

STI Diagnoses in Michigan, 2020

All data as of June 1, 2021

Surveillance & Epidemiology Section
Division of HIV & STI Programs
Bureau of Infectious Disease
Michigan Department of Health and Human Services



www.michigan.gov/hivsti

Overview

Michigan's STI Surveillance Program collects, interprets, and disseminates population level data regarding persons with sexually transmitted infections. Data is collected in the Michigan Disease Surveillance System (MDSS) where reports from laboratories, private providers, and local public health give information about diagnosis, demographics, and patient behaviors. The most commonly reported sexually transmitted infections are chlamydia, gonorrhea, and syphilis. For the purposes of this report, counts of early stage and symptomatic syphilis (primary and secondary syphilis) are separated from latent diagnoses.

Key Definitions

The Basics

New Diagnoses: The number of cases newly diagnosed over a given period of time, usually a year. The date assigned to an STI report is the onset date, or if that is missing the specimen collection date is used. If both dates are missing, the referral date, or the date the report was referred to MDHHS, is used.

Diagnosis Rate: For every 100,000 people in a population, the number who were newly diagnosed. This is used to compare groups.

Re-infection Rate: For the purposes of this report, re-infection is measured as being diagnosed with the same infection at least 30 days after a prior diagnosis but no more than 12 months after the prior diagnosis. Re-infections may be transmitted by partners who were not treated when the original patient was first diagnosed.

The following measures are displayed in this report:

Count: The number of persons newly diagnosed during the given year.

Pop: The total population (census) during the given year.

Rate: The new diagnosis rate per 100,000 persons in the specified population during the given year ($\text{count/pop} \times 100,000$ or $\text{count/est pop} \times 100,000$).

Risk Categories and Hierarchy

MSM: Men who have sex with men.

PWID: Persons who inject drugs.

Heterosexual: Males: men who are not MSM or PWID and reported sex with a female.

Females: females who are not a PWID and reported sex with a male

STI Diagnoses by Characteristics, 2020

Includes confirmed and probable cases

Race/Ethnicity	Chlamydia			Gonorrhea			P&S Syphilis		Latent Syphilis		2020
	count	rate	Re-infected %	count	rate	Re-infected %	count	rate	count	rate	Population ²
Black	18,658	1,361.5	12%	13,285	969.4	11%	471	34.4	661	48.2	1,370,393
Hispanic	1,831	337.8	10%	724	133.6	9%	34	6.3	92	17.0	542,105
White	12,869	173.3	7%	4,768	64.2	7%	245	3.3	421	5.7	7,425,115
Asian/NH/PI	277	82.3	10%	67	19.9	6%	7	2.1	12	3.6	336,648
Am Indian/AN	200	352.3	9%	66	116.3	6%	6	10.6	6	10.6	56,766
Multi/Other	2,331	989.7	9%	1,071	454.7	8%	17	7.2	20	8.5	235,528
Unknown	8,667	-	-	3,433	-	-	3	-	24	-	-
Race/Ethnicity by sex at birth											
Male											
Black	14,890	303.4	6%	11,988	244.3	10%	671	13.7	922	18.8	4,907,813
Black	6,961	1,072.8	8%	7,303	1,125.5	12%	401	61.8	489	75.4	648,865
Hispanic	490	177.9	7%	299	108.5	7%	30	10.9	70	25.4	275,468
White	3,415	93.0	5%	1,901	51.8	6%	209	5.7	320	8.7	3,672,496
Other	950	305.5	7%	645	207.4	8%	28	9.0	27	8.7	310,984
Unknown	3,074	-	4%	1,840	-	4%	3	-	16	-	-
Female											
Black	29,942	591.9	10%	11,425	225.8	8%	112	2.2	314	6.2	5,058,742
Black	11,697	1,621.1	14%	5,982	829.1	9%	70	9.7	172	23.8	721,528
Hispanic	1,341	502.9	11%	425	159.4	10%	4	1.5	22	8.3	266,637
White	9,454	251.9	8%	2,867	76.4	8%	36	1.0	101	2.7	3,752,619
Other	1,858	584.4	10%	559	175.8	7%	2	0.6	11	3.5	317,958
Unknown	5,592	-	6%	1,592	-	4%	-	-	8	-	-
Unknown Sex											
Unknown Sex	1	-	-	1	-	-	-	-	-	-	-
Risk*											
MSM	543		10%	631		9%	364	127.9	446	156.7	284,653*
MSM/PWID	2		0%	3		0%	7		15		-
PWID	47		9%	36		3%	9		20		-
Heterosexual	9,503		9%	3,872		7%	314		396		-
Males	2,272		5%	1,343		6%	214		182		-
Females	7,231		10%	2,529		8%	100		214		-
Undetermined	34,738		9%	18,872		9%	89		359		-
Age at diagnosis											
Unknown Age	3			3			-		-		-
Less than 15 years	328	18.8	9%	114	6.5	5%	-	-	2	0.1	1,748,988
15-19 years	12,263	1,935.4	12%	4,060	640.8	10%	28	4.4	36	5.7	633,603
20-24 years	16,911	2,516.2	10%	6,804	1,012.4	10%	122	18.2	163	24.3	672,087
25-29 years	8,166	1,190.5	7%	5,295	771.9	9%	175	25.5	236	34.4	685,946
30-39 years	5,379	437.5	6%	4,754	386.7	7%	223	18.1	384	31.2	1,229,514
40-49 years	1,209	103.9	3%	1,479	127.1	5%	119	10.2	232	19.9	1,163,203
50-59 years	439	33.1	5%	680	51.2	6%	86	6.5	137	10.3	1,328,150
60+ years	135	5.4	2%	225	9.0	8%	30	1.2	46	1.8	2,505,064
Total	44,833	449.8	9%	23,414	234.9	9%	783	7.9	1,236	12.4	9,966,555

1 - P&S: Primary and Secondary Syphilis

2 - Rate per 100,000 based on annual Census Bureau estimates from the American Community Survey (ACS)

*MSM Census estimate is 5.8% of the male population in Michigan (Lieb S, et al 2011. Statewide Estimation of Racial/Ethnic Populations of Men Who Have Sex with Men in the U.S.)

STI Diagnoses by Local Health Jurisdiction, 2020

Includes confirmed and probable cases

Race/Ethnicity	Chlamydia			Gonorrhea			P&S Syphilis		Latent Syphilis		2020 Population ²
	count	rate	Re-infected %	count	rate	Re-infected %	count	rate	count	rate	
Allegan County	327	275.0	8%	109	91.7	3%	2	1.7	9	7.6	118,927
Barry-Eaton	584	339.1	8%	216	125.4	6%	7	4.1	11	6.4	172,209
Bay County	331	323.3	9%	99	96.7	10%	2	2.0	2	2.0	102,387
Benzie-Leelanau	46	116.2	0%	5	12.6	0%	-	0.0	3	7.6	39,595
Berrien County	784	512.3	10%	407	266.0	8%	3	2.0	6	3.9	153,025
Branch-Hillsdale-St. Joseph	393	262.1	6%	218	145.4	6%	1	0.7	2	1.3	149,930
Calhoun County	712	533.0	8%	473	354.1	6%	7	5.2	13	9.7	133,580
Central Michigan District	518	275.4	5%	125	66.5	6%	3	1.6	10	5.3	188,104
Chippewa County	68	184.0	3%	7	18.9	0%	1	2.7	2	5.4	36,958
Delta-Menominee	77	132.3	1%	5	8.6	0%	-	0.0	1	1.7	58,220
Dickinson-Iron	68	188.0	10%	4	11.1	0%	-	0.0	2	5.5	36,178
District 2	112	172.5	4%	13	20.0	0%	1	1.5	-	0.0	64,936
District 4	113	149.5	3%	16	21.2	0%	1	1.3	-	0.0	75,605
District 10	572	214.7	6%	151	56.7	3%	4	1.5	18	6.8	266,442
Genesee County	2,784	687.8	12%	1,710	422.4	11%	26	6.4	41	10.1	404,794
Grand Traverse County	245	261.8	5%	41	43.8	5%	4	4.3	2	2.1	93,592
Huron County	59	192.5	7%	10	32.6	0%	1	3.3	-	0.0	30,653
Ingham County	1,679	577.8	9%	923	317.6	10%	33	11.4	48	16.5	290,609
Ionia County	194	300.5	8%	55	85.2	2%	2	3.1	-	0.0	64,553
Jackson County	696	443.5	10%	374	238.3	9%	9	5.7	32	20.4	156,920
Kalamazoo County	1,927	724.5	11%	1,226	460.9	11%	29	10.9	32	12.0	265,988
Kent County	3,341	507.2	9%	1,949	295.9	9%	37	5.6	105	15.9	658,708
Lapeer County	148	168.9	2%	41	46.8	7%	2	2.3	7	8.0	87,635
Lenawee County	245	250.5	3%	111	113.5	5%	1	1.0	5	5.1	97,808
Livingston County	299	155.5	6%	67	34.8	7%	5	2.6	3	1.6	192,335
Luce-Mack-Alger-School	46	135.0	7%	1	2.9	0%	-	0.0	2	5.9	34,084
Macomb County	3,038	348.9	7%	1,437	165.0	9%	80	9.2	82	9.4	870,791
Marquette County	207	314.4	6%	11	16.7	0%	-	0.0	1	1.5	65,834
Midland County	163	195.3	6%	40	47.9	3%	1	1.2	1	1.2	83,441
Mid-Michigan District	495	269.7	7%	156	85.0	5%	4	2.2	14	7.6	183,512
Monroe County	401	266.3	7%	173	114.9	9%	1	0.7	7	4.6	150,568
Muskegon County	1,339	770.1	13%	681	391.6	11%	3	1.7	9	5.2	173,883
Northwest MI Com Hlth Agenc	179	166.3	7%	24	22.3	0%	-	0.0	7	6.5	107,661
Oakland County	3,925	313.1	8%	1,713	136.7	7%	77	6.1	138	11.0	1,253,459
Ottawa County	799	271.2	9%	200	67.9	3%	8	2.7	16	5.4	294,635
Saginaw County	1,241	653.6	10%	749	394.5	10%	4	2.1	6	3.2	189,868
Sanilac County	72	176.7	4%	11	27.0	9%	1	2.5	-	0.0	40,747
Shiawassee County	168	248.0	7%	56	82.7	5%	6	8.9	4	5.9	67,738
St Clair County	363	227.9	8%	142	89.1	4%	7	4.4	5	3.1	159,293
Tuscola County	114	218.0	8%	18	34.4	6%	1	1.9	1	1.9	52,289
Van Buren-Cass	372	292.8	5%	154	121.2	3%	4	3.1	9	7.1	127,058
Washtenaw County	1,565	427.0	7%	619	168.9	9%	30	8.2	30	8.2	366,473
Wayne LHD	3,957	368.0	8%	1,875	174.4	7%	71	6.6	96	8.9	1,075,254
Detroit LHD ³	9,933	1492.9	10%	6,993	1051.0	10%	303	45.5	453	68.1	665,369
Western UP District	134	206.4	8%	6	9.2	0%	1	1.5	1	1.5	64,907
Total	44,833	449.8	9%	23,414	234.9	9%	783	7.9	1,236	12.4	9,966,555

1 - P&S: Primary and Secondary Syphilis

2 - Rate per 100,000 based on annual Census Bureau estimates from the American Community Survey (ACS)

3 - Detroit LHD refers to Detroit City and Hamtramck, Highland Park, the Grosse Points, and Harper Woods.

STI Diagnoses by County, 2020

Includes confirmed and probable cases

	Chlamydia			Gonorrhea			P&S Syphilis		Latent Syphilis		2020 Population ²
	count	rate	Re-infected %	count	rate	Re-infected %	count	rate	count	rate	
Alcona County	14	133.3	7%	3	28.6	0%	-	-	-	0.0	10,505
Alger County	12	133.1	0%	-	0.0		-	-	1	11.1	9,015
Allegan County	327	275.0	8%	109	91.7	3%	2	1.7	9	7.6	118,927
Alpena County	48	170.0	4%	7	24.8	0%	-	-	-	0.0	28,238
Antrim County	51	217.5	14%	10	42.6	0%	-	0.0	1	4.3	23,449
Arenac County	34	227.4	6%	10	66.9	10%	-	-	-	0.0	14,953
Baraga County	25	306.2	12%	-	0.0		-	-	-	0.0	8,164
Barry County	174	280.4	10%	38	61.2	3%	-	0.0	5	8.1	62,061
Bay County	331	323.3	9%	99	96.7	10%	2	2.0	2	2.0	102,387
Benzie County	19	106.4	0%	1	5.6	0%	-	-	1	5.6	17,852
Berrien County	784	512.3	10%	407	266.0	8%	3	2.0	6	3.9	153,025
Branch County	107	246.4	7%	52	119.7	2%	-	-	-	0.0	43,424
Calhoun County	712	533.0	8%	473	354.1	6%	7	5.2	13	9.7	133,580
Cass County	138	267.5	1%	75	145.4	3%	2	-	-	0.0	51,584
Charlevoix County	45	172.4	11%	3	11.5	0%	-	-	2	7.7	26,105
Cheboygan County	30	118.3	3%	8	31.5	0%	-	0.0	-	0.0	25,365
Chippewa County	68	184.0	3%	7	18.9	0%	1	2.7	2	5.4	36,958
Clare County	60	195.0	5%	21	68.2	0%	-	0.0	2	6.5	30,771
Clinton County	206	258.3	7%	56	70.2	5%	1	1.3	9	11.3	79,753
Crawford County	26	186.0	0%	8	57.2	0%	1	-	1	7.2	13,981
Delta County	49	137.6	2%	2	5.6	0%	-	-	1	2.8	35,612
Dickinson County	49	195.1	12%	2	8.0	0%	-	-	1	4.0	25,112
Eaton County	410	372.2	8%	178	161.6	7%	7	6.4	6	5.4	110,148
Emmet County	58	174.0	2%	8	24.0	0%	-	-	2	6.0	33,342
Genesee County	2,784	687.8	12%	1,710	422.4	11%	26	6.4	41	10.1	404,794
Gladwin County	37	145.5	5%	8	31.5	13%	1	-	1	3.9	25,424
Gogebic County	28	202.3	14%	1	7.2	0%	-	-	-	0.0	13,842
Grand Traverse County	245	261.8	5%	41	43.8	5%	4	4.3	2	2.1	93,592
Gratiot County	106	263.1	8%	38	94.3	5%	-	-	1	2.5	40,283
Hillsdale County	111	243.1	4%	72	157.7	6%	-	-	-	0.0	45,658
Houghton County	73	207.8	5%	5	14.2	0%	1	-	-	0.0	35,126
Huron County	59	192.5	7%	10	32.6	0%	1	-	-	0.0	30,653
Ingham County	1,679	577.8	9%	923	317.6	10%	33	11.4	48	16.5	290,609
Ionia County	194	300.5	8%	55	85.2	2%	2	3.1	-	0.0	64,553
Iosco County	58	230.7	3%	8	31.8	0%	-	-	-	0.0	25,140
Iron County	19	171.7	5%	2	18.1	0%	-	-	1	9.0	11,066
Isabella County	290	417.2	6%	69	99.3	9%	2	2.9	5	7.2	69,504
Jackson County	696	443.5	10%	374	238.3	9%	9	5.7	32	20.4	156,920
Kalamazoo County	1,927	724.5	11%	1,226	460.9	11%	29	10.9	32	12.0	265,988
Kalkaska County	35	194.4	6%	3	16.7	0%	-	-	-	0.0	18,003
Kent County	3,341	507.2	9%	1,949	295.9	9%	37	5.6	105	15.9	658,708
Keweenaw County	4	188.8	0%	-	0.0		-	-	-	0.0	2,119
Lake County	21	181.2	5%	6	51.8	0%	-	-	13	112.2	11,587
Lapeer County	148	168.9	2%	41	46.8	7%	2	2.3	7	8.0	87,635
Leelanau County	27	124.2	0%	4	18.4	0%	-	-	2	9.2	21,743
Lenawee County	245	250.5	3%	111	113.5	5%	1	1.0	5	5.1	97,808
Livingston County	299	155.5	6%	67	34.8	7%	5	2.6	3	1.6	192,335
Luce County	7	114.3	0%	-	0.0		-	-	-	0.0	6,126

STI Diagnoses by County, 2020

Includes confirmed and probable cases

	Chlamydia			Gonorrhea			P&S Syphilis		Latent Syphilis		2020 Population ²
	count	rate	Re-infected %	count	rate	Re-infected %	count	rate	count	rate	
Mackinac County	17	156.8	12%	1	9.2	0%	-	-	1	9.2	10,839
Macomb County	3,038	348.9	7%	1,437	165.0	9%	80	9.2	82	9.4	870,791
Manistee County	31	125.3	6%	5	20.2	0%	-	-	1	4.0	24,738
Marquette County	207	314.4	6%	11	16.7	0%	-	0.0	1	1.5	65,834
Mason County	55	188.6	7%	8	27.4	0%	1	-	1	3.4	29,164
Mecosta County	139	316.6	8%	38	86.5	3%	2	4.6	-	0.0	43,907
Menominee County	28	123.8	0%	3	13.3	0%	-	-	-	0.0	22,608
Midland County	163	195.3	6%	40	47.9	3%	1	1.2	1	1.2	83,441
Missaukee County	33	217.8	6%	15	99.0	0%	-	-	-	0.0	15,152
Monroe County	401	266.3	7%	173	114.9	9%	1	0.7	7	4.6	150,568
Montcalm County	183	288.3	7%	62	97.7	5%	3	-	4	6.3	63,476
Montmorency County	6	64.3	0%	-	0.0	-	1	10.7	-	0.0	9,337
Muskegon County	1,339	770.1	13%	681	391.6	11%	3	1.7	9	5.2	173,883
Newaygo County	94	190.5	4%	30	60.8	7%	-	-	1	2.0	49,348
Oakland County	3,925	313.1	8%	1,713	136.7	7%	77	6.1	138	11.0	1,253,459
Oceana County	61	227.5	5%	17	63.4	6%	-	-	1	3.7	26,819
Ogemaw County	32	152.9	3%	2	9.6	0%	1	-	-	0.0	20,923
Ontonagon County	4	70.7	0%	-	0.0	-	-	-	1	17.7	5,656
Osceola County	53	225.9	6%	9	38.4	0%	-	0.0	1	4.3	23,466
Oscoda County	8	95.6	0%	-	0.0	-	-	-	-	0.0	8,368
Otsego County	25	100.9	0%	3	12.1	0%	-	0.0	2	8.1	24,765
Ottawa County	799	271.2	9%	200	67.9	3%	8	2.7	16	5.4	294,635
Presque Isle County	29	229.0	0%	1	7.9	0%	-	-	-	0.0	12,665
Roscommon County	44	183.4	5%	8	33.4	0%	-	-	1	4.2	23,986
Saginaw County	1,241	653.6	10%	749	394.5	10%	4	2.1	6	3.2	189,868
Sanilac County	72	176.7	4%	11	27.0	9%	1	2.5	-	0.0	40,747
Schoolcraft County	10	123.4	10%	-	0.0	-	-	-	-	0.0	8,104
Shiawassee County	168	248.0	7%	56	82.7	5%	6	-	4	5.9	67,738
St. Clair County	363	227.9	8%	142	89.1	4%	7	4.4	5	3.1	159,293
St. Joseph County	175	287.6	6%	94	154.5	7%	1	1.6	2	3.3	60,848
Tuscola County	114	218.0	8%	18	34.4	6%	1	-	1	1.9	52,289
Van Buren County	234	310.0	7%	79	104.7	4%	2	2.6	9	11.9	75,474
Washtenaw County	1,565	427.0	7%	619	168.9	9%	30	8.2	30	8.2	366,473
Wayne County	4,539	422.1	8%	2,283	212.3	8%	86	8.0	120	11.2	1,075,254
Detroit City	9,351	1405.4	11%	6,585	989.7	10%	288	43.3	429	64.5	665,369
Wexford County	77	228.2	6%	21	62.2	5%	-	-	-	0.0	33,743
Total	44,833	449.8	9%	23,414	234.9	9%	783	7.9	1,236	12.4	9,966,555

1 - P&S: Primary and Secondary Syphilis

2 - Rate per 100,000 based on annual Census Bureau estimates from the American Community Survey (ACS)