

Public Health Services Administration

2022 Annual Maryland STI Report

Table of Contents

Table of Contents	2
STI Overview	4
Figure 1. All STI Rates* by County, Maryland, 2022	4
Table 1. STI Population vs Maryland Population, Maryland 2022	5
Chlamydia	6
Figure 2. Chlamydia Rates by County, Maryland 2022	6
Figure 3. Chlamydia Case Counts and Rates, Maryland, 2018-2022	7
Figure 4. Chlamydia Rates by Age and Current Sex, Maryland, 2022	8
Gonorrhea	10
Figure 6. Gonorrhea Rates by County, Maryland, 2022	10
Figure 7. Gonorrhea Case Counts and Rates, Maryland, 2018-2022	
Figure 8. Gonorrhea Rates by Age and Current Sex, Maryland, 2022	
Figure 9. Gonorrhea Case Counts by Race and Ethnicity, Maryland, 2022	
Gonorrhea Rates by Race and Ethnicity, Maryland, 2018-2022	13
Syphilis	14
Figure 10. Acquired Syphilis by Stage, Case Count and Rates, Maryland, 2018-2022	14
Primary and Secondary Syphilis	15
Figure 11. Primary and Secondary Syphilis Rates by County, Maryland, 2022	15
Figure 12. Primary and Secondary Syphilis Rates by County, Maryland, 2018-2022	16
Figure 14. Primary and Secondary Syphilis Cases by Race and Ethnicity, Maryland, 2	02218
Primary and Secondary Syphilis Rates by Race and Ethnicity, Maryland, 2018- 2022	18
Acquired Syphilis	19
Figure 15. Acquired Syphilis Rates by County, Maryland, 2022	
Figure 16. Acquired Syphilis Case Counts and Rates, Maryland, 2018-2022	20
Figure 17. Acquired Syphilis Rates by Age and Current Sex, Maryland, 2022	21
Figure 18. Acquired Syphilis Case Counts by Race and Ethnicity, Maryland, 2022	22
Acquired Syphilis Case Counts and Rates by Race and Ethnicity, Maryland, 2018- 2022	22
Congenital Syphilis	23
Figure 19. Congenital Syphilis Combined Rates by County, Maryland, 2018-2022	23
Figure 20. Congenital Syphilis, Cases and Rates, Maryland, 2018-2022	24
Figure 21. Congenital Syphilis Rates and Acquired Syphilis Rates among People of Childbearing Capacity, Maryland, 2018-2022	25
STI Tables	
2A. Chlamydia Case Counts and Rates By County, Ranked by Rate, Maryland, 2022	
2B . Chlamydia Case Counts and Rates by County in Alphabetical Order, 2018-2022, Marylan	d28
3A. Gonorrhea Case Counts and Rates By County, Ranked by Rate, Maryland, 2022	29

3B . Gonorrhea Case Counts and Rates by County in Alphabetical Order, 2018-2022,	
Maryland	30
4A. Primary and Secondary Syphilis Case Counts and Rates By County, Ranked by Rate, Maryl 2022	
4B. Primary and Secondary Syphilis Case Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland	32
4C. Acquired Syphilis Case Counts and Rates By County, Ranked by Rate, Maryland, 2022	33
5A. Congenital Syphilis Rates By County, Ranked by Rate, Maryland, 2022	35
5B. Congenital Syphilis, Combined Case Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland	36
Definitions/Acronyms	37
References	39
Resources	40
Acknowledgements	41

STI Overview

Surveillance is key to understanding the extent of sexually transmitted infections in Maryland and in those persons most affected by STIs. The 2022 Sexually Transmitted Infections (STI) Annual Report provides updated data and trends in nationally notifiable STIs: chlamydia, gonorrhea, and syphilis, including congenital syphilis.

Since STIs often do not show symptoms, screening is necessary for timely diagnosis and treatment. Changes in access to sexual health care can affect the number of infections diagnosed and reported. Disruptions in STI-related prevention and care activities related to the public health response to the COVID-19 pandemic has had a pronounced impact on trends in STI surveillance data; therefore, trends for STI surveillance data collected during the pandemic and presented in the 2022 STI Annual Report should be interpreted cautiously. For more information, please see CDC's Impact of COVID-19 on STIs. Additionally, due to a 2021 Network Security Incident, the Maryland Department of Health (MDH) was not able to complete 2021 STI data reporting and only state-level information is being published and will be denoted by this symbol '*' throughout the report. Finally, due to the transition to a new surveillance database in early 2023, 2022 data may not be as robust as prior years. The data provided in this report have been reviewed and previously unknown data may have been updated for the purposes of this analysis.

Rates of STIs in Maryland in 2022, were the highest since at least 1984 and certain counties remain disproportionately impacted by STI rates compared to their population (Table 1).

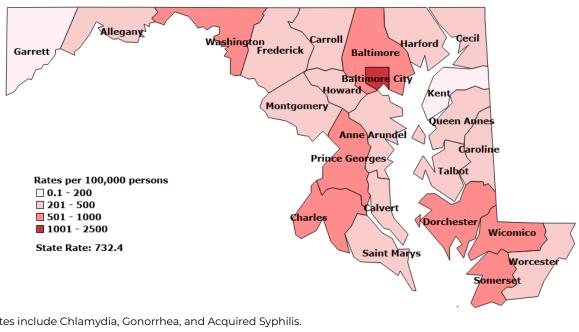


Figure 1. All STI Rates* by County, Maryland, 2022

*All STI rates include Chlamydia, Gonorrhea, and Acquired Syphilis.

County	Maryland S	TI Population		Maryland Po	pulation
	n	%	Rate	n	%
Allegany	238	0.5%	353.8	67,267	1.1%
Anne Arundel	2,556	5.7%	430.8	593,286	9.6%
Baltimore	5,932	13.1%	701	846,161	13.7%
Baltimore City	13,333	29.5%	2339.4	569,931	9.2%
Calvert	266	0.6%	281.3	94,573	1.5%
Caroline	152	0.3%	454.6	33,433	0.5%
Carroll	353	0.8%	201.4	175,305	2.8%
Cecil	404	0.9%	385	104,942	1.7%
Charles	1,143	2.5%	671.9	170,102	2.8%
Dorchester	264	0.6%	806.7	32,726	0.5%
Frederick	1,006	2.2%	350.4	287,079	4.7%
Garrett	37	0.1%	129.5	28,579	0.5%
Harford	1,129	2.5%	427.9	263,867	4.3%
Howard	1,293	2.9%	385.5	335,411	5.4%
Kent	34	0.1%	176	19,320	0.3%
Montgomery	4,714	10.4%	447.9	1,052,521	17.1%
Prince Georges	9,199	20.4%	971.4	946,971	15.4%
Queen Annes	110	0.2%	212.7	51,711	0.8%
Saint Marys	495	1.1%	430.9	114,877	1.9%
Somerset	171	0.4%	696.7	24,546	0.4%
Talbot	139	0.3%	366.4	37,932	0.6%
Washington	952	2.1%	611.9	155,590	2.5%
Wicomico	982	2.2%	938.2	104,664	1.7%
Worcester	239	0.5%	443.7	53,866	0.9%
Unknown	12	0.03%	-		
Total	45,153	100.0%	732.4	6,164,660	100.0%

Table 1. STI Population vs Maryland Population, Maryland 2022

*Includes Chlamydia, Gonorrhea, and acquired syphilis cases.

[▶] Issue Date: 04/01/2024

Chlamydia

In 2022, a total of 31,326 cases of *Chlamydia trachomatis* infection were reported to the Maryland Department of Health (MDH), making it the most common notifiable sexually transmitted infection and the second most common notifiable condition (after COVID-19) in Maryland. This case count corresponds to a rate of 506.7 cases per 100,000 persons, which is a decrease of 13.7% compared with the rate five years ago (2018).

Rates of reported chlamydia are highest among adolescents and young adults: in 2022, more than half of (58%) of all reported chlamydia cases in Maryland were among persons aged 15–24 years.

The increases in rates of reported chlamydia in 2022 follow a substantial decrease in rates and cases in 2020 and 2021. The decrease in rates of reported chlamydia in 2020 and 2021 were unlikely due to a reduction in new infections. As chlamydial infections are usually asymptomatic, case rates are heavily influenced by screening coverage. During the COVID-19 pandemic, many health care clinics limited in-person visits to patients with symptoms or closed entirely, and it is likely that preventive health care visits where STI screening usually happens, such as annual reproductive health visits for young women, decreased. Although the rate of reported chlamydia has increased, the rate is still lower than the rate in 2018 and 2019 suggesting that COVD-19 related challenges related to chlamydia screening may still persist.

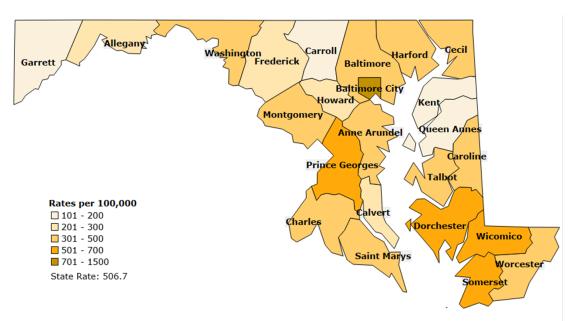


Figure 2. Chlamydia Rates by County, Maryland 2022

For more detailed information about chlamydia rates by County, please refer to <u>Table 2A. Chlamydia</u> <u>Case Counts and Rates By County, Ranked by Rate, Maryland, 2022</u> and <u>Table 2B. Chlamydia Case</u> <u>Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland</u>.

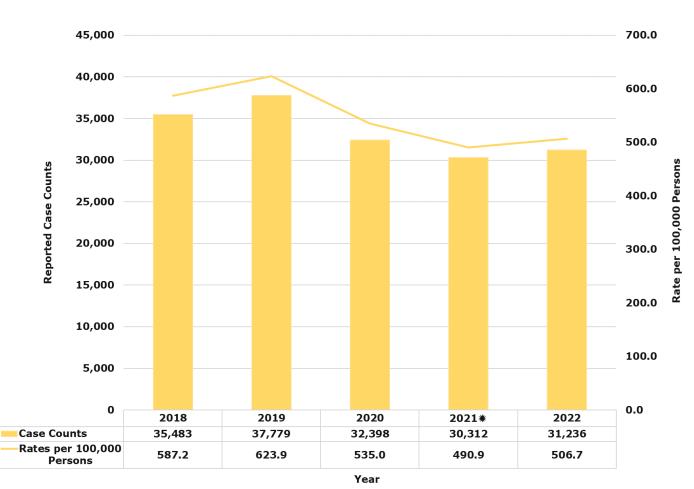


Figure 3. Chlamydia Case Counts and Rates, Maryland, 2018-2022

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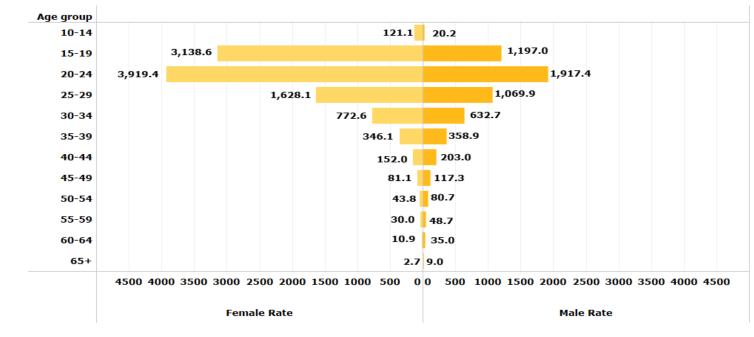


Figure 4. Chlamydia Rates by Age and Current Sex, Maryland, 2022

*Per 100,000

	Age group														
Current Sex		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages	
Female	Cases	229	5,971	7,467	3,127	1,649	746	314	152	91	65	23	16	19,854	
	Rates	121.1	3138.6	3919.4	1628.1	772.6	346.1	152.0	81.1	43.8	30.0	10.9	2.7	627.7	
Male	Cases	40	2,370	3,715	2,065	1,333	754	409	211	159	99	68	41	11,268	
	Rates	20.2	1197.0	1917.4	1069.9	632.7	358.9	203.0	117.3	80.7	48.7	35.0	9.0	375.4	
All Sexes	Cases	270	8,356	11,210	5,215	2,995	1,507	729	367	253	165	91	57	31,236	
	Rates	69.7	2,152.3	2,917.3	1,354.3	706.2	354.1	178.7	100.0	62.5	39.3	22.5	69.7	506.7	

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Race/Ethnicity	
Unknown	11,511 36.9%
Black/African American	9,859 31.6%
White	3,652 11.7%
Multi-Racial	3,336 10.7%
Hispanic/Latino	1,331 4.3%
Other	1,233 3.9%
Asian	239 0.8%
American Indian/Alaskan Native	58 0.2%
Native Hawaiian/Pacific Islander	17 0.1%

Figure 5. Chlamydia Case Counts by Race and Ethnicity, Maryland, 2022

Chlamydia Case Counts and Rates by Race and Ethnicity, 2018-2022

	American Indian/ Alaskan Native		Indian/ Alaskan Native		Indian/ Alaskan Native		As	ian	Black// Ame			anic/ ino aces)	Multi	-Racial	Haw Pa	tive aiian/ cific nder	Wh	iite	Unknown Race	Other	All R	aces
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Cases	Cases	Rates				
2018	64	435.9	351	88.2	16,181	898.3	2,170	345.3	128	87.4	15	488.3	4,855	159.1	11,719	-	35,483	587.2				
2019	72	490.6	453	112.4	17,128	943.1	2,951	462.3	107	69.9	33	1120.9	4,753	157.0	12,282	-	37,779	623.9				
2020	42	286.9	261	64.2	13,296	729.5	2,013	307.6	114	73.2	20	660.5	3,387	113.0	13,265	-	32,398	535.0				
2021*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	30,312	490.9				
2022	58	395.7	239	56.1	9,859	526.3	1,331	188.3	3,336	2023.3	17	562.5	3,652	122.7	11,511	1,233	31,236	506.7				

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Gonorrhea

In 2022, a total of 11,164 cases of *gonorrhea* were reported to the Maryland Department of Health (MDH), making it the second most common notifiable sexually transmitted infection in Maryland. This case count corresponds to a rate of 181.1 cases per 100,000, an increase of 6.2% compared with the rate in 2018. Since 2018, nine counties in Maryland have increased in rates of reported gonorrhea.

Since 2013, rates of reported gonorrhea have been higher among men compared to women, likely reflecting cases identified in both gay, bisexual, and other men who have sex with men (MSM) and men who have sex with women only. Although there is limited data available on sexual behaviors of persons reported with gonorrhea, enhanced data from jurisdictions participating in a sentinel surveillance system, the <u>STD Surveillance Network (SSuN)</u>, including Baltimore City suggest that almost 40% of gonorrhea cases occurred among MSM in 2022. However, Maryland has seen an increase in the number of young women with gonorrhea since 2020, specifically among those aged 15-24 years.

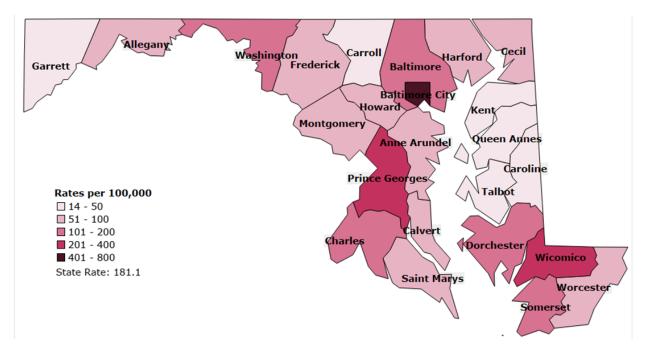


Figure 6. Gonorrhea Rates by County, Maryland, 2022

For more detailed information about chlamydia rates by County, please refer to <u>3A</u>. <u>Gonorrhea</u> <u>Case Counts and Rates By County, Ranked by Rate, Maryland, 2022</u> and <u>3B</u>. <u>Gonorrhea Case</u> <u>Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland</u>.

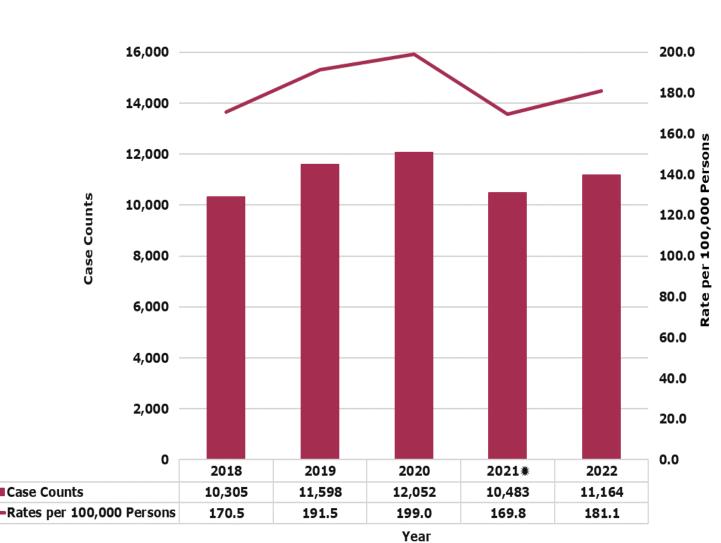
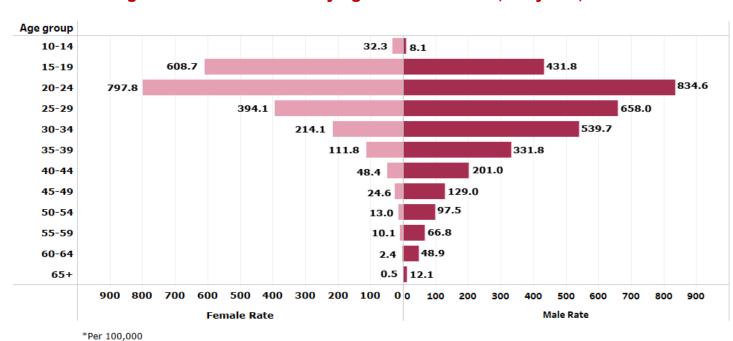


Figure 7. Gonorrhea Case Counts and Rates, Maryland, 2018-2022

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	Age group														
Current Sex		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages	
	Cases	61	1,158	1,520	757	457	241	100	46	27	22	5	3	4,400	
Female	Rates	32.3	608.7	797.8	394.1	214.1	111.8	48.4	24.6	13.0	10.1	2.4	0.5	139.1	
Male	Cases	16	855	1,617	1,270	1,137	697	405	232	192	136	95	55	6,708	
маје	Rate	8.1	431.8	834.6	658.0	539.7	331.8	201.0	129.0	97.5	66.8	48.9	12.1	223.5	
All	Cases	78	2,019	3,148	2,036	1,602	943	507	278	220	160	100	59	11,164	
Sexes	Rate	20.1	520.0	819.2	528.7	377.7	221.5	124.3	75.7	54.4	38.1	24.7	5.7	181.1	

Figure 8. Gonorrhea Rates by Age and Current Sex, Maryland, 2022

Race/Ethnicity	
Unknown	4,562 40.86%
Black/African American	4,255 38.11%
Multi-Racial	960 8.60%
White	900 8.06%
Other	229 2.05%
Hispanic/Latino	195 1.75%
Asian	44 0.39%
American Indian/Alaskan Native	13 0.12%
Native Hawaiian/Pacific Islander	6 0.05%

Figure 9. Gonorrhea Case Counts by Race and Ethnicity, Maryland, 2022

Gonorrhea Rates by Race and Ethnicity, Maryland, 2018-2022

		an Indian/ n Native	As	sian	-	African erican	Lat	anic/ tino Races)	Multi	-Racial		Hawaiian/ c Islander	WI	nite	Unknown	Other	Τα	otal
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates			Cases	Rates
2018	18	122.6	61	15.3	6,683	371.0	378	60.1	65	44.4	10	325.5	1,488	48.8	1,602	-	10,305	170.5
2019	22	149.9	81	20.1	7,552	415.8	460	72.1	56	36.6	9	305.7	1,632	53.9	1,786	-	11,598	191.5
2020	20	136.6	80	19.7	7,188	394.4	435	66.5	45	28.9	9	297.2	1,169	39.0	3,106	-	12,052	199.0
2021*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10,483	169.8
2022	13	88.7	44	10.3	4,255	227.1	195	27.6	960	582.2	6	198.5	900	30.2	4,562	229	11,164	181.1

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Syphilis

In 2022, 2,753 cases of syphilis (all stages of acquired syphilis) were reported to the Maryland Department of Health, the most syphilis cases reported since 1991.

Nationally, CDC reports more than 200,000 cases of acquired syphilis in 2022: the most syphilis cases reported nationally since 1950. This represents an 80% increase in syphilis rates since 2018 Nationally, correlating to a nearly 8% increase in Maryland.

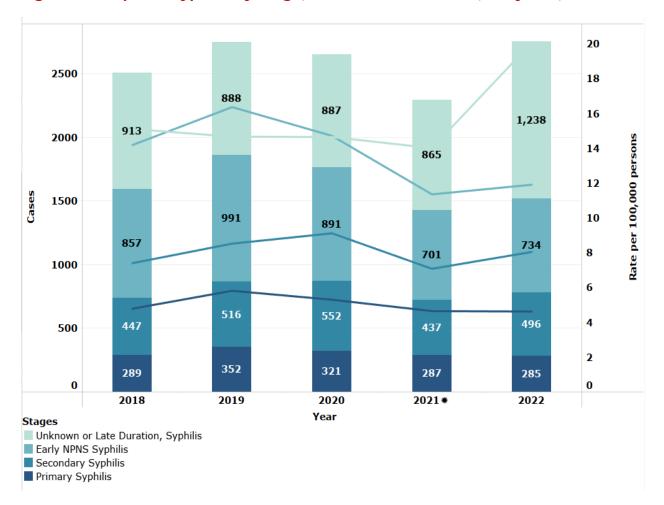


Figure 10. Acquired Syphilis by Stage, Case Count and Rates, Maryland, 2018-2022

For more information on syphilis staging, please consult <u>STI Update: Syphilis Staging - Learn</u> <u>How to Stage Infections Appropriately at https://www.youtube.com/watch?v=pVhfUksYbeo</u>.

Primary and Secondary Syphilis

There were 781 cases of primary and secondary (P&S) syphilis reported to MDH in 2022; primary and secondary syphilis are the two infectious stages of syphilis when signs and symptoms are present at the time of diagnosis. Since reaching a historic low in 2000 and 2001, the rate of P&S syphilis has increased almost every year, increasing 4.1% since 2018.

Nationally men who have sex with men (MSM) are disproportionately impacted by syphilis, accounting for almost half (45.1%) of all male P&S syphilis cases in 2022, however in Maryland, only 25% of syphilis cases were reported among MSM. Although rates of P&S syphilis are lower among women, rates have increased substantially in recent years, increasing by 65.4% from 2018 to 2022 in Maryland, highlighting the sustained increase in the heterosexual syphilis epidemic in the United States.

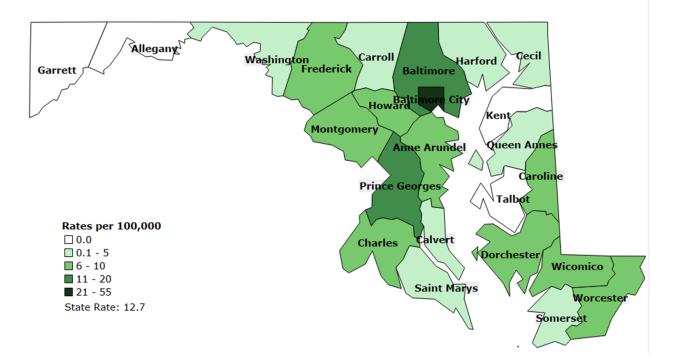


Figure 11. Primary and Secondary Syphilis Rates by County, Maryland, 2022

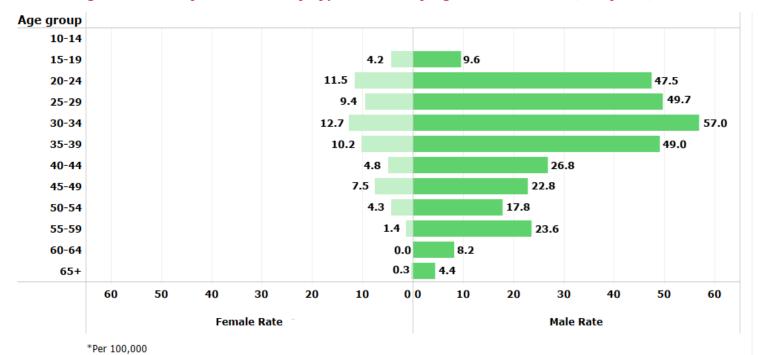
For more detailed information about chlamydia rates by County, please refer to <u>4A. Primary</u> and Secondary Syphilis Case Counts and Rates By County, Ranked by Rate, Maryland, 2022 and <u>4B. Primary and Secondary Syphilis Case Counts and Rates by County in Alphabetical</u> <u>Order, 2018-2022, Maryland.</u>

Figure 12. Primary and Secondary Syphilis Rates by County, Maryland, 2018-2022



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	Age group														
Current Sex		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages	
Female	Cases	0	8	22	18	27	22	10	14	9	3	0	2	135	
	Rates	0.0	4.2	11.5	9.4	12.7	10.2	4.8	7.5	4.3	1.4	0.0	0.3	4.3	
Male	Cases	0	19	92	96	120	103	54	41	35	48	16	20	644	
	Rates	0.0	9.6	47.5	49.7	57.0	49.0	26.8	22.8	17.8	23.6	8.2	4.4	21.5	
All Sexes	Cases	0	27	114	114	147	125	64	55	44	51	16	22	781	
	Rates	0.0	7	29.7	29.6	34.7	29.4	15.7	15	10.9	12.1	4.0	2.1	12.7	

Figure 14. Primary and Secondary Syphilis Cases by Race and Ethnicity, Maryland, 2022

Race/Ethnicity	
Black/African American	436 55.8%
White	153 19.6%
Hispanic/Latino	64 8.2%
Multi-Racial	58 7.4%
Unknown	42 5.4%
Other	14 1.8%
Asian	10 1.3%
American Indian/Alaskan Native	4 0.5%

Native Hawaiian/Pacific

Islander

Primary and Secondary Syphilis Rates by Race and Ethnicity, Maryland, 2018-2022

	Ind	erican lian/ 1 Native	As	ian	-	African rican	Hisp Latin Rac	o (All	Multi-	Racial	Hawa	tive aiian/ Islander	Wh	iite	Unknown	Other	То	vtal
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Cases	Cases	Rates
2018	3	20.4	8	2.0	495	27.5	56	8.9	9	6.1	1	32.6	163	5.3	2	-	737	12.2
2019	0	0.0	27	6.7	580	31.9	66	10.3	8	5.2	1	34.0	183	6.0	3	-	868	14.3
2020	1	6.8	21	5.2	600	32.9	87	13.3	11	7.1	5	165.1	140	4.7	8	-	873	14.4
2021*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	726	11.8
2022	4	27.3	10	2.3	436	23.3	64	9.1	58	35.2	0	0.0	153	5.1	42	14	781	12.7

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Acquired Syphilis

Syphilis is reported in four stages: primary, secondary, early non-primary non-secondary, and unknown or late duration. Recently, public health agencies have changed from "Adult Syphilis" to "Acquired Syphilis" to better reflect the transmission route of syphilis.

While primary and secondary syphilis are the infectious stages of syphilis, the majority of persons diagnosed with syphilis are asymptomatic and are diagnosed as early non-primary non-secondary syphilis or syphilis of unknown or late duration. Providing this data allows for better estimates of syphilis incidence.

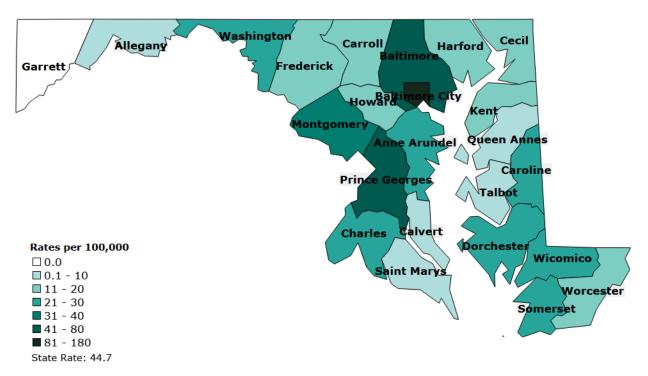
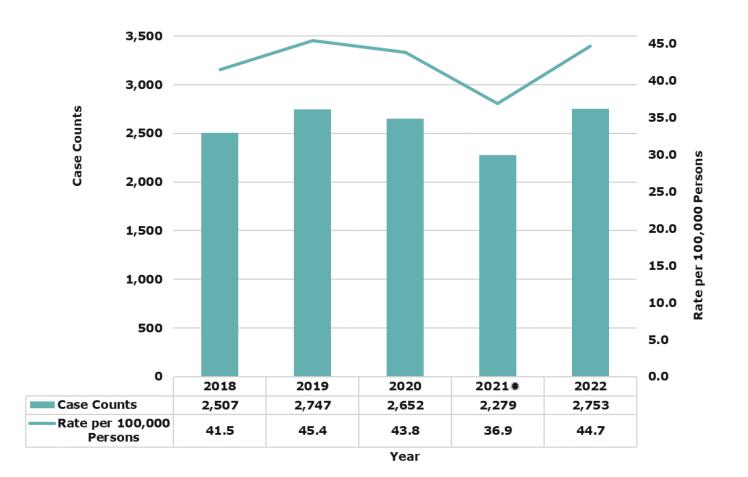


Figure 15. Acquired Syphilis Rates by County, Maryland, 2022

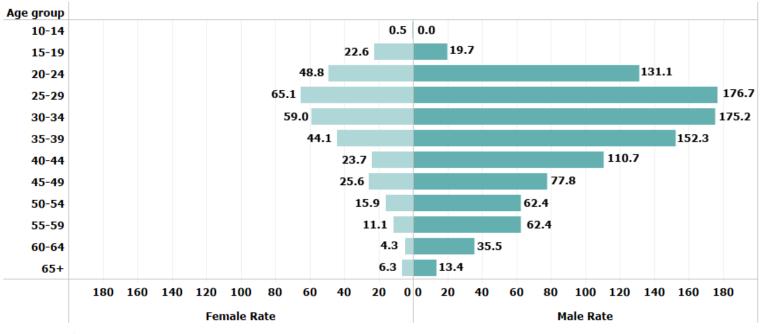
For more detailed information about chlamydia rates by County, please refer to <u>4C. Acquired</u> <u>Syphilis Case Counts and Rates By County, Ranked by Rate, Maryland, 2022 and 4D. Acquired</u> <u>Syphilis Case Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland.</u>

Figure 16. Acquired Syphilis Case Counts and Rates, Maryland, 2018-2022



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*Per 100,000

	Age group													
Current Sex		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Female	Cases	1	43	93	125	126	95	49	48	33	24	9	37	683
	Rates	0.5	22.6	48.8	65.1	59.0	44.1	23.7	25.6	15.9	11.1	4.3	6.3	24.3
Male	Cases	0	39	254	341	369	320	223	140	123	127	69	61	2066
	Rates	0.0	19.7	131.1	176.7	175.2	152.3	110.7	77.8	62.4	62.4	35.5	13.4	68.8
All	Cases	1	82	347	467	496	415	272	188	156	152	79	98	2753
Sexes	Rates	0.29	21.1	90.3	121.3	117	97.5	66.7	51.2	38.6	36.2	19.5	9.4	44.7

Figure 18. Acquired Syphilis Case Counts by Race and Ethnicity, Maryland, 2022

Race/Ethnicity	
Black/African American	1,493 54.2%
White	465 16.9%
Hispanic/Latino	311 11.3%
Unknown	197 7.2%
Multi-Racial	194 7.0%
Other	50 1.8%
Asian	34 1.2%
American Indian/Alaskan Native	6 0.2%
Native Hawaiian/Pacific Islander	3 0.1%

Acquired Syphilis Case Counts and Rates by Race and Ethnicity, Maryland, 2018- 2022

	America Indian/ Alaskan		Asian		Black/At America		Hispani Latino (All Rac	-	Multi-Ra	acial	Native Hawaiia Pacific I	-	White		Unknown	Other	Total	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Cases	Cases	Rates
2018	5	34.1	44	11.1	1,657	92.0	267	42.5	22	15.0	2	65.1	496	16.3	14	-	2,507	41.5
2019	3	20.4	74	18.4	1,814	99.9	282	44.2	27	17.6	3	101.9	527	17.4	17	-	2,747	45.4
2020	3	20.5	48	11.8	1,825	100.1	304	46.5	33	21.2	7	231.2	413	13.8	19	-	2,652	43.8
2021*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2,279	36.9
2022	6	40.9	34	8.0	1,493	79.7	311	44.0	194	117.7	3	99.3	465	15.6	197	50	2,753	44.7

▶ Issue Date: 04/01/2024

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Congenital Syphilis

Congenital Syphilis (CS) is when syphilis is passed from a pregnant person to their infant and can occur at any stage of syphilis. CS can cause serious health problems for the baby like miscarriage, stillbirth, premature birth, and/or birth defects.

In 2022, Maryland reported 46 CS cases and reported a rate of 68.8 CS cases per 100,000 live births. From 2012 to 2022, Maryland experienced an over 300% increase in reported CS cases and 2022 marked the most CS cases reported since 1997.

This alarming increase in CS correlates to nearly 40 (39.4)% increase in acquired syphilis diagnoses among persons of childbearing capacity (assigned female at birth, ages 13-50) from 2018 to 2022. CS represents a serious health issue for pregnant persons as more than 10% of reported CS cases in Maryland were stillborn in 2022.

Nationally, CDC reports 3,755 cases of CS in 2022: a nearly 1000% increase from 2012 to 2022.

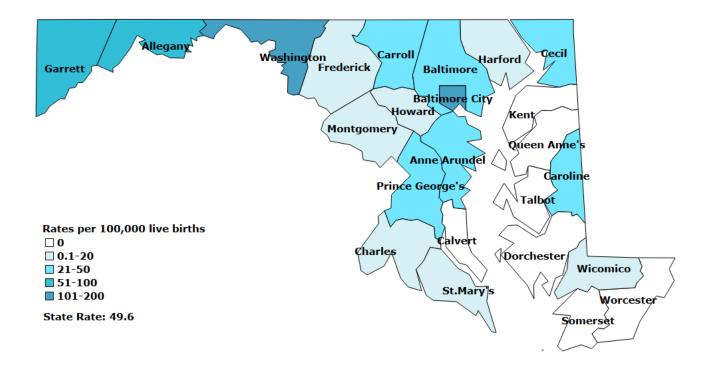
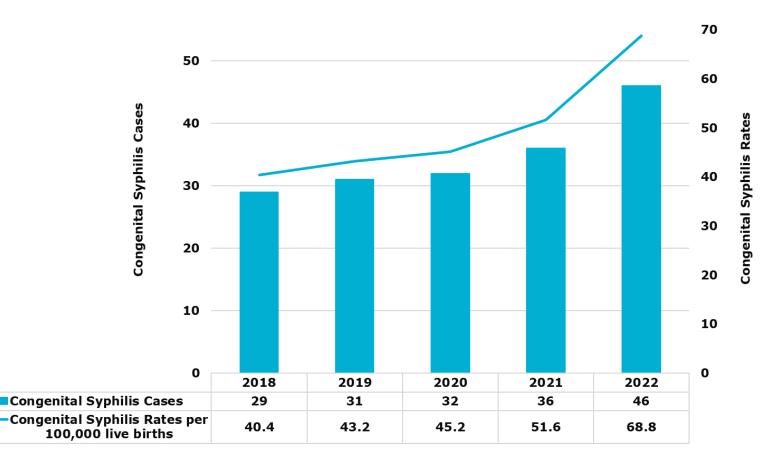


Figure 19. Congenital Syphilis Combined Rates by County, Maryland, 2018-2022

Figure 20. Congenital Syphilis, Cases and Rates, Maryland, 2018-2022

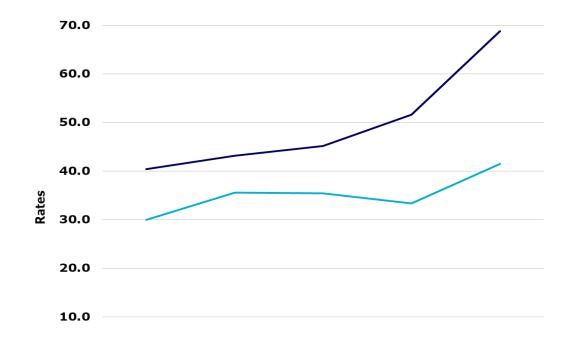


Year

▶ Issue Date: 04/01/2024

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Figure 21. Congenital Syphilis Rates and Acquired Syphilis Rates among People of Childbearing Capacity, Maryland, 2018-2022



0.0	2018	2019	2020	2021	2022
 Acquired Syphilis Rates in PCBC per 100,000 Persons 	30.0	35.6	35.4	33.4	41.5
—Congenital Syphilis Rates per 100,000 live births	40.4	43.2	45.2	51.6	68.8

Year

*PCBC=People of Chilbearing Capacity

▶ Issue Date: 04/01/2024

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STI Tables

To better protect the confidentiality, data are suppressed (*) in the following instances:

- 1. Case counts of less than five people
- 2. Data describing a demographic group or geographic area (eg Birth Rates by year) with a population less than 1,000.
- 3. If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

Additionally, due to a <u>2021 Network Security Incident</u>, the Maryland Department of Health (MDH) was not able to complete 2021 STI data reporting and only state-level information is being published and will be denoted by this symbol '*****' throughout the report.

Rank	County	Case Counts	Rates per 100,000 Persons
1	Baltimore City	8134	1,427.2
2	Wicomico	729	696.5
3	Dorchester	218	666.1
4	Prince Georges	6306	665.9
5	Somerset	136	554.1
-	Maryland Total	31,236	506.7
6	Charles	831	488.5
7	Baltimore	4095	484.0
8	Washington	671	431.3
9	Caroline	129	385.8
10	Saint Marys	403	350.8
11	Worcester	185	343.4
12	Montgomery	3564	338.6
13	Harford	880	333.5
14	Anne Arundel	1896	319.6
15	Talbot	121	319.0
16	Cecil	332	316.4
17	Allegany	198	294.3
18	Howard	969	288.9
19	Frederick	797	277.6
20	Calvert	211	223.1
21	Queen Annes	87	168.2
22	Carroll	272	155.2
23	Kent	28	144.9
24	Garrett	33	115.5

2A. Chlamydia Case Counts and Rates By County, Ranked by Rate, Maryland, 2022

*11 cases have "Unknown" County

2B . Chlamydia Case Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland

	Case Co	unts				Rates per 100,000 Persons					
County	2018	2019	2020	2021*	2022	2018	2019	2020	2021*	2022	
Allegany	242	263	234	*	198	341.0	372.9	334.0	*	294.3	
Anne Arundel	2,316	2,710	2,155	*	1,896	402.1	467.3	369.8	*	319.6	
Baltimore	4,463	4,879	4,411	*	4,095	538.7	588.9	534.0	*	484.0	
Baltimore City	8,013	8,602	7,014	*	8,134	1330.0	1446.7	1196.7	*	1427.2	
Calvert	269	295	291	*	211	292.4	318.4	312.7	*	223.1	
Caroline	83	113	128	*	129	249.2	337.2	382.2	*	385.8	
Carroll	407	327	309	*	272	241.6	193.8	182.7	*	155.2	
Cecil	336	372	329	*	332	326.8	360.8	318.1	*	316.4	
Charles	1,103	1,138	983	*	831	683.0	695.0	597.8	*	488.5	
Dorchester	206	216	234	*	218	643.8	677.9	734.6	*	666.1	
Frederick	844	820	779	*	797	330.1	314.6	293.8	*	277.6	
Garrett	38	57	54	*	33	130.3	196.2	187.2	*	115.5	
Harford	973	1,041	914	*	880	383.1	407.3	355.9	*	333.5	
Howard	1,170	1,200	1,071	*	969	362.0	368.2	326.3	*	288.9	
Kent	73	69	42	*	28	376.6	355.2	218.8	*	144.9	
Montgomery	4,410	4,699	3,814	*	3,564	419.0	447.0	362.6	*	338.6	
Prince Georges	8,014	8,262	6,974	*	6,306	881.3	906.4	766.7	*	665.9	
Queen Annes	124	135	140	*	87	246.8	266.9	273.6	*	168.2	
Saint Marys	504	511	412	*	403	447.3	449.2	359.2	*	350.8	
Somerset	187	184	170	*	136	728.3	718.5	667.9	*	554.1	
Talbot	103	119	124	*	121	278.6	320.0	335.4	*	319.0	
Washington	573	636	709	*	671	379.7	421.0	469.1	*	431.3	
Wicomico	835	906	898	*	729	809.1	871.1	863.5	*	696.5	
Worcester	197	225	209	*	185	380.1	430.5	398.8	*	343.4	
Maryland Total	35,483	37,779	32,398	30,312	31,236	587.2	623.9	535.0	490.9	506.7	

3A. Gonorrhea Case Counts and Rates By County, Ranked by Rate, Maryland, 2022

Rank	County	Case Counts	Rate per 100,000 Persons
1	Baltimore City	4,234	742.9
2	Prince Georges	2,256	238.2
3	Wicomico	222	212.1
-	Maryland Total	11,164	181.1
4	Baltimore	1,472	174.0
5	Charles	273	160.5
6	Washington	245	157.5
7	Somerset	30	122.2
8	Dorchester	39	119.2
9	Anne Arundel	529	89.2
10	Worcester	47	87.3
11	Harford	211	80.0
12	Montgomery	832	79.0
13	Saint Marys	89	77.5
14	Howard	259	77.2
15	Frederick	168	58.5
16	Cecil	59	56.2
17	Allegany	35	52.0
18	Calvert	49	51.8
19	Talbot	17	44.8
20	Caroline	14	41.9
21	Queen Annes	18	34.8
22	Carroll	57	32.5
23	Kent	*	*
24	Garrett	*	*

*1 case has "Unknown" County

3B . Gonorrhea Case Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland

	Case Co	ounts				Rate per 100,000 Persons					
County	2018	2019	2020	2021*	2022	2018	2019	2020	2021*	2022	
Allegany	41	22	47	*	35	57.8	31.2	67.1	*	52.0	
Anne Arundel	544	681	634	*	529	94.4	117.4	108.8	*	89.2	
Baltimore	1,309	1,527	1,671	*	1,472	158.0	184.3	202.3	*	174.0	
Baltimore City	3,596	3,982	3,930	*	4,234	596.9	669.7	670.5	*	742.9	
Calvert	68	94	74	*	49	73.9	101.4	79.5	*	51.8	
Caroline	20	21	46	*	14	60.1	62.7	137.3	*	41.9	
Carroll	93	70	52	*	57	55.2	41.5	30.8	*	32.5	
Cecil	91	129	97	*	59	88.5	125.1	93.8	*	56.2	
Charles	258	273	303	*	273	159.7	166.7	184.3	*	160.5	
Dorchester	64	63	107	*	39	200.0	197.7	335.9	*	119.2	
Frederick	131	133	159	*	168	51.2	51.0	60.0	*	58.5	
Garrett	6	*	6	*	*	20.6	*	20.8	*	*	
Harford	191	272	232	*	211	75.2	106.4	90.3	*	80.0	
Howard	256	238	274	*	259	79.2	73.0	83.5	*	77.2	
Kent	7	8	14	*	*	36.1	41.2	72.9	*	*	
Montgomery	660	834	936	*	832	62.7	79.3	89.0	*	79.0	
Prince Georges	2,020	2,196	2,406	*	2,256	222.1	240.9	264.5	*	238.2	
Queen Annes	9	14	22	*	18	17.9	27.7	43.0	*	34.8	
Saint Marys	165	314	266	*	89	146.5	276.0	231.9	*	77.5	
Somerset	69	38	62	*	30	268.7	148.4	243.6	*	122.2	
Talbot	16	24	27	*	17	43.3	64.5	73.0	*	44.8	
Washington	242	283	326	*	245	160.3	187.3	215.7	*	157.5	
Wicomico	388	336	308	*	222	376.0	323.1	296.2	*	212.1	
Worcester	61	44	53	*	47	117.7	84.2	101.1	*	87.3	
Maryland Total	10,305	11,598	12,052	10,483	11,164	170.5	191.5	199.0	169.8	181.1	

4A. Primary and Secondary Syphilis Case Counts and Rates By County, Ranked by Rate, Maryland, 2022

Rank	County	Case Counts	Rates per 100,000 Persons
1	Baltimore City	306	53.9
2	Baltimore	121	14.3
-	Maryland Total	781	12.7
3	Prince Georges	111	11.7
4	Dorchester	*	*
5	Anne Arundel	54	9.1
6	Caroline	*	*
7	Montgomery	90	8.6
8	Wicomico	8	7.6
9	Howard	24	7.2
10	Worcester	*	*
11	Charles	9	5.3
12	Frederick	15	5.2
13	Harford	13	4.9
14	Washington	7	4.5
15	Somerset	*	*
16	Carroll	6	3.4
17	Cecil	*	*
18	Queen Annes	*	*
19	Calvert	*	*
20	Saint Marys	*	*
21	Allegany	0	0.0
21	Garrett	0	0.0
21	Kent	0	0.0
21	Talbot	0	0.0

4B. Primary and Secondary Syphilis Case Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland

	Case C	ounts				Rates	oer 100,00	0 Person	s	
County	2018	2019	2020	2021*	2022	2018	2019	2020	2021*	2022
Allegany	*	*	*	*	0	*	*	*	*	0.0
Anne Arundel	27	39	32	*	54	4.7	6.7	5.5	*	9.1
Baltimore	103	103	148	*	121	12.4	12.4	17.9	*	14.3
Baltimore City	277	312	314	*	307	46.0	52.5	53.6	*	53.9
Calvert	*	*	*	*	*	*	*	*	*	*
Caroline	*	*	*	*	*	*	*	*	*	*
Carroll	7	9	*	*	6	4.2	5.3	*	*	3.4
Cecil	*	*	13	*	*	*	*	12.6	*	*
Charles	14	14	21	*	9	8.7	8.6	12.8	*	5.3
Dorchester	*	*	*	*	*	*	*	*	*	*
Frederick	13	23	13	*	15	5.1	8.8	4.9	*	5.2
Garrett	0	*	0	*	0	0.0	*	0.0	*	0.0
Harford	5	7	15	*	13	2.0	2.7	5.8	*	4.9
Howard	25	22	16	*	24	7.7	6.7	4.9	*	7.2
Kent	0	0	*	*	0	0.0	0.0	*	*	0.0
Montgomery	66	89	76	*	90	6.3	8.5	7.2	*	8.6
Prince Georges	153	169	163	*	111	16.8	18.5	17.9	*	11.7
Queen Annes	*	*	*	*	*	*	*	*	*	*
Saint Marys	5	*	6	*	*	4.4	*	5.2	*	*
Somerset	*	0	*	*	*	*	0.0	*	*	*
Talbot	*	*	0	*	0	*	*	0.0	*	0.0
Washington	22	58	37	*	7	14.6	38.4	24.5	*	4.5
Wicomico	5	5	*	*	8	4.8	4.8	*	*	7.6
Worcester	*	*	*	*	*	*	*	*	*	*
Maryland Total	737	868	873	726	781	12.2	14.3	14.4	11.8	12.7

4C. Acquired Syphilis Case Counts and Rates By County, Ranked by Rate, Maryland, 2022

Rank	County	Case Counts	Rates per 100,000 Persons
1	Baltimore City	965	169.3
2	Prince Georges	637	67.3
-	Maryland Total	2,753	44.7
3	Baltimore	365	43.1
4	Montgomery	318	30.2
5	Wicomico	31	29.6
6	Caroline	9	26.9
7	Washington	36	23.1
8	Charles	39	22.9
9	Anne Arundel	131	22.1
10	Dorchester	7	21.4
11	Somerset	5	20.4
12	Howard	65	19.4
13	Harford	38	14.4
14	Frederick	41	14.3
15	Carroll	24	13.7
16	Worcester	7	13.0
17	Cecil	13	12.4
18	Kent	*	*
19	Queen Annes	5	9.7
20	Allegany	5	7.4
21	Calvert	6	6.3
22	Talbot	*	*
23	Saint Marys	*	*
24	Garrett	0	0.0

4D. Acquired Syphilis Case Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland

	Case C	Counts				Rates per 100,000 Persons						
County	2018	2019	2020	2021*	2022	2018	2019	2020	2021*	2022		
Allegany	*	*	*	*	0	*	*	*	*	0.0		
Anne Arundel	27	39	32	*	54	4.7	6.7	5.5	*	9.1		
Baltimore	103	103	148	*	121	12.4	12.4	17.9	*	14.3		
Baltimore City	277	312	314	*	307	46.0	52.5	53.6	*	53.9		
Calvert	*	*	*	*	*	*	*	*	*	*		
Caroline	*	*	*	*	*	*	*	*	*	*		
Carroll	7	9	*	*	6	4.2	5.3	*	*	3.4		
Cecil	*	*	13	*	*	*	*	12.6	*	*		
Charles	14	14	21	*	9	8.7	8.6	12.8	*	5.3		
Dorchester	*	*	*	*	*	*	*	*	*	*		
Frederick	13	23	13	*	15	5.1	8.8	4.9	*	5.2		
Garrett	0	*	0	*	0	0.0	*	0.0	*	0.0		
Harford	5	7	15	*	13	2.0	2.7	5.8	*	4.9		
Howard	25	22	16	*	24	7.7	6.7	4.9	*	7.2		
Kent	0	0	*	*	0	0.0	0.0	*	*	0.0		
Montgomery	66	89	76	*	90	6.3	8.5	7.2	*	8.6		
Prince Georges	153	169	163	*	111	16.8	18.5	17.9	*	11.7		
Queen Annes	*	*	*	*	*	*	*	*	*	*		
Saint Marys	5	*	6	*	*	4.4	*	5.2	*	*		
Somerset	*	0	*	*	*	*	0.0	*	*	*		
Talbot	*	*	0	*	0	*	*	0.0	*	0.0		
Washington	22	58	37	*	7	14.6	38.4	24.5	*	4.5		
Wicomico	5	5	*	*	8	4.8	4.8	*	*	7.6		
Worcester	*	*	*	*	*	*	*	*	*	*		
Maryland Total	737	868	873	726	781	12.2	14.3	14.4	11.8	12.7		

Rank	County	Rate per 100,000 live births
1	Baltimore City	273.8
2	Allegany	*
3	Washington	128.6
4	Cecil	88.0
-	National	77.9
5	Wicomico	75.4
-	Maryland	68.8
6	Howard	63.8
7	Carroll	63.3
8	Anne Arundel	61.7
9	Baltimore	54.1
10	Prince George's	53
11	Harford	38.7
12	Frederick	35.9
13	Montgomery	8.8
14	Calvert	0.0
14	Caroline	0.0
14	Charles	0.0
14	Dorchester	0.0
14	Garrett	0.0
14	Kent	0.0
14	Queen Anne's	0.0
14	St.Mary's	0.0
14	Somerset	0.0
14	Talbot	0.0
14	Worcester	0.0

5A. Congenital Syphilis Rates By County, Ranked by Rate, Maryland, 2022

5B. Congenital Syphilis, Combined Case Counts and Rates by County in Alphabetical Order, 2018-2022, Maryland

County	Case Counts	Rate per 100,000 live births
Allegany	*	94.6
Anne Arundel	*	23.0
Baltimore City	75	197.7
Baltimore	24	49.9
Calvert	0	0.0
Caroline	*	47.8
Carroll	*	34.2
Cecil	*	34.8
Charles	*	10.7
Dorchester	0	0.0
Frederick	*	19.5
Garrett	*	75.4
Harford	*	15.0
Howard	*	17.8
Kent	0	0.0
Montgomery	8	13.4
Prince George's	24	41.6
Queen Anne's	0	0.0
St.Mary's	*	14.3
Somerset	0	0.0
Talbot	0	0.0
Washington	14	168.0
Wicomico	*	15.6
Worcester	0	0.0
Maryland Total	273	49.6



Birth Sex: An individual's biological status as male, female, or something else. Sex is assigned at birth and associated with physical attributes, such as anatomy and chromosomes.

Case: An instance of an infection that meets the <u>Case Definitions</u> laid out by CDC and CSTE (see Case Definition).

<u>Case Definition</u>: In epidemiology, set of criteria used in making a decision as to whether an individual has a disease or health event of interest.

Current Sex: A required reporting variable per COMAR 10.06.01 not reflective of birth sex or gender identity (typically an individual's current sex organs).

Ethnicity: The common characteristics of a group of people, especially regarding ancestry, culture, language or national experiences.

Gender Identity: An individual's sense of themselves as man, woman, transgender, or something else.

Live births: In human reproduction, a live birth occurs when a fetus, whatever its gestational age, exits the maternal body and subsequently shows any sign of life, such as voluntary movement, heartbeat, or pulsation of the umbilical cord, for however brief a time and regardless of whether the umbilical cord or placenta are intact.

MMWR Week: The MMWR week is the week of the epidemiologic year for which the National Notifiable Diseases Surveillance System (NNDSS) disease report is assigned by the reporting local or state health department for the purposes of MMWR disease incidence reporting and publishing. Values for MMWR week range from 1 to 53, although most years consist of 52 weeks.

MSM: Men who have sex with men. This terminology is used to describe reported risk behaviors and should not be confused with sexual orientation.

MSW: Men who have sex with women only. This terminology is used to describe reported risk behaviors and should not be confused with sexual orientation.

NBS: National Electronic Disease Surveillance (NEDS) Based System (NBS), the Maryland STI Surveillance Database from 2022-Current.

Persons of Child Bearing Capacity: Those with a current sex of female who are between the ages of 15-49.

PRISM: Patient Reporting Investigation Surveillance Manager, the Maryland STI Surveillance Database from 2015-2021.

Race: A grouping of humans based on shared physical or social qualities into categories generally viewed as distinct by society. This is a reporting variable

Rate: Also known as an incidence rate. The number of new cases per population at risk in a given time period. In this report, rates are calculated as the number of cases per 100,000 people in one year.

STI: A sexually transmitted infection (STI) is a virus, bacteria, fungus, or parasite people can get through sexual contact. Many STIs have no symptoms, so people can have an infection but not know it.

STD: A sexually transmitted disease (STD) develops because of an STI and the term implies that the infection has led to some symptom of disease.

References

- Adolescent and School Health: Terminology. (2022, December 23). Centers for Disease Control and Prevention. <u>https://www.cdc.gov/healthyyouth/terminology/sexual-and-gender-identity-terms.ht</u> m
- 2. Data: STI*PRISM and STI/HIV NBS, Statewide STI Database, 2018-2022.
- 3. DEPARTMENT OF PLANNING Maryland State Data Center <u>https://planning.maryland.gov/MSDC/Documents/pop_estimate/ARS/Vintage2020/C</u> <u>NTY-PopEst-2022.xlsx</u>
- 4. *MMWR Weeks* (n.d.). Centers for Disease Control and Prevention. <u>https://ndc.services.cdc.gov/wp-content/uploads/MMWR_Week_overview.pdf</u>
- 5. *National overview of STIs, 2022.* (2024, January 30). Centers for Disease Control and Prevention. <u>https://www.cdc.gov/std/statistics/2022/overview.htm</u>
- 6. Sexually Transmitted Diseases (STDs): Diseases & Related Conditions. (2023, July 7). Centers for Disease Control and Prevention. <u>https://www.cdc.gov/std/general/default.htm</u>
- 7. Surveillance case definitions for current and historical conditions.. (2022, October 4). Centers for Disease Control and Prevention.<u>https://ndc.services.cdc.gov/</u>
- 8. Vital signs: Missed opportunities for preventing congenital syphilis united states, 2022. (2023, November 16). Centers for Disease Control and Prevention. https://www.cdc.gov/mmwr/volumes/72/wr/mm7246e1.htm

Resources

Centers for Disease Control and Prevention (CDC) STD Resources: <u>https://www.cdc.gov/std/default.htm</u>

CDC STI Treatment Guidelines: https://www.cdc.gov/std/treatment-guidelines/default.htm

CDC and Council of State and Territorial Epidemiologists (CSTE) Surveillance Case Definitions: <u>https://ndc.services.cdc.gov/</u>

Code of Maryland Regulations (COMAR) 10.06.01 https://dsd.maryland.gov/Pages/COMARSearch.aspx#k=10.06.01#I=1033

Expedited Partner Therapy:

https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/Expedited%20Partner%20Therapy.a spx

Maryland Department of Health, Center for STI Prevention: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/Home.aspx

MSM/LGBTQ Resources: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/MSM-LGBTQ.aspx

PrEP Maryland: https://prepmaryland.org/

Reportable Conditions – Resources: https://phpa.health.maryland.gov/Pages/what-to-report.aspx



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This report was prepared by the following CSTIP Staff: María José Gullett, Ifeoluwa Oginni, and Amanda Reich.