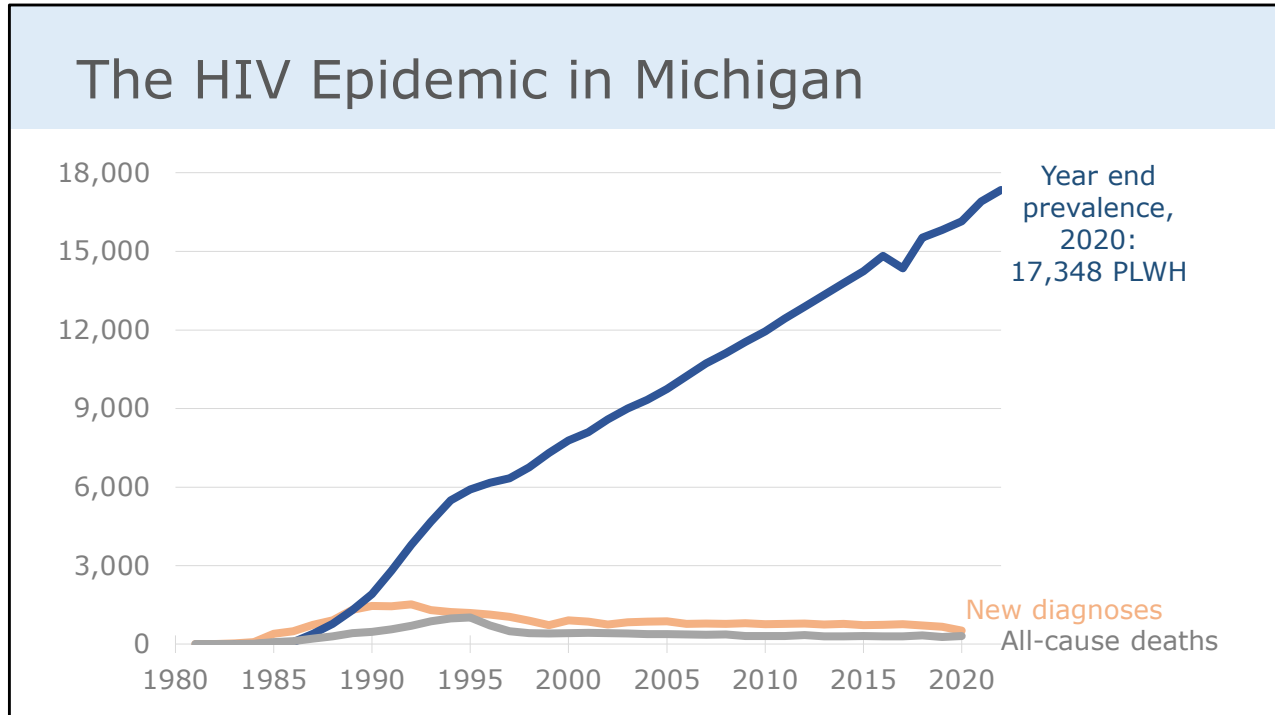


STI-HIV Coinfections

Important definitions for this section

Co-infected: When both STI and HIV infection are present at the same time. Requires HIV diagnosis to be on or before the date of STI diagnosis.

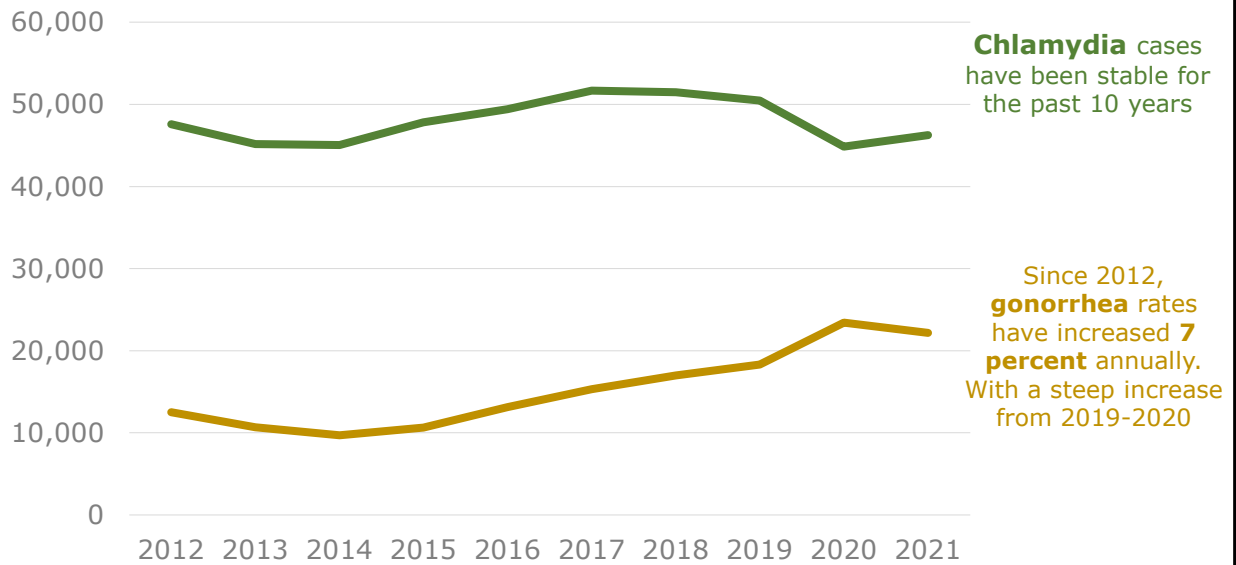
Co-diagnosed: When an STI and HIV or another STI are both diagnosed within 30 days of each other, regardless of which is diagnosed first. May include cases which are not counted as a coinfection due to HIV diagnosis coming after STI.



In Michigan, prevalence continues to increase because the number of new diagnoses is larger than the number of deaths. Before 2014, prevalence counts were calculated by adding new diagnoses to the previous year's prevalence and subtracting total deaths. This method ignores movement. Historically (pre-1998), movement was minimal as most PLWH did not survive long after diagnosis. Therefore, residence at diagnosis was the focus. Beginning in 2014, efforts to update current address began, and prevalence counts switched from calculations based on residence at diagnosis to current address. All the movement among PLWH that occurred up until that point was included in the prevalence count in 2015. That is why there is a dip in 2015.

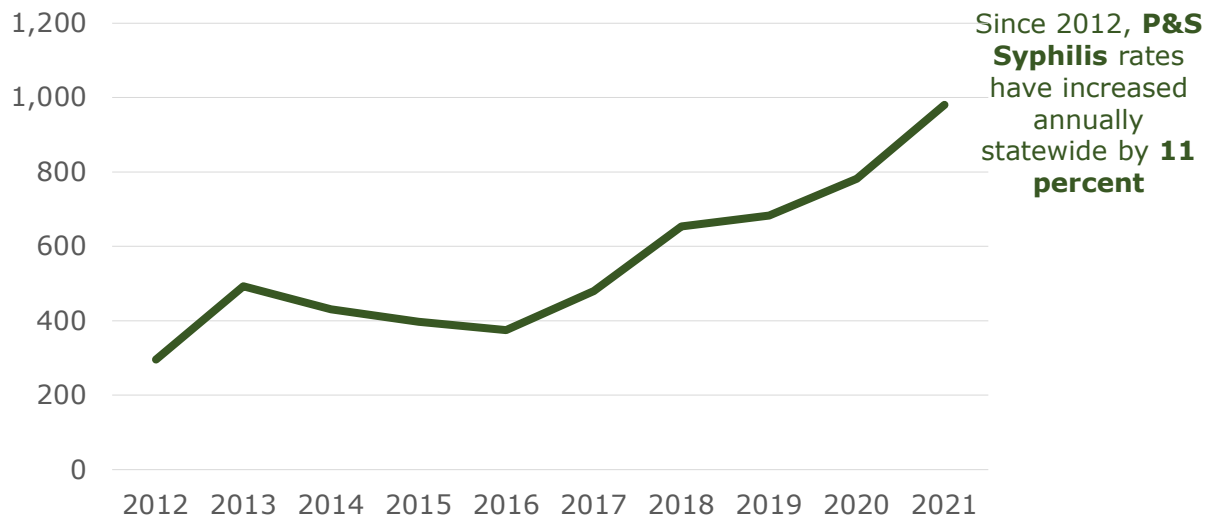
Typically, MDHHS delays any figures regarding all-cause death by two years (i.e., this year, MDHHS would only report deaths through 2019). At this point in the year (July 2021), death counts from the previous year are still underreported. Currently, there are already 309 deaths among PLWH during 2020 reported to MDHHS. This is equal to the average deaths reported over the previous 10 years, and it is expected to grow as more reports are received.

STI Recent Trends – Chlamydia and Gonorrhea



Full STI trends can be found here: https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982-428731--,00.html

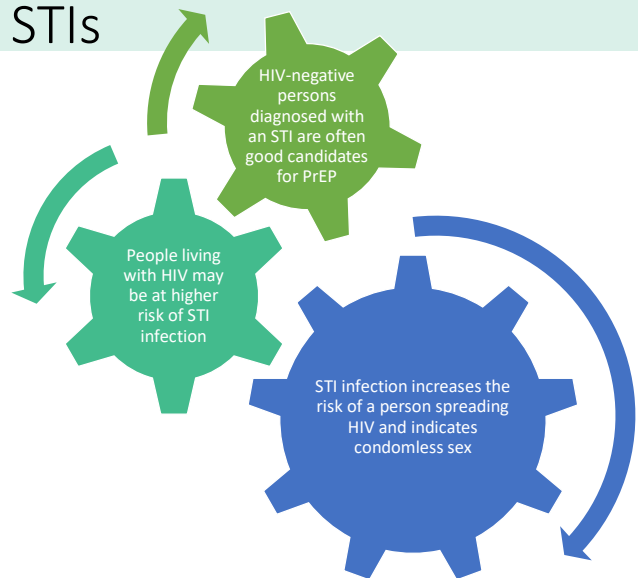
STI Recent Trends – Syphilis



Full STI trends can be found here: https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982-428731--,00.html

Coinfection of HIV and STIs

STI and HIV affect many of the same people and populations. Looking at where co-infections occur and the HIV care outcomes of coinfecting people may help inform health service delivery and targeted prevention strategies for STI/HIV programs.

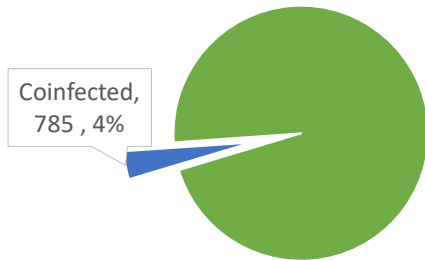


Information from CDC found at <https://www.cdc.gov/STI/hiv/STIfact-STI-hiv-detailed.htm>

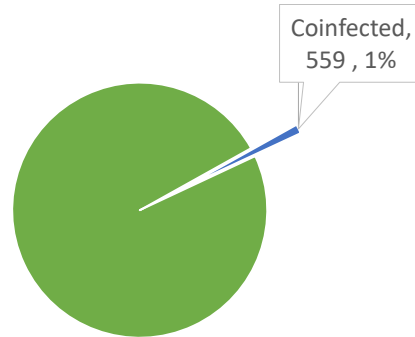
Gonorrhea/Chlamydia-HIV Coinfections

HIV Coinfection is relatively uncommon among people diagnosed with gonorrhea and chlamydia

Among Gonorrhea Diagnoses



Among Chlamydia Diagnoses

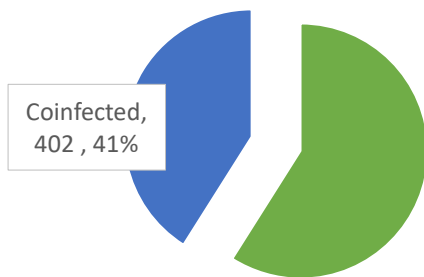


Gonorrhea and Chlamydia diagnoses are not followed up on by disease intervention specialists as standard practice and so are often missing information about HIV status or recent testing. Coinfected cases represent those patients with reported HIV in Michigan.

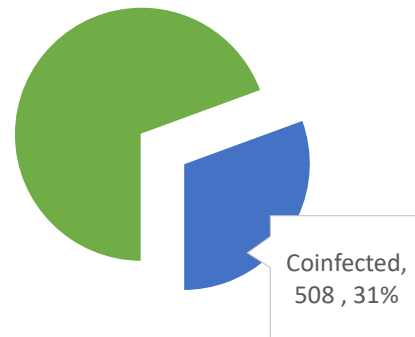
Syphilis-HIV Coinfections

People diagnosed with syphilis are significantly more likely to have an HIV coinfection

Among Primary & Secondary Diagnoses



Among Latent Diagnoses



Primary and secondary syphilis include those cases who were diagnosed while symptoms were present.

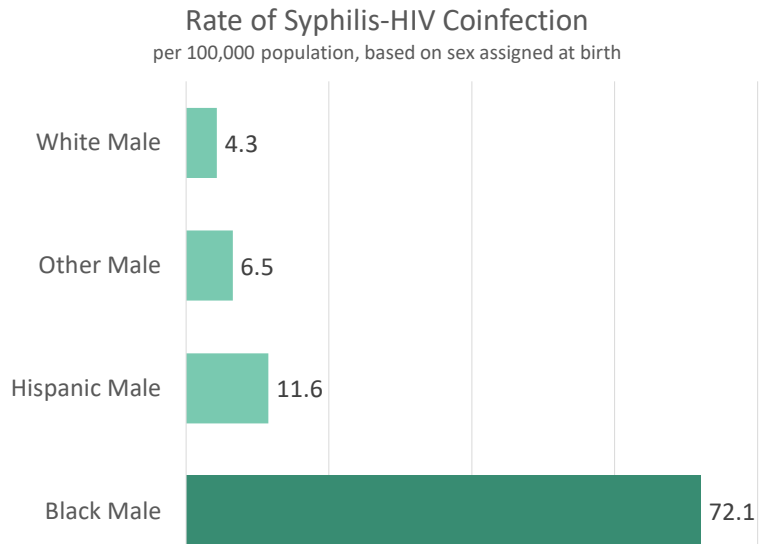
Latent Syphilis are cases diagnosed after symptoms or where duration of infection is unknown.

Latent syphilis cases usually present with no symptoms and may be diagnosed because of regular STI screening associated with an HIV care visit, PrEP initiation or check-up visit, or other STI screening event.

Syphilis-HIV Coinfections

Patterns of syphilis-HIV coinfection follow HIV health disparities in Michigan.

Black men have the highest burden with a coinfection rate **17 times higher** than white men.



The racial disparity for syphilis-HIV coinfections in 2020 is a compounding of the disproportionate burden black men have for overall syphilis cases and HIV prevalence.

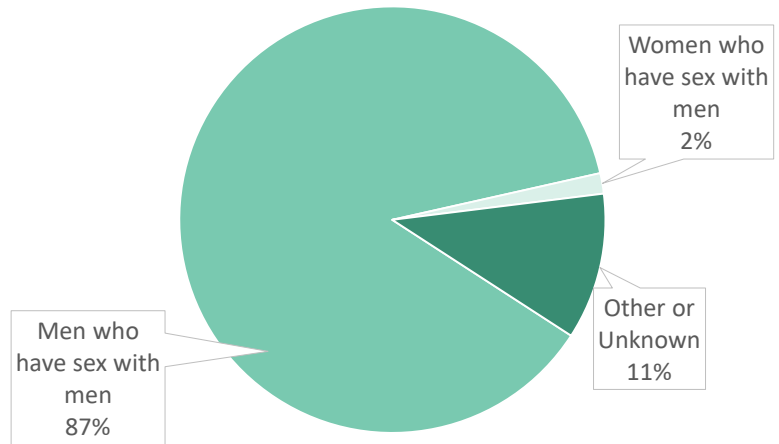
For primary and secondary syphilis alone, black men had 8.7 times higher rate of diagnosis than white men

(https://www.michigan.gov/documents/mdhhs/2019_Michigan_STI_Diagnosis_Trends-slides_705747_7.pdf)

Syphilis-HIV Coinfections

Men who have sex with men (including those who also inject drugs) represent **87%** of all syphilis-HIV coinfections in 2020

Syphilis-HIV Coinfections by transmission risk (n=710)

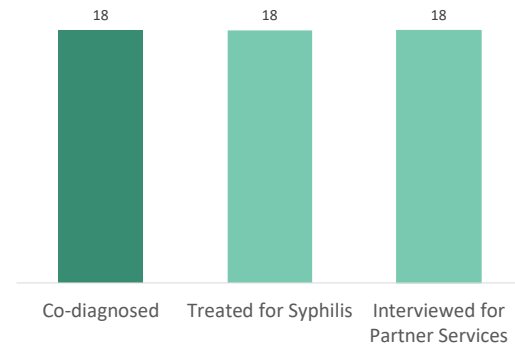


MSM are disproportionately affected by both syphilis and HIV.

Syphilis-HIV Co-diagnoses

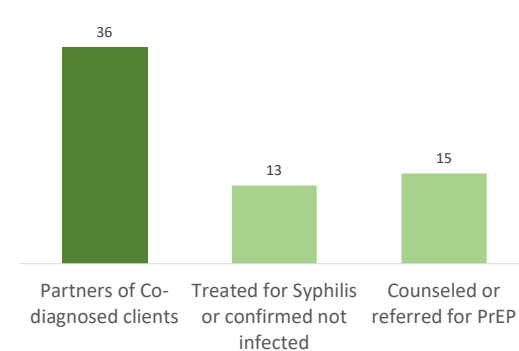
There were 18 syphilis-HIV co-diagnosed patients in Michigan in 2020.

Co-diagnoses are those infections diagnosed within 30 days of one another, regardless of which diagnosis comes first.



There were 31 partners of these co-diagnosed patients offered prevention services.

These represent people who may be already infected with HIV and/or syphilis or who are at high risk of infection.



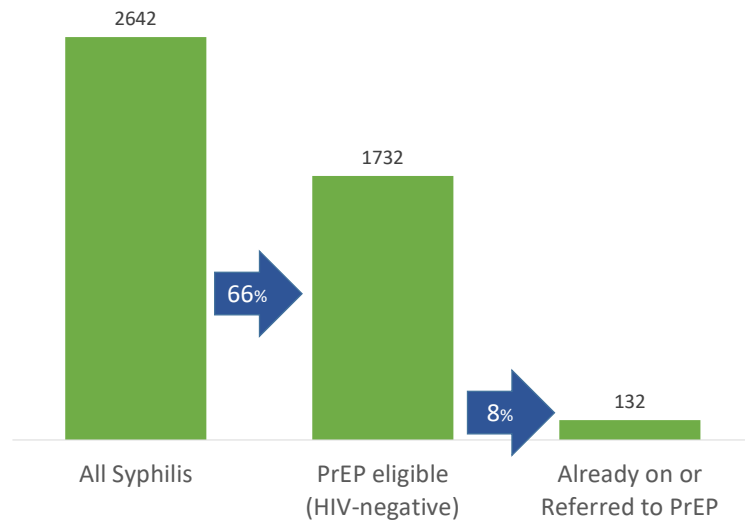
Co-diagnoses are those infections diagnosed within 30 days of one another, regardless of which diagnosis comes first.

A person newly diagnosed with HIV or early stage syphilis is followed up to ensure linkage to care or treatment and to conduct partner elicitation and notification.

More information about partner services in Michigan can be found here:

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982-428735--,00.html#partnersvcs

HIV Prevention for persons with a Syphilis diagnosis



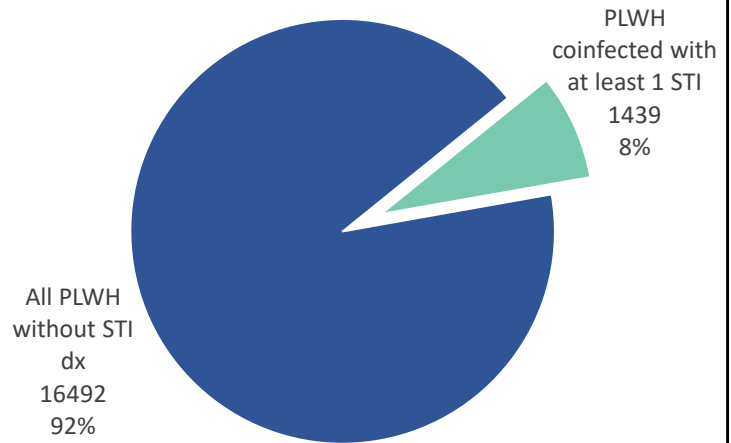
Given the high Syphilis-HIV coinfection rate, syphilis patients who are HIV-negative are given HIV prevention counseling and may be referred to **Pre-Exposure Prophylaxis (PrEP)** to prevent HIV infection

CDC PrEP eligibility <https://www.cdc.gov/hiv/effective-interventions/prevent/prep/index.html>

HIV-STI Coinfections

Among all people living with HIV, 7% were diagnosed with any reportable STI in 2020.

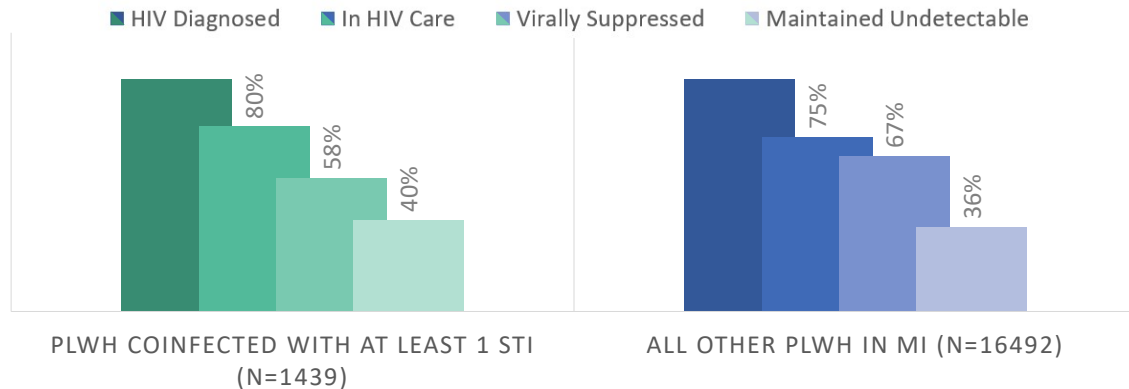
Among PLWH, those most likely to have had an STI reported in 2020 were ages **15-29 years** and **male**.



Information from CDC found at <https://www.cdc.gov/STI/hiv/STIfact-STI-hiv-detailed.htm>

HIV Care and STI Coinfection

Compared to all people living with HIV (PLWH) in Michigan, syphilis patients in 2020 were **more likely** to be engaged in HIV care (measured by lab reports), but **42%** were **insufficiently engaged in care** as they were not virally suppressed. This represents potential for HIV transmission.



A. In Care - PLWH with at least 1 CD4, viral load, or genotype lab test (proxies for medical care visits) in the 12 months prior to or on the date of STI diagnosis.

B. Virally Suppressed (VS) - PLWH who are in care with less than 200 copies of HIV virus per milliliter of blood (<200c/mL) based on most recent lab prior to or on the date of STI diagnosis.

C. Maintained Undetectable (MU) - PLWH who maintained viral load levels <200c/mL for at least 4-8 months prior to the date of STI diagnosis. This measure is derived from studies supporting the U=U (undetectable = untransmittable) campaign.

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

Care status was ascertained on the date of the STI diagnosis. In care is measured by labs reported to surveillance dated within 13 months of the STI diagnosis.

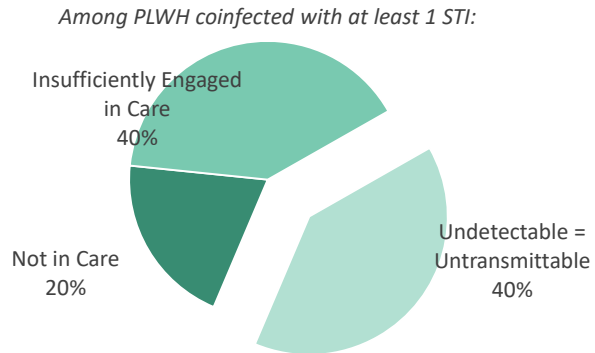
Virally suppressed is a subset of in care individuals.

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

HIV Care and STI Coinfection

PLWH who are coinfecting with an STI are connected with a medical provider and engaged in condomless sex. Tailoring services provides an opportunity to achieve HIV prevention goals of **Undetectable = Untransmittable**.



STI patients least likely to be maintaining undetectable status include:



15-19 year olds
(33%)



Men who have sex with
men and inject drugs
(38%)



Black Men
(38%)



Men who have sex
with women
(31%)

Insufficiently engaged in care are those persons who have care labs but not consistent viral suppression
Undetectable = Untransmittable is based on the research and scientific consensus is that a person living with HIV who is taking antiretroviral therapy (ART) as prescribed and who has an undetectable viral load in their blood sample for at least six months, has a negligible risk of transmitting HIV sexually
[.https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_91668---,00.html](https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_91668---,00.html)

For questions on using these data or for additional data requests:

www.Michigan.gov/SOARS