Utah Health Status Update:

Adolescent Sexual Health

July 2007

Utah Department of Health

National data show that by age 19, more than two thirds of adolescent boys and girls have had sexual intercourse. Decisions about sexual health and sexual behaviors made during adolescence can have lifelong effects, from teen pregnancy that can affect health, educational, and economic opportunities for the child and parents, to human papilloma virus infections that can result in cervical cancer or chlamydia infections that can cause infertility. This issue of the Health Status Update highlights several aspects of sexual health and the consequences of certain sexual behaviors during adolescence.

Pregnancy Rates

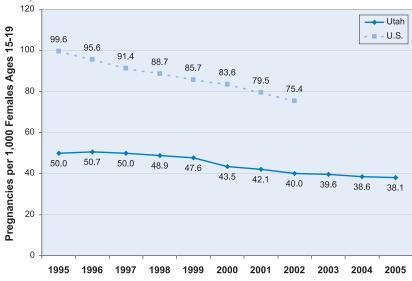
In 2005, the Utah Department of Health (UDOH) set a goal to reduce the state's teen pregnancy rate 20 percent by the year 2015. Using 2003's pregnancy rate of 39.6 pregnancies per 1,000 females aged 15-19 years as a baseline, a 20 percent reduction would bring the rate to 31.7 per 1,000 girls in that age group. Pregnancy rates count live births, fetal deaths, and abortions. Since 2003, the teen pregnancy rate has dropped from 39.6 pregnancies to 38.1 pregnancies per 1,000 females aged 15-19 years in 2005. This represents more than a 3.5 percent drop in two years. Teen pregnancy rates have fallen more than 20 percent in both Utah and the U.S. over the decade since 1995. At 38.1 pregnancies per 1,000 teen girls, Utah's rate is well below the national rate of 75 per 1,000. (See Figure 1.)

Birth Rates

Utah's teen birth rate for 2005 is 32.6 births per 1,000 females aged 15–19. Birth rates count live births only. According to the most recent national level data (2004), the national teen birth rate is 40.4 births per 1,000 females aged 15–19. Although Utah has a lower birth rate than the nation, there are populations within Utah that have rates higher than the nation. When broken down by race and ethnicity, the highest birth rates occur among Hispanic girls aged 15–19. In 2005, the birth rate among Hispanic teens was 99.4 per 1,000 females aged 15–19. (See Figure 2.)

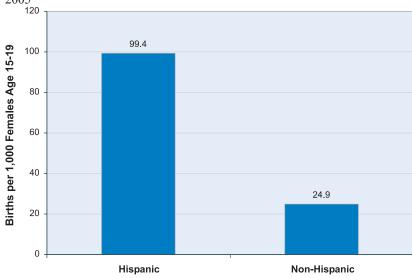
Pregnancy Rates

Figure 1. Number of pregnancies per 1,000 females age 15–19, Utah and U.S., 1995–2005



Birth Rates by Ethnicity

Figure 2. Number of births per 1,000 females age 15-19 by ethnicity, Utah, 2005



Prevention Efforts

The UDOH and its partners are working on a plan to reduce the number of teen girls who get pregnant. The UDOH subcontracts abstinence education federal funds to nine community groups that target 9–19 year olds. The Utah Adolescent Health Network has developed a plan to get education and resources to teens and families. A critical part of the plan will be to help parents help their teens delay sexual activity.

STD Rates

Statewide, Utah is experiencing an increase in both chlamydia and gonorrhea cases. Statistics for 2006 indicate 888 gonorrhea cases and 5,092 chlamydia cases, marking a new precedent in sexually transmitted disease occurrence in Utah. In particular, those ages 15–24 are at highest risk for contracting chlamydia and gonorrhea. In 2006, 51% of gonorrhea and 67% chlamydia cases were seen in this population. Increases in ages 13–19 are alarming, reflecting a need for more comprehensive STD education, testing and prevention services, targeting teenagers.

Since 2002, this 13–19 age group has seen over a 150% increase in gonorrhea cases while chlamydia has increased by 22% (Figures 3 and 4).

Adolescents in Utah are experiencing more cases of chlamydia and gonorrhea than ever before. This can be attributed to a greater incidence of disease, as well as an increase in the number of teens tested. Confidential testing is readily available at many public and private providers throughout the state, often at low or no cost.

STD Complications

Chlamydia and gonorrhea are bacterial infections that can exist without any noticeable symptoms. Left untreated, these infections can cause severe reproductive and related health problems. In females, untreated infections can spread into the uterus and fallopian tubes, resulting in pelvic inflammatory disease (PID). PID can permanently damage the fallopian tubes, uterus, and surrounding tissues, leading to infertility, chronic pelvic pain, and ectopic pregnancy (pregnancy outside the uterus). Gonorrhea also causes PID, infertility, chronic pelvic pain, and ectopic pregnancy. Serious complications among males are less common for both gonorrhea and chlamydia. Males are more often symptomatic with gonorrhea than with chlamydia. Women with gonorrhea often have no symptoms.

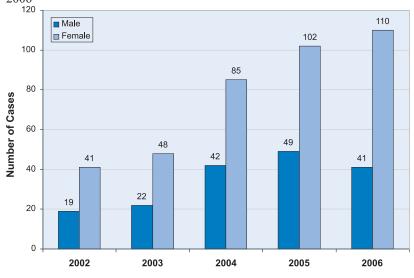
Both chlamydial and gonorrheal infections can cause serious complications in an infant such as eye infections, blindness, pneumonia, or death, if the infant is infected during birth.

References

1. Mosher WD, Chandra A, Jones J. Sexual behavior and selected health measures: Men and Women 15–44 years of age, United States, 2002.

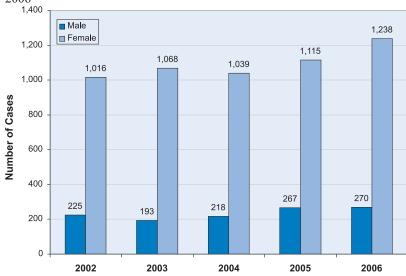
Gonorrhea Cases

Figure 3. Number of gonorrhea cases, Utah adolescents age 13-19, 2002-2006



Chlamydia Cases

Figure 4. Number of chlamydia cases, Utah adolescents age 13-19, 2002-2006



July 2007 Utah Health Status Update

For additional information about this topic, contact Jennifer Mayfield, Child, Adolescent, and School Health Program, Utah Department of Health, Box 142001, Salt Lake City, UT 84114-2001, (801) 538-9317, jmayfield@utah.gov; Tim Lane, STD Program Manager, Utah Department of Health, Box 142105, Salt Lake City, UT 84114-2105, (801) 538-6755, tlane@utah.gov; or the Office of Public Health Assessment, Utah Department of Health, Box 142101, Salt Lake City, UT 84114-2101, (801) 538-6108, FAX (801) 538-9346, email: phdata@utah.gov

Spotlights for June 2007

Breaking News, June 2007

Cervical Cancer Prevention (HPV)

Genital human papillomavirus (HPV) is the most common sexually transmitted infection in the United States and the leading cause of cervical cancer. Approximately 20 million people are currently infected with HPV and an estimated 6.2 million people are newly infected every year.

The Food and Drug Administration (FDA) recently approved a vaccine that is highly effective in preventing four types of HPV in young women that cause up to 70% of all cervical cancers and about 90% of genital warts. The Centers for Disease Control and Prevention (CDC) currently recommends the HPV vaccine be given to females ages 9 to 26. The vaccine, given in a series of three injections over a six-month period, will not eliminate the need for screening because it does not protect against all types of HPV that cause cervical cancer.

In April, industrialist Jon Huntsman, Sr. donated \$1 million to the Utah Department of Health (UDOH) to educate Utahns about cervical cancer and provide low cost HPV vaccines to eligible women. A portion of these funds, along with \$25,000 allocated by the Utah legislature, will be used for a public awareness media campaign and for provider education to inform physicians and other health care professionals about the HPV vaccine and available cancer screening services. All campaign materials will direct individuals to the Cancer Control Hotline at 1-800-717-1811.

Utah children ages 9 through 18 may receive the HPV vaccine through the Vaccines for Children (VFC) Program. The low-cost HPV vaccine will also be available for women ages 19 to 26 years of age who have no insurance or insurance that does not pay for the vaccine. For more information call the Utah Department of Health's Cancer Program at (801) 538-6157 or 1-800-717-1811.

Community Health Indicators Spotlight, June 2007

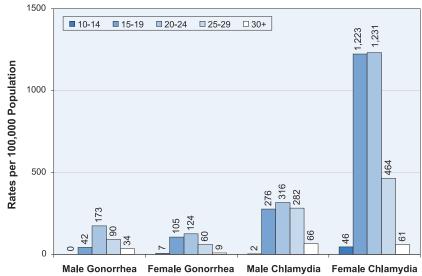
Sexually Transmitted Diseases

The rates for chlamydia and gonorrhea have increased statewide for all ages, not only among adolescents (see page 2 of this report). Since 2002, gonorrhea cases have increased over 140%, while chlamydia cases have increased over 45%. It is likely that males and females have similar rates of chlamydia, yet screenings occur mostly among females, producing higher rates of reported infections. Left untreated, both diseases can lead to infertility and other serious long-term consequences, especially for women.

Efforts are being made by the state and local health departments to increase public awareness and to educate and test as many people as possible. Ongoing traditional public health measures include the following:

Clinical services, including testing and treatment, are provided at many local health departments.

Reported Chlamydia and Gonorrhea Rates per 100,000 Population by Age Group and Sex, Utah, 2006



- Contact investigation and treatment is accomplished in many of Utah's local health departments.
- Public education, and free screening activities have taken place throughout the state.

Symptoms of gonorrhea are not always evident, while chlamydia infections in both men and women are commonly asymptomatic. All persons who are sexually active and may be at risk for a STD should have an annual exam that includes testing.

Monthly Health Indicators Report (Data Through May 2007)

Monthly Report of Notifiable Diseases, May 2007	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)	22	21	134	86	1.6			
Enterotoxigenic Escherichia coli (E. coli)	5	4	25	13	1.9			
Hepatitis A (infectious hepatitis)	0	3	2	15	0.1			
Hepatitis B (serum hepatitis)	1	3	10	16	0.6			
Influenza [†]	Weekly updates at http://health.utah.gov/epi/diseases/flu							
Measles (Rubeola, Hard Measles)	0	0	0	0				
Meningococcal Diseases	1	1	7	3	2.2			
Norovirus	1	2*	14	7*	1.9			
Pertussis (Whooping Cough)	18	34	190	136	1.4			
Salmonellosis (Salmonella)	26	38	103	99	1.0			
Shigellosis (Shigella)	2	4	9	18	0.5			
Varicella (Chickenpox)	99	64*	559	382*	1.5			
Viral Meningitis	3	6	21	28	0.7			
			1	20	0.7			
Notifiable Diseases Reported Quarterly, 1st Qtr 2007	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	Quarter	arter ge)	Cases YTD					
Notifiable Diseases Reported Quarterly, 1st Qtr 2007	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 2007 HIV	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio 7 (obs/exp)			
Notifiable Diseases Reported Quarterly, 1st Qtr 2007 HIV AIDS	Current Quarter # Cases	Current Quarter # Expected 10 Cases (5-yr average)	# Cases AID #	# Expected YTD 11 (5-yr average)	YTD Standard Morbidity Ratio 1 (obs/exp)			
Notifiable Diseases Reported Quarterly, 1st Qtr 2007 HIV AIDS Chlamydia	# Contract C	Current Quarter # Expected # Expected 10 Cases 10 C	# Cases AID 19 12 1,125	# Expected YTD 108 1	YTD Standard Morbidity Ratio 7.1 (obs/exp)			
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Notifiable Diseases Reported Quarterly, 1st Qtr 2007 HIV AIDS Chlamydia Gonorrhea Tuberculosis Program Enrollment for the Month of May 2007	# Current Quarter # Cases # Cases # Cases	Previous # Expected # Expected Month	% Changes From Previous # 19 12 17 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	1 Year Ago # Expected YTD 1	% Change [§] From 1 Year From 1 Year Ago C 1			

Medicaid Expenditures (in Millions) for the Month of May 2007	Current Month	Expected/ Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 7.4	\$ 8.3	\$ 86.7	\$ 96.9	(\$ 10.2)
Inpatient Hospital	\$ 15.4	\$ 16.9	\$ 161.0	\$ 170.7	(\$ 9.7)
Outpatient Hospital	\$ 6.1	\$ 6.6	\$ 68.2	\$ 67.7	\$ 0.6
Long Term Care	\$ 13.1	\$ 11.7	\$ 167.9	\$ 165.6	\$ 2.4
Pharmacy	\$ 9.8	\$ 10.7	\$ 114.7	\$ 123.5	(\$ 8.8)
Physician/Osteo Services	\$ 4.6	\$ 5.8	\$ 54.8	\$ 59.3	(\$ 4.5)
TOTAL HCF MEDICAID	\$ 98.8	\$ 124.1	\$ 1,284.7	\$ 1,334.1	(\$ 49.4)
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 (2005)	268,652	10.0%	-1.3%	\$ 3,501.7	+8.6%
Non-maternity Hospitalizations (2005)	161,474	5.8%	-1.6%	\$ 2,914.5	+8.2%
Emergency Department Encounters (2005)	664,523	25.0%	+3.5%	\$ 553.2	+21.2%
Outpatient Surgery (2005)	308,300	11.7%	-0.5%	\$ 947.7	+12.1%
Annual Community Health Measures	Current Data Year	Population at Risk	Number Affected	Percent/ Rate	% Change [§] From Previous Year
Overweight and Obesity (Adults 18+)	2006	1,777,802	976,000	54.9%	+1.3%
Cigarette Smoking (Adults 18+)	2006	1,777,802	174,200	9.8%	-15.0%
Influenza Immunization (Adults 65+)	2006	217,313	156,700	72.1%	+3.4%
Health Insurance Coverage (Uninsured)	2006	2,582,371	306,500	11.9%	+2.5%
Motor Vehicle Crash Injury Deaths	2005	2,528,926	292	11.6 / 100,000	-4.5%
Suicide Deaths	2005	2,528,926	344	13.6 / 100,000	-11.1%
Diabetes Prevalence	2006	2,582,371	105,600	4.1%	-0.7%
Coronary Heart Disease Deaths	2005	2,528,926	1,567	62.0 / 100,000	-4.6%
All Cancer Deaths	2005	2,528,926	2,512	99.3 / 100,000	+0.4%
Births to Adolescents (Ages 15-17)	2005	58,374	917	15.7 / 1,000	+5.8%
Early Prenatal Care	2005	51,517	40,587	78.8%	+1.0%
Infant Mortality	2005	51,517	231	4.5 / 1,000	-13.3%
Childhood Immunization (4:3:1:3:3)	2005	50,043	37,100	74.1%	+3.9%

^{*} Due to limited historical data, the average is based upon 3 years of data for norovirus, varicella, and West Nile virus infections.

Note: Active surveillance has ended for West Nile Virus until the 2007 season.

 $[\]dagger$ The 2006-07 influenza season has ended in Utah. Influenza-like illness measures are below baseline. As of June 22,

^{2007, 283} influenza-associated hospitalizations have been reported to the UDOH. More information can be found at http://health.utah.gov/epi/diseases/flu

^{§ %} Change could be due to random variation.