# SURVEILLANCE REPORT 2021



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OCTOBER 2022 Cases reported through June 2022



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#### SECURITY AND CONFIDENTIALITY

All information about individuals diagnosed and/or living with Human Immunodeficiency Virus (HIV) is strictly confidential and collected for legitimate public health purposes. Federal, state, and local health departments have implemented procedures and policies to assure the confidentiality and security of HIV data. Prior to submitting data to the CDC, all information is de-identified and encrypted using computer encryption software. In addition, strict guidelines govern the release of reports like this one, which ensure that HIV data are not presented in such a way as to possibly identify any individual with HIV. Maintenance of confidentiality and security safeguards is critical for federal funding and is a top priority within the Philadelphia HIV Surveillance Unit.

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# **Definitions**

#### AACO (AIDS Activities Coordinating Office):

The office within the Philadelphia Department of Public Health responsible for administering the City's HIV Programs.

Acute HIV Infection: Acute HIV infection typically describes the interval between the first possible detection of virus by virologic assay and development of a mature antibody response. Signs and symptoms of acute HIV infection can include fever, headache, sore throat, adenopathy, anorexia, and rash and often develop about 2 weeks after the start of the infection.

AIDS (Acquired Immune Deficiency **Syndrome**): A result of Human Immunodeficiency Virus (HIV) infection, which disables the immune system from effectively fighting numerous opportunistic infections and cancers.

#### AIAN (American Indian/Alaska Native):

A racial/ethnic group. Also identify as First Nations/Indigenous.

CDC (Centers for Disease Control and Prevention): A federal disease prevention agency, which is part of the U.S. Department of Health and Human Services that provides national laboratory and health and safety guidelines and recommendations; tracks diseases throughout the world; and performs basic research involving laboratory, behavioral science, epidemiology and other studies of disease.

Confidentiality: Keeping medical information confidential or private.

Diagnosis: Determination of the nature of a case of a disease based on signs, symptoms, and laboratory findings during life. A diagnosis of AIDS for an adult is being HIV antibody-positive in addition to having one opportunistic infection, condition, or disease (e.g. wasting syndrome, PCP, Kaposi's sarcoma, CD4 T-lymphocyte count below 200 or 14%).

EHE (Ending the HIV Epidemic): The U.S. Department of Health and Human Services (HHS) launched the Ending the HIV Epidemic in the U.S. (EHE) initiative in 2019. The initiative aims to reduce new HIV infections in the U.S. by 90% by 2030 by scaling up key HIV prevention and treatment strategies.

Epidemiology: The branch of medical science that deals with the study of incidence, distribution and control of a disease in a population.

Equity: The state in which everyone has the opportunity to attain their highest level of health while centering justice and dignity.

Gender Identity: One's innermost concept of self as male or female or both or neither-how individuals perceive themselves and what they call themselves. One's gender identity can be the same or different than the sex assigned at birth.

HBV Co-Infection: Hepatitis B Virus Coinfection. Refers to a person living with HIV who has current or past HBV infection evidenced by a positive HBV surface antigen, HBV DNA or HBV e-antigen.

HCV Co-Infection: Hepatitis C Virus Co-Infection. Refers to a person living with HIV who has current or past HCV infection evidenced by a positive HCV antibody, HCV RNA, or HCV genotype test.

Heterosexuals at Increased Risk for HIV Infection: As defined by National HIV Behavioral Surveillance, the population of individuals 18 and older living below poverty level.

#### HIV (Human Immunodeficiency Virus):

The retrovirus that causes AIDS by infecting the T-helper cells.

Incidence: The number or rate of new cases of a disease over defined period of time.

MSM (Men who have sex with men): An HIV transmission category.

MSM/PWID (Men who have sex with men who are also people who inject drugs): An HIV transmission category.

NHPI (Native Hawaiian/ Pacific Islander): A racial/ethnic group.

NRR (No Reported Risk): Indicates when documentation is insufficient to assign an HIV transmission category based on CDC guidelines.

Outbreak: An increase in diagnoses above what is normally expected in a geographic area or population during a particular period

Perinatal Transmission of HIV: Term used to describe the spread of HIV from a mother to her baby that can occur during pregnancy, labor, delivery or breastfeeding; also known as vertical transmission.

PLWDH: People living with diagnosed HIV.

**PLWH:** People living with HIV, both diagnosed and undiagnosed.

PrEP: Pre-exposure prophylaxis. Antiretroviral medication taken daily by individuals at increased risk for HIV infection to lower their chances of getting infected.

Prevalence: Total number of cases of a disease in a population over a period of time.

PWID (Person/People Who Inject Drugs): An HIV transmission category.

Risk Behavior: Used here to describe behaviors that put people at risk of contracting HIV.

Sexual Orientation: The sexual attraction people feel for others, whether of their own sex, the opposite sex, or both sexes.

Stigma: An attitude of disapproval and discontent toward a person or group because of the presence of an attribute perceived as undesirable.

#### **Transmission Category:**

A system that classifies cases by possible HIV transmission risk factors or mode(s) of infection; e.g. PWID, MSM/PWID, perinatal transmission, heterosexual contact.

# Introduction

The Philadelphia Department of Public Health (PDPH), AIDS Activities Coordinating Office (AACO) Surveillance Report is the annual report presenting data on human immunodeficiency virus (HIV) diagnoses in the City of Philadelphia. Data in this report include persons diagnosed through December 31, 2021 and reported through June 30, 2022. While HIV diagnoses have been on a steady decline since the mid-2000s (Figure 11), the number of new HIV diagnoses has remained relatively stable until 2020, when COVID-19 severely impacted the HIV testing and care infrastructure in Philadelphia. Today, there are 18,351 people living with diagnosed HIV (PLWDH) in Philadelphia, of whom 365 were newly diagnosed in 2021. The largest burden of HIV disease continues to impact men who have sex with men (MSM) and, despite continued public health efforts since 2018, persons who inject drugs (PWID) (Table 4). Overall, both prevalent disease and new diagnoses continue to disproportionally affect Black and Brown communities.

In 2019, Philadelphia was 1 of 48 counties in the United States selected to receive federal funding to combat the HIV epidemic under the Ending the HIV Epidemic: A Plan for America (EHE) initiative. The plan's overall goal is a 75% reduction in new HIV diagnoses by 2025 and a 90% reduction in new HIV diagnoses by 2030. Through this initiative, PDPH aims to reach these goals by focusing efforts on 5 Key Pillars: Diagnosis, Treatment, Prevention, Response, with an added pillar for an overarching approach centered in health equity and radical customer service.

More specifically, PDPH will enhance existing strategies and adapt novel techniques to 1) diagnose all persons with HIV as early as possible, 2) treat persons living with HIV quickly and effectively, 3) prevent new HIV transmissions by promoting pre-exposure prophylaxis (PrEP) and syringe services, and 4) identify and respond quickly to HIV outbreaks. Thus far, notable improvements include a decrease in confirmed new diagnoses, decreased homelessness among PLWDH, and increased PrEP coverage for those at risk (Table 1).

Additionally in 2021, PDPH and our partners implemented EHE initiatives, including the development of health equity plans, the distribution of HIV selftest kits, awarding funds to agencies for increased re-engagement activities and delivery of low threshold sexual health services, a non-occupational post-exposure prophylaxis center of excellence, and establishing the Philadelphia regional EHE collaborative. For more information about the national EHE initiative please visit: <a href="https://www.hiv.gov/federal-response/">https://www.hiv.gov/federal-response/</a> ending-the-hiv-epidemic/overview.

# **Report Updates**

Additional Sections:

- Topics of Continued Focus: Equity
- Topics of Continued Focus: Prevention

In this report, as with last year, PDPH has included a section illustrating the impact of COVID-19, highlighting trends in HIV testing and care data from 2019 to 2021. COVID-19 contributed to a decrease in new HIV diagnoses during 2020, and therefore estimates of HIV Incidence, or the number of new HIV infections, as well as the estimate of individuals unaware of their HIV status could not be calculated. Because of this, the HIV Care Continuum (Figure 1A) has been updated to reflect a diagnosis-based continuum that calculates measures among PLWDH only (previous reports include those who may have been infected, but were unaware of their status). Due to the ongoing COVID-19 pandemic, all data presented should be interpreted with caution. Please read all table titles and footnotes carefully to ensure a complete understanding of the displayed data.

New indicators have been included in the EHE Dashboard describing progress towards reducing stigma, decreasing housing instability, and increasing PrEP coverage. Additional data about PLWDH experiencing homelessness and HIVrelated stigma, collected through the Medical Monitoring Project (MMP), along with a modified continuum by subgroup and barriers to care data collected through the Data to Care efforts, is included in a newly added section focused on Health Equity. In addition, data on PrEP can now be found in a Prevention section summarizing PrEP indications and the PrEP Continuum of Care. as well as PDPH's HIV self-test program. PDPH would like to note that the planned 2020 NHBS cycle among MSM was postponed until 2021 due to COVID-19 limitations. At time of publication, the PWID cycle is in progress and data from both the 2021 MSM cycle as well as the 2022 PWID will be available in the 2022 Annual Surveillance Report.

# **Ending the HIV Epidemic Dashboard**

TABLE 1 Ending the HIV Epidemic Dashboard

| GOAL:  | 2017  | 2018  | 2019  | 2020  | 2021  | Progress     | 2025 Target | 2030 Target |
|--|-------|-------|-------|-------|-------|--------------|-------------|-------------|
| Reduce new HIV infections<br>by 75% in five years and by<br>90% in ten years | 470   | 440   | 440   | *     |       | STABLE       | (118)       | (47)        |
| Increase knowledge of status<br>to 95% by 2025                               | 88.6% | 88.4% | 88.5% | *     |       | STABLE       | (95.0%)     |             |
| Decrease confirmed HIV diagnoses<br>to 25% by 2025 and 8% by 2030            | 508   | 438   | 445   | 335   | 365   | IMPROVING    | (127)       | (41)        |
| Increase linkage to care<br>to 95% by 2025                                   | 86.3% | 86.1% | 81.3% | 82.5% | 81.4% | NOT IMPROVED | (95.0%)     |             |
| Increase viral suppression to 95% by 2025**                                  | 72.3% | 70.1% | 72.3% | 67.3% | 70.1% | STABLE       | (95.0%)     |             |
| Decrease stigma among PLWDH by 50%, Median <sup>†</sup>                      | 37.6  | 36.0  | 36.6  | 38.6  |       | STABLE       | (18.8)      |             |
| Decrease Unhoused PLWDH<br>by 50%  | 9.9%  | 13.6% | 8.1%  | 6.7%  |       | IMPROVING    | (4.9%)      |             |
| PrEP coverage <sup>‡</sup>   |       |       | 37.2% | 35.5% | 41.2% | IMPROVING    | (50.0%)     |             |

<sup>\*</sup>Due to the impact of COVID-19 on HIV diagnoses during 2020, estimates of HIV Incidence, or the number of new HIV infections, as well as the estimate of individuals unaware of their HIV status were not calculated.

Note Values in parentheses represent a goal number or percentage.

PrEP coverage is defined as the proportion of persons prescribed PrEP among those with a PrEP indication

<sup>\*\*</sup>among PLWDH who have evidence of care in the last 5 years

<sup>†</sup>Among PLWDH in Philadelphia between 2015-2020, using data from the Medical Monitoring Project (MMP)

<sup>‡</sup>Centers for Disease Control and Prevention. Core indicators for monitoring the Ending the HIV Epidemic initiative (preliminary data): National HIV Surveillance System data reported through March 2022; and preexposure prophylaxis (PrEP) data reported through December 2021. HIV Surveillance Data Tables 2022;3(No. 2). https://www.cdc.gov/hiv/library/reports/surveillance-data-tables/index.html Published August 2022. Accessed 9/14/2022.

#### **HIV Continuum of Care**

The HIV Continuum of Care is a data driven tool focusing on the diagnosis and care of individuals living with HIV. Engaging HIV patients in care is critical to slowing the spread of HIV transmission. This diagnosis-based continuum depicts the percentage of persons living with diagnosed HIV (PLWDH) residing in Philadelphia at various levels of engagement in care and compares to the most recently published national outcomes. The Continuum (Figure 1A) includes the percentage of newly diagnosed people who were linked to care in a timely manner, defined as a CD4 or viral load collected within 1 month of initial HIV diagnosis; the percentage of PLWDH who received care, evidenced by at least one CD4 or viral load result in the calendar year; the percentage of PLWDH who were retained in care, defined as two or more laboratory results at least 91 days apart in the calendar year; and the percentage of PLWDH who were virally suppressed, defined as a viral load of <200 copies/ mL at last measure in 2021.

Among newly diagnosed persons in 2021, 81.4% were linked to HIV medical care within 1 month of their diagnosis. Among all PLWDH, 64.2% received care during 2021. The proportion of PLWDH retained in HIV medical care was 43.7% in 2021. Finally, 55.7% of PLWDH were virally suppressed at most recent viral load (regardless of retention in care status) in 2021.

While the comparison to national data is an important reference, it is necessary to note that the most recently released data from the CDC reflects outcomes for 2020, when COVID-19 still had a major impact on access to care across the US.

Figure 1B is a modified HIV Continuum of Care assessing outcomes among those diagnosed with HIV who had evidence of recent HIV care in Philadelphia during the last 5 years. HIV case reporting data alone can overestimate the number of PLWDH due to duplicate case reporting, migration, and missed deaths. By excluding individuals without evidence of recent care, we hope to evaluate HIV care outcomes more precisely and better identify individuals in need of re-linkage to care and other services. Receipt of care, retention in HIV care, and viral suppression outcomes all increased from 2020 and were 80.8%, 55.0%, and 70.1%, respectively, among those with evidence of recent care (Figure 1B). Identifying new opportunities to improve outcomes along the continuum of care is vital to improving the health of persons living with HIV and reducing the rate of HIV transmission.

# Diagnoses of HIV Infection and AIDS (Stage 3)

In 2021, the majority of newly diagnosed HIV were in people assigned male sex at birth (79.2%), Non-Hispanic (NH) Black (62.7%), and in MSM (55.8%). Additionally, those aged 30-39 had the largest proportion of new diagnoses of among all age groups (31.5%) (Table 4). When considering the underlying population sizes of those newly diagnosed with HIV, the significant disparities in HIV diagnoses become readily apparent. The highest rates of new diagnoses were seen among MSM (1,534.5 per 100,000), which was nearly 8 times that of PWID (198.7), and nearly 64 times that of at-risk heterosexuals (24.1), defined as individuals over the age of 18 who are living in poverty (Figure 10).

Racial/ethnic health disparities in Philadelphia persist and mirror those observed across the nation. NH Black people have the highest burden of HIV compared to any other race/ethnicity group. In 2021, the highest rates of new HIV diagnoses were among non-Hispanic Black people (36.2 per 100,000), followed by Hispanics/Latinx (28.2) and non-Hispanic Whites (13.6) (Table 5).

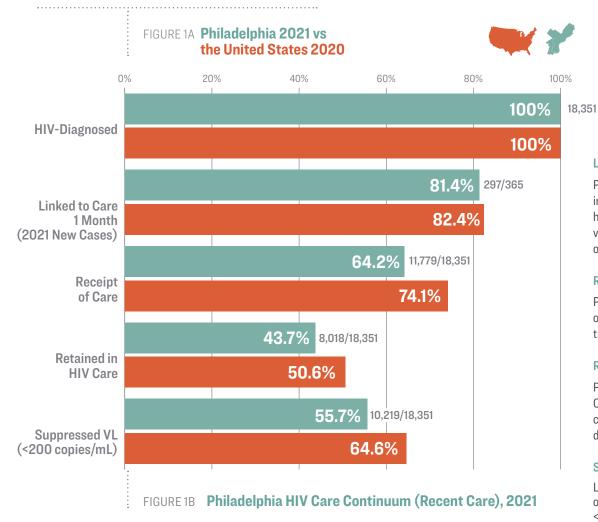
New AIDS diagnoses in Philadelphia during 2021 were primarily among persons assigned male sex at birth (74.7%), NH Black individuals (64.3%), MSM (48.2%), and those aged 50 and over (36.2%) (Table 8). The proportion of concurrent AIDS diagnoses has steadily declined since 2015, however the proportion of concurrent diagnoses increased during 2021 to 20.0% from 17.9% in 2020 (Table 7).

# Prevalence of HIV Infection among Philadelphia Residents

Among PLWDH diagnosed through 2021, males (72.2%), non-Hispanic Black people (63.7%), persons aged 50 and older (55.5%), and MSM (39.6%) accounted for the largest proportions by sex assigned at birth, race/ethnicity, age group, and transmission risk, respectively (Table 9). For both males and females, HIV prevalence rates are disproportionately higher for racial and ethnic minorities. HIV prevalence rates were highest among non-Hispanic Black people (1,814.7 per 100,000), followed by Hispanic/Latinx individuals (1,594.8) (Table 13).

Disparities in prevalence by race/ethnicity and transmission risk remain, with non-Hispanic Black MSM having the highest prevalence rates of HIV among any group (30,371.5 per 100,000 population) (Figure 12).

# **HIV Care Continuum**



#### **Linked to Care**

Persons diagnosed with HIV in a given calendar year who had one or more documented viral load or CD4 tests within one month of diagnosis.

#### **Receipt of HIV Care**

Persons who have at least one CD4 or viral load during the calendar year.

#### **Retained in HIV Care**

Persons who have 2 or more CD4 or viral loads during the calendar year, at least 91 days apart.

#### Suppressed Viral Load (VL)

Last reported viral load of the calendar year being <200 copies/mL. Individuals with no evidence of a viral load in the calendar year are considered not suppressed.



Source Philadelphia Data: Philadelphia Department of Public Health, AIDS Activities Coordinating Office

Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2020. HIV Surveillance Supplemental Report 2022;27(No. 3). http://www.cdc.gov/hiv/library/ reports/hiv-surveillance.html. Published May 2022. Accessed September 2022.

Source United States Data: Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2015-2019. HIV Surveillance Supplemental Report 2021;26(No. 1). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021. Accessed August 2021.

#### Figure 1B

Note Care Continuum Outcomes are Among PLWDH with a reported CD4 or Viral Load in the last 5 years (Jan 1, 2017 - Dec 31, 2021)

# Equity

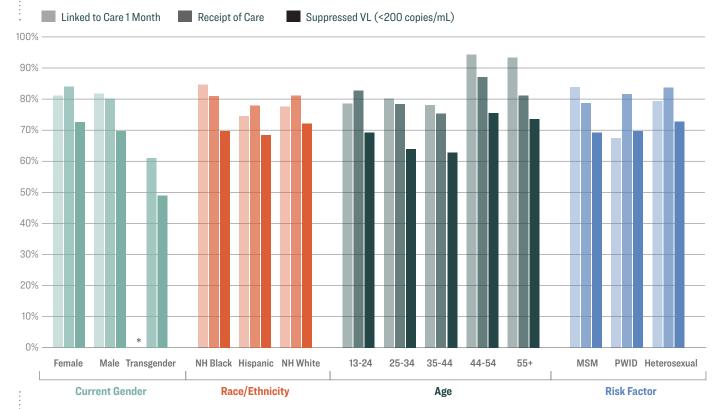
To achieve federal EHE initiative goals and reduce HIV transmission locally, PDPH is dedicated to ensuring that health equity is a foundational element of surveillance, prevention, and care practices. AACO has expanded the definition of health equity (Page 3) to include justice and dignity. This requires us to address structural and systemic drivers of health disparities including racism, discrimination, poverty, homelessness, and access to quality education, employment, and health care. This starts with how PDPH collects, analyzes, and disseminates HIV data to inform health department policies, practices, and services. The tables and graphs presented below provide critical quantitative and qualitative data that are necessary to highlight existing disparities and barriers within the HIV prevention and care infrastructure.

# **Modified Continuum by Subgroup**

Figure 2 illustrates the Modified Continuum of Care by different subgroups. Disaggregating data by race/ ethnicity, gender, age group, and risk factor can highlight disparities that exist within outcomes. For example, Hispanic/Latinx and Transgender PLWDH both have the lowest rates of linkage, retention, and viral suppression, while all outcomes are greater among older PLWDH (aged 44+) when compared to younger individuals.

Additionally, linkage to care within 30 days was lowest among PWID, while receipt of care was lowest among MSM. Viral suppression was similar across risk groups.

FIGURE 2 Care Continuum Indicators by Select Demographics, 2021



Note \* Cell sizes < 6 are suppressed. Source Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Equity

#### **Barriers to Care Data**

Qualitative data collected through the Data to Care and Field Services programs indicates that 54.5% of barriers faced by out-of-care individuals are provider/structural barriers, 44.9% are patient rights/education barriers, 32.4% are supportive services/SES barriers, and 9.7% are behavioral health barriers.

Through Field Services outreach, PDPH works to reengage these out-of-care individuals and connect them to resources including Medical Case Management, Emergency Food vouchers, Housing Assistance, and more. EHE funds were also provided to Ryan White HIV treatment sites to support individualized plans to remove structural-level barriers to care within their facilities including adding extended hours and readily available appointment slots.

#### TABLE 2 Data-to-Care Barriers and Resources, 2019-2021

#### **Barriers**

| Barrier Domain              | % of Barriers Reported |
|-----------------------------|------------------------|
| Provider/Structural Barrier | 54.5%                  |
| Patient Rights/Education    | 44.9%                  |
| Supportive Services/SES     | 32.4%                  |
| Behavioral Health           | 9.7%                   |

Some barriers fall into multiple barrier categories and therefore will not total 100%. Provider/Structural barriers include challenges with time management, with the medical facility or provider, with SES factors, with health insurance and access to care, and with communication with the service system. Patient Rights/Education barriers incude challenges with SES factors, with mental health, with health insurance and access to care, with patient education, and with medication adherence. Supportive Services/SES barriers include challenges with transportation, unemployment, child care, housing and food insecurity. Behavioral Health barriers include challenges with mental health and substance use.

#### **Resources Provided**

| Resource Type             | N   | %      |
|---------------------------|-----|--------|
| Medical Case Management   | 80  | 66.1%  |
| Mental Health Services    | 2   | 1.7%   |
| Drug & Alcohol Treatment  | 1   | 0.8%   |
| Health Insurance          | 1   | 0.8%   |
| Self-Help/Support Groups  | 0   | 0.0%   |
| Legal Services            | 2   | 1.7%   |
| Governmental Services     | 0   | 0.0%   |
| Criminal Justice Services | 0   | 0.0%   |
| Faith Community Support   | 0   | 0.0%   |
| Immigration Services      | 0   | 0.0%   |
| Clothing & Hygiene        | 0   | 0.0%   |
| Emergency Food/Pantry     | 9   | 7.4%   |
| Child Care                | 0   | 0.0%   |
| Housing Services          | 4   | 3.3%   |
| Utility Support           | 1   | 0.8%   |
| Other                     | 21  | 17.4%  |
| Total Resources Provided  | 121 | 100.0% |

Source Philadelphia Department of Public Health, AIDS Activities Coordinating Office, Data to Care (D2C)

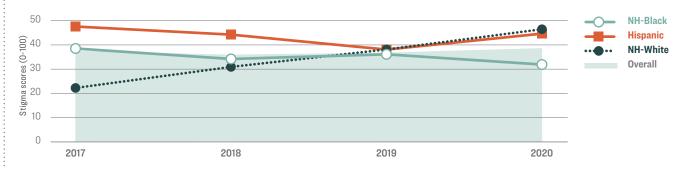
# Equity

# Stigma and Housing Stability

Two major components of the EHE initiative look to reduce HIV-related stigma and homelessness among PLWDH. The tables below illustrate stigma scores and homelessness by race/ethnicity from 2017 to 2020, collected through the Medical Monitoring Project (MMP). MMP collects data about behaviors, clinical outcomes, and quality of care from PLWDH randomly sampled in Philadelphia.

Stigma among NH Whites increased across years, with Hispanic/Latinx individuals having the highest stigma scores on average across all four years (Figure 3). NH Black individuals report stigma at or below the overall average score. Overall homelessness has decreased since 2018, however rates have increased among Hispanic/Latinx PLWDH and remained above the overall rate for NH Black people (Figure 4).

FIGURE 3 Trends of Stigma Scores Among PLWDH by Race/Ethnicity, 2017–2020

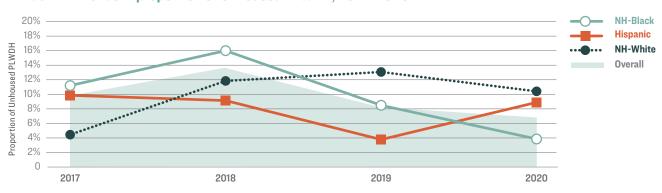


Note HIV-related stigma is defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about people living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is discussed in: Wright, K., Naar-King, S., Lam, P., Templin, T., & Frey, M. (2007). Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. The Journal of adolescent health: official publication of the Society for Adolescent Medicine, 40(1), 96-98. https://doi.org/10.1016/j.jadohealth.2006.08.001

For more information on MMP methodology, see: Beer L, Johnson C, Fagan J, Frazier E, Nyaku M, Craw J, Sanders C, Luna-Gierke R, Shouse R. A National Behavioral and Clinical Surveillance System of Adults With Diagnosed HIV (The Medical Monitoring Project): Protocol for an Annual Cross-Sectional Interview and Medical Record Abstraction Survey, JMIR Res Protoc 2019;8(11):e15453. URL: https://www.researchprotocols. org/2019/11/e15453. DOI: 10.2196/15453

Source Philadelphia Department of Public Health, AIDS Activities Coordinating Office, Medical Monitoring Project (MMP)

FIGURE 4 Trends in proportion of Unhoused PLWDH, 2017–2020



Philadelphia Department of Public Health, AIDS Activities Coordinating Office, Medical Monitoring Project (MMP)

# Topics of Continued Focus: COVID-19 Impact

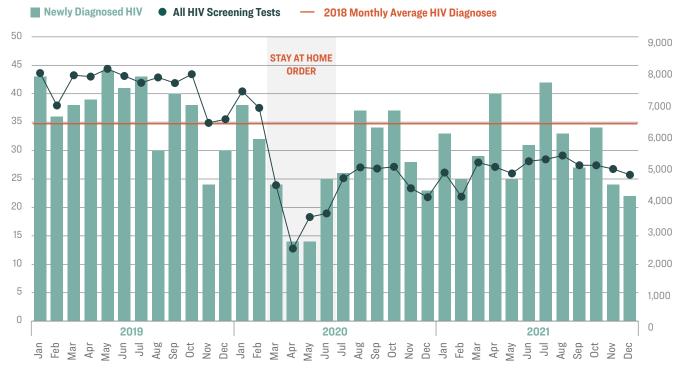
# Impact of COVID-19 on HIV Surveillance Data

- COVID-19 had a substantial impact on the HIV prevention and care infrastructure in Philadelphia during 2020, especially during the local stay-athome order that went into effect on March 23, 2020. Efforts to restore HIV services and improve access to care were the focus of 2021.
- During 2021, the number of newly diagnosed cases increased from 2020 and mirrored slight increases in testing. However, HIV testing across the city did not return to pre-pandemic levels (Figure 5).
- There was a significant increase in the volume of viral load testing during 2021 compared to 2020, indicating that access to care has improved (Figure 6).
- The proportion of persons newly diagnosed with HIV who were concurrently diagnosed with AIDS has trended up from 13.0% in 2019 to 17.8% in 2020 to 20% in 2021. Concurrent diagnoses of HIV/AIDS infection represent missed opportunities for early HIV diagnosis and may be related to reduced access to HIV testing (<u>Table 7</u>).
- The impact of COVID-19 can also be seen across HIV Care Continuum measures (Figure 1A). While continuum measures have improved since 2020, retention in care and viral suppression have not returned to those observed pre-pandemic.
- During 2021, PDPH implemented several activities to direct resources to mitigate the impact of COVID among PLWDH and those at-risk for new infection including the creation of low threshold sexual health sites and the nPEP Center of Excellence, the implementation of AACO's Field Services Program, and the expansion of the HIV self-test kit program.



# Topics of Continued Focus: COVID-19 Impact

FIGURE 5 Overall HIV Screening Volume and Newly Diagnosed HIV, Philadelphia, 2019 - 2021



Note HIV screening tests include positive and negative HIV screening results from AACO-funded community and mobile-based testing, available clinical testing, and prison-based testing.

Source Philadelphia Department of Public Health, AIDS Activities Coordinating Office

FIGURE 6 HIV Viral Load Testing Volume, Philadelphia, 2019 - 2021

Note Percentage increase represents the change in viral load testing from 2020 to 2021.



Note Percentage increase represents the change in viral load testing from 2020 to 2021.

# Topics of Continued Focus: HIV Outbreak in PWID

# **HIV Outbreak Among People Who Inject Drugs**

After identifying an outbreak during 2018, the number of new HIV diagnoses among PWID, including men who inject and have sex with men (MSM/PWID), has steadily risen, with a high of 91 new diagnoses in 2019. This represented a 184% increase from 32 cases reported in 2016, or the last year that a decrease was observed. While a decrease in new infections within this population was noted in 2020 and attributed to the lack of access to testing opportunities during COVID-19, newly diagnosed cases have increased again in 2021, totaling 62 newly diagnosed cases (Figure 7). Of the outbreak cases diagnosed from 2018 to 2021, the vast majority are male (71.5%), NH White (53.9%), and aged 30 and older (73.3%).

The ongoing outbreak continues to highlight the risk for HIV infection among PWID and their sexual and syringe sharing partners. PDPH utilizes datadriven approaches to assess and intervene within this outbreak as part of the 'Respond' pillar in the EHE plan. During 2021, PDPH has prioritized the expansion of harm reduction services through increased funding for syringe service programs, resulting in increased service delivery hours, improved syringe access, and implementation of low threshold HIV prevention services.

FIGURE 7 Demographic Characteristics and HIV Epidemiological Curve among PWID, 2018-2021



\*Cell sizes <6 are suppressed.

# Topics of Continued Focus: Transgender Persons

# **Transgender Persons**

The quality of data on transgender individuals has not improved at the same pace as surveillance data on the overall population. Some of these differences are attributed to the lack of a gender identity variable in the surveillance system and most medical records prior to 2009, making it difficult to determine gender identity for individuals diagnosed prior to the addition of these variables to the current data system. Furthermore, many transgender persons are misclassified as MSM. Table 12 presents demographic information based on available gender identity and reclassifies transmission risk reported as MSM and heterosexual contact into one category termed sexual contact. Efforts to improve surveillance data on transgender individuals—including matching data to other sources such as the Ryan White CAREware database and other available health department databases, internal and external trainings on standardized collection of gender identity data and medical chart review, and additional abstractions from medical record data when necessary — have made a significant impact on identifying transgender PLWDH and are ongoing.

Notably, Philadelphia was one of seven sites that was funded for the National HIV Behavioral Surveillance (NHBS) pilot cycle among transgender women. The cycle began in 2019, with data collection completed in February 2020. NHBS provided data on the utilization of HIV prevention services by transgender women as well as sexual and drug-use behaviors that place transgender women at risk for HIV infection. These data were used to establish the PrEP continuum in Transgender Women (Figure 8) and will continue to provide valuable information for monitoring and evaluating national and local EHE goals and for guiding prevention efforts. A factsheet detailing findings from the 2019-2020 NHBS cycle among transgender women, and a companion implications document, will be released in the near future. The NHBS cycle among transgender women will be repeated in 2023.



# Topics of Continued Focus: Prevention

#### **PrEP Indications**

Pre-Exposure Prophylaxis, or PrEP, is a daily medication taken by individuals at high risk for HIV infection to lower their chances of getting infected. In May of 2018, CDC published estimates of adults with indications for PrEP by transmission risk group and race/ethnicity. Based on this methodology, PDPH estimates that there were 8,190 HIV negative persons in Philadelphia during 2021 with a PrEP indication, with HIV-negative, non-Hispanic Black MSM having the greatest proportion of PrEP indications (71.0%) (Table 3).

PDPH continues to use the PrEP Monitoring and Evaluation plan, developed in 2019 through collaborations with other health departments and academic institutions, to track the progress of PrEP usage in the City of Philadelphia. While PrEP can reduce an individual's chances of acquiring HIV, it is only effective when taken as directed.

Adherence to PrEP must be stressed by providers and condom usage must still be encouraged to prevent other sexually transmitted infections

TABLE 3 Estimates of Adults with Indications for HIV Pre-exposure Prophylaxis by Race/Ethnicity and **Transmission Category, Philadelphia 2021**\*

|          | NE     | GATIVE AT | RISK         | Pi    | rEP INDICAT | ION          | % NE  | GATIVE PO | PULATION     |
|----------|--------|-----------|--------------|-------|-------------|--------------|-------|-----------|--------------|
|          | MSM    | PWID      | Heterosexual | MSM   | PWID        | Heterosexual | MSM   | PWID      | Heterosexual |
| NH Black | 4,777  | 6,012     | 125,911      | 3,390 | 300         | 1,290        | 71.0% | 5.0%      | 1.0%         |
| Hispanic | 2,104  | 3,754     | 48,244       | 850   | 200         | 170          | 40.4% | 5.3%      | 0.4%         |
| NH White | 5,475  | 12,849    | 64,378       | 710   | 1,040       | 100          | 13.0% | 8.1%      | 0.2%         |
|          |        |           |              |       |             |              | L     |           |              |
| TOTAL**  | 12,897 | 23,428    | 261,015      | 5,080 | 1,540       | 1,570        | 39.4% | 6.6%      | 0.6%         |

<sup>\*</sup> Methods based on Smith, D.K., Handel, M.V., & Grey, J. (2018). Estimates of adults with indications for HIV pre-exposure prophylaxis by jurisdiction, transmission risk group, and race/ethnicity, United States 2015. Annals of Epidemiology.

The population of individuals 18 and older living below poverty level is used as a proxy for the at risk heterosexual population estimate. The MSM population estimate is based on number of active MSM in the past year. Racial/ethnic population estimates for HIV negative MSM are based on the proportion of MSM who were HIV negative by race/ethnicity in the National HIV Behavioral Surveillance (NHBS) data in 2017. Racial/ethnic population composition for all active PWID is based on race/ethnicity data for individuals with a primary diagnosis of opioid use disorder who participated in any Medicaid-funded outpatient services in Philadelphia in 2019. Racial/ethnic population estimates for HIV negative PWID are based on the proportion of PWID who were HIV negative by race/ethnicity in the National HIV Behavioral Surveillance (NHBS) data for Philadelphia in 2018.

<sup>\*\*</sup> Totals presented represent data for all racial/ethnic groups of a given population, and therefore will be greater than the sum of the three racial/ethnic groups presented.

# Topics of Continued Focus: Prevention

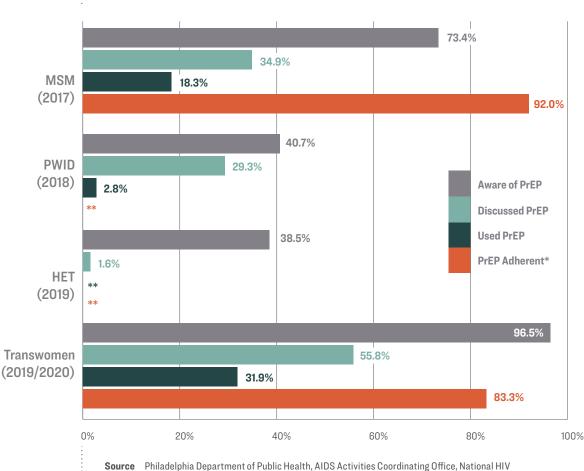
#### **PrEP Continuum**

The PrEP continuum is similar to the HIV continuum of care but was developed using data from the CDC funded National HIV Behavioral Surveillance (NHBS) project and is used to help monitor efforts to increase PrEP awareness, use, and adherence among HIV negative individuals at risk for HIV. There are four metrics along the PrEP continuum: 1) Awareness of PrEP, 2) discussing PrEP with a medical provider in the past year, 3) using PrEP in the past year, and 4) PrEP adherence in the past year. The PrEP continuum is presented for HIV negative individuals in four at-risk populations, including MSM, atrisk heterosexuals, PWID, and transwomen.

routine NHBS activities, the scheduled 2020 MSM NHBS cycle was postponed to 2021. However, due to the small sample size resulting from COVID-19, the 2021 data are unreliable. The next MSM cycle for NHBS will be in 2023. Therefore, data reported here remain unchanged from last report. PrEP awareness, discussions about PrEP, and PrEP usage were highest among transwomen, while PrEP adherence was highest among MSM. Both at-risk heterosexuals and PWID reported the lowest levels of awareness, discussions about, and usage of PrEP. Less than half of all MSM, PWID, and heterosexuals interviewed had discussed PrEP with their provider in the past year.

Due to the impact of COVID-19 on the ability to conduct

FIGURE 8 **Continuum of PrEP Awareness and Usage**  Identifying and removing barriers to PrEP for underserved populations is necessary to improve the PrEP continuum among all groups.



- \*Among those who reported PrEP use in the past year. Adherent is defined as taking PrEP every day or almost every day.
- \*\*Numbers become too small to present stable population estimates.

#### Note

These numbers are presented as percentages, with the denominator being all HIV negative persons interviewed (with the exception of 'PrEP Adherent').

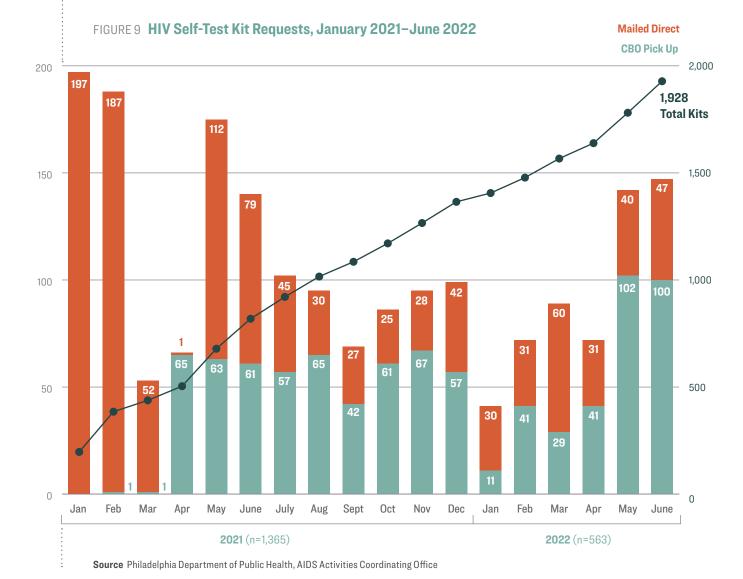
Behavioral Surveillance Project (NHBS)

# Topics of Continued Focus: Prevention

# **HIV Self Test Program**

During 2021, PDPH expanded the HIV self-test program, which increases HIV testing opportunities by providing an alternative for people at higher risk for acquiring HIV who may be unwilling or decline to get tested in other venues. In addition to increasing awareness of HIV status, the program destigmatizes HIV screening by providing a personal and private experience. From January 2021 through June 2022, PDPH supplied nearly 2,500 self-test kits to community-based partner agencies (data not shown).

During this period, 1,064 kits were requested and mailed direct to consumer and an additional 864 were picked up from a community-based partner agency (Figure 9). Consumers can request an in-home test kit to be mailed to their home address through the campaign website: http://www.PhillyKeepOnLoving. com or kits can be picked up at one of our communitybased partner agencies.



# Newly Diagnosed Cases

TABLE 4 By Year and Selected Characteristics (regardless of AIDS status) | 2017 – 2021

| Bar graphs               |                  |      |         |       |         | <b>V=1</b> |          |      |         |     |         |
|--------------------------|------------------|------|---------|-------|---------|------------|----------|------|---------|-----|---------|
| indicate 2021            | • • • • • • • •  |      | 0017    |       |         | YEAR O     | F DIAGNO | ISIS | 0000    |     | 0001    |
| percentages              | •                | N    | 2017    | NI.   | 2018 %  | NI NI      | 2019 %   | N    | 2020    | N   | 2021    |
|                          | Tatal            |      |         | N 420 | 100.0 % | N          |          |      |         |     |         |
| One Analysis of a Disale | Total            | 508  | 100.0 % | 438   | 100.0 % | 445        | 100.0 %  | 335  | 100.0 % | 365 | 100.0 % |
| Sex Assigned at Birth    |                  | 105  | 00.70/  | 107   | 04.40/  | 100        | 04.0.0/  | 0.0  | 0450/   | 70  | 00.00/  |
|                          | Female           | 105  | 20.7 %  | 107   | 24.4 %  | 108        | 24.3 %   | 82   | 24.5 %  | 76  | 20.8 %  |
| D. /Ed. : :              | Male             | 403  | 79.3 %  | 331   | 75.6 %  | 337        | 75.7 %   | 253  | 75.5 %  | 289 | 79.2 %  |
| Race/Ethnicity           | NII DI I         | 0.40 | 07.5.0/ | 050   | 50.00/  | 000        | 00.00/   | 007  | 07.0.0/ | 000 | 0070/   |
|                          | NH Black         | 343  | 67.5 %  | 258   | 58.9 %  | 280        | 62.9 %   | 227  | 67.8 %  | 229 | 62.7 %  |
|                          | Hispanic         | 82   | 16.1 %  | 88    | 20.1%   | 79         | 17.8 %   | 54   | 16.1 %  | 52  | 14.2 %  |
|                          | NH White         | 69   | 13.6 %  | 78    | 17.8 %  | 74         | 16.6 %   | 45   | 13.4 %  | 76  | 20.8 %  |
|                          | Multi-race       | 7    | 1.4 %   | 6     | 1.4 %   | 9          | 2.0 %    | *    | *       | *   | *       |
|                          | Asian            | *    | *       | 6     | 1.4 %   | *          | *        | *    | *       | *   | *       |
|                          | Other/Unknown    | *    | *       | *     | *       | *          | *        | *    | *       | *   | *       |
| Age Category             | •<br>•<br>•      |      |         |       |         |            |          |      |         |     |         |
|                          | 0-12             | 0    | 0.0%    | 0     | 0.0%    | 0          | 0.0%     | *    | *       | *   | *       |
|                          | 13-19            | 43   | 8.5 %   | 22    | 5.0 %   | 32         | 7.2 %    | 19   | 5.7 %   | 18  | 4.9 %   |
|                          | 20-24            | 95   | 18.7 %  | 91    | 20.8 %  | 76         | 17.1 %   | 51   | 15.2 %  | 66  | 18.1 %  |
|                          | 25-29            | 102  | 20.1%   | 83    | 18.9 %  | 99         | 22.2 %   | 75   | 22.4 %  | 77  | 21.1 %  |
|                          | 30-39            | 138  | 27.2 %  | 119   | 27.2 %  | 115        | 25.8 %   | 98   | 29.3 %  | 115 | 31.5 %  |
|                          | 40-49            | 61   | 12.0 %  | 49    | 11.2 %  | 60         | 13.5 %   | 42   | 12.5 %  | 39  | 10.7 %  |
|                          | 50+              | 69   | 13.6 %  | 74    | 16.9 %  | 63         | 14.2 %   | 49   | 14.6 %  | 48  | 13.2 %  |
| Transmission Risk        | •                |      |         |       |         |            |          |      |         |     |         |
|                          | MSM              | 279  | 54.9 %  | 212   | 48.4 %  | 236        | 53.0 %   | 192  | 57.3 %  | 204 | 55.9 %  |
|                          | PWID             | 43   | 8.5 %   | 59    | 13.5 %  | 74         | 16.6 %   | 26   | 7.8 %   | 43  | 11.8 %  |
|                          | MSM/PWID         | *    | *       | 20    | 4.6%    | 17         | 3.8 %    | 10   | 3.0 %   | 19  | 5.2 %   |
|                          | Heterosexual     | 110  | 21.7 %  | 86    | 19.6 %  | 87         | 19.6 %   | 81   | 24.2 %  | 63  | 17.3 %  |
|                          | Pediatric        | 0    | 0.0%    | 0     | 0.0%    | 0          | 0.0%     | *    | *       | *   | *       |
|                          | No Reported Risk | 71   | 14.0 %  | 61    | 13.9 %  | 31         | 7.0 %    | 25   | 7.5 %   | 34  | 9.3 %   |
| Hepatitis Co-infection   | •                |      |         |       |         |            |          |      |         |     |         |
|                          |                  | 12   | 2.3%    | 15    | 3.4%    | 13         | 2.9%     | 7    | 2.1%    | 9   | 2.5%    |
|                          | Hepatitis C      | 55   | 10.8%   | 72    | 16.4%   | 81         | 18.2%    | 40   | 11.9%   | 47  | 12.9%   |
|                          |                  |      |         |       |         |            |          |      |         |     |         |
|                          | •                |      |         |       |         |            |          |      |         |     |         |
|                          | •                |      |         |       | •       |            |          |      |         |     | _       |
|                          | •<br>•<br>•      |      |         |       |         |            |          |      |         |     |         |
|                          | •                |      |         |       |         |            |          |      |         |     |         |
| Total Cases              | o<br>o<br>o      |      | 508     |       | 438     |            | 445      |      | 335     |     | 365     |

\*Cell sizes <6 are suppressed.

Due to rounding, percentages may not add up to exactly 100%.

<sup>\*\*</sup>Ever reported Hepatitis B- or Hepatitis C-positive.

# Newly Diagnosed HIV

TABLE 5 By Race/Ethnicity and Selected Characteristics

(regardless of AIDS status) | 2021

| :                |   | NH BL  | ACK   |  | HISPA  | NIC   |   | NH WHI  | ITE   |
|------------------|---|--|---|--|--|---|---|---|---|
| •                | N   | %  |   | N  | %  |   | N   | %   |   |
| Total            | 229   | 100.0 %  |   | 52   | 100.0 %  |   | 76  | 100.0 %   |   |
| 1:               |   |  |   |  |  |   |   |   |   |
| Female           | 55  | 24.0 %   |   | 9  | 17.3 %   |   | 11  | 14.5 %  |   |
| Male             | 174   | 76.0 %   |   | 43   | 82.7 %   |   | 65  | 85.5 %  |   |
|                  |   |  |   |  |  |   |   |   |   |
| 0-12             | *   | *  |   | *  | *  |   | 0   | 0.0%  |   |
| 13-19            | 16  | 7.0 %  |   | *  | *  |   | 0   | 0.0%  |   |
| 20-24            | 53  | 23.1 %   |   | 8  | 15.4 %   |   | *   | *   |   |
| 25-29            | 54  | 23.6 %   |   | 7  | 13.5 %   |   | 14  | 18.4 %  |   |
| 30-39            | 57  | 24.9 %   |   | 20   | 38.5 %   |   | 36  | 47.4 %  |   |
| 40-49            | 16  | 7.0 %  |   | 9  | 17.3 %   |   | 12  | 15.8 %  |   |
| 50+              | 32  | 14.0 %   |   | *  | *  |   | 9   | 11.8 %  |   |
|                  |   |  |   |  |  |   |   |   |   |
| MSM              | 136   | 59.4 %   |   | 34   | 65.3 %   |   | 29  | 38.1%   |   |
| PWID             | 7   | 3.1 %  |   | *  | *  |   | 30  | 39.5 %  |   |
| MSM/PWID         | *   | *  |   | *  | *  |   | 12  | 15.8 %  |   |
| Heterosexual     | 52  | 22.7 %   |   | 7  | 13.4 %   |   | *   | *   |   |
| Pediatric        | *   | *  |   | 0  | 0.0%   |   | 0   | 0.0%  |   |
| No Reported Risk | 27  | 11.8 %   |   | *  | *  |   | *   | *   |   |
|                  |   | 22   | 9   |  |  |   |   |   |   |
| •                |   |  |   |  |  |   |   |   |   |
| •                |   |  |   |  |  |   |   | 76  |   |
| •                |   |  |   |  | 52   | 2   |   | 10  |   |
|                  |   |  |   |  |  |   |   |   |   |
|                  |   | 36.2   | 2   |  | 28.2   | 2   |   | 13.6  |   |
|                  |   | NH BL  |   |  | HISPA  |   |   | NH WHI  |   |
|                  | Female Male  0-12 13-19 20-24 25-29 30-39 40-49 50+  MSM PWID MSM/PWID Heterosexual Pediatric | Total 229  Total 229  Female 55  Male 174  0-12 * 13-19 16 20-24 53 25-29 54 30-39 57 40-49 16 50+ 32  MSM 136  PWID 7  MSM/PWID *  Heterosexual 52  Pediatric * | N       %         Total       229       100.0 %         n       Female       55       24.0 %         Male       174       76.0 %         0-12       *       *         13-19       16       7.0 %         20-24       53       23.1 %         25-29       54       23.6 %         30-39       57       24.9 %         40-49       16       7.0 %         50+       32       14.0 %         MSM       136       59.4 %         PWID       7       3.1 %         MSM/PWID       *       *         Heterosexual       52       22.7 %         Pediatric       *       *         No Reported Risk       27       11.8 %         22 | N       %         Total       229 100.0 %         In       Female       55 24.0 %         Male       174 76.0 %         O-12       *       *         13-19       16 7.0 %       1         20-24       53 23.1 %       2         25-29       54 23.6 %       3         30-39       57 24.9 %       4         40-49       16 7.0 %       4         50+       32 14.0 %       4         PWID       7 3.1 %       4         MSM/PWID       *       *         Heterosexual       52 22.7 %       5         Pediatric       *       *         No Reported Risk       27 11.8 %       1         229 | N       %       N         Total       229 100.0 %       52         Female       55 24.0 %       9         Male       174 76.0 %       43         0-12       *       *         13-19       16 7.0 %       *         20-24       53 23.1 %       8         25-29       54 23.6 %       7         30-39       57 24.9 %       20         40-49       16 7.0 %       9         50+       32 14.0 %       *         MSM       136 59.4 %       34         PWID       7 3.1 %       *         MSM/PWID       *       *         Heterosexual       52 22.7 %      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 %         Total       229 100.0 %       52 100.0 %         Female       55 24.0 %       9 17.3 %         Male       174 76.0 %       43 82.7 %         0-12       *       *       *         13-19       16 7.0 %       *       *       *         20-24       53 23.1 %       8 15.4 %       25-29       54 23.6 %       7 13.5 %       30-39       57 24.9 %       20 38.5 %       340-49       9 17.3 %       340-49       50+       9 17.3 %       340-49       50+       32 14.0 %       34 65.3 %       34 65.3 %       34 65.3 %       34 65.3 %       34 65.3 %       35 7 13.4 %       34 65.3 %       35 7 13.4 %       35 7 13.4 %       35 7 13.4 %       36 7 13.4 %       36 7 13.4 %       36 7 13.4 %       36 7 13.4 %       36 7 13.4 %       36 7 13.4 %       36 7 13.4 %       36 7 13.4 %       36 7 13.4 %       36 7 13.4 %       37 13.4 %       37 13.4 %       37 13.4 %       37 13.4 %       37 13.4 %       37 13.4 %       37 13.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 %       38 15.4 | N       %       N       %       N         Total       229 100.0 %       52 100.0 %       76         Female       55 24.0 %       9 17.3 %       11         Male       174 76.0 %       43 82.7 %       65         0-12       *       *       *       *       0         13-19       16 7.0 %       *       *       *       0       0         20-24       53 23.1 %       8 15.4 %       * <td< td=""><td>N       %       N       %       N       %         Total       229 100.0 %       52 100.0 %       76 100.0 %         Female       55 24.0 %       9 17.3 %       11 14.5 %         Male       174 76.0 %       43 82.7 %       65 85.5 %         0-12       *       *       *       0 0.0 %         13-19       16 7.0 %       *       *       *       0 0.0 %         20-24       53 23.1 %       8 15.4 %       *       *       *         25-29       54 23.6 %       7 13.5 %       14 18.4 %       30-39       57 24.9 %       20 38.5 %       36 47.4 %         40-49       16 7.0 %       9 17.3 %       12 15.8 %       12 15.8 %         50+       32 14.0 %       *       *       *       9 11.8 %         MSM       136 59.4 %       34 65.3 %       29 38.1 %       PWID       7 3.1 %       *       *       *         MSM/PWID       *       *       *       *       *       *       *       *         No Reported Risk       27 11.8 %       *       *       *       *       *       *       *       *       *       *       *       *       *       *&lt;</td></td<> | N       %       N       %       N       %         Total       229 100.0 %       52 100.0 %       76 100.0 %         Female       55 24.0 %       9 17.3 %       11 14.5 %         Male       174 76.0 %       43 82.7 %       65 85.5 %         0-12       *       *       *       0 0.0 %         13-19       16 7.0 %       *       *       *       0 0.0 %         20-24       53 23.1 %       8 15.4 %       *       *       *         25-29       54 23.6 %       7 13.5 %       14 18.4 %       30-39       57 24.9 %       20 38.5 %       36 47.4 %         40-49       16 7.0 %       9 17.3 %       12 15.8 %       12 15.8 %         50+       32 14.0 %       *       *       *       9 11.8 %         MSM       136 59.4 %       34 65.3 %       29 38.1 %       PWID       7 3.1 %       *       *       *         MSM/PWID       *       *       *       *       *       *       *       *         No Reported Risk       27 11.8 %       *       *       *       *       *       *       *       *       *       *       *       *       *       *< |

\*Cell sizes <6 are suppressed.

Due to rounding, percentages may not add up to exactly 100%.

# Newly Diagnosed HIV

#### TABLE 6 By Sex Assigned at Birth and Selected Characteristics | 2021

Assigned males at birth comprised the majority of all new HIV diagnoses (79.2%), with the highest rates among MSM. Assigned females at birth comprised 20.8% of new diagnoses, with highest rates among NH Black and heterosexual women.

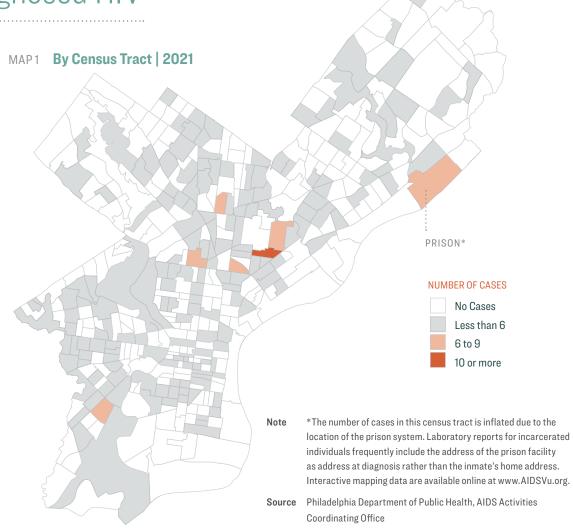
|                   |                  | AS | SIGNED F | EMAL      | E AT | BIRTH    | ASSI | GNED M  | ALE AT  | BIRTH |        |
|-------------------|------------------|----|----------|-----------|------|----------|------|---------|---------|-------|--------|
|                   |                  | N  | %        |           |      | Rate †   | N    | %       |         |       | Rate † |
|                   | Total            | 76 | 100.0 %  |           |      | 9.5      | 289  | 100.0 % |         |       | 40.9   |
| Race/Ethnicity    | •                |    |          |           |      |          |      |         |         |       |        |
|                   | NH Black         | 55 | 72.4 %   |           |      | 15.7     | 174  | 60.2 %  |         |       | 61.5   |
|                   | Hispanic         | 9  | 11.8 %   |           |      | 9.6      | 43   | 14.9 %  |         |       | 47.3   |
|                   | NH White         | 11 | 14.5 %   |           |      | 3.8      | 65   | 22.5 %  |         |       | 24.1   |
|                   | Asian            | 0  | 0.0%     |           |      | 0        | *    | *       |         |       | *      |
|                   | Multi-race       | *  | *        |           |      | *        | *    | *       |         |       | *      |
|                   | Other/Unknown    | 0  | 0.0%     |           |      | *        | *    | *       |         |       | *      |
| Age Category      | •                |    |          |           |      |          |      |         |         |       |        |
|                   | 0-12             | *  | *        |           |      | *        | 0    | 0.0%    |         |       | 0      |
|                   | 13-19            | *  | *        |           |      | *        | 15   | 5.2 %   |         |       | 19.5   |
|                   | 20-24            | 11 | 14.5 %   |           |      | 14.6     | 55   | 19.0 %  |         |       | 77.6   |
|                   | 25-29            | 11 | 14.5 %   |           |      | 15.5     | 66   | 22.8 %  |         |       | 103.5  |
|                   | 30-39            | 25 | 32.9 %   |           |      | 23.6     | 90   | 31.1 %  |         |       | 94.0   |
|                   | 40-49            | 11 | 14.5 %   |           |      | 11.0     | 28   | 9.7 %   |         |       | 31.1   |
|                   | 50+              | 13 | 17.1 %   |           |      | 5.1      | 35   | 12.1 %  |         |       | 19.0   |
| Transmission Risk |                  |    |          |           |      | '        |      |         |         |       |        |
|                   | MSM              | 0  | 0.0%     |           |      | _        | 204  | 70.6 %  |         |       | 1534.5 |
|                   | PWID             | 13 | 17.1 %   |           |      | _        | 30   | 10.4 %  |         |       | N/A    |
|                   | MSM/PWID         | 0  | 0.0%     |           |      | _        | 19   | 6.6 %   |         |       | N/A    |
|                   | Heterosexual     | 59 | 77.6 %   |           |      | 48.2     | *    | *       |         |       | *      |
|                   | Pediatric        | *  | *        |           |      | *        | *    | *       |         |       | *      |
|                   | No Reported Risk | *  | *        |           |      | *        | 31   | 10.7 %  |         |       | N/A    |
|                   |                  |    |          |           |      |          |      | 29      | 39      |       |        |
|                   | •                |    |          |           |      |          |      | 20      |         |       |        |
|                   | •                |    |          |           |      |          |      |         |         |       |        |
|                   | •                |    |          |           |      |          |      |         |         |       |        |
|                   | •                |    |          | <b>76</b> |      |          |      |         |         |       |        |
| Total N           | •                |    |          |           |      |          |      |         |         |       |        |
|                   | •                |    | ASSIGNED | FEM       | ALE  | AT BIRTH | ASS  | IGNED M | IALE AT | BIRTH | 1      |

Note \*Cell sizes <6 are suppressed.

Due to rounding, percentages may not add up to exactly 100%.

<sup>†</sup> Rates for age and race/ethnicity by sex assigned at birth were calculated using the 2010 decennial census. MSM rates were calculated using estimates of MSM activity among males 13 and older in the last year. Heterosexual rates were calculated using the number of individuals 18 and older living below the federal poverty level from the 2010 American Community Survey.

# Newly Diagnosed HIV



#### FIGURE 10

# **Rates of Newly Diagnosed** HIV disease per 100,000 **People by Year of Diagnosis** and Risk Group, 2017 - 2021

Dotted line represents unreliable data for trend between two years.

MSM population size based on estimates of MSM activity among males 13 and older in the last year. Active PWID population size estimated as 25,000 citywide. Individuals 18 and older living below the poverty level was used as a proxy for at-risk heterosexuals.



# AIDS Diagnoses

TABLE 7

# Concurrent HIV/AIDS, Demographics and Transmission Risk | 2017 - 2021

| REPO!                    |      | 2017       | 7    |            |      | 2018       | œ    |            |          | 2019       | 6        |            |            | 2020  | 50   |            |       | 2021       | 12       |            |
|--------------------------|------|------------|------|------------|------|------------|------|------------|----------|------------|----------|------------|------------|-------|------|------------|-------|------------|----------|------------|
|                          | Ž    | Non-       | Conc | Concurrent | Z    | Non-       | Conc | Concurrent | N        | Non-       | Concu    | Concurrent | Non-       | n-    | Conc | Concurrent | ž     | Non-       | Conc     | Concurrent |
|                          | conc | concurrent | HIV  | HIV/AIDS   | conc | concurrent | HIV/ | HIV/AIDS   | concl    | concurrent | //NH     | HIV/AIDS   | concurrent | rrent | HIV  | HIV/AIDS   | conci | concurrent | /NIH     | HIV/AIDS   |
|                          | z    | Row%       | z    | Row%       | z    | Row%       | z    | Row%       | z        | Row%       | z        | Row%       | z          | Row%  | z    | Row%       | z     | Row%       | z        | Row%       |
| Total                    | 422  | 83.1%      | 98   | 16.9%      | 376  | 82.8%      | 62   | 14.2%      | 388      | 87.2%      | 22       | 12.8%      | 275        | 85.1% | 09   | 17.9%      | 292   | 80.08      | 73       | 20.0%      |
| Sex Assigned at Birth    |      |            |      |            |      |            |      |            |          |            |          |            |            |       |      |            |       |            |          |            |
| Female                   | 87   | 82.9%      | 18   | 17.1%      | 93   | %6'98      | 14   | 13.1%      | 98       | 80.7%      | 10       | 9.3%       | 64         | 78.0% | 18   | 22.0%      | 09    | 78.9%      | 16       | 21.1%      |
| Male                     | 335  | 83.1%      | 89   | 16.9%      | 283  | 85.5%      | 48   | 14.5%      | 290      | 86.1%      | 47       | 13.9%      | 211        | 83.4% | 42   | 16.6%      | 232   | 80.3%      | 22       | 19.7%      |
| Race/Ethnicity           |      |            |      |            |      |            |      |            |          |            |          |            |            |       |      |            |       |            |          |            |
| NH Black                 | 285  | 83.1%      | 28   | 16.9%      | 219  | 84.9%      | 39   | 15.1%      | 247      | 88.2%      | 33       | 11.8%      | 191        | 84.1% | 36   | 15.9%      | 179   | 78.2%      | 20       | 21.8%      |
| Hispanic                 | 70   | 85.4%      | 12   | 14.6%      | 74   | 84.1%      | 14   | 15.9%      | 62       | 78.5%      | 17       | 21.5%      | 47         | 82.0% | 7    | 13.0%      | 38    | 73.1%      | 14       | 26.9%      |
| NH White                 | 99   | 81.2%      | 13   | 18.8%      | 69   | 88.5%      | 6    | 11.5%      | 89       | 91.9%      | 9        | 8.1%       | 32         | 71.1% | 13   | 28.9%      | 89    | 89.5%      | $\infty$ | 10.5%      |
| Multi-race               | 9    | 20.6%      | *    | *          | 9    | 100.0%     | 0    | %0.0       | $\infty$ | 88.9%      | ×        | *          | *          | *     | *    | *          | *     | *          | 0        | %0.0       |
| Asian                    | *    | *          | *    | *          | 9    | 100.0%     | 0    | %0.0       | *        | *          | 0        | %0.0       | *          | *     | *    | *          | *     | *          | *        | *          |
| Other/Unknown            | *    | *          | *    | *          | *    | *          | 0    | %0.0       | *        | *          | 0        | %0.0       | *          | *     | *    | *          | *     | *          | 0        | %0.0       |
| Age at HIV Dx            |      |            |      |            |      |            |      |            |          |            |          |            |            |       |      |            |       |            |          |            |
| 0-12                     | 0    | %0.0       | 0    | %0.0       | 0    | %0.0       | 0    | %0.0       | 0        | %0.0       | 0        | %0.0       | *          | *     | 0    | %0.0       | *     | *          | 0        | %0.0       |
| 13-19                    | 42   | 82.7%      | *    | *          | 21   | 95.4%      | *    | *          | 31       | %6.96      | *        | *          | 18         | 94.7% | *    | *          | 15    | 83.3%      | *        | *          |
| 20-24                    | 88   | 95.6%      | 7    | 7.4%       | 82   | 90.1%      | 0    | 9.9%       | 70       | 92.1%      | 9        | 7.9%       | 47         | 92.1% | *    | *          | 09    | %6'06      | 9        | 9.1%       |
| 25-29                    | 93   | 91.2%      | ത    | 8.8%       | 77   | 92.8%      | 9    | 7.2%       | 87       | 87.9%      | 12       | 12.1%      | 99         | 88.0% | 6    | 12.0%      | 69    | 89.68      | ∞        | 10.4%      |
| 30-39                    | 116  | 84.1%      | 22   | 15.9%      | 97   | 81.5%      | 22   | 18.5%      | 92       | 85.6%      | 20       | 17.4%      | 80         | 81.6% | 8    | 18.4%      | 92    | 80.08      | 23       | 20.0%      |
| 40-49                    | 39   | 63.9%      | 22   | 36.1%      | 38   | %9'.2      | =    | 22.4%      | 21       | 82.0%      | ത        | 15.0%      | 28         | %2'99 | 14   | 33.3%      | 29    | 74.4%      | 유        | 25.6%      |
| 20+                      | 44   | 63.8%      | 22   | 36.2%      | 91   | 82.4%      | 13   | 17.6%      | 54       | 85.7%      | <b>о</b> | 14.3%      | 35         | 71.4% | 14   | 28.6%      | 25    | 52.1%      | 23       | 47.9%      |
| <b>Transmission Risk</b> |      |            |      |            |      |            |      |            |          |            |          |            |            |       |      |            |       |            |          |            |
| MSM                      | 244  | 82.5%      | 32   | 12.5%      | 183  | 86.3%      | 29   | 13.7%      | 201      | 85.2%      | 35       | 14.8%      | 165        | 85.9% | 27   | 14.1%      | 165   | 80.9%      | 39       | 19.1%      |
| PWID                     | 34   | 79.1%      | 6    | 20.9%      | 53   | 89.8%      | 9    | 10.2%      | 69       | 93.2%      | *        | *          | 23         | 88.5% | *    | *          | 37    | %0.98      | 9        | 14.0%      |
| MSM/PWID                 | *    | *          | 0    | %0.0       | 8    | %0.06      | *    | *          | 16       | 94.1%      | *        | *          | 7          | %0.07 | *    | *          | 19    | 100.0%     | 0        | %0.0       |
| Heterosexual             | 90   | 81.8%      | 20   | 18.2%      | 73   | 84.9%      | 13   | 15.1%      | 92       | 87.4%      | 1        | 12.6%      | 61         | 75.3% | 20   | 24.7%      | 49    | 77.8%      | 14       | 22.2%      |
| Pediatric                | 0    | %0.0       | 0    | %0.0       | 0    | %0.0       | 0    | %0.0       | 0        | %0.0       | 0        | %0.0       | *          | *     | 0    | %0.0       | *     | *          | 0        | %0.0       |
|                          |      |            |      |            |      |            |      |            |          |            |          |            |            |       |      |            |       |            |          |            |

\*Cell sizes < 6 are suppressed. Concurrent HIV/AIDS is defined as diagnosis of AIDS within 90 days of initial diagnosis of HIV. Note

41.2%

7

58.8%

20

28.0%

72.0%

<u>∞</u>

83.9%

26

19.7%

42

80.3%

49

31.0%

22

%0.69

49

No Reported Risk

Due to rounding, percentages may not add up to exactly 100%.

# AIDS Diagnoses

TABLE 8 By Year and Selected Characteristics | 2017 - 2021

| Bar graphs            |                  |     |         |     | YEAR OF | DIAGN | OSIS    |     |         |     |         |
|-----------------------|------------------|-----|---------|-----|---------|-------|---------|-----|---------|-----|---------|
| indicate 2021         | •                |     | 2017    |     | 2018    |       | 2019    |     | 2020    |     | 2021    |
| percentages           | •                | N   | %       | N   | %       | N     | %       | N   | %       | N   | %       |
|                       | Total            | 245 | 100.0 % | 158 | 100.0 % | 172   | 100.0 % | 157 | 100.0 % | 174 | 100.0 % |
| Sex Assigned at Birth | •                |     |         |     |         |       |         |     |         |     |         |
|                       | Female           | 71  | 29.0 %  | 44  | 27.8 %  | 44    | 25.6 %  | 48  | 30.6 %  | 44  | 25.3 %  |
|                       | Male             | 174 | 71.0 %  | 114 | 72.2 %  | 128   | 74.4 %  | 109 | 69.4 %  | 130 | 74.7 %  |
| Race/Ethnicity        |                  |     |         |     |         |       |         |     |         |     |         |
|                       | NH Black         | 152 | 62.0 %  | 108 | 68.4 %  | 105   | 61.0 %  | 110 | 70.1 %  | 112 | 64.4 %  |
|                       | Hispanic         | 43  | 17.6 %  | 31  | 19.6 %  | 38    | 22.1%   | 22  | 14.0 %  | 31  | 17.8 %  |
|                       | NH White         | 38  | 15.5 %  | 19  | 12.0 %  | 25    | 14.5 %  | 20  | 12.7 %  | 24  | 13.8 %  |
|                       | Multi-race       | 10  | 4.1%    | 0   | 0.0%    | *     | *       | *   | *       | *   | *       |
|                       | Asian            | *   | *       | 0   | 0.0%    | *     | *       | *   | *       | *   | *       |
|                       | Other/Unknown    | *   | *       | 0   | 0.0%    | 0     | 0.0%    | *   | *       | *   | *       |
| Age Category          |                  |     |         |     |         |       |         |     |         |     |         |
|                       | 13-19            | *   | *       | *   | *       | *     | *       | *   | *       | *   | *       |
|                       | 20-24            | 13  | 5.3 %   | 15  | 9.5 %   | 13    | 7.6 %   | *   | *       | 8   | 4.6%    |
|                       | 25-29            | 31  | 12.7 %  | 17  | 10.8 %  | 34    | 19.8 %  | 23  | 14.6 %  | 17  | 9.8 %   |
|                       | 30-39            | 62  | 25.3 %  | 48  | 30.4 %  | 51    | 29.6 %  | 50  | 31.8 %  | 55  | 31.6 %  |
|                       | 40-49            | 54  | 22.0 %  | 26  | 16.4 %  | 26    | 15.1 %  | 32  | 20.4 %  | 28  | 16.1 %  |
|                       | 50+              | 82  | 33.5 %  | 51  | 32.3 %  | 45    | 26.2 %  | 46  | 29.3 %  | 63  | 36.2 %  |
| Transmission Risk     | •                |     |         |     |         |       |         |     |         |     |         |
|                       | MSM              | 91  | 37.1 %  | 61  | 38.6 %  | 73    | 42.4 %  | 61  | 38.8 %  | 84  | 48.3 %  |
|                       | PWID             | 33  | 13.5 %  | 28  | 17.7 %  | 29    | 16.9 %  | 18  | 11.5 %  | 22  | 12.6 %  |
|                       | MSM/PWID         | 8   | 3.3 %   | *   | *       | *     | *       | 8   | 5.1 %   | *   | *       |
|                       | Heterosexual     | 87  | 35.5 %  | 46  | 29.1 %  | 54    | 31.4 %  | 54  | 34.4 %  | 46  | 26.4 %  |
|                       | Pediatric        | *   | *       | *   | *       | *     | *       | *   | *       | 0   | 0.0%    |
|                       | No Reported Risk | 25  | 10.2 %  | 16  | 10.1 %  | 10    | 5.8 %   | 13  | 8.3 %   | 18  | 10.3 %  |
|                       |                  |     |         |     |         |       |         |     |         |     |         |
|                       | •                |     |         |     |         |       |         |     |         |     |         |
|                       | •                |     |         |     |         |       | •       |     |         |     | •       |
|                       |                  |     |         |     |         |       |         |     |         |     |         |
| Total Cases           | * * * *          | 2   | 45      | 1   | 58      | 1     | 72      | 1   | 157     |     | 174     |

Note \*Cell sizes < 6 are suppressed.

A proportion of AIDS diagnoses in each year were diagnosed with HIV in a previous year and later progressed to AIDS. Due to rounding, percentages may not add up to exactly 100%.

FIGURE 11 Philadelphia HIV and AIDS Diagnoses, Deaths, and Prevalence by Year | 1985 - 2021

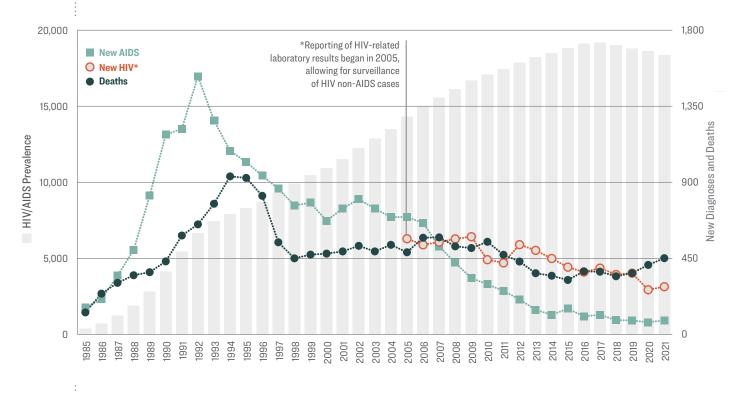


TABLE 9 HIV (non-AIDS) and AIDS Cases by Selected Characteristics | 2021

| N %       N %       N %         Total 8,596 100.0 %       9,755 100.0 %       18,351 100.0 %         Sex Assigned at Birth         Female       2,376 27.6 %       2,723 27.9 %       5,099 27.8%         Male       6,220 72.4 %       7,032 72.1 %       13,252 72.2 %         Race/Ethnicity         NH Black       5,408 62.9 %       6,284 64.4 %       11,692 63.7 %         Hispanic       1,446 16.8 %       1,546 15.8 %       2,992 16.3 %         NH White       1,421 16.5 %       1,564 16.0 %       2,985 16.3 %         Multi-race       189 2.2 %       247 2.5 %       436 2.4 %         Asian       100 1.2 %       96 1.0 %       196 1.1 %         Other/Unknown       32 0.4%       18 0.2 %       50 0.2 %   |                       |                 | HIV (N | ON-AIDS | S) |       | AIDS    | HIV    | AIDS    |        |
|--|-----------------------|-----------------|--------|---------|----|-------|---------|--------|---------|--------|
| Female   2,376   27.6 %   2,723   27.9 %   5,099   27.8 %   2,723   27.9 %   13,252   72.2 %   |                       |                 |        |         | ,  |       |         |        |         |        |
| Female   |                       | Total           | 8,596  | 100.0 % |    | 9,755 | 100.0 % | 18,351 | 100.0 % |        |
| Female   | Sex Assigned at Birth |                 | -      |         |    |       |         | -      |         |        |
| NH Black   | •                     |                 | 2,376  | 27.6 %  |    | 2,723 | 27.9 %  | 5,099  | 27.8%   |        |
| NH Black 5,408 62.9 % 6,284 64.4 % 11,692 63.7 % Hispanic 1,446 16.8 % 1,546 15.8 % 2,992 16.3 % 1 NH White 1,421 16.5 % 1,564 16.0 % 2,985 16.3 % 1 NH White 1,421 16.5 % 1,564 16.0 % 2,985 16.3 % 1 NH White 1,421 16.5 % 1,564 16.0 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,564 16.0 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,564 16.0 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,564 16.0 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,564 16.0 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,695 16.0 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,695 16.0 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1,695 16.3 % 1 NH White 1,421 16.5 % 1 NH W  | •                     | Male            | 6,220  | 72.4 %  |    | 7,032 | 72.1 %  | 13,252 | 72.2 %  |        |
| Hispanic 1,446 16.8  | Race/Ethnicity        |                 |        |         |    |       |         |        |         |        |
| NH White 1,421 16.5 %  |                       | NH Black        | 5,408  | 62.9 %  |    | 6,284 | 64.4 %  | 11,692 | 63.7 %  |        |
| Multi-race 189 2.2 % 247 2.5 % 436 2.4 % 1 Asian 100 1.2 % 96 1.0 % 196 1.1 % 1 Other/Unknown 32 0.4 % 18 0.2 % 50 0.2 % 1  ****  ****  ***  ***  ***  ***  **   |                       | Hispanic        | 1,446  | 16.8 %  |    | 1,546 | 15.8 %  | 2,992  | 16.3 %  |        |
| Asian 100 1.2 % 96 1.0 % 196 1.1 % 18 0.2 % 50 0.2 % 18 0.2 % 50 0.2 % 18 0.2 % 50 0.2 % 18 0.2 % 50 0.2 % 19 0.2 % 19 0.0 % 12 0.0 % 13 19 46 0.5 % 8 0.1 % 54 0.3 % 10 19 12 0.0 % 13 19 46 0.5 % 8 0.1 % 54 0.3 % 19 0.9 % 19 0.5 % 19 0.9 % 19 0.5 % 19 0.0 |                       | NH White        | 1,421  | 16.5 %  |    | 1,564 | 16.0 %  | 2,985  | 16.3 %  |        |
| Age Category**    18 0.2 %   50 0.2 %  |                       | Multi-race      | 189    | 2.2 %   |    | 247   | 2.5 %   | 436    | 2.4 %   |        |
| Age Category**    13   |                       | Asian           | 100    | 1.2 %   |    | 96    | 1.0 %   | 196    | 1.1 %   |        |
| \$\begin{array}{c c c c c c c c c c c c c c c c c c c  |                       | Other/Unknown   | 32     | 0.4%    |    | 18    | 0.2 %   | 50     | 0.2 %   |        |
| 13-19  | Age Category**        |                 |        |         |    |       |         |        |         |        |
| 20-24   333   3.9 %  |                       | <13             | 12     | 0.1 %   |    | 0     | 0.0%    | 12     | 0.0 %   |        |
| 25-29 784 9.1% 207 2.1% 991 5.4% 40-49 1,656 19.3% 11,659 16.0% 3,215 17.5% 10,198 55.6% 10,198  |                       | 13-19           | 46     | 0.5 %   |    | 8     | 0.1 %   | 54     | 0.3 %   |        |
| 30-39  |                       | 20-24           | 333    | 3.9 %   |    | 61    | 0.6 %   | 394    | 2.1 %   |        |
| ## August  |                       | 25-29           | 784    | 9.1 %   |    | 207   | 2.1 %   | 991    | 5.4 %   |        |
| Transmission Risk  MSM   |                       | 30-39           | 2,326  | 27.0 %  |    | 1,161 | 11.9 %  | 3,487  | 19.0 %  |        |
| Transmission Risk  MSM   |                       | 40-49           | 1,656  | 19.3 %  |    | 1,559 | 16.0 %  | 3,215  | 17.5 %  |        |
| MSM 3,865 45.0 % 3,411 35.0 % 7,276 39.6 % 7 |                       | 50+             | 3,439  | 40.0 %  |    | 6,759 | 69.3 %  | 10,198 | 55.6 %  |        |
| PWID 1,146 13.3 %   2,212 22.7 %   3,358 18.3 %   10   | Transmission Risk     |                 |        |         |    |       |         |        |         |        |
| MSM/PWID 282 3.3% 502 5.1% 784 4.3% Heterosexual 2,911 33.9% 3,268 33.5% 6,179 33.7% Pediatric 110 1.3% 142 1.4% 252 1.4% No Reported Risk 280 3.2% 211 2.2% 491 2.7% 5,000 FEMALE 9,755   |                       | MSM             | 3,865  | 45.0 %  |    | 3,411 | 35.0 %  | 7,276  | 39.6 %  |        |
| Other * * * 9 0.1 % 11 0.1 %   |                       | PWID            | 1,146  | 13.3 %  |    | 2,212 | 22.7 %  | 3,358  | 18.3 %  |        |
| Heterosexual 2,911 33.9 %  |                       | MSM/PWID        | 282    | 3.3 %   |    | 502   | 5.1 %   | 784    | 4.3 %   |        |
| Pediatric 110 1.3 % 142 1.4 % 252 1.4 % No Reported Risk 280 3.2 % 211 2.2 % 491 2.7 % 18,351 20,000 MALE 9,755 10,000 5,000   |                       | Other           | *      | *       |    | 9     | 0.1 %   | 11     | 0.1 %   |        |
| No Reported Risk 280 3.2 % 211 2.2 % 491 2.7 % 20,00 18,351 20,000 15,000 5,000 Total N  |                       | Heterosexual    | 2,911  | 33.9 %  |    | 3,268 | 33.5 %  | 6,179  | 33.7 %  |        |
| Total N  FEMALE  9,755  18,351  20,00  15,000  5,000   |                       | Pediatric       | 110    | 1.3 %   |    | 142   | 1.4 %   | 252    | 1.4 %   |        |
| ● FEMALE ● MALE 15,000  8,596 9,755 10,000  Total N  |                       | No Reported Ris | k 280  | 3.2 %   |    | 211   | 2.2 %   | 491    | 2.7 %   |        |
| 8,596 9,755 10,000 Total N   |                       |                 |        |         |    |       |         | 18,    | 351     | 20,00  |
| 8,596 9,755 10,000 5,000 Total N   |                       | FEMALE          |        |         |    |       |         |        |         | 45.00  |
| Total N 5,000  |                       | : • MALE        |        |         |    |       |         |        |         | 15,000 |
| Total N 5,000  |                       |                 | 8      | ,596    |    | 9     | 7,755   |        |         | 10,00  |
| Total N  |                       | :               |        |         |    |       |         |        |         |        |
|  |                       |                 |        |         |    |       |         |        |         | 5,000  |
| HIV (NON-AIDS) AIDS HIV/AIDS   | Total N               | <u>:</u>        |        |         |    |       |         |        |         |        |
|  |                       |                 | HIV (N | ON-AIDS | 3) |       | AIDS    | HIV    | AIDS    |        |

\*Cell sizes <6 are suppressed.

\*\* Age as of December 31, 2021

Due to rounding, percentages may not add up to exactly 100%.

TABLE 10 By Race/Ethnicity and Selected Characteristics | 2021

| •                     |                  |        |         |     |       |          |      |           |   |
|-----------------------|------------------|--------|---------|-----|-------|----------|------|-----------|---|
|                       |                  |        | NH BL   | ACK |       | HISPANIC |      | NH WHIT   | Έ |
| •                     |                  | N      | %       |     | N     | %        | I    | N %       |   |
|                       | Total            | 11,692 | 100.0 % |     | 2,992 | 100.0 %  | 2,98 | 5 100.0 % |   |
| Sex Assigned at Birth |                  |        |         |     |       |          |      |           |   |
| •                     | Female           | 3,657  | 31.3 %  |     | 805   | 26.9 %   | 46   | 2 15.5 %  |   |
| •                     | Male             | 8,035  | 68.7 %  |     | 2,187 | 73.1 %   | 2,52 | 3 84.5 %  |   |
| Age Category**        |                  |        |         |     |       |          |      |           |   |
|                       | <13              | 6      | 0.1 %   |     | *     | *        |      | 0.0%      |   |
|                       | 13-19            | 42     | 0.4 %   |     | 9     | 0.3 %    |      | * *       |   |
|                       | 20-24            | 298    | 2.5 %   |     | 73    | 2.4 %    | 10   | 6 0.5 %   |   |
|                       | 25-29            | 725    | 6.2 %   |     | 141   | 4.7 %    | 81   | 6 2.9 %   |   |
|                       | 30-39            | 2,329  | 19.9 %  |     | 543   | 18.1 %   | 46   | 3 15.5 %  |   |
|                       | 40-49            | 1,982  | 17.0 %  |     | 595   | 19.9 %   | 49   | 4 16.5 %  |   |
|                       | 50+              | 6,310  | 54.0 %  |     | 1,627 | 54.4 %   | 1,92 | 4 64.5 %  |   |
| Transmission Risk     |                  |        |         |     |       |          |      |           |   |
|                       | MSM              | 4,259  | 36.4 %  |     | 973   | 32.5 %   | 1,75 | 5 58.8 %  |   |
|                       | PWID             | 1,978  | 16.9 %  |     | 749   | 25.0 %   | 53   | 6 18.0 %  |   |
|                       | MSM/PWID         | 403    | 3.5 %   |     | 165   | 5.5 %    | 17-  | 4 5.8 %   |   |
|                       | Other            | 6      | 0.1 %   |     | *     | *        |      | * *       |   |
|                       | Heterosexual     | 4,526  | 38.7 %  |     | 961   | 32.1 %   | 45   | 8 15.3 %  |   |
|                       | Pediatric        | 180    | 1.5 %   |     | 50    | 1.7 %    | 1    | 7 0.6 %   |   |
|                       | No Reported Risk | 340    | 2.9 %   |     | 93    | 3.1 %    | 4    | 2 1.4 %   |   |
| •                     |                  |        | 11,69   | 2   |       |          |      |           |   |
| •                     | FEMALE           |        | 11,00   |     |       |          |      |           |   |
|                       | MALE             |        |         |     |       |          |      |           |   |
|                       | MALE             |        |         |     |       |          |      |           |   |
| •                     |                  |        |         |     |       |          |      |           |   |
|                       |                  |        |         |     |       | 2,992    |      | 2,985     |   |
|                       |                  |        |         |     |       |          |      |           |   |
| Total N               |                  |        |         |     |       |          |      |           |   |
| •                     |                  |        | NH BL   | ACK |       | HISPANIC |      | NH WHIT   |   |

**Note** \*Cell sizes < 6 are suppressed.

\*\* Age as of December 31, 2021

Due to rounding, percentages may not add up to exactly 100%.

TABLE 11

By Sex Assigned at Birth and Selected Characteristics | 2021

|                   |                  | ASSIGNI | ED FEMALE | AT BIRTH | ASSIGN | IED MALE | AT BIRTH |                 |
|-------------------|------------------|---------|-----------|----------|--------|----------|----------|-----------------|
|                   |                  | N       | %         |          | N      | %        |          |                 |
|                   | Total            | 5,099   | 100.0 %   |          | 13,252 | 100.0 %  |          |                 |
| Race/Ethnicity    |                  |         |           |          | -, -   |          |          |                 |
| •                 | NH Black         | 3,657   | 71.7%     |          | 8,035  | 60.6%    |          |                 |
|                   | Hispanic         | 805     | 15.8%     |          | 2,187  | 16.5%    |          |                 |
|                   | NH White         | 462     | 9.1%      |          | 2,523  | 19.0%    |          |                 |
|                   | Multi-race       | 128     | 2.5%      |          | 308    | 2.3%     |          |                 |
|                   | Asian            | 36      | 0.7%      |          | 160    | 1.2%     |          |                 |
|                   | Other/Unknown    | 11      | 0.2%      |          | 39     | 0.3%     |          |                 |
| Age Category**    |                  |         |           |          |        |          |          |                 |
|                   | <13              | 9       | 0.2%      |          | *      | *        |          |                 |
|                   | 13-19            | 22      | 0.4%      |          | 32     | 0.2%     |          |                 |
|                   | 20-24            | 69      | 1.3%      |          | 325    | 2.4%     |          |                 |
|                   | 25-29            | 182     | 3.6%      |          | 809    | 6.1%     |          |                 |
|                   | 30-39            | 724     | 14.2%     |          | 2,763  | 20.8%    |          |                 |
|                   | 40-49            | 1,018   | 20.0%     |          | 2,197  | 16.6%    |          |                 |
|                   | 50+              | 3,075   | 60.3%     |          | 7,123  | 53.8%    |          |                 |
| Transmission Risk |                  |         |           |          |        |          |          |                 |
|                   | MSM              | 0       | 0.0%      |          | 7,276  | 54.9%    |          |                 |
|                   | PWID             | 1,222   | 24.0%     |          | 2,136  | 16.1%    |          |                 |
|                   | MSM/PWID         | 0       | 0.0%      |          | 784    | 5.9%     |          |                 |
|                   | Other            | *       | *         |          | 8      | 0.1%     |          |                 |
|                   | Heterosexual     | 3,696   | 72.5%     |          | 2,483  | 18.7%    |          |                 |
|                   | Pediatric        | 132     | 2.6%      |          | 120    | 0.9%     |          |                 |
|                   | No Reported Risk | 46      | 0.9%      |          | 445    | 3.4%     |          |                 |
|                   |                  |         |           |          |        | 13,252   |          | 4.5.000         |
|                   |                  |         |           |          |        | 13,232   |          | 15,000          |
|                   |                  |         |           |          |        |          |          | 12,000<br>9,000 |
|                   |                  |         | 5,099     |          |        |          |          | 6,000           |
|                   |                  |         |           |          |        |          |          | 3,000           |
| Total N           |                  |         |           |          |        |          |          | 3,000           |

ASSIGNED FEMALE AT BIRTH

ASSIGNED MALE AT BIRTH

\*Cell sizes <6 are suppressed.

\*\* Age as of December 31, 2021

Due to rounding, percentages may not add up to exactly 100%.

TABLE 12 By Gender Identity and Selected Characteristics | 2021

#### **GENDER IDENTITY**

| *                 |        |          |          | GENDEN   | 7EM1111 |                 |        |                    |       |  |  |  |
|-------------------|--------|----------|----------|----------|---------|-----------------|--------|--------------------|-------|--|--|--|
|                   | Cisger | nder Men | Cisgende | er Women |         | sgender<br>omen |        | Transgender<br>Men |       |  |  |  |
|                   | N      | %        | N        | %        | N       | %               | N      | %                  |       |  |  |  |
| Total             | 12,859 | 100.0 %  | 5,055    | 100.0 %  | 401     | 100.0 %         | 22     | 100.0 %            |       |  |  |  |
| Race/Ethnicity    |        |          |          |          |         |                 |        |                    |       |  |  |  |
| NH Black          | 7,752  | 60.3 %   | 3,629    | 71.8 %   | 289     | 72.1 %          | 15     | 68.2 %             |       |  |  |  |
| Hispanic          | 2,125  | 16.5 %   | 798      | 15.8 %   | 63      | 15.7 %          | *      | *                  |       |  |  |  |
| NH White          | 2,496  | 19.4 %   | 455      | 9.0 %    | 29      | 7.2 %           | *      | *                  |       |  |  |  |
| Multi-race        | 294    | 2.3 %    | 126      | 2.5 %    | 13      | 3.2 %           | *      | *                  |       |  |  |  |
| Asian             | 156    | 1.2 %    | 36       | 0.7 %    | *       | *               | 0      | 0.0%               |       |  |  |  |
| Other/Unknown     | 36     | 0.3 %    | 11       | 0.2 %    | *       | *               | 0      | 0.0%               |       |  |  |  |
| Age Category**    |        |          |          |          |         |                 |        |                    |       |  |  |  |
| <13               | *      | *        | 9        | 0.2 %    | 0       | 0.0%            | 0      | 0.0%               |       |  |  |  |
| 13-19             | 32     | 0.2 %    | 22       | 0.4 %    | 0       | 0.0%            | 0      | 0.0%               |       |  |  |  |
| 20-24             | 306    | 2.4 %    | 66       | 1.3 %    | 17      | 4.2 %           | *      | *                  |       |  |  |  |
| 25-29             | 759    | 5.9 %    | 177      | 3.5 %    | 49      | 12.2 %          | *      | *                  |       |  |  |  |
| 30-39             | 2,601  | 20.2 %   | 710      | 14.1 %   | 158     | 39.4 %          | 13     | 59.1 %             |       |  |  |  |
| 40-49             | 2,125  | 16.5 %   | 1,011    | 20.0 %   | 75      | 18.7 %          | *      | *                  |       |  |  |  |
| 50+               | 7,033  | 54.7 %   | 3,060    | 60.5 %   | 102     | 25.4 %          | *      | *                  |       |  |  |  |
| Transmission Risk |        |          |          |          |         |                 |        |                    |       |  |  |  |
| Sexual Contact    | 9,440  | 73.4 %   | 3,663    | 72.5 %   | 324     | 80.8 %          | 17     | 77.3 %             |       |  |  |  |
| PWID              | 2,850  | 22.2 %   | 1,214    | 24.0 %   | 72      | 18.0 %          | *      | *                  |       |  |  |  |
| Other             | 8      | 0.1 %    | *        | *        | 0       | 0.0%            | 0      | 0.0%               |       |  |  |  |
| Pediatric         | 120    | 0.9 %    | 129      | 2.6 %    | *       | *               | *      | *                  |       |  |  |  |
| No Reported Risk  | 441    | 3.4 %    | 46       | 0.9 %    | *       | *               | 0      | 0.0%               |       |  |  |  |
| :                 | 12     | ,859     |          |          |         |                 |        |                    | 15,00 |  |  |  |
|                   |        |          |          |          |         |                 |        |                    | 12,00 |  |  |  |
|                   |        |          |          |          |         |                 |        |                    | 9,00  |  |  |  |
|                   |        |          | 5,0      | 055      |         |                 |        |                    | 6,00  |  |  |  |
| :                 |        |          |          |          |         | 404             |        | 0.0                | 3,00  |  |  |  |
| Total N           |        |          |          |          |         | 401             |        | 22                 | 3,30  |  |  |  |
|                   | Cisge  | nder Men | Cisgend  | er Women | Transge | nder Women      | Transg | ender Men          |       |  |  |  |
|                   |        |          |          |          |         |                 |        |                    |       |  |  |  |

\*Cell sizes <6 are suppressed. Note

Due to rounding, percentages may not add up to exactly 100%.

Gender identity is often not recorded in medical records. Sex assigned at birth was used to determine gender identity where no additional information was present. The prevalence among transgender women, transgender men, and those cases with additional gender identities is assumed to be higher. Individuals identifying as non-binary (n=14) were excluded from the table due to small cell sizes.

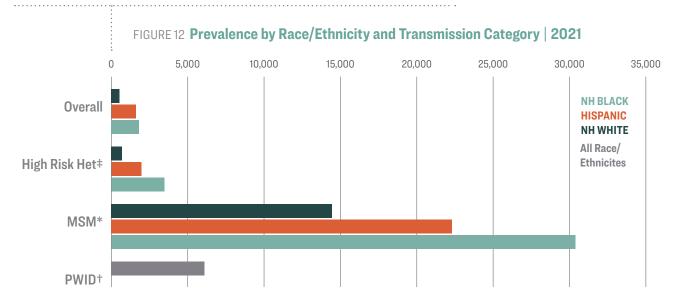
<sup>\*\*</sup>Age as of December 31, 2021

TABLE 13

Prevalence by Sex and Race/Ethnicity | 2021

|                           | POPULATION     | PLWHA  | <b>RATE PER 100,000</b> |  |
|---------------------------|----------------|--------|-------------------------|--|
| Sex Assigned at Birth     |                |        |                         |  |
| Female                    | 806,193        | 5,099  | 632.5                   |  |
| Male                      | 719,813        | 13,252 | 1,841.0                 |  |
| Race/Ethnicity            |                |        |                         |  |
| Hispanic                  | 187,611        | 2,992  | 1,594.8                 |  |
| NH Black                  | 644,287        | 11,692 | 1,814.7                 |  |
| NH White                  | 562,585        | 2,985  | 530.6                   |  |
| Asian                     | 95,521         | 196    | 205.2                   |  |
| AIAN                      | 3,498          | 39     | 1,114.9                 |  |
| NHPI                      | *              | 10     | *                       |  |
| Other Race                | 4,105          | *      | *                       |  |
| Multi-racial              | 27,942         | 436    | 1,560.4                 |  |
| Sex Assigned at Birth and | Race/Ethnicity |        |                         |  |
| Hispanic Female           | 94,484         | 805    | 852.0                   |  |
| NH Black Female           | 353,319        | 3,657  | 1,035.0                 |  |
| NH White Female           | 290,025        | 462    | 159.3                   |  |
| Asian Female              | 49,137         | 36     | 73.3                    |  |
| AIAN Female               | 1,882          | 8      | 425.1                   |  |
| NHPI Female               | *              | *      | *                       |  |
| Other race Female         | 2,014          | 0      | 0.0                     |  |
| Multi-racial Female       | 15,095         | 128    | 848.0                   |  |
| Hispanic Male             | 93,127         | 2,187  | 2,348.4                 |  |
| NH Black Male             | 290,968        | 8,035  | 2,761.5                 |  |
| NH White Male             | 272,560        | 2,523  | 925.7                   |  |
| Asian Male                | 46,384         | 160    | 344.9                   |  |
| AIAN Male                 | 1,616          | 31     | 1,918.3                 |  |
| NHPI Male                 | *              | 7      | *                       |  |
| Other race Male           | *              | *      | *                       |  |
| Multi-racial Male         | 12,847         | 308    | 2,397.4                 |  |
| Total                     | 1,526,006      | 18,351 | 1,202.6                 |  |

\*Cell sizes <6 are suppressed. Rates and case counts in categories with <500 population are also suppressed. Rates were calculated using the 2010 decennial census data.



\*The population of individuals 18 and older living below poverty level is used as a proxy for heterosexuals at increased risk for HIV infection.

\*\*MSM total population based on estimated number of active MSM in the past 5 years.

† The total number of Philadelphia residents who have ever injected drugs is estimated to be 55,000. Estimation methods based on Lansky A, Finlayson T, Johnson C, Holtzman D, Wejnert C, Mitsch A, et al. (2014) Estimating the Number of Persons Who Inject Drugs in the United States by Meta-Analysis to Calculate National Rates of HIV and Hepatitis C Virus Infections. PLoS ONE 9(5): e97596. For HIV prevalence, ever PWID is used instead of active  $PWID\ since\ many\ people\ who\ acquired\ HIV\ through\ injection\ drug\ use\ no\ longer\ inject\ drugs.\ This\ is\ roughly\ 4.5\%\ of\ properties and the properties of\ properties and\ propertie$ Philadelphia residents 18 and older. Since the demographic composition of PWID has shifted overtime, estimates of ever PWID by race/ethnicity are not reliable.

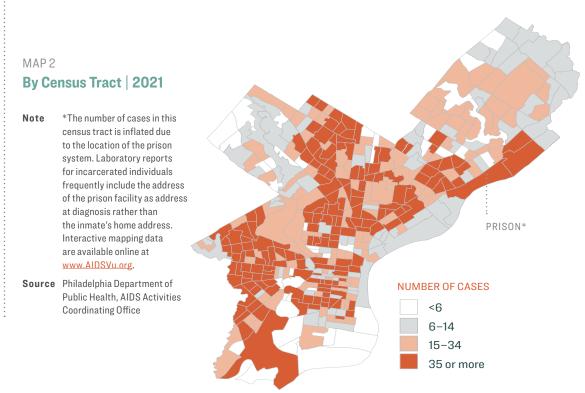


TABLE 14 By Hepatitis B or C Co-Infection and Selected Characteristics | 2020

| •                     | Hepatit | tis B/HIV | <ul><li>Hepatit</li></ul> | is C/HIV | <ul><li>HIV Total</li></ul> |        |  |  |
|-----------------------|---------|-----------|---------------------------|----------|-----------------------------|--------|--|--|
|                       | N       | Row%      | N                         | Row%     | N                           | Row%   |  |  |
| Total                 | 1,944   | 10.6%     | 5,450                     | 29.7%    | 18,351                      | 100.0% |  |  |
| Sex Assigned at Birth |         |           |                           |          |                             |        |  |  |
| Female                | 430     | 8.4%      | 1,573                     | 30.8%    | 5,099                       | 100.0% |  |  |
| Male                  | 1,514   | 11.4%     | 3,877                     | 29.3%    | 13,252                      | 100.0% |  |  |
| Race/Ethnicity        |         |           |                           |          |                             |        |  |  |
| NH Black              | 1,342   | 11.5%     | 3,018                     | 25.8%    | 11,692                      | 100.0% |  |  |
| Hispanic              | 210     | 7.0%      | 1,083                     | 36.3%    | 2,985                       | 100.0% |  |  |
| NH White              | 306     | 10.3%     | 1,130                     | 37.9%    | 2,985                       | 100.0% |  |  |
| Multi-race            | 60      | 13.8%     | 189                       | 43.3%    | 436                         | 100.0% |  |  |
| Asian                 | 24      | 12.2%     | 26                        | 13.3%    | 196                         | 100.0% |  |  |
| Other/Unknown         | *       | *         | *                         | *        | 50                          | 100.0% |  |  |
| Age Category**        |         |           |                           |          |                             |        |  |  |
| <13                   | 0       | 0.0%      | 6                         | 50.0%    | 12                          | 100.0% |  |  |
| 13-19                 | *       | *         | *                         | *        | 54                          | 100.0% |  |  |
| 20-24                 | 7       | 1.8%      | 11                        | 2.8%     | 394                         | 100.0% |  |  |
| 25-29                 | 15      | 1.5%      | 72                        | 7.3%     | 991                         | 100.0% |  |  |
| 30-39                 | 97      | 2.8%      | 415                       | 11.9%    | 3,487                       | 100.0% |  |  |
| 40-49                 | 305     | 9.5%      | 699                       | 21.7%    | 3,215                       | 100.0% |  |  |
| 50+                   | 1,519   | 14.9%     | 4,426                     | 43.4%    | 10,198                      | 100.0% |  |  |
| Transmission Risk     |         |           |                           |          |                             |        |  |  |
| MSM                   | 677     | 9.3%      | 779                       | 10.7%    | 7,276                       | 100.0% |  |  |
| PWID                  | 601     | 17.9%     | 2,898                     | 86.3%    | 3,358                       | 100.0% |  |  |
| MSM/PWID              | 111     | 14.2%     | 497                       | 63.4%    | 784                         | 100.0% |  |  |
| Heterosexual          | 493     | 8.0%      | 1,147                     | 18.6%    | 6,179                       | 100.0% |  |  |
| Pediatric             | 7       | 2.8%      | 12                        | 4.8%     | 252                         | 100.0% |  |  |
| Other                 | *       | *         | 9                         | 81.8%    | 11                          | 100.0% |  |  |
| No Risk Reported      | 54      | 11.0%     | 108                       | 22.0%    | 491                         | 100.0% |  |  |

Note \*Cell sizes <6 are suppressed

Data represents proportion of PLWDH with current HBV and/or HCV infection as of December 31st, 2021. Row, not column, percentages are presented here.

Source Philadelphia Department of Public Health, AIDS Activities Coordinating Office; Philadelphia Department of Public Health, Division of Disease Control, Viral Hepatitis Program.

<sup>\*\*</sup>Age as of December 31, 2021

# Perinatal Exposures

#### TABLE 15 By Selected Demographics | 2017 - 2021

Perinatal exposures represent instances where HIV transmission might have occurred from pregnant mother/ parent to child during pregnancy, labor and delivery (L&D), or breast/chest feeding. Incidence of HIV infection among perinatally exposed children in Philadelphia has remained low in the past five years due to local perinatal prevention efforts. Case definitions for infant HIV status are based on recommended clinical and/or laboratory diagnostic algorithms. HIV negative definitive, HIV negative presumptive, and HIV indeterminate are detailed classifications of perinatal exposures, while confirmed HIV infection reflects a true pediatric parent-to-child transmission of HIV to an infant.

For more information on HIV case definitions, please visit: https://www.cdc.gov/mmwr/preview/mmwrhtml/ rr6303a1.htm

This table shows both demographic and clinical characteristics for the mother/parent and child before, during, and after birth. Maternal/Parental viral load represents the most recent viral load before birth; prenatal care was defined as at least 1 medical visit during pregnancy; maternal/parental timing at diagnosis was categorized as early (any time before L&D), late (during or after L&D), and unknown.

#### YEAR OF EXPOSURE

|                            |            | 2017    |    | 2018    |    | 2019    | 2  | 2020    | 2021 |         |  |
|----------------------------|------------|---------|----|---------|----|---------|----|---------|------|---------|--|
|                            | N          | %       | N  | %       | N  | %       | N  | %       | N    | %       |  |
| Total                      | 88         | 100.0 % | 92 | 100.0 % | 67 | 100.0 % | 81 | 100.0 % | 74   | 100.0 % |  |
| Infant Sex Assigned at Bir | rth        |         |    |         |    |         |    |         |      |         |  |
| Female                     | 45         | 51.1 %  | 52 | 56.5 %  | 30 | 44.8 %  | 45 | 55.6 %  | 36   | 48.6 %  |  |
| Male                       | 43         | 48.9 %  | 40 | 43.5 %  | 37 | 55.2 %  | 36 | 44.4 %  | 38   | 51.4 %  |  |
| Mother/Parent's Age at D   | elivery    |         |    |         |    |         |    |         |      |         |  |
| 13 - 19                    | *          | *       | *  | *       | *  | *       | *  | *       | 0    | 0.0%    |  |
| 20 - 24                    | 13         | 14.8 %  | 12 | 13.0 %  | 7  | 10.4 %  | 6  | 7.4 %   | *    | *       |  |
| 25 - 34                    | 51         | 58.0 %  | 55 | 59.8 %  | 38 | 56.7 %  | 46 | 56.8 %  | 45   | 60.8 %  |  |
| 35+                        | 23         | 26.1 %  | 24 | 26.1%   | 19 | 28.4 %  | 27 | 33.3 %  | 24   | 32.4 %  |  |
| Mother/Parent's Race/Et    | hnicity    |         |    |         |    |         |    |         |      |         |  |
| NH Black                   | 65         | 73.9 %  | 64 | 69.6 %  | 47 | 70.1 %  | 59 | 72.8 %  | 54   | 73.0 %  |  |
| Hispanic                   | 13         | 14.8 %  | 8  | 8.7 %   | 6  | 9.0 %   | 8  | 9.9 %   | 9    | 12.2 %  |  |
| NH White                   | *          | *       | 15 | 16.3 %  | 9  | 13.4 %  | 11 | 13.6 %  | 9    | 12.2 %  |  |
| Multi-race                 | *          | *       | *  | *       | *  | *       | *  | *       | *    | *       |  |
| Asian                      | *          | *       | 0  | 0.0%    | 0  | 0.0%    | 0  | 0.0%    | 0    | 0.0%    |  |
| Mother/Parent's Transmi    | ssion Risk |         |    |         |    |         |    |         |      |         |  |
| PWID                       | 12         | 13.6 %  | 12 | 13.0 %  | 7  | 10.4 %  | 7  | 8.6 %   | 9    | 12.2 %  |  |
| Heterosexual               | 65         | 73.9 %  | 69 | 75.0 %  | 51 | 76.1 %  | 64 | 79.0 %  | 60   | 81.1 %  |  |
| Pediatric                  | 10         | 11.4 %  | 9  | 9.8 %   | 7  | 10.4 %  | 7  | 8.6 %   | *    | *       |  |
| NRR/Unknown                | *          | *       | *  | *       | *  | *       | *  | *       | *    | *       |  |

Note \*Cell sizes < 6 are suppressed.

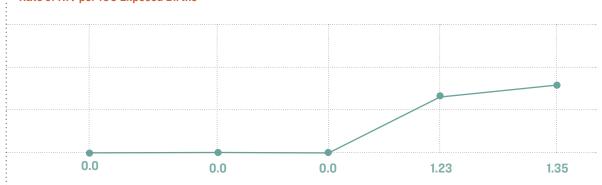
Due to rounding, percentages may not add up to exactly 100%.

# Perinatal Exposures

TABLE 16 By Selected Clinical Characteristics | 2017 - 2021

| •                                  | YEAR OF EXPOSURE |         |    |         |    |         |    |         |    |         |  |  |  |
|------------------------------------|------------------|---------|----|---------|----|---------|----|---------|----|---------|--|--|--|
|                                    |                  | 2017    |    | 2018    |    | 2019    | :  | 2020    |    | 2021    |  |  |  |
|                                    | N                | %       | N  | %       | N  | %       | N  | %       | N  | %       |  |  |  |
| Total                              | 88               | 100.0 % | 92 | 100.0 % | 67 | 100.0 % | 81 | 100.0 % | 74 | 100.0 % |  |  |  |
| HIV positive, definitive           | 0                | 0.0%    | 0  | 0.0%    | 0  | 0.0%    | 1  | 1.2 %   | 1  | 1.4 %   |  |  |  |
| HIV indeterminate                  | 1                | 1.1 %   | 3  | 3.3 %   | 2  | 3.0 %   | 16 | 19.8 %  | 16 | 21.6 %  |  |  |  |
| HIV negative, definitive           | 65               | 73.9 %  | 55 | 59.8 %  | 41 | 61.2 %  | 33 | 40.7 %  | 23 | 31.1 %  |  |  |  |
| HIV negative, presumptive          | 22               | 25.0 %  | 34 | 37.0 %  | 24 | 35.8 %  | 31 | 38.3 %  | 34 | 46.0 %  |  |  |  |
| Maternal/Parental Viral Load       | ł                |         |    |         |    |         |    |         |    |         |  |  |  |
| >=1000                             | 7                | 8.0 %   | 8  | 8.7 %   | 6  | 9.0 %   | 9  | 11.1 %  | 11 | 14.9 %  |  |  |  |
| <1000                              | 78               | 88.6 %  | 80 | 87.0 %  | 56 | 83.6 %  | 65 | 80.3 %  | 57 | 77.0 %  |  |  |  |
| Unknown                            | 3                | 3.4 %   | 4  | 4.4 %   | 5  | 7.5 %   | 7  | 8.6 %   | 6  | 8.1 %   |  |  |  |
| Maternal/Parental Prenatal         | Care             |         |    |         |    |         |    |         |    |         |  |  |  |
| No                                 | 12               | 13.6 %  | 13 | 14.1 %  | 5  | 7.5 %   | 4  | 4.9 %   | 3  | 4.1 %   |  |  |  |
| Yes                                | 76               | 86.4 %  | 79 | 85.9 %  | 62 | 92.5 %  | 77 | 95.1 %  | 71 | 95.9 %  |  |  |  |
| <b>ARV Medications During Preg</b> | gnancy           | ,       |    |         |    |         |    |         |    |         |  |  |  |
| No                                 | 1                | 1.1 %   | 4  | 4.4 %   | 3  | 4.5 %   | 6  | 7.4 %   | 6  | 8.1 %   |  |  |  |
| Unknown                            | 6                | 6.8 %   | 7  | 7.6 %   | 0  | 0.0%    | 1  | 1.2 %   | 1  | 1.4 %   |  |  |  |
| Yes                                | 81               | 92.0 %  | 81 | 88.0 %  | 64 | 95.5 %  | 74 | 91.4 %  | 67 | 90.5 %  |  |  |  |
| Neonatal ARV                       |                  |         |    |         |    |         |    |         |    |         |  |  |  |
| Unknown :                          | 2                | 2.3 %   | 2  | 2.2 %   | 2  | 3.0 %   | 5  | 6.2 %   | 2  | 2.7 %   |  |  |  |
| Yes                                | 86               | 97.7 %  | 90 | 97.8 %  | 65 | 97.0 %  | 76 | 93.8 %  | 72 | 97.3 %  |  |  |  |

# Rate of HIV per 100 Exposed Births



Due to rounding, percentages may not add up to exactly 100%.

# **HIV-Related Deaths**

#### TABLE 17

#### HIV-Related Death by Year and Select Characteristics, Philadelphia | 2018 - 2020

It is important to monitor the proportion of deaths among PLWDH for which HIV is noted as an underlying cause of death. Delays in death ascertainment activities may contribute to a higher proportion of cases with unknown cause of death in more recent years.

|                     | <b>2018</b> (n=344) |        |    |        |    |        | <b>2019</b> (n=363) |        |    |        |    |        | <b>2020</b> (n=441) |        |    |        |    |        |
|---------------------|---------------------|--------|----|--------|----|--------|---------------------|--------|----|--------|----|--------|---------------------|--------|----|--------|----|--------|
|                     |                     | No     | Un | known  |    | Yes    |                     | No     | Un | known  |    | Yes    |                     | No     | Ur | ıknown |    | Yes    |
|                     | N                   | Col%   | N  | Col%   | N  | Col%   | N                   | Col%   | N  | Col%   | N  | Col%   | N                   | Col%   | N  | Col%   | N  | Col%   |
| Total               | 280                 | 100.0% | 7  | 100.0% | 57 | 100.0% | 309                 | 100.0% | *  | 100.0% | 50 | 100.0% | 359                 | 100.0% | *  | 100.0% | 47 | 100.0% |
| Sex Assigned at     | Birth               |        |    |        |    |        |                     |        |    |        |    |        |                     |        |    |        |    |        |
| Female              | 64                  | 22.9%  | *  | *      | 15 | 26.3%  | 78                  | 25.2%  | 0  | 0.0%   | 16 | 32.0%  | 91                  | 25.3%  | *  | *      | 24 | 51.1%  |
| Male                | 216                 | 77.1%  | *  | *      | 42 | 73.7%  | 231                 | 74.8%  | *  | *      | 34 | 68.0%  | 268                 | 74.7%  | *  | *      | 23 | 48.9%  |
| Race/Ethnicity      |                     |        |    |        |    |        |                     |        |    |        |    |        |                     |        |    |        |    |        |
| NH Black            | 166                 | 59.3%  | *  | *      | 36 | 63.2%  | 189                 | 61.2%  | *  | *      | 32 | 64.0%  | 224                 | 62.4%  | *  | *      | 35 | 74.5%  |
| Hispanic            | 34                  | 12.1%  | *  | *      | 9  | 15.8%  | 38                  | 12.3%  | 0  | 0.0%   | 6  | 12.0%  | 54                  | 15.0%  | *  | *      | 7  | 14.9%  |
| NH White            | 69                  | 24.6%  | 0  | 0.0%   | 10 | 17.5%  | 66                  | 21.4%  | *  | *      | 9  | 18.0%  | 66                  | 18.4%  | *  | *      | *  | *      |
| Multi-race          | 10                  | 3.6%   | 0  | 0.0%   | *  | *      | 12                  | 3.9%   | 0  | 0.0%   | *  | *      | 14                  | 3.9%   | 0  | 0.0%   | *  | *      |
| Other/Unk           | *                   | *      | 0  | 0.0%   | 0  | 0.0%   | *                   | *      | 0  | 0.0%   | *  | *      | 0                   | 0.0%   | 0  | 0.0%   | 0  | 0.0%   |
| Asian               | 0                   | 0.0%   | 0  | 0.0%   | 0  | 0.0%   | *                   | *      | 0  | 0.0%   | 0  | 0.0%   | *                   | *      | 0  | 0.0%   | 0  | 0.0%   |
| Age at HIV Dx       |                     |        |    |        |    |        |                     |        |    |        |    |        |                     |        |    |        |    |        |
| 0 - 12              | *                   | *      | 0  | 0.0%   | 0  | 0.0%   | 0                   | 0.0%   | 0  | 0.0%   | *  | *      | *                   | *      | *  | *      | *  | *      |
| 13 - 19             | *                   | *      | 0  | 0.0%   | *  | *      | *                   | *      | 0  | 0.0%   | *  | *      | 8                   | 2.2%   | 0  | 0.0%   | *  | *      |
| 20 - 24             | 21                  | 7.5%   | *  | *      | *  | *      | 24                  | 7.8%   | 0  | 0.0%   | *  | *      | 32                  | 8.9%   | *  | *      | *  | *      |
| 25 - 29             | 27                  | 9.6%   | *  | *      | 10 | 17.5%  | 41                  | 13.3%  | 0  | 0.0%   | *  | *      | 43                  | 12.0%  | 0  | 0.0%   | 8  | 17.0%  |
| 30 - 39             | 95                  | 33.9%  | *  | *      | 17 | 29.8%  | 106                 | 34.3%  | *  | *      | 14 | 28.0%  | 116                 | 32.3%  | *  | *      | 16 | 34.0%  |
| 40 - 49             | 64                  | 22.9%  | *  | *      | 18 | 31.6%  | 71                  | 23.0%  | *  | *      | 13 | 26.0%  | 101                 | 28.1%  | *  | *      | 12 | 25.5%  |
| 50+                 | 68                  | 24.3%  | *  | *      | 7  | 12.3%  | 62                  | 20.1%  | 0  | 0.0%   | 12 | 24.0%  | 58                  | 16.2%  | 0  | 0.0%   | 7  | 14.9%  |
| Transmission Ri     | sk                  |        |    |        |    |        |                     |        |    |        |    |        |                     |        |    |        |    |        |
| MSM                 | 55                  | 19.6%  | *  | *      | 22 | 38.6%  | 82                  | 26.5%  | 0  | 0.0%   | 12 | 24.0%  | 102                 | 28.4%  | *  | *      | 7  | 14.9%  |
| PWID                | 104                 | 37.1%  | *  | *      | 13 | 22.8%  | 121                 | 39.2%  | *  | *      | 16 | 32.0%  | 126                 | 35.1%  | *  | *      | 13 | 27.7%  |
| MSM/PWID            | 21                  | 7.5%   | 0  | 0.0%   | *  | *      | 11                  | 3.6%   | 0  | 0.0%   | *  | *      | 23                  | 6.4%   | 0  | 0.0%   | *  | *      |
| Heterosexual        | 87                  | 31.1%  | *  | *      | 19 | 33.3%  | 91                  | 29.4%  | *  | *      | 18 | 36.0%  | 103                 | 28.7%  | 0  | 0.0%   | 23 | 48.9%  |
| Pediatric           | *                   | *      | 0  | 0.0%   | 0  | 0.0%   | 0                   | 0.0%   | 0  | 0.0%   | *  | *      | *                   | *      | *  | *      | *  | *      |
| Other               | *                   | *      | 0  | 0.0%   | 0  | 0.0%   | 0                   | 0.0%   | 0  | 0.0%   | 0  | 0.0%   | 0                   | 0.0%   | 0  | 0.0%   | 0  | 0.0%   |
| No Reported<br>Risk | 10                  | 3.6%   | 0  | 0.0%   | *  | *      | *                   | *      | 0  | 0.0%   | *  | *      | *                   | *      | 0  | 0.0%   | *  | *      |

**Note** \*Cell sizes <6 are suppressed.

2021 data not shown due to delays in reporting cause of death Due to rounding, percentages may not add up to exactly 100%.

# Reporting Information

#### Who Must Report?

All HIV Testing Providers, Health Care Providers & Laboratories

# What Test Results Must Be Reported?

- All results, including: Positive, Negative & Indeterminate will be reported to the PDPH including if the patient is determined to have either:
  - a confirmed HIV infection
  - a probable or possible HIV infection (including cases where additional testing is needed to confirm the diagnosis)
- **Preliminary Positive Results** including instances where no supplemental/confirmatory testing was performed or when supplemental/confirmatory testing was negative
- Negative and indeterminate Results including test results for HIV infection within 180 days of (before, after, or on the same date as) the HIV diagnosis. The negative/ indeterminate test results are needed to recognize infections as early or acute when transmission to others is more likely and intervention is more urgent.
- Results of all CD4 counts and HIV viral loads including undetectable results
- **HIV genotype sequence data** (FASTA or FASTQ format)

# What Cases Need to be Reported?

- All individuals who are Philadelphia residents AND
- All individuals who are tested in Philadelphia or receive care at a Philadelphia based facility or provider.
- Pregnancy in an HIV-infected person
- New HIV-positive result in a pregnant person
- Birth of an infant to an HIV-infected person

# When Do I Need to Report?

The following tests results or events need to be reported by telephone to the PDPH within 1 business day of the result or the confirmation of the event:

- Confirmed or suspected acute HIV infection (Call 215-685-4781 to report a case)
- 2. Pregnancy in an HIV-infected pregnant person (Call 215-685-4786 to report a case)
- 3. New HIV-positive result in a pregnant person (Call 215-685-4786 to report a case)
- 4. Birth of an infant to an HIV-infected person (Call 215-685-4786 to report a case)

All other test results and HIV case reports must be reported to the PDPH within 5 business days of the receipt.

# **How Do I Submit a Report?**

Mail the completed HIV Case Report Forms to the Philadelphia Department of Public Health.

To mail forms, please use these steps:

- 1. Place the forms in a sealed envelope that states: Confidential, to be opened by addressee only
- 2. Place the first envelope into another sealed envelope and address to:

Philadelphia Department of Public Health Attention: Melissa Miller P.O. Box 58909 Philadelphia, PA 19102-8909

For reporting questions, please call Melissa Miller (215-685-4781).

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Additional contributions also made by the following groups: AACO ISU, Prevention, and EHE, as well as PDPH Viral Hepatitis.

#### TO OUR READERS:

The AACO Surveillance Unit of the Philadelphia Department of Public Health, which conducts HIV surveillance for the City of Philadelphia, produces this report. The data in this report reflects cases diagnosed through December 2021 and reported through June 2022.

HIV surveillance is the ongoing and systematic collection, analysis, and dissemination of population-based information on HIV. There are two basic types of surveillance; active and passive. Passive surveillance is submission of HIV case reports from physicians, laboratories, and other individuals or institutions without having to regularly contact the reporting sources. Active surveillance employs strategies intended to identify unreported cases, and depends on secondary information sources for leads e.g., hospitals, clinics, physician offices, laboratories. Review of medical charts at provider sites or via telephone with facility staff are completed to establish cases of HIV infection and to obtain information critical to completing HIV case reports.

The HIV case count in Philadelphia results from a combination of active and passive surveillance. Physicians began reporting AIDS cases to the Department of Health in 1983. Name-based HIV reporting began in October, 2005.

New HIV reporting regulations were approved by the City of Philadelphia's Board of Health in November 2016 and went into effect in January of 2017.

Any questions about this report and/or requests for data can be directed to: Melissa Miller, MPH AACOEPI@PHILA.GOV Please allow at least 10 business days for all data requests.