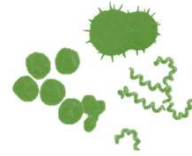


Sexually Transmitted Diseases (STDs)



Important definitions for this section

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

MSM: Men who have sex with men

PWID: People who inject drugs

P&S Syphilis: Primary and secondary, or the earliest stages of syphilis infection

Reportable Conditions

Chlamydia	Gonorrhea	Syphilis
Caused by bacteria <i>Chlamydia trachomatis</i>	Caused by bacteria <i>Neisseria gonorrhoeae</i>	Caused by bacteria <i>Treponema pallidum</i>
Most people who have chlamydia have no symptoms	Possible sequelae include pelvic inflammatory disease (PID) and disseminated gonococcal infection (DGI)	Syphilis is divided into stages with different signs and symptoms; primary and secondary syphilis present with symptoms
Serovariants of chlamydia can cause lymphogranuloma venereum (LGV)	Antibiotics have successfully treated gonorrhea for several decades; however, the bacteria has historically developed resistance to various drug types	Without treatment, syphilis can spread, causing manifestations such as neurosyphilis, ocular or otic syphilis, or death
Treatable by azithromycin or doxycycline	Treatable by dual therapy of ceftriaxone and azithromycin	Treatable by benzathine penicillin or doxycycline

Reference and more information at <https://www.cdc.gov/std>

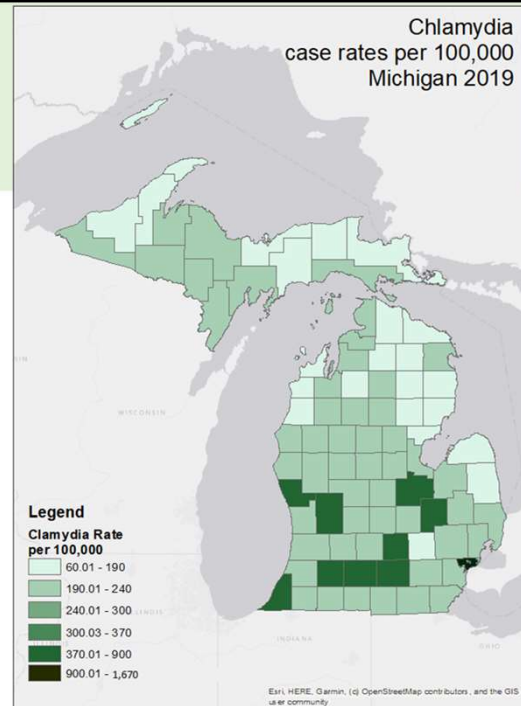
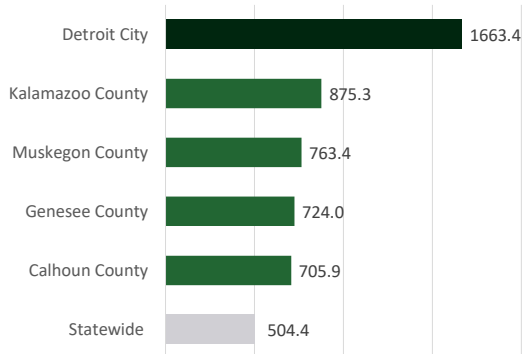
Reportable Conditions (less common)

Lymphogranuloma venereum	Chancroid	Granuloma inguinale
Caused by a serovariant of the bacteria <i>Chlamydia trachomatis</i>	Caused by bacteria <i>Hemophilus ducreyi</i>	Caused by bacteria <i>Klebsiella granulomatis</i>
Symptoms range and most commonly include painful inflammation in the rectum (known as proctitis).	Usually presents as one or more genital ulcers that bleed on contact	A disease of the skin and mucous membranes in the genital area, often with granuloma lesions.
Most recent cases in Michigan are among men who have sex with men with multiple partners	Rare in the U.S., more common in tropical countries. No cases reported in Michigan in 2019.	This is rare in the U.S.; no cases were reported in Michigan in 2019.
Treatable by long doses of doxycycline	Treatable by either ceftriaxone or azithromycin	Treatable by doxycycline

Reference and more information at <https://www.cdc.gov/std>

Chlamydia Trachomatis

Five Local Health Jurisdictions with Highest Case Rate per 100,000



Chlamydia is the most commonly reported communicable disease nationwide. In 2019, there were **50,374** cases of chlamydia diagnosed among Michigan residents. The City of Detroit (including the bordering cities of Highland Park and Hamtramck) had the highest diagnosis rate with **1,663** cases per 100,000, or approximately **3 times** the statewide rate.

Full list of local health departments and case rates:

https://www.michigan.gov/documents/mdhhs/2019_STDs_in_Michigan_tables_summary_697340_7.pdf

Chlamydia – Trends over Time

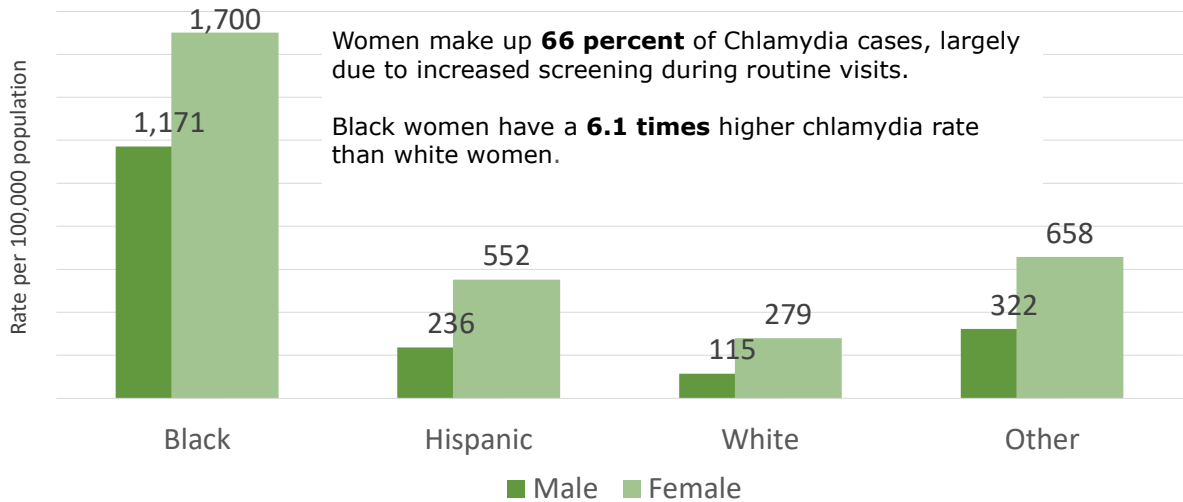


[See full trend report here.](#)

In 2019, the rate of chlamydia cases per 100,000 Michigan residents was **504.40** and the count was **50,374** cases total.

This represents a **1 percent (95% CI 0.1%-1.6%)** average increase per year in the past 10 years.

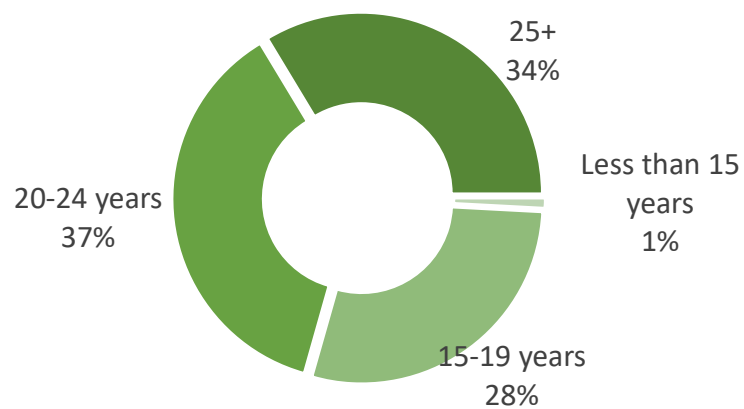
Chlamydia – Priority Populations



Women make up **66 percent** of Chlamydia cases, largely due to increased screening during routine visits.

Black women have a **6.1 times** higher chlamydia rate than white women.

Chlamydia – Priority Populations

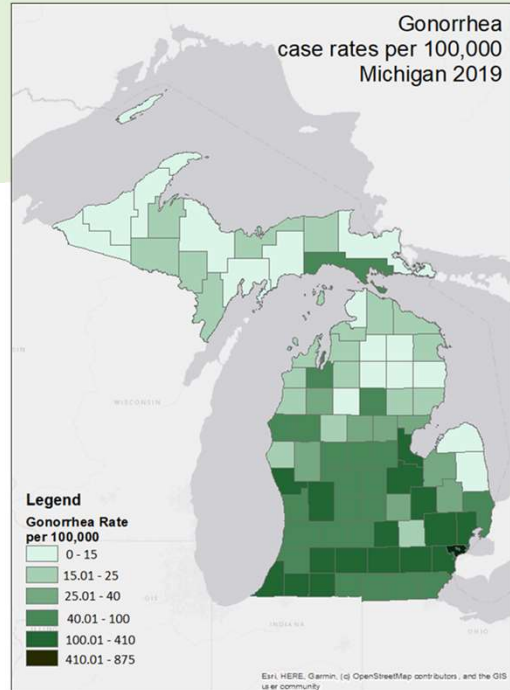
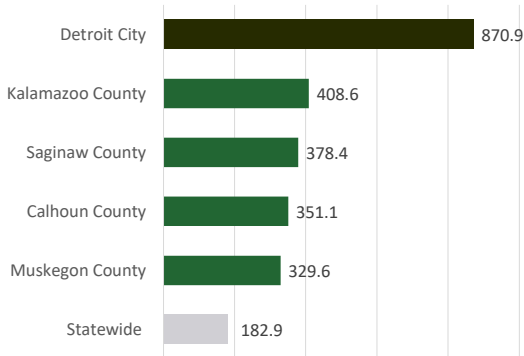


66 percent of Chlamydia cases were diagnosed among patients less than 25 years old

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Neisseria gonorrhoea

Five Local Health Jurisdictions with Highest Case Rate per 100,000



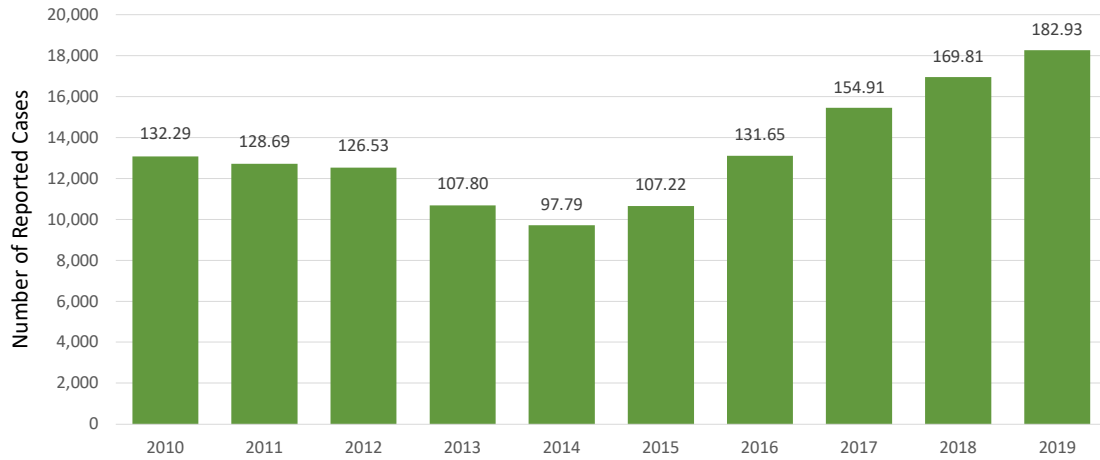
In 2019, there were **18,264** reported cases of gonorrhea in Michigan, or **182.88** cases per 100,000 residents.

Gonorrhea case counts are consistently highest in Detroit compared to the rest of the state. The case rate in Detroit is **871** cases per 100,000, **4.8 times** higher than the rest of Michigan.

Full list of local health departments and case rates:

https://www.michigan.gov/documents/mdhhs/2019_STDs_in_Michigan_tables_summary_697340_7.pdf

Gonorrhea – Trends over Time

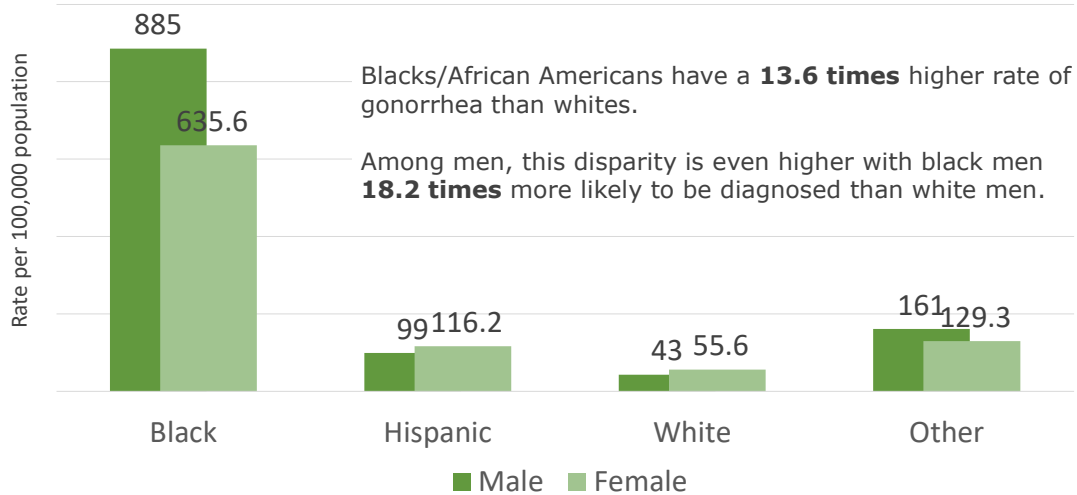


[See full trend report here.](#)

In 2019, the rate of gonorrhea cases per 100,000 Michigan residents was **182.18** and the case count total was **18,264**.

Since 2010, gonorrhea rates have increased annually, on average, **4 percent (95% CI 0.8% - 7%)**.

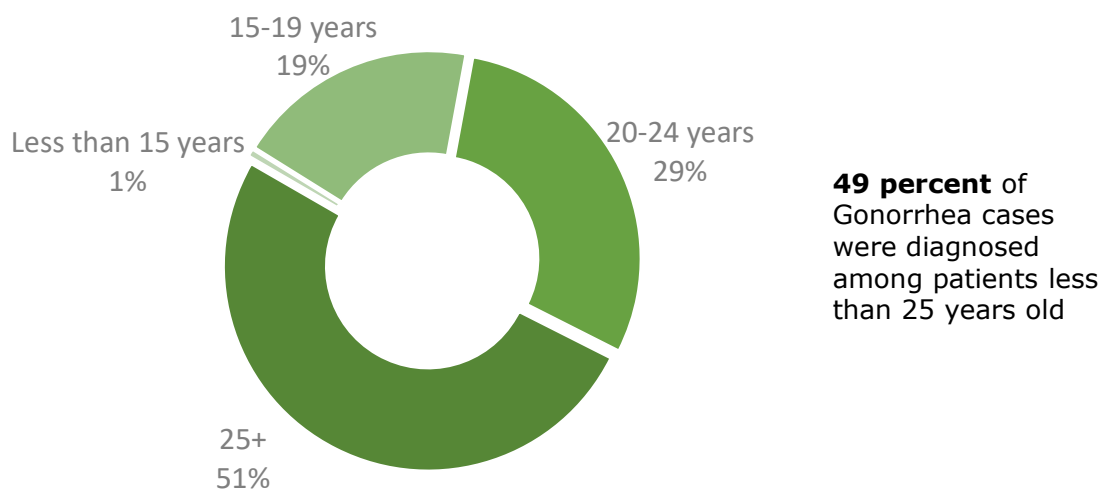
Gonorrhea – Priority Populations



Blacks/African Americans have a **13.6 times** higher rate of gonorrhea than whites.

Among men, this disparity is even higher with black men **18.2 times** more likely to be diagnosed than white men.

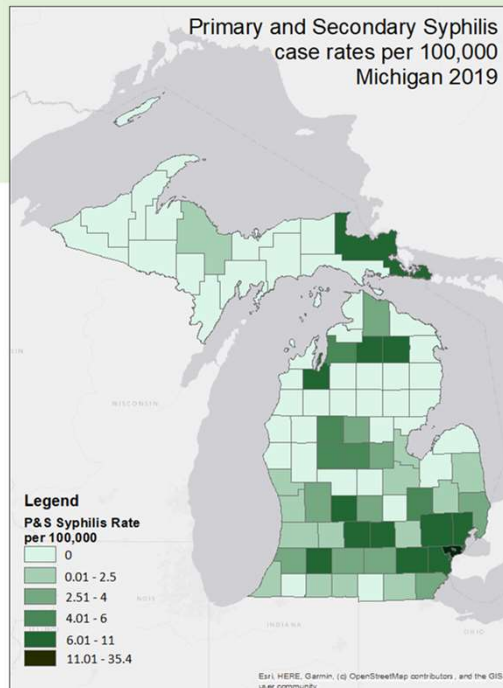
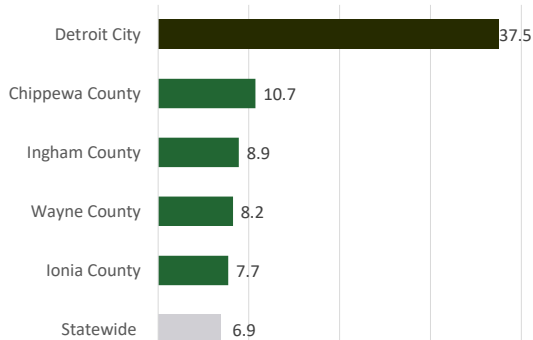
Gonorrhea – Priority Populations



49 percent of Gonorrhea cases were diagnosed among patients less than 25 years old

Primary and Secondary Syphilis

Five Local Health Jurisdictions with Highest Case Rate per 100,000



Primary and Secondary (P&S) Syphilis include all cases with early infection *and* symptoms. Early latent, late latent, and unknown duration syphilis are not included in these counts.

In 2019 there were **685** cases of P&S Syphilis in Michigan, or **6.86** cases per 100,000. The city of Detroit accounts for **37 percent** of these cases with a rate of **37.5** cases per 100,000.

Full list of local health departments and case rates:

https://www.michigan.gov/documents/mdhhs/2019_STDs_in_Michigan_tables_summary_697340_7.pdf

P&S Syphilis – Trends over Time

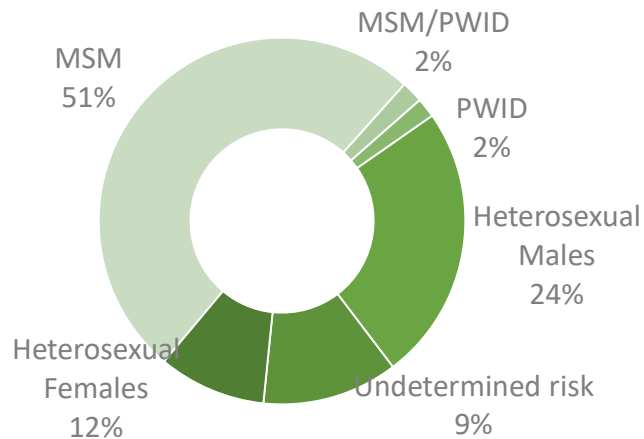


[See full trend report here.](#)

In 2019, the rate of P&S Syphilis cases per 100,000 Michigan residents was **6.86** and the case count was **685**.

Since 2010, P&S Syphilis rates have increased annually, on average, by **10 percent (95% CI 7% - 14%)**.

Syphilis – Priority Populations



86 percent of P&S syphilis cases are men.

The majority (**59 percent**) of those men report sex with other men.

MSM = men who have sex with men
PSWID = people who inject drugs

86 percent of P&S syphilis cases are men.

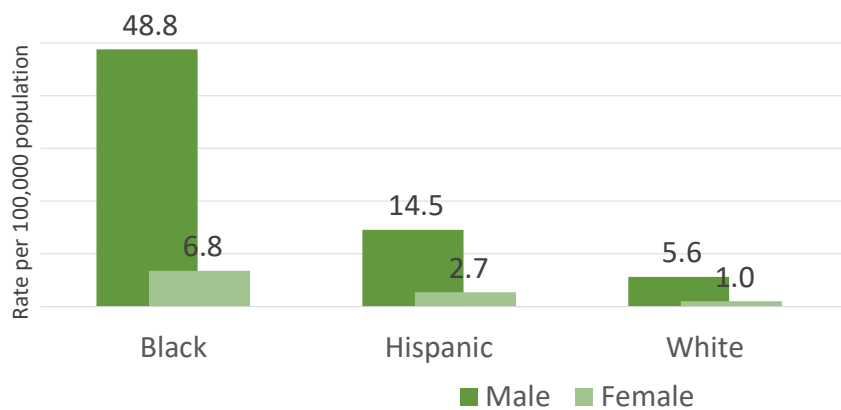
The majority (**59 percent**) of those men report sex with other men.

Abbreviations:

MSM = men who have sex with men

PSWID = people who inject drugs

Syphilis – Priority Populations



Black men have the highest rates of P&S Syphilis of any racial/ethnic group at **48.8** cases per 100,000.

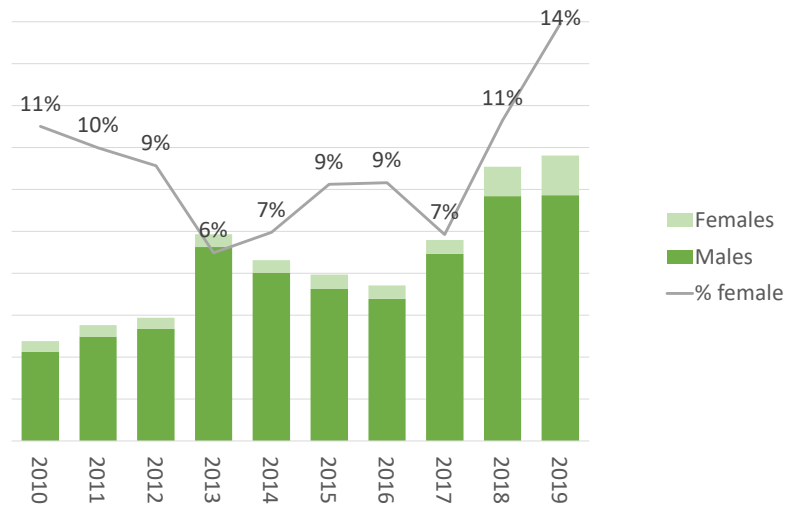
This equates to an **8.7 times** higher rate of diagnosis for black men compared to white men.

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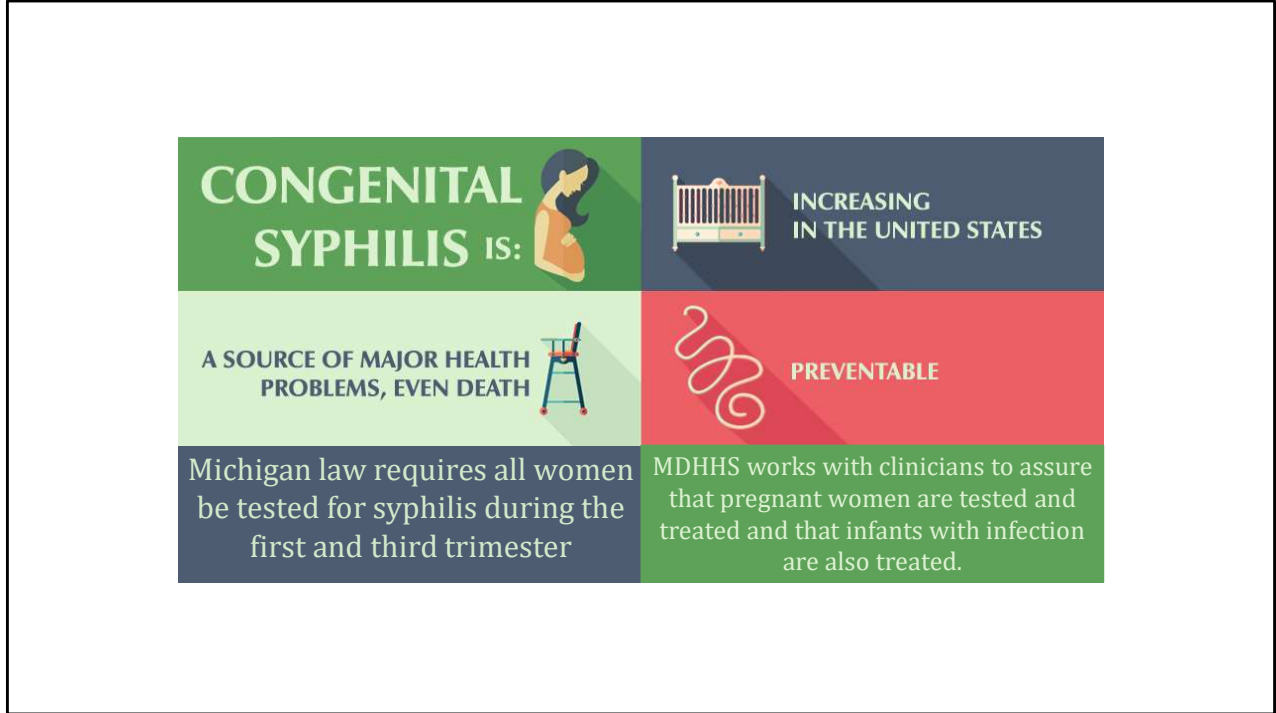
Syphilis Among Women:

Women of childbearing age remain a priority population for public health follow-up as they are at risk of vertical transmission of syphilis to infants during pregnancy and childbirth.



The proportion of primary & secondary syphilis cases which were women in 2019 was **14 percent**, up from **11 percent** in 2010.

The most significant increases in female cases over that time has been among white women and women who inject drugs, but the majority of female cases are among black women and women who have sex with men.



There were **16** cases of congenital syphilis in Michigan in 2019, including **1** reported syphilitic stillbirth.

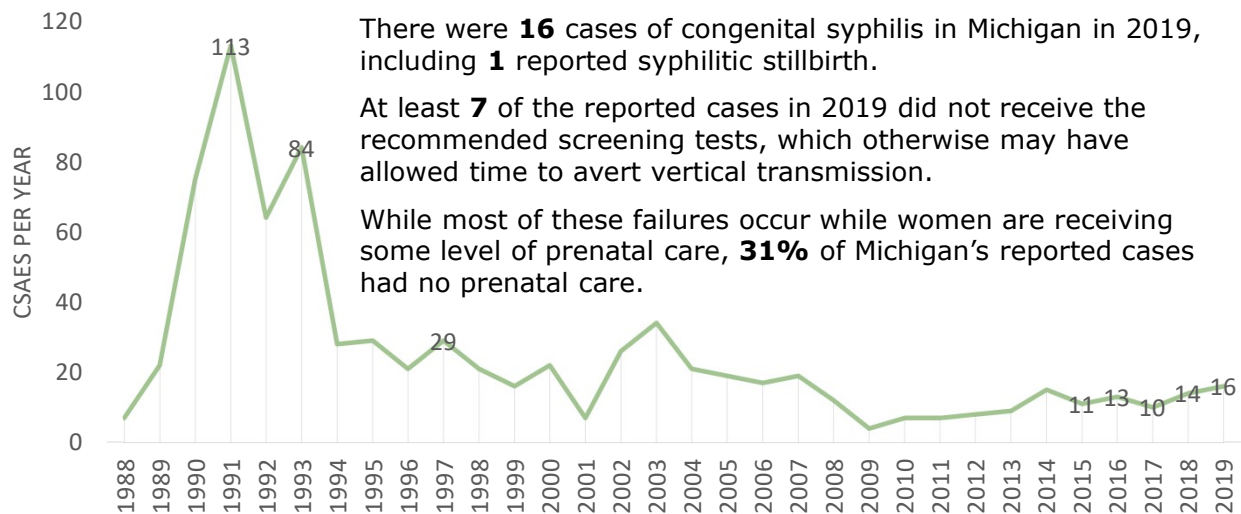
At least **7** of the reported cases in 2019 did not receive the recommended screening tests, which otherwise may have allowed time to avert vertical transmission.

While most of these failures occur while women are receiving some level of prenatal care, **31%** of Michigan's reported cases had no prenatal care.

More information on legislation available online:

https://www.michigan.gov/documents/mdhhs/Michigan_HIV_STD_Law_Updates_FA_Q_650285_7.pdf

Congenital Syphilis



2019 Reported Congenital Syphilis Cases

At least 7 of the reported cases could have been averted with adherence to the screening guidelines

2 cases occurred when the mom was diagnosed in a timely manner, however they were not adequately treated according to the strict required timeline.

5 cases occurred when mom was diagnosed too late in the pregnancy for adequate treatment resulting from a missed or untimely 3rd trimester screening.

1 reported case of a syphilitic stillbirth.

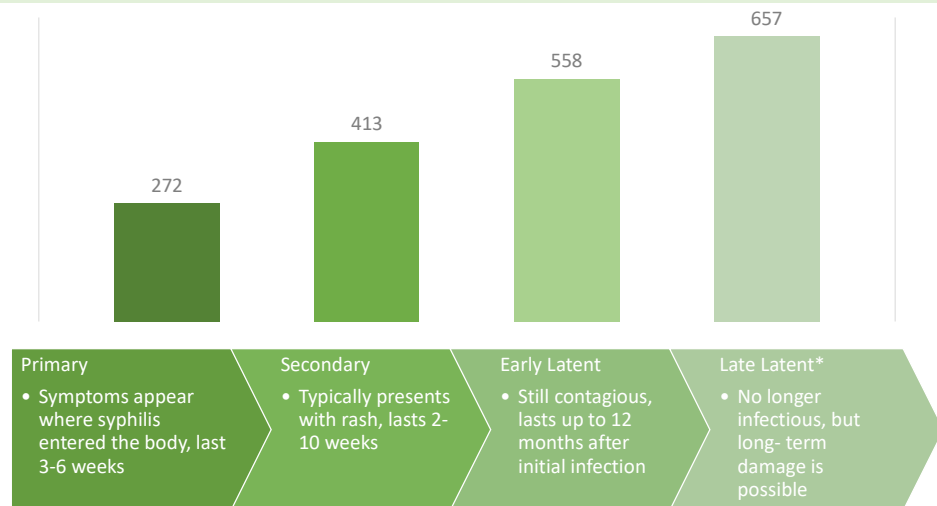
Congenital Syphilis

In 2019, [legislation](#) went into effect to update Michigan's testing guidelines during pregnancy, so that during the first *and* third trimester, women are tested for syphilis on an opt-out basis.

Michigan's House Bill 6022: Revised screening guideline for pregnant women	% of 2019 congenital syphilis cases where mom received recommended screening
Shall be tested for HIV, HBV, and syphilis at their first prenatal visit (unless the patient refuses)	50%
Are to be retested for these infections during the third trimester (MDHHS recommends 28-32 weeks)	31%
Are to be tested If she presents for delivery without documentation of previous testing or declination and reason for refusal	94%

Stages of Syphilis

Without proper treatment, early syphilis symptoms will fade but the infection remains in the body and can cause irreparable damage.



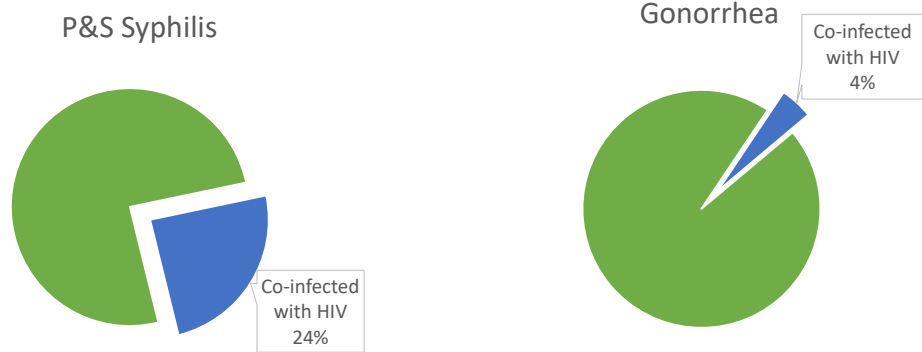
Without proper treatment, early syphilis symptoms will fade but the infection remains in the body and can cause irreparable damage. Early syphilis includes all cases within one year of infection. This includes primary and secondary cases as well as early latent. Late syphilis is all cases where infection has lasted more than 1 year.

Unknown* duration may include cases where patients were unable to be located or stage was otherwise unable to be determined.

*Stage unknown cases are counted with late latent stage for surveillance purposes.

STD/HIV Co-infection

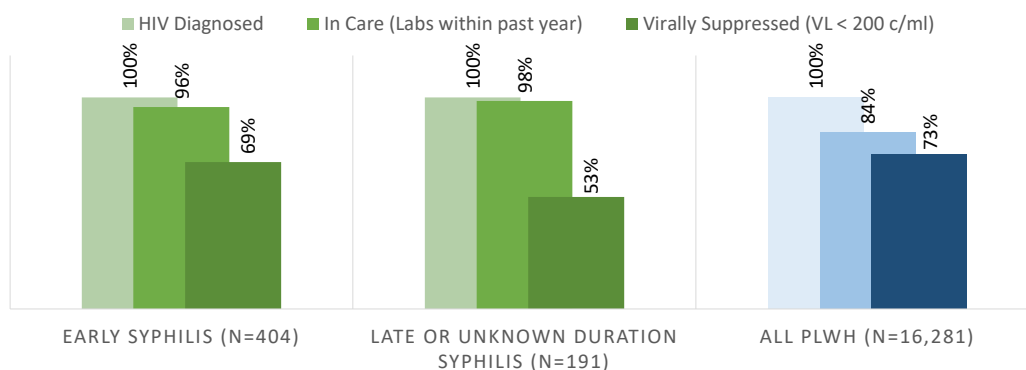
Co-infection with HIV is common among STD patients in Michigan. In 2019, **24 percent** of P&S Syphilis patients and **4.4 percent** of Gonorrhea patients also had diagnosed HIV.



Co-infection is measured as having an HIV diagnosis on or before the STD diagnosis date. Since a person may have an STD multiple times per calendar year, the denominator for coinfection rate is cases of STDs rather than patients.

Syphilis/HIV Co-infection

Compared to all people living with HIV (PLWH) in Michigan, syphilis patients in 2019 were **more likely** to be engaged in HIV care but **less likely** to be virally suppressed as measured at the time of STD diagnosis.



HIV Care Status was measured for STD Cases who were living with HIV for at least 6 months prior to STD Diagnosis (excluding cases who were more recently diagnosed with HIV or co-diagnosed with HIV and STD at the same time).

Early Syphilis includes primary, secondary, and early latent diagnoses (infection is 1 year old or less).

Care status was ascertained on the date of the STD diagnosis. In care is measured by labs reported to surveillance dated within 13 months of the STD diagnosis. Virally suppressed is a subset of in care individuals.

HIV care rates come from the MDHHS Annual HIV Stats found here:

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_72251-350111--,00.html

For questions on using these data
or for additional data requests, contact:
MDHHS-HIV-STD-data-requests@michigan.gov