

Utah Health Status Update:

Communicable Disease Highlights – Utah, 2014

October 2015

The Utah Department of Health collects surveillance data on more than 75 communicable diseases in Utah. This report highlights a few of the top diseases as reported to the department. It is likely that the number of reported cases represent only a small proportion of the true burden of disease, as a substantial number of communicable disease cases are never reported.¹

Sexually-Transmitted Diseases

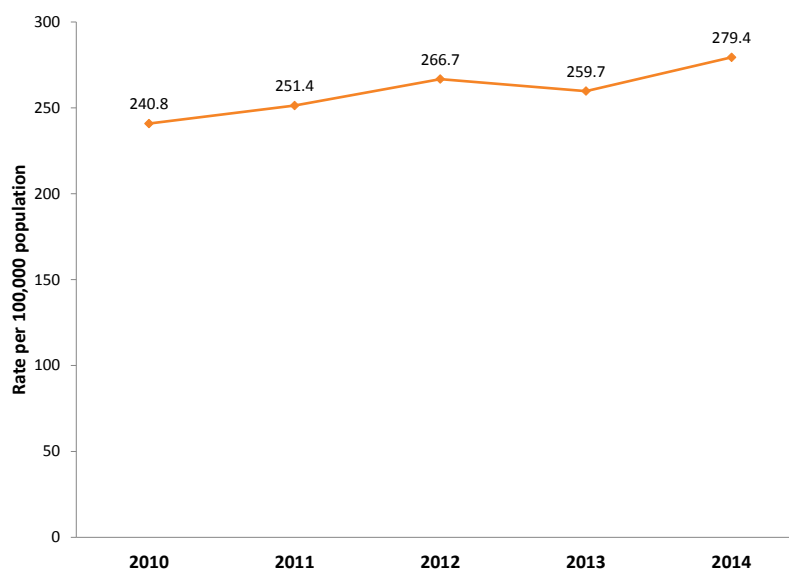
Chlamydia cases increased slightly in Utah in 2014, with 8,223 cases being reported compared to 7,535 cases reported in 2013. Chlamydia is a sexually-transmitted disease that continues to be the most frequently reported communicable disease both in Utah and nationally. Chlamydia primarily affects younger populations. The majority of infected

KEY FINDINGS

- *Chlamydia* continued to be the most frequently reported communicable disease both in Utah and nationally.
- From 2011 to 2014, the number of *gonorrhea* infections among males increased 296%, while infections among females increased 714%. The largest increase has been among females who identify as heterosexual.
- Approximately 10 people in every 100,000 were reported as having chronic *hepatitis B* in 2014.
- *Hepatitis C* rates increased from 37.7 cases per 100,000 persons in 2013 to 51.0 cases per 100,000 persons in 2014, making it the second most frequently reported communicable disease in 2014.
- *Pertussis* rates decreased in 2014, dropping 29% from 2013.
- An increase in *campylobacteriosis* was due to an outbreak associated with raw milk consumption.
- *Salmonellosis* rates increased from 11.1 cases per 100,000 persons in 2013 to 12.6 cases per 100,000 persons in 2014.

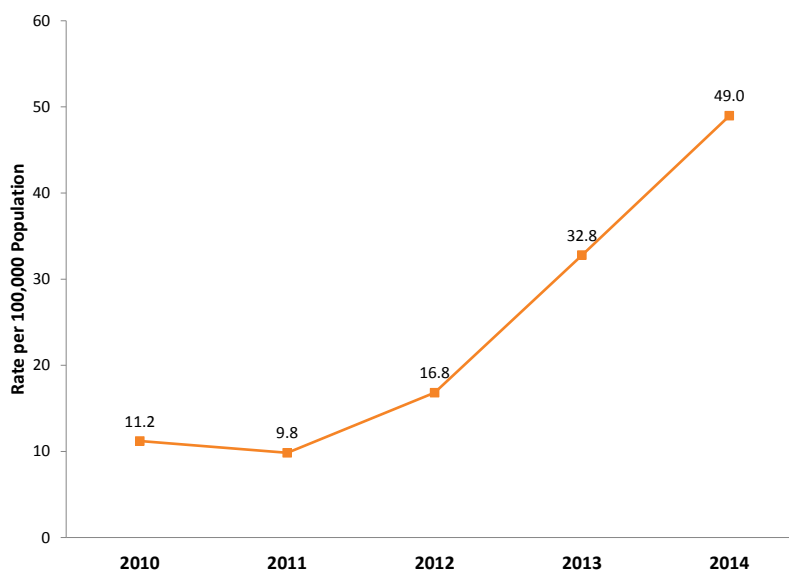
Chlamydia Rates, Utah, 2010–2014

Figure 1. Number of reported chlamydia cases per 100,000 population, Utah, 2010–2014



Gonorrhea Rates, Utah, 2010–2014

Figure 2. Number of reported gonorrhea cases per 100,000 population, Utah, 2010–2014



individuals experience no signs or symptoms. Untreated chlamydia can result in infertility.

Gonorrhea rates increased from 32.8 cases per 100,000 persons in 2013 to 49.0 cases per 100,000 persons in 2014. Analysis of this increase suggests a shift in affected populations. Historically, gonorrhea was

associated more closely with men-who-have-sex-with-men (MSM), but data collected in 2014 shows that the heterosexual population is largely affected now as well. From 2011 to 2014, the number of gonorrhea infections among males increased 296%, while infections among females increased 714%; the largest increase has been among females who identify as heterosexual.

Chronic Hepatitis

Hepatitis B rates increased by 14% from 2013 to 2014. Approximately 10 people in every 100,000 were reported as having chronic hepatitis B in 2014. The virus that causes hepatitis B is often spread through sexual activity or contaminated blood. It's also very important to screen pregnant women for the disease to prevent transmission during childbirth. Chronic hepatitis B can lead to liver cancer; however, a vaccine exists to prevent infection.

Hepatitis C rates increased from 37.7 cases per 100,000 persons in 2013 to 51.0 cases per 100,000 persons in 2014, making it the second most frequently reported communicable disease in 2014. Hepatitis C is transmitted through blood and while there is no vaccine, curative treatments have become available. The Centers for Disease Control and Prevention recommend that persons born between 1945 and 1965, and those at an increased risk of coming in contact with blood, get tested for hepatitis C.

Vaccine-Preventable Diseases

Pertussis rates decreased in 2014, dropping 29% from 2013. Pertussis is cyclical in nature and is expected to increase again in the coming years. There is a safe and effective booster vaccine that is available for preteens, teens, and adults that contains protection against whooping cough. Adults are the most common source of pertussis transmission to infants, who are most at risk of serious complications and death from the infection.

For additional information about this topic, contact Kristina Larson, Utah Department of Health, (801) 538-6288, email: kristinalarson@utah.gov; or the Office of Public Health Assessment, Utah Department of Health, (801) 538-9191, email: chdata@utah.gov.

Top 10 Communicable Diseases in Utah

Table 1. Top 10 communicable diseases reported, number of cases, rates (cases per 100,000 population), and percent change in rate, Utah, 2014

Disease	Number of reported cases*	Rate per 100,000 population†	Percent change in rate from 2013
Chlamydia	8,223	279.4	▲ 7.6%
Hepatitis C, past or present	1,502	51.0	▲ 35.4%
Gonorrhea	1,441	49.0	▲ 49.5%
Influenza-associated hospitalization‡	1,413	48.0	▲ 34.5%
Pertussis (whooping cough)	940	31.9	▼ -29.1%
Campylobacteriosis	558	19.0	▲ 9.0%
Salmonellosis	370	12.6	▲ 13.0%
Hepatitis B, chronic	300	10.2	▲ 14.3%
Streptococcal disease, invasive, other	287	9.8	▼ -4.0%
Giardiasis	225	7.6	▼ -3.9%

* Case counts for reporting year 2014 are provisional and subject to change. Case counts are determined using print criteria outlined in the CDC National Notifiable Diseases 2014 Event Code List available at http://www.cdc.gov/nndss/document/nnds_event_code_list_2014.pdf.

† Rates are calculated per 100,000 population. Population estimates obtained from <http://quickfacts.census.gov/qfd/states/49000.html>.

‡ Influenza is best assessed seasonally. Additional information is available at <http://health.utah.gov/epi/diseases/influenza>.

Enteric Diseases

Campylobacteriosis is the most common cause of bacterial foodborne illness in the United States. In 2014, there were 558 cases reported in Utah, an increase from recent years. This increase is due to an outbreak associated with raw milk consumption. The disease can be severe in immunocompromised individuals, occasionally spreading to the bloodstream and causing a life-threatening infection. Common sources of exposure include improperly cooked poultry, untreated water, and unpasteurized (raw) milk.

Salmonellosis rates increased from 11.1 cases per 100,000 persons in 2013 to 12.6 cases per 100,000 persons in 2014. The highest rates of infection were in children less than 5 years and the elderly. The most common risk factors for infection were mishandling of raw chicken, exposure to live animals (including chicks/chickens and reptiles), and international travel.

For more information on communicable diseases in Utah visit health.utah.gov/epi.

1. O'Connell EK, Zhang G, Leguen F, Llau A, Rico E. Innovative uses for syndromic surveillance. *Emerg Infect Dis* [serial on the Internet]. 2010 April [downloaded September 30, 2015]. <http://wwwnc.cdc.gov/eid/article/16/4/09-0688>.

UDOH ANNOUNCEMENT:

System transition to ICD-10 coding by October 1, 2015 is mandatory for all payers, providers, and other organizations covered by HIPAA. Utah Medicaid is on target to process claims using ICD-10 coding for the deadline. Information and resources can be found online at: <http://www.cms.gov/Medicare/Coding/ICD10/>.

Breaking News, October 2015

Utah Adoption Registry

During the 2015 General Legislative Session, Utah lawmakers passed Senate Bill 77 which appropriated funding to automate and improve the Utah Mutual-Consent Voluntary Adoption Registry (Utah Adoption Registry).

What Is the Utah Adoption Registry?

- The registry helps adult adoptees, birth parents, and biological siblings locate one another without using the court system or spending excessive amounts of time and money.
- Participation in the registry is voluntary.
- A match occurs when an adult adoptee born in Utah and his or her birth parent or an adoptee's biological sibling voluntarily place their name on the Utah Adoption Registry.

Since its inception in 1987, the registry has helped more than 300 adult adoptees born in Utah reunite with their birth parents and biological siblings. In 2014, there were 2,053 completed adoptions that occurred in Utah.

The Utah Department of Health Office of Vital Records and Statistics (OVRs) plans to use the newly appropriated funding to advance registry services by:

1. Converting paper-based data into an electronic format that can be imported into a searchable registry database.
2. Developing an electronic registry database that allows use of broad search terms and methods.
3. Implement a public education campaign to increase use of the Utah Adoption Registry.

The improvements will help OVRs achieve four outcomes: 1) increase the number of names on the registry, 2) increase the number of registry searches, 3) increase the number of registry matches, and 4) decrease the staff time necessary to find adoption documents and make matches. More information about the registry can be found at <http://www.health.utah.gov/vitalrecords>.

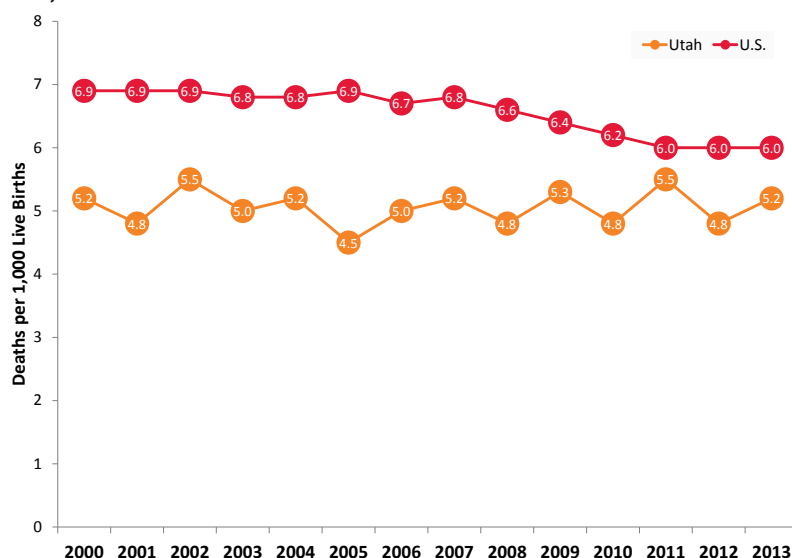
Community Health Indicators Spotlight, October 2015

Strategies to Reduce Infant Mortality in Utah

In 2013, 262 Utah infants died before their first birthday, creating a devastating void for parents, siblings, and other family members. The leading causes of infant death in Utah are related to premature birth and birth defects. A report from the National Center for Health Statistics noted that in 2013, Utah had the 12th lowest infant mortality rate in the U.S. However, Utah was one of seven states where the infant mortality rate did not decline between 2005 and 2013.¹

In 2014, the Maternal and Child Health (MCH) Bureau of the Health Resources and Services Administration initiated a nationwide launch of the Collaborative Improvement and Innovation Network (CoIIN) to Reduce Infant Mortality. The CoIIN is engaging partners to employ quality improvement innovation and collaborative learning to decrease infant mortality. Utah's participation in the CoIIN is focused on two strategy areas: prevention of preterm birth and preconception/interconception care to promote optimal health in women before, after, and between pregnancies. The Utah Department of Health will be working with partners such as the March of Dimes to improve birth outcomes and decrease infant mortality. For more information about the CoIIN in Utah, contact Lynne Nilson, MCH Bureau Director, lnilson@utah.gov, 801-273-2854.

Infant Mortality: Rate of Deaths at Under 1 Year of Age, Utah and U.S., 2000–2013



Source: Utah Birth Certificate Database and Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health

¹ Mathews TJ, MacDorman ME, Thoma ME. Infant mortality statistics from the 2013 period linked birth/infant death data set. *National vital statistics reports*; vol 64 no 9. Hyattsville, MD: National Center for Health Statistics. 2015.

Monthly Health Indicators Report

(Data Through August 2015)

Monthly Report of Notifiable Diseases, August 2015	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	55	273	348	0.8
Shiga toxin-producing Escherichia coli (E. coli)	13	28	66	73	0.9
Hepatitis A (infectious hepatitis)	0	0	4	6	0.7
Hepatitis B, acute infections (serum hepatitis)	0	1	6	7	0.9
Meningococcal Disease	0	0	1	4	0.3
Pertussis (Whooping Cough)	12	89	293	676	0.4
Salmonellosis (Salmonella)	81	34	300	227	1.3
Shigellosis (Shigella)	3	5	26	25	1.0
Varicella (Chickenpox)	3	10	110	197	0.6
West Nile (Human cases)	2	2	2	2	1.0

Quarterly Report of Notifiable Diseases, 2nd Qtr 2015	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†	18	28	44	57	0.8
Chlamydia	2,056	1,790	4,169	3,663	1.1
Gonorrhea	322	154	664	292	2.3
Syphilis	11	15	22	25	0.9
Tuberculosis	10	10	14	17	0.8

Medicaid Expenditures (in Millions) for the Month of August 2015	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 24.9	\$ 27.3	\$ 31.1	\$ 33.6	\$ (2.5)
Inpatient Hospital	\$ 12.1	\$ 12.6	\$ 12.9	\$ 13.5	\$ (0.7)
Outpatient Hospital	\$ 4.7	\$ 5.7	\$ 5.4	\$ 7.9	\$ (2.6)
Long Term Care	\$ 22.6	\$ 25.2	\$ 29.3	\$ 32.6	\$ (3.3)
Pharmacy	\$ 10.9	\$ 11.2	\$ 19.6	\$ 20.1	\$ (0.5)
Physician/Osteo Services	\$ 4.3	\$ 4.3	\$ 5.2	\$ 7.3	\$ (2.2)
TOTAL MEDICAID	\$ 297.7	\$ 301.9	\$ 423.2	\$ 429.5	\$ (6.3)

Program Enrollment for the Month of August 2015	Current Month	Previous Month	% Change* From Previous Month	1 Year Ago	% Change* From 1 Year Ago
Medicaid	289,866	289,486	+0.1%	276,122	+5.0%
PCN (Primary Care Network)	12,217	12,214	+0.0%	17,155	-28.8%
CHIP (Children's Health Ins. Plan)	16,286	16,276	+0.1%	15,577	+4.6%

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 (2013)	279,393	9.0%	-2.8%	\$ 6,513.8	+5.9%
Non-maternity Hospitalizations (2013)	177,191	5.6%	-2.5%	\$ 5,554.8	+6.6%
Emergency Department Encounters (2013)	683,415	22.3%	-1.5%	\$ 1,555.4	+7.1%
Outpatient Surgery (2013)	404,303	13.1%	+7.3%	\$ 2,167.9	+11.5%

Annual Community Health Measures	Current Data Year	Number Affected	Percent/Rate	% Change* From Previous Year	State Rank§ (1 is best)
Obesity (Adults 18+)	2014	523,600	25.7%	+6.5%	8 (2014)
Cigarette Smoking (Adults 18+)	2014	197,600	9.7%	-6.1%	1 (2014)
Influenza Immunization (Adults 65+)	2014	167,200	58.0%	+1.0%	36 (2014)
Health Insurance Coverage (Uninsured)	2013	336,500	11.6%	-12.1%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2013	192	6.6 / 100,000	-7.8%	9 (2013)
Poisoning Deaths	2013	630	21.7 / 100,000	-6.2%	47 (2013)
Suicide Deaths	2013	570	19.6 / 100,000	+2.9%	49 (2013)
Diabetes Prevalence (Adults 18+)	2014	144,700	7.1%	-0.1%	8 (2014)
Poor Mental Health (Adults 18+)	2014	324,000	15.9%	-3.0%	19 (2014)
Coronary Heart Disease Deaths	2013	1,515	52.2 / 100,000	+1.0%	1 (2013)
All Cancer Deaths	2013	2,961	102.1 / 100,000	+1.9%	1 (2013)
Stroke Deaths	2013	831	28.6 / 100,000	+3.1%	18 (2013)
Births to Adolescents (Ages 15-17)	2013	573	8.6 / 1,000	-16.3%	11 (2013)
Early Prenatal Care	2013	38,905	76.4%	+1.2%	n/a
Infant Mortality	2013	262	5.1 / 1,000	+6.7%	9 (2012)
Childhood Immunization (4:3:1:3:3:1)	2014	36,900	74.6%	n/a#	24 (2014)

† Diagnosed HIV infections, regardless of AIDS diagnosis.

* Relative percent change. Percent change could be due to random variation.

§ State rank based on age-adjusted rates where applicable.

In 2014, NIS analysis for the complete 4:3:1:3:3:1 series was updated to provide a more accurate assessment of Haemophilus influenzae type B vaccination. Due to this change, the 2014 results for 4:3:1:3:3:1 coverage are not comparable to prior years.

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 the 2015-2016 season.