

**SEXUALLY
TRANSMITTED
DISEASE
SURVEILLANCE
UTAH
2003-2012**

August 2013



UTAH DEPARTMENT OF
HEALTH
Bureau of Epidemiology

Acknowledgments

The Utah Department of Health (UDOH) would like to recognize the efforts of local health department personnel throughout the state of Utah who play a critical role in case investigation and data collection of sexually transmitted diseases.

Sexually transmitted disease data for Utah are published by the UDOH Bureau of Epidemiology. Please direct questions or comments to:

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Introduction

Sexually Transmitted Disease Surveillance, Utah, 2003-2012 is a summary of surveillance data for the following reportable sexually transmitted diseases (STDs) in Utah: chlamydia, gonorrhea, and primary and secondary (P&S) syphilis. Of the 75 Utah reportable communicable diseases, chlamydia was the most frequently reported disease in 2012 with 7,616 cases, and gonorrhea was fifth with 480 cases.¹ In collaboration with the 12 local health departments (LHDs) throughout the state, each STD case is investigated, including the provision of partner services.

Sexually Transmitted Disease Surveillance, Utah, 2003-2012 consists of five sections: one section each for chlamydia, gonorrhea, and P&S syphilis; a section specific to chlamydia and gonorrhea in adolescents 15 to 19 years of age and young adults 20 to 24 years of age; and a section with tables. Each disease-specific section contains text and figures that summarize data and display trends. The “Adolescents and Young Adults” section takes a more detailed look at the chlamydia and gonorrhea incidence in this vulnerable age group. The “Tables” section includes data about STDs by age group, sex, race/ethnicity, geography, sexual orientation in males, and testing data. Finally, the appendix contains a map of the 12 LHDs and a table listing the counties in each district’s service area.

Technical Notes

The Utah Communicable Disease Rule requires that health care providers and laboratories report cases of chlamydia, gonorrhea, and syphilis to their local health department or the Utah Department of Health (UDOH), Bureau of Epidemiology within three

¹ Utah Department of Health (2012). Top 10 Communicable Disease Report, Utah, 2012, http://health.utah.gov/epi/topdiseaserpt/Top_CD-Diseases_UT.htm.

working days of identification.² Upon receipt, these reports are entered into the Utah-National Electronic Disease Surveillance System (UT-NEDSS), a secure statewide disease surveillance system which was launched in 2009. This database, along with STDNIS, a legacy database provided by the Centers for Disease Control and Prevention (CDC), is the source for much of the data provided in this report. The variable “Men Who Have Sex With Men (MSM)” was introduced in UT-NEDSS; therefore, charts and tables pertaining to this variable start in 2009. The cases in this report are classified by CDC’s *Morbidity and Mortality Weekly Report (MMWR)* year unless otherwise noted.

Chlamydia and gonorrhea testing data referenced in this report are limited to data provided by the UDOH’s Utah Public Health Laboratories (UPHL). In 2013, the UPHL changed its name from Unified State Laboratories: Public Health (USL:PH), the name used in previous reports. The UPHL data include testing conducted at adult and youth correctional facilities, community and family planning clinics, LHDs, a small number of private providers, and student health centers throughout the state. Testing data from other laboratories are currently unavailable.

Population data used to calculate rates were obtained on June 13, 2013 from the Population Estimates Query Module from the UDOH, Center for Health Data, Indicator-Based Information System for Public Health (IBIS-PH).

In previous Utah STD reports, missing or unknown data were redistributed according to the distribution of known age group, race/ethnicity, and sex data. In this report, missing and unknown data were not redistributed; therefore, incidence rates may appear lower than in previous reports.

² Utah Code Annotated. R386-702 Communicable Disease Rule. <http://www.rules.utah.gov/publicat/code/r386/r386-702.htm>

Chlamydia

Chlamydia trachomatis infections continue to be the most frequently reported communicable disease in both Utah and the United States.³ In 2012, 7,616 cases of chlamydia were reported in Utah. Chlamydia accounted for 65% of all the nationally-notifiable diseases reported in Utah in 2012. From 2003 to 2011, the most recent year for which national - statistics were available at the time of writing this report, Utah's chlamydia rate was an average of 56% of the U.S. rate.⁴ Utah's chlamydia rate increased 62% from 165.0 cases per 100,000 population in 2003 to 266.7 in 2012. The increase in chlamydia rates may be an actual increase or due to increased screening efforts, use of increasingly sensitive diagnostic tests, increased reporting by providers and laboratories, and/or improved information systems for reporting.

Over the past 10 years, chlamydia rates in females have been twice that of males in Utah, most likely a result of higher rates of screening in women for this usually asymptomatic infection. Females with chlamydial infection are at risk for developing pelvic inflammatory disease (PID), and both men and women may become infertile as a result of untreated chlamydial infections. Susceptibility to more serious infections, such as the human immunodeficiency virus (HIV), increases when an individual is infected with chlamydia. In addition, pregnant women with chlamydia can pass the infection to their infants during delivery, potentially resulting in pneumonia or neonatal ophthalmia.

During the 2003-2012 time period in Utah, chlamydia rates increased in all age groups between 15-64 years, with rates increasing by at least 60% in age groups between 15 and 29 years; doubling in age groups between 30 and 45 years; and quadrupling in age groups from 45 to 64 years. Although the rates in older adults are not as high as in younger age groups,

³ Utah Department of Health (2012). Top 10 Communicable Disease Report, Utah, 2012, http://health.utah.gov/epi/topdiseaserpt/Top_CD-Diseases_UT.htm.

⁴ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2011*. Atlanta: U.S. Department of Health and Human Services; 2012.

this demonstrates the need to target prevention messages to a wide range of age groups.

Two-thirds of the chlamydia cases reported in Utah in 2012 were among persons 15-24 years of age. The highest rates of infection were reported among females aged 20-24 years (1,701.3 cases per 100,000 population) and 15-19 years (1,561.6). The highest rate of infection reported in males in Utah in 2012 was among men 20-24 years (717.2 cases per 100,000 population).

In 2012, four local health districts in Utah had chlamydia rates higher than the state rate: Salt Lake County Health District (368.9 cases per 100,000 population), Weber-Morgan (335.5), Southeastern (279.7), and Davis (273.9). Similar to prior years, the majority of chlamydial infections were identified in the four counties along the Wasatch Front: Salt Lake (51.5% of cases), Davis (11.4%), Utah (10.5%), and Weber (10.8%) .

In 2012, the highest chlamydia rate among the major racial and ethnic groups in Utah was reported among Blacks (1,064.7 cases per 100,000 population), followed by American Indian/Alaska Natives (668.4), Pacific Islanders (565.6), and Hispanics (520.7). The lowest chlamydia rates were reported among Whites and Asians (213.0 and 200.7 cases per 100,000 population, respectively).

Chlamydia screening tests administered by adult and youth correctional facilities, community and family planning clinics, local health departments, a small number of private providers, and student health centers throughout the state are processed at the Utah Public Health Laboratories (UPHL). The lab adopted a dual chlamydia/gonorrhea test in late 2004. The number of chlamydia results reported by the UPHL increased 72% between 2005 and 2012. Although 50% more women were tested than men during this eight-year period, males have consistently had a higher positivity rate than females. Testing data from other laboratories are currently unavailable.

Figure 1. Chlamydia Rates, Utah and United States, 2003-2012*

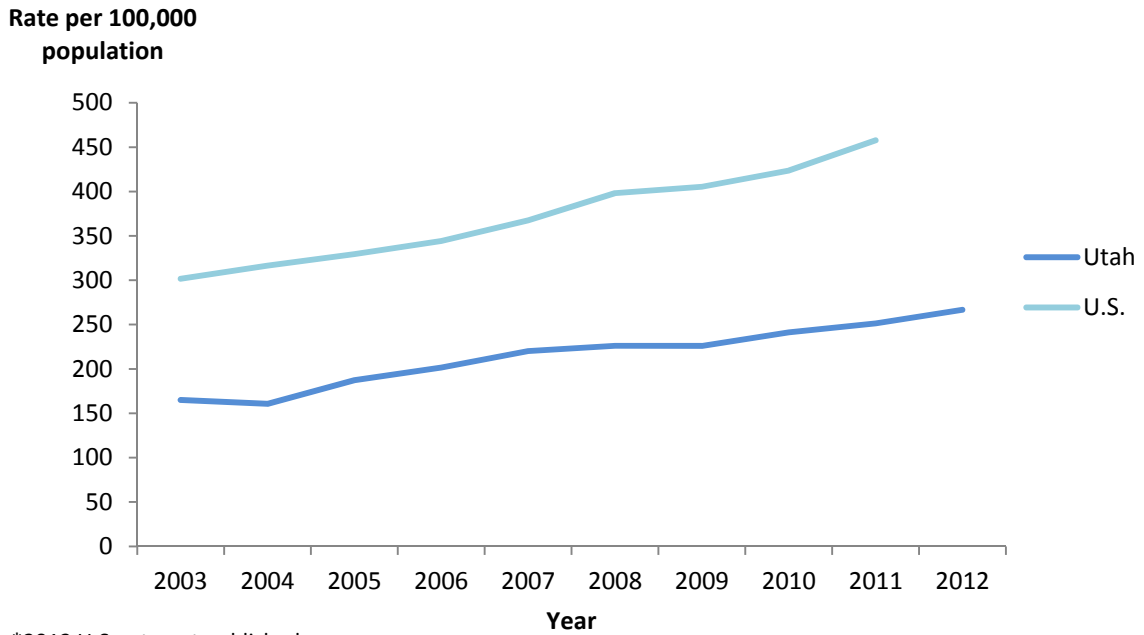
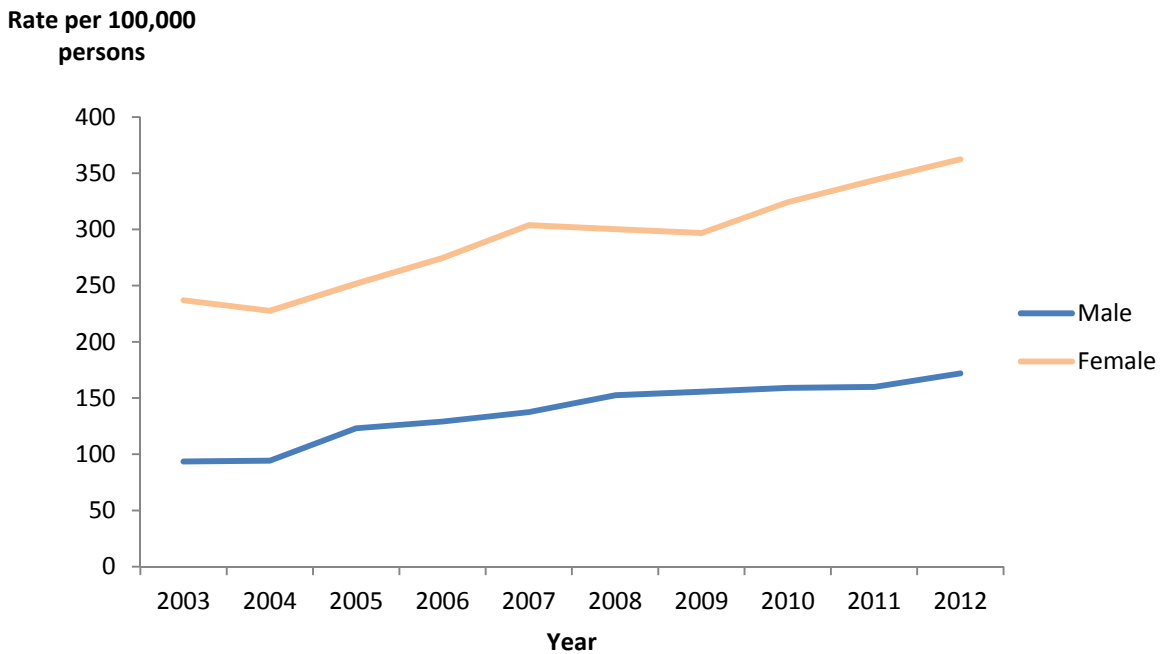
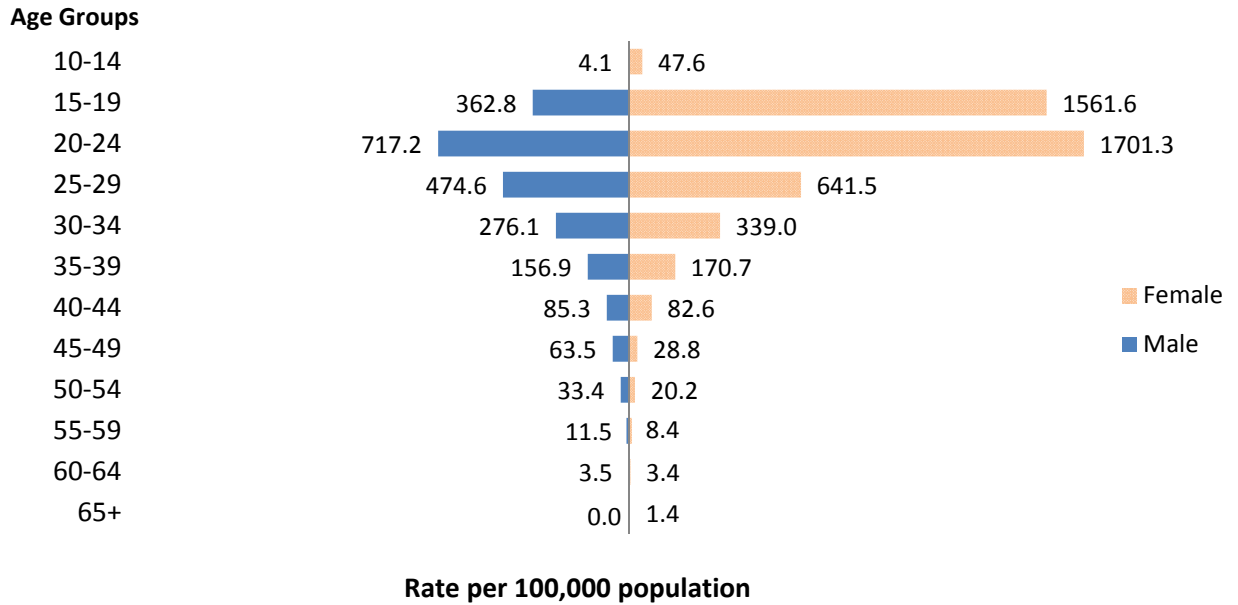


Figure 2. Chlamydia Rates by Sex, Utah, 2003-2012



**Figure 3. Chlamydia Rates by Age Group and Sex
Among Persons Aged ≥10 Years, Utah, 2012**



**Figure 4. Chlamydia Rates by Local Health District,
Utah, 2012**

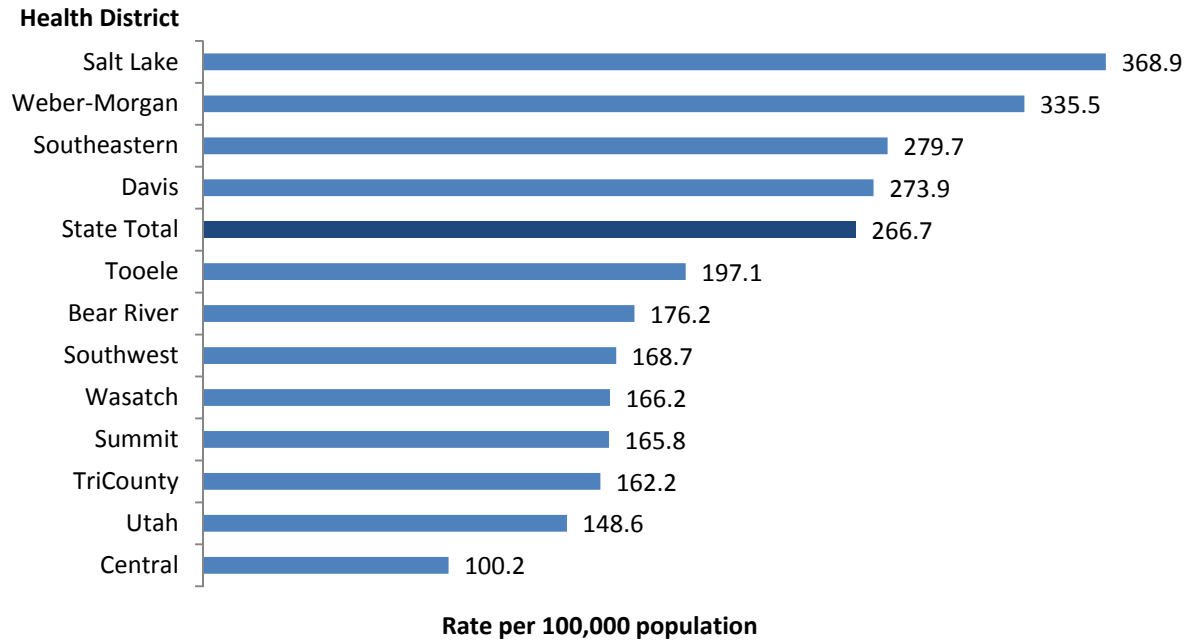


Figure 5. Chlamydia Rates by Race/Ethnicity, Utah, 2012

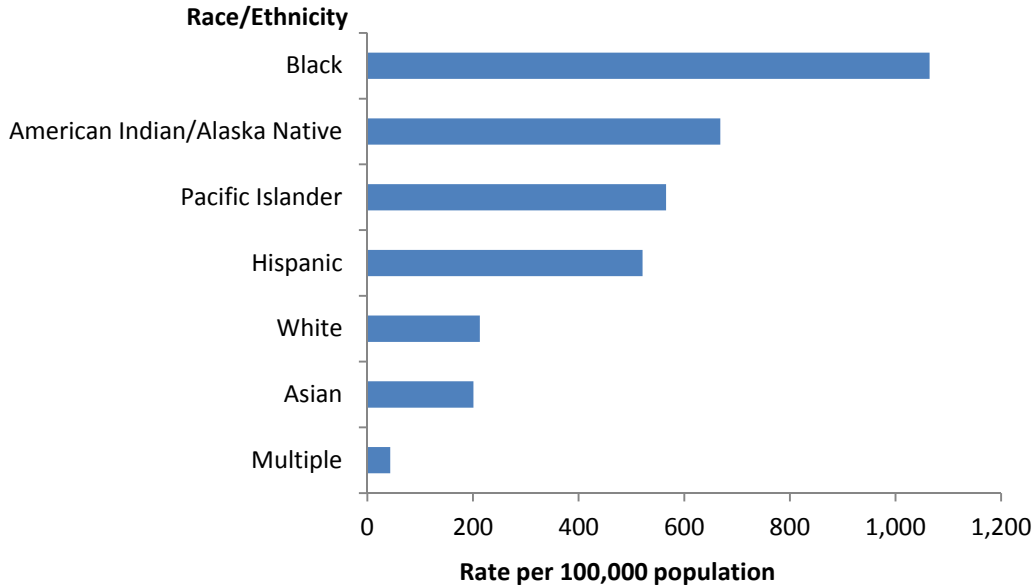
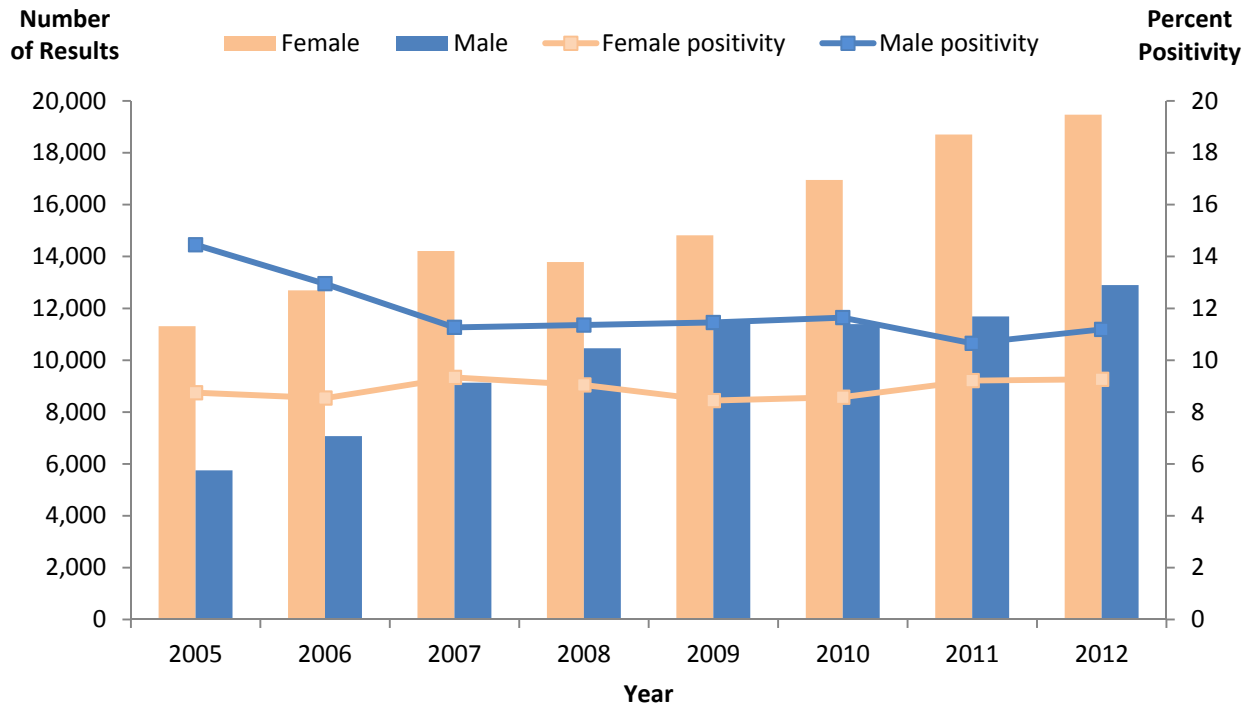


Figure 6. Number of Chlamydia Test Results and Percent Positivity by Sex, Utah Public Health Laboratories, Utah, 2005-2012



Gonorrhea

In 2012, 480 cases of gonorrhea were reported in Utah. Gonorrhea was the fifth most frequently reported communicable disease in Utah and the second most reported disease in the United States.⁵ From 2003 to 2011, the most recent year for which national statistics were available at the time of writing this report, Utah's gonorrhea rate was an average of 19% of the U.S. rate.⁶ Following a doubling of Utah's gonorrhea rate from 2003 to 2006, when the rate peaked at 35.2 cases per 100,000 population, Utah's gonorrhea rate decreased annually to the lowest rate reported of 9.8 in 2011. In 2012, the rate increased to 16.8 cases per 100,000 population.

Gonorrhea rates among males in Utah have consistently been higher than among females over the past 10 years; and during the past five years, males have had rates at least 2.5 times higher than females. Two-thirds of male gonorrhea cases in 2009 and 2010 were among men who have sex with men (MSM); this percentage decreased in 2011 and 2012 to 62% and 52%, respectively. The gonorrhea rate in females increased 97% from 2011 to 2012, from 4.7 cases per 100,000 population to 9.3. Untreated gonorrhea infections can damage the reproductive system in both males and females. Females with gonorrhea infection are at risk for developing pelvic inflammatory disease (PID). Gonorrhea can spread to joints and become systemic (disseminated gonorrhea). Susceptibility to infections, such as the human immunodeficiency virus (HIV), increases when an individual is infected with gonorrhea. Furthermore, pregnant women with gonorrhea can pass the infection to their infant during delivery, potentially resulting in ophthalmia neonatorum.

In 2012, 60% of the reported gonorrhea cases in Utah were among persons 20-34 years of age. In

males, the highest rates of infection were in the following age groups: 20-24 years (61.4 cases per 100,000 population), 25-29 years (56.4), and 30-34 years (51.8). In females, the highest rate of infection was among 20-24 year olds (36.7 cases per 100,000 population). Although the rates were lower, the largest percentage rate increases from 2011 to 2012 were among persons 40-59 years. This demonstrates the need to target prevention messages to a wide range of age groups.

In 2012, two local health districts in Utah had gonorrhea rates higher than the state rate: Salt Lake County Health District (32.0 cases per 100,000 population) and Weber-Morgan Health District (17.0). Similar to prior years, more than 90% of the cases were identified in four counties along the Wasatch Front: Salt Lake (70.8%), Weber (8.8%), Davis (8.5%), and Utah (3.5%).

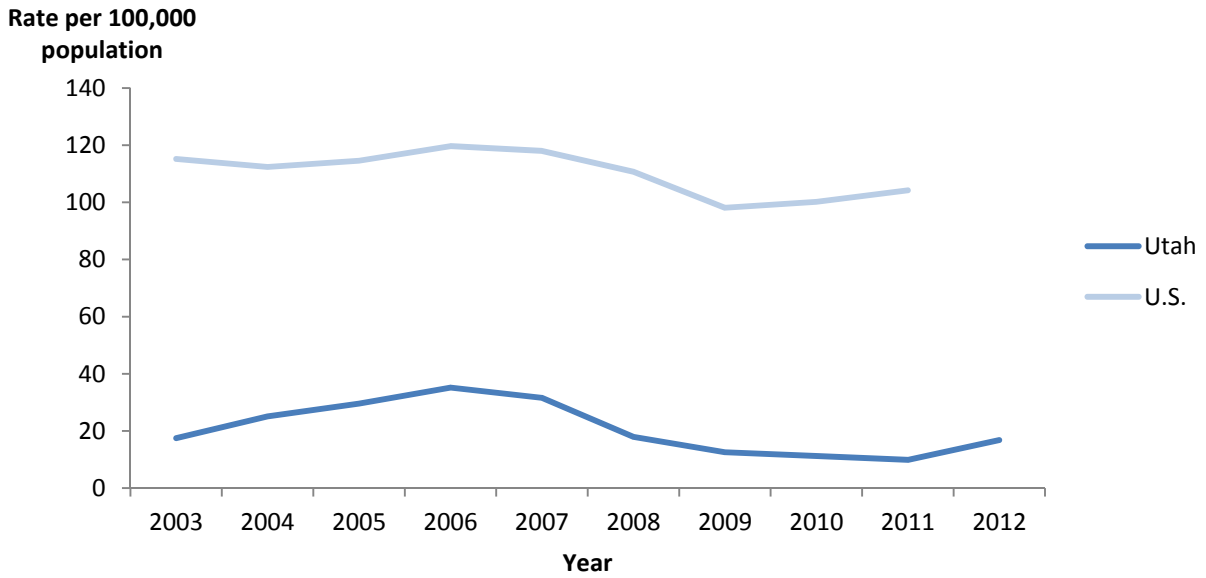
In 2012, the highest gonorrhea rate among the major racial and ethnic groups in Utah was reported among Blacks (201.6 cases per 100,000 population), followed by American Indians (49.2), Hispanics (22.0), Pacific Islanders (19.9), Whites (13.7), and Asians (5.1).

Gonorrhea screening tests administered by adult and youth correctional facilities, community and family planning clinics, local health departments, a small number of private providers, and student health centers throughout the state are processed at the Utah Public Health Laboratories (UPHL). The lab adopted a dual chlamydia/gonorrhea test in late 2004. The number of gonorrhea results reported by the UPHL increased 70% between 2005 and 2012. Although 53% more women were tested than men during this eight-year period, males had a positivity rate that was at least twice that of females – with positivity climbing to more than six times that of females since 2009. Testing data from other laboratories are currently unavailable.

⁵ Utah Department of Health (2012). Top 10 Communicable Disease Report, Utah, 2012. http://health.utah.gov/epi/topdiseaserpt/Top_CD-Diseases_UT.htm

⁶ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2011*. Atlanta: U.S. Department of Health and Human Services; 2012.

Figure 7. Gonorrhea Rates, Utah and United States, 2003-2012*



*2012 U.S. rate not published.

Figure 8. Gonorrhea Rates by Sex, Utah, 2003-2012

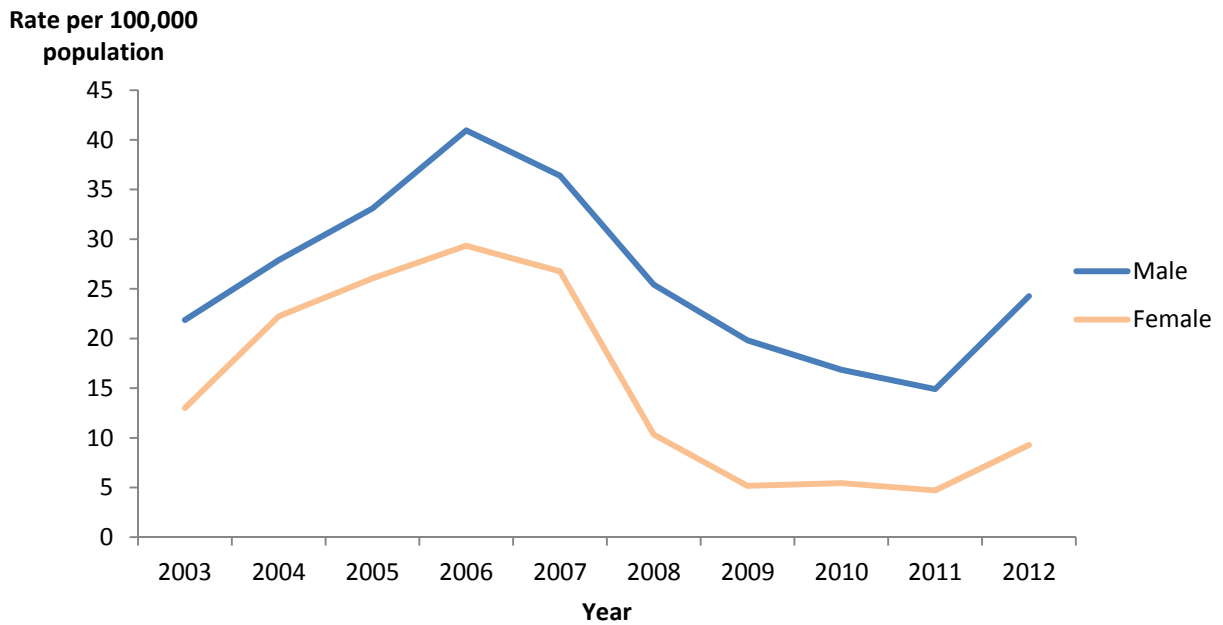


Figure 9. Gonorrhea Rates by Age Group and Sex Among Persons Aged ≥10 Years, Utah, 2012

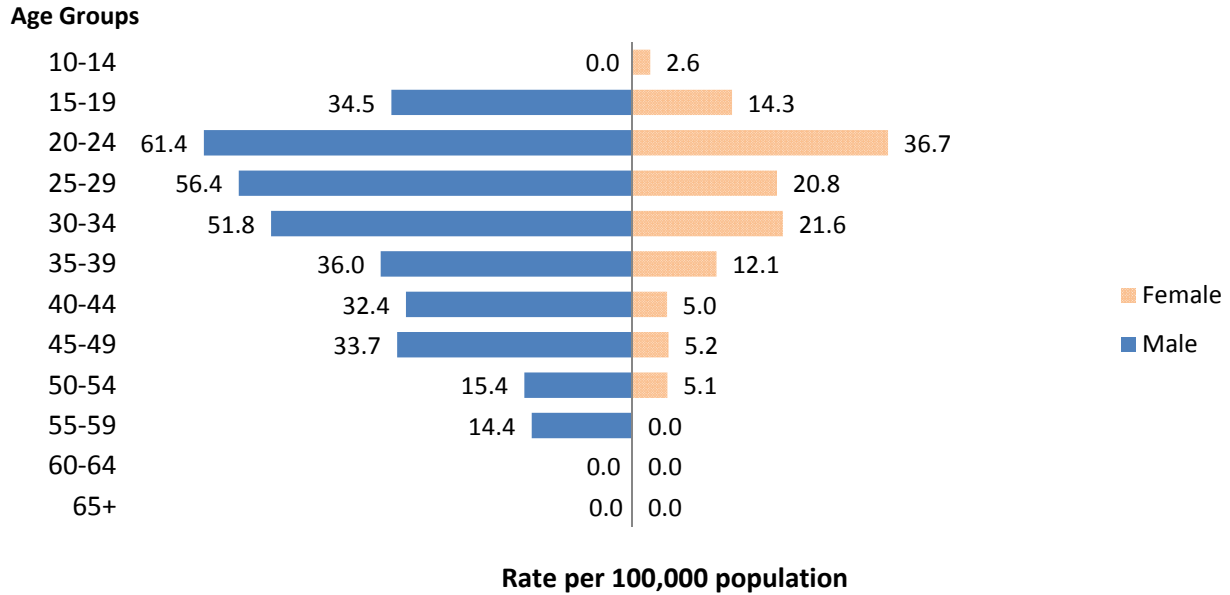


Figure 10. Gonorrhea Rates by Local Health District, Utah, 2012

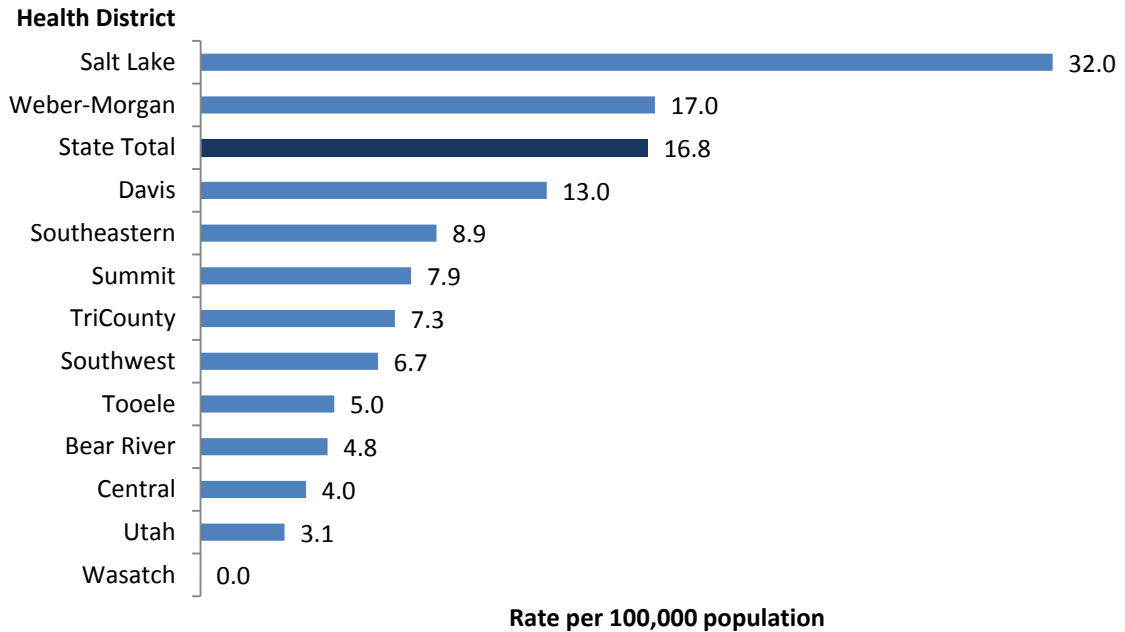


Figure 11. Gonorrhea Rates by Race/Ethnicity, Utah, 2012

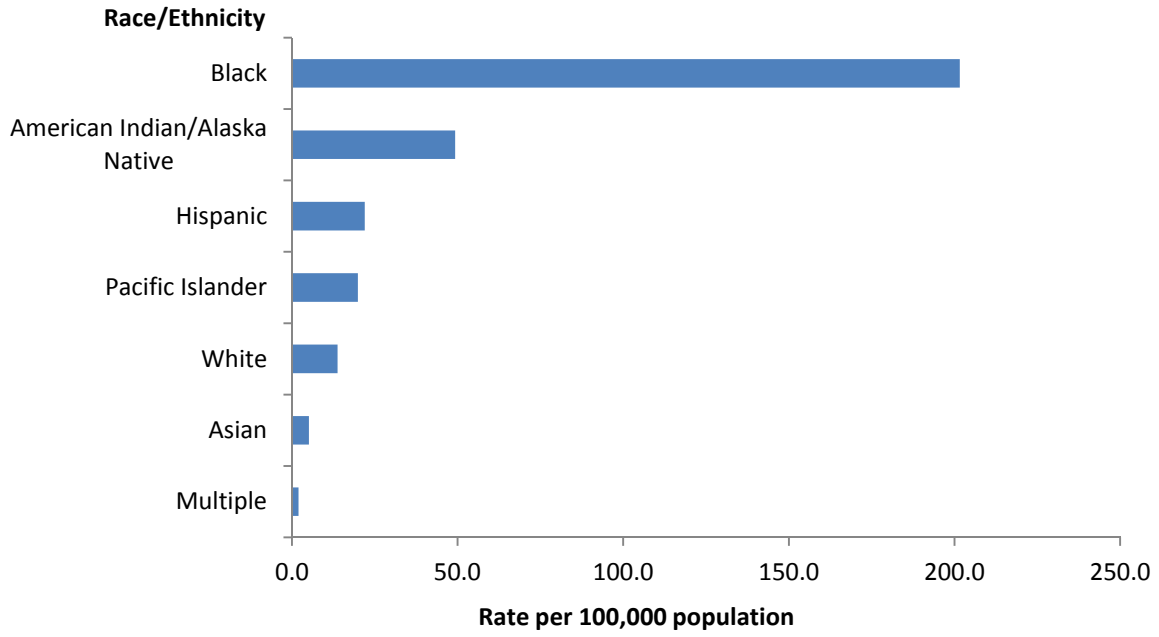
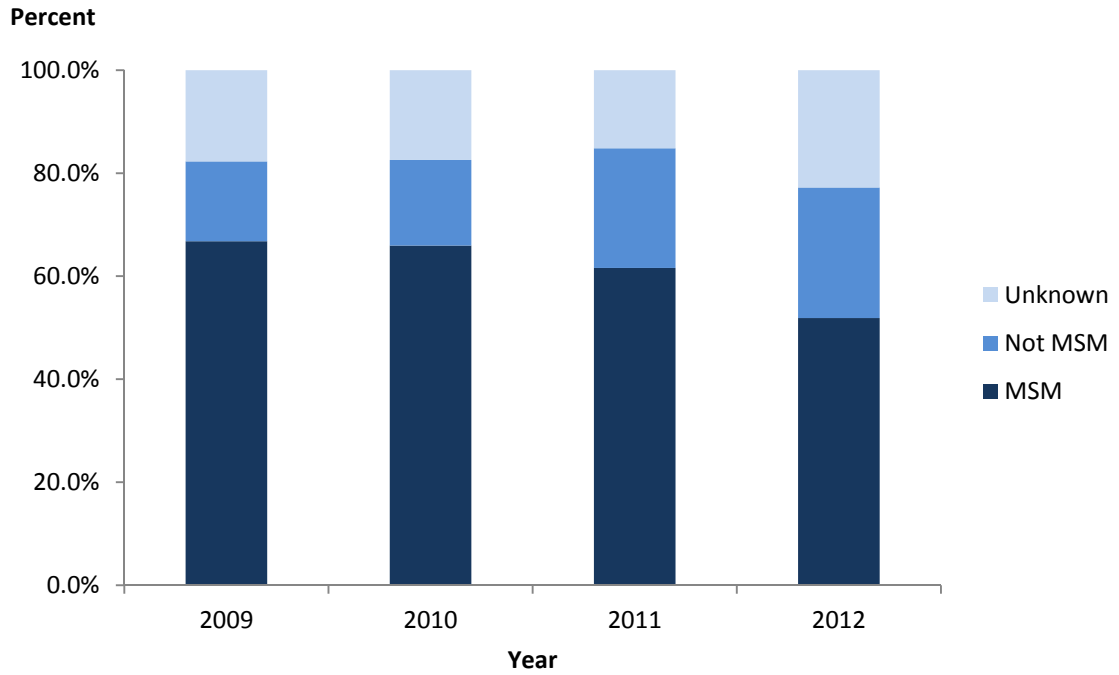
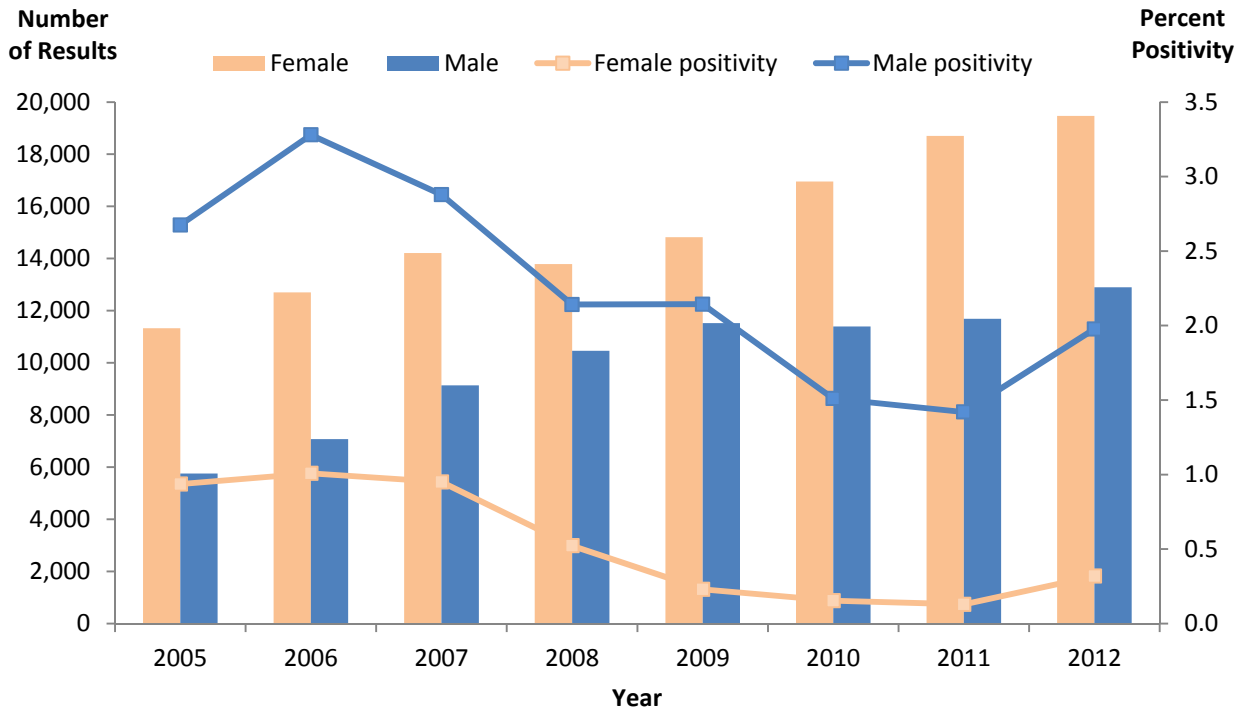


Figure 12. Percent of Male Gonorrhea Cases by Sexual Orientation*, Utah, 2009-2012



*MSM=Men Who Have Sex with Men

Figure 13. Number of Gonorrhea Test Results and Percent Positivity by Sex, Utah Public Health Laboratories, Utah, 2005-2012



Primary and Secondary Syphilis

Syphilis is a complex sexually transmitted disease comprised of several stages throughout the duration of infection. The initial stage, primary syphilis, is characterized by a highly infectious, painless open sore at the site of infection called a chancre.

Syphilis is passed from person to person through direct contact with the chancre. Sexual transmission can also occur during the secondary stage of syphilis. An infant can acquire syphilis through the placenta if the mother is infected, and untreated syphilis in pregnant women may result in perinatal death. In later stages of the disease, the bacteria move throughout the body, damaging many organs over time. Significant complications typically occur when syphilis is untreated. Due to the open nature of the syphilitic sores, untreated syphilis facilitates the transmission of the human immunodeficiency virus (HIV).

The primary and secondary stages of syphilis are considered to be the most infectious stages and are the focus of this report. In 2012, 42 cases of primary and secondary (P&S) syphilis were reported in Utah as compared to 14 cases the previous year and an average of 31 cases in the previous five years. The P&S syphilis rate in Utah in 2012 was 1.5 cases per 100,000 population.

The P&S syphilis rate in Utah has risen and fallen over the past 10 years. The rate of P&S syphilis in Utah increased from 0.6 cases per 100,000 population in 2003 to 2.3 in 2010. The increase was particularly steep from 2008 to 2010, which was inconsistent with the national trend during the same time period when rates leveled off. In 2011, the rate plummeted to 0.5 cases per 100,000 population; and in 2012, the rate increased to 1.5. From 2003 to 2012, Utah's P&S syphilis rate was an average of 24% of the national rate.⁷

P&S syphilis rates in males were at least 2.5 times higher than in females throughout the past decade in Utah. Since 2010, over 90% of the P&S cases in men have been among men who have sex with men (MSM). No cases of P&S syphilis were diagnosed

among females in 4 of the past 10 years, including in 2012.

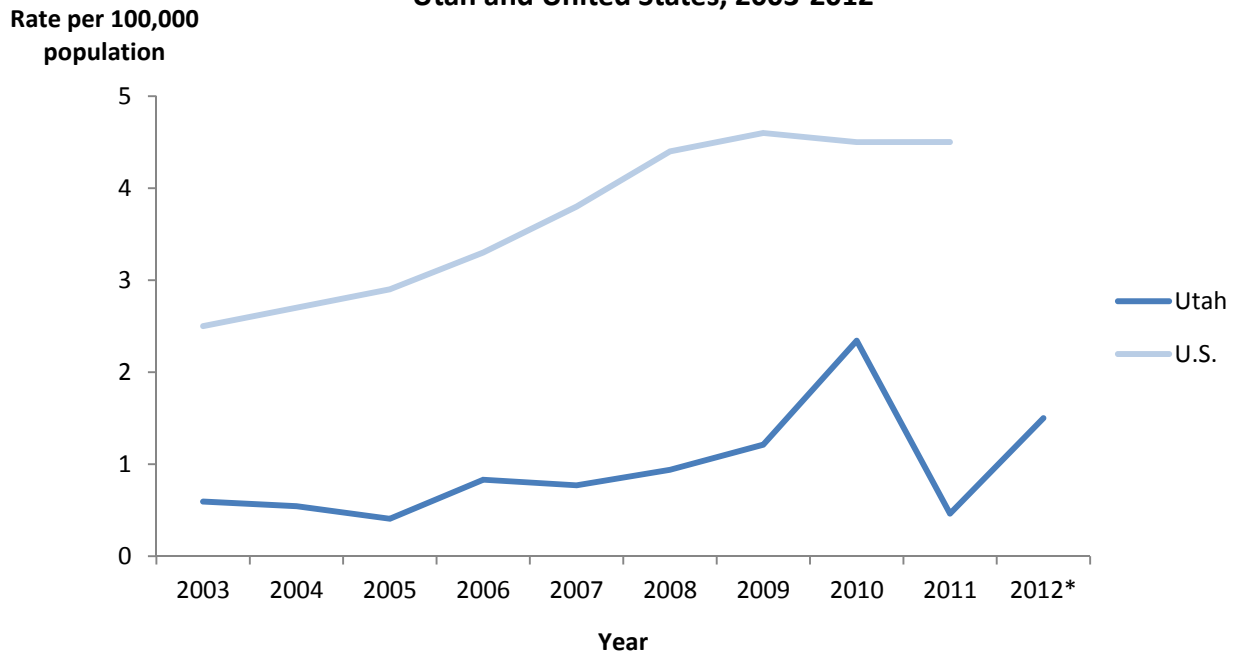
The highest P&S syphilis rates in Utah in 2012 were among men 25-29 years (8.7 cases per 100,000 population) and 30-34 (7.8). P&S syphilis cases were reported in age groups as young as 20-24 years and as old as 55-59 years. This highlights the need to target prevention messages to a wide range of age groups.

In 2012, six local health districts in Utah reported P&S syphilis cases. Salt Lake County Health District accounted for 81% of the P&S cases in 2012 and reported a rate of 3.2 cases per 100,000 population.

Of the 42 cases of P&S syphilis reported in Utah in 2011, the breakdown among racial and ethnic groups was as follows: 36 cases (86%) were among Whites; 2 cases each were reported among Asians and Hispanics; and 1 case each was reported among American Indians, Blacks, and Pacific Islanders.

⁷ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2011*. Atlanta: U.S. Department of Health and Human Services; 2012.

Figure 14. Primary and Secondary Syphilis Rates, Utah and United States, 2003-2012



*2012 U.S. rate not yet published.

Figure 15. Primary and Secondary Syphilis Rates by Sex, Utah, 2003-2012

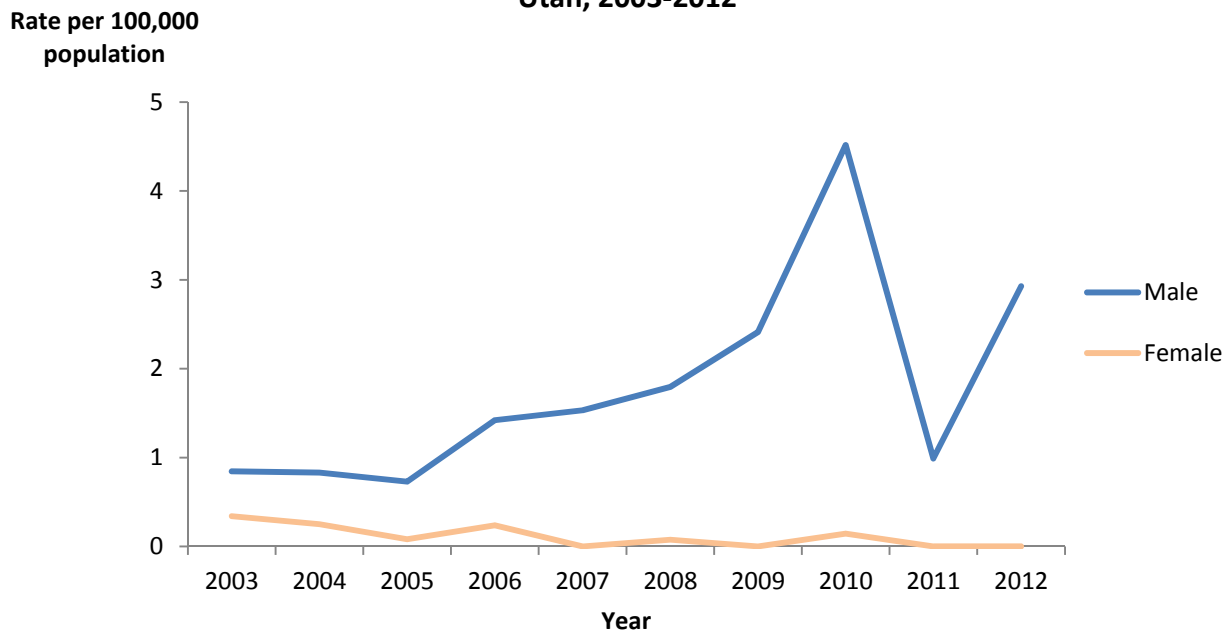


Figure 16. Primary & Secondary Syphilis Rates in Males by Age Group, Utah, 2012

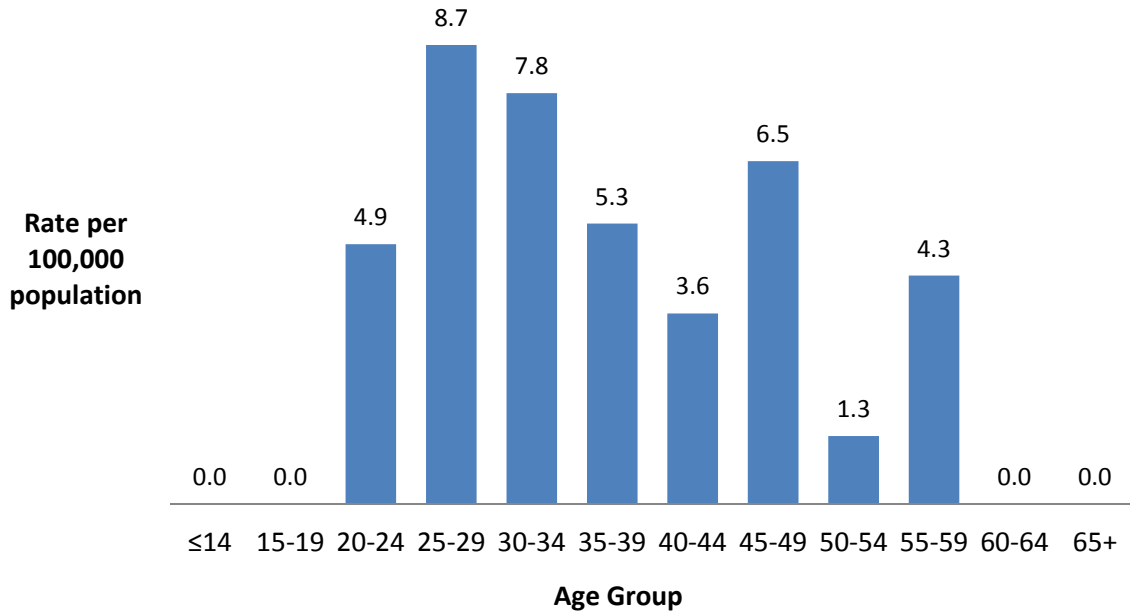


Figure 17. Primary and Secondary Syphilis Rates by Local Health District, Utah, 2012

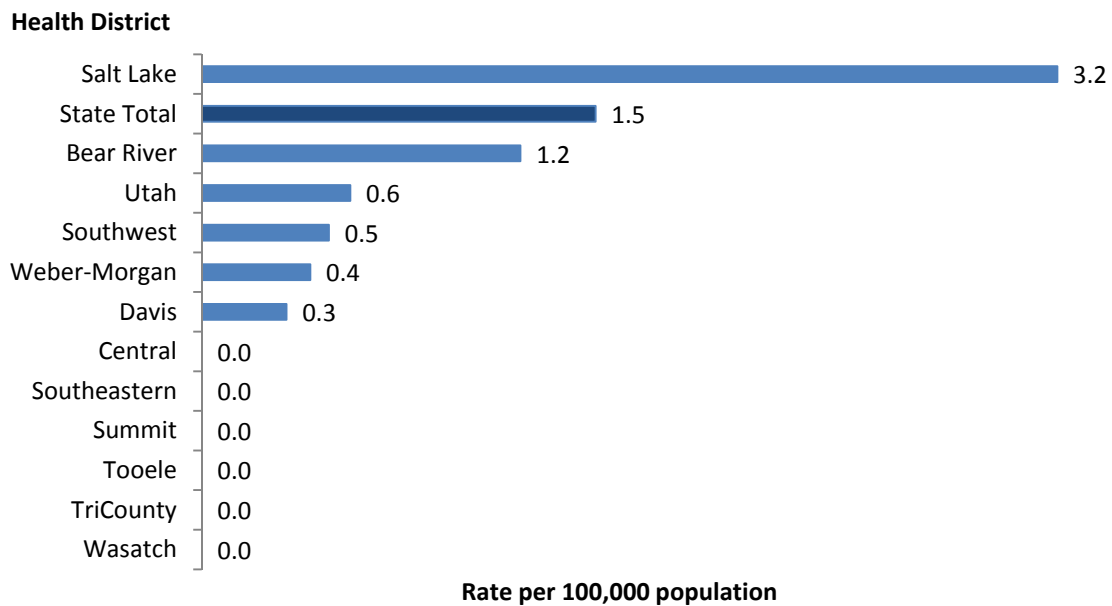
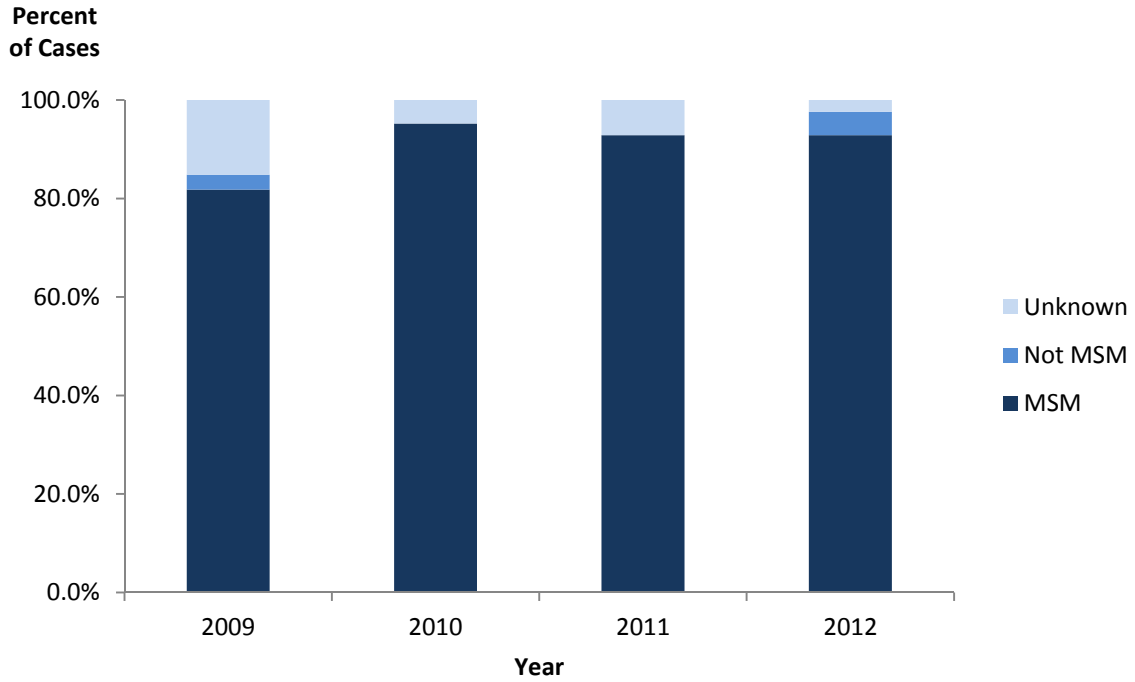


Figure 18. Percent of Male Primary and Secondary Syphilis Cases by Sexual Orientation*, Utah, 2009-2012



*MSM=Men Who Have Sex with Men

Chlamydia and Gonorrhea in Adolescents and Young Adults

In both Utah and the United States, adolescents 15 to 19 years of age and young adults 20 to 24 years of age have higher incidences of chlamydia and gonorrhea.⁸ In 2012, persons 15 to 24 years of age represented 16% of Utah's population; yet, this population accounted for 66% of the reported chlamydia cases and 36% of gonorrhea cases. The increased rate of sexually transmitted diseases (STDs) can be attributed to increased risky sexual behavior among adolescents and young adults, anatomical vulnerabilities increasing transmission rates, and increased screening among this age group.

Chlamydia

Chlamydia trachomatis infection rates steadily increased in persons 15-19 and 20-24 years of age from 2003 to 2012. During this 10-year period, the chlamydia rate increased 106% in males 15-19 years, 92% in males 20-24 years, 59% in females 15-19 years, and 89% in females 20-24 years. Throughout this period, the chlamydia rate in females aged 15-19 was about four times that in males of the same age; and in persons aged 20-24 years, the female rate was twice that of males.

In 2012, the distribution of morbidity in adolescents and young adults varied by age. Adolescents 15 and 16 years of age had the lowest rates of chlamydia in both males and females. The rates increased with age and peaked in females at ages 18 to 21 years (rates above 2,000 cases per 100,000 population) and in males at ages 20 to 22 years (highest rate of 891.7 in 20-year-olds and rates above 744 in 21- and 22-year-olds). The rate of chlamydia in females was at least two times that of males; and the rate differences generally decreased with age, from females having rates six times higher than males in 15- and 16-year-olds to two times higher in 22- to 24-year-olds.

⁸ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2011*. Atlanta: U.S. Department of Health and Human Services; 2012.

Gonorrhea

From 2003 to 2012, gonorrhea rates in persons 15-19 and 20-24 years of age increased annually until it peaked in 2006 for 20- to 24-year-olds (133.1 cases per 100,000 population) and in 2007 for 15- to 19-year-olds (69.7). Since then, both age groups had a general declining trend until 2012, when rates in both age groups increased. From 2011 to 2012, rates in males 15-19 years and 20-24 years increased 75% and 21%, respectively. During this timeframe, the rate in females 15-19 year of age stayed about the same while the rate in females 20-24 years of age increased 112%.

In adolescents, females 15-19 years of age had gonorrhea rates at least twice that of males in this age group from 2003-2007. The rates between the sexes in this age group were similar in 2008 and 2010; females had rates that were 74% of male rates in 2009 and 2011; and females had a rate that was 42% of the male rate in 2012. In young adults, the rates between males and females were similar from 2003 to 2005. Starting in 2006, the female rate in this age group began to decline, from being 75% of the male rate in 2006 to 34% in 2011. However, in 2012, the gonorrhea rate of females 20-24 years of age doubled as compared to 2011, rendering the female rate 60% of the male rate.

In 2012, the distribution of morbidity in adolescents and young adults varied by age. Adolescent males 15-17 years of age and females aged 15, 17, and 19 years had the lowest gonorrhea rates. With the exception of 21-year-olds, rates in males were higher than in females of the same age in persons 18 years or older. The highest rate in males was among adolescents 19 years of age (105.5 cases per 100,000 persons) and the highest rate in females among young women 21 years of age (58.2 cases per 100,000 population).

Figure 19. Chlamydia Rates by Age Group and Sex in Adolescents and Young Adults, Utah, 2003-2012

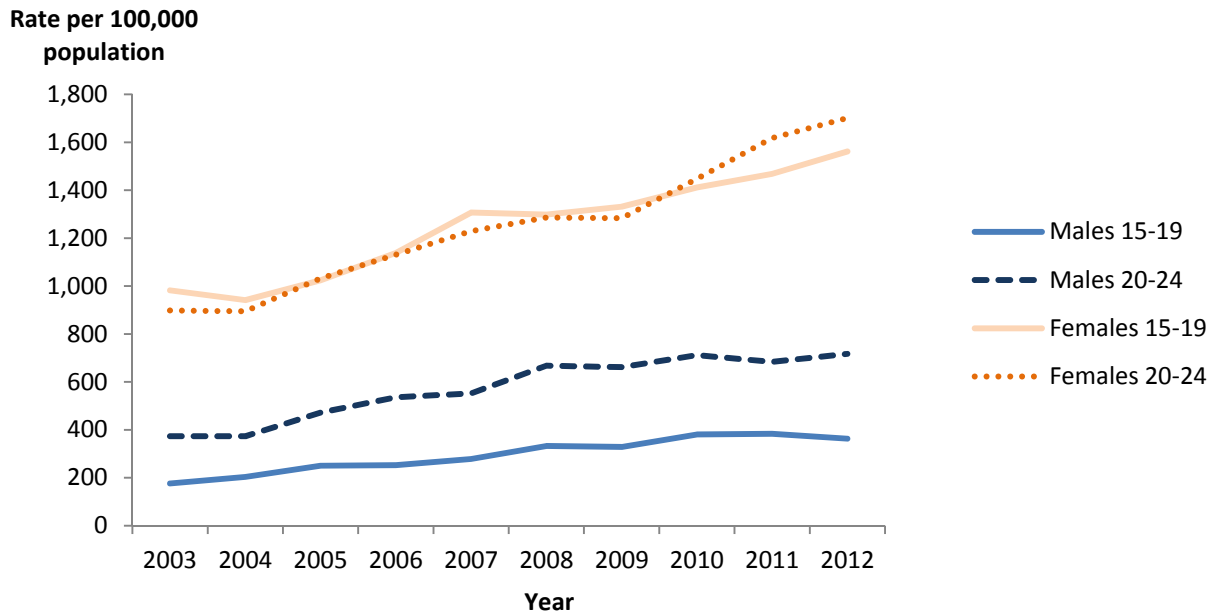


Figure 20. Chlamydia Rates by Age and Sex in Adolescents and Young Adults, Utah, 2012

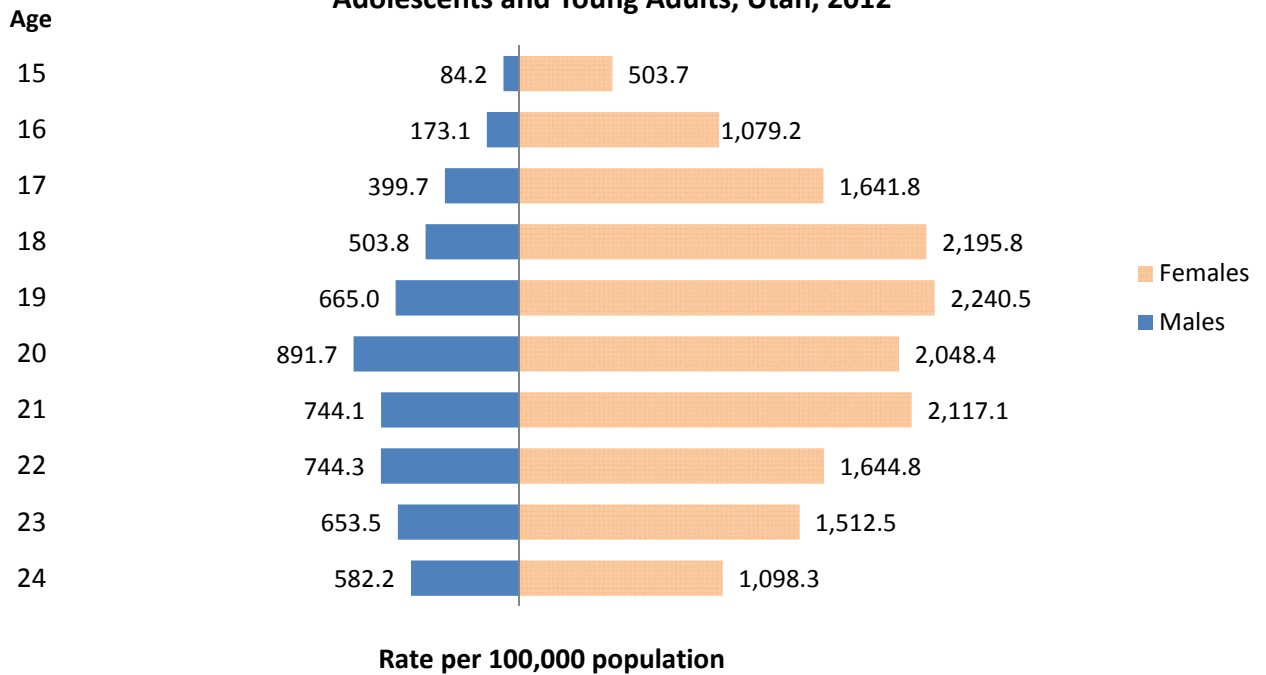


Figure 21. Gonorrhea Rates by Age Group and Sex in Adolescents and Young Adults, Utah, 2003-2012

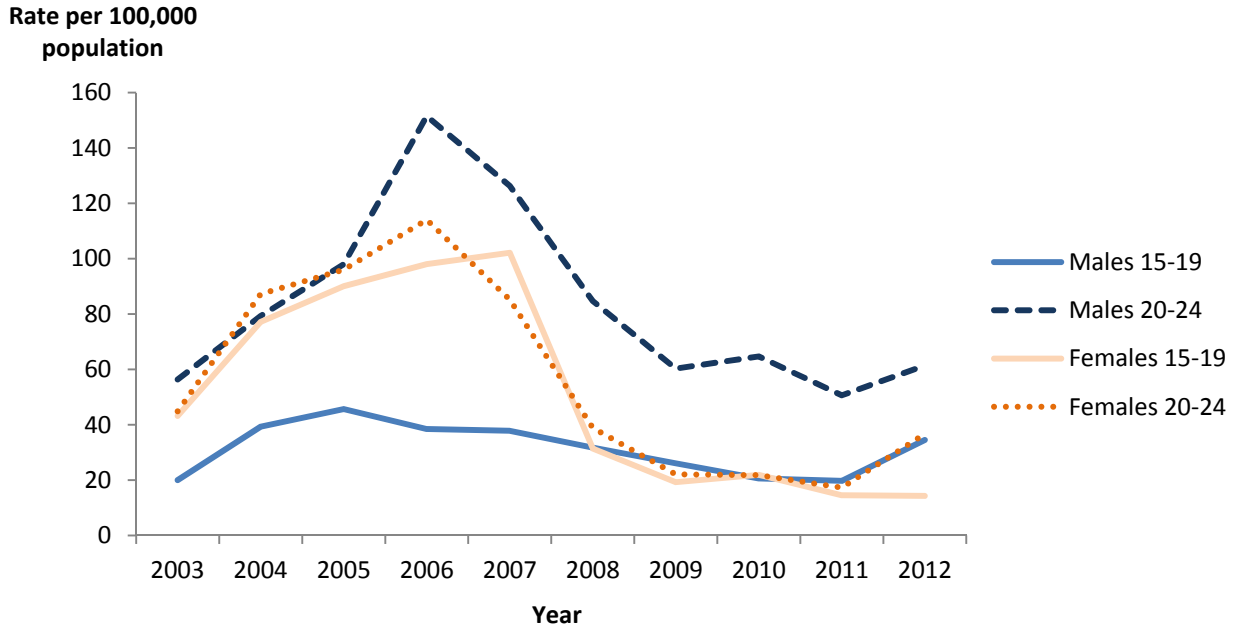
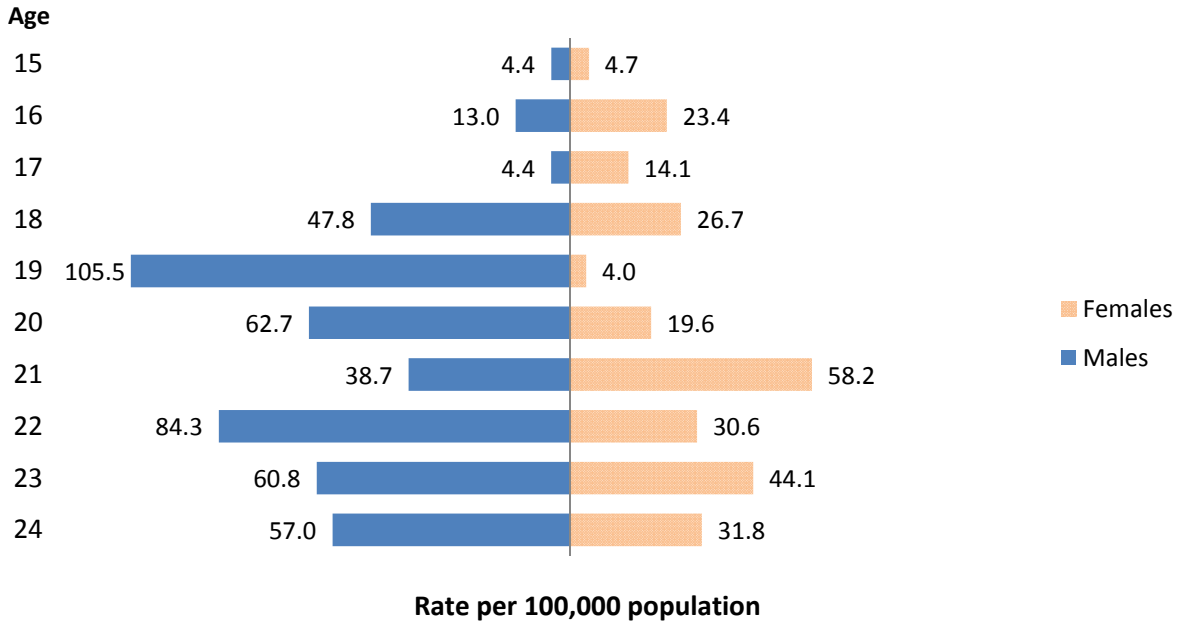


Figure 22. Gonorrhea Rates by Age and Sex in Adolescents and Young Adults, Utah, 2012



TABLES

Table 1. Cases of Sexually Transmitted Diseases and Rates per 100,000 Population, Utah and United States (U.S.), 2003-2012

Year	Chlamydia			Gonorrhea			Primary and Secondary Syphilis		
	Utah		U.S.	Utah		U.S.	Utah		U.S.
	Cases	Rate	Rate	Cases	Rate	Rate	Cases	Rate	Rate
2003	3,894	165.0	301.7	412	17.5	115.2	14	0.6	2.5
2004	3,858	160.6	316.5	602	25.1	112.4	13	0.5	2.7
2005	4,602	187.2	329.4	727	29.6	114.6	10	0.4	2.9
2006	5,090	201.5	344.3	888	35.2	119.7	21	0.8	3.3
2007	5,720	220.2	367.5	821	31.6	118.0	20	0.8	3.8
2008	6,019	226.0	398.1	477	17.9	110.7	25	0.9	4.4
2009	6,151	225.9	405.3	341	12.5	98.1	33	1.2	4.6
2010	6,694	241.2	423.6	310	11.2	100.2	65	2.3	4.5
2011	7,080	251.3	457.6	277	9.8	104.2	14	0.5	4.5
2012*	7,616	266.7	-	480	16.8	-	42	1.5	-

*2012 U.S. rates not yet published.

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Utah Cases - Bureau of Epidemiology, Utah Department of Health; U.S. Rates – Centers for Disease Control and Prevention (CDC); Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Table 2. Chlamydia Cases and Rates by Age Group and Sex, Utah, 2003-2012

Sex (years)	Age Group	Cases										Rates per 100,000 Population									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
M A L E	<1	4	1	1	4	2	7	3	2	3	5	16.4	4.0	4.0	15.2	7.3	26.3	11.0	7.4	11.5	18.8
	1 to 9	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10 to 14	7	4	3	2	8	7	5	6	5	5	6.9	3.9	2.9	1.9	7.4	6.3	4.4	5.1	4.2	4.1
	15 to 19	185	212	263	269	302	366	365	425	427	410	176.3	203.3	250.5	252.5	278.5	332.3	328.6	380.3	382.9	362.8
	20 to 24	463	456	578	644	651	772	757	825	824	876	373.0	372.9	472.1	536.0	551.8	667.4	661.7	711.7	684.0	717.2
	25 to 29	246	250	354	382	429	445	516	491	515	547	258.3	252.0	351.5	352.6	376.9	381.4	441.4	412.4	453.0	474.6
	30 to 34	97	119	165	160	212	210	251	237	250	320	112.5	132.7	176.6	170.4	216.0	203.6	230.0	212.6	218.6	276.1
	35 to 39	40	47	84	87	100	116	117	113	114	148	54.5	63.9	110.3	109.0	120.1	135.2	131.5	124.9	122.5	156.9
	40 to 44	40	25	45	39	46	50	50	59	70	71	52.1	32.7	59.3	51.8	60.8	66.0	65.2	74.9	85.2	85.3
	45 to 49	12	14	13	26	23	36	34	22	35	49	16.6	19.1	17.4	34.1	29.9	46.2	43.6	28.5	46.0	63.5
	50 to 54	5	3	9	12	12	20	21	21	14	26	8.2	4.7	13.7	17.6	16.8	27.3	28.2	27.7	18.2	33.4
	55 to 59	2	1	2	8	3	6	5	9	1	8	4.2	2.0	3.7	13.9	5.1	9.8	7.8	13.6	1.5	11.5
	60 to 64	1	0	0	1	1	1	3	4	3	2	2.8	0.0	0.0	2.4	2.2	2.1	6.0	7.5	5.3	3.5
65+	0	3	1	2	5	1	1	0	1	0	0.0	3.3	1.1	2.0	4.9	0.9	0.9	0.0	0.8	0.0	
Unknown	6	0	0	1	0	2	0	3	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Male Total		1,108	1,135	1,518	1,637	1,794	2,039	2,128	2,217	2,262	2,467	93.6	94.2	123.1	129.2	137.5	152.5	155.6	159.0	159.8	171.9
F E M A L E	<1	8	0	1	4	3	10	2	1	0	1	34.5	0.0	4.2	16.4	11.8	39.7	7.7	3.9	0.0	4.0
	1 to 9	2	0	2	2	2	2	1	1	0	1	1.1	0.0	1.0	1.0	1.0	0.9	0.5	0.4	0.0	0.4
	10 to 14	49	70	47	45	49	40	48	43	48	55	51.2	73.3	48.6	45.6	48.3	38.4	44.4	38.7	42.1	47.6
	15 to 19	1,023	976	1,069	1,196	1,395	1,405	1,451	1,546	1,618	1,744	982.5	941.4	1,024.1	1,138.4	1,307.1	1,298.3	1,331.8	1,411.9	1,468.3	1,561.6
	20 to 24	1,080	1,066	1,215	1,309	1,399	1,456	1,452	1,660	1,869	1,993	897.8	894.4	1,032.4	1,131.1	1,229.1	1,286.1	1,283.4	1,447.9	1,617.7	1,701.3
	25 to 29	397	377	454	575	672	639	648	715	740	710	427.5	391.4	454.5	545.2	612.7	573.9	579.1	640.9	677.9	641.5
	30 to 34	141	152	182	188	238	248	243	297	297	376	175.8	184.0	211.8	213.6	257.0	252.5	236.5	279.1	271.4	339.0
	35 to 39	52	47	74	80	97	106	102	122	145	155	74.3	66.8	101.4	104.5	121.1	128.0	119.3	139.9	161.9	170.7
	40 to 44	18	21	20	31	45	44	49	62	62	66	23.8	27.8	26.8	42.0	61.4	60.2	66.4	81.9	78.7	82.6
	45 to 49	2	11	11	11	14	18	14	20	29	22	2.8	15.0	14.7	14.4	18.2	23.1	17.9	25.9	38.4	28.8
	50 to 54	2	1	8	6	9	5	8	8	7	16	3.3	1.6	12.0	8.6	12.5	6.7	10.6	10.4	9.0	20.2
	55 to 59	0	1	1	0	3	1	2	2	3	6	0.0	2.0	1.8	0.0	5.0	1.6	3.1	2.9	4.3	8.4
	60 to 64	1	0	0	2	0	1	0	0	0	2	2.7	0.0	0.0	4.6	0.0	2.0	0.0	0.0	0.0	3.4
65+	0	1	0	0	0	4	1	0	0	2	0.0	0.9	0.0	0.0	0.0	3.1	0.7	0.0	0.0	1.4	
Unknown	11	0	0	4	0	1	2	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Female Total		2,786	2,723	3,084	3,453	3,926	3,980	4,023	4,477	4,818	5,149	236.9	227.5	251.8	274.5	303.7	300.2	296.8	324.2	343.7	362.4
T O T A L	<1	12	1	2	8	5	17	5	3	3	6	25.3	2.1	4.1	15.8	9.5	32.8	9.4	5.7	5.9	11.6
	1 to 9	2	0	2	2	2	2	1	1	0	1	0.5	0.0	0.5	0.5	0.5	0.2	0.2	0.2	0.0	0.2
	10 to 14	56	74	50	47	57	47	53	49	53	60	28.4	37.5	25.0	23.1	27.2	21.9	23.8	21.5	22.6	25.3
	15 to 19	1,208	1,188	1,332	1,465	1,697	1,771	1,816	1,971	2,045	2,154	577.8	571.3	636.1	692.3	788.7	811.1	825.3	890.9	922.4	958.6
	20 to 24	1,543	1,522	1,793	1,953	2,050	2,228	2,209	2,485	2,693	2,869	631.2	630.3	746.8	828.0	884.4	973.4	970.8	1,077.7	1,141.1	1,198.9
	25 to 29	643	627	808	957	1,101	1,084	1,164	1,206	1,255	1,257	341.9	320.7	402.8	447.6	492.6	475.4	508.7	522.9	563.2	556.4
	30 to 34	238	271	347	348	450	458	494	534	547	696	143.0	157.3	193.5	191.3	235.9	227.5	233.2	245.1	244.5	306.8
	35 to 39	92	94	158	167	197	222	219	235	259	303	64.2	65.3	105.9	106.8	120.6	131.6	125.5	132.2	141.8	163.7
	40 to 44	58	46	65	70	91	94	99	121	132	137	38.1	30.3	43.2	47.0	61.1	63.2	65.8	78.3	82.0	84.0
	45 to 49	14	25	24	37	37	54	48	42	64	71	9.7	17.1	16.1	24.2	24.0	34.7	30.8	27.2	42.2	46.2
	50 to 54	7	4	17	18	21	25	29	29	21	42	5.7	3.1	12.8	13.1	14.6	17.0	19.3	19.0	13.6	26.8
	55 to 59	2	2	3	8	6	7	7	11	4	14	2.1	2.0	2.8	6.9	5.0	5.6	5.4	8.2	2.9	10.0
	60 to 64	2	0	0	3	1	2	3	4	3	4	2.8	0.0	0.0	3.5	1.1	2.1	2.9	3.7	2.6	3.4
65+	0	4	1	2	5	5	2	0	1	2	0.0	1.9	0.5	0.9	2.2	2.1	0.8	0.0	0.4	0.8	
Unknown	17	0	0	5	0	3	2	3	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Cases		3,894	3,858	4,602	5,090	5,720	6,019	6,151	6,694	7,080	7,616	165.0	160.6	187.2	201.5	220.2	226.0	225.9	241.2	251.3	266.7

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Table 3. Chlamydia Cases and Rates by Local Health District, Utah, 2003-2012

Local Health District	Cases										Rates per 100,000 Population									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bear River	96	118	156	190	233	190	176	238	277	296	66.8	81.1	105.7	127.3	152.3	120.6	108.7	143.6	165.6	176.2
Central	55	56	61	52	54	77	59	86	74	76	81.1	81.9	88.6	74.2	75.3	104.1	78.6	113.4	97.1	100.2
Davis	425	430	465	535	540	567	751	702	748	865	166.3	164.0	172.7	191.9	187.3	191.7	248.7	228.1	239.9	273.9
Salt Lake	2149	2091	2524	2824	3238	3415	3274	3524	3634	3924	232.4	223.8	266.3	292.1	329.2	341.7	322.0	341.1	346.4	368.9
Southeastern	74	70	96	89	91	76	101	105	127	158	140.1	132.7	182.3	168.0	168.6	138.8	181.7	185.6	225.1	279.7
Southwest	140	153	193	214	263	274	247	337	346	355	89.1	93.1	109.8	114.8	135.7	138.1	122.6	165.4	166.8	168.7
Summit	34	45	60	36	64	62	48	65	54	63	105.1	135.3	175.8	105.1	184.7	176.0	133.9	177.9	143.6	165.8
Tooele	95	85	74	66	88	83	109	124	132	118	203.6	177.5	150.2	128.2	163.5	148.5	190.5	211.9	222.5	197.1
TriCounty	58	52	59	51	46	71	62	85	88	89	136.5	120.8	133.8	112.2	96.8	143.7	118.1	163.0	165.4	162.2
Utah	265	259	405	420	464	518	623	719	791	803	65.2	62.2	94.0	93.7	98.8	106.2	123.4	138.3	149.1	148.6
Wasatch	20	11	12	24	32	29	39	29	34	42	112.6	59.9	61.8	115.6	149.4	131.1	170.4	122.4	139.2	166.2
Weber-Morgan	483	488	497	589	607	657	662	680	775	827	226.9	226.4	227.8	266.5	268.2	282.2	278.8	281.3	317.5	335.5
Unknown	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Total	3,894	3,858	4,602	5,090	5,720	6,019	6,151	6,694	7,080	7,616	165.0	160.6	187.2	201.5	220.2	226.0	225.9	241.2	251.3	266.7

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Table 4. Chlamydia Cases and Rates by Race/Ethnicity, Utah, 2003-2012

Race/Ethnicity	Cases										Rates per 100,000 Population									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
AI/AK Native*	87	90	143	111	104	105	111	105	168	190	332.0	347.2	548.6	421.4	387.0	389.4	407.8	384.1	599.0	668.4
Asian [#]	113	126	172	85	96	98	78	90	89	118	188.7	202.9	266.9	179.4	195.3	190.9	145.8	161.8	153.4	200.7
Pacific Islander [#]				80	111	125	130	136	139	142				400.3	524.5	558.7	555.7	557.9	561.1	565.6
Black	112	109	165	174	187	190	230	237	283	301	593.4	554.2	797.3	783.3	794.4	775.4	888.5	895.7	1,014.6	1,064.7
Hispanic [†]	921	969	1,174	1,293	1,405	1,488	1,647	1,646	1,784	1,969	378.9	380.2	435.7	449.9	453.7	449.9	473.8	455.2	478.4	520.7
White	2,012	2,558	2,948	3,326	3,812	4,007	3,838	4,387	4,566	4,868	101.5	127.5	144.3	159.5	179.2	185.1	174.4	196.5	202.4	213.0
Multiple [§]	N/A	N/A	N/A	8	4	5	6	8	10	22	N/A	N/A	N/A	21.7	10.1	11.9	13.4	16.9	20.0	43.3
Other/Unknown	649	6	0	13	1	1	111	85	41	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Total	3,894	3,858	4,602	5,090	5,720	6,019	6,151	6,694	7,080	7,616	165.0	160.6	187.2	201.5	220.2	226.0	225.9	241.2	251.3	266.7

*AI/AK Native=American Indian/Alaska Native.

[#] The Asian and Pacific Islander race categories were combined into one race category prior to 2006.

[†] Includes persons of Hispanic ethnicity regardless of race.

[§] The Multiple race category was not in use prior to 2006.

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - U.S. Bureau of the Census.

Table 5. Chlamydia Test Results and Percent Positivity by Sex, Utah Public Health Laboratories, Utah, 2005-2012

Year*	Female			Male			Total**		
	Positive Results	Total Results	Percent Positive	Positive Results	Total Results	Percent Positive	Positive Results	Total Results	Percent Positive
2005	989	11,312	8.74	831	5,751	14.45	2,234	18,991	11.76
2006	1,084	12,696	8.54	916	7,074	12.95	2,356	21,489	10.96
2007	1,326	14,209	9.33	1,029	9,136	11.26	2,563	25,125	10.20
2008	1,247	13,788	9.04	1,188	10,463	11.35	2,577	25,647	10.05
2009	1,251	14,819	8.44	1,320	11,525	11.45	2,621	26,846	9.76
2010	1,453	16,951	8.57	1,326	11,391	11.64	2,821	28,756	9.81
2011	1,723	18,704	9.21	1,245	11,690	10.65	3,011	30,711	9.80
2012	1,803	19,468	9.26	1,443	12,900	11.19	3,278	32,708	10.02

* Results reported by calendar year.

** Totals include results where the gender is unknown.

Source: Utah Public Health Laboratories , Utah Department of Health.

Table 6. Gonorrhea Cases and Rates by Age Group and Sex, Utah, 2003-2012

Sex	Age Group (years)	Cases										Rates per 100,000 Population									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
M A L E	<1	2	0	0	0	0	1	0	0	0	0	8.2	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0
	1 to 9	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10 to 14	1	0	1	0	0	1	1	0	1	0	1.0	0.0	1.0	0.0	0.0	0.9	0.9	0.0	0.8	0.0
	15 to 19	21	41	48	41	41	35	29	23	22	39	20.0	39.3	45.7	38.5	37.8	31.8	26.1	20.6	19.7	34.5
	20 to 24	70	97	120	182	149	98	69	75	61	75	56.4	79.3	98.0	151.5	126.3	84.7	60.3	64.7	50.6	61.4
	25 to 29	62	85	88	121	103	78	88	49	54	65	65.1	85.7	87.4	111.7	90.5	66.9	75.3	41.2	47.5	56.4
	30 to 34	34	34	54	53	54	43	29	34	33	60	39.4	37.9	57.8	56.4	55.0	41.7	26.6	30.5	28.9	51.8
	35 to 39	22	43	37	45	53	29	17	24	19	34	30.0	58.4	48.6	56.4	63.7	33.8	19.1	26.5	20.4	36.0
	40 to 44	15	15	25	29	31	19	12	17	10	27	19.6	19.6	32.9	38.5	41.0	25.1	15.6	21.6	12.2	32.4
	45 to 49	10	13	18	24	21	17	9	7	9	26	13.8	17.7	24.1	31.5	27.3	21.8	11.6	9.1	11.8	33.7
	50 to 54	5	7	15	14	15	11	14	3	1	12	8.2	11.1	22.8	20.5	21.0	15.0	18.8	4.0	1.3	15.4
	55 to 59	2	0	1	8	5	4	2	2	1	10	4.2	0.0	1.9	13.9	8.5	6.5	3.1	3.0	1.5	14.4
	60 to 64	1	0	1	0	1	1	1	1	0	0	2.8	0.0	2.5	0.0	2.2	2.1	2.0	1.9	0.0	0.0
	65+	0	1	0	2	2	0	0	0	0	0	0.0	1.1	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0
Unknown	14	0	0	0	0	3	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Male Total		259	336	408	519	475	340	271	235	211	348	21.9	27.9	33.1	40.9	36.4	25.4	19.8	16.9	14.9	24.3
F E M A L E	<1	0	0	0	0	0	1	0	0	0	0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
	1 to 9	1	1	0	3	0	0	0	0	0	0	0.5	0.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
	10 to 14	4	5	8	7	2	3	2	1	1	3	4.2	5.2	8.3	7.1	2.0	2.9	1.8	0.9	0.9	2.6
	15 to 19	45	80	94	103	109	34	21	24	16	16	43.2	77.2	90.1	98.0	102.1	31.4	19.3	21.9	14.5	14.3
	20 to 24	54	104	113	132	97	44	25	25	20	43	44.9	87.3	96.0	114.1	85.2	38.9	22.1	21.8	17.3	36.7
	25 to 29	28	39	62	75	73	28	15	15	15	23	30.2	40.5	62.1	71.1	66.6	25.1	13.4	13.4	13.7	20.8
	30 to 34	8	19	20	20	34	13	2	7	6	24	10.0	23.0	23.3	22.7	36.7	13.2	1.9	6.6	5.5	21.6
	35 to 39	9	6	10	18	14	8	1	2	6	11	12.9	8.5	13.7	23.5	17.5	9.7	1.2	2.3	6.7	12.1
	40 to 44	1	9	7	10	9	0	2	1	1	4	1.3	11.9	9.4	13.6	12.3	0.0	2.7	1.3	1.3	5.0
	45 to 49	0	1	1	1	4	4	1	0	1	4	0.0	1.4	1.3	1.3	5.2	5.1	1.3	0.0	1.3	5.2
	50 to 54	0	2	2	0	3	0	0	0	0	4	0.0	3.1	3.0	0.0	4.2	0.0	0.0	0.0	0.0	5.1
	55 to 59	0	0	2	0	0	1	1	0	0	0	0.0	0.0	3.7	0.0	0.0	1.6	1.5	0.0	0.0	0.0
	60 to 64	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	65+	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown	3	0	0	0	1	1	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Female Total		153	266	319	369	346	137	70	75	66	132	13.0	22.2	26.0	29.3	26.8	10.3	5.2	5.4	4.7	9.3
T O T A L	<1	2	0	0	0	0	2	0	0	0	0	4.2	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0
	1 to 9	1	1	0	3	0	0	0	0	0	0	0.3	0.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
	10 to 14	5	5	9	7	2	4	3	1	2	3	2.5	2.5	4.5	3.4	1.0	1.9	1.3	0.4	0.9	1.3
	15 to 19	66	121	142	144	150	69	50	47	38	55	31.6	58.2	67.8	68.1	69.7	31.6	22.7	21.2	17.1	24.5
	20 to 24	124	201	233	314	246	142	94	100	81	118	50.7	83.2	97.0	133.1	106.1	62.0	41.3	43.4	34.3	49.3
	25 to 29	90	124	150	196	176	106	103	64	69	88	47.8	63.4	74.8	91.7	78.7	46.5	45.0	27.8	31.0	39.0
	30 to 34	42	53	74	73	88	56	31	41	39	84	25.2	30.8	41.3	40.1	46.1	27.8	14.6	18.8	17.4	37.0
	35 to 39	31	49	47	63	67	37	18	26	25	45	21.6	34.0	31.5	40.3	41.0	21.9	10.3	14.6	13.7	24.3
	40 to 44	16	24	32	39	40	19	14	18	11	31	10.5	15.8	21.3	26.2	26.9	12.8	9.3	11.7	6.8	19.0
	45 to 49	10	14	19	25	25	21	10	7	10	30	6.9	9.6	12.7	16.4	16.2	13.5	6.4	4.5	6.6	19.5
	50 to 54	5	9	17	14	18	11	14	3	1	16	4.1	7.1	12.8	10.2	12.5	7.5	9.3	2.0	0.6	10.2
	55 to 59	2	0	3	8	5	5	3	2	1	10	2.1	0.0	2.8	6.9	4.2	4.0	2.3	1.5	0.7	7.1
	60 to 64	1	0	1	0	1	1	1	1	0	0	1.4	0.0	1.2	0.0	1.1	1.0	1.0	0.9	0.0	0.0
	65+	0	1	0	2	2	0	0	0	0	0	0.0	0.5	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0
Unknown	17	0	0	0	1	4	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Cases		412	602	727	888	821	477	341	310	277	480	17.5	25.1	29.6	35.2	31.6	17.9	12.5	11.2	9.8	16.8

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Table 7. Gonorrhea Cases and Rates by Local Health District, Utah, 2003-2012

Local Health District	Cases										Rates per 100,000 Population									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bear River	14	6	13	26	12	3	6	7	3	8	9.7	4.1	8.8	17.4	7.8	1.9	3.7	4.2	1.8	4.8
Central	3	2	15	8	5	0	0	3	1	3	4.4	2.9	21.8	11.4	7.0	0.0	0.0	4.0	1.3	4.0
Davis	42	45	62	58	54	24	36	38	18	41	16.4	17.2	23.0	20.8	18.7	8.1	11.9	12.3	5.8	13.0
Salt Lake	269	363	451	612	552	334	241	196	196	340	29.1	38.9	47.6	63.3	56.1	33.4	23.7	19.0	18.7	32.0
Southeastern	14	9	6	11	5	2	5	6	7	5	26.5	17.1	11.4	20.8	9.3	3.7	9.0	10.6	12.4	8.9
Southwest	7	26	27	17	15	14	12	6	10	14	4.5	15.8	15.4	9.1	7.7	7.1	6.0	2.9	4.8	6.7
Summit	3	4	3	6	6	4	2	2	2	3	9.3	12.0	8.8	17.5	17.3	11.4	5.6	5.5	5.3	7.9
Tooele	5	7	7	10	14	10	1	6	1	3	10.7	14.6	14.2	19.4	26.0	17.9	1.7	10.3	1.7	5.0
TriCounty	1	2	4	10	1	2	0	0	2	4	2.4	4.6	9.1	22.0	2.1	4.0	0.0	0.0	3.8	7.3
Utah	17	42	53	45	34	13	16	24	20	17	4.2	10.1	12.3	10.0	7.2	2.7	3.2	4.6	3.8	3.1
Wasatch	2	1	3	2	1	0	0	0	0	0	11.3	5.4	15.5	9.6	4.7	0.0	0.0	0.0	0.0	0.0
Weber-Morgan	35	95	83	83	122	71	22	22	17	42	16.4	44.1	38.1	37.6	53.9	30.5	9.3	9.1	7.0	17.0
Unknown	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Total	412	602	727	888	821	477	341	310	277	480	17.5	25.1	29.6	35.2	31.6	17.9	12.5	11.2	9.8	16.8

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Table 8. Gonorrhea Cases and Rates by Race/Ethnicity, Utah, 2003-2012

Race/Ethnicity	Cases										Rates per 100,000 Population									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
AI/AK Native*	6	12	15	18	13	5	2	5	5	14	22.9	46.3	57.5	68.3	48.4	18.5	7.3	18.3	17.8	49.2
Asian [#]				12	8	10	4	2	2	3				25.3	16.3	19.5	7.5	3.6	3.4	5.1
Pacific Islander [#]	8	14	19	10	13	2	3	3	3	5	13.4	22.5	29.5	50.0	61.4	8.9	12.8	12.3	12.1	19.9
Black	12	33	63	53	79	41	26	9	19	57	63.6	167.8	304.4	238.6	335.6	167.3	100.4	34.0	68.1	201.6
Hispanic [†]	67	120	174	179	182	88	60	33	40	83	27.6	47.1	64.6	62.3	58.8	26.6	17.3	9.1	10.7	22.0
White	246	423	456	614	524	331	236	253	207	314	12.4	21.1	22.3	29.4	24.6	15.3	10.7	11.3	9.2	13.7
Multiple [§]	N/A	N/A	N/A	1	1	0	1	0	0	1	N/A	N/A	N/A	2.7	2.5	0.0	2.2	0.0	0.0	2.0
Other/Unknown	73	0	0	1	1	0	9	5	1	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Total	412	602	727	888	821	477	341	310	277	480	17.5	25.1	29.6	35.2	31.6	17.9	12.5	11.2	9.8	16.8

*AI/AK Native=American Indian/Alaska Native.

[#] The Asian and Pacific Islander race categories were combined into one race category prior to 2006.

[†] Includes persons of Hispanic ethnicity regardless of race.

[§] The Multiple race category was not in use prior to 2006.

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - U.S. Bureau of the Census.

Table 9. Gonorrhea Cases and Percent Among Males by Sexual Orientation, Utah, 2009-2012

Year	MSM*		Not MSM*		Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases
2009	181	66.8%	42	15.5%	48	17.7%	271
2010	155	66.0%	39	16.6%	41	17.4%	235
2011	130	61.6%	49	23.2%	32	15.2%	211
2012	180	51.9%	88	25.4%	79	22.8%	347

*MSM=Men Who Have Sex with Men

Note: Cases were classified by Morbidity and Mortality Weekly Report (MMWR) year.

Source: Bureau of Epidemiology, Utah Department of Health.

Table 10. Gonorrhea Test Results and Percent Positivity by Sex, Utah Public Health Laboratories, Utah, 2005-2012

Year*	Female			Male			Total**		
	Positive Results	Total Results	Percent Positive	Positive Results	Total Results	Percent Positive	Positive Results	Total Results	Percent Positive
2005	106	11,325	0.94	154	5,758	2.67	469	19,226	2.44
2006	128	12,700	1.01	232	7,074	3.28	547	21,694	2.52
2007	135	14,212	0.95	263	9,136	2.88	495	25,161	1.97
2008	72	13,788	0.52	224	10,463	2.14	337	25,647	1.31
2009	34	14,819	0.23	247	11,525	2.14	296	26,846	1.10
2010	26	16,951	0.15	172	11,392	1.51	211	28,757	0.73
2011	24	18,704	0.13	166	11,690	1.42	208	30,711	0.68
2012	62	19,468	0.32	255	12,645	1.98	328	32,708	1.00

* Results reported by calendar year.

** Totals include results where the gender is unknown.

Source: Utah Public Health Laboratories, Utah Department of Health.

Table 11. Primary and Secondary Syphilis Cases and Rates by Age Group and Sex, Utah, 2003-2012

Sex	Age Group (years)	Cases										Rates per 100,000 Population									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
M A L E	<1	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1 to 9	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10 to 14	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15 to 19	0	0	0	0	0	0	1	1	0	0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.0	0.0	0.0
	20 to 24	1	2	0	2	4	3	3	11	2	6	0.8	1.6	0.0	1.7	3.4	2.6	2.6	9.5	1.7	4.9
	25 to 29	0	1	4	3	4	5	9	11	1	10	0.0	1.0	4.0	2.8	3.5	4.3	7.7	9.2	0.9	8.7
	30 to 34	2	2	1	5	5	2	11	8	3	9	2.3	2.2	1.1	5.3	5.1	1.9	10.1	7.2	2.6	7.8
	35 to 39	3	1	1	1	2	1	5	11	3	5	4.1	1.4	1.3	1.3	2.4	1.2	5.6	12.2	3.2	5.3
	40 to 44	2	2	1	3	1	3	1	9	0	3	2.6	2.6	1.3	4.0	1.3	4.0	1.3	11.4	0.0	3.6
	45 to 49	2	0	1	3	2	2	1	4	2	5	2.8	0.0	1.3	3.9	2.6	2.6	1.3	5.2	2.6	6.5
	50 to 54	0	1	0	1	1	4	1	2	1	1	0.0	1.6	0.0	1.5	1.4	5.5	1.3	2.6	1.3	1.3
	55 to 59	0	1	1	0	0	2	1	4	1	3	0.0	2.0	1.9	0.0	0.0	3.3	1.6	6.0	1.5	4.3
	60 to 64	0	0	0	0	0	1	0	2	1	0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	3.8	1.8	0.0
	65+	0	0	0	0	1	0	0	1	0	0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.9	0.0	0.0
Unknown	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Male Total	10	10	9	18	20	24	33	63	14	42	0.8	0.8	0.7	1.4	1.5	1.8	2.4	4.5	1.0	2.9	
F E M A L E	<1	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1 to 9	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	10 to 14	1	0	0	0	0	0	0	0	0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	15 to 19	0	1	1	1	0	0	0	1	0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.9	0.0	0.0	
	20 to 24	0	1	0	0	0	0	0	1	0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	
	25 to 29	1	1	0	0	0	1	0	0	0	1.1	1.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	
	30 to 34	0	0	0	1	0	0	0	0	0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	
	35 to 39	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	40 to 44	0	0	0	1	0	0	0	0	0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	
	45 to 49	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	50 to 54	2	0	0	0	0	0	0	0	0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	55 to 59	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	60 to 64	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	65+	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Unknown	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Female Total	4	3	1	3	0	1	0	2	0	0	0.3	0.3	0.1	0.2	0.0	0.1	0.0	0.1	0.0	0.0	
T O T A L	<1	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1 to 9	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	10 to 14	1	0	0	0	0	0	0	0	0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	15 to 19	0	1	1	1	0	1	1	1	0	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.0	
	20 to 24	1	3	0	2	4	3	3	12	2	6	0.4	1.2	0.0	0.8	1.7	1.3	1.3	5.2	0.8	2.5
	25 to 29	1	2	4	3	4	6	9	11	1	10	0.5	1.0	2.0	1.4	1.8	2.6	3.9	4.8	0.4	4.4
	30 to 34	2	2	1	6	5	2	11	8	3	9	1.2	1.2	0.6	3.3	2.6	1.0	5.2	3.7	1.3	4.0
	35 to 39	3	1	1	1	2	1	5	11	3	5	2.1	0.7	0.7	0.6	1.2	0.6	2.9	6.2	1.6	2.7
	40 to 44	2	2	1	4	1	3	1	9	0	3	1.3	1.3	0.7	2.7	0.7	2.0	0.7	5.8	0.0	1.8
	45 to 49	2	0	1	3	2	2	1	4	2	5	1.4	0.0	0.7	2.0	1.3	1.3	0.6	2.6	1.3	3.3
	50 to 54	2	1	0	1	1	4	1	2	1	1	1.6	0.8	0.0	0.7	0.7	2.7	0.7	1.3	0.6	0.6
	55 to 59	0	1	1	0	0	2	1	4	1	3	0.0	1.0	0.9	0.0	0.0	1.6	0.8	3.0	0.7	2.1
	60 to 64	0	0	0	0	0	1	0	2	1	0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.8	0.9	0.0
	65+	0	0	0	0	1	0	0	1	0	0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0
Unknown	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Cases	14	13	10	21	20	25	33	65	14	42	0.6	0.5	0.4	0.8	0.8	0.9	1.2	2.3	0.5	1.5	

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Table 12. Primary and Secondary Syphilis Cases and Rates by Local Health District, Utah, 2003-2012

Local Health District	Cases											Rates per 100,000 Population									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Bear River	2	1	0	0	0	0	0	0	0	2	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	
Central	0	0	0	0	0	0	0	1	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	
Davis	1	1	0	2	1	1	1	3	1	1	0.4	0.4	0.0	0.7	0.3	0.3	0.3	1.0	0.3	0.3	
Salt Lake	5	6	9	15	19	22	29	54	9	34	0.5	0.6	0.9	1.6	1.9	2.2	2.9	5.2	0.9	3.2	
Southeastern	4	2	0	0	0	0	0	0	0	0	7.6	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Southwest	1	2	0	0	0	0	0	2	1	1	0.6	1.2	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.5	
Summit	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tooele	0	0	0	0	0	1	0	0	0	0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	
TriCounty	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Utah	0	1	1	4	0	1	0	3	0	3	0.0	0.2	0.2	0.9	0.0	0.2	0.0	0.6	0.0	0.6	
Wasatch	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Weber-Morgan	1	0	0	0	0	0	3	2	3	1	0.5	0.0	0.0	0.0	0.0	0.0	1.3	0.8	1.2	0.4	
Unknown	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
State Total	14	13	10	21	20	25	33	65	14	42	0.6	0.5	0.4	0.8	0.8	0.9	1.2	2.3	0.5	1.5	

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Table 13. Primary and Secondary Syphilis Cases and Rates by Race/Ethnicity, Utah, 2003-2012

Race/Ethnicity	Cases											Rates per 100,000 Population									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
AI/AK Native*	4	1	0	0	0	2	0	0	1	1	15.3	3.9	0.0	0.0	0.0	7.4	0.0	0.0	3.6	3.5	
Asian [#]																					
Pacific Islander [#]	1	1	0	3	0	0	1	1	0	1	1.7	1.6	0.0	15.0	0.0	0.0	4.3	4.1	0.0	0.0	
Black	0	0	0	1	1	2	0	2	0	1	0.0	0.0	0.0	4.5	4.2	8.2	0.0	7.6	0.0	4.0	
Hispanic [†]	2	3	1	5	3	2	7	8	1	2	0.8	1.2	0.4	1.7	1.0	0.6	2.0	2.2	0.3	7.1	
White	6	8	9	12	16	19	25	54	12	36	0.3	0.4	0.4	0.6	0.8	0.9	1.1	2.4	0.5	1.6	
Multiple [§]	N/A	N/A	N/A	0	0	0	0	0	0	0	N/A	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other/Unknown	1	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
State Total	14	13	10	21	20	25	33	65	14	42	0.6	0.5	0.4	0.8	0.8	0.9	1.2	2.3	0.5	1.5	

*AI/AK Native=American Indian/Alaska Native.

[#] The Asian and Pacific Islander race categories were combined into one race category prior to 2006.

[†] Includes persons of Hispanic ethnicity regardless of race.

[§] The Multiple race category was not in use prior to 2006.

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - U.S. Bureau of the Census.

Table 14. Primary and Secondary Syphilis Cases and Percent Among Males by Sexual Orientation, Utah, 2009-2012

Year	MSM*		Not MSM*		Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases
2009	27	81.8%	1	3.0%	5	15.2%	33
2010	60	95.2%	0	0.0%	3	4.8%	63
2011	13	92.9%	0	0.0%	1	7.1%	14
2012	39	92.9%	2	4.8%	1	2.4%	42

*MSM=Men Who Have Sex with Men

Note: Cases were classified by Morbidity and Mortality Weekly Report (MMWR) year.

Source: Bureau of Epidemiology, Utah Department of Health.

Table 15. Chlamydia Cases and Rates per 100,000 Population by Age and Sex in Adolescents and Young Adults, Utah, 2012

Age	Males		Females		Total	
	Cases	Rates	Cases	Rates	Cases	Rates
15	19	84.2	108	503.7	127	288.6
16	40	173.1	231	1,079.2	271	608.9
17	90	399.7	349	1,641.8	439	1,002.9
18	116	503.8	493	2,195.8	609	1,339.1
19	145	665.0	563	2,240.5	708	1,508.5
20	185	891.7	523	2,048.4	708	1,529.9
21	173	744.1	509	2,117.1	682	1,442.1
22	203	744.3	376	1,644.8	579	1,154.9
23	172	653.5	343	1,512.5	515	1,051.1
24	143	582.2	242	1,098.3	385	826.2

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Table 16. Gonorrhea Cases and Rates per 100,000 Population by Age and Sex in Adolescents and Young Adults, Utah, 2012

Age	Males		Females		Total	
	Cases	Rates	Cases	Rates	Cases	Rates
15	1	4.4	1	4.7	2	4.5
16	3	13.0	5	23.4	8	18.0
17	1	4.4	3	14.1	4	9.1
18	11	47.8	6	26.7	17	37.4
19	23	105.5	1	4.0	24	51.1
20	13	62.7	5	19.6	18	38.9
21	9	38.7	14	58.2	23	48.6
22	23	84.3	7	30.6	30	59.8
23	16	60.8	10	44.1	26	53.1
24	14	57.0	7	31.8	21	45.1

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year.

Sources: Cases - Bureau of Epidemiology, Utah Department of Health; Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

Appendix - Utah's 12 Local Health Districts



Local Health Department	Counties in Service Area
Bear River Health Department	Box Elder, Cache, Rich
Central Utah Public Health Department	Juab, Millard, Piute, Sanpete, Sevier, Wayne
Davis County Health Department	Davis
Salt Lake Valley Health Department	Salt Lake
Southeastern Utah District Health Department	Carbon, Emery, Grand, San Juan
Southwest Utah Public Health Department	Beaver, Garfield, Iron, Kane, Washington
Summit County Health Department	Summit
Tooele County Health Department	Tooele
TriCounty Health Department	Daggett, Duchesne, Uintah
Utah County Health Department	Utah
Wasatch County Health Department	Wasatch
Weber-Morgan Health Department	Morgan, Weber