

Utah Health Status Update: Late Preterm Births

March 2011

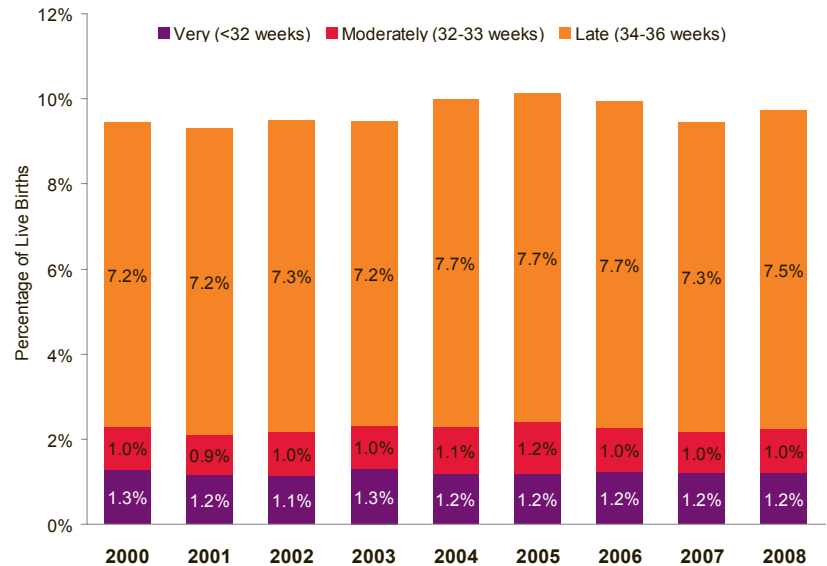
Preterm birth is defined as a live birth that occurs before the 37th week of pregnancy. Preterm births can be further categorized as very preterm (less than 32 weeks), moderately preterm (32–33 weeks) and late preterm (34–36 weeks). Nationally and in Utah, most preterm births are in the late category with over 77% of preterm births occurring between 34 and 36 weeks in 2008. The incidence of late preterm birth has increased both in Utah and nationally. The National Center for Health Statistics reports that late preterm birth rates rose significantly for all states from 1990–91 to 2005–06; Utah was no exception with a 29% increase.

In the same time that late preterm births were increasing, research on the outcomes for these infants was expanding. Studies have found that the conventional thought that late

- **The National Center for Health Statistics reports that late preterm birth rates rose significantly for all states from 1990–91 to 2005–06; Utah was no exception with a 29% increase.**
- **It is now understood that late preterm babies are at increased risk for respiratory distress, intraventricular hemorrhage, sepsis, hyperbilirubinemia requiring phototherapy, intubation, and neonatal and infant mortality.**
- **The largest contributors to late preterm birth were preterm premature rupture of membranes (PPROM) and preterm labor.**
- **All women of reproductive age, regardless of future pregnancy intention should be counseled about achieving optimum health across their life spans.**
- **Adopting a life course perspective to health where education and intervention occur across all points in life to assure optimal outcomes can be one effective prevention tool in reducing rates.**

Preterm Births

Figure 1. Percentage of all live births that were preterm by gestation, Utah, 2000–2008



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

preterm babies did just as well as term infants is unfounded. It is now understood that late preterm babies are at increased risk for respiratory distress, intraventricular hemorrhage, sepsis, hyperbilirubinemia requiring phototherapy, intubation, and neonatal and infant mortality. The March of Dimes also reports that a baby's brain at 34 weeks is only 65% of the size of a full term infants, putting preterm babies at increased risk for learning and behavioral problems later in life.¹

Among births that occurred in Utah between 2006 and 2008, significantly higher rates of late preterm birth were noted among women who were older than 35 years of age, of lower education levels, unmarried, of Black/African American race, delivered a male infant, lived in rural communities, and who were pregnant with twins or higher order multiples. Among late preterm births, 17.8% were multiple gestations.

Many pregnancy complications that lead to preterm birth are not preventable. In a study reviewing medical charts of late preterm births that occurred between 2007 and 2008, Holland et al found that less than 10% of late preterm births would have been potentially preventable.² The largest contributors to late preterm birth were preterm premature rupture of membranes (PPROM) and preterm labor.

While Holland found few interventions are possible to prevent moderately and early preterm births, there are potential practices that may be effective in reducing the incidence of late preterm birth. For Utah births between 2006–2008, significantly higher rates of preterm birth occurred among women who smoked during pregnancy, had excessive weight gain during pregnancy, had underweight or obese body mass indexes prior

to pregnancy, and who had an interpregnancy intervals of six months or less.

The promotion of good maternal health prior to pregnancy is one area where clinicians and public health can make an impact. All women of reproductive age, regardless of future pregnancy intention should be counseled about achieving optimum health across their life spans.

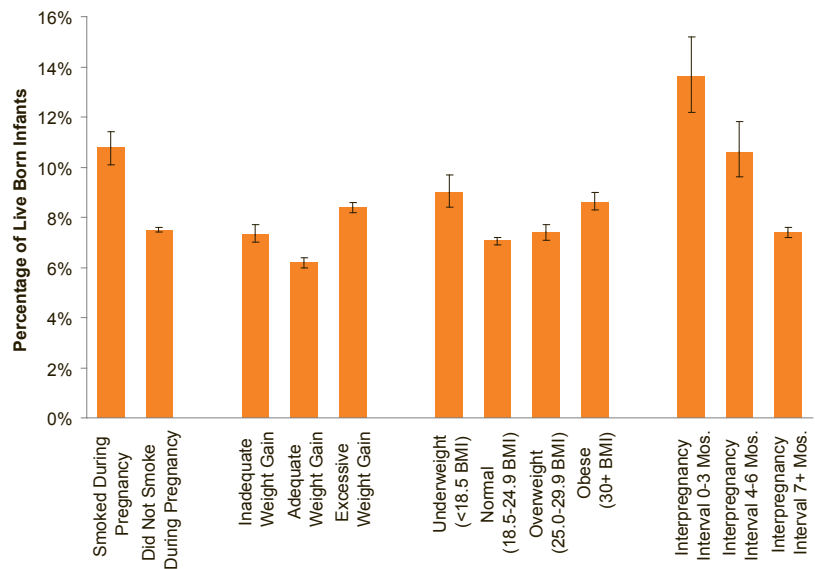
- Women who are smoking should be counseled on the effects of smoking on fertility and potential offspring. There are many tools available to assist women with smoking cessation, as well as tools for health care providers. Visit the Utah Tobacco Prevention and Control Program's website at <http://www.tobaccofreeutah.org> for resources.
- Women should be counseled regarding healthy lifestyles, including appropriate eating habits and exercise to achieve and maintain a healthy weight.
- Pregnant women should be advised regarding appropriate weight gain during pregnancy. In 2009, the Institutes of Medicine revised their recommendations regarding pregnancy weight gain. Pregnancy weight gain recommendations and charts can be found at <http://www.babyyourbaby.org/pregnancy/during-pregnancy/weight-gain.php>.
- Postpartum women should be educated regarding the recommendations for spacing of births. In 2010, Healthy People changed the recommendation for optimal pregnancy spacing to eighteen months from the birth of one child to the conception of the next.

In 2010, the Utah Department of Health launched a new campaign to encourage reproductive aged women to improve their health behaviors. Information on many aspects of women's health, including smoking, eating, exercise, and pregnancy spacing can be found at <http://www.poweryourlife.org>.

Another potential area of promise is the use of 17- α hydroxyprogesterone caproate, a weekly injection that has been shown to reduce recurrent preterm birth in women with a history of spontaneous preterm delivery. Since the largest predictor of preterm birth is a history of preterm birth, women with a singleton

Late Preterm Births and Risk Factors

Figure 2. Percentage of live born infants that were late preterm births by selected characteristics, Utah, 2006–2008



BMI (body mass index) is calculated by dividing pre-pregnancy weight in kilograms by the square of height in meters. Source: Utah Birth Certificate Database, Office of Vital Records and Statistics, Utah Department of Health

pregnancy should be screened for obstetric history and offered this medication if they are an appropriate candidate.

Preterm birth is a complex issue with many overlapping pathways. Adopting a life course perspective to health where education and intervention occur across all points in life to assure optimal outcomes can be one effective prevention tool in reducing rates. Health care providers can help women reduce risk factors and improve health status as well as reduce late preterm births.

References

1. Damus, K. Prevention of preterm birth: a renewed national priority. *Current Opinion in Obstetrics and Gynecology*. 2008, 20:590-596.
2. Holland MG, Refuerzo JS, Ramin SM, Saade GR, Blackwell SC. Late preterm birth: how often is it avoidable? *Am J Obstet Gynecol*. 2009 Oct;201(4):404.e1-4.

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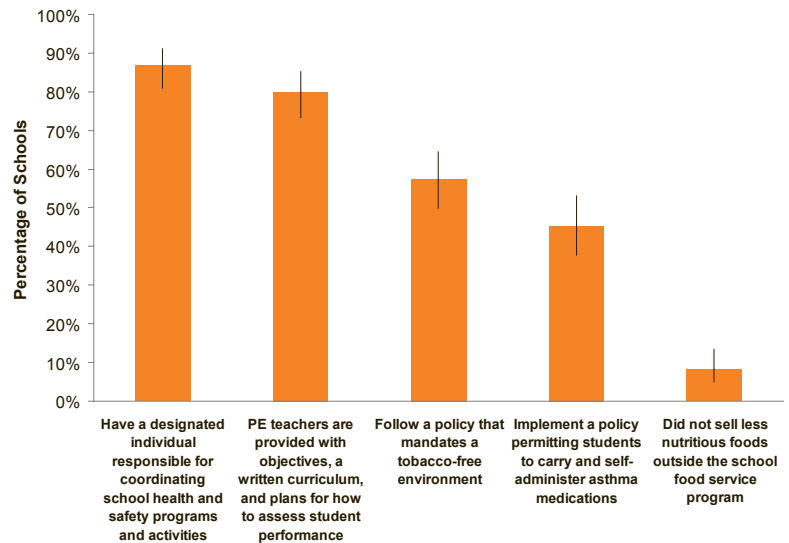
Breaking News, February 2011

School Health Profiles

School Health Profiles (Profiles) assists state and local education and health agencies in monitoring and assessing characteristics of school health education. Information about policies related to physical education, tobacco-use prevention, nutrition, asthma management, and family and community involvement in school health programs is collected from school principals and lead health education teachers. Questionnaires developed by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion were mailed to 258 secondary public schools containing any of grades 6 through 12 in Utah during spring 2010. Usable questionnaires were received from 71% of principals and from 73% of teachers.

Results from 2010 showed that 86.9% of schools have a designated individual responsible for coordinating school health programs. Most (79.9%) of the school's PE teachers are provided with goals, objectives, a written curriculum, and plans to assess student performance. Just over half (57.4%) of the schools follow a policy that mandates a tobacco-free environment. Although Utah law allows middle and high school students to carry and administer asthma medications in schools, less than half (45.3%) implement such a policy. Few Utah schools (8.3%) prohibit the selling of less nutritious foods and beverages, including sports drinks anywhere outside the school food service program. Data from Profiles can be used to improve school health programs and provide an environment for healthy adolescents in Utah.

Selected School-level Impact Measures, Utah Profiles, 2010



Community Health Indicators Spotlight, February 2011

Expedited Partner Therapy

In 2009, the Utah State Legislature passed House Bill 17 which amended the Pharmacy Practice Act in the Division of Occupational and Professional Licensing Act. The bill provides health providers exceptions for Expedited Partner Therapy (EPT) for the treatment of chlamydia and gonorrhea. The Centers for Disease Control and Prevention defines EPT as “the clinical practice of treating the sex partners of patients diagnosed with chlamydia or gonorrhea by providing prescriptions or medications to the patient to take to his/her partner without the health care provider first examining the partner.” EPT has been shown in several studies to reduce re-infection rates.

A provider should always discuss partner notification and testing options with a patient diagnosed with a sexually transmitted disease. If the patient expresses concerns about a partner's unwillingness or inability to get tested and treated, the option to use EPT should be discussed. The most appropriate use of EPT should include those partners who are unable or unlikely to seek timely treatment. Any provider in Utah may prescribe a single dose of an oral antibiotic to a sexual partner(s) of a patient diagnosed with chlamydia or gonorrhea without examining the partner(s). The number of doses should be limited to the number of known sex partners in the previous 60 days or to the most recent sex partner if none identified within the previous 60 days. Proper educational materials about the contracted sexually transmitted disease should also be provided for the patient and for each sexual partner. Recommendations for re-testing three months after treatment should be discussed with the infected patient.

EPT Resources:

<http://www.cdc.gov/std/ept/>

<http://www.region8ipp.com/epttoolkit/eptindex.htm>

<http://www.cdc.gov/std/treatment/2010>

<http://www.health.utah.gov/cdc>

Monthly Health Indicators Report

(Data Through January 2011)

Monthly Report of Notifiable Diseases, January 2011	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)	9	17	9	17	0.5
Shiga toxin-producing Escherichia coli (E. coli)	0	2	0	2	0.0
Hepatitis A (infectious hepatitis)	1	1	1	1	0.8
Hepatitis B, acute infections (serum hepatitis)	0	1	0	1	0.0
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/flu				
Meningococcal Disease	0	1	0	1	0.0
Pertussis (Whooping Cough)	15	38	15	38	0.4
Salmonellosis (Salmonella)	8	21	8	21	0.4
Shigellosis (Shigella)	0	3	0	3	0.0
Varicella (Chickenpox)	21	97	21	97	0.2
Quarterly Report of Notifiable Diseases, 4th 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)
HIV/AIDS†	4	33	75	128	0.6
Chlamydia	1,665	1,465	6,630	5,517	1.2
Gonorrhea	50	178	311	651	0.5
Tuberculosis	6	9	20	33	0.6
Medicaid Expenditures (in Millions) for the Month of January 2011	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 15.5	\$ 9.6	\$ 87.3	\$ 66.8	\$ 20.5
Inpatient Hospital	\$ 21.8	\$ 20.3	\$ 115.4	\$ 141.9	\$ (26.5)
Outpatient Hospital	\$ 11.0	\$ 10.5	\$ 51.1	\$ 73.3	\$ (22.3)
Long Term Care	\$ 13.4	\$ 14.2	\$ 86.3	\$ 99.3	\$ (13.0)
Pharmacy‡	\$ 17.3	\$ 12.6	\$ 96.1	\$ 88.5	\$ 7.6
Physician/Osteo Services	\$ 9.1	\$ 7.3	\$ 51.0	\$ 50.9	\$ 0.2
TOTAL HCF MEDICAID	\$ 205.6	\$ 146.8	\$ 972.1	\$ 1,027.5	\$ (55.4)

Program Enrollment for the Month of January 2011	Current Month	Previous Month	% Change\$ From Previous Month	1 Year Ago	% Change\$ From 1 Year Ago
Medicaid	230,812	227,325	+1.5%	206,351	+11.9%
PCN (Primary Care Network)	18,456	14,402	+28.1%	18,494	-0.2%
CHIP (Children's Health Ins. Plan)	36,559	37,224	-1.8%	41,748	-12.4%
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 (2009)	276,924	9.3%	-2.6%	\$ 5,116.1	+8.8%
Non-maternity Hospitalizations (2009)	166,045	5.4%	-0.7%	\$ 4,298.2	+9.5%
Emergency Department Encounters (2008)	681,958	23.4%	-2.9%	\$ 879.5	+12.6%
Outpatient Surgery (2008)	299,958	10.4%	-1.0%	\$ 1,277.7	+15.2%
Annual Community Health Measures	Current Data Year	Number Affected	Percent/Rate	% Change\$ From Previous Year	State Rank¶ (1 is best)
Obesity (Adults 18+)	2009	465,600	24.0%	+3.9%	11 (2009)
Cigarette Smoking (Adults 18+)	2009	190,300	9.8%	+5.4%	1 (2009)
Influenza Immunization (Adults 65+)	2009	174,400	68.8%	-6.2%	33 (2009)
Health Insurance Coverage (Uninsured)	2009	314,300	11.2%	+4.7%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2009	227	8.1 / 100,000	-16.6%	15 (2007)
Poisoning Deaths	2009	543	19.4 / 100,000	+7.0%	49 (2007)
Suicide Deaths	2009	445	15.9 / 100,000	+15.3%	n/a
Diabetes Prevalence (Adults 18+)	2009	118,500	6.1%	+0.2%	11 (2009)
Poor Mental Health (Adults 18+)	2009	291,600	15.0%	+7.0%	19 (2009)
Coronary Heart Disease Deaths	2009	1,469	52.5 / 100,000	-4.4%	1 (2007)
All Cancer Deaths	2009	2,543	90.8 / 100,000	+1.1%	1 (2007)
Stroke Deaths	2009	734	26.2 / 100,000	-2.2%	14 (2007)
Births to Adolescents (Ages 15-17)	2009	992	16.5 / 1,000	-10.6%	19 (2008)
Early Prenatal Care	2008	43,997	79.1%	-0.4%	n/a
Infant Mortality	2009	285	5.3 / 1,000	+11.4%	4 (2007)
Childhood Immunization (4:3:1:3:3:1)	2009	41,500	76.6%	+4.1%	16 (2009)

* Influenza activity remains low/moderate in Utah. Influenza-like illness activity is below baseline statewide. As of February 5, 2011, 337 influenza-associated hospitalizations have been reported to the UDOH. More information can be found at <http://health.utah.gov/epi/diseases/flu>.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

‡ 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.

§ % 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 2011 season.