



2023

SYNDEMICS SURVEILLANCE REPORT, 2023

WISCONSIN DEPARTMENT OF CORRECTIONS (WI DOC)

Epidemiologic Evaluation of Hepatitis C Virus (HCV), Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV), and Sexually Transmitted Infections (STIs) Diagnosed within Prisons in Wisconsin



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Introduction

This report by the Wisconsin Department of Health Services (DHS) Communicable Disease Harm Reduction Section provides a high-level summary of the epidemiology of hepatitis C, hepatitis B, human immunodeficiency virus (HIV), and the sexually transmitted infections (STIs) chlamydia, gonorrhea, and syphilis within Wisconsin prisons.

Many people who are justice-involved experience multiple risk factors for viral hepatitis, HIV, and sexually transmitted infections. The prevalence of these infections and diseases among people who are incarcerated is higher than in the general population.

Populations who are impacted by incarceration may also experience higher rates of these conditions due to factors such as structural racism, stigma, and poverty, as well as unequal access to health care, education, and housing. All these factors affect communities of color disproportionately and can put individuals at greater risk for acquiring the conditions illustrated in this report.

DHS has an excellent collaborative partnership with the Wisconsin Department of Corrections (DOC) who tests for and treats many health conditions among justice-involved people in their custody.

Hepatitis C Virus (HCV)

2023 Wisconsin DOC Surveillance

Background

Health Equity Key Takeaways:

People who are incarcerated have a hepatitis C infection rate 10 times higher than the general public. Additionally, 30% of people living with hepatitis C spend at least part of each year incarcerated ([Data and Statistics about Correctional Health | CDC](#)). For these reasons, correctional facilities play an important role in eliminating hepatitis C nationally and in Wisconsin.¹

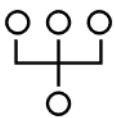
The Centers for Disease Control and Prevention (CDC) recommends that all samples needed to diagnose hepatitis C be collected in a single visit and HCV RNA testing be performed automatically when the HCV antibody is reactive. Information on operational guidance when testing for hepatitis C can be found in the [Updated Operational Guidance for Implementing CDC's Recommendations on Testing for Hepatitis C Virus Infection | MMWR](#).²

All adults should receive at least one-time screening for hepatitis C, based on the 2020 revision of hepatitis C testing recommendations from the [U.S. Preventive Services Task Force](#)³ and the [CDC](#).⁴



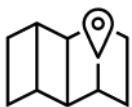
The incidence of new hepatitis C cases is highest among people aged 30-49 years.

People aged 30–49 years represent 72% of people diagnosed with hepatitis C in 2023 within DOC.



Hepatitis A and B vaccination coverage is suboptimal among people affected with hepatitis C.

Among the 115 HCV cases reported in 2023 at DOC, 41 people (36%) were ever vaccinated against HAV and 68 people (59%) were ever vaccinated against HBV. Among those who were ever vaccinated against HBV, 63 people (55%) received the full series.



The rate of new hepatitis C cases is highest among white and Hispanic people.

In 2023, the rate of new hepatitis C cases was highest in white people at a rate of 2,204.9 per 100,000 and among Hispanic people at a rate of 2,104.1 per 100,000 within WI DOC.

Hepatitis C Surveillance, WI DOC

2023 Key Points



115 cases



Of HCV cases, 36% vaccinated against HAV and 55% vaccinated against HBV



People diagnosed at DOC represent 8% of all new HCV cases in the state



30–39 year-olds had the highest incidence of HCV



Figure 1. From 2000 to 2023, a total of **6,322 total hepatitis C cases** were reported by the DOC. In 2023, a total of **115 hepatitis C cases** were reported by the DOC.

Number of cases reported by DOC, Wisconsin, 2000–2023

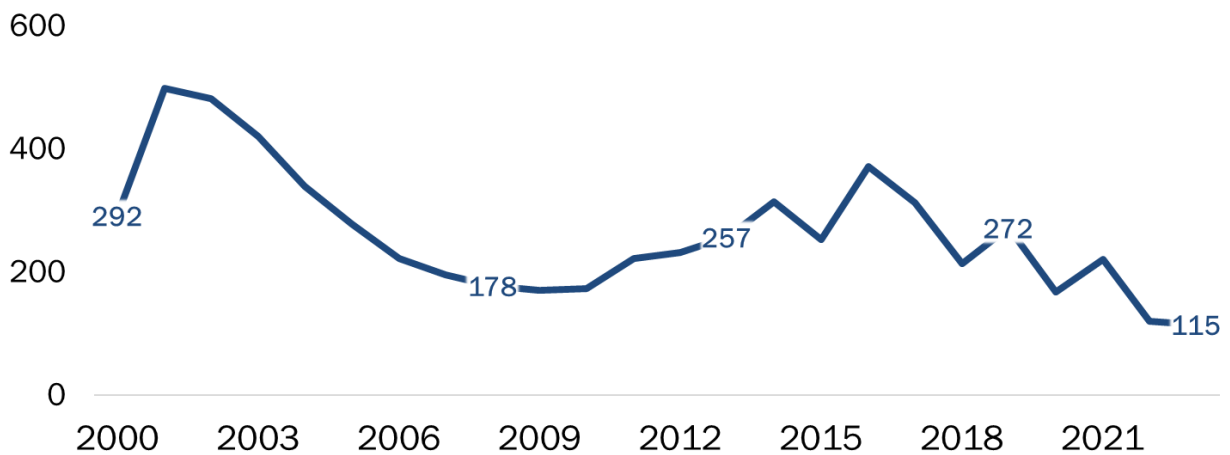
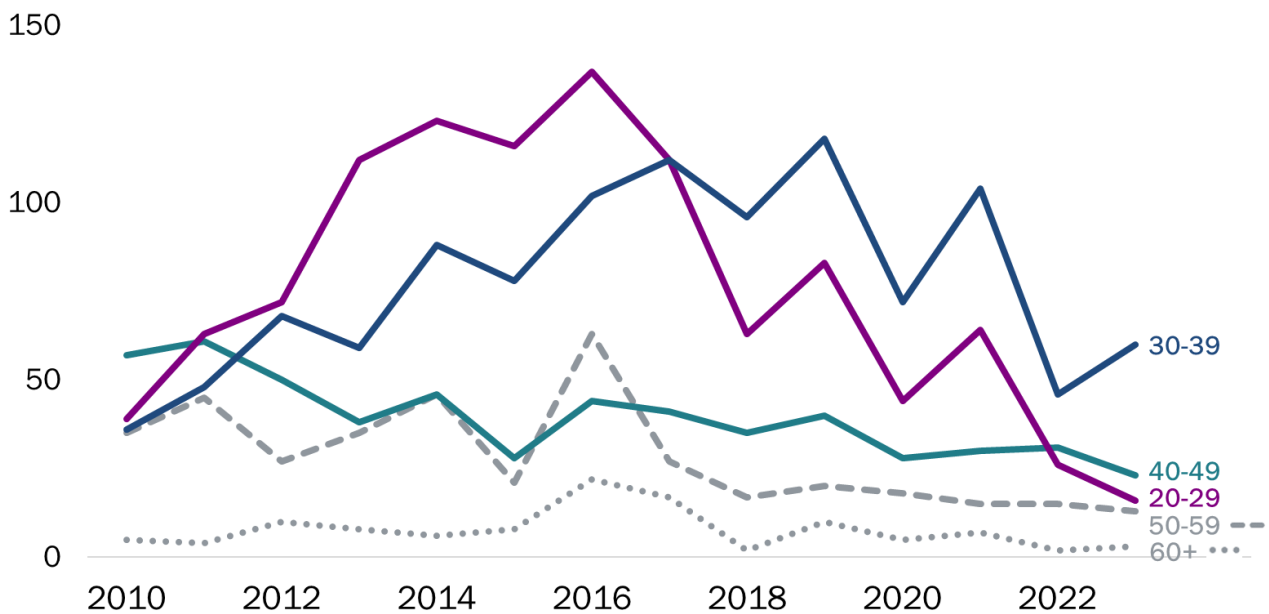


Figure 2. Since 2017, **people aged 30–39** have had the highest incidence of HCV within DOC and HCV incidence has been decreasing in **people aged 20–29**.

Number of cases reported by DOC across age groups, Wisconsin, 2000–2023



Hepatitis C Surveillance, WI DOC



Trends

Figure 3. On average, people diagnosed with hepatitis C at DOC represent **8% of all new cases** reported across the state of Wisconsin.

Number of cases reported by DOC compared to all cases reported in Wisconsin, 2010–2023

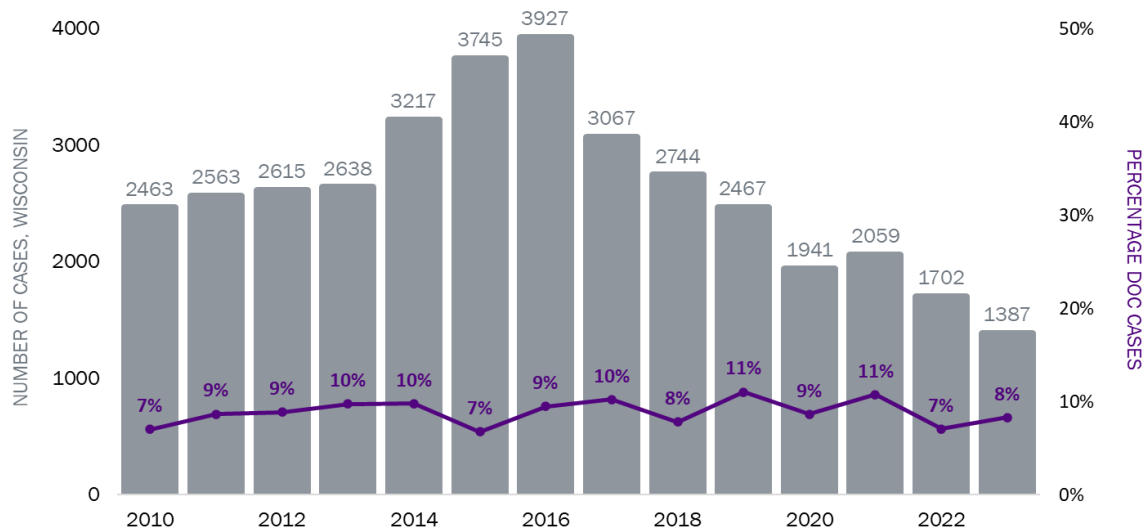
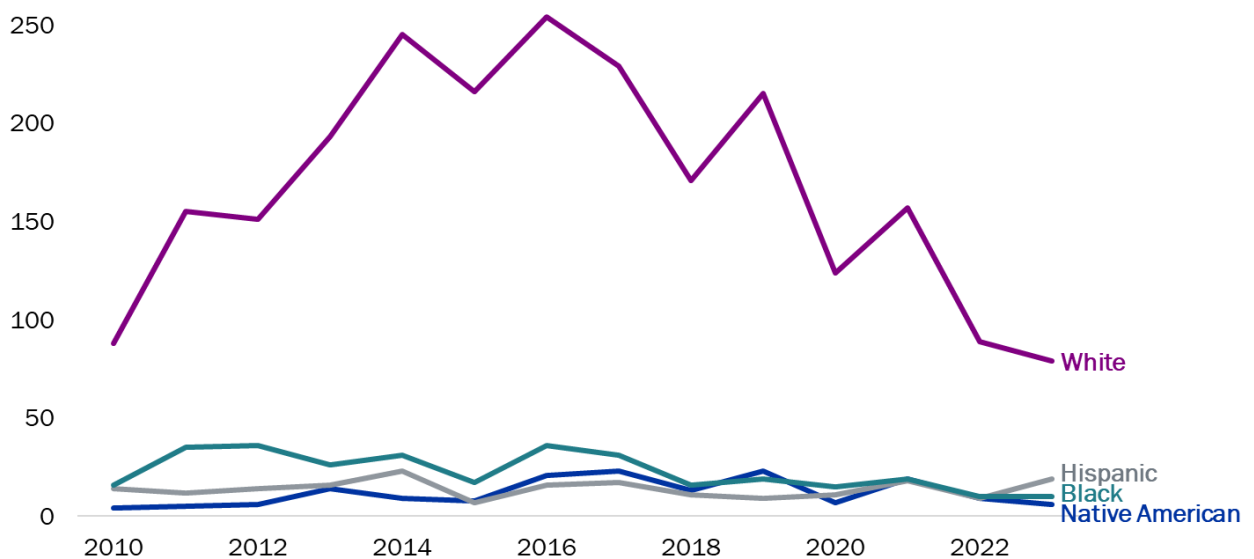


Figure 4. Since 2010, HCV incidence among white and Black people has decreased while **HCV incidence increased among Native American people.**

Diagnosis rate reported by DOC across race and ethnicities, Wisconsin, 2010–2023



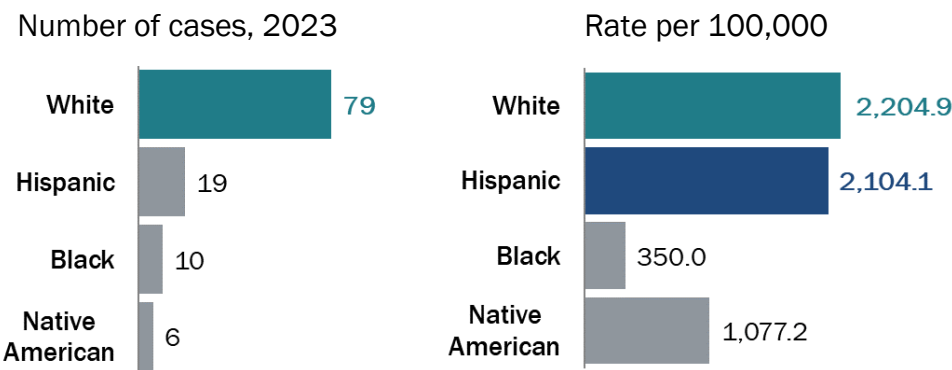
*Rates not shown for Asian people due to small number of diagnoses. Rates derived from numerators less than 20 may be unreliable.

Hepatitis C Surveillance, WI DOC



Demographics, 2023

Figure 5. In 2023, most newly reported cases of hepatitis C from WI DOC were among white people, but the rate was highest among **white** and **Hispanic people**.

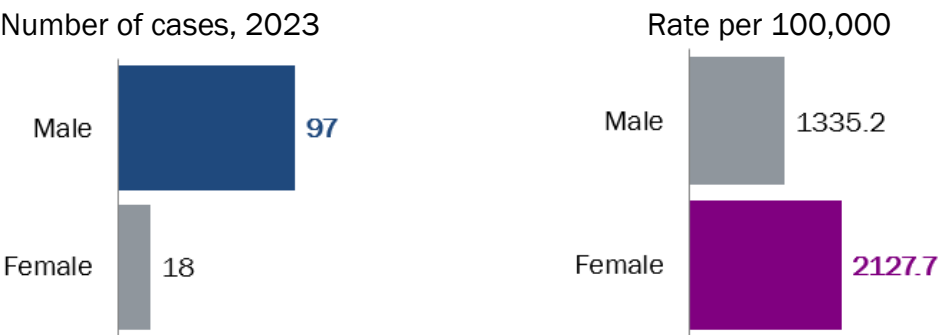


*Due to data suppression rules, counts not shown for race or ethnic groups with less than five diagnoses. Rates derived from numerators less than 20 may be unreliable.

Figure 6. **People aged 30–49 had the highest incidence (72%)** of HCV within the DOC in 2023.



Figure 7. In 2023, among those diagnosed with hepatitis C within the DOC, **84% were male (97 cases)**, but the rate was highest in **females (2,127.7 per 100,000)**.



*Rates derived from numerators less than 20 may be unreliable.

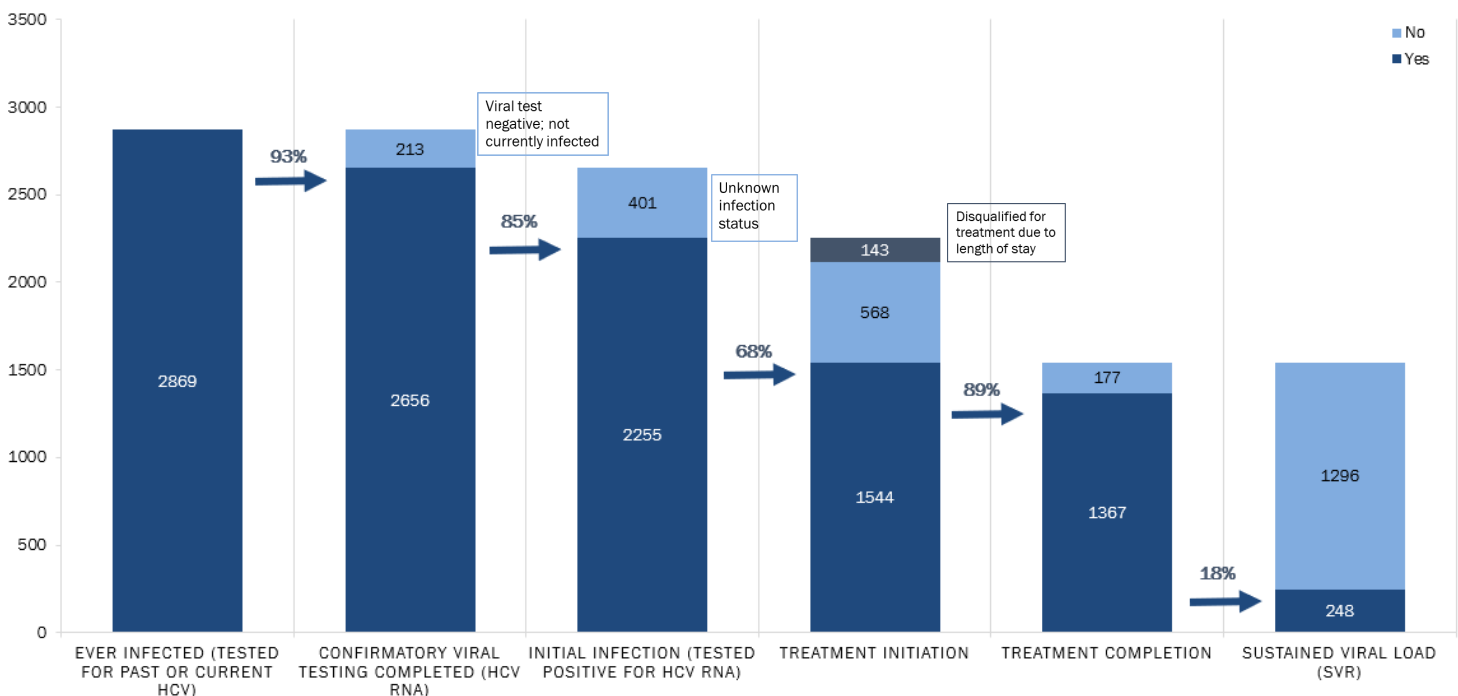
HCV Continuum of Care, 2017–2022

Based on administrative and electronic medical record (EMR) data provided by WI DOC, a continuum of care was created to visualize the progress of justice-involved people through each step in accessing care—from diagnosis to viral clearance.

In October 2019, WI DOC transitioned from risk-based to universal HCV screening upon intake. From 2020–2022, an average of 93% of people at intake were screened for HCV. Direct-acting antivirals (DAAs) have been available since 2014, yet few people nationally receive treatment in a timely manner. Timely treatment is crucial to prevent liver damage and save lives. In 2022, CDC released new findings from a [Vital Signs report](#) showing that only about 1 in 3 people with insurance get treatment.⁵

Comparably, among those diagnosed with HCV at a WI DOC facility, 68% initiate treatment (n=1544) and 89% of that cohort go on to complete HCV treatment (n=1367), which is well above the national average.

Figure 8. Hepatitis C Care Cascade, WI DOC, 2017–2022



What the cascade shows	Opportunities for intervention
Most (93%) of the 2,869 people at DOC who were ever infected with hepatitis C since January 2017 were virally tested to determine current infection status.	213 people at DOC have not completed hepatitis C RNA viral diagnostic testing from 2017–2022.
Of the 2,255 people whose first RNA test was positive, 68% initiated HCV treatment.	711 total people at DOC did not initiate treatment, among which 143 were ineligible due to an insufficient length of stay for treatment completion.
Of the 1,544 people who initiated treatment, 89% (n=1,367) completed their DAA treatment course. Among these people, 18% (n=248) were re-tested and demonstrated viral clearance.	177 people eligible for HCV treatment did not complete their treatment course. Follow-up testing to ensure sustained viral load (SVR) was not completed for 1,296 people at WI DOC.

Hepatitis B Virus (HBV)

2023 Wisconsin DOC Surveillance

Background

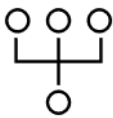
Health Equity Key Takeaways:

Correctional settings have an estimated HBV prevalence that is three to 38 times higher than in the general population, identifying correctional facilities as a focal point in hepatitis B elimination statewide and nationally.¹



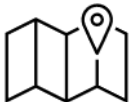
The incidence of new hepatitis B cases is highest among people aged 30–49 years old.

People aged 30–49 years represent 57% of people diagnosed with hepatitis B from January 2012–December 2023 within DOC.



Approximately 11% of people diagnosed with HBV within DOC are currently retained in HBV care.

Among the 73 people who screened positive for HBV, 8 people received HBV testing from 07/01/2022–12/31/2023, indicating retention in care.



The rate of new hepatitis B cases is highest among Asian people.

From January 2012 to December 2023, the rate of new hepatitis B was highest in Asian people within DOC, at a rate of 1,794.9 per 100,000, which is 17.6 times and 38.4 times higher than the rate in Black and white people, respectively.

Hepatitis B Surveillance, WI DOC

Key Points



5 cases in
2023



Over the past 10 years, there
was a 26% decrease in reported
HBV cases from the DOC.

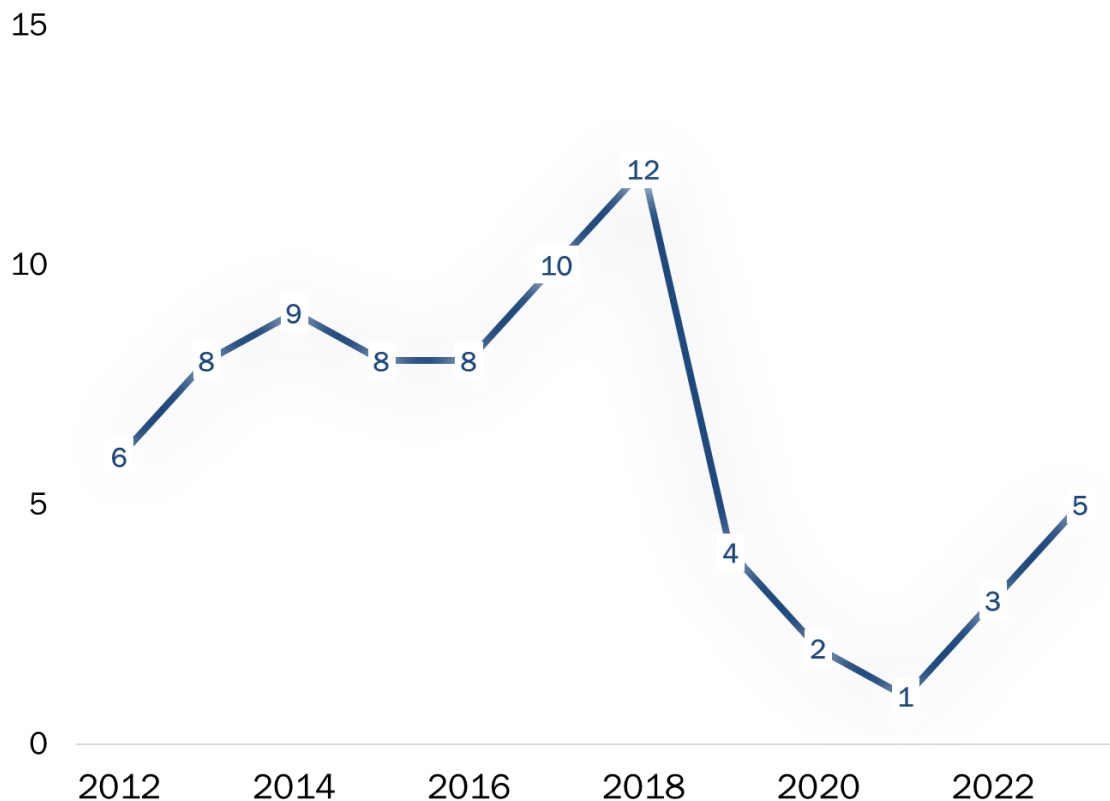


Rate of new HBV cases
is 44 times higher in
Asian people than in
white people



Figure 9. From 2012 to 2023, **76 total hepatitis B cases** were reported by the DOC. Over the past 10 years, the number of reported hepatitis B cases has decreased 26%.

Hepatitis B cases reported by WI DOC, 2012–2023



Recommendations

Despite being vaccine-preventable, Wisconsin continues to manage and investigate hundreds of hepatitis B virus infections annually. Although reductions in hepatitis B incidence have occurred in the past 4 decades due to childhood vaccination coverage, immunization among adults has been suboptimal.

[ACIP recommends universal HBV vaccination to all adults aged 19-59](#) in order to increase vaccination coverage and decrease disease incidence.⁵

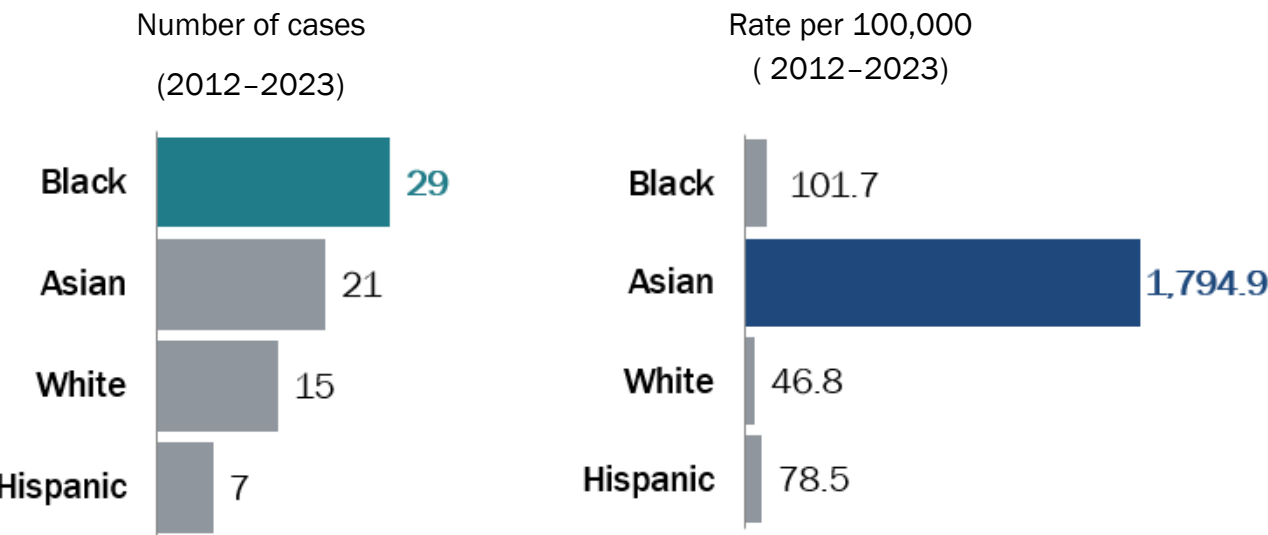
As of March 2023, [CDC recommends one-time HBV screening of adults utilizing the triple panel \(HBsAg, anti-HBc, anti-HBs\)](#).⁶

Hepatitis B Surveillance, WI DOC



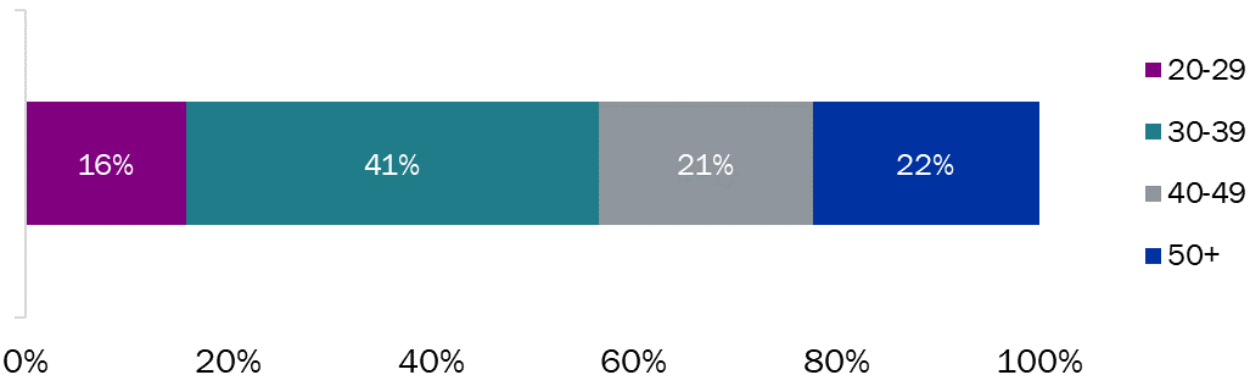
Demographics, 2012–2023

Figure 10. From 2012 to 2023, most newly reported cases of hepatitis B from WI DOC were among Black people, but the rate was highest among Asian people.



*Due to data suppression rules, counts not shown for race or ethnic groups with less than five diagnoses. Rates derived from numerators less than 20 may be unreliable.

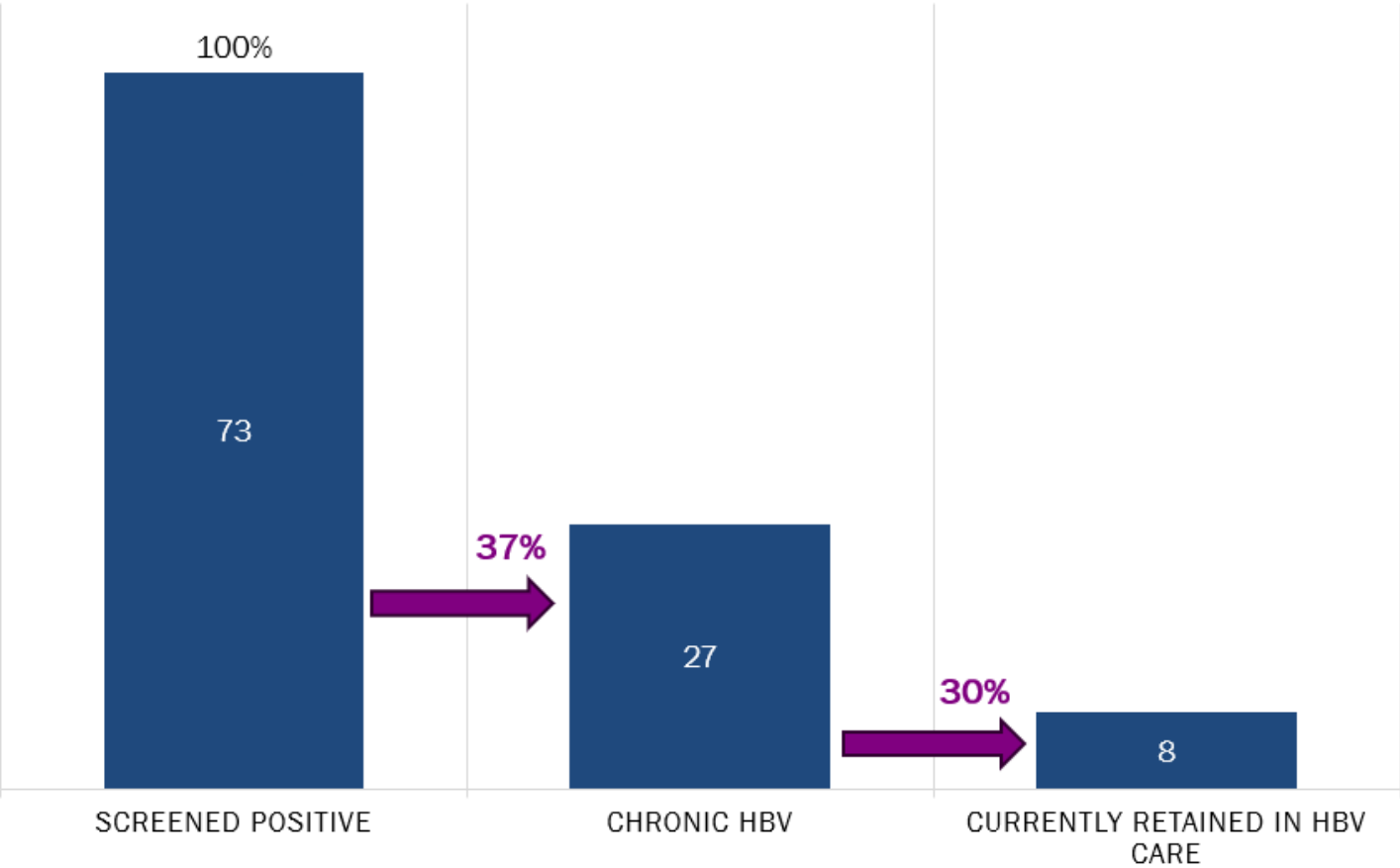
Figure 11. People aged 30–49 had the highest incidence (62%) of HBV within the DOC from January 2012 to December 2023.



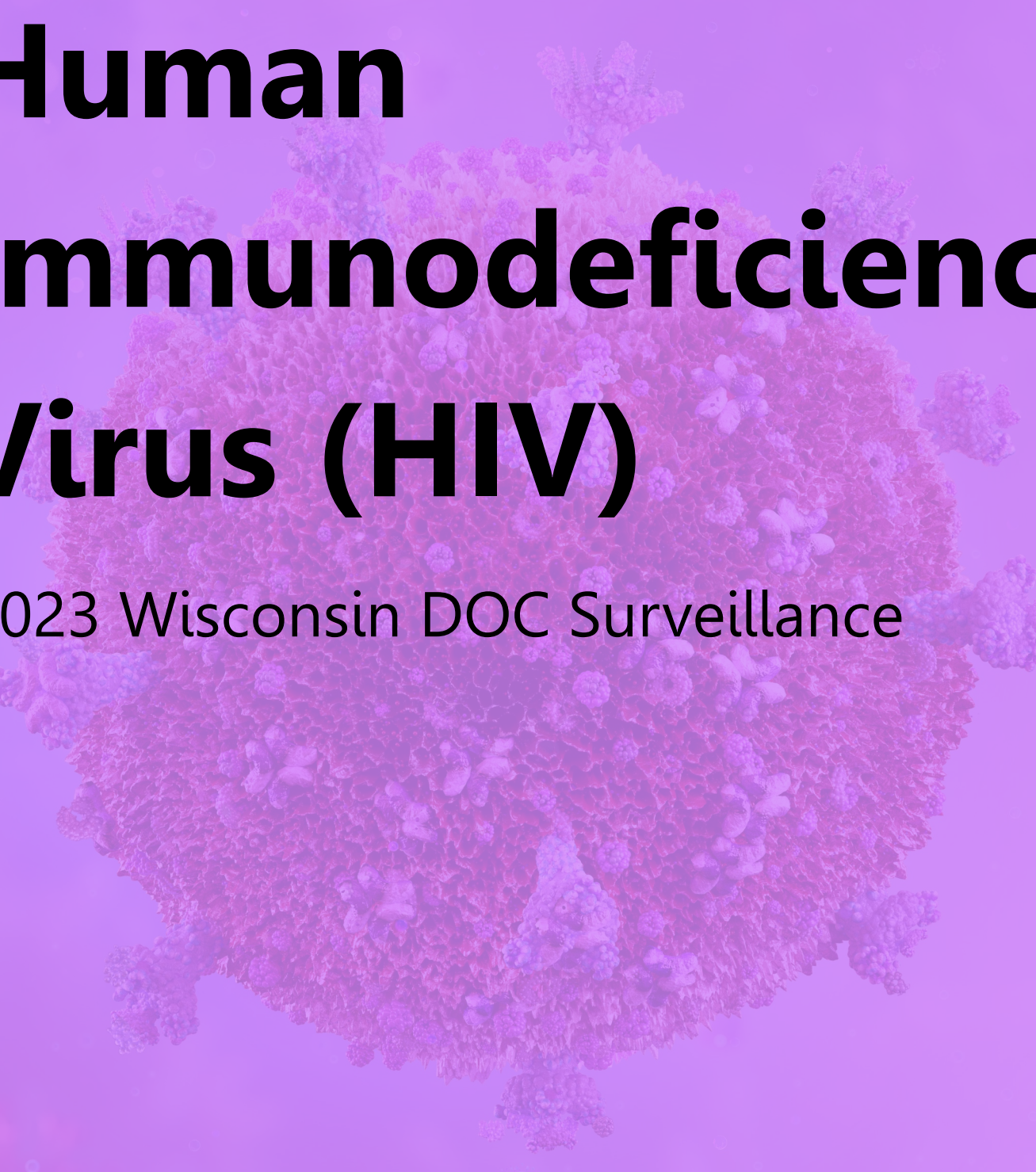
HBV Continuum of Care, 2018 - 2023

Figure 12. The chronic hepatitis B continuum of care (CoC) is a way to demonstrate a standardized approach to measure HBV care engagement and management based on laboratory-based reporting. The chronic HBV CoC visualizes gaps in care, highlighting the need to improve access to and retention in specialized HBV care management.

Hepatitis B Continuum of Care in WI DOC, 2018–2023



Definition	
Screened positive	All individuals who have tested positive for HBV DNA, HBsAg, or HBV Genotype from 01/01/2012–12/31/2023 and met the acute confirmed, chronic probable, or chronic confirmed CSTE case definition and Are still alive through 12/31/2023
Chronic HBV	CSTE chronic confirmed case definition
Currently retained in care	HBV testing occurring during the follow-up period of 07/01/2022–12/31/2023



Human Immunodeficiency Virus (HIV)

2023 Wisconsin DOC Surveillance

Background

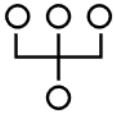
Health Equity Key Takeaways:

Correction settings have an estimated HIV prevalence that is three times higher than in the general population, identifying correctional facilities as a focal point in HIV care management statewide and nationally.¹

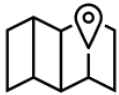


The number of new HIV diagnoses is highest among people aged 20–39 years old.

People aged 20–39 years represent 73% of people diagnosed with HIV from January 2014–December 2023 within the DOC.



The rate of new HIV diagnoses is 1.4 times higher in females compared to males.



The rate of new HIV diagnoses is highest among Black people.

From January 2014 to December 2023, the rate of new HIV cases within DOC was highest in Black people at a rate of 108.5 per 100,000, which is 2.3 times and 1.2 times higher than the rate in white and Hispanic people, respectively.

HIV Surveillance, WI DOC

Key Points



4 new HIV diagnoses in 2023



Black people had the highest rate of new HIV diagnoses per 100,000 people



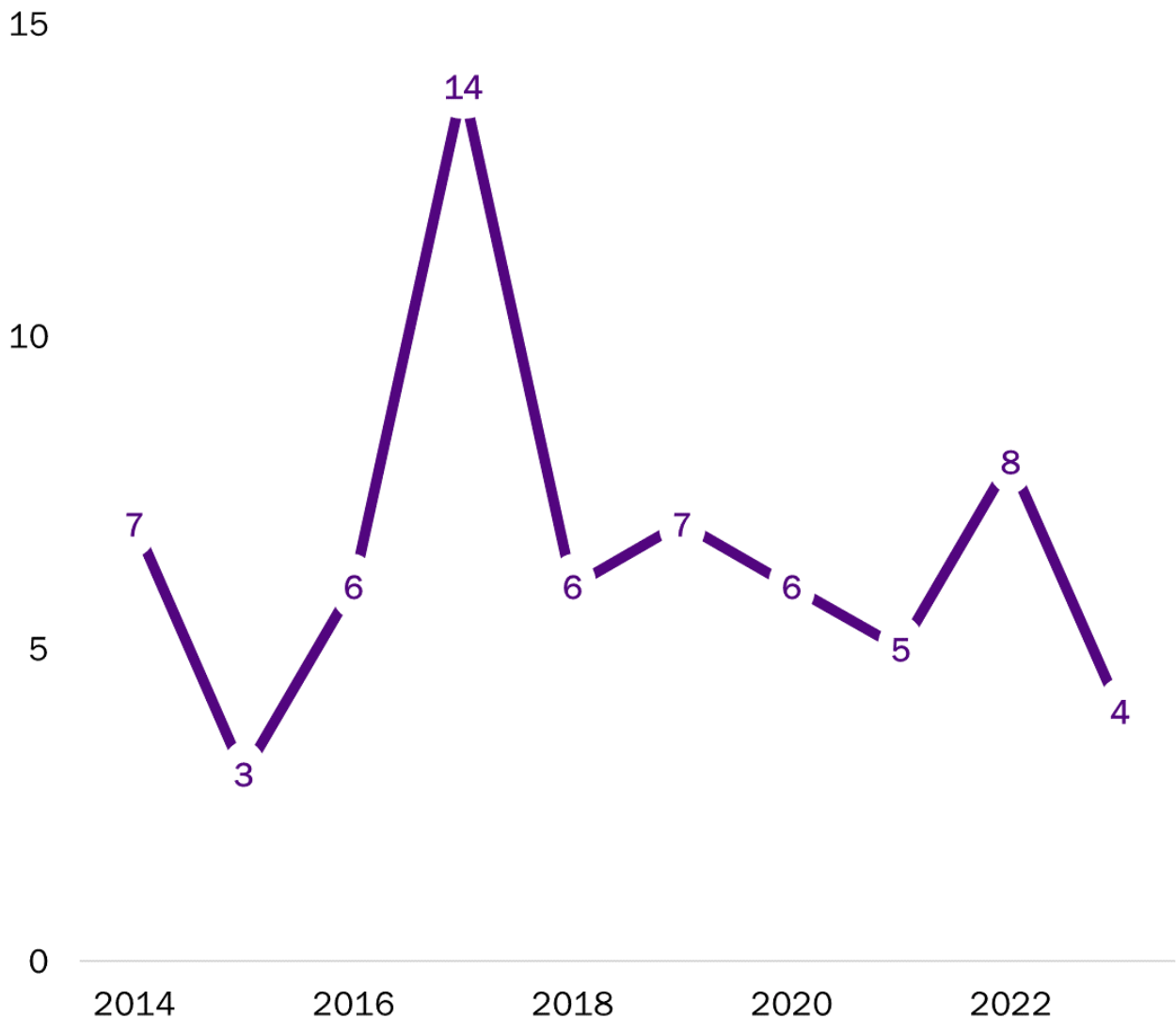
20–39 year olds had the highest rate of new HIV diagnoses per 100,000 people



Trends

Figure 13. From 2014 to 2023, **66 people were diagnosed with HIV within the DOC.** The number of new diagnoses has decreased by 37.5% in 2023 based on a five-year average.

Number of new HIV diagnoses in WI DOC, 2014–2023





Demographics, 2014 - 2023

Figure 14. From 2014 to 2023, the number of new HIV diagnoses and diagnosis rate per 100,000 people were highest among **Black people** within the DOC. *There were no new HIV diagnoses reported in Asian or Native American people.

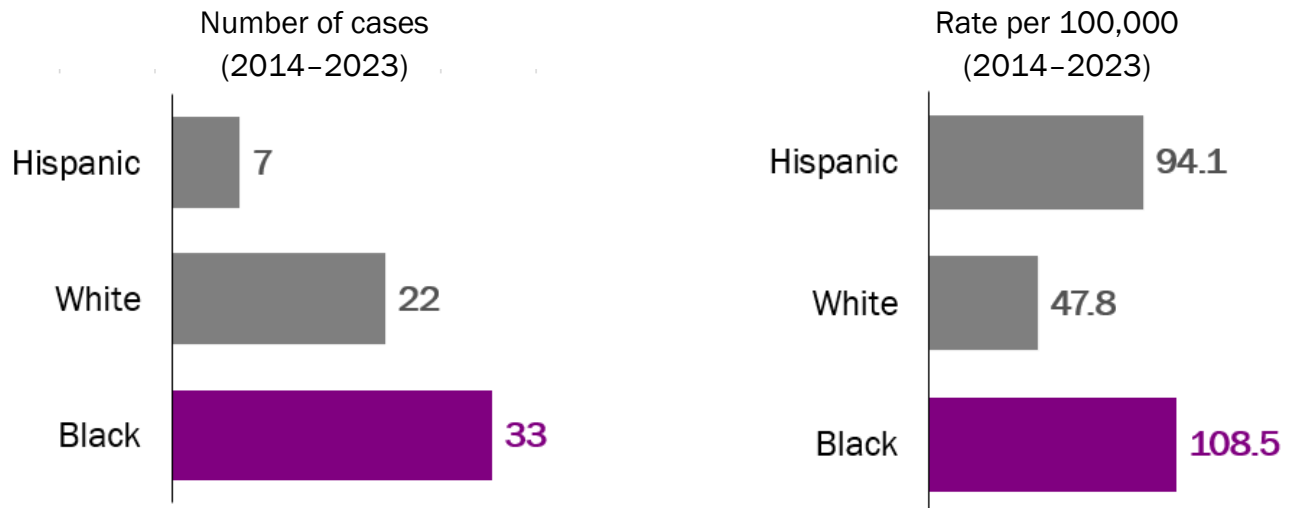


Figure 15. From 2012 to 2023, the number of new HIV diagnoses was the highest among **people aged 20-39 (73%)** within the DOC.

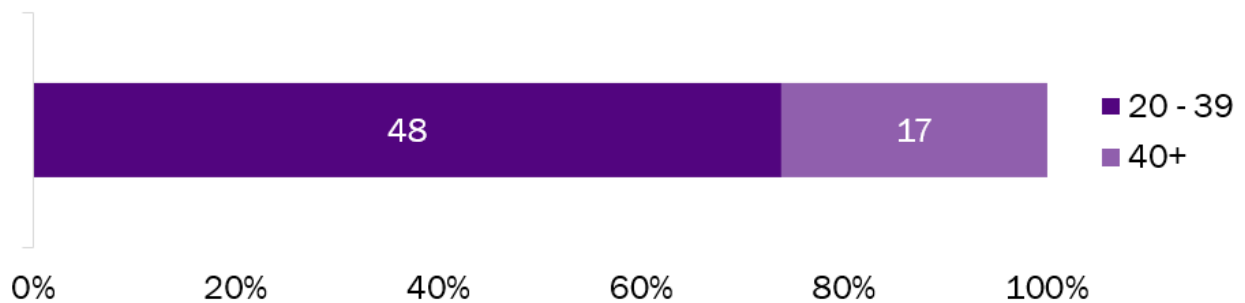
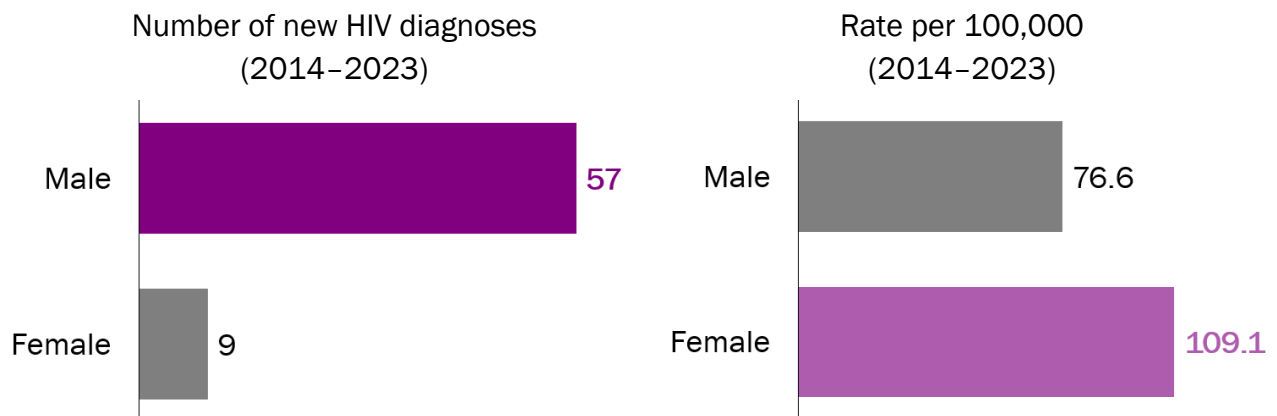


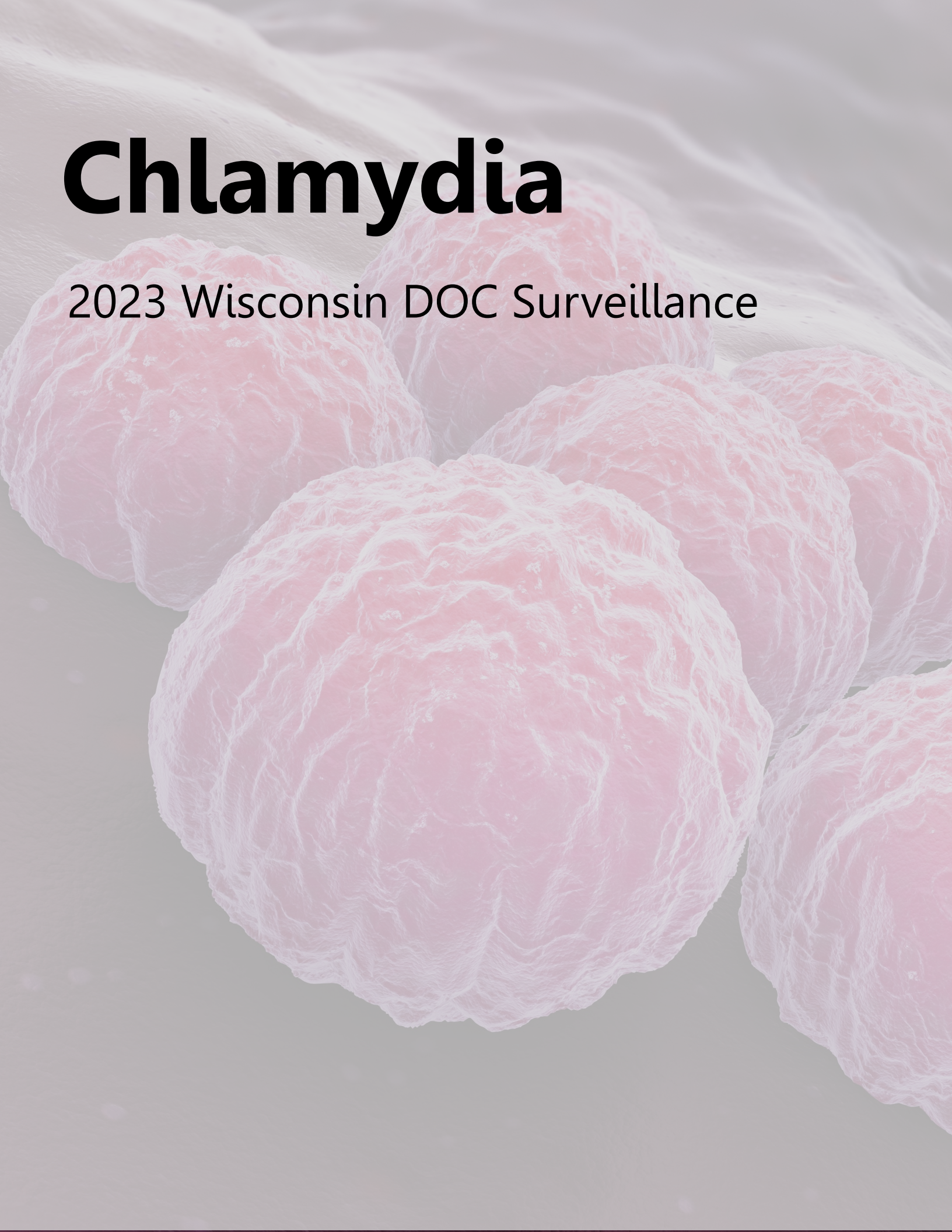
Figure 16. From 2014 to 2023, the number of new HIV diagnoses was **higher in males (n=57)**, but the HIV diagnosis rate per 100,000 people was **higher in females (109.1 per 100,000)**.



*Rates derived from numerators less than 20 may be unreliable.

Chlamydia

2023 Wisconsin DOC Surveillance



Background

Health Equity Key Takeaways:

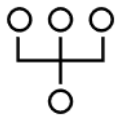
Rates of sexually transmitted infections (chlamydia, gonorrhea, and syphilis) in Wisconsin correctional populations are much higher (2,860 per 100,000) than in the general U.S. population (1,741 per 100,000).

While STI screenings at intake are not mandatory at WI DOC, since 2021, CDC has recommended opt-out chlamydia screening for females aged 35 years or younger and males aged younger than 30 years housed in correctional facilities, ideally conducted at intake.⁷

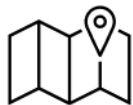


The incidence of new chlamydia cases is highest among people aged 20–29 years.

In 2023, 68% of new chlamydia cases within DOC were diagnosed in people aged 20–29 years.



The rate of new chlamydia cases is 1.1 times higher in males compared to females.



The rate of new chlamydia cases is highest among Black people.

In 2023, the rate of new chlamydia cases within DOC was highest in Black people at a rate of 2,345 per 100,000, which is 2.9 times and 2.1 times higher than the rate in white and Hispanic people, respectively.

Chlamydia Surveillance, WI DOC

2023 Key Points



157 cases



Black people had the highest rate of chlamydia infection per 100,000 people



20 - 29 year olds had the highest incidence



Trends

Figure 17. From 2014 to 2023, **1,833 cases of chlamydia** were reported by DOC. The number of reported chlamydia cases has decreased by 15.7% in 2023 based on a 8-year average. The sharp decrease in cases in 2020 should not be interpreted as a decrease in chlamydia occurrence; rather, it is likely a result of decreased testing due to the COVID-19 pandemic. The exact incidence of chlamydia in Wisconsin’s correctional facilities is likely much higher than the case counts shown.

Chlamydia cases in WI DOC, 2014–2023

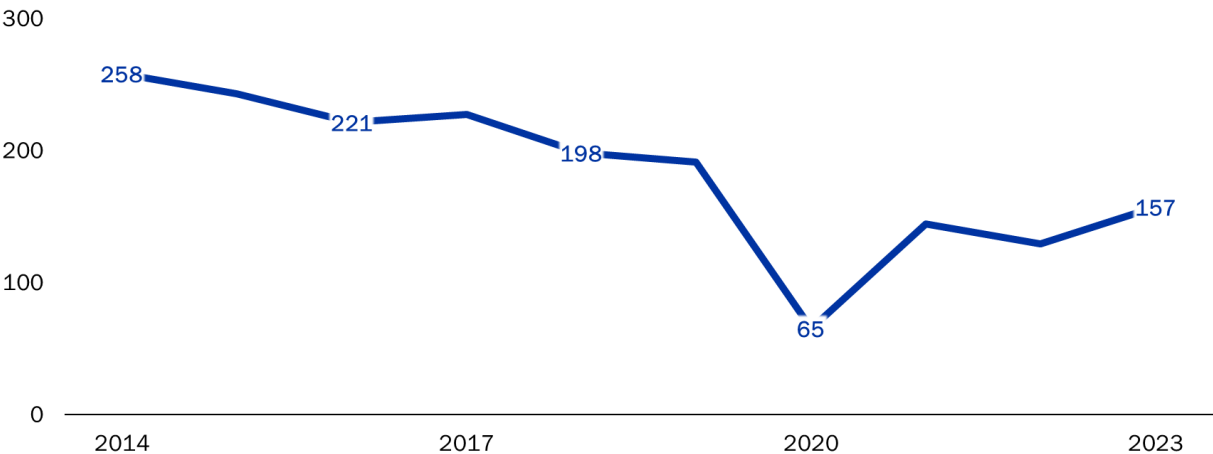
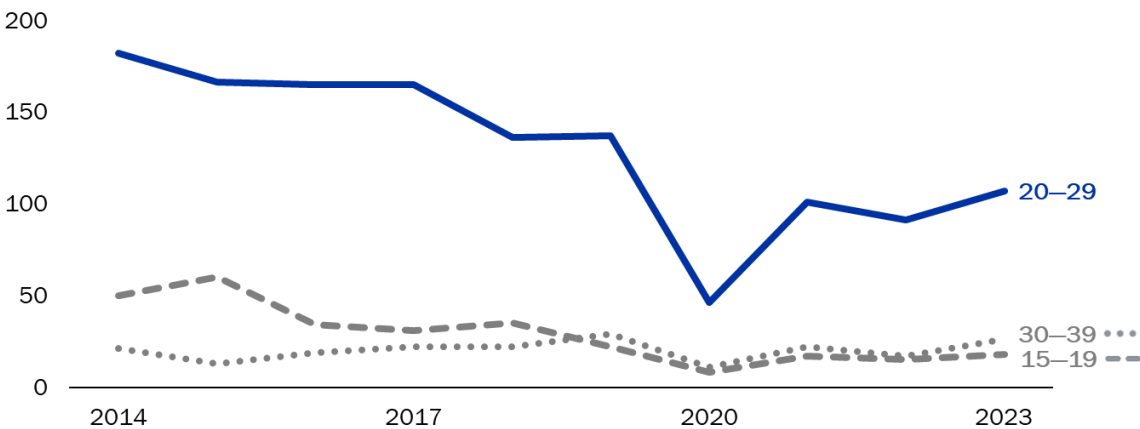


Figure 18. Since 2014, **people aged 20–29** have comprised the highest number of chlamydia diagnoses within DOC. In 2023, 68% of chlamydia cases were reported among **people aged 20–29**.



Chlamydia Surveillance, WI DOC



Demographics

Figure 19. In 2023, the incidence and rate per 100,000 people of new chlamydia infections was highest in **Black people within the DOC**. The rate of newly reported chlamydia infections within the DOC was 2.9 times and 2.1 times higher in Black people than white and Hispanic people, respectively. *Due to data suppression rules, counts not shown for racial and ethnic groups with less than five diagnoses.

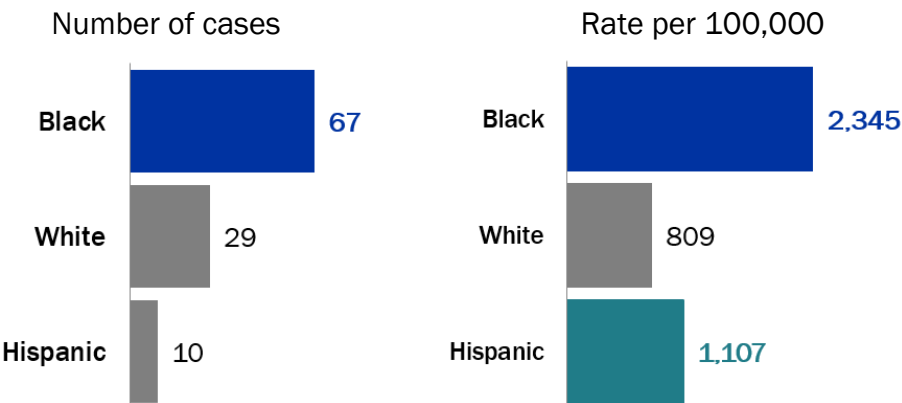


Figure 20. **People aged 20–29 had the highest incidence (68%)** of chlamydia in 2023, but the **rate per 100,000 was highest among people aged 15–19 years**.

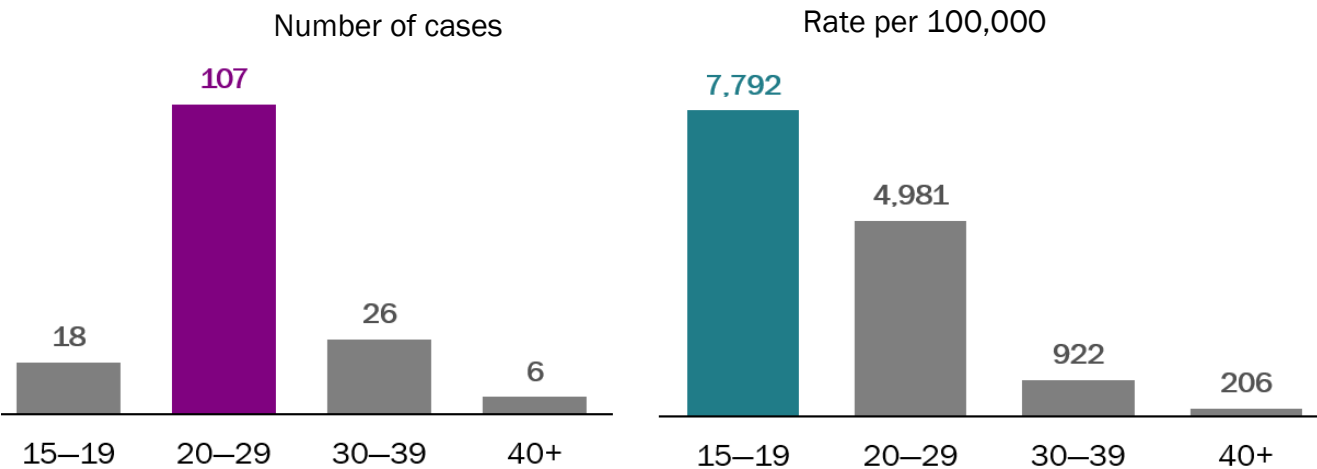
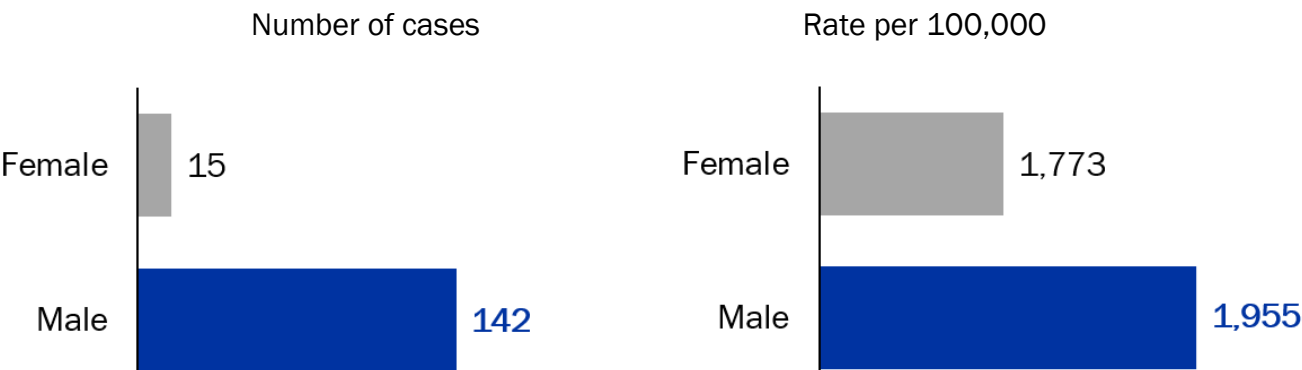


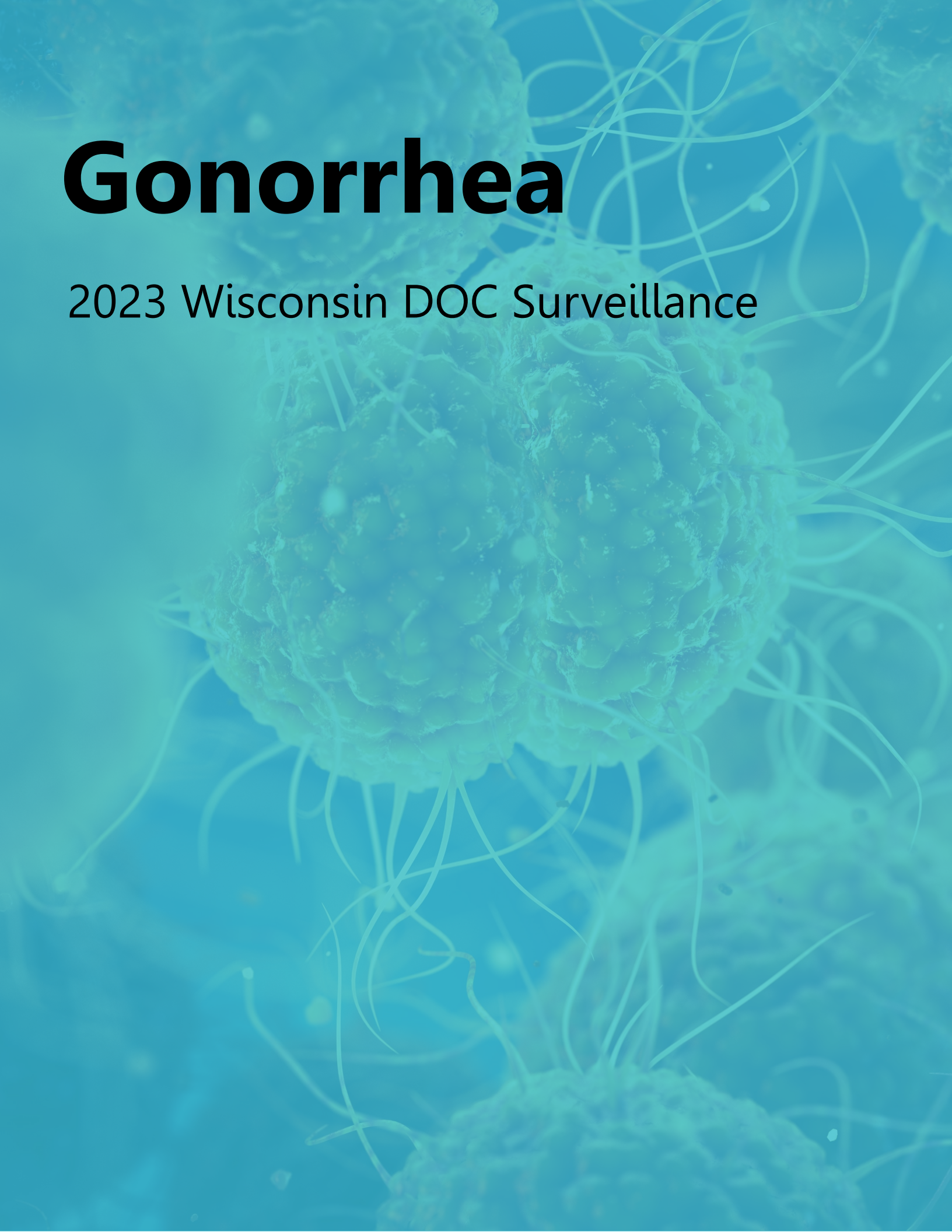
Figure 21. In 2023, the incidence and rate of chlamydia per 100,000 people were both higher in **males**.



*Rates derived from numerators less than 20 may be unreliable.

Gonorrhea

2023 Wisconsin DOC Surveillance



Background

Health Equity Key Takeaways:

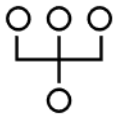
Rates of sexually transmitted infections (chlamydia, gonorrhea, and syphilis) in Wisconsin correctional populations are much higher (2,860 per 100,000) than in the general U.S. population (1,741 per 100,000).

While STI screenings at intake are not mandatory at WI DOC, since 2021, CDC has recommended opt-out gonorrhea screening for females aged 35 years or younger and males aged younger than 30 years housed in correctional facilities, ideally conducted at intake.⁷



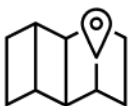
The incidence of new gonorrhea cases is highest among people aged 20–29 years.

From 2014–2023, 57% of new gonorrhea cases within the DOC were among people aged 20 - 29 years.



The rate of new gonorrhea cases is 2.8 times higher in females compared to males.

From 2014–2023, 79% of new gonorrhea cases within the DOC were male, but females had a 2.4 times higher rate at 412.2 per 100,000 people.

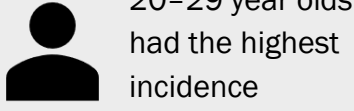
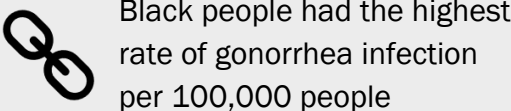


The rate of new gonorrhea cases is highest among Black people.

From 2014–2023, the rate of new gonorrhea cases within the DOC was highest in Black people at a rate of 309.1 per 100,000 people, which is 3.8 times and 2.6 times higher than the rate in white and Hispanic people, respectively.

Gonorrhea Surveillance, WI DOC

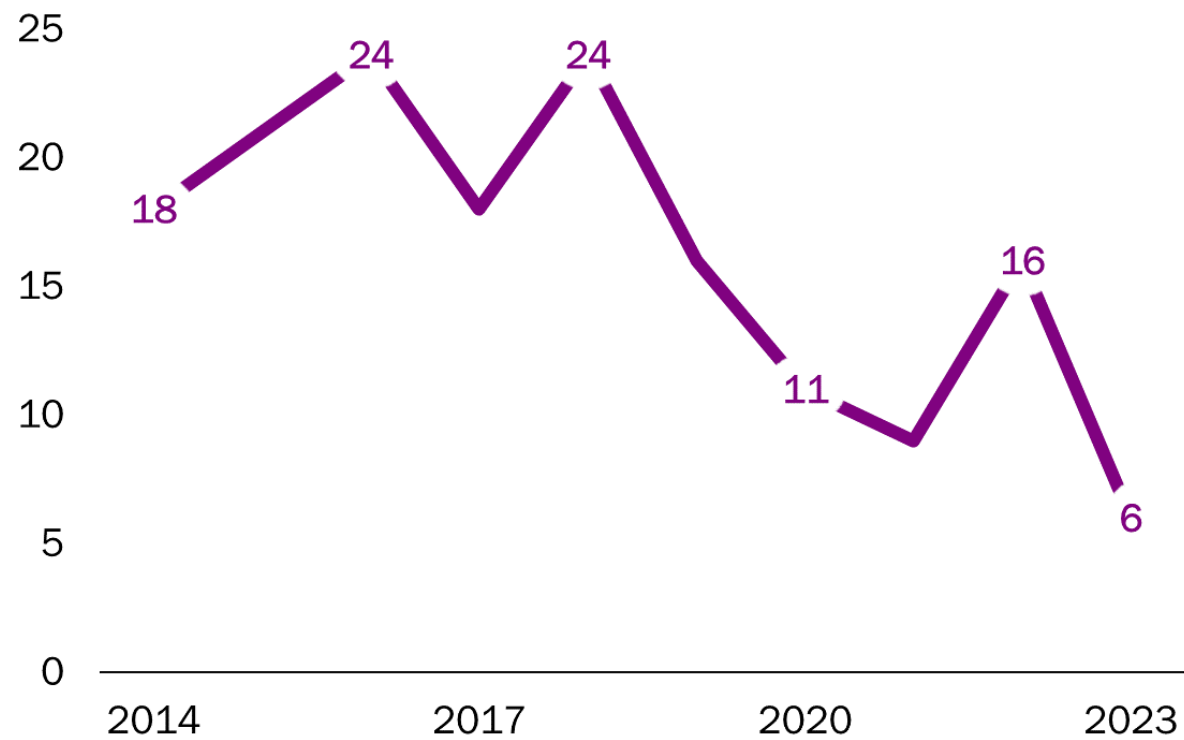
2023 Key Points



Trends

Figure 22. Between 2014 and 2023, **163 cases of gonorrhea** were reported by DOC. The number of reported gonorrhea cases has decreased by 60.6% in 2023 based on a five-year average. The sharp decrease in cases in 2020 should not be interpreted as a decrease in gonorrhea occurrence; rather, it is likely a result of decreased testing due to the COVID-19 pandemic. The exact incidence of gonorrhea in Wisconsin’s correctional facilities is likely much higher than the case counts shown.

Gonorrhea cases in WI DOC, 2014–2023





Demographics, 2014 - 2023

Figure 23. From 2014 to 2023, **Black people** had both the highest incidence of new gonorrhea diagnoses and the highest rate of gonorrhea infection per 100,000 people within the DOC. *Due to data suppression rules, counts not shown for racial and ethnic groups with less than five diagnoses.

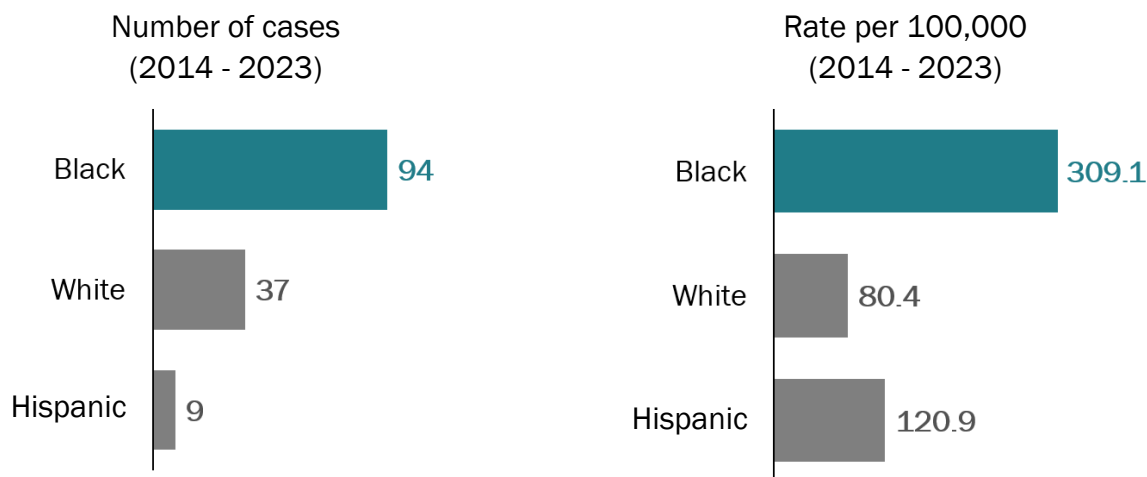


Figure 24. From 2012 - 2023, **people aged 20 - 29 had the highest incidence (57%)** of gonorrhea within the DOC.

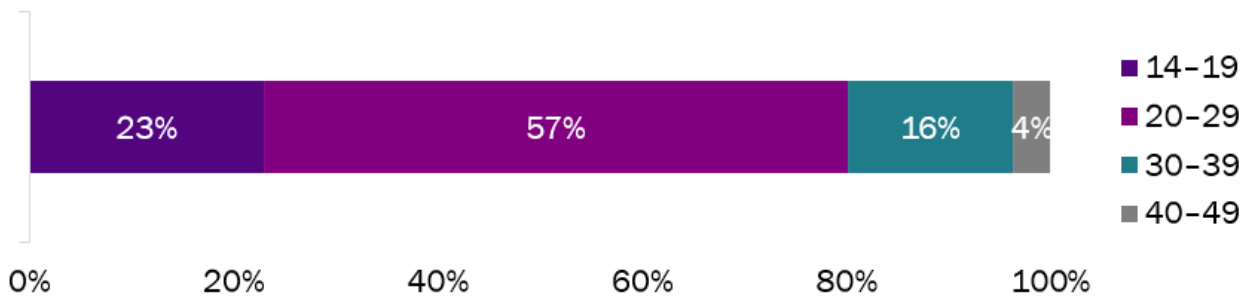
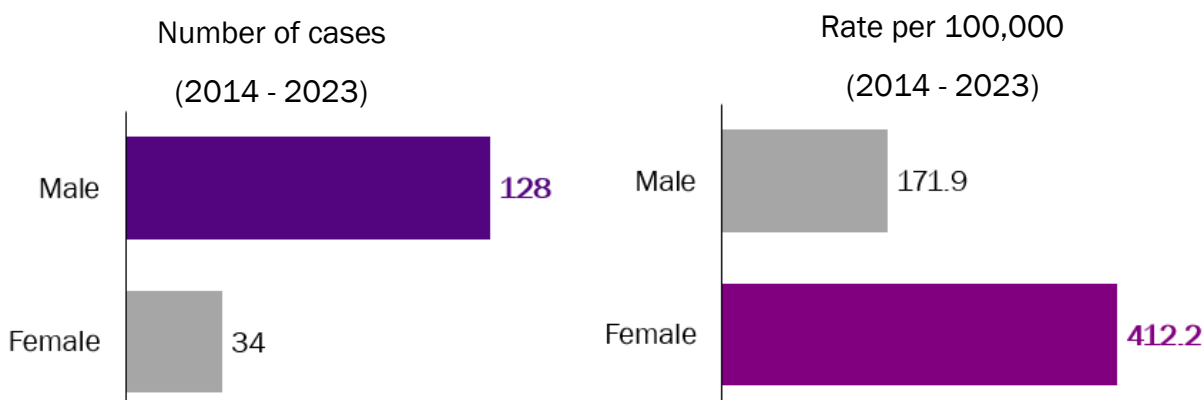


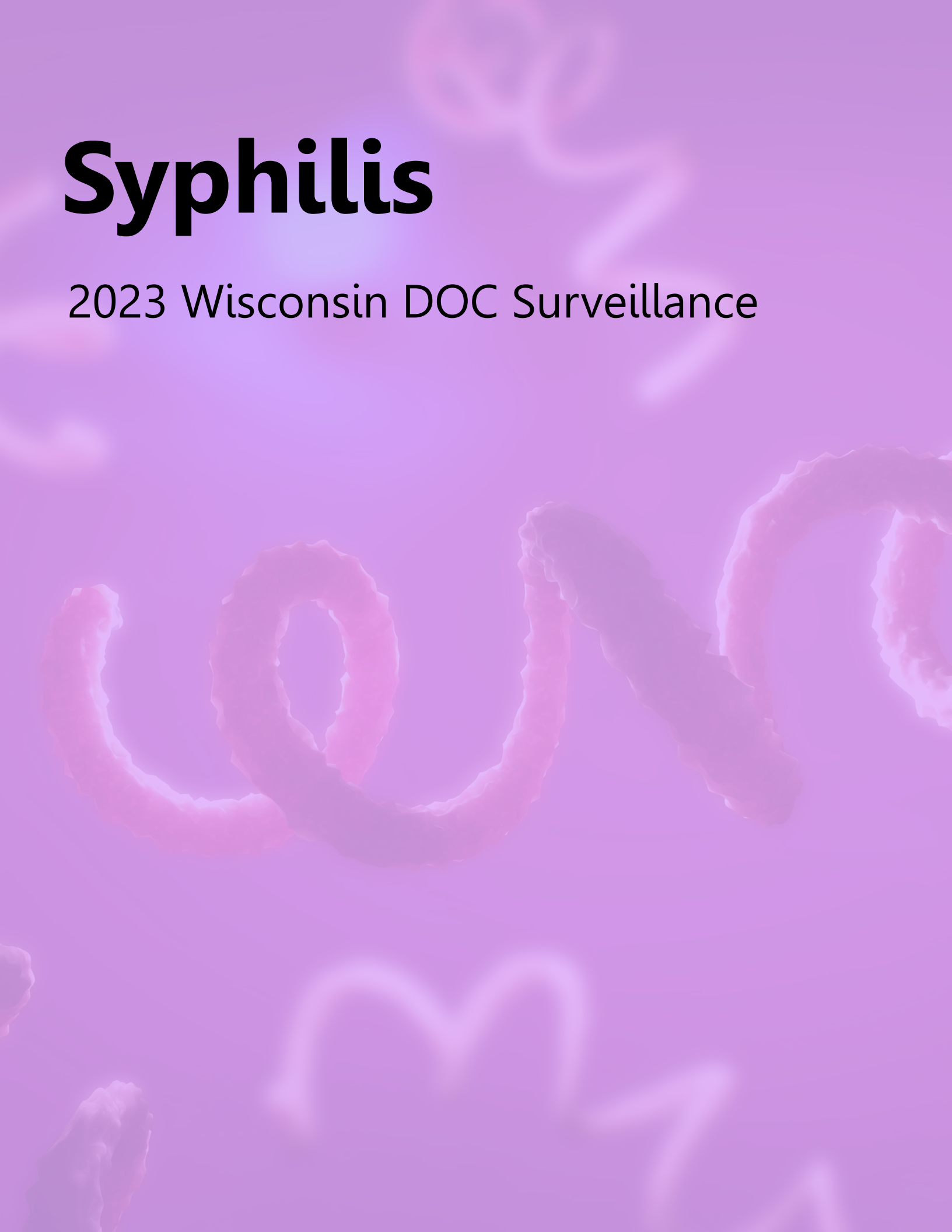
Figure 25. From 2014 - 2023, the incidence of gonorrhea was **higher in males (n=128)**, but the rate of gonorrhea infection per 100,000 people was **higher in females (412.2 per 100,000)**.



*Rates derived from numerators less than 20 may be unreliable.

Syphilis

2023 Wisconsin DOC Surveillance



Background

Health Equity Key Takeaways:

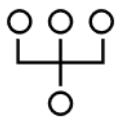
Rates of sexually transmitted infections (chlamydia, gonorrhea, and syphilis) in Wisconsin correctional populations are much higher (2,860 per 100,000) than in the general U.S. population (1,741 per 100,000).

While STI screenings at intake are not mandatory at WI DOC, CDC recommends syphilis screening for all individuals with a history of incarceration, ideally conducted at intake.⁷



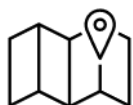
The incidence of new syphilis cases is highest among people aged 30–39 years.

In 2023, 46% of new syphilis cases within the DOC were among people aged 30–39 years.



The rate of new syphilis cases is 2.1 times higher in females compared to males.

In 2023, 81% of new syphilis cases within the DOC were male, but females had a 2.1 times higher rate at 1,182 per 100,000 people.



The rate of new syphilis cases is highest among Hispanic people.

In 2023, the rate of new syphilis cases within the DOC was highest in Hispanic people at a rate of 1,107 per 100,000, which is 1.8 times and 1.5 times higher than white and Black people, respectively.

Syphilis Surveillance, WI DOC

2023 Key Points



Hispanic people had the highest rate of syphilis infection per 100,000 people

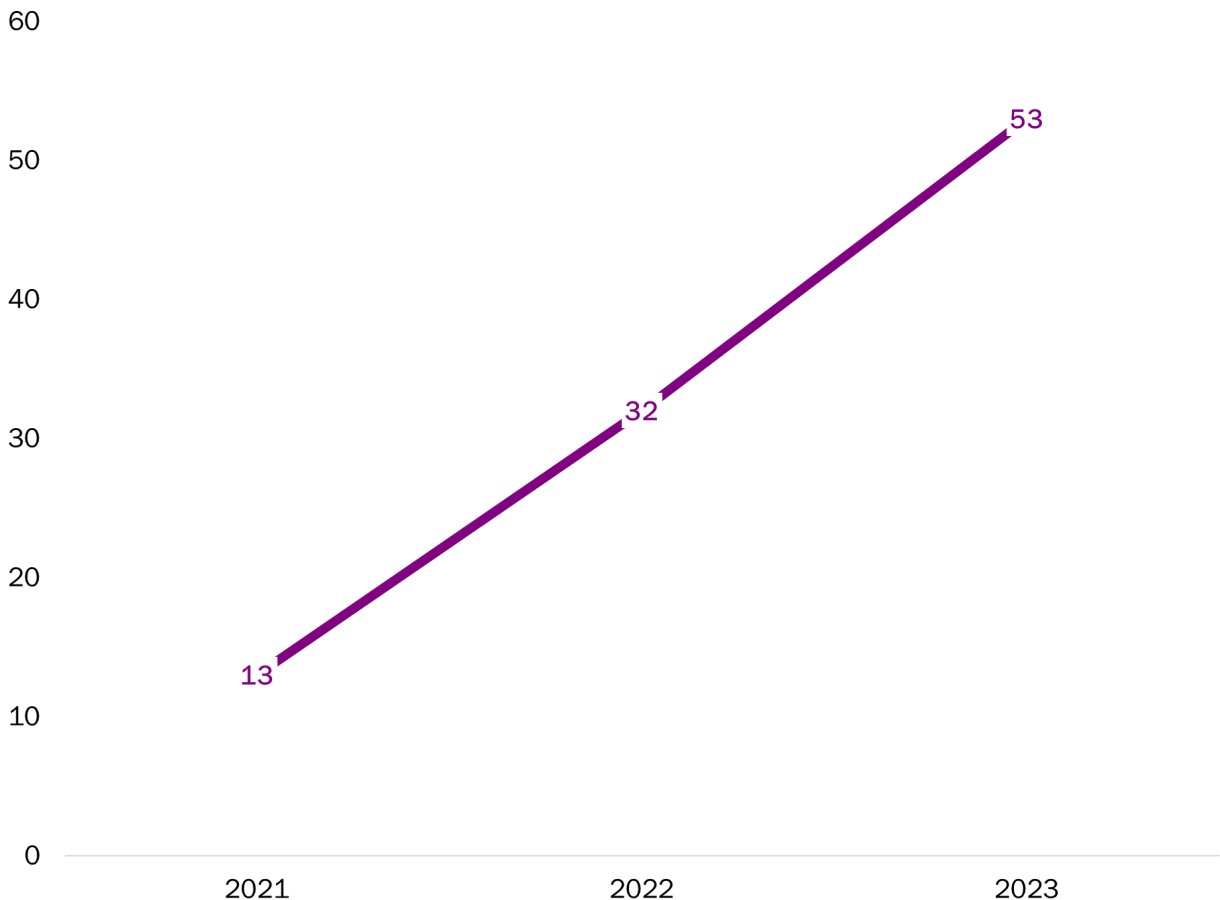
30–39 year olds had the highest incidence



Trends

Figure 26. From January 2021 to December 2023, **98 cases of syphilis** were reported by the DOC. The number of reported syphilis cases has increased by 65.6% from 2022 to 2023. The exact incidence of syphilis in Wisconsin’s correctional facilities is likely much higher than the case counts shown.

Syphilis cases in WI DOC, 2021–2023





Demographics

Figure 27. In 2023, the number of new syphilis cases reported was **highest among white people**, but the rate of new cases per 100,000 people was highest in **Hispanic people** within the DOC. The rate of newly reported syphilis infections within the DOC was 1.5 times and 1.6 times higher in Hispanic people than in white and Black people. *Due to data suppression rules, counts and rates not shown for racial and ethnic groups with less than five diagnoses.

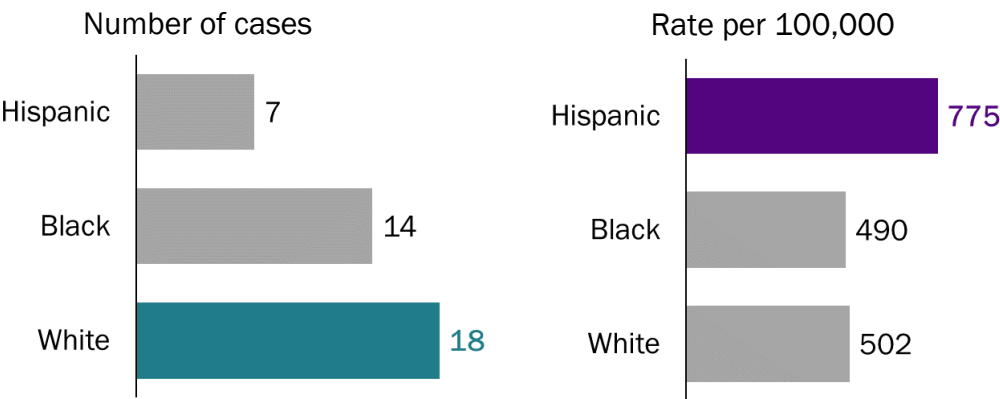


Figure 28. In 2023, **people aged 20–29** and **30–39** had the highest incidence (63%) of syphilis at WI correctional facilities.

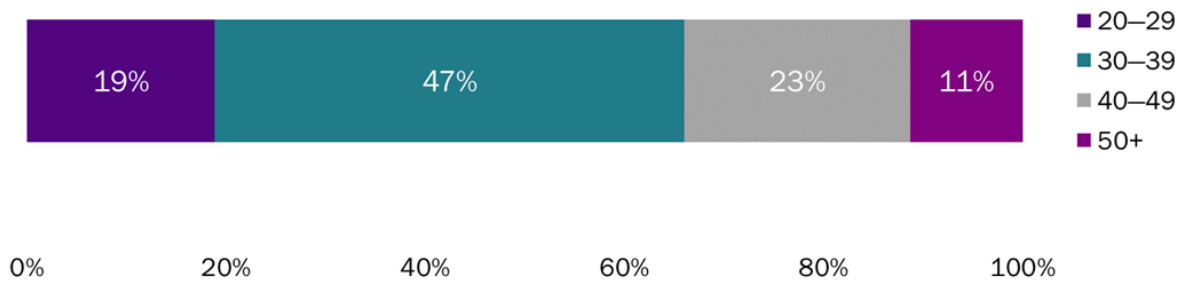
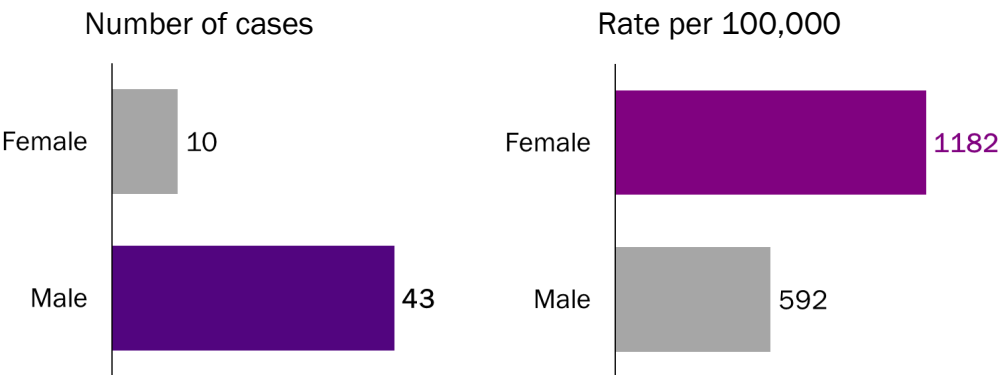


Figure 29. In 2023, the incidence of syphilis was highest in **males**, but the rate of syphilis infections per 100,000 people was higher in **females**.



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Technical notes:

New HCV, HBV, HIV, chlamydia, gonorrhea, and syphilis diagnoses are included in this report if they meet all of the following criteria:

- The person was diagnosed during the year of analysis.
- The person was located within the Wisconsin Department of Corrections at the time of diagnosis.

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Authorship:

Kelsa Lowe

Dhana Shrestha

Data visualization and analytics:

Kelsa Lowe

Data contributors:

Abby Winkler

Caroline Mohr

Emily Hacker

Stephanie Luedtke

Noah Leigh

Stephanie Borchardt

Sarah Born

Reviewers:

Stephanie Schauer

Scott Stokes

Kailynn Mitchell

Yi Ou

Brandon Kufalk

Alexandra Richardson

Jenna Romanowski

Julia McCarroll

Traci DeSalvo

For questions or comments regarding hepatitis B, hepatitis C and STI surveillance data in this report, please contact: dhdsdphhcvssurveillance@dhs.wisconsin.gov.

For questions or comments regarding HIV surveillance data in this report, please contact: dhshivsurveillance@dhs.wisconsin.gov.

Please visit the following links for more information:

[WI Hepatitis B Immunization](#)

[WI Hepatitis C Program](#)

[WI HIV Program](#)

[WI STI Program](#)

[CDC Data and Statistics: Correctional Health](#)