

Key findings

- UT ranks among the lowest number of STI cases in the U.S.: chlamydia (44), gonorrhea (44), syphilis (44), and congenital syphilis (47).
- The majority of STI cases are reported from the Wasatch Front: chlamydia (83%), gonorrhea (90%), and syphilis (88%).
- Highest STI rates were in people who identify as Black or African American, Native Hawaiian or Pacific Islander, and American Indian or Alaska Native.
- Females have higher rates of chlamydia while males have higher rates of gonorrhea and syphilis.
- Individuals aged 15 to 24 had highest rates for chlamydia and gonorrhea, while syphilis was higher in individuals aged 25 to 34.
- Congenital syphilis cases have increased more than 6 times from 2013.

STI trends in Utah

Chlamydia, gonorrhea, and syphilis—annual surveillance update

Of the more than 75 reportable communicable diseases sexually transmitted infections (STIs) are the most commonly reported diseases. There were 14,861 STI cases reported in 2022, a 3% decrease from 2021. Chlamydia continues to be the most frequently reported STI with 11,110 reported cases, followed by gonorrhea with 3,082 cases and syphilis (all stages, including congenital) with 669 cases. Chlamydia and gonorrhea both decreased from 2021 (2% and 16%, respectively). Syphilis cases continue to rise at a significant rate with a 26% increase from 2021, with congenital syphilis (CS) cases rising more than 6 times the number of cases from 2013.

Figure 1. STI rates per 100,000 population, Utah 2013-2022



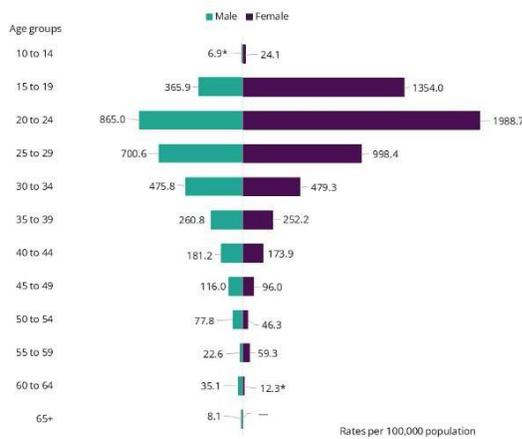
Source: Utah Department of Health and Human Services Office of Communicable Diseases. UT-NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

2022 Chlamydia surveillance update

Chlamydia remained the number one reported STI in the state with 11,110 cases reported, a 2% decrease compared to 2021. Throughout Utah, the majority of cases are from the Wasatch Front: Salt Lake County (52%), Utah County (14%), Davis County (9%), and Weber-Morgan (8%) (Table 1).

STIs are common, especially among young people. In Utah, adolescents and young adults (aged 15–24) account for 17% of the population but accounted for 57% of all reported chlamydia cases (Figure 2).

Figure 2. Chlamydia rates by sex, Utah, 2022



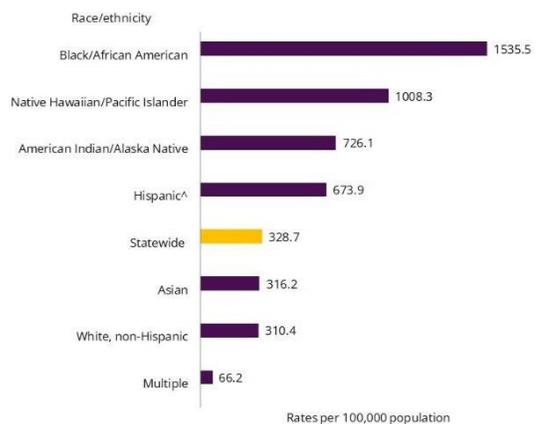
Source: Utah Department of Health and Human Services Office of Communicable Diseases. UT_NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

The majority of cases are among females (63%). Chlamydia infections often have no symptoms and case rates are heavily influenced by screening coverage. Higher rates in females may be attributed to higher rates of screening when compared with males.

From 2021, the rate among men increased 31% (from 248.8 to 327.1 cases per 100,000 population). Rates among women decreased approximately 1% (from 426.6 to 423.1 cases per 100,000 population). Decreases among women were most pronounced in those aged 30 to 34 (7% decreases from 2021). However, among women aged 55 to 59 there was a disproportionate increase of more than 2 times the rate from 2021 (24.8 to 59.3 cases per 100,000 population).

In 2022, highest rates among the major racial and ethnic groups were reported among people who identify as non-Hispanic Black or African American, Native Hawaiian or Pacific Islander, and American Indian or Native Alaska (1535.5, 1008.3, and 726.1 cases per 100,000 population, respectively) (Figure 3).

Figure 3. Chlamydia rates by race/ethnicity, Utah, 2022



Source: 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.

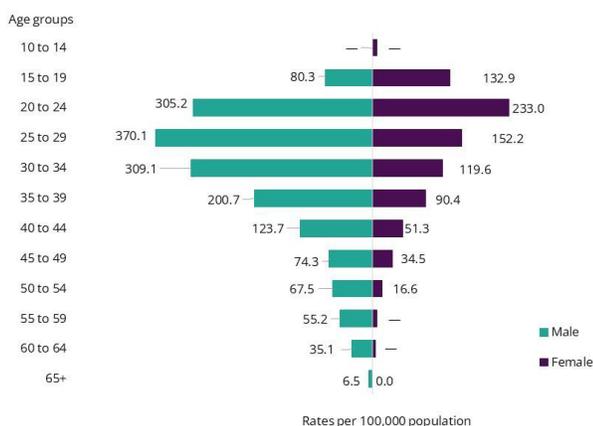
2022 Gonorrhea surveillance update

Gonorrhea continues to be the second most commonly reported STI with 3,082 cases reported, a 15% decrease from 2021. Like chlamydia, the majority of gonorrhea cases are reported along the populous Wasatch Front: Salt Lake County (65%), Utah County (11%), Davis County (8%), and Weber-Morgan (7%).

The highest rates among the major racial and ethnic groups were reported in individuals who identify as non-Hispanic Black or African American, Native Hawaiian or Pacific Islander, and American Indian or Native Alaska (694.3, 284.5, and 219.7 cases per 100,000 population). Individuals who identify as Black or African American had rates more than 8 times higher than that of individuals who identified as white.

Compared to chlamydia, gonorrhea has higher rates among individuals in older age groups. Females aged 20 to 29 and males aged 25 to 34 had the highest rates of gonorrhea (Figure 4).

Figure 4. Gonorrhea rates by age group and sex, Utah, 2022

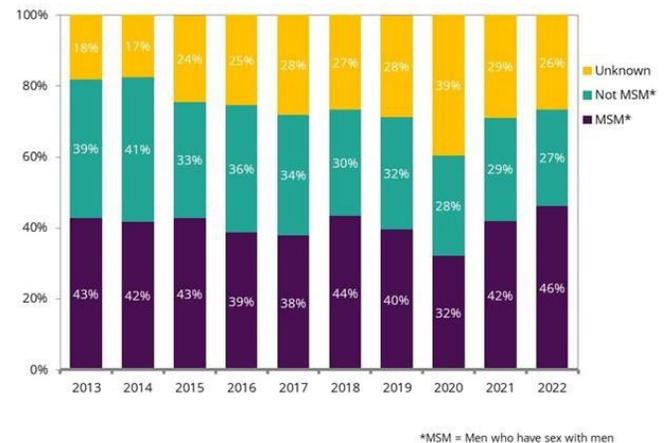


Source: Utah Department of Health and Human Services Office of Communicable Diseases. UT_NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kern C. Gardner Policy Institute.

From 2021 to 2022, rates decreased among both males (16%) and females (15%). Among males, rates decreased in all age groups, except those aged 20 to 24, which increased 23% from 2021.

The majority of cases are among males (66%), with rates 2 times higher than females. This reflects cases identified in both men who have sex with men (MSM) and men who have sex with women (MSW). In 2022, 46% of cases were in MSM compared to 27% of cases in MSW (Figure 5).

Figure 5. Percent of male gonorrhea cases by sexual orientation, Utah, 2022



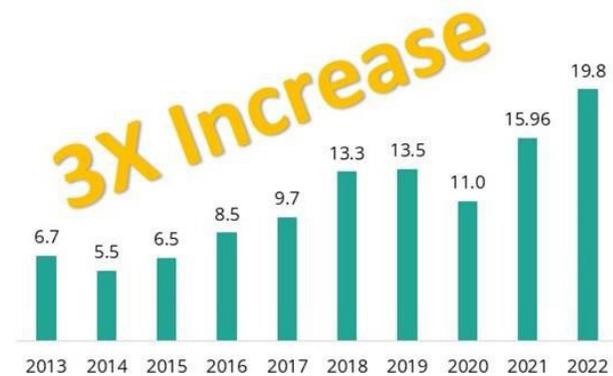
Source: Utah Department of Health and Human Services Office of Communicable Diseases. UT_NEDSS (reportable disease surveillance system).

2022 Syphilis surveillance update

Syphilis is a complex sexually transmitted infection comprised of several stages (early, non-primary non-secondary, primary, secondary, and late or unknown duration) throughout the duration of the infection. Primary and secondary (P&S) syphilis is the most infectious stage and tends 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 stages and Utah follows this trend.

Utah continues to experience a sharp rise in syphilis rates for all stages. In 2022, 669 cases were reported, with a rate 3 times that of 2013 (from 6.7 to 19.8 cases per 100,000 population) (Figure 6).

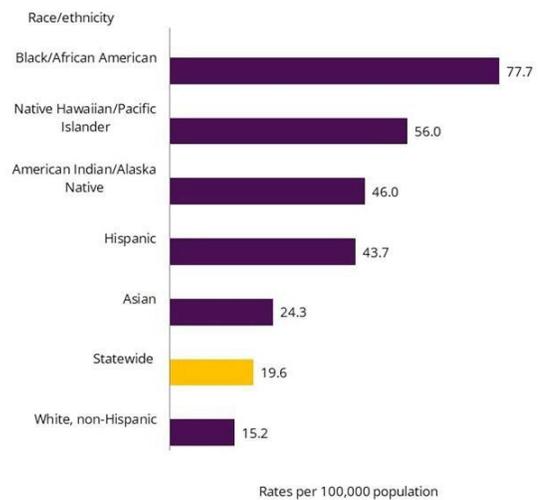
Figure 6. All stages of syphilis rates, Utah, 2013-2022



Source: 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.

Racial and ethnic minorities continue to shoulder a disproportionate burden of syphilis cases. People who identify as Black or African American have rates nearly 5 times higher than the statewide rate and 2.3 times higher than the next highest group, individuals who identify as Hispanic. People who identify as Hispanic make up 14.8% of Utah's population and account for 30% of the cases (Figure 7).

Figure 7. All stages of syphilis by race/ethnicity, Utah, 2022



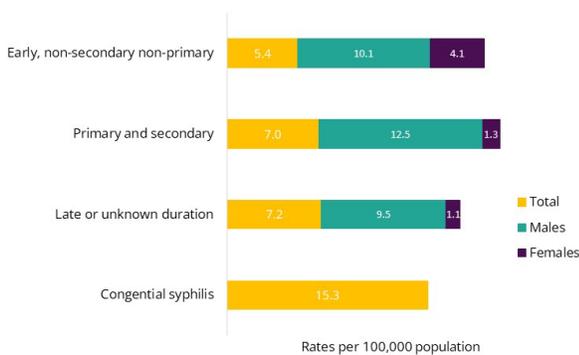
Source: Utah Department of Health and Human Services Office of Communicable Diseases. UT_NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

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

2022 Syphilis surveillance update

Syphilis rates increased in both males and females, as well as all age groups. Males account for more cases of syphilis and in particular, P&S syphilis (12.5 cases per 100,000 population). Rates in males are nearly 5 times higher than in females (32.3 compared to 6.8, respectively). Females have higher rates in the early, non-primary non-secondary stage, more than likely due to increased screenings. Males have highest rates in the late or unknown stage (Figure 8).

Figure 8. Syphilis rates by stages, Utah, 2022



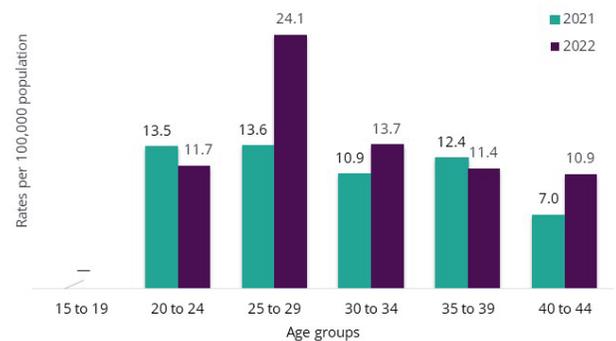
Source: Utah Department of Health and Human Services Office of Communicable Diseases. UT_NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kern C. Gardner Policy Institute.

Syphilis rates are highest among MSM, accounting for 78% of male syphilis cases. There is a concern for coinfection with HIV. MSM who are HIV-negative and diagnosed with P&S syphilis are more likely to get HIV in the future. Syphilis and other STIs might indicate ongoing behaviors and exposures that place a person at greater risk for acquiring HIV.

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). This raises specific concerns for females of reproductive age (FRA), aged 15 to 44. FRA are a priority population as treatment of a pregnant woman with syphilis may prevent CS (syphilis passed from the mother to the baby during pregnancy).

From 2021 to 2022, rates increased 19% in FRA, with the highest rates in females aged 25 to 29 (24.1 cases per 100,000 population). In this age group there was a 77% increase in rates from 2021 (13.6 to 24.1 cases per 100,000 population) (Figure 9).

Figure 9. All stages of syphilis in females of reproductive age, Utah, 2022



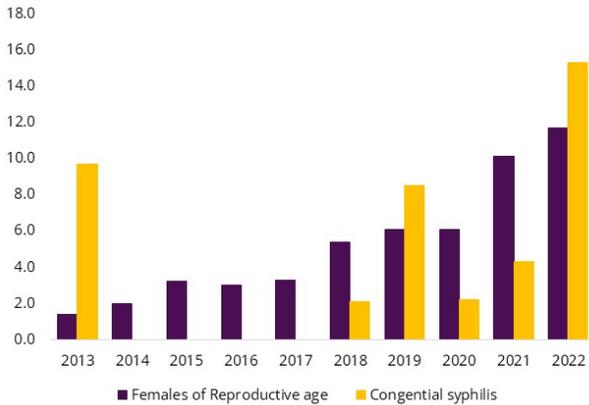
Source: Utah Department of Health and Human Services Office of Communicable Diseases. UT_NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kern C. Gardner Policy Institute.

Note: Rate estimates with relative standard errors greater than 50% have been suppressed and are marked by an em dash.

The increase in syphilis among females is particularly concerning as CS rates closely follow FRA rates (Figure 10). FRA rates have increased more than 6 times the rate of 2013 (1.4 to 11.7 cases per 100,000 population).

2022 Syphilis surveillance update

Figure 10. Syphilis in females of reproductive age in comparison to congenital syphilis rates, Utah, 2022



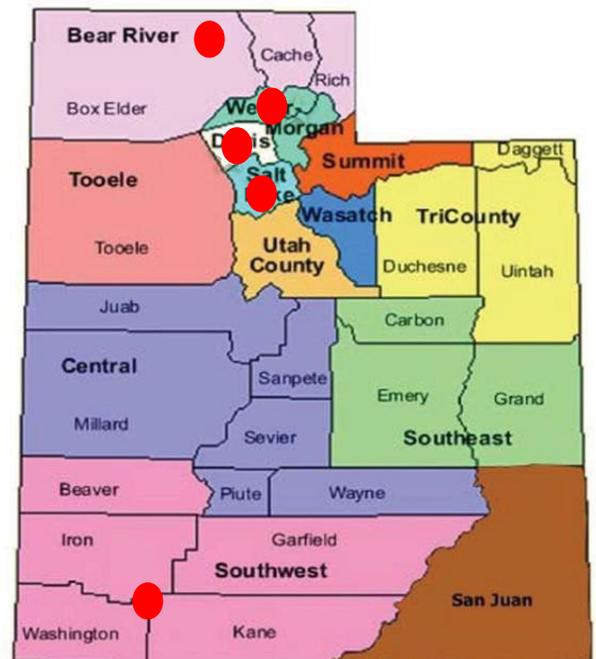
Source: Utah Department of Health and Human Services Office of Communicable Diseases. UT_NEDSS (reportable disease surveillance system) and population data from Utah Population Committee estimates by the Kem C. Gardner Policy Institute.

Congenital syphilis occurs during pregnancy when an untreated mother with syphilis passes it to the baby. This can occur during any stage of syphilis and in any trimester. However, the risk of transmission is highest if the person has acquired syphilis recently. Syphilis during pregnancy can cause tragic outcomes, like miscarriage, still birth, infant death, developmental delays, and lifelong medical issues.

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 6 times the number from 2013 (9.7 to 15.3 cases per 100,000 population). From 2021 to 2022 there was a 2.5 increase in CS cases, with zero stillborn or fetal deaths reported. CS cases were reported in many areas of the state (Figure 11).

Figure 11. Map of congenital cases, Utah, 2022



● Indicates a LHD with one or more CS case.

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
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

Table 1. STI cases by local health district, Utah, 2022

Reported cases and rates of STIs, Utah, 2018–2022

	2018		2019		2020		2021		2022	
	Cases	Rate [§]								
Chlamydia	10,558	334.6	11,072	345.6	10,492	322.8	11,230	336.4	11,110	328.7
Gonorrhea	2,895	91.8	2,878	89.8	3,121	96.0	3,632	108.8	3,082	91.2
Syphilis, early	106	3.4	120	3.7	82	2.5	133	4.0	183	5.4
Syphilis, primary	77	2.4	53	1.7	67	2.0	84	2.5	84	2.5
Syphilis, secondary	93	2.9	86	2.7	68	2.1	123	3.7	123	3.7
Syphilis, late or unknown	146	4.6	169	5.3	141	4.3	190	5.7	242	7.2
Syphilis, congenital	<11	—	<11	—	<11	—	<11	—	<11	15.3*

Reported cases and rates of STIs by local health district, Utah, 2022

	Chlamydia		Gonorrhea		Early syphilis		P&S syphilis		Late or unknown syphilis		Congenital syphilis	
	Cases	Rate [§]	Cases	Rate [§]	Cases	Rate [§]	Cases	Rate [§]	Cases	Rate [§]	Cases	Rate [§]
Bear River	407	201.3	70	34.6	<11	—	<11	3.5*	<11	3.9*	<11	—
Central Utah	141	173.3	22	27.0	0	0.0	<11	—	<11	—	0	0.0
Davis County	975	262.2	236	63.4	10	2.7*	18	4.8	18	4.8	<11	—
Salt Lake County	5,762	479.7	1,999	166.4	119	9.9	165	13.7	147	12.2	<11	—
San Juan	48	320.4	<11	61.3*	<11	—	<11	—	<11	—	0	0.0
Southeast Utah	97	239.5	<11	24.7*	<11	—	<11	—	<11	—	0	0.0
Southwest Utah	720	261.3	104	37.7	<11	—	11	4.0	13	4.7	<11	—
Summit County	141	323.2	22	50.4	<11	—	<11	—	<11	—	0	0.0
Tooele County	170	219.1	51	65.7	<11	—	0	0.0	<11	—	0	0.0
TriCounty	91	157.8	18	31.2	<11	—	<11	—	0	0.0	0	0.0
Utah County	1,587	228.8	325	46.8	23	3.3	18	2.6	25	3.5	0	0.0
Wasatch County	69	188.4	14	38.2	<11	—	<11	—	0	0.0	0	0.0
Weber-Morgan	902	318.5	201	70.9	11	3.9*	<11	3.2*	19	6.8	<11	—
	11,110		3,062		163		212		222		0	

[§] Rate per 100,000 persons

* 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.

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