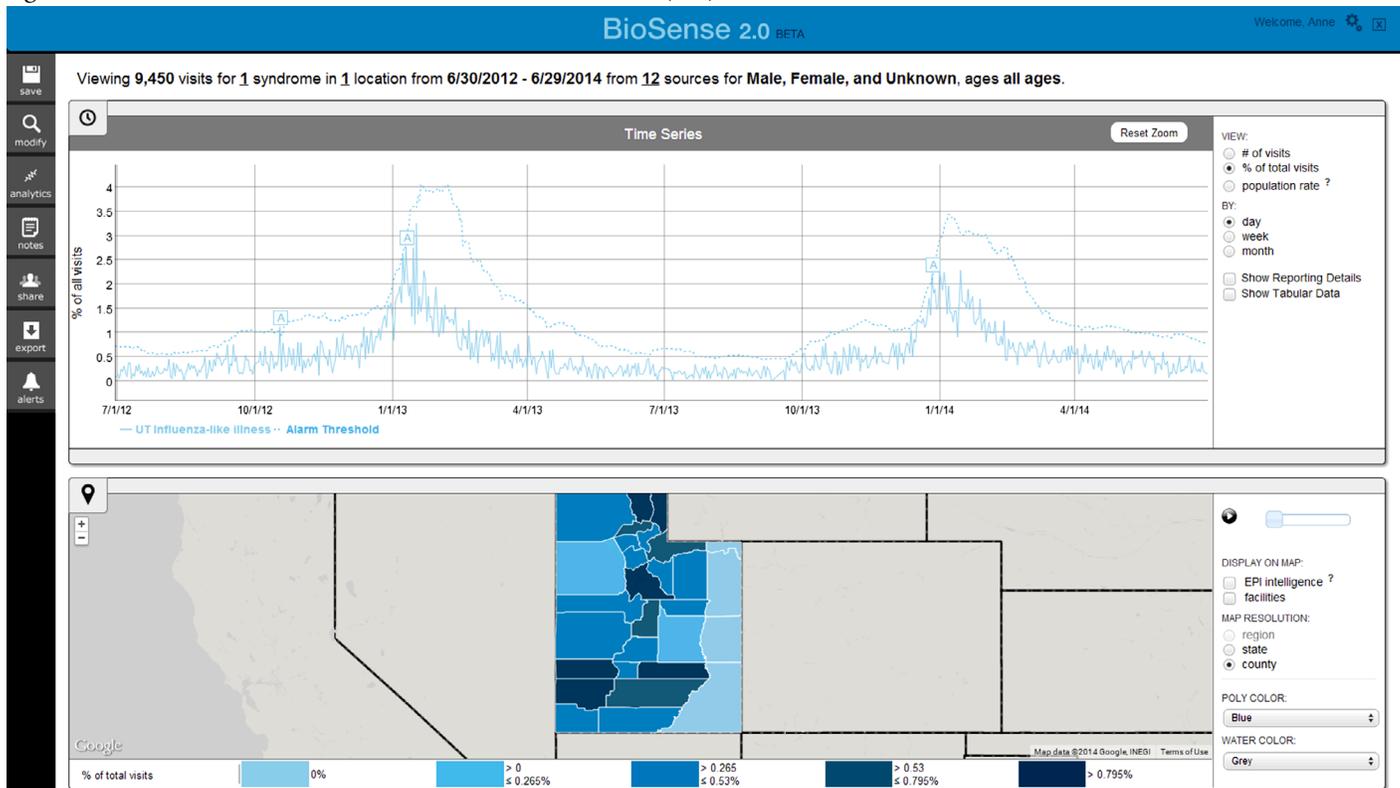
Syndromic surveillance is required for eligible hospitals in Stage 2 of MU. BioSense 2.0 is a CDC public health surveillance system which utilizes

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- **Syndromic surveillance through BioSense 2.0 can serve as a frontline defense in the case of an emergent communicable disease threat or bio-terrorism event.**
- **Increasing the number of facilities using the system will enhance Utah's syndromic surveillance population and geographic coverage and improve syndromic surveillance for all local health jurisdictions in the state.**

BioSense 2.0 Screenshot

Figure 1. Screenshot of BioSense 2.0 influenza-like illness (ILI) data for the 2012–2013 and 2013–2014 influenza seasons



Breaking News, August 2014

Utah's Online Hospital Comparison Tool

On August 5, 2014, the Utah Department of Health Office of Health Care Statistics (OHCS) released a public hospital comparison tool which enables consumers and other decision makers to compare Utah's hospitals in selected treatment areas based on cost, quality, and patient safety.

For example, if a consumer or someone they care about expects to be admitted to a hospital in the near future, they can use quality information to help them choose a hospital. This tool can help consumers find a hospital that is especially good at treating the conditions they face, or especially good at protecting patients from risks; avoid hospitals that may not perform well in the ways they care about; and help them choose between hospitals that all have good reputations.

Utah uses MONAHRQ®, a web-based tool developed by the Agency for Healthcare Research and Quality (AHRQ), to generate the online hospital comparison tool. MONAHRQ® analyzes, summarizes, and presents information in a format ready for use by consumers and other decision makers on:

- Quality of care at the hospital level. There are many ways to judge the quality of health care. Health care quality can be described as doing the right thing, at the right time, in the right way—and having the best possible results. The Institute of Medicine recently stated that high quality health care is effective, safe, patient-centered, timely, efficient, and equitable.
- Health care utilization at the hospital level. Hospital utilization means use of hospital services. It includes information on the number of hospital stays, length of hospital stays, and charges or costs for hospital stays. Utilization numbers can be used if consumers are interested in a specific medical condition or procedure, such as hip replacement surgery.
- Rates of conditions and procedures at the county level. These rates include information on the number of hospital stays and charges or costs for hospital stays. This information can be used by policy makers and public health workers.

To view the online comparison tool, please go to <https://health.utah.gov/myhealthcare/monahrq/>, and for more information on this data-rich tool, select the Resources tab.

Community Health Indicators Spotlight, August 2014

Investigating Perceived Clusters of Cancer in Utah

The Environmental Epidemiology Program (EEP) within the Utah Department of Health has the responsibility of investigating when the public has concern about the number of cancer cases in their neighborhood. Because the EEP requires authorization from the local health authority having jurisdiction before it can initiate an investigation, the best way for the public to start an investigation is by contacting their local health department. Contact information for the local health departments can be found online at: <http://www.ualhd.org>.

Currently, the EEP has cancer incidence data from 1973 through 2011. These data are obtained from the Utah Cancer Registry (UCR) (<http://ucr.utah.edu/>). The EEP uses these data to develop cancer indicators for the Utah Environmental Public Health Tracking Network (available at: <http://epht.health.utah.gov/epht-view/>) and to conduct cancer statistical reviews on request. The EEP also performs statewide scans of cancer incidence to identify cancer hot spots for targeted intervention activities. Some cancer statistical review reports can be found at: <http://health.utah.gov/enviroepi/>.

A statistical review typically includes the comparison of age adjusted cancer rates for 42 different anatomical cancer categories, for up to seven analytical periods of 3–5 years each, for each sex (where appropriate). This approach results in many (500+) separate independent comparisons. With that many comparisons, it is certain that a few will be statistically significant by random chance alone. The EEP uses a set of criteria for meaningful elevated rates as well as statistical significance. The roles of these investigations are to identify cancer problems that public health can respond to and to empower communities regarding their health.

Monthly Health Indicators Report

(Data Through June 2014)

Monthly Report of Notifiable Diseases, June 2014	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)	73	54	262	204	1.3
Shiga toxin-producing Escherichia coli (E. coli)	9	11	27	31	0.9
Hepatitis A (infectious hepatitis)	0	1	5	4	1.3
Hepatitis B, acute infections (serum hepatitis)	1	1	3	5	0.6
Meningococcal Disease	0	1	1	4	0.3
Pertussis (Whooping Cough)	44	72	490	380	1.3
Salmonellosis (Salmonella)	34	32	189	151	1.3
Shigellosis (Shigella)	1	3	14	16	0.9
Varicella (Chickenpox)	11	8	121	229	0.5
West Nile (Human cases)	0	0	0	0	0.0

Quarterly Report of Notifiable Diseases, 2nd Qtr 2014	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†	23	28	50	56	0.9
Chlamydia	2,000	1,684	4,114	3,466	1.2
Gonorrhea	318	102	633	196	3.2
Syphilis	13	13	21	22	0.9
Tuberculosis	9	10	14	19	0.8

Medicaid Expenditures (in Millions) for the Month of June 2014	Current Month	Expected/Budgeted‡ for Month	Fiscal YTD	Budgeted‡ Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 15.7	\$ 11.7	\$ 152.1	\$ 146.2	\$ 5.9
Inpatient Hospital	\$ 9.5	\$ 10.2	\$ 115.1	\$ 148.0	\$ (32.9)
Outpatient Hospital	\$ 5.7	\$ 5.8	\$ 57.0	\$ 72.2	\$ (15.2)
Long Term Care	\$ 14.9	\$ 13.6	\$ 170.6	\$ 169.8	\$ 0.8
Pharmacy ‡	\$ 9.1	\$ 9.8	\$ 111.9	\$ 145.4	\$ (33.5)
Physician/Osteo Services §	\$ 4.4	\$ 6.6	\$ 56.9	\$ 82.8	\$ (25.9)
TOTAL HCF MEDICAID	\$170.1	\$170.5	\$2,232.6	\$2,235.2	\$ (2.6)

Program Enrollment for the Month of June 2014	Current Month	Previous Month	% Change ¶ From Previous Month	1 Year Ago	% Change ¶ From 1 Year Ago
Medicaid	276,879	278,466	-0.6%	259,684	+6.6%
PCN (Primary Care Network)	12,229	9,395	+30.2%	16,117	-24.1%
CHIP (Children's Health Ins. Plan)	15,563	15,653	-0.6%	34,823	-55.3%

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 (2012)	281,605	9.2%	-1.2%	\$ 6,146.4	+5.6%
Non-maternity Hospitalizations (2012)	177,753	5.7%	-0.3%	\$ 5,208.7	+6.1%
Emergency Department Encounters (2011)	665,925	22.5%	+1.8%	\$ 1,309.5	+12.8%
Outpatient Surgery (2011)	376,054	12.7%	+2.5%	\$ 1,878.5	+6.5%

Annual Community Health Measures	Current Data Year	Number Affected	Percent/Rate	% Change ¶ From Previous Year	State Rank# (1 is best)
Obesity (Adults 18+)	2012	476,400	24.3%	-0.5%	10 (2012)
Cigarette Smoking (Adults 18+)	2012	207,300	10.6%	-10.8%	1 (2012)
Influenza Immunization (Adults 65+)	2012	147,100	56.0%	-1.5%	40 (2012)
Health Insurance Coverage (Uninsured)	2012	376,600	13.2%	-1.5%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2012	205	7.2 / 100,000	-16.8%	19 (2010)
Poisoning Deaths	2012	661	23.1 / 100,000	+15.6%	45 (2010)
Suicide Deaths	2012	545	19.1 / 100,000	+9.3%	45 (2010)
Diabetes Prevalence (Adults 18+)	2012	141,100	7.2%	+7.5%	14 (2012)
Poor Mental Health (Adults 18+)	2012	307,800	15.7%	-3.7%	12 (2012)
Coronary Heart Disease Deaths	2012	1,580	55.3 / 100,000	-3.4%	3 (2010)
All Cancer Deaths	2012	2,861	100.2 / 100,000	+3.3%	1 (2010)
Stroke Deaths	2012	793	27.8 / 100,000	+0.6%	17 (2010)
Births to Adolescents (Ages 15-17)	2012	668	10.4 / 1,000	-6.6%	11 (2011)
Early Prenatal Care	2012	38,829	75.5%	+1.0%	n/a
Infant Mortality	2012	248	4.8 / 1,000	-12.6%	10 (2010)
Childhood Immunization (4:3:1:3:3:1)	2012	40,000	74.9%	+5.3%	15 (2012)

† Diagnosed HIV infections, regardless of AIDS diagnosis.

‡ Includes only the gross pharmacy costs. Pharmacy Rebate and Pharmacy Part D amounts are excluded from this line item.

§ Physician/Osteo Services - Medicaid payments reported under Physician/Osteo Services does not include enhanced physician payments.

¶ % 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 has ended for influenza until the 2014-2015 season.