

Sexually transmitted infections in Utah: Surveillance report 2013–2022



Acknowledgements

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Sexually transmitted infection data for Utah are published by DHHS Office of Communicable Diseases. Please direct questions or comments to:

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Table of contents

Acknowledgments	2
Table of contents	3
List of figures	4
List of tables	5
Executive summary	7
Introduction	9
Technical notes	9
Impacts of COVID-19 pandemic1	10
Chlamydia1	11
Gonorrhea1	17
Syphilis	24
Congenital syphilis	34
Tables	35
Appendix5	53

List of figures

Chlamydia

Figure 1. Chlamydia rates, Utah and United States, 2013–2022	.11
Figure 2. Chlamydia rates by sex, Utah and United States, 2013–2022	.12
Figure 3. Chlamydia rates by age group and sex among persons aged >= 10 years, Utah, 2022	.13
Figure 4. Chlamydia rates by age groups and sex in adolescents and young adults, Utah, 2013–2022	.14
Figure 5. Chlamydia rates by age and sex in adolescents and young adults, Utah, 2022	
Figure 6. Chlamydia rates by local health district, Utah, 2022 Figure 7. Chlamydia rates by race/ethnicity, Utah, 2022	.15

Gonorrhea

Figure 8. Gonorrhea rates, Utah and United States, 2013–2022	17
Figure 9. Gonorrhea rates by sex, 2013–2022	18
Figure 10. Percentage of male gonorrhea cases by sexual orientation, 2022	19
Figure 11. Gonorrhea rates by age groups and sex among persons aged >= 10 years,	
Utah, 2022	20
Figure 12. Gonorrhea in adolescents and young adults, Utah, 2013–2022	21
Figure 13. Gonorrhea rates by local health district, Utah, 2022	22
Figure 14. Gonorrhea rates by race/ethnicity, Utah, 2022	23

Syphilis

Figure 15. Syphilis rates by stages, Utah, 2022	25
Figure 16. All stages of syphilis rates, Utah, 2018-2022	26
Figure 17. All stages of syphilis rates, Utah and U.S., 2013–2022	26
Figure 18. All stages of syphilis rates by local health district, Utah, 2022	27
Figure 19. All stages of syphilis rates by race/ethnicity, Utah, 2022	28
Figure 20. All stages of syphilis rates by sex, Utah, 2013–2022	29
Figure 21. All stages of syphilis rates by age groups, Utah, 2022	30
Figure 22. Percent of all stages of syphilis in males by sexual orientation,	
Utah, 2013–2022	31
Figure 23. All stages of syphilis in females of reproductive age, Utah, 2022	32

Congenital syphilis

Figure 24. Syphilis in females of reproductive age in comparison to conge	nital syphilis rates,
Utah, 2013-2022	
Figure 25. Map of congenital syphilis cases, Utah, 2022	

List of tables

le 1. Cases of sexually transmitted diseases and rates per 100,000 population, Utah and U.S., 2013–2022
le 2. Chlamydia cases and rates by age group and sex, Utah, 2013–2022
le 3. Chlamydia cases and rates by local health district, Utah, 2013–202237
le 4. Chlamydia cases and rates by race/ethnicity, Utah, 2013–2022
le 5. Chlamydia cases and rates per 100,000 population by age and sex in adolescents and young adults, Utah, 202238
le 6. Gonorrhea cases and rates by age groups and sex, Utah, 2013–2022
le 7. Gonorrhea cases and rates by local health district, Utah, 2013–202240
le 8. Gonorrhea cases and rates by race/ethnicity, Utah, 2013–202241
le 9. Gonorrhea cases and rates per 100,000 population by age and sex in adolescents and young adults, Utah, 202242
le 10. Gonorrhea cases and percentage among males by sexual orientation,
Utah, 2013–2022
le 11. All stages of syphilis cases and rates by age group and sex, Utah, 2013-202244
le 12. All stages of syphilis cases and rates by local health district, Utah, 2013-202245
le 13. All stages of syphilis cases and rates by race/ethnicity, Utah, 2013-202246
le 14. All stages of syphilis cases and percent among males by sexual orientation,
Utah, 2013-2022
le 15. All stages of syphilis cases and rates by females of reproductive age,

Utah, 2013-2022	48
Table 16. Congenital syphilis cases, Utah, 2013-2022	48
Table 17. Primary and secondary syphilis cases and rates by age groups and sex, Utah, 2013–2022	49
Table 18. Primary and secondary syphilis cases and rates by local health district,	
Utah, 2013–2022	50
Table 19. Primary and secondary syphilis cases and rates by race/ethnicity,	
Utah, 2013–2022	51
Table 20. Primary and secondary syphilis cases and percentage among males by sexual orientation, Utah, 2013–2022	52

Appendix

Executive summary

This report presents a summary of statistics and trends for 2022 surveillance data for notifiable sexually transmitted infections (STI) in Utah: chlamydia, gonorrhea, and syphilis, and focuses on newly reported cases of these infections within the state. It is meant to be descriptive, and its purpose is to present the data in multiple ways for use by local health agencies, healthcare professionals, non-profit organizations and the public. It is intended to be a resource to aid in prevention planning, funding applications, outcome monitoring, reports, education, and to identify priority populations for public health interventions.

In collaboration with the 13 local health departments (LHDs) throughout the state, each syphilis, gonorrhea, and some chlamydia cases are investigated, and each case is provided partner services. Disease intervention specialists (DIS) promote prompt treatment and facilitate partner notification to interrupt the chain of disease transmission. DIS promote human immunodeficiency virus (HIV) testing, provide HIV pre-exposure prophylaxis (PrEP) referrals, sexual health education, and collect the data used to compile this report.

Of the more than 75 reportable communicable diseases STIs are among the most commonly reported diseases. There were 14,861 STI cases reported in 2022 compared to 15,394 in 2021, a 3% decrease. The majority of infections are reported along the more populous Wasatch Front (Appendix): 83% of chlamydia infections, 91% of gonorrhea infections, and 88% of syphilis infections in 2022. Racial and ethnic minorities continue to shoulder a disproportionate burden of STIs in Utah.

Chlamydia remained the number one reported STI in the state with 11,110 cases reported, a 2% decrease compared to 2021. The majority of cases are among females, 63%. The highest rates were in individuals aged 15 to 24 (1408.74 cases per 100,000 population) and individuals who identify as non-Hispanic Black or African American (1535.5 cases per 100,000 population).

Gonorrhea remained the second most commonly reported STI with 3,082 cases reported, a 15% decrease from 2021. Most cases are among males, 66%. The highest rates were in individuals aged 20 to 24 (270.3 cases per 100,000 population) and individuals who identify as non-Hispanic Black or African American (694.3 cases per 100,000 population).

Syphilis cases increased 26% with 669 cases in 2022 compared to 532 in 2021. The majority of cases continue to be in men, 83%, and of those 71% were reported in men who have sex with men (MSM). Female rates increased 113% over the last five years which raises concern for females of reproductive age (15–44). Congenital syphilis cases have followed the increase in rates of females of reproductive age, with six times the cases reported in 2022 compared to 2018.

Data from the Centers for Disease Control and Prevention (CDC) ranks Utah in the top 10 lowest cases among all states in 2022. The following is a ranking of Utah's STI cases nationally: chlamydia (44), gonorrhea (44), primary and secondary syphilis (44), and congenital syphilis (47). For national trends in 2022, please reference the <u>CDC 2022 STD Surveillance Report</u>.

Introduction

This report consists of six sections: a section for the impacts of the COVID-19 pandemic, a section each for chlamydia, gonorrhea, syphilis, and congenital syphilis; and a section with data tables. Each disease-specific section contains text and figures that summarize data and display trends. The "Tables" section includes data for STIs by age group, sex, race/ethnicity, geography, and sexual orientation in males. Finally, the appendix contains a map of the 13 LHDs and a table listing the counties in each district's service area. Disease and treatment information can be found at the <u>Office of Communicable Diseases</u>' official website.

Technical notes

The <u>Utah Communicable Disease Rule</u> requires healthcare providers and laboratories report cases of chlamydia, gonorrhea, and syphilis to their LHD or the Utah Department of Health and Human Services (DHHS) Office of Communicable Diseases within 3 working days of identification.¹ Upon receipt, these reports are entered into Utah–National Electronic Disease Surveillance System (UT-NEDSS), a secure statewide disease surveillance system. The cases in this report are classified by Centers for Disease Control and Prevention's (CDC) *Morbidity and Mortality Weekly Report (MMWR)* year unless otherwise noted.

Population data used to calculate rates were obtained from the Population Estimates Query Module from the DHHS Center for Health Data and Informatics, Indicator-Based Information System for Public Health (IBIS-PH). Population estimates are provided by Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

In this report, missing and unknown age group, sex, and race/ethnicity data were not redistributed; therefore, incidence rates may be underestimated, particularly rates by race/ethnicity.

¹Utah Code Annotated. <u>R386-702 Communicable Disease Rule</u>. http://www.rules.utah.gov/publicat/code/r386/r386-702.htm

Impacts of the COVID-19 pandemic

During 2020, the COVID-19 pandemic led to disruptions in STI-related prevention and care activities, including decreased screening during the initial shelter-in-place orders due to clinical closures and lack of resources, including a vaccine. STI program resources, including STI case investigators, were also redirected to COVID-19 activities which further delayed non-emergent disease investigations. Because STIs often do not show symptoms, screening is necessary for adequate diagnosis and treatment. Changes in access to healthcare affected the number of infectious diseases being diagnosed and reported.

The COVID-19 pandemic significantly affected trends in STIs—potentially resulting in underreporting of infections and possible increased STI transmission. It's likely these effects will persist for several years, and it may be difficult to understand the full impact of the pandemic on STIs. As a result, STI surveillance data collected during 2020 and 2021 should be interpreted cautiously.

Chlamydia

Infections caused by the *Chlamydia trachomatis* bacterium are the most reported STI in both Utah and the U.S.² Females with chlamydia are at risk for developing pelvic inflammatory disease (PID), and males are at risk for developing epididymitis. . Untreated chlamydia infections can damage the reproductive systems of both males and females, causing infertility. Susceptibility to more serious infections, such as HIV increases when an individual is infected with chlamydia. In addition, pregnant women with chlamydia can pass the infection to their infant during delivery, potentially resulting in pneumonia or neonatal ophthalmia.

In 2022, 11,110 cases of chlamydia were reported in Utah. This case count corresponds to a rate of 328.7 cases per 100,000 population, a decrease of 2% compared with the rate in 2021. Between 2013 and 2022,² Utah's chlamydia rate was 66% of the U.S. rate (Figure 1).³ The overall rate for chlamydia in the U.S. in 2022 was 495.0 cases per 100,000 population.³

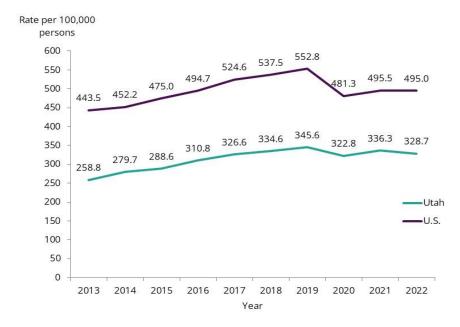


Figure 1. Chlamydia rates, Utah and United States, 2013–2022

²Centers for Disease Control and Prevention (2021) Tables-Sexually Transmitted Disease Surveillance data, 2022.

³Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2021*. Atlanta: U.S. Department of Health and Human Services; 2022.

Chlamydia by sex and age

Chlamydial infections in both men and women are commonly asymptomatic, yet screenings occur more often in females. Over the past 10 years, chlamydia rates in females have averaged twice that of males (Figure 2), most likely a result of higher rates of screening in women for this usually asymptomatic infection.

During 2021 to 2022, the rate of reported chlamydia among men increased 31% (from 248.8 to 327.1 cases per 100,000 population) and the rate among women decreased approximately 1% (from 426.6 to 423.1 cases per 100,000 population) (Figure 2).

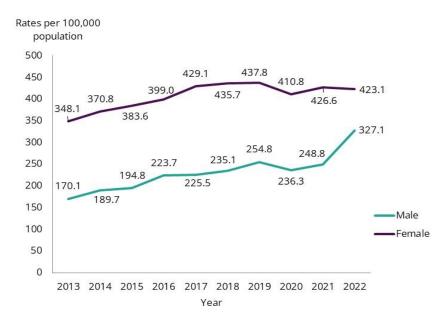


Figure 2. Chlamydia rates by sex, Utah and United States, 2013–2022

Decreases in rates of reported chlamydia were most pronounced among women aged 30 to 34 years (7% decrease from 2021). However, women aged 55 to 59 had a disproportionate increase by 139% (from 24.8 to 59.3 cases per 100,000 population) (Figure 3).

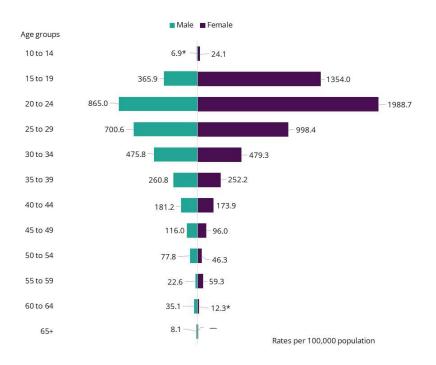
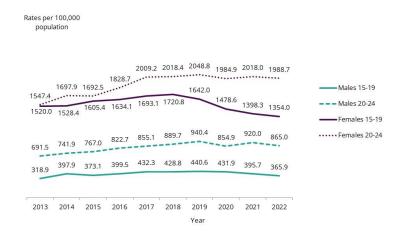


Figure 3. Chlamydia rates by sex and age, Utah, 2022

Chlamydia rates steadily increased in people aged 15 to 19 and 20 to 24 from 2013 to 2022, except for 2020 (Figure 4). During this 10-year period, the chlamydia rate increased on average by 3% in males aged 15 to 19, 3% in males aged 20 to 24. Rates decreased on average by 8% in females aged 15 to 19 and had an average increase of 2% in females aged 20 to 24.

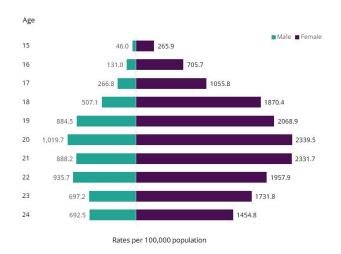
Throughout this period, the rate in females aged 15 to 19 was about 4 times that in males of the same age; in people aged 20 to 24, the female rate was about twice that of males.

Figure 4. Chlamydia rates by age groups and sex in adolescents and young adults, Utah, 2022



In 2022, the distribution of disease in adolescents and young adults varied by age. Adolescents aged 15 and 16 years old had the lowest rates of chlamydia in both males and females (Figure 5). The rates increased with age and peaked in females at age 21 (2,838.9 cases per 100,000 population) and in males at age 19 (1,118.4 cases per 100,000 population). The rate of chlamydia in females was greater than that of males at every age; and the rate ratios generally decreased with age.

Figure 5. Chlamydia rates by age and sex in adolescents and young adults, Utah, 2022



Chlamydia by region

In 2022, one LHD in Utah had chlamydia rates higher than the state rate: Salt Lake County health district (479.7 cases per 100,000 population) (Figure 6). Similar to prior years, the majority of chlamydial infections were identified in the 4 health districts along the Wasatch Front (83% of cases): Salt Lake (52% of cases), Utah (14% of cases), Weber-Morgan (8% of cases) and Davis (9% of cases).

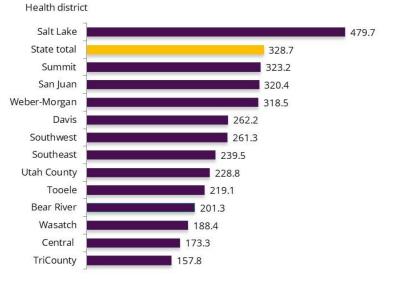


Figure 6. Chlamydia rates by local health district, Utah, 2022

Chlamydia by race/Hispanic ethnicity

In 2022, the highest chlamydia rates among the major racial and ethnic groups in Utah were reported among people who identify as non-Hispanic Black/African Americans (1,513.1 cases per 100,000 population) and individuals who identify as Native Hawaiian or Pacific Islander (1,008.3 cases per 100,000 population), followed by individuals who identify as American Indian/Alaska Native and those who identify as Hispanic populations (722.9 and 673.5 cases per 100,000 population, respectively) (Figure 7). Racial/ethnic minorities continued to be disproportionately affected by chlamydia in 2022. In comparison, rates among people who identify as non-Hispanic White populations were 310.1 cases per 100,000 population.

Rates per 100,000 population

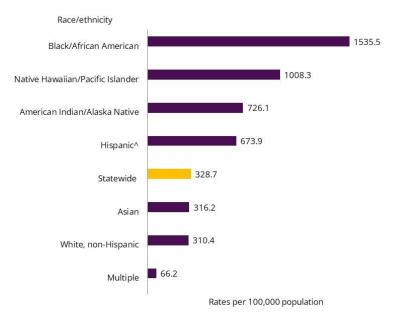


Figure 7. Chlamydia rates by race/ethnicity, Utah, 2022

Gonorrhea

Although less common than chlamydia infections, gonorrhea, caused by the bacterium *Neisseria* gonorrhoeae, is a priority public health concern in Utah. Untreated gonorrhea infections can damage the reproductive systems of both males and females. Females with gonorrhea infection are at risk for developing PID, and both males and females may become infertile as a result of untreated infections. Also, susceptibility to infections such as HIV increases when an individual has gonorrhea. Furthermore, pregnant women with gonorrhea can pass the infection to their infant during delivery, potentially resulting in ophthalmia neonatorum. Gonorrhea can spread to the blood stream and settle in the joints, brain, and heart and become systemic (disseminated gonorrhea).

In 2022, a total of 3,082 cases of gonorrhea were reported, making it the second most common notifiable STI in Utah. From 2013 to 2021 rates steadily increased, however, from 2021 to 2022, the overall rate of gonorrhea decreased 16% to a rate of 91.2 cases per 100,000 population. Utah's gonorrhea rate was 47% of the U.S. rate in 2022, up from 31% of the U.S. rate in 2013 (Figure 8).

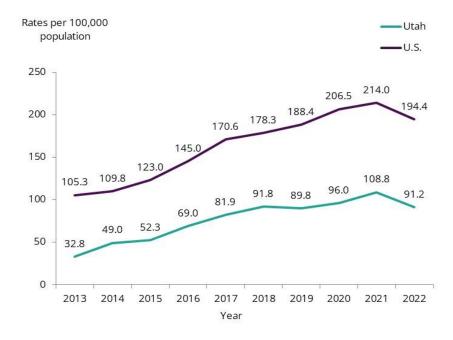
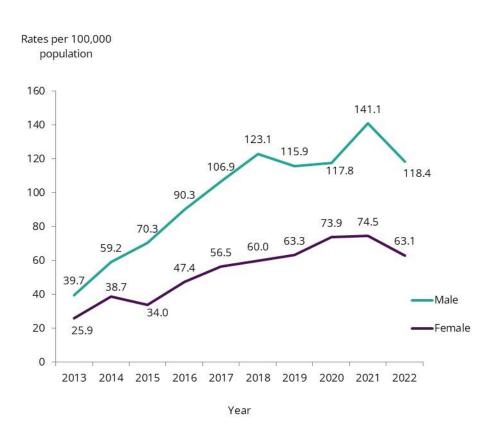


Figure 8. Gonorrhea rates, Utah and United States, 2013-2022

Gonorrhea by sex

During 2021 to 2022, rates of reported gonorrhea decreased among both males (16%) and females (15%). Gonorrhea rates among males in Utah have consistently been higher than among females for the past 10 years (Figure 9).

Figure 9. Gonorrhea rates by sex, 2013–2022



Since 2013, rates among males averaged about 2 times higher than females. Likely reflecting cases identified in both MSM and men who have sex with women only (MSW). This data is provided through Utah's participation in a sentinel surveillance system, the STD Surveillance Network (SSuN). Enhanced data showed that from 2013 to 2022, on average 41% of male gonorrhea cases were among MSM. For 2022, 46% of cases were in MSM compared to 27% of cases in MSW (Figure 10).

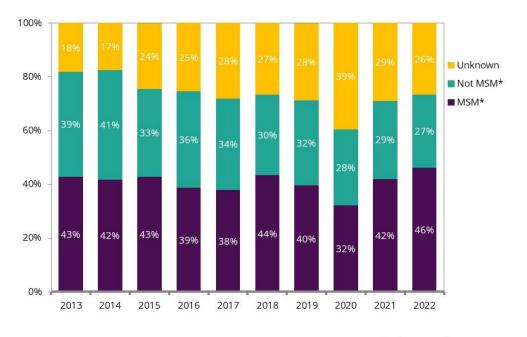


Figure 10. Percentage of male gonorrhea cases by sexual orientation, 2022

*MSM = Men who have sex with men

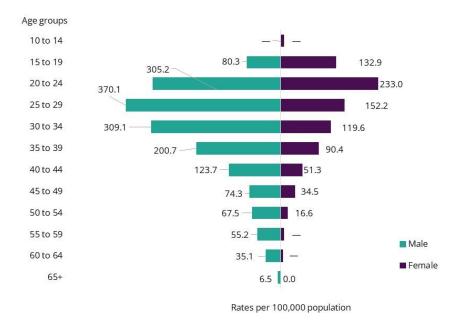
Gonorrhea by age

During 2021 to 2022 rates among males decreased in all age groups, except males aged 20 to 24, with an increase of 23% (from 284.8 to 305.2 cases per 100,000 population). Highest rates for both males and females continue to be among people aged 20 to 34, accounting for 63% of reported cases.

In males, the highest rates of infection were in the 25 to 29 age group (370.1 cases per 100,000 population) followed by the 30 to 34 age group, and 20 to 24 age group (309.1 and 305.2 cases per 100,000 population, respectively) (Figure 11).

In females, the highest rate of infection was among those aged 20 to 24 (233.0 cases per 100,000 population). All age groups seen a decrease in rates from 2021 to 2022 with the most pronounced decrease (48%) among people aged 50 to 54.

Figure 11. Gonorrhea rates by age group and sex among persons aged >= 10 years, Utah, 2022



Note: Age groups with suppressed rates are shown as an em dash on the graph.

In both Utah and the U.S., adolescents 15 to 19 years of age and young adults aged 20 to 24 have higher incidences of chlamydia and gonorrhea. In 2022, people aged 15 to 24 represented 16% of Utah's population; yet this population accounted for 34% of gonorrhea cases. This increased rate of STIs could be attributed to increased risky sexual behavior among adolescents and young adults and increased screening among these age groups.

Gonorrhea rates in those aged 15 to 24 have continued on a general upward trend since 2013, with an increase of 232% through 2021. From 2021 to 2022 rates had a decrease by 16% (from 108.8 to 91.2 cases per 100,000 population). The rates between the sexes in this age group showed males have consistently stayed close to twice the rate of females (Figure 12).

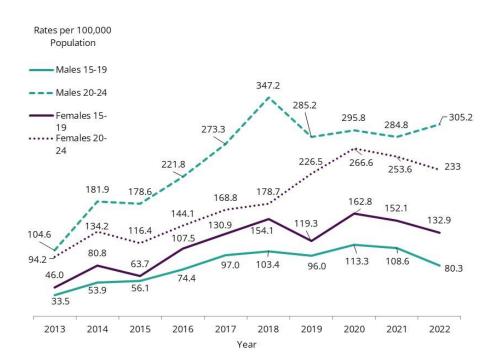


Figure 12. Gonorrhea in adolescents and young adults, Utah, 2013–2022

Among males and females aged 20 to 24, males have consistently had higher rates. In 2022, for males this was the only age group that had an increase in reported cases by 7% (from 284.8 to 3052.2 cases per 100,000 population). During this same time, females had an 8% decrease in reported cases (from 253.6 to 233.0 cases per 100,000 population).

Gonorrhea by local health district

In 2022, one LHD in Utah had gonorrhea rates higher than the state rate: Salt Lake County health district (163.5 cases per 100,000 population) (Figure 13). Similar to prior years, the majority of cases were identified in 4 health districts along the Wasatch Front (91% of reported cases): Salt Lake (65%), Utah (11%), Davis (8%) and, Weber-Morgan (7%).

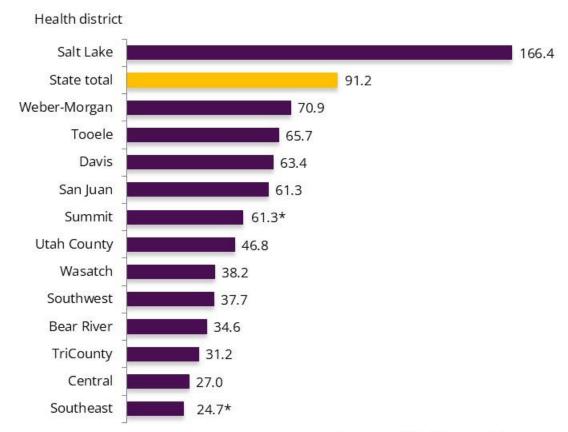


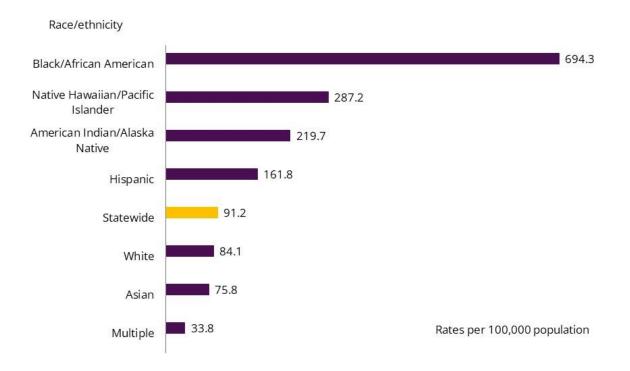
Figure 13. Gonorrhea rates by local health district, Utah, 2022

Rates per 100,000 population

Gonorrhea by race/ethnicity

In 2022, the highest gonorrhea rate among the major racial and ethnic groups in Utah was reported among people who identify as non-Hispanic Black/African American (691.8 cases per 100,000 population) with rates 86% higher than that of the statewide rate. Distantly followed by individuals who identify as Native Hawaiian or other Pacific Islander and American Indian/Native Alaska populations, (287.2, and 219.7 cases per 100,000 population, respectively) (Figure 14).

Figure 14. Gonorrhea rates by race/ethnicity, Utah, 2022



Syphilis, all stages

Syphilis is a complex sexually transmitted infection comprised of several stages throughout the duration of the 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. The open nature of a sore makes it easier to acquire HIV, if exposed, or to transmit the virus, if infected.

Sexual transmission can also occur during the secondary stage of syphilis. In the second stage of syphilis, a skin rash can appear as well as other more generalized symptoms such as swollen lymph nodes, fatigue, and hair loss. Some patients can have additional skin manifestations including mucous patches (raised patches in the mouth or anus) and condylomata lata (wart-like lesions in the genital or rectal areas).

Without treatment, syphilis will persist in the body even though symptoms resolve. This latent stage of syphilis is divided into early latent and late latent. Early latent syphilis refers to an infection that has been acquired in the past 12 months and late latent refers to an infection that has been acquired more than 12 months ago.

Neurological, ocular, and otic manifestations can occur at any stage of syphilis and are caused by syphilis bacteria invading the brain, eyes, or auditory system, respectively. These manifestations can present as altered mental status, meningitis, decreased vision, hearing loss, and vertigo.

In later stages of the disease (tertiary syphilis), the bacteria moves throughout the body, damaging internal organs over time. Affected organs can include the brain, spinal cord, heart, liver, and bones.

An infant can acquire syphilis through the placenta if the mother is infected, this is referred to as congenital syphilis (CS). CS can have major health impacts on an infant including miscarriage, stillbirth, prematurity, low birth weight, vision loss, hearing loss, and bone abnormalities. Children aged 2 years or older may have signs such as abnormal tooth development, eye disorders, changes to the facial bones, and deafness. The primary and secondary (P&S) stages of syphilis are considered to be the most infectious stages and tend to be the focus of national reports. For the purpose of Utah, this report will reflect all stages of syphilis unless otherwise noted. Rural areas tend to have higher rates in late or unknown syphilis. If all stages of syphilis are not discussed, the true impact of syphilis would be diminished. Data tables 17–20, included at the end of the report reflect only P&S syphilis data for comparison to national rates and trends.

Rates in Utah and the U.S.

Utah continues to experience a sharp rise in syphilis rates for all stages. Rates reached 3 times the rate in 2013 (from 6.7 to 19.8 cases per 100,000 population) (Figure 15).

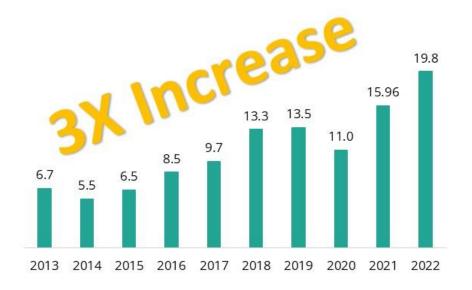


Figure 15. All stages of syphilis rates, Utah, 2013–2022

In 2022, the rate was 19.8 cases per 100,000 population with the highest rates seen in the late or unknown duration stage (Figure 16).

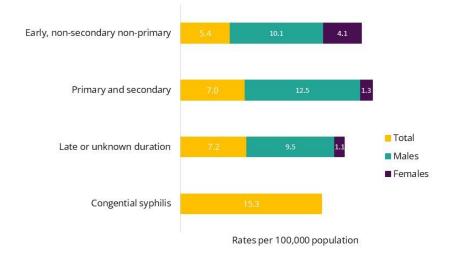
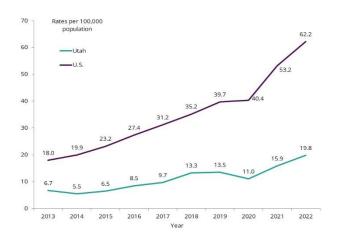


Figure 16. Syphilis rates by stages, Utah, 2022

Across the U.S., rates have also increased each year since 2001, with 207,255 cases of syphilis (all stages and congenital syphilis) were reported which is the greatest number of cases reported since 1950. From 2021, the U.S. saw an increase of 17.3% (Figure 17).

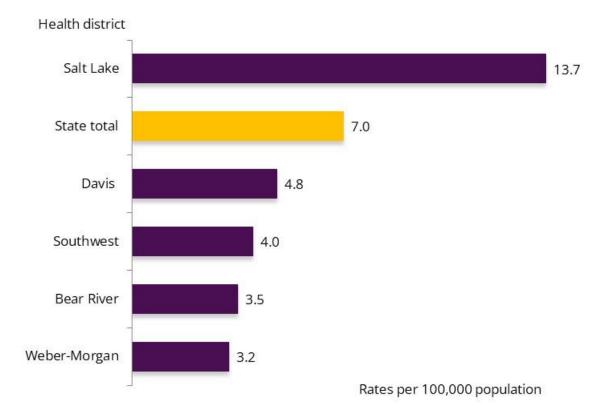
Figure 17. All stages of syphilis rates, Utah and U.S., 2013–2022



By local health district

In 2022, one LHD in Utah had gonorrhea rates higher than the state rate: Salt Lake County health district (13.1 cases per 100,000 population) (Figure 18). Similar to prior years, the majority of cases were identified in 4 health districts along the Wasatch Front (88% of reported cases): Salt Lake (65%), Utah (10%), Davis (7%) and, Weber-Morgan (6%).

Figure 18. All stages of syphilis rates by local health district, Utah, 2022

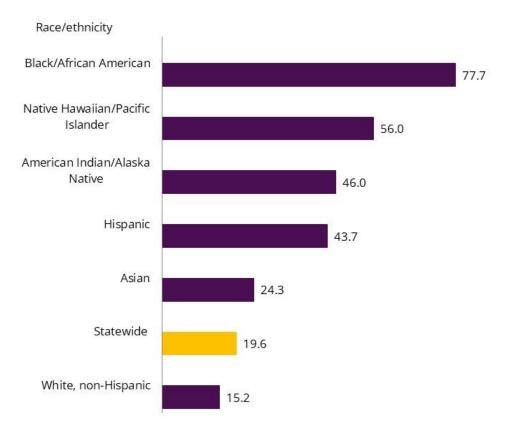


Note: LHDs with suppressed syphilis rates are not displayed on the graph.

Syphilis by race/ethnicity

Racial and ethnic minorities continue to shoulder a disproportionate burden of STIs in Utah. People who identify as Black or African American make up 1.5% of the population in Utah but have rates nearly five times higher than the statewide rate. This group is 2.3 times higher than the next highest group, individuals who identify as Hispanic (Figure 19). People who identify as Hispanic make up 14.8% of Utah's population and account for 30% of the cases.

Figure 19. All stages of syphilis rates by race/ethnicity 2022



Rates per 100,000 population

Syphilis by age and sex

In 2022, syphilis rates increased in both males and females, as well as in all age groups. Males report more cases of syphilis and in particular, P&S syphilis (12.5 cases per 100,000 population). Rates in males are nearly five times higher than in females (32.3 and 6.8, respectively) (Figure 20). Males comprised 83% of the syphilis cases in 2022. Males have consistently had higher rates than females throughout the past decade in Utah.

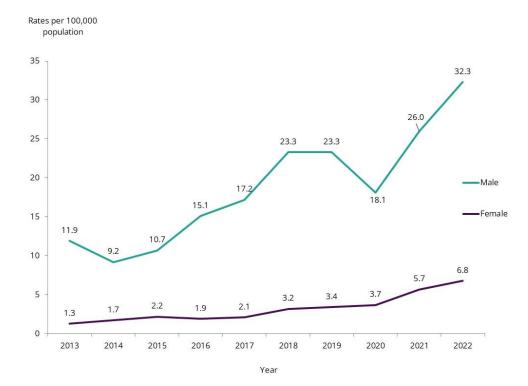


Figure 20. All stages of syphilis rates by sex, Utah, 2022

Unlike chlamydia and gonorrhea, higher rates of syphilis are seen in older age groups starting among individuals aged 25 to 29 (53.7 cases per 100,000 population). In 2022, syphilis cases were reported in all_age groups, except those aged 1 to 9 (Figure 21). This highlights the need to target prevention messages to a wide age range.

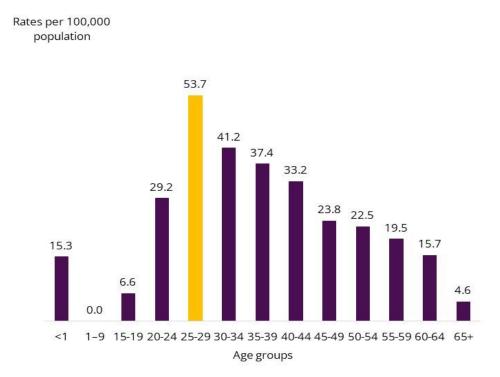


Figure 21. All stages of syphilis rates by age group, Utah, 2022

Males

Syphilis rates are highest among MSM, accounting for 78% of male syphilis cases (Figure 22). There is also a concern for coinfection with HIV. MSM who are HIVnegative and diagnosed with P&S syphilis are more likely to get HIV in the future. The risk of acquiring HIV increases if exposure to that infection occurs when a syphilis chancre is present. Furthermore, syphilis and other STIs might indicate ongoing behaviors and exposures that place a person at greater risk for acquiring HIV.

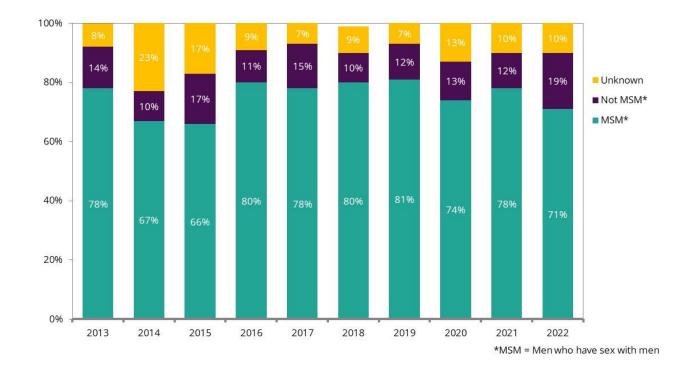


Figure 22. Percent of all stages of syphilis in males by sexual orientation, Utah, 2022

Females

After more than a decade of extremely low case rates, syphilis rates in females have increased more than two-fold since 2018 (3.2 to 6.8 cases per 100,000 population) (Figure 20). Females between the ages of 25 to 29 years experienced the highest rates (24.1 cases per 100,000 population), a 77% increase from 2021 (Figure 23).

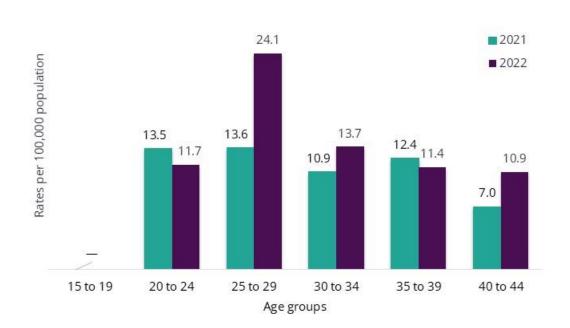
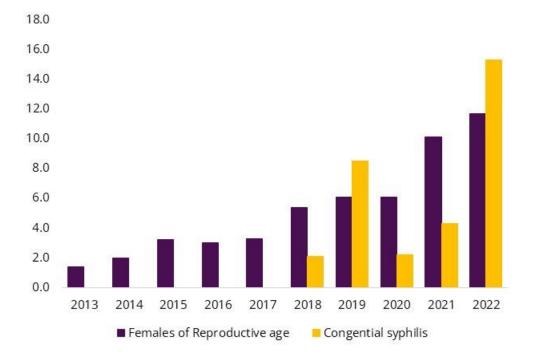


Figure 23. All stages of syphilis in females of reproductive age, Utah, 2022

Females of reproductive age (FRA) are a priority population as treatment of a pregnant woman with syphilis may prevent congenital syphilis (syphilis passed from the mother to the baby while pregnant). FRA are generally defined as females aged 15 to 44. From 2018 to 2022 FRA experienced a two-fold increase in rates (from 5.4 to 11.7 cases per 100,000 population). The increase in syphilis among females is particularly concerning as congenital syphilis rates closely follow FRA rates (Figure 24).

Figure 24. Syphilis in females of reproductive age in comparison to congenital syphilis rates, Utah, 2013-2022



Congenital syphilis (CS)

A pregnant individual can transmit syphilis to their baby during any stage of syphilis and any trimester of pregnancy. However, the risk of transmission is highest if the person has acquired syphilis recently. Syphilis during pregnancy can cause tragic outcomes, such as miscarriage, stillbirth, infant death, and lifelong medical issues. Newborn syphilis occurs when mothers do not receive timely testing and treatment during pregnancy.

Testing for syphilis should occur for all pregnant women at the first prenatal visit, in the third trimester, and again at delivery.

In 2022, CS cases continued to rise with more than six times the number from 2013 (9.7 to 15.3 cases per 100,000 population). From 2021 to 2022 there was a 250% increase in cases, with zero stillborn or fetal deaths reported. CS cases were reported in 5 LHDs with 4 in the populous Wasatch Front (Figure 25).



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
San Juan Public Health Department	San Juan
Southeastern Utah District Health Department	Carbon, Emery, Grand
Southwest Utah Public Health Department	Beaver, Garfield, Iron, Kane, Washington
Summit County Health Department	Summit
To cele County Health Department	Ta aele
TriCounty Health Department	Daggett, Duchesne, Uintah
Utah County Health Department	Utah
Wasatch County Health Department	Wasatch
Weber-Morgan Health Department	Morgan, Weber

Figure 25. Map of congenital syphilis cases, Utah, 2022

Indicates a LHD with one or more CS case.

	Chlamydia			G	onorrhe	а	All stages syphilis			Early non-primary non-secondary syphilis			Primary and secondary syphilis			Late/unknown duration syphilis			Congential syphilis		
	Uta	Utah U.S.		U.S. Uta		U.S.	Utah U.S.		U.S.	Utah U.		U.S.	Uta	Utah		Utah		U.S.	Utah		U.S.
Year	Cases	Rate	Rate	Cases	Rate	Rate	Cases	Rate	Rate	Cases	Rate	Rate	Cases	Rate	Rate	Cases	Rate	Rate	Cases	Rate	Rate
2013	7501	258.8	443.5	951	32.8	105.3	195	6.7	18.0	53	1.8	5.4	80	2.8	5.6	57	2.0	6.9	<11	9.7*	9.1
2014	8218	279.7	452.2	1440	49.0	109.8	161	5.5	19.9	42	1.4	6.1	53	1.8	6.4	66	2.2	7.4	0	0.0	11.5
2015	8611	288.6	475.0	1560	52.3	123.0	193	6.5	23.2	36	1.2	7.5	66	2.2	7.5	91	3.0	8.1	0	0.0	12.4
2016	9460	310.8	494.7	2100	69.0	145.0	260	8.5	27.4	61	2.0	9.0	93	3.1	8.7	106	3.5	9.5	0	0.0	16.2
2017	10135	326.6	524.6	2541	81.9	170.6	301	9.7	31.2	87	2.8	10.4	117	3.8	9.4	97	3.1	11.1	0	0.0	24.4
2018	10558	334.6	537.5	2895	91.8	178.3	421	13.3	35.2	106	3.4	11.8	168	5.3	10.7	146	4.6	12.3	<11	_	34.3
2019	11072	345.6	552.8	2878	89.8	188.4	431	13.5	39.7	120	3.7	12.7	138	4.3	11.9	169	5.3	14.4	<11	_	48.5
2020	10492	322.8	481.3	3121	96.0	206.5	357	11.0	40.4	82	2.5	13.0	133	4.1	12.6	141	4.3	14.2	<11	_	59.7
2021	11230	336.4	495.5	3632	108.8	214.0	532	15.9	53.2	133	4.0	15.6	207	6.2	16.2	190	5.7	20.6	<11	_	77.9
2022	11110	328.7	495.0	3082	91.2	194.4	669	19.8	62.2	183	5.4	17.1	237	7.0	17.7	242	7.2	26.3	<11	15.3*	102.5

Table 1. Cases of sexually transmitted diseases and rates per 100,000 population, Utah and U.S., 2013-2022

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet DHHS standards for reliability. Rate estimates with relative standard errors greater than 50% have been suppressed.

Table 2. Chlamydia cases and rates by age group and sex, Utah, 2013-2022

	Age group																				
	(years)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
_	<1	<11	0	0	<11	<11	<11	<11	0	0	<11	_	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	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	_	-	6.2*	7.6*	5.2*	5.1*	-	-	-	6.9*
	15 to 19	362	458	439	483	535	543	569	564	550	515	318.9	397.9	373.1	399.5	432.3	428.8	440.6	431.9	395.7	365.9
	20 to 24	866	934	979	1061	1117	1184	1276	1185	1331	1267	691.5	741.9	767.0	822.7	855.1	889.7	940.4	854.9	920.0	865.0
М	25 to 29	616	656	645	762	831	801	953	875	948	920	567.2	597.0	576.8	647.4	672.5	630.2	797.6	665.3	730.9	700.6
а	30 to 34	316	336	357	463	446	532	522	492	594	571	273.6	293.5	315.8	416.1	405.6	484.3	466.6	431.2	501.1	475.8
i.	35 to 39	161	194	218	291	258	297	363	327	317	330	157.3	175.7	197.2	254.8	221.6	252.3	309.1	281.4	253.6	260.8
	40 to 44	79	112	121	159	131	145	187	184	226	211	90.6	125.5	132.5	169.0	132.7	139.9	172.9	163.1	196.5	181.2
e	45 to 49	45	56	64	92	88	99	97	105	103	114	59.7	73.3	81.3	111.9	103.6	113.1	107.8	113.9	106.1	116.0
	50 to 54	20	44	48	63	46	58	58	71	74	68	25.9	57.2	63.0	83.7	61.1	77.1	76.0	90.0	85.7	77.8
	55 to 59	<11	13	33	22	45	42	47	43	37	18	6.9*	17.8	44.4	29.2	59.3	54.9	61.4	56.5	47.0	22.6
	60 to 64	<11	<11	<11	14	<11	17	21	16	24	27	8.4*	-	14.0*	20.9	13.0*	24.0	29.2	21.8	31.6	35.1
	65+	<11	<11	<11	<11	11	<11	15	<11	<11	15		-	-	4.7*	7.1*	4.9*	8.8	-	4.9*	8.1
	Unknown	0	0	<11	0	0	0	0	0	0	0	N/A									
	Male total	2484	2810	2925	3428	3525	3735	4096	3870	4217	4069	170.1	189.7	194.8	223.7	225.5	235.1	254.8	236.3	248.8	327.1
	<1	<11	0	<11	0	<11	0	0	0	<11	0	-	0.0	-	0.0		0.0	0.0	0.0	-	0.0
	1 to 9	<11	0	0	0	0	<11	0	<11	<11	<11		0.0	0.0	0.0	0.0	-	0.0	-	-	-
	10 to 14	37	49	47	53	48	46	43	41	59	33	31.0	40.3	38.1	42.3	37.6	35.4	33.0	31.4	43.7	24.1
	15 to 19	1651	1684	1815	1900	2018	2100	2051	1871	1839	1803	1520.0	1528.4	1605.4	1634.1	1693.1	1720.8	1642.0	1478.6	1398.3	1354.0
F	20 to 24	1890	2088	2079	2246	2499	2552	2641	2606	2737	2731	1547.4	1697.9	1692.5	1828.7	2009.2	2018.4	2048.8	1984.9	2018.0	1988.7
	25 to 29	773	792	871	911	1053	1100	1158	1051	1147	1233	735.0	749.6	808.8	808.5	899.1	916.7	948.5	852.8	940.4	998.4
e	30 to 34	382	457	477	473	483	511	474	500	597	561	343.5	412.7	436.4	434.1	447.2	474.6	436.1	451.7	516.5	479.3
m	35 to 39	161	187	224	250	285	271	324	272	323	290	163.4	189.4	210.2	226.9	253.0	237.9	284.6	241.3	284.4	252.2
а	40 to 44	78	93	89	122	124	136	141	181	165	200	92.8	108.3	101.3	134.7	130.7	136.3	135.2	166.3	145.3	173.9
1	45 to 49	24	36	42	46	63	58	75	53	87	89	32.7	48.6	55.2	58.0	76.6	68.4	86.4	59.5	95.0	96.0
е	50 to 54	13	14	27	20	16	29	29	28	28	39	16.6	17.9	35.1	26.4	21.4	39.2	38.7	36.3	33.7	46.3
	55 to 59	<11	<11	11	<11	14	11	17	11	19	46	8.1*	8.0*	14.4*	7.7*	17.8	13.9*	21.6	14.1*	24.8	59.3
	60 to 64	0	<11	<11	<11	<11	<11	<11	<11	<11	10	-	-	-	-	8.3*	6.8*	6.6*	7.8*	6.2*	12.3*
	65+	0	0	<11	<11	0	<11	<11	<11	0	<11	0.0	0.0	-	-	0.0	-	-	-	0.0	-
	Unknown	0	0	0	0	0	0	0	0	0	0	N/A									
	Female total	5017	5408	5686	6032	6610	6823	6940	6622	7010	7039	348.1	370.8	383.6	399.0	429.1	435.7	437.8	410.8	426.6	423.1
	<1	<11	0	<11	<11	<11	<11	<11	0	<11	<11	-	0.0	-	-	_	-	-	0.0	6.5	6.4
	1 to 9	<11	0	0	0	0	<11	0	<11	<11	<11	-	0.0	0.0	0.0	0.0	-	0.0	-	-	-
	10 to 14	41	51	55	63	55	53	46	45	63	43	16.8	20.5	21.8	24.5	20.9	19.8	17.1	16.7	22.7	15.3
	15 to 19	2013	2142	2254	2383	2553	2641	2620	2434	2390	2317	906.2	950.8	977.0	1004.8	1050.8	1062.8	1031.3	647.0	883.1	846.3
	20 to 24	2756	3022	3058	3307	3616	3738	3917	3791	4068	3996	1114.1	1214.3	1220.9	1313.4	1418.0	1439.2	1480.4	1404.6	1451.3	1408.7
Т	25 to 29	1389	1448	1517	1673	1884	1901	2111	1926	2094	2151	649.7	671.8	690.6	726.2	782.8	769.3	840.1	756.0	832.5	844.9
0	30 to 34	698	793	834	936	929	1043	996	992	1191	1132	307.9	352.1	375.1	425.0	426.2	479.5	451.6	441.3	508.7	477.5
t	35 to 39	322	381	442	541	543	568	687	599	640	620	160.3	182.4	203.6	241.1	237.0	245.2	297.0	261.6	268.3	256.7
a	40 to 44	157	205	210	281	255	281	328	365	391	411	91.7	117.1	117.2	152.2	131.7	138.1	154.4	164.7	171.1	177.6
1	45 to 49	69	92	106	138	151	157	172	158	189	203	46.4	61.2	68.4	85.4	90.3	91.1	97.3	87.2	100.7	106.3
I	50 to 54	33	58	75	83	62	87	87	99	102	107	21.2	37.4	49.0	55.0	41.4	58.3	57.5	63.4	60.2	62.4
	55 to 59	11	19	44	28	59	53	64	54	56	64	7.5*	12.8	29.1	18.3	38.2	34.1	41.2	35.1	36.1	40.7
	60 to 64	<11	<11	<11	17	15	22	26	22	29	37	4.1*	4.7*	7.6*	12.4	10.6	15.2	17.6	14.6	18.6	23.4
	65+	<11	<11	<11	<11	11	<11	17	<11	<11	17		—	_	2.8*	3.3*	2.9*	4.7	1.3*	2.3*	4.3
	Unknown	0	0	<11	0	0	0	0	0	<11	<11	N/A									
	Total cases	7501	8218	8611	9460	10135	10558	11072	10492	11230	11110	258.8	279.7	288.6	310.8	326.6	334.6	345.6	322.8	356.5	348.3

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet DHHS standards for reliability. Rate estimates with relative standard errors greater than 50% have been suppressed.

Table 3. Chlamydia cases and rates by local health district, Utah, 2013-2022

Local health													Rates p	er 100,0	00 popul	ation				
district	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bear River	251	267	348	354	353	394	391	381	428	407	147.6	155.6	200.1	199.3	195.2	214.3	209.4	201.1	214.3	201.3
Central	91	110	91	89	106	123	135	118	146	141	119.9	144.4	118.3	113.8	133.4	152.4	164.8	142.4	181.6	173.3
Davis	891	954	891	968	1142	1145	1154	956	965	975	276.4	290.1	266.1	283.7	329.5	326.1	324.8	266.1	262.7	262.2
Salt Lake	3792	4279	4579	5107	5328	5289	5709	5458	5834	5762	351.2	392.4	415.3	455.7	468.5	460.3	492.8	468.3	491.4	479.7
San Juan	N/A	N/A	55	54	59	43	55	15	42	47	N/A	N/A	360.6	351.9	386.0	280.4	361.2	98.2	289.9	320.4
Southeast	168	126	69	69	70	100	91	69	81	97	299.8	225.7	171.3	171.7	175.9	250.0	225.8	169.5		239.5
Southwest	380	432	410	461	556	653	701	651	672	720	179.0	199.2	185.2	202.2	235.5	267.3	277.3	249.0	247.0	261.3
Summit	74	91	89	120	118	116	132	129	111	141	192.5	232.5	224.3	295.8	285.2	277.0	308.4	303.5	257.6	323.2
Tooele	141	143	164	159	194	187	188	176	197	170	232.5	232.6	261.7	246.0	287.4	267.3	260.7	236.2	257.0	219.1
TriCounty	112	139	118	124	111	147	97	108	127	91	197.2	238.6	197.8	215.4	197.9	261.1	171.2	189.8	222.9	157.8
Utah	774	940	974	1021	1180	1270	1362	1411	1603	1587	140.3	167.5	169.9	172.7	194.2	204.2	214.3	216.7	234.0	228.8
Wasatch	38	35	29	46	42	46	57	52	51	69	143.0	125.8	99.6	151.2	131.1	138.2	166.6	147.3	141.0	188.4
Weber-Morgan	789	702	794	885	876	1043	1000	968	970	900	317.8	279.9	312.6	342.3	332.3	390.0	367.9	351.8	346.8	318.5
Unknown	0	0	0	<11	0	<11	0	0	<11	<11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State total	7,501	8,218	8,611	9,460	10,135	10,558	11,072	10,492	11,230	11,110	258.8	279.7	288.6	310.8	326.6	334.6	345.6	322.8	336.4	328.7

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR)* year. San Juan County has been an independent LHD since 2015. Prior to 2015, it was served by the Southeast Utah LHD. Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah

Population Committee estimates by the Kem C. Gardner Policy Institute.

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

Note: Rate estimates with relative standard errors greater than 50% have been suppressed.

Table 4. Chlamydia cases and rates by race/ethnicity, Utah, 2013-2022

Race/ethnicity	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019
American Indian/Alaska Native	220	208	169	189	186	201	208	193	245	228	796.6	744.3	599.1	662.9	644.7	690.6	702.9
Asian	121	143	152	191	222	233	215	203	267	271	191.9	217.9	223.5	266.7	294.4	298.7	268.0
Black/African American	341	373	361	471	510	570	622	554	652	617	1177.5	1258.3	1183.2	1461.8	1496.0	1610.3	1689.3
Native Hawaiian/Pacific Islander	146	195	206	240	303	294	312	361	304	358	553.8	720.8	735.0	823.9	1004.0	934.4	960.1
White, Non-Hispanic	6606	7061	7189	7928	8441	8545	8713	8008	8319	8103	285.4	301.8	303.7	329.8	346.2	346.2	349.0
Hispanic [†]	1979	1950	2161	2431	2590	2665	3033	2951	3205	3368	514.1	495.6	534.2	580.8	597.1	595.9	660.6
2 or more	37	43	41	62	80	78	98	62	54	51	69.6	77.9	71.4	102.8	126.4	118.3	142.6
Other/unknown	30	195	493	379	393	637	904	1,111	1,389	1,482	N/A						
State total	7,501	8,218	8,611	9,460	10,135	10,558	11,072	10,492	11,230	11,110	258.8	279.7	288.6	310.8	326.6	334.6	345.6

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

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

	Male	es	Fem	ales	To	tal
Age	Cases	Rates	Cases	Rates	Cases	Rates
15	14	46.0	74	265.9	88	151.0
16	39	131.0	194	705.7	233	406.9
17	77	266.8	288	1,055.8	365	650.2
18	156	507.1	586	1,870.4	742	1,195.0
19	229	884.5	661	2,068.9	890	1,538.7
20	240	1,019.7	650	2,339.5	890	1,734.2
21	279	888.2	653	2,331.7	932	1,568.6
22	304	935.7	541	1,957.9	845	1,405.5
23	219	697.2	485	1,731.8	704	1,262.0
24	225	692.5	402	1,454.8	627	1,094.3

Table 5. Chlamydia cases and rates per 100,000 population by age and sex in adolescents and young adults, Utah, 2022

Note: Cases were classified by *Morbidity and Mortality Weekly Report (MMWR*) year. Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

Table 6. Gonorrhea cases and rates by age group and sex, Utah, 2013-2022

	Age group				Cases								Ra	ates per 10	00,000 po	pulation					
	(years)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	<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	<11	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	_	0.0
	10 to 14	<11	0	<11	<11	0	0	0	0	0	<11	_	0.0	_	_	0.0	0.0	0.0	0.0	0.0	_
	15 to 19	38	62	66	90	120	131	123	148	151	113	33.5	53.9	56.1	74.4	97.0	103.4	96.0	113.3	108.6	80.3
	20 to 24	131	229	228	286	357	462	387	410	412	447	104.6	181.9	178.6	221.8	273.3	347.2	285.2	295.8	284.8	305.2
м	25 to 29	133	200	267	311	390	422	457	428	531	486	122.5	182.0	238.8	264.2	315.6	332.0	353.7	325.4	409.4	370.1
	30 to 34	100	150	163	257	272	344	334	335	445	371	86.6	131.0	144.2	231.0	247.4	313.2	298.5	293.6	375.4	309.1
a	35 to 39	60	97	121	170	219	232	224	238	287	254	58.6	91.1	109.4	148.9	188.1	197.1	190.7	204.8	229.6	200.7
I	40 to 44	41	49	70	111	105	139	137	153	205	144	47.0	54.9	76.7	118.0	106.3	134.1	126.6	135.6	178.3	123.7
e	45 to 49	29	40	45	80	95	83	77	84	141	73	38.4	52.4	57.2	97.3	111.9	94.8	85.6	91.1	145.3	74.3
	50 to 54	33	28	51	38	53	68	59	58	109	59	42.8	36.4	65.7	50.5	70.5	90.4	77.3	73.5	126.3	67.5
	55 to 59	<11	13	35	25	35	46	35	40	67	44	12.4*	17.8	47.0	33.2	46.1	60.2	45.7	52.5	85.1	55.2
	60 to 64	<11	<11	<11	11	18	17	23	26	36	27	_	11.3*	_	16.4*	26.0	24.0	32.0	35.5	47.4	35.1
	65+	0	0	<11	<11	<11	12	13	<11	13	12	0.0	0.0	3.5*	_	4.5*	7.4	7.6	5.0*	7.1	6.5
	Unknown	0	0	0	0	0	0	<11	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	578	875	1,056	1,384	1,671	1,956	1,871	1,929	2,398	2,031	39.7	59.2	70.3	90.3	106.9	123.1	115.9	117.8	141.5	118.4
	<1	0	<11	0	0	0	0	0	0	0	<11	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
	1 to 9	0	0	0	0	0	<11	0	0	<11	<11	0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	_	-
	10 to 14	<11	<11	<11	<11	<11	11	<11	<11	<11	<11	_	4.1*	4.9*	4.0*	7.0*	8.5*	_	_	_	_
	15 to 19	50	89	72	125	156	188	148	206	200	177	46.0	80.8	63.7	107.5	130.9	154.1	119.3	162.8	152.1	132.9
	20 to 24	115	165	143	177	210	226	292	350	344	320	94.2	134.2	116.4	144.1	168.8	178.7	226.5	266.6	253.6	233.0
F	25 to 29	82	119	108	160	191	198	208	237	227	188	78.0	112.6	100.3	142.0	163.1	165.0	170.4	192.3	186.1	152.2
e	30 to 34	57	102	81	130	129	121	158	146	179	140	51.3	92.1	74.1	119.3	119.4	112.4	145.4	131.9	154.9	119.6
m	35 to 39	35	52	55	60	85	103	87	102	122	104	35.5	50.8	51.6	54.4	75.5	90.4	76.4	90.5	107.4	90.4
а	40 to 44	11	18	20	34	37	52	43	73	72	59	14.3	21.0	22.8	37.5	39.0	51.1	41.2	67.1	63.4	51.3
-	45 to 49	<11	<11	13	16	27	20	38	42	39	32		12.2*	17.1	20.2	32.8	23.6	43.8	47.2	42.6	34.5
e	50 to 54	11	<11	<11	<11	16	<11	21	21	29	14	14.0*	_	6.5*	9.3*	21.4	13.5*	28.0	27.2	34.9	16.6
e	55 to 59	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	_	_	_	_	7.6*	7.6*	6.3*	11.6*	11.8*	_
	60 to 64	<11	0	0	<11	<11	<11	<11	<11	<11	<11	_	0.0	0.0	_	_	_	_	_	7.5*	_
	65+	0	0	0	0	0	0	<11	0	<11	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	373	565	504	716	870	939	1,007	1,192	1,233	1,050	25.9	38.7	34.0	47.4	56.5	60.0	63.3	73.9	75.0	63.1
	<1	0	<11	0	0	0	0	0	0	0	<11	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0	0.0	_
	1 to 9	0	0	0	0	0	<11	0	0	<11	<11	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	-	_
	10 to 14	<11	<11	<11	<11	<11	11	<11	<11	<11	<11	_	2.0*	2.8*	3.1*	3.4*	4.1*	_	_	_	_
	15 to 19	88	149	137	215	276	318	271	347	350	290	39.6	67.0	59.8	90.7	113.6	128.3	107.5	137.7	129.7	105.9
	20 to 24	246	386	369	463	567	688	676	753	756	767	99.4	158.3	148.1	183.9	222.3	265.1	256.6	281.6	269.7	270.3
Т	25 to 29	215	317	373	471	581	619	664	657	756	674	100.6	148.0	170.8	204.5	241.4	250.9	264.6	261.0	301.2	264.5
o	30 to 34	157	249	241	387	401	465	490	479	623	511	69.3	111.9	109.7	175.7	184.0	213.8	223.1	214.0	266.5	215.6
-	35 to 39	95	147	175	230	304	334	311	338	409	358	47.3	71.3	81.1	102.5	132.7	144.6	134.5	148.5	171.4	148.2
ι	40 to 44	53	66	90	145	142	191	180	225	277	203	31.0	38.3	50.2	78.5	73.4	93.9	84.7	102.0	121.2	87.7
а	45 to 49	33	49	58	96	122	103	115	125	180	105	22.2	32.6	37.5	59.4	73.0	59.8	65.0	69.5	95.4	55.0
1	50 to 54	44	32	55	45	69	78	80	79	138	73	28.3	20.7	36.6	29.8	46.0	52.3	52.9	50.6	81.4	42.5
	55 to 59	12	14	36	26	41	52	40	49	75	48	8.2*	9.4	23.8	17.0	26.5	33.5	25.7	31.8	48.9	30.5
	60 to 64	<11	<11	<11	12	22	19	24	28	42	31	4.1*	5.5*	3.0*	8.8	15.6	13.1	16.3	18.6	26.9	19.6
	65+	0	0	<11	<11	<11	12	14	<11	15	12	0.0	0.0	_	-	2.1*	3.4	3.8	2.4*	3.9	3.1
	Unknown	0	0	0	0	0	0	<11	0	1	<11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total cases	951	1,440	1,560	2,100	2,541	2,895	2,878	3,121	3,632	3,082	32.8	49.0	52.3	69.0	81.9	91.8	89.8	96.0	108.8	91.2

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee

estimates by the Kem C. Gardner Policy Institute.

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

Table 7. Gonorrhea Cases and Rates by Local Health District, Utah, 2013–2022

Local health				Cases									Rates	oer 100,0	00 popula	ation				
district	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bear River	<11	35	17	27	49	53	39	58	62	70	4.1*	20.4	9.8	15.2	27.1	28.8	20.9	30.1	31.0	34.6
Central	<11	<11	<11	<11	<11	24	11	12	28	22	_	9.2*	10.4*	12.8*	11.3*	29.7	13.4*	15.7	34.8	27.0
Davis	64	105	93	138	184	217	228	244	254	236	19.9	31.9	27.8	40.4	53.0	61.8	64.2	67.9	69.2	63.4
Salt Lake	681	1001	1048	1436	1653	1909	1895	1990	2349	1999	63.4	91.8	95.0	128.1	145.3	166.2	163.5	170.7	197.7	166.4
San Juan	0	0	<11	<11	<11	<11	16	<11	13	<11	N/A	N/A	_	39.1*	32.7*	45.6*	105.1	32.7*	89.7	61.3*
Southeast	<11	<11	<11	<11	19	21	15	12	15	<11	8.9*	12.5*	14.9*	14.9*	47.8	52.5	37.2	29.5	37.4	24.7*
Southwest	16	23	55	56	88	65	84	96	153	104	7.5	10.6	24.8	24.6	37.3	26.6	33.2	36.0	55.9	37.7
Summit	<11	<11	<11	11	<11	22	24	25	23	22	13.0*	23.0*	25.2*	27.1*	16.9*	52.5	57.0	58.8	51.1	50.4
Tooele	<11	22	28	29	42	26	47	53	76	51	11.5*	35.8	44.7	44.9	62.2	37.2	65.2	71.1	99.2	65.7
TriCounty	<11	<11	12	<11	14	28	25	20	23	18	10.6*	12.0*	20.1	10.4*	25.0	49.7	44.1	35.2	40.4	31.2
Utah	67	97	129	159	201	229	244	328	349	325	12.1	17.3	22.5	26.9	33.1	36.8	38.4	50.4	50.9	46.8
Wasatch	<11	<11	<11	<11	<11	<11	<11	17	19	14	_	_	_	29.6*	25.0*	_	20.5*	48.2	52.5	38.2
Weber-Morgan	85	124	147	206	262	290	243	261	268	201	_	_	_	79.7	99.5	108.4	89.4	94.5	95.8	70.9
Unknown	0	<11	0	<11	0	0	0	0	0	<11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State total	951	1,440	1,560	2,100	2,541	2,895	2,878	3,121	3,632	3,082	32.8	49.0	52.3	69.0	81.9	91.8	89.8	96.0	108.7	91.2

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet DHHS standards for reliability. Rate estimates with relative standard errors greater than 50% have been suppressed.

Table 8. Gonorrhea cases and rates b	ov race/ethnicity, Utah, 2013–2022
	y race, cerninercy, oran, zono zozz

				Cas	ies							F	Rates pe	er 100,0)00 pop	ulation				
Race/Ethnicity	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
American Indian/Alaska Native	21	22	29	32	41	59	80	53	90	69	76.0	78.7	102.8	112.2	142.1	202.7	270.4	175.9	290.2	219.7
Asian	13	22	23	32	46	47	50	42	82	65	20.6	33.5	33.8	44.7	61.0	60.3	62.3	51.0	96.9	75.8
Black/African American	75	108	158	195	207	258	214	295	355	279	259.0	364.3	517.9	605.2	607.2	728.9	581.2	775.4	894.5	694.3
Native Hawaiian/Pacific Islander	<11	18	23	42	55	50	53	92	85	101	26.6*	66.5	82.1	144.2	182.3	158.9	163.1	273.7	242.4	284.5
White	830	1244	1229	1702	2072	2335	2293	2376	2645	2196	35.9	53.2	51.9	70.8	85.0	54.1	91.9	94.2	102.6	84.1
Hispanic [†]	173	322	312	484	578	596	723	784	922	808	44.9	81.8	77.1	115.6	133.3	133.3	157.5	166.2	186.6	161.7
Multiple	<11	<11	<11	13	20	27	27	45	29	26	9.4*	16.3*	8.7*	21.6	31.6	41.0	39.3	62.8	38.1	33.8
Other/unknown	0	17	93	84	100	119	161	218	346	346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State total	951	1,440	1,560	2,100	2,541	2,895	2,878	3,121	3,632	3,082	32.8	49.0	52.3	69.0	81.9	60.1	89.8	96.0	108.8	91.2

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

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

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

	Ma	ales	Fen	nales	Тс	otal
Age	Cases	Rates	Cases	Rates	Cases	Rates
15	4	13.1	5	18.0	9	15.4
16	5	16.8	24	87.3	29	50.6
17	12	41.6	24	88.0	36	64.1
18	39	126.8	53	169.2	92	148.2
19	53	204.7	71	222.2	124	214.4
20	73	310.1	73	262.7	146	284.5
21	83	264.2	69	246.4	152	255.8
22	112	344.7	64	231.6	176	292.7
23	86	273.8	53	189.3	139	249.2
24	93	286.2	61	220.8	154	268.8

Table 9. Gonorrhea cases and rates per 100,000 population by age and sex in adolescents and young adults, Utah, 2022

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

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

	М	SM*	Not	MSM*	Unkr	nown	Total
Year	Cases	Percent	Cases	Percent	Cases	Percent	Cases
2013	247	42.9%	226	39.2%	103	17.9%	576
2014	362	41.9%	352	40.8%	149	17.3%	863
2015	450	42.9%	344	32.8%	254	24.2%	1049
2016	537	38.8%	499	36.1%	348	25.1%	1384
2017	635	38.0%	568	34.0%	468	28.0%	1671
2018	850	43.5%	586	30.0%	518	26.5%	1954
2019	740	39.6%	595	31.9%	532	28.5%	1868
2020	617	32.3%	541	28.3%	754	39.4%	1912
2021	1006	42.1%	699	29.2%	687	28.7%	2392
2022	940	46.3%	553	27.2%	538	26.5%	2031

Table 10. Gonorrhea cases and percent among males by sexual orientation, Utah, 2013-2022

*MSM=Men who have sex with men

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

	Age group				Cases									Rates p	er 100,00	00 popul	ation				
	(years)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	<1	<11	0	0	0	0	<11	<11	<11	<11	<11	_	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	<11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	_
	15 to 19	<11	<11	<11	<11	<11	13	<11	<11	<11	17			5.1*	6.6*	6.5*	10.3	6.2*	6.9*	7.5*	12.1
	20 to 24	23	19	18	32	42	46	43	38	59	61	18.4	15.1	14.1	24.8	32.2	34.6	31.7	27.4	43.9	44.5
	25 to 29	26	26	33	40	50	77	75	65	73	96	23.9	23.7	29.5	34.0	40.5	60.6	58.1	49.4	61.9	83.4
Μ	30 to 34	17	25	22	27	42	63	58	49	88	91	14.7	21.8	19.5	24.3	38.2	57.4	51.8	42.9	66.1	67.9
а	35 to 39	31	15	22	38	36	53	67	35	59	81	30.3	14.1	18.1	33.3	30.9	45.0	57.0	30.1	45.9	61.8
I.	40 to 44	23	<11	19	22	17	38	33	31	42	67	26.4	10.1*	20.8	23.4	17.2	36.7	30.5	27.5	35.3	54.7
e	40 to 44 45 to 49	18	<11	<11	14	24	25	26	24	33	40	20.4	13.1*	8.9*	17.0	28.3	28.6	28.9	27.5	34.6	39.9
	50 to 54	15	14	18	22	19	25	20	17	26	35	19.4	18.2	23.6	29.2	26.3	34.6	31.4	20.0	34.0	40.9
									<11												
	55 to 59	<11	<11	11	12	19	13	20		23	27	11.1*	10.9*	14.8*	15.9	25.0	17.0	26.1	9.2*	29.8	35.1
	60 to 64	<11	<11	<11	<11	<11	<11	<11	<11	13	22	8.4*	-		9.0*		9.9*	13.9*	13.7*	16.9	28.2
	65+	<11	<11	<11	<11	<11	<11	11	11	11	13	—	3.7*	3.5*	7.4*	6.4*	5.5*	6.5*	6.2*	6.0*	6.8
	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	173	136	161	232	269	371	377	297	438	554	11.9	9.2	10.7	15.1	17.2	23.3	23.3	18.1	26.0	32.3
	<1	<11	0	0	0	0	0	<11	0	<11	<11	-	0.0		0.0	0.0	0.0	-	0.0	_	17.5*
	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	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11		-	_	_	-	_	-	4.0*	4.3*	-
F	20 to 24	<11	<11	<11	<11	<11	<11	16	<11	15	14	_	-	7.3*	4.9*	4.0*	7.1*	12.4*	7.6*	13.5	11.7
	25 to 29	<11	<11	<11	<11	<11	<11	<11	16	16	28	_	4.7*	-	4.4*	-	5.8*	7.4*	13.0	13.6	24.2
e	30 to 34	0	<11	<11	<11	<11	11	<11	<11	14	18	0.0	-	-	-	5.6*	10.2*	6.4*	5.4*	10.9	13.8
m	35 to 39	<11	<11	<11	<11	<11	<11	<11	<11	15	14	5.1*	-	-	4.5*	6.2*	-	-	-	12.4	11.4
а	40 to 44	0	<11	<11	0	0	<11	<11	<11	<11	13	0.0	-	-	0.0	0.0	-	4.8*	-	7.0*	11.0
I.	45 to 49	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	_	-	_	_	-	-	-	5.6*	_	7.2*
e	50 to 54	<11	<11	<11	<11	<11	<11	<11	0	<11	<11	_	_	-	_	_	_	_	0.0	—	—
C	55 to 59	0	<11	0	<11	<11	<11	<11	<11	<11	<11	0.0	-	0.0	_	_	_	-	_	_	-
	60 to 64	0	0	<11	0	<11	0	0	<11	<11	<11	0.0	0.0	-	0.0	-	0.0	0.0	-	—	—
	65+	<11	<11	<11	11	<11	<11	<11	<11	11	<11	_	3.8*	-	-	2.8*	-	-	2.5*	5.2*	2.7*
	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	19	25	32	28	32	50	54	60	95	115	1.3	1.7	2.2	1.9	2.1	3.2	3.4	3.7	5.7	6.8
_	<1	<11	0	0	0	0	<11	<11	<11	0	0	9.7*	0.0	0.0	0.0	0.0	_	_	-	0.0	14.9*
	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	<11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	_
	15 to 19	<11	<11	<11	<11	<11	16	12	14	16	19	2.3*	-	3.5*	4.2*	4.1*	6.4	4.7	5.4	5.9	6.6
	20 to 24	24	20	27	38	47	55	57	48	74	76	9.7	8.8	10.8	15.1	18.4	21.2	22.3	17.8	29.7	29.2
т	25 to 29	27	31	37	45	53	85	84	81	89	124	12.6	14.4	16.9	19.5	22.0	34.0	33.4	31.8	37.9	53.7
0	30 to 34	17	26	25	29	48	74	65	55	102	108	7.5	11.5	11.2	13.2	22.0	34.0	29.5	24.5	39.0	41.2
-	35 to 39	36	17	22	43	43	57	69	38	74	94	17.9	8.1	10.1	19.2	18.8	24.6	29.8	17.0	29.7	37.4
t	40 to 44	23	<11	20	22	17	42	38	34	49	80	13.4	5.7*	11.2	11.9	8.8	20.6	17.9	15.3	21.4	33.2
а	45 to 49	20	13	<11	15	25	26	28	29	36	47	14.1	8.6	5.2*	9.3	15.0	15.1	16.4	16.0	19.1	23.8
Т	50 to 54	16	15	22	24	20	30	26	17	28	38	10.3	9.7	14.4	15.9	13.3	20.1	17.2	10.9	17.2	22.5
	55 to 59	<11	<11	11	15	20	16	20	<11	25	30	5.5*	6.7*	7.3*	9.8	12.9	10.3	14.2	6.5*	16.2	19.5
	60 to 64	<11	<11	<11	<11	<11	<11	<11	13	14	25	4.1*	0.7	7.5	4.4*	-	4.8*	6.8*	8.7	8.9	15.7
	65+	<11	11	<11	13	15	13	13	16	22	19	2.1*	3.7*	3.3*	4.4	4.5	3.7	3.6	4.2	5.6	4.6
	Unknown	<11	0	0	0	0	0	0	0	22	0	2.1* N/A	5.7 ⁿ	5.5* N/A	4.1 N/A	4.5 N/A	3.7 N/A	3.6 N/A	4.2 N/A	5.6 N/A	4.6 N/A
	Total cases	195	161	193	260	301	421	431	357	533	669	6.7	5.5	6.5	8.5	9.7	13.3	13.5	11.0	15.9	19.6
	I ULAI LASES	195	101	193	200	301	421	431	337	222	009	0.7	5.5	0.5	0.0	9.7	15.5	15.5	11.0	15.9	19.0

Table 11. All stages of syphilis cases and rates by age group and sex, Utah, 2013-2022

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet DHHS standards for realiability. Note: Rate estimates with relative standard errors greater than 50% have been suppressed.

Local health					Case	S								Rat	es per 100),000 popu	ulation			
district	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bear River	<11	<11	<11	<11	<11	<11	<11	<11	12	19	_	_	3.4*	3.4*	-	3.3*	_	3.7*	6.0	9.3
Central	<11	0	0	0	<11	<11	<11	<11	<11	<11	-	0.0	0.0	0.0	-	5.0*	-	_	7.5*	_
Davis	20	15	16	18	23	37	41	25	39	48	6.2	4.6	4.8	5.3	6.6	10.5	11.5	7.0	10.6	12.8
Salt Lake	143	112	130	203	204	270	271	213	301	432	13.2	10.3	11.8	16.8	17.8	23.5	23.4	18.2	25.1	35.8
San Juan	N/A	N/A	<11	<11	<11	<11	<11	<11	<11	<11	_	0.0	_	-	_	_	-	32.7*	54.6*	33.5*
Southeast	<11	<11	<11	<11	<11	0	<11	<11	<11	<11	0.0	_	-	_	-	0.0	12.4*	_	-	17.3*
Southwest	<11	<11	<11	11	19	21	15	16	27	28	2.4*	_	3.6*	4.8*	8.0	8.6	5.9	6.1	10.0	10.1
Summit	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	_	_	_	_	_	_	18.7*	_	16.3*	13.9*
Tooele	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	_	_	_	-	7.4*	-	-	8.1*	9.2*	9.0*
TriCounty	<11	0	0	0	<11	<11	<11	<11	<11	<11	_	0.0	0.0	0.0	-	_	_	_	-	_
Utah	<11	15	14	20	22	36	48	40	72	66	1.1*	2.7	2.4	3.4	3.6	5.8	7.6	6.1	10.5	9.3
Wasatch	0	<11	<11	0	<11	<11	0	0	0	<11	0.0	_	-	0.0	-	_	0.0	0.0	0.0	_
Weber-Morgan	<11	11	<11	<11	20	38	29	34	47	41	-	4.4*	2.8*	3.9*	7.6	14.2	10.7	12.4	16.9	14.6
Unknown	<11	0	<11	0	0	0	<11	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	195	161	193	260	301	421	431	357	532	669	6.7	5.5	6.5	8.5	9.7	13.3	13.5	11.0	15.9	19.6

Table 12. All stages of syphilis cases and rates by local health district, Utah, 2013-2022

Note: Cases were classified by Morbidity and Mortality Weekly Report (MMWR) year. San Juan County has been an independent LHD since 2015. Prior to 2015, it was served by the Southeast Utah LHD.

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population

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

Table 13. All stages of syphilis cases and rates by race/ethnicity, Utah, 2013–2022

					Cas	es								Rat	tes per 1	00,0 <mark>00 p</mark>	opulatio	n		
Race/ethnicity	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
American Indian/Alaska Native	<11	0	<11	<11	<11	<11	<11	19	19	24	-	0.0	_	_	20.8*	30.9*	27.0*	63.1	61.3	46.0
Asian	<11	<11	<11	<11	<11	15	<11	<11	14	23	12.7*	9.1*	10.6*	8.4*	6.6*	19.2	10.0*	7.3*	16.5	24.3
Black/African American	18	25	24	25	17	26	33	20	25	41	62.2	84.3	78.7	77.6	49.9	73.5	89.6	52.6	63.0	77.7
Native Hawaiian/Pacific Islander	<11	<11	<11	<11	10	15	12	<11	15	22	—	25.9*	—	20.6*	33.1*	47.7	36.9	20.8*	42.8	56.0
White	161	118	152	215	256	341	349	264	404	463	7.0	5.0	6.4	8.9	10.5	13.8	14.0	10.5	15.7	15.2
Hispanic [†]	38	40	59	69	79	118	131	122	174	224	9.9	10.2	14.6	16.5	18.2	26.4	28.5	25.9	35.2	43.7
Multiple	0	<11	<11	<11	<11	<11	<11	<11	<11	<11	0.0	-	-	-	7.9*	-	-	-	6.6*	7.1*
Other/unknown	<11	<11	<11	<11	<11	12	17	37	50	89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State total	179	143	176	240	283	409	411	340	527	662	6.7	5.5	6.5	8.5	9.7	13.3	13.5	11.0	15.9	19.6

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

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population

Committee estimates by the Kem C. Gardner Policy Institute.

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

	M	SM*		Not	MSM*	Unk	nown	Total
Year	Cases	Percent	_	Cases	Percent	Cases	Percent	Cases
2013	135	78.0%	_	25	14.5%	13	7.5%	173
2014	91	66.9%		14	10.3%	31	22.8%	136
2015	106	65.8%		28	17.4%	27	16.8%	161
2016	185	79.7%		25	10.8%	22	9.5%	232
2017	210	78.1%		40	14.9%	19	7.1%	269
2018	294	79.5%		39	10.5%	37	10.0%	370
2019	304	81.1%		44	11.7%	27	7.2%	375
2020	220	74.3%		37	12.5%	39	13.2%	296
2021	342	78.3%		51	11.7%	44	10.1%	437
2022	390	70.8%		105	19.1%	56	10.2%	551

Table 14. All stages of syphilis cases and percent among males by sexual orientation, Utah, 2013–2022

*MSM=Men who have sex with men

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

Age group					Cas	ses									Rat	tes				
(years)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
15 to 19	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	_	-	-	_	_	_	_	3.9*	4.2*	_
20 to 24	<11	<11	<11	<11	<11	<11	16	10	16	14	_	_	7.3*	4.8*	4.0*	7.1*	12.4	7.6*	13.5	11.7
25 to 29	<11	<11	<11	<11	<11	<11	<11	16	16	28	_	4.7*	_	4.4*	_	5.8*	7.3*	12.9	13.6	24.1
30 to 34	0	<11	<11	<11	<11	11	<11	<11	14	18	0.0	—	—	—	5.5*	10.2*	6.4*	6.4*	10.9	13.7
35 to 39	<11	<11	<11	<11	<11	<11	<11	<11	15	14	5.1*	_	-	4.5*	6.2*	_	_	_	12.4	11.4
40 to 44	0	<11	<11	0	0	<11	<11	<11	<11	13	0.0	_	_	0.0	0.0	_	4.7*	_	6.9*	10.9
Female total	<11	13	21	20	23	38	43	44	75	89	1.4*	2.0	3.2	3.0	3.3	5.4	6.1	6.1	10.1	11.7

Table 15. All stages of syphilis cases and rates by females of reproductive age, Utah, 2013–2022

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases,

UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

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

Note: Cases less than 11 and/or rate estimates with relative standard errors greater than 50% have been suppressed.

Table 16. Congential syphilis cases, Utah, 2013-2022

Age group		Cases										Rates per 100,000 population										
(years)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
<1	<11	0	0	0	0	<11	<11	<11	<11	<11	9.7*	0.0	0.0	0.0	0.0	_	_	_	_	15.3*		

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet DHHS standards for realiability. Note: Rate estimates with relative standard errors greater than 50% have been suppressed.

	Age group					Case	es								Rates	oer 100,00	00 popula	ition			
	(years)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	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	<11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	15 to 19	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	0.0	-	_	5.0*	3.2*	6.3*	_	3.1*	2.9*	6.4*
	20 to 24	<11	<11	<11	15	24	20	19	11	26	30	8.03	5.6*	5.5*	11.6	18.4	15.0	14.0	7.9*	18.0	20.5
	25 to 29	<11	<11	15	12	22	36	23	25	28	41	12.9	8.2*	13.4	10.2	17.8	28.3	17.8	19.0	21.6	31.2
М	30 to 34	11	11	<11	<11	14	31	15	25	43	33	8.7	9.6*	7.1*	9.0*	12.7	28.2	13.4	21.9	36.3	27.7
а	35 to 39	<11	<11	<11	13	18	21	20	16	30	35	11.7	5.6*	8.1*	11.4	15.5	17.8	17.0	13.8	24.0	27.7
Ι	40 to 44	<11	<11	<11	<11	<11	17	11	13	15	23	8.0*	4.5*	7.7*	9.6*	9.1*	16.4	10.2*	11.5	13.0	19.8
e	45 to 49	<11	<11	<11	<11	<11	11	<11	<11	<11	16	6.63	-	5.1*	6.1*	7.1*	12.6*	11.1*	9.8*	9.3*	16.3*
	50 to 54	<11	<11	<11	12	<11	<11	12	<11	12	11	10.4*	9.1*	6.6*	15.9	6.6*	12.0*	15.7	11.4*	13.9	12.6*
	55 to 59	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	9.7*	-	5.4*	5.3*	11.9*	-	9.1*	-	10.2*	12.5*
	60 to 64	<11	<11	<11	0	<11	0	<11	<11	<11	<11	-		—	0.0	-	0.0	6.9*	6.8*	6.6*	7.8*
	65+	0	0	<11	<11	<11	<11	0	<11	<11	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
	Male total	76	50	64	87	113	159	125	121	181	215	5.2		4.3	5.7	7.2	10.0	7.7	7.4	10.7	12.5
	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	<11	0	<11	<11	0	0	<11	<11	0	0	-	0.0	_	_	0.0	0.0	_	_	0.0	0.0
	20 to 24	0	<11	0	<11	<11	<11	<11	0	<11	<11	0.0	-	0.0	—	—	—	—	0.0	—	3.6*
F	25 to 29	0	0	0	0	<11	<11	<11	<11	<11	<11	0.0		0.0	0.0	_	_	-	4.1*	4.1*	4.0*
е	30 to 34	0	0	<11	0	0	<11	<11	<11	<11	<11	0.0		—	0.0	0.0	3.7*	_	—	3.5*	—
m	35 to 39	<11	<11	0	<11	0	0	0	0	<11	<11	-	-	0.0	-	0.0	0.0	0.0	0.0	4.4*	-
а	40 to 44	0	0	0	0	0	<11	<11	<11	<11	<11	0.0		0.0	0.0	0.0	_	_	-	5.3*	_
1	45 to 49 50 to 54	0	<11	0	<11	0	0	<11	<11	0	0	0.0		0.0	-	0.0	0.0	-		0.0	0.0
e	50 to 54 55 to 59	0	0	0	0	<11	<11	<11	0	<11	<11	0.0		0.0	_	0.0	_	-	0.0	-	_
	60 to 64	0	0	0	0	0	0	<11	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	<11	<11	0.0		0.0	0.0	0.0	0.0	0.0	0.0	_	_
	Unknown	0	0	0	0	0	0	0	<11 0	0	<11	0.0 N/A		0.0 N/A	0.0 N/A	0.0 N/A	0.0 N/A	0.0 N/A		0.0 N/A	 N/A
		<11	<11	<11	<11	<11	<11	13	12	26	22			IN/A	0.4*	N/A	0.6*	0.8	0.7	1.6	1.3
	Female total 1 to 9						0	0	0	20	0		-								0.0
	10 to 14	0	0	0	0	0	0	0	0	0	<11	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15 to 19	<11	<11	0	<11	<11	<11	<11	<11	<11	<11	0.0		1.7*	3.0*	1.6*	3.2*	1.6*	1.9*	1.5*	3.3*
	20 to 24	<11	<11	<11	17	27	21	22	11	29	35	4.03		2.8*	6.8	10.6	8.1	8.3	4.1*	10.3	12.3
	25 to 29	<11	<11	15	12	27	37	22	30	33	46	4.0		6.8	5.2	9.6	15.0	9.6	11.8	13.1	12.3
т	30 to 34	<11	11	<11	<11	14	35	18	27	47	36	4.43		4.0*	4.5*	6.4	16.1	8.2	12.0	20.1	15.2
0	35 to 39	<11	<11	<11	14	14	21	20	16	35	38	6.5		4.1*	6.2	7.9	9.1	8.6	7.0	14.7	15.7
t	40 to 44	<11	<11	<11	<11	<11	19	13	15	21	26	4.1*	2.3*	3.9*	4.9*	4.6*	9.3	6.1	6.8	9.2	11.2
a	45 to 49	<11	<11	<11	<11	<11	11	11	<11	<11	16	3.4		2.6*	3.7*	3.6*	6.4*	6.2*	5.5*	4.8*	8.4
I	50 to 54	<11	<11	<11	13	<11	<11	13	<11	14	12	5.1*	4.5*	3.3*	8.6	3.3*	6.7*	8.6	5.8*	8.3	7.0
'	55 to 59	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	4.8		2.6*	2.6*	5.8*	_	5.1*	_	5.2*	6.4*
	60 to 64	<11	<11	<11	0	<11	0	<11	<11	<11	<11	_	_		0.0	_	0.0	3.4*	3.3*	3.8*	4.4*
	65+	0	0	<11	<11	<11	<11	0	<11	<11	<11	-	0.0	_	_	_	_	0.0	_	_	_
	Unknown	<11	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	80	53	66	93	117	168	138	133	207	237	2.7	1.8	2.2	3.1	3.8	5.3	4.3	4.1	6.2	7.0

Table 17. Primary and secondary syphilis cases and rates by age group and sex, Utah, 2013-2022

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

Sources: Utah Cases - Department of Health and Human Services, Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system); Population Estimates - National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Bureau of the Census.

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

Local health					Case	s								Rate	s per 100,	000 popu	lation			
district	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bear River	0	0	<11	<11	<11	<11	0	<11	<11	<11	0.0	0.0	_	-	_	_	0.0	_	_	3.5*
Central	<11	0	0	0	0	<11	<11	<11	<11	<11	1.3	0.0	0.0	0.0	0.0	_	1.2	_	_	_
Davis	6	<11	<11	<11	<11	17	15	<11	21	18	1.9*	_	1.8*	1.5*	1.2	4.8	4.2	1.9*	5.7	4.8
Salt Lake	66	41	49	70	87	121	97	90	118	165	6.1	3.8	4.4	6.2	7.6	10.5	8.4	7.7	9.9	13.7
San Juan	0	0	0	0	0	0	0	<11	<11	<11	N/A	N/A	0.0	0.0	0.0	0.0	0.0	_	_	_
Southeast	0	0	0	0	<11	0	<11	0	0	<11	0.0	0.0	0.0	0.0	2.5	0.0	_	0.0	0.0	_
Southwest	0	0	<11	<11	<11	<11	<11	<11	14	11	0.0	0.0	-	2.2*	3.4*	_	2.4*	3.4*	5.1	4.0
Summit	0	0	0	<11	0	0	<11	<11	<11	<11	0.0	0.0	0.0	_	0.0	0.0	-	-	-	_
Tooele	<11	<11	0	0	<11	0	0	<11	<11	0	1.6	1.6	0.0	0.0	_	0.0	0.0	_	6.5*	0.0
TriCounty	<11	0	0	0	<11	0	0	<11	<11	<11	_	0.0	0.0	0.0	_	0.0	0.0	_	_	_
Utah	0	<11	<11	<11	<11	<11	<11	11	22	18	0.0	_	1.0*	1.0*	1.3*	1.1*	0.8*	1.7*	3.2	2.6
Wasatch	0	<11	0	0	0	0	0	0	0	<11	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0	0.0	_
Weber-Morgan	<11	<11	<11	<11	<11	15	<11	<11	14	<11	_	2.0*	_	-	1.9*	5.6*	3.3*	-	5.0	3.2
Unknown	<11	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	80	53	66	93	117	168	138	133	207	237	2.8	1.8	2.2	3.1	3.8	5.3	4.3	4.1	6.2	7.0

Table 18. Primary and secondary syphilis cases and rates by local health district, Utah, 2013–2022

Note: Cases were classified by Morbidity and Mortality Weekly Report (MMWR) year. San Juan County has been an independent LHD since 2015. Prior to 2015, it was served by the Southeast Utah LHD. Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

* Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet DHHS standards for reliability. Note: Rate estimates with relative standard errors greater than 50% have been suppressed.

Table 19. Primary and secondary syphilis cases and rates by race/ethnicity, Utah, 2013-2022

					Case	es								Rates	per 100,0	00 popula	tion			
Race/ethnicity	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
American Indian/Alaska Native	<11	0	0	<11	<11	<11	<11	<11	<11	<11	_	0.0	0.0	_	_	-	-	16.6*	25.8*	19.1*
Asian	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	_	_	_	_	_	_	_	—	7.1*	9.3*
Black	<11	<11	<11	<11	<11	<11	<11	<11	15	15	_	20.2*	_	15.5*	20.5*	25.4*	21.7*	15.8*	37.8	37.3
Pacific Islander	0	<11	0	<11	<11	<11	<11	<11	<11	<11	0.0	_	0.0	_	_	_	1.5*	—	_	1.6*
White	70	42	62	83	101	145	114	108	156	165	131.7	76.1	107.9	137.6	159.5	219.9	165.9	150.7	205.2	214.3
Hispanic [†]	<11	<11	20	18	23	43	32	36	60	73	34.1*	33.3*	71.4	61.8	76.2	136.7	98.5	107.1	171.1	205.6
Multiple	0	<11	0	<11	<11	<11	<11	<11	<11	<11	0.0	-	0.0	_	_	_	_	_	_	-
Other/unknown	<11	0	<11	0	0	<11	<11	11	16	33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State total	80	53	66	93	117	168	138	133	207	237	2.8	1.8	2.2	3.1	3.8	5.3	4.3	4.1	6.2	7.0

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

Note: Cases were classified by Morbidity and Mortality Weekly Report (MMWR) year. San Juan County has been an independent LHD since 2015. Prior to 2015, it was served by the Southeast Utah LHD.

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kern C. Gardner Policy Institute.

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

	M	SM*	Not	MSM*	Unk	nown	Total
Year	Cases	Percent	Cases	Percent	Cases	Percent	Cases
2013	69	90.8%	<11	1.3%	<11	7.9%	76
2014	44	88.0%	<11	8.0%	<11	4.0%	50
2015	52	81.3%	<11	9.4%	<11	9.4%	64
2016	77	88.5%	<11	6.9%	<11	4.6%	87
2017	92	81.4%	12	10.6%	<11	8.0%	113
2018	131	82.4%	14	8.8%	14	8.8%	159
2019	108	86.4%	13	10.4%	<11	3.2%	125
2020	96	79.3%	<11	6.6%	17	14.0%	121
2021	142	78.5%	21	11.6%	18	9.9%	181
2022	152	70.7%	46	21.4%	17	7.9%	215

Table 20. Primary and secondary syphilis cases and percent among males by sexual orientation, Utah, 2013–2022

*MSM=Men who have sex with men

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

Data sources: Utah Department of Health and Human Services Office of Communicable Diseases, UT-NEDSS

(reportable disease surveillance system) and population data from Utah Population Committee estimates by the

Kem C. Gardner Policy Institute.

Note: Cases less than 11 and/or rate estimates with relative standard errors greater than 50% have been suppressed.

Appendix

Utah's 13 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 County Health Department	Salt Lake
San Juan Public Health Department	San Juan
Southeast Utah Health Department	Carbon, Emery, Grand
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