

Utah Health Status Update:

Healthy Utah Babies: The Challenge

February 2013

Infant mortality is a major indicator of the health of a nation, as it is associated with a variety of factors such as maternal health, quality and access to health care, socioeconomic conditions, and public health practices. The U.S. infant mortality rate generally declined through the 20th century,¹⁻³ however, more recent data suggest a halt in this decline.^{4,5} In addition, according to the Kaiser Family Foundation reports, the U.S. ranks poor (42nd) compared to other nations in infant mortality rates.⁶

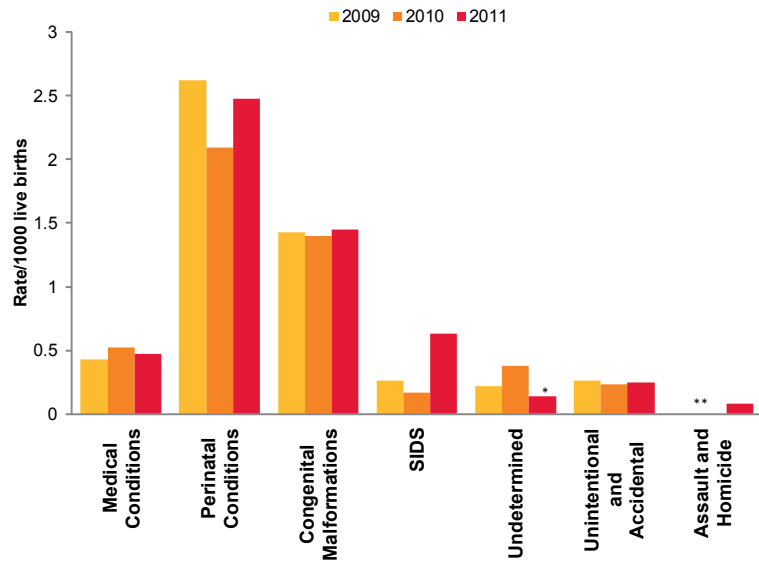
The Association of State and Territorial Health Officers (ASTHO) and the March of Dimes (MOD) have recently challenged states across the nation to partner to prevent infant mortality and its greatest contributor, preterm birth (PTB). Utah has signed on to reduce our rate of premature birth by 8% by 2014. Using our 2009 data as the baseline year, our challenge is to lower our preterm birth rate from 9.7% to 8.9%.

While Utah's infant mortality rate compares favorably to other states rates, we saw a slight increase in the rate between 2009 (5.1/1000 live births) and 2011(5.4/1000). The largest contributor to Utah's infant mortality rate is a set of causes of death referred to as perinatal conditions. This set of causes is largely related

- Infant mortality is a major indicator of the health of a nation, as it is associated with a variety of factors such as maternal health, quality and access to health care, socioeconomic conditions, and public health practices.
- The major contributor to infant mortality in Utah is PTB; the PTB rate in Utah has fluctuated between 9.4% and 10.1% over the past decade.
- Utah's PTB rate is lower than the national rate but concerning due to the high cost and potential of long term disability of premature infants.
- The average charges of a premature infant in Utah is almost \$60,000. The aver cost of a non-PTB in Utah is approximately \$2,400.

Infant Mortality

Figure 1. Rate by cause of death, Utah, 2009-2011



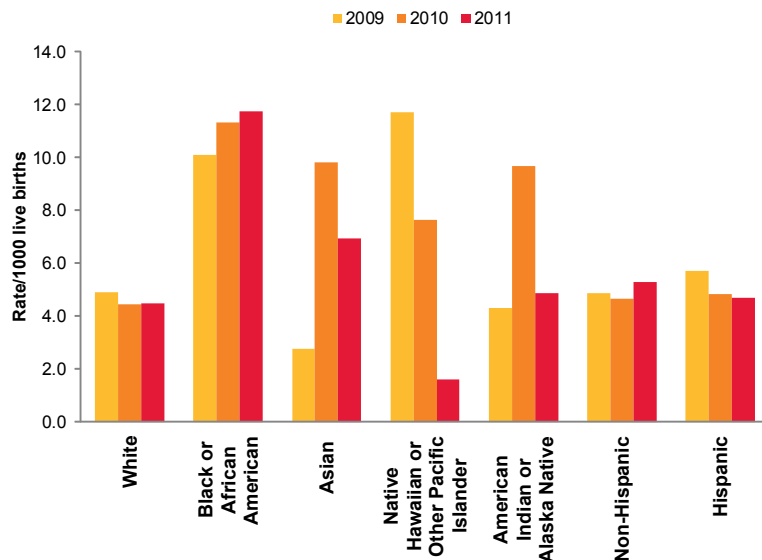
* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet UDOH standards for reliability.

** Suppressed due to small numbers.

Source: Utah Vital Statistics Birth and Death Certificate Data.

Infant Mortality

Figure 2. Rate by mother's race/hispanic ethnicity, Utah, 2009-2011



Source: Utah Vital Statistics Birth and Death Certificate Data

to pregnancy related issues, primarily preterm birth and low birth weight (Figure 1).

Utah data indicate that women with the following demographic characteristics have the highest risk for infant mortality: very short intervals between pregnancies, <20 or >35 years of age, obesity, unmarried, twin/

triplet pregnancies and/or have a college degree. In addition, Utah as well as the nation as a whole has much higher rates of infant mortality among our racial and ethnic minority women (Figure 2).

The prematurity rate in Utah has fluctuated between 9.4% and 10.1% over the past decade. While Utah's rate is lower than the national rate, it is still a great cause for concern due to the high cost of preterm births. The average charges of a PTB in Utah is almost \$60,000. Isolating the extremely preterm infants (<27 weeks gestation), of which there are on average 260 per year, the average cost increases to almost \$100,000. In Utah during 2010, approximately 70% of the funds spent by Medicaid on births were for PTBs.

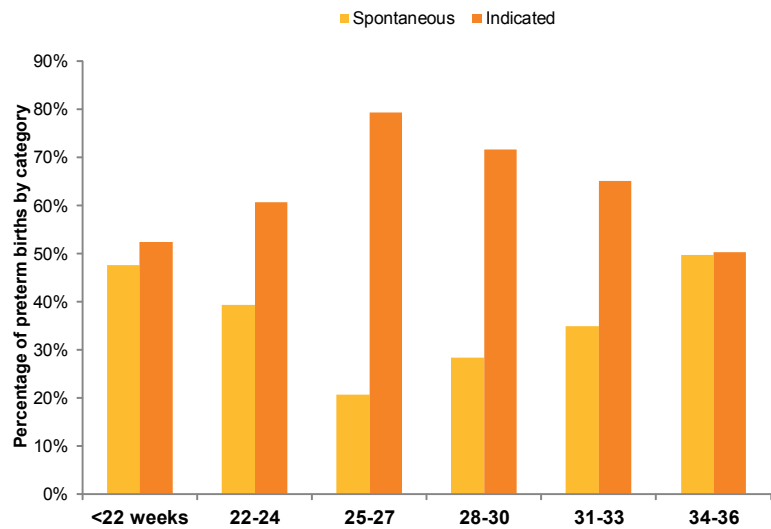
Causes of PTB are many but are commonly broken into two categories: indicated and spontaneous. Indicated PTBs are those in which mother and/or infant has a condition that necessitates a preterm delivery by induction or cesarean section, e.g. hypertension, pre-eclampsia or fetal distress, to save the life of the mother and/or her infant. Spontaneous preterm births are those in which mother spontaneously goes in to labor and delivers prematurely (Figure 3).

Infant mortality related to PTB is closely correlated with gestational age at birth. The infant mortality rate in Utah from 2009-2011 for infants born prematurely (<32 weeks gestation) was 202/1000 live births compared to just 1.4/1000 for full term infants.

The Utah Department of Health is involved in the formation of a collaborative effort among hospitals, payers and healthcare providers interested in addressing the problem of preterm birth and infant mortality. The mission of this collaborative will be to optimize the health of mothers and children in Utah by decreasing PTB-related morbidity and mortality. The goal of reducing the PTB rate by 8% in Utah will be accomplished by conducting four state-wide initiatives: 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 use of progesterone supplementation during a pregnancy identified as high risk for preterm birth, an intervention proven to reduce the risk of recurrent PTB, and

Spontaneous vs. Indicated Preterm Births

Figure 3. Percentage by gestational age, Utah, 2009-2011



Source: Utah Vital Statistics Birth and Death Certificate Data

4) Increasing single embryo transfer for in vitro fertilization (IVF) to reduce selective multiple gestations and resultant PTBs.

Over the course of three years the stakeholders will establish an independent non-profit collaborative that will be an ongoing, self-sustaining, independent organization promoting the health of the women and children of the state of Utah for many years to come.

References

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2. Achievements in public health, 1900-1999: healthier mothers and babies. *MMWR Morb Mortal Wkly Rep.* 1999;48(38):849-58.
3. Guyer B, Freedman MA, Strobino DM, Sondik EJ. Annual summary of vital statistics: trends in the health of Americans during the 20th century. *Pediatrics.* 2000;106:1307-17.
4. MacDorman MF, Martin JA, Mathews TJ, Hoyert DL, Ventura SJ. Explaining the 2001-02 infant mortality increase: data from the linked birth/infant death data set. *Natl Vital Stat Rep.* 2005 Jan 24;53:1-23.
5. Mathews TJ, MacDorman MF. Infant mortality statistics from the 2005 period linked birth/infant death data set. *Natl Vital Stat Rep.* 2008 Jul 30;57:1-32.
6. Taken from <http://www.globalhealthfacts.org/data/topic/map.aspx?ind=91&by=Data&order=d&fmt=93>.

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Breaking News, February 2013

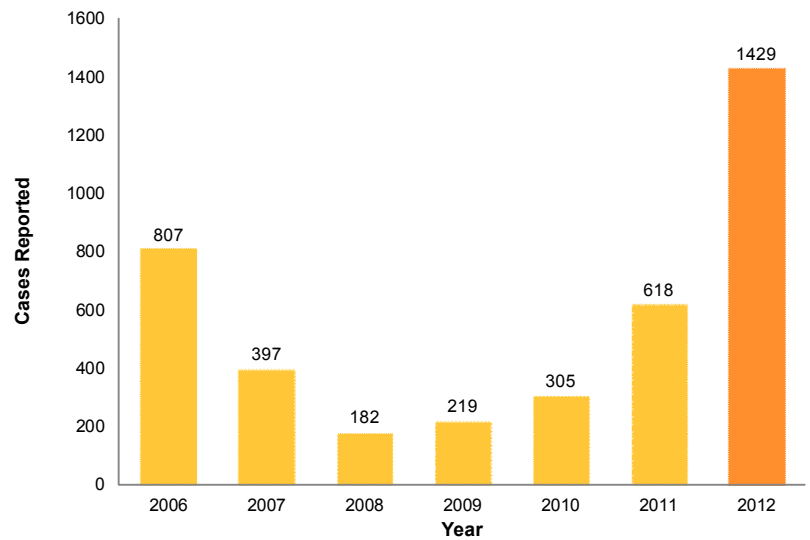
Pertussis

Pertussis is a contagious, bacterial disease, spread through coughing and sneezing, and is treatable with antibiotics. Symptoms appear within 7-21 days after exposure and include spasms of coughing, an inspiratory whoop, and sometimes vomiting after violent episodes of coughing. Pertussis is commonly spread from adults and older children to young infants. Infants less than one year of age are at highest risk for acquiring pertussis and pertussis-associated complications, such as pneumonia and inflammation of the brain.

Pertussis vaccine (DTaP) provides protection during childhood; however, immunity wanes over time and leaves adolescents and adults unprotected. To boost immunity in adolescents and adults, a single dose of booster vaccine (Tdap) is recommended. Provisional recommendations for pregnant women are to administer one dose of Tdap during each pregnancy, irrespective of prior doses received.

In Utah, over 1,400 cases of pertussis were reported during 2012, the most active year for pertussis since the 1940's. The majority of cases occurred in children less than 14 years of age (58%). One death was reported, and 3% of cases were hospitalized for pertussis. Continued outbreaks in Utah and the U.S. underscore the importance of immunizing infants, children and adults with the pertussis vaccine.

Reported Cases of Pertussis, Utah 2006-2012*



*Data for 2012 is preliminary.

Community Health Indicators Spotlight, February 2013

New Choices Waiver

The New Choices Waiver, established in 2007, is offered through the Utah Medicaid program. It was designed to serve people who meet nursing facility level of care and who have been residing long term in a skilled nursing facility or in a licensed assisted living facility. The program enables the enrollee to return to their own home or to another community-based setting by offering services and support to meet their unique care needs.

Each waiver participant receives specialized case management services that are designed to assess their needs and connect them with the services that will help them to reside safely in the community-based setting. Some of the most highly utilized services offered by the New Choices Waiver include Attendant Care, Homemaker Services, Medication Assistance, Non-medical Transportation, Specialized Medical Equipment, Home Delivered Meals, and Adult Residential Services.

This program is able to serve up to 1,400 individuals and is currently serving approximately 1,250 enrollees. To learn more about the eligibility criteria or to request an application, please call the New Choices Waiver Team within the Division of Medicaid and Health Financing: 1-801-538-6155 (option 6) or toll free 1-800-662-9651 (option 6).

Monthly Health Indicators Report

(Data Through December 2012)

Monthly Report of Notifiable Diseases, December 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)	28	19.6	514	377	1.4
Shiga toxin-producing Escherichia coli (E. coli)	2	2.8	113	121	0.9
Hepatitis A (infectious hepatitis)	0	1	4	10	0.4
Hepatitis B, acute infections (serum hepatitis)	0	0	13	10	1.3
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/flu				
Meningococcal Disease	0	0.8	4	7	0.6
Pertussis (Whooping Cough)	32	31.4	1419	349	4.1
Salmonellosis (Salmonella)	14	21	259	336	0.8
Shigellosis (Shigella)	2	3.6	34	43	0.8
Varicella (Chickenpox)	22	41	300	571	0.5
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 December 2012	Current Month	Expected/Budgeted‡ for Month	Fiscal YTD	Budgeted‡ Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 18.0	\$ 11.1	\$ 68.0	\$ 66.5	\$ 1.5
Inpatient Hospital	\$ 20.6	\$ 25.7	\$ 125.0	\$ 155.3	\$ (30.3)
Outpatient Hospital	\$ 7.1	\$ 8.0	\$ 34.2	\$ 47.9	\$ (13.7)
Long Term Care	\$ 16.5	\$ 12.8	\$ 79.2	\$ 76.7	\$ 2.5
Pharmacy§	\$ 16.2	\$ 10.8	\$ 83.2	\$ 64.5	\$ 18.7
Physician/Osteo Services	\$ 9.3	\$ 7.7	\$ 44.5	\$ 46.1	\$ (1.6)
TOTAL HCF MEDICAID	\$213.8	\$ 259.9	\$ 917.0	\$ 987.1	\$ (70.1)

Program Enrollment for the Month of December 2012	Current Month	Previous Month	% Change¶ From Previous Month	1 Year Ago	% Change¶ From 1 Year Ago
Medicaid	255,436	255,117	+0.1%	249,521	+2.4%
PCN (Primary Care Network)	11,906	13,722	-13.2%	11,280	+5.5%
CHIP (Children's Health Ins. Plan)	35,417	35,546	-0.4%	37,306	-5.1%
Health Care System Measures	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)

Note: Active surveillance has ended for influenza virus until the 2012-2013 season.
 † 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 2013 season.