

**AIDS Activities Coordinating Office (AACO)  
Surveillance Report**

# HIV

IN PHILADELPHIA

*Cases reported through June 2018*

2017

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CITY OF PHILADELPHIA

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# Introduction

The AIDS Activities Coordinating Office (AACO) Surveillance Report is the annual report presenting data on human immunodeficiency virus (HIV) infections in the City of Philadelphia. Data in this report include persons diagnosed through December 31, 2017 and reported through June 30, 2018. The number of newly diagnosed HIV cases has been on a steady decline since the mid-2000s (Figure 3) consistent with national trends. In addition, Philadelphia has a similar percentage of HIV-positive individuals in care when compared to national data. This report highlights these and other notable trends observed through 2017. By collecting, analyzing, and publishing the most recent data available, AACO is helping our partners initiate, target, and focus their outreach, testing, prevention, and care approaches across the City to ensure that resources and efforts are directed to populations in greatest need.

## Report Changes

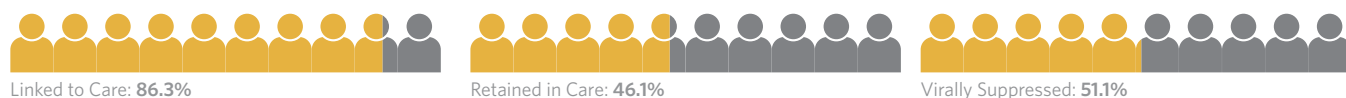
The authors would like to point out that the 2017 HIV Surveillance Report includes new information and figures, including a Goals and Evaluation Dashboard (Table 1), an HCV Continuum of Care among persons living with HIV (Figure 5), and a table on HIV mortality (Table 17). With the addition of these new tables, we hope to inform readers of the ongoing efforts by the community and local health department to help prevent HIV, reduce disparities related to HIV, and improve the lives of all people living with HIV. In 2017 the Philadelphia Department of Public Health changed its method for identifying heterosexual transmission of HIV in order to align with the Centers for Disease Control and Prevention (CDC) standards for risk factor collection. Those assigned female sex at birth who reported sex with men of unknown HIV status and no other risk factors are presumed heterosexual transmission risk.

Those assigned male sex at birth who reported sex with women of unknown HIV status and no other risk factor are classified as No Risk Reported (NRR). This method for identifying heterosexual transmission risk is reflected in the 2017 newly diagnosed cases but cannot be applied retroactively to HIV cases diagnosed prior to 2017. Because of this, the proportion and rate of heterosexuals newly diagnosed with HIV in 2017 are not comparable to those diagnosed in all years prior to 2017.

All rates presented are per 100,000 population. Rates for the general population and by race, sex, and age are calculated from the 2010 decennial census data. Rates by transmission risk (MSM, PWID, at-risk heterosexuals) are based on the most recent population estimates. Please read all table titles and footnotes carefully to ensure a complete understanding of the displayed data.

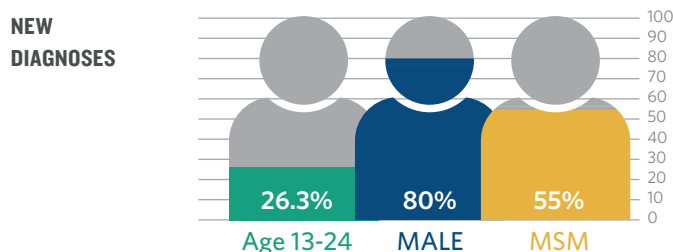
## HIV Continuum of Care

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 both individual health as well as slowing the spread of new HIV infections. The Continuum depicts the percentage of people living with HIV at various levels of engagement in care and highlights various areas in which Philadelphia is exceeding national outcomes. The Continuum (Figure 1) includes the percentage of people with new diagnoses 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 people 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 people who were virally suppressed, defined as a viral load of <200 copies/mL at last measure in 2017.



## Diagnoses of HIV Infection and Diagnoses of Infection Classified as Stage 3 (AIDS)

Individuals aged 13-24 accounted for 26.3% of all newly diagnosed HIV infections in 2017 (Table 2). Those whose sex at birth was male (80.0%), and those reported as MSM (55.0%) made up the largest proportions of new diagnoses. The rate of new HIV diagnoses in 2017 was higher among MSM (1,022.7 per 100,000) compared to PWID (74.3 per 100,000) and at-risk heterosexuals, defined as individuals over the age of 18 who are living in poverty, (41.2 per 100,000) (Figure 2). Racial/ethnic health disparities in Philadelphia persist and mirror disparities observed across the nation.



The percentages presented in this continuum are based on all persons living with HIV (both diagnosed and undiagnosed). Among persons newly diagnosed with HIV disease in 2017, 86.3% were linked to HIV medical care within 1 month of their diagnosis. However, under half (46.1%) of all people living with HIV in Philadelphia were retained in HIV medical care in 2017. In addition, 51.1% of all people living with HIV in Philadelphia were virally suppressed at their most recent viral load in 2017 (regardless of their retention in care status). Identifying new opportunities to improve linkage to care, retention in care, and viral suppression are vital to improving the health of HIV-positive individuals and reducing the rate of HIV transmission.

Non-Hispanic Blacks continue to be affected by HIV more than any other race/ethnicity group. In 2017, the highest rate of new HIV diagnosis was among non-Hispanic Blacks (53.6 per 100,000 population) followed by Hispanics/Latinx (44.9) and non-Hispanic whites (11.4) (Table 3). New AIDS diagnoses in Philadelphia were comprised primarily of males (72.0%), with MSM (36.4%), and those aged 50 and older (32.3%) representing the largest proportion of transmission and age categories, respectively (Table 7). Of all cases newly diagnosed with HIV in 2017, 18.8% had a concurrent diagnosis of AIDS, defined as a diagnosis of AIDS within 3 months of initial HIV diagnosis (Table 5). Concurrent diagnoses of AIDS and HIV infection represent missed opportunities for early HIV diagnosis. While the overall number of concurrent diagnoses has decreased since 2013, certain subpopulations have had better outcomes than others. Between 2013 and 2017, concurrent diagnoses among MSM (18.3% vs 13.9%) have fallen below the citywide average of 18.8%, but the same is not true for Heterosexuals (29.5% vs 20.4%) and PWID (24.2% vs 23.7%).

## Estimates of HIV Incidence

Incidence of disease is defined as the number of new infections in a given time period, typically one year, regardless of when those infections were diagnosed. HIV diagnoses indicate when a person was diagnosed with HIV, not when the person was infected. Due to the nature of HIV infection, true incidence is difficult to measure. Recent infection is rarely accompanied with symptoms, and persons are often unaware of their exposure. HIV incidence estimates based on a CD4 depletion model can be found in Table 6.

There were an estimated 450 new HIV transmissions in Philadelphia in 2016. The highest rates of HIV infection occurred among men (47.2 per 100,000 population), persons aged 25-34 (61.0), and MSM (775.0) (Table 6). The significant declines in recent HIV infections are due, in part, to decreases in new infections among heterosexuals and people who inject drugs. These estimates provide valuable information on where additional education and prevention efforts are needed.

## Prevalence of HIV Infection among Philadelphia Residents

Among people living with HIV infection diagnosed through 2017, those assigned male sex at birth (71.9%), MSM (37.1%), and those aged 50 and older (52.0%) accounted for the largest percentages by sex, transmission risk, and age group, respectively (Table 8). HIV prevalence was highest among non-Hispanic Blacks (1,904.9 per 100,000 population), followed by Hispanic/Latinx (1,574.0) (Table 12).

There are no reliable estimates available for the racial composition of the population of PWID. Because of this, prevalence by race among PWID are not displayed in Figure 4. However, differences in prevalence by race and transmission risk can be seen, with non-Hispanic Black MSM having the highest prevalence of HIV (27,982.6 per 100,000 population).

## Hepatitis Co-Infection

Of the 19,199 people living with diagnosed HIV (PLWDH) in Philadelphia, 3,375 (17.6%) were co-infected with Hepatitis C Virus (HCV), and 1,109 (5.8%) were co-infected with Hepatitis B Virus (HBV) (Table 13). The proportion of PLWDH HCV co-infection was greatest among those assigned female sex at birth (18.4%), Hispanic/Latinx (24.4%), PWID (42.0%), and those aged 50 and older (22.8%) (Table 13).

HCV care continuum outcomes are significantly better among PLWDH HCV co-infection than HCV mono-infection alone (data not shown). Among 3,375 HCV antibody-positive persons living with HIV infection 2,768 (82.0%) received a confirmatory RNA test of whom 2,289 were confirmed positive. 1,206 (35.7%) persons have resolved their HCV infection through 2017. This amounts to 52.7% resolution among those with confirmed HCV viremia (Figure 5).

## Migration

In the past, the description of persons with HIV infection in terms of geographic area has been based on their residence at diagnosis. Migrations were assumed to either be negligible or in-migration and out-migration were assumed to be roughly equal. HIV case surveillance increasingly focuses on the individuals currently living in a jurisdiction, rather than those diagnosed in the jurisdiction.

While Philadelphia has seen roughly 500 to 700 new cases a year for the past several years, the total population of people living with diagnosed HIV in Philadelphia has remained stable due to a proportionate number of individuals moving out of Philadelphia or dying. Thus current residents, rather than those diagnosed locally, are the focus of our in-care and viral suppression measures in the HIV Continuum of Care.



## Emerging Issues

### Pre-Exposure Prophylaxis (PrEP)

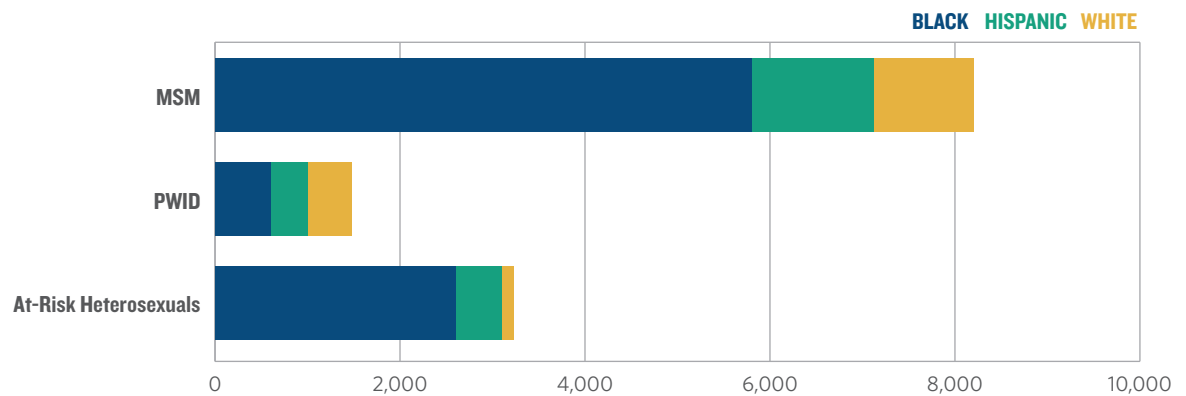
Pre-Exposure Prophylaxis, or PrEP, is a daily medication taken by individuals at high risk for HIV infection to lower their chances of getting infected. While PrEP can reduce an individual's chances of acquiring HIV, it is not effective when not taken as directed. Adherence to PrEP must be stressed by providers and condom usage must still be encouraged. PrEP does not prevent other sexually transmitted infections or pregnancy. In May of 2018, the CDC published estimates of adults with indications for PrEP by transmission risk group and race/ethnicity. Based on this methodology<sup>1</sup>, AACO estimates there are 13,113 HIV negative persons in Philadelphia with a PrEP indication, with HIV-negative non-Hispanic Black MSM having the greatest population proportion with a PrEP indication (58.0%) (Table 16). Furthermore, in collaboration with other health departments and academic institutions, AACO has developed a PrEP Monitoring and Evaluation plan to track the progress of PrEP usage in the City of Philadelphia. Future reports will provide progress on PrEP use in Philadelphia by priority populations.

### 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 before 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 men who have sex with men. In attempt to reexamine issues surrounding the quality of transgender data, Table 11 presents demographic information based on gender identity and reclassifies transmission risk reported as MSM and heterosexual contact into one category called sexual contact. A greater understanding of the risk behaviors and needs of transgender persons is needed to inform best practices for treatment and prevention in this population. Efforts to improve data on transgender individuals—including internal and external trainings on standardized collection of gender identity data and medical chart review—are ongoing.

#### PrEP INDICATION

by Transmission Category  
and Race/Ethnicity<sup>1</sup>



<sup>1</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*.

# Definitions

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**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.

**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%).

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

**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 Co-infection. 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.

**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.

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

**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.

**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.



# Goals and Evaluation Dashboard

TABLE 1

	2020 National Goal <sup>1</sup>	2014	2015	2016	2017	Current Trend
<b>HIV Diagnosis</b>						
New HIV Diagnosis, Rate	↓ 25%	37.0/100,000	35.8/100,000	30.7/100,000	32.5/100,000	Goal not met
Diagnosed Proportion <sup>2</sup>	90%	91.3%	90.3%	90.7%	N/A	Goal met
<b>HIV Care and Morbidity</b>						
Linked to Care in 1 month <sup>3</sup>	85%	71.7%	79.6%	77.9%	86.3%	Goal met
In HIV Care <sup>4,5</sup>	90%	63.4%	64.6%	66.3%	66.7%	Improving but goal not met
Viral Suppression <sup>4,6</sup>	80%	53.4%	54.9%	54.9%	56.1%	Improving but goal not met
<b>Disparities: Viral Suppression<sup>4,6</sup></b>						
White PLWDH	--	52.4%	54.0%	53.5%	54.1%	No disparities
Black PLWDH	--	53.6%	55.5%	55.5%	56.6%	No disparities
Hispanic/Latino PLWDH	--	51.6%	52.3%	52.8%	54.2%	No disparities
Transgender PLWDH	--	60.3%	62.0%	65.2%	60.6%	No disparities
PWID PLWDH	--	49.9%	50.8%	49.6%	50.5%	Disparity observed. Lower rates of viral suppression

<sup>1</sup>All 2020 goals use 2014 as the baseline

<sup>2</sup>Based on the CDC developed CD4 depletion model

<sup>3</sup>Among persons with a new HIV diagnosis

<sup>4</sup>Among HIV-infected persons with diagnosed HIV infection

<sup>5</sup>In HIV care is defined as 1+ CD4 or viral load lab in the calendar year

<sup>6</sup>Viral suppression is defined as a viral load <200 copies/mL at last measure in the calendar year

## Abbreviations:

PLWDH, people living with diagnosed HIV; MSM, men who have sex with men; PWID, people who inject drugs

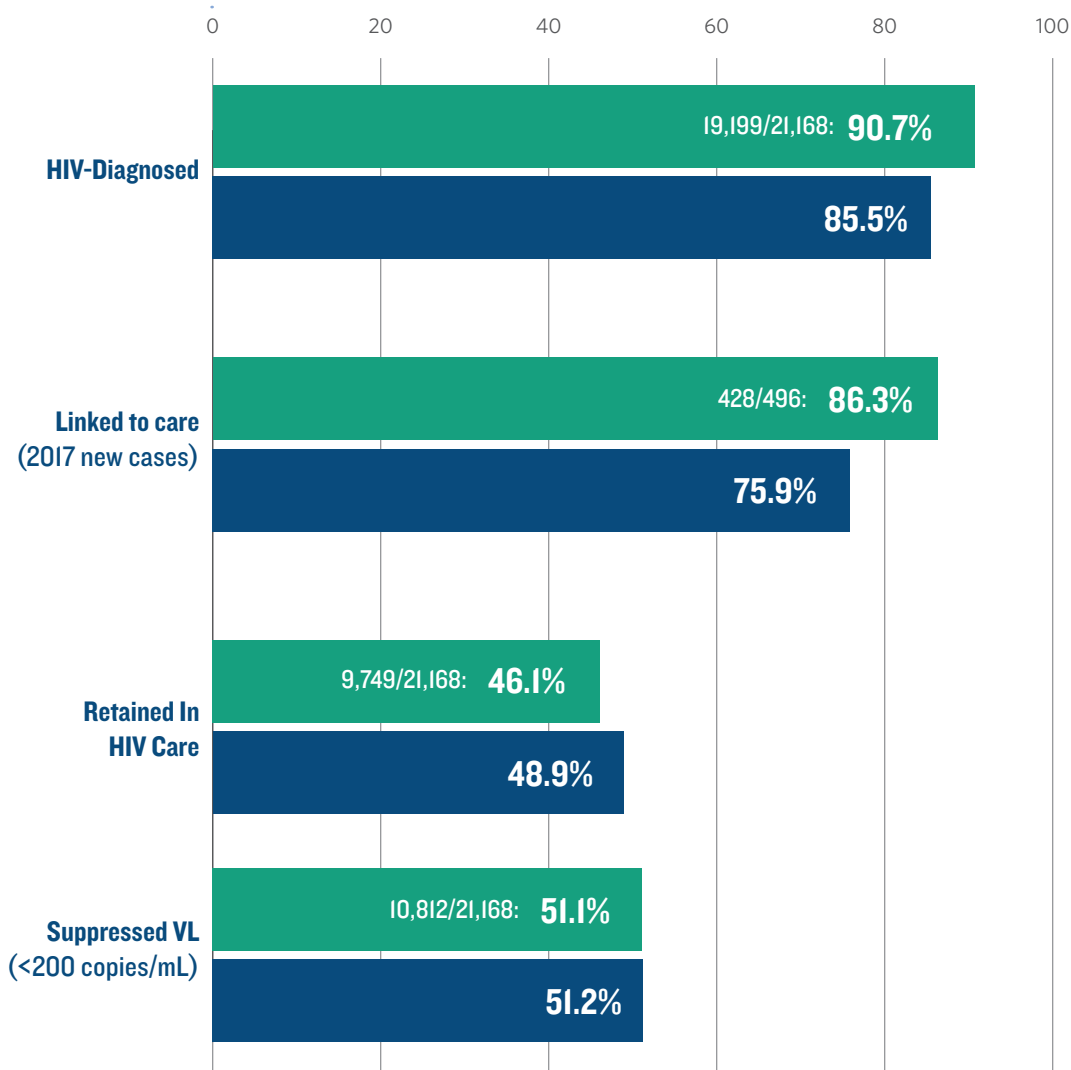
**Note** Rates of new HIV diagnoses are per 100,000 population and based on the 2010 decennial census data

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# HIV Care Continuum

FIGURE 1

Philadelphia 2017 vs the United States



## Linked to Care

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

## 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 a calendar year being <200 copies/mL

## Sources

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

U.S. Data: 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, 2016. HIV Surveillance Supplemental Report 2018;23(No. 4). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published June 2018. Accessed August 2018.

Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2010–2015. HIV Surveillance Supplemental Report 2018;23(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published March 2018. Accessed August 2018.

# Newly Diagnosed HIV

TABLE 2

By Year and Selected Characteristics (regardless of AIDS status) | 2013-2017

Bar graphs indicate  
2017 percentages

		YEAR OF DIAGNOSIS									
		2013		2014		2015		2016		2017	
		N	%	N	%	N	%	N	%	N	%
	Total	642	100.0 %	565	100.0 %	547	100.0 %	468	100.0 %	496	100.0 %
Sex at Birth											
	Female	123	19.1 %	118	20.8 %	119	21.7 %	112	23.9 %	99	19.9 %
	Male	519	80.8 %	447	79.1 %	428	78.2 %	356	76.0 %	397	80.0 %
Race/Ethnicity											
	Black	479	74.6 %	383	67.7 %	398	72.7 %	304	64.9 %	339	68.3 %
	Hispanic	71	11.0 %	72	12.7 %	75	13.7 %	89	19.0 %	83	16.7 %
	White	68	10.5 %	86	15.2 %	58	10.6 %	59	12.6 %	64	12.9 %
	Asian	13	2.0 %	12	2.1 %	10	1.8 %	10	2.1 %	*	*
	Multi-race	7	1.0 %	8	1.4 %	*	*	*	*	*	*
	Other/Unknown	*	*	*	*	*	*	*	*	*	*
Age Category											
	0-12	*	*	*	*	*	*	0	0	0	0
	13-19	45	7.0 %	31	5.4 %	34	6.2 %	29	6.1 %	42	8.4 %
	20-24	133	20.7 %	110	19.4 %	100	18.2 %	88	18.8 %	89	17.9 %
	25-29	102	15.8 %	87	15.3 %	97	17.7 %	94	20.0 %	96	19.3 %
	30-39	129	20.0 %	121	21.4 %	133	24.3 %	108	23.0 %	143	28.8 %
	40-49	117	18.2 %	96	16.9 %	86	15.7 %	64	13.6 %	61	12.2 %
	50+	111	17.2 %	119	21.0 %	95	17.3 %	85	18.1 %	65	13.1 %
Transmission Risk											
	MSM	328	51.0 %	286	50.6 %	310	56.6 %	265	56.6 %	273	55.0 %
	PWID	33	5.1 %	35	6.1 %	27	4.9 %	26	5.5 %	38	7.6 %
	MSM/PWID	18	2.8 %	11	1.9 %	8	1.4 %	*	*	*	*
	Heterosexual	254	39.5 %	229	40.5 %	195	35.6 %	165	35.2 %	108	21.7 %
	Pediatric	6	0.9 %	*	*	*	*	0	0	0	0
	No Reported Risk	*	*	*	*	*	*	7	1.4 %	72	14.5 %
Co-Infections											
	Hepatitis B	31	4.80%	24	4.30%	21	3.80%	12	2.60%	13	2.60%
	Hepatitis C	78	12.20%	63	11.20%	76	13.90%	46	9.80%	56	11.30%
TOTAL CASES		642		565		547		468		496	

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

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

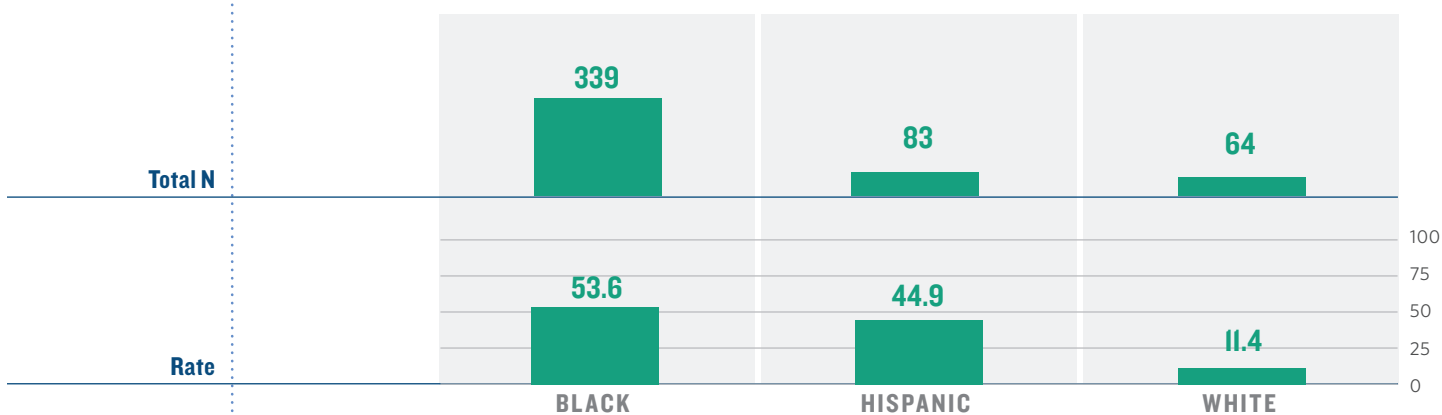
# Newly Diagnosed HIV

TABLE 3

## By Race/Ethnicity | 2017

Racial/ethnic health disparities persist and mirror disparities observed across the nation.

	BLACK		HISPANIC		WHITE	
	N	%	N	%	N	%
<b>Total</b>	<b>339</b>	<b>100.0 %</b>	<b>83</b>	<b>100.0 %</b>	<b>64</b>	<b>100.0 %</b>
<b>Sex at Birth</b>						
Female	69	20.3 %	18	21.6 %	10	15.6 %
Male	270	79.6 %	65	78.3 %	54	84.3 %
<b>Age Category</b>						
13-19	36	10.6 %	*	*	*	*
20-24	69	20.3 %	11	13.2 %	6	9.3 %
25-29	67	19.7 %	14	16.8 %	12	18.7 %
30-39	87	25.6 %	31	37.3 %	24	37.5 %
40-49	39	11.5 %	10	12.0 %	11	17.1 %
50+	41	12.0 %	12	14.4 %	10	15.6 %
<b>Transmission Risk</b>						
MSM	190	56.0 %	43	51.8 %	37	57.8 %
PWID	8	2.3 %	13	15.6 %	17	26.5 %
MSM/PWID	*	*	*	*	0	0
Heterosexual	83	24.4 %	19	22.8 %	*	*
No Reported Risk	56	16.5 %	6	7.2 %	6	9.3 %



**Notes** \*Cell sizes <6 are suppressed. Rates were calculated using the 2010 decennial census data.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Newly Diagnosed HIV

TABLE 4

## By Sex at Birth | 2017

Men comprised the majority of all new HIV diagnoses (80%), with the greatest diagnosis rates among MSM. Women comprised 20% of new diagnoses, with the highest rates among Black and heterosexual women.

	FEMALE			MALE		
	N	%	Rate †	N	%	Rate †
<b>Total</b>	<b>99</b>	<b>100.0 %</b>	<b>12.3</b>	<b>397</b>	<b>100.0 %</b>	<b>55.2</b>
<b>Race/Ethnicity</b>						
Black	69	69.6 %	19.5	270	68.0 %	92.8
Hispanic	18	18.1 %	19.1	65	16.3 %	69.8
White	10	10.1 %	3.4	54	13.6 %	19.8
Asian	*	*	*	*	*	*
Multi-race	*	*	*	*	*	*
Other/Unknown	0	0	0	*	*	*
<b>Age Category</b>						
13-19	*	*	*	39	9.8 %	50.6
20-24	8	8.0 %	10.6	81	20.4 %	113.8
25-29	9	9.0 %	12.7	87	21.9 %	134.7
30-39	39	39.3 %	36.8	104	26.1 %	105.6
40-49	15	15.1 %	15	46	11.5 %	49.9
50+	25	25.2 %	9.8	40	10.0 %	20.9
<b>Transmission Risk</b>						
MSM	0	0	-	273	68.7 %	813.7
PWID	12	12.1 %	N/A	26	6.5 %	N/A
MSM/PWID	0	0	-	*	*	N/A
Heterosexual	84	84.8 %	52.3	24	6.0 %	21.3
No Reported Risk	*	*	N/A	69	17.3 %	N/A
<b>Total N</b>	99			397		
	FEMALE			MALE		

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

† Rates are per 100,000 population. Rates for age and race/ethnicity by sex 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 5 years. **Heterosexual** rates were calculated using the number of individuals 18 and older living below the federal poverty level from the 2010 American Community Survey.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Newly Diagnosed HIV

MAP 1  
By Census Tract | 2017

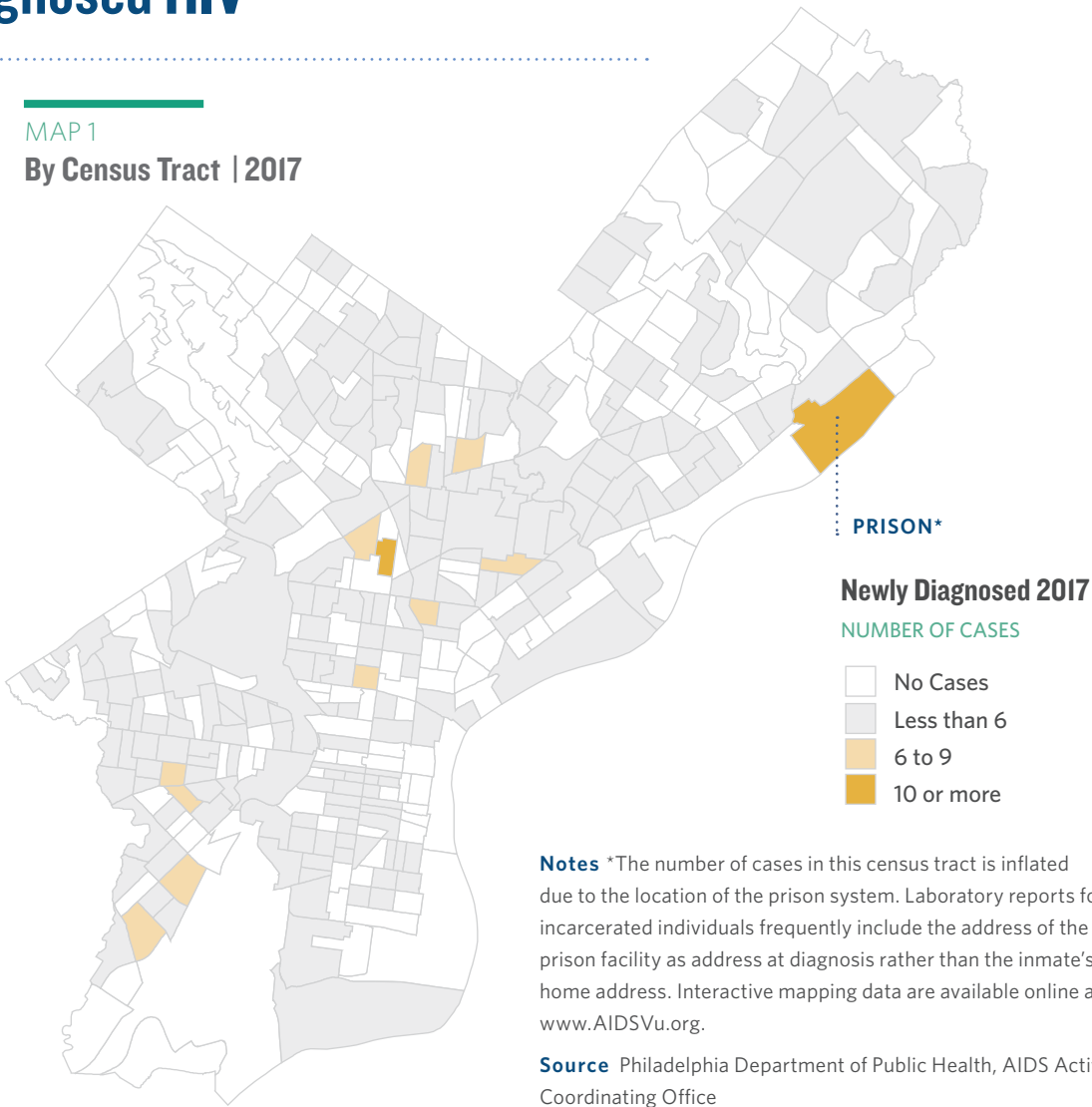
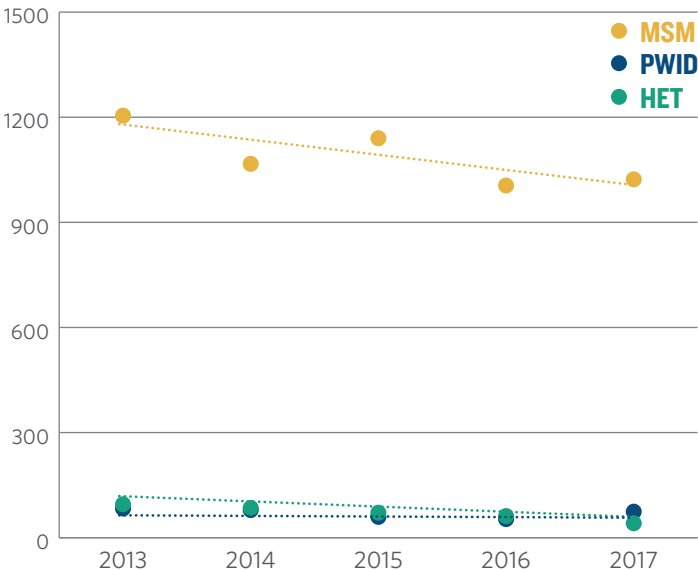


FIGURE 2  
Rates of Newly Diagnosed HIV disease per 100,000 People by Year of Diagnosis and Risk Group 2013-2017

**MSM** population size based on estimates of MSM activity among males 13 and older in the last 5 years. **PWID** population size estimated as 55,000 citywide. Individuals 18 and older living below the poverty level was used as a proxy for **high risk heterosexuals**.





# Newly Diagnosed HIV

TABLE 5

Concurrent HIV/AIDS, Demographics and Transmission Risk | 2013–2017

	2013				2014				2015				2016				2017			
	Non-concurrent		Concurrent HIV/AIDS		Non-concurrent		Concurrent HIV/AIDS		Non-concurrent		Concurrent HIV/AIDS		Non-concurrent		Concurrent HIV/AIDS		Non-concurrent		Concurrent HIV/AIDS	
	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %	N	Col %	N	Row %	N	Row %	N	Row %	N	Row %
Total	497	77.4%	145	22.6%	449	79.5%	116	20.5%	446	81.5%	101	18.5%	388	82.9%	80	17.1%	403	81.3%	93	18.8%
Sex at Birth																				
Female	89	72.4%	34	27.6%	89	75.4%	29	24.6%	96	80.7%	23	19.3%	97	86.6%	15	13.4%	81	81.8%	18	18.2%
Male	408	78.6%	111	21.4%	360	80.5%	87	19.5%	350	81.8%	78	18.2%	291	81.7%	65	18.3%	322	81.1%	75	18.9%
Race/Ethnicity																				
Black	376	78.5%	103	21.5%	297	77.5%	86	22.5%	324	81.4%	74	18.6%	252	82.9%	52	17.1%	278	82.0%	61	18.0%
Hispanic	59	83.1%	12	16.9%	64	88.9%	8	11.1%	65	86.7%	10	13.3%	76	85.4%	13	14.6%	67	80.7%	16	19.3%
White	47	69.1%	21	30.9%	70	81.4%	16	18.6%	48	82.8%	10	17.2%	48	81.4%	11	18.6%	50	78.1%	14	21.9%
Asian	7	53.8%	6	46.2%	11	*	*	*	*	*	6	*	7	*	*	*	*	*	*	*
Multi-race	*	*	*	*	*	*	*	*	*	*	*	*	*	100.0%	0	0.0%	*	*	*	*
Other/Unknown	*	*	*	*	*	*	*	*	*	100.0%	0	0.0%	*	*	*	*	100.0%	*	0	0.0%
Age at HIV Dx																				
0-12	*	100.0%	0	0.0%	*	100.0%	0	0.0%	*	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
13-19	43	*	*	*	30	*	*	*	33	*	*	*	27	*	*	*	41	*	*	*
20-24	113	85.0%	20	15.0%	101	91.8%	9	8.2%	96	*	*	*	80	90.9%	8	9.1%	81	91.0%	8	9.0%
25-29	83	81.4%	19	18.6%	78	89.7%	9	10.3%	86	88.7%	11	11.3%	80	85.1%	14	14.9%	86	89.6%	10	10.4%
30-39	94	72.9%	35	27.1%	91	75.2%	30	24.8%	105	78.9%	28	21.1%	93	86.1%	15	13.9%	116	81.1%	27	18.9%
40-49	84	71.8%	33	28.2%	66	68.8%	30	31.3%	58	67.4%	28	32.6%	45	70.3%	19	29.7%	38	62.3%	23	37.7%
50+	75	67.6%	36	32.4%	82	68.9%	37	31.1%	66	69.5%	29	30.5%	63	74.1%	22	25.9%	41	63.1%	24	36.9%
Transmission Risk																				
MSM	268	81.7%	60	18.3%	246	86.0%	40	14.0%	259	83.5%	51	16.5%	225	84.9%	40	15.1%	235	86.1%	38	13.9%
PWID	25	75.8%	8	24.2%	29	82.9%	6	17.1%	25	*	*	*	23	*	*	*	29	76.3%	9	23.7%
MSM/PWID	16	*	*	*	10	*	*	*	6	*	*	*	*	*	*	*	*	*	*	*
Heterosexual	179	70.5%	75	29.5%	161	70.3%	68	29.7%	149	76.4%	46	23.6%	130	78.8%	35	21.2%	86	79.6%	22	20.4%
Pediatric	6	100.0%	0	0.0%	*	100.0%	0	0.0%	*	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
No Risk Reported	*	100.0%	0	0.0%	*	*	*	*	*	100.0%	0	0.0%	6	*	*	*	49	68.1%	23	31.9%

**Notes** \*Cells size < 6 are suppressed. Concurrent HIV/AIDS is defined as diagnosis of AIDS within 90 days of initial diagnosis of HIV.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# HIV Incidence Estimates

TABLE 6

Incidence Estimates by Year and Selected Characteristics | 2014–2016

	2014				2015				2016			
	N	%	95% CI	Rate†	N	%	95% CI	Rate†	N	%	95% CI	Rate†
<b>Total</b>	<b>410</b>	<b>100.0%</b>	<b>250-560</b>	<b>26.9</b>	<b>470</b>	<b>100.0%</b>	<b>290-650</b>	<b>30.8</b>	<b>450</b>	<b>100.0%</b>	<b>240-660</b>	<b>29.5</b>
<b>Sex at Birth</b>												
Male	330	80.5%	190-470	45.8	370	78.7%	200-530	51.4	340	75.6%	140-530	47.2
Female	80	19.5%	10-140	9.9	100	21.3%	20-180	12.4	110	24.4%	20-200	13.6
<b>Race/Ethnicity</b>												
Black	300	73.2%	160-440	46.6	350	74.5%	190-500	54.3	270	60.0%	100-450	41.9
Hispanic	60	14.6%	10-100	32.0	70	14.9%	10-140	37.3	100	22.2%	10-190	53.3
White	50	12.2%	0-100	8.9	40	8.5%	0-80	7.1	60	13.3%	0-130	10.7
Asian	10	2.4%	0-30	10.5	10	2.1%	0-20	10.5	10	2.2%	0-40	10.5
Multiple races	-	-	-	-	0	0.0%	0-20	0.0	10	2.2%	0-30	35.8
American Indian/ Alaska Native	-	-	-	-	0	0.0%	0-10	0.0	-	-	-	-
Native Hawaiian/ Other Pacific Islander	-	-	-	-	-	-	-	-	-	-	-	-
<b>Age at Infection</b>												
13-24	130	31.7%	50-210	43.1	130	27.7%	30-220	43.1	130	28.9%	10-250	43.1
25-34	150	36.6%	60-250	61.0	200	42.6%	80-310	81.3	150	33.3%	30-270	61.0
35-44	60	14.6%	0-120	31.9	70	14.9%	0-140	37.2	70	15.6%	0-150	37.2
45-54	60	14.6%	0-130	30.3	50	10.6%	0-120	25.3	70	15.6%	0-150	35.4
>=55	30	7.3%	0-80	8.7	40	8.5%	0-90	11.6	40	8.9%	0-110	11.6
<b>Transmission Risk</b>												
MSM	240	58.5%	120-350	715.4	280	59.6%	140-410	834.6	260	57.8%	90-420	775.0
PWID	30	7.3%	0-80	54.5	30	6.4%	0-70	54.5	30	6.7%	0-80	54.5
MSM/PWID	10	2.4%	0-30	-	0	0.0%	0-10	-	10	2.2%	0-40	-
Heterosexual	140	34.1%	40-230	52.1	160	34.0%	50-270	59.5	150	33.3%	30-270	55.8



**Note:** Incidence of disease is defined as the number of new infections in a given time period, typically one year. Due to the nature of HIV infection, true incidence is difficult to measure. Recent infection is rarely accompanied with symptoms, and persons are often unaware of their exposure. Routine testing of all persons at risk for HIV is sporadic at best, and many are not tested and diagnosed until some time after their initial infection. The estimates presented here utilize diagnostic testing algorithms designed to detect recent infection, along with testing and treatment history data available for newly diagnosed persons in Philadelphia. These estimates provide the best available indicator of the true number of new HIV infections in Philadelphia. While the rate of incident cases is declining among most groups, new HIV transmissions are still affecting certain groups disproportionately. Blacks, Hispanics, males, and those aged 13-24, 25-34, and the MSM populations are all experiencing the highest percentages of new HIV infections.

† Rate of incident cases are per 100,000 people and based on 2010 decennial census. Rates among MSM were calculated using estimates of MSM activity among males 13 and older in the last 5 years. PWID rates based on a local population estimate of 55,000 active injection drug users. Heterosexual rates were calculated using the number of individuals 18 and older living below the federal poverty level from the 2010 American Community Survey.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# AIDS Diagnoses

TABLE 7

By Year and Selected Characteristics | 2013-2017

Bar graphs indicate  
2017 percentages

		YEAR OF DIAGNOSIS									
		2013		2014		2015		2016		2017	
		N	%	N	%	N	%	N	%	N	%
	Total	352	100.0 %	263	100.0 %	243	100.0 %	207	100.0 %	247	100.0 %
Sex at Birth											
	Female	100	28.4 %	83	31.5 %	72	29.6 %	64	30.9 %	69	27.9 %
	Male	252	71.5 %	180	68.4 %	171	70.3 %	143	69.0 %	178	72.0 %
Race/Ethnicity											
	Black	249	70.7 %	190	72.2 %	179	73.6 %	144	69.5 %	157	63.5 %
	Hispanic	46	13.0 %	28	10.6 %	33	13.5 %	32	15.4 %	43	17.4 %
	White	38	10.7 %	34	12.9 %	22	9.0 %	24	11.5 %	38	15.3 %
	Multi-race	10	2.8 %	9	3.4 %	*	*	*	*	8	3.2 %
	Asian	8	2.2 %	*	*	6	2.4 %	*	*	*	*
	Other/Unknown	*	*	*	*	*	*	*	*	0	0
Age Category											
	13-19	*	*	*	*	7	2.8 %	*	*	*	*
	20-24	38	10.7 %	15	5.7 %	13	5.3 %	15	7.2 %	14	5.6 %
	25-29	45	12.7 %	28	10.6 %	36	14.8 %	34	16.4 %	32	12.9 %
	30-39	81	23.0 %	63	23.9 %	57	23.4 %	49	23.6 %	65	26.3 %
	40-49	83	23.5 %	74	28.1 %	58	23.8 %	45	21.7 %	53	21.4 %
	50+	102	28.9 %	80	30.4 %	72	29.6 %	60	28.9 %	80	32.3 %
Transmission Risk											
	MSM	115	32.6 %	86	32.6 %	97	39.9 %	82	39.6 %	90	36.4 %
	PWID	41	11.6 %	39	14.8 %	34	13.9 %	18	8.6 %	31	12.5 %
	MSM/PWID	9	2.5 %	*	*	*	*	*	*	9	3.6 %
	Heterosexual	176	50.0 %	131	49.8 %	102	41.9 %	98	47.3 %	88	35.6 %
	No Reported Risk	11	3.1 %	*	*	*	*	*	*	28	11.3 %
	Pediatric	0	0	*	*	*	*	*	*	*	*
TOTAL CASES		352		263		243		207		247	

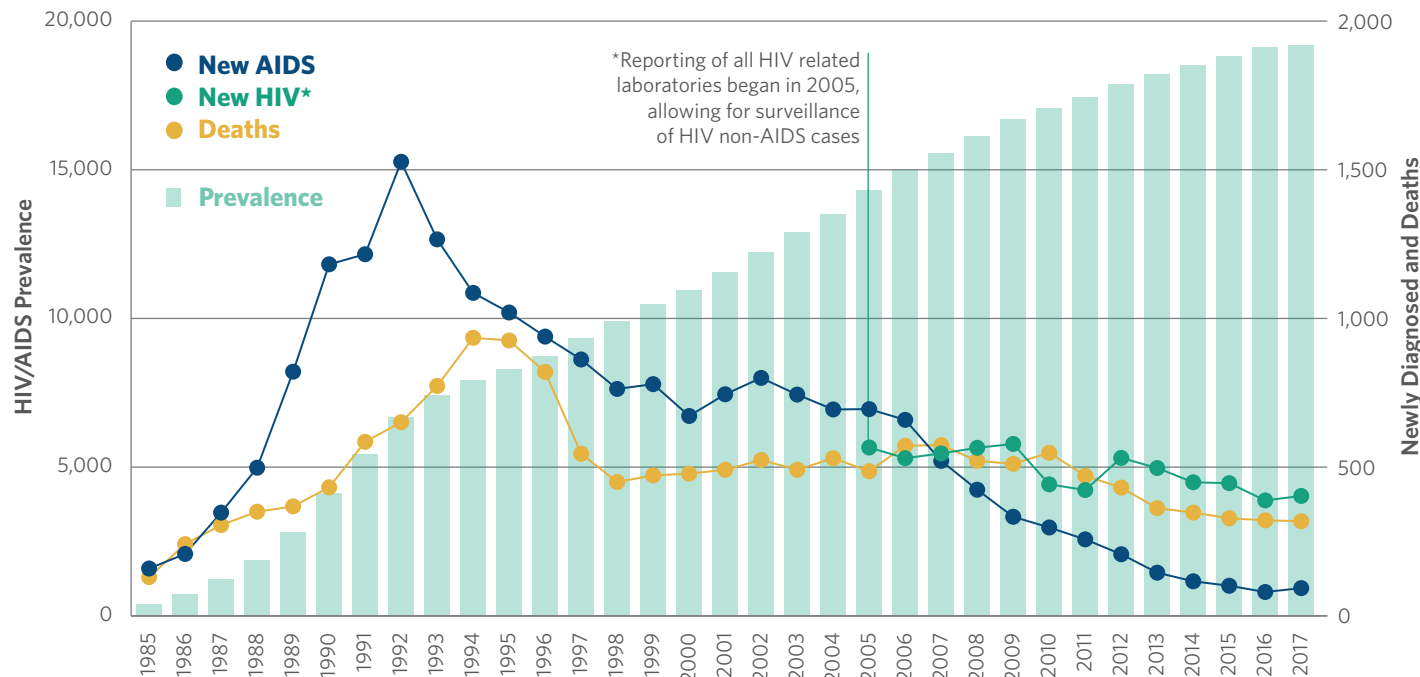
**Notes** \*Cells size < 6 are suppressed.

A proportion of AIDS diagnoses in each year were diagnosed with HIV in a previous year and later progressed to AIDS.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Persons Living with Diagnosed HIV

FIGURE 3  
Philadelphia HIV and AIDS Diagnoses, Deaths,  
and People Living with HIV by Year | 1985-2017



# Persons Living with Diagnosed HIV

TABLE 8

## HIV (non-AIDS) and AIDS Cases by Selected Characteristics | 2017

		HIV (NON-AIDS)		AIDS		HIV/AIDS	
		N	%	N	%	N	%
<b>Total</b>		<b>8,494</b>	<b>100.0 %</b>	<b>10,705</b>	<b>100.0 %</b>	<b>19,199</b>	<b>100.0 %</b>
<b>Sex at Birth</b>							
● Female	Female	2,417	28.4 %	2,967	27.7 %	5,384	28.0 %
● Male	Male	6,077	71.5 %	7,738	72.2 %	13,815	71.9 %
<b>Race/Ethnicity</b>							
	Black	5,366	63.1 %	6,907	64.5 %	12,273	63.9 %
	White	1,459	17.1 %	1,868	17.4 %	3,327	17.3 %
	Hispanic	1,378	16.2 %	1,575	14.7 %	2,953	15.3 %
	Multi-race	165	1.9 %	246	2.2 %	411	2.1 %
	Asian	98	1.1 %	89	0.8 %	187	0.9 %
	Other/Unknown	28	0.3 %	20	0.1 %	48	0.2 %
<b>Age Category†</b>							
	Unknown	38	0.4 %	85	0.7 %	123	0.6 %
	0-12	22	0.2 %	*	*	25	0.1 %
	13-19	83	0.9 %	20	0.1 %	103	0.5 %
	20-24	381	4.4 %	82	0.7 %	463	2.4 %
	25-29	944	11.1 %	369	3.4 %	1,313	6.8 %
	30-39	2,056	24.2 %	1,188	11.0 %	3,244	16.8 %
	40-49	1,774	20.8 %	2,167	20.2 %	3,941	20.5 %
	50+	3,196	37.6 %	6,791	63.4 %	9,987	52.0 %
<b>Transmission Risk</b>							
	MSM	3,525	41.4 %	3,603	33.6 %	7,128	37.1 %
	PWID	1,260	14.8 %	2,652	24.7 %	3,912	20.3 %
	MSM/PWID	264	3.1 %	536	5.0 %	800	4.1 %
	Other	*	*	11	0.1 %	14	0.0 %
	Heterosexual	3,116	36.6 %	3,573	33.3 %	6,689	34.8 %
	Pediatric	127	1.4 %	148	1.3 %	275	1.4 %
	No Reported Risk	199	2.3 %	182	1.7 %	381	1.9 %
<b>Total N</b>		<b>8,494</b>		<b>10,705</b>		<b>19,199</b>	
		<b>HIV (NON-AIDS)</b>		<b>AIDS</b>		<b>HIV/AIDS</b>	

**Notes** \*Cell sizes <6 are suppressed. † Age as of December 31, 2017

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Persons Living with Diagnosed HIV

TABLE 9

By Race/Ethnicity and Selected Characteristics | 2017

		BLACK		WHITE		HISPANIC	
		N	%	N	%	N	%
<b>Total</b>		<b>12,273</b>	<b>100.0 %</b>	<b>3,327</b>	<b>100.0 %</b>	<b>2,953</b>	<b>100.0 %</b>
<b>Sex at Birth</b>							
● Female	Female	3,916	31.9 %	500	15.0 %	800	27.0 %
● Male	Male	8,357	68.0 %	2,827	84.9 %	2,153	72.9 %
<b>Age Category†</b>							
	Unknown	68	0.5 %	24	0.7 %	27	0.9 %
	0-12	18	0.1 %	0	0	*	*
	13-19	87	0.7 %	*	*	11	0.3 %
	20-24	365	2.9 %	25	0.7 %	59	1.9 %
	25-29	956	7.7 %	127	3.8 %	180	6.0 %
	30-39	2,128	17.3 %	459	13.7 %	521	17.6 %
	40-49	2,462	20.0 %	622	18.6 %	687	23.2 %
	50+	6,189	50.4 %	2,066	62.0 %	1,463	49.5 %
<b>Transmission Risk</b>							
	MSM	4,060	33.0 %	1,995	59.9 %	818	27.7 %
	PWID	2,371	19.3 %	573	17.2 %	862	29.1 %
	MSM/PWID	435	3.5 %	167	5.0 %	162	5.4 %
	Other	8	0.0 %	*	*	*	*
	Heterosexual	4,952	40.3 %	521	15.6 %	986	33.3 %
	Pediatric	199	1.6 %	22	0.6 %	50	1.6 %
	No Reported Risk	248	2.0 %	45	1.3 %	74	2.5 %
<b>Total N</b>							
		12,273		3,327		2,953	
		BLACK		WHITE		HISPANIC	

**Notes** \*Cell sizes <6 are suppressed. † Age as of December 31, 2017

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office



# Persons Living with Diagnosed HIV

TABLE 10

By Sex at Birth and Selected Characteristics | 2017

		FEMALE						MALE									
		N	%							N	%						
	Total	5,384	100.0 %							13,815	100.0 %						
Race/Ethnicity																	
	Black	3,916	72.7 %							8,357	60.4 %						
	White	500	9.2 %							2,827	20.4 %						
	Hispanic	800	14.8 %							2,153	15.5 %						
	Multi-race	115	2.1 %							296	2.1 %						
	Asian	41	0.7 %							146	1.0 %						
	Other/Unknown	12	0.2 %							36	0.2 %						
Age Category†																	
	Unknown	34	0.6 %							89	0.6 %						
	0-12	14	0.2 %							11	0.0 %						
	13-19	31	0.5 %							72	0.5 %						
	20-24	88	1.6 %							375	2.7 %						
	25-29	226	4.1 %							1,087	7.8 %						
	30-39	811	15.0 %							2,433	17.6 %						
	40-49	1,373	25.5 %							2,568	18.5 %						
	50+	2,807	52.1 %							7,180	51.9 %						
Transmission Risk																	
	MSM	-	-							7,128	51.5 %						
	PWID	1,373	25.5 %							2,539	18.3 %						
	MSM/PWID	-	-							800	5.7 %						
	Other	*	*							10	0.0 %						
	Heterosexual	3,829	71.1 %							2,860	20.7 %						
	Pediatric	133	2.4 %							142	1.0 %						
	No Reported Risk	45	0.8 %							336	2.4 %						
	Total N																
5,384						13,815											
FEMALE						MALE											

**Notes** \*Cell sizes <6 are suppressed. † Age as of December 31, 2017

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Persons Living with Diagnosed HIV

TABLE 11

By Gender Identity and Selected Characteristics | 2017

	GENDER IDENTITY							
	(M) Male		(F) Female		(MF) Transgender Male to Female		(FM) Transgender Female to Male	
	N	%	N	%	N	%	N	%
<b>Total</b>	<b>13,540</b>	<b>100.0 %</b>	<b>5,345</b>	<b>100.0 %</b>	<b>283</b>	<b>100.0 %</b>	<b>28</b>	<b>100.0 %</b>
<b>Race/Ethnicity</b>								
Black	8,150	60.1 %	3,887	72.7 %	212	74.9 %	21	75.0 %
White	2,808	20.7 %	496	9.2 %	20	7.0 %	*	*
Hispanic	2,116	15.6 %	794	14.8 %	39	13.7 %	*	*
Multi-race	290	2.1 %	115	2.1 %	6	2.1 %	0	0
Asian	142	1.0 %	41	0.7 %	*	*	0	0
Other/Unknown	34	0.2 %	12	0.2 %	*	*	0	0
<b>Age Category†</b>								
Unknown	88	0.6 %	34	0.6 %	*	*	0	0
0-12	11	0.0 %	14	0.2 %	0	0	0	0
13-19	71	0.5 %	30	0.5 %	*	*	*	*
20-24	358	2.6 %	87	1.6 %	17	6.0 %	*	*
25-29	1,026	7.5 %	220	4.1 %	63	22.2 %	*	*
30-39	2,335	17.2 %	797	14.9 %	100	35.3 %	12	42.8 %
40-49	2,534	18.7 %	1,369	25.6 %	35	12.3 %	*	*
50+	7,117	52.5 %	2,794	52.2 %	66	23.3 %	8	28.5 %
<b>Transmission Risk</b>								
Sexual Contact	9,769	72.1%	3,797	71.0%	226	79.9%	25	89.3%
PWID	3,288	24.3%	1,367	25.5%	52	18.4%	*	*
Pediatric	142	1.0%	132	2.4%	0	0.0%	*	*
Other	10	0.0%	*	*	0	0.0%	0	0.0%
No Reported Risk	331	2.4%	45	0.8%	*	*	0	0.0%
<b>TOTAL N</b>	<b>13,540</b>		<b>5,345</b>		<b>283</b>		<b>28</b>	
	<b>Male</b>		<b>Female</b>		<b>Male to Female</b>		<b>Female to Male</b>	

**Notes** \*Cell sizes <6 are suppressed. † Age as of December 31, 2017

Gender identity is often not recorded in medical records. Birth sex was used to determine gender identity where no additional information was present. The prevalence among Male to Female, Female to Male, and those cases with additional gender identities is assumed to be higher. Individuals identifying as non-binary were excluded from the table due to small cell sizes.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Persons Living with Diagnosed HIV

TABLE 12

Prevalence by Sex and Race/Ethnicity | 2017

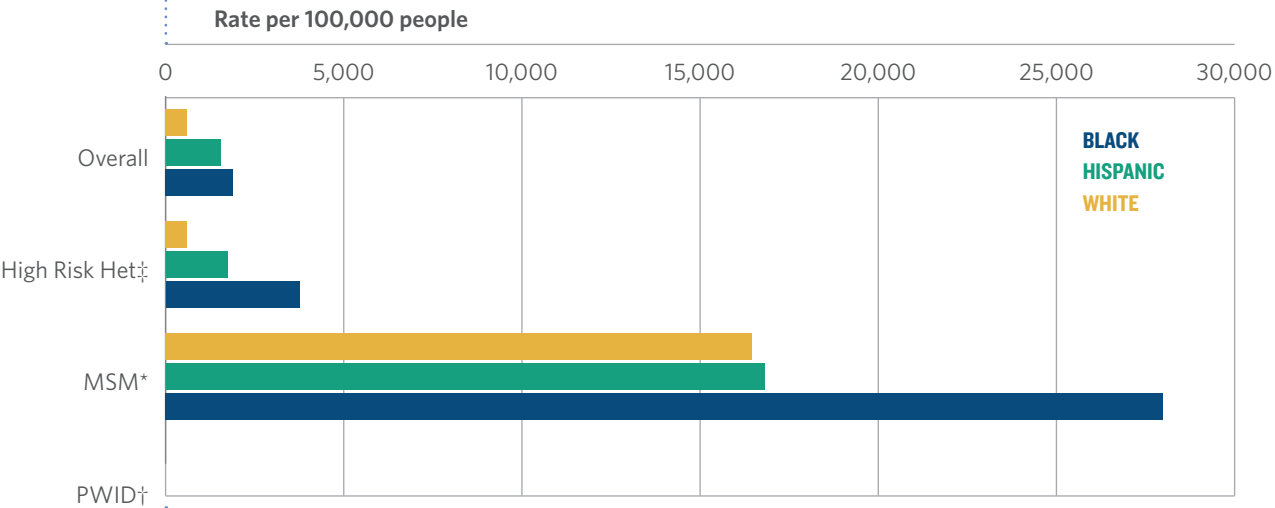
	POPULATION	PLWHA	RATE PER 100,000	
<b>Sex</b>				
Female	806,193	5,384	667.8	
Male	719,813	13,815	1,919.2	
<b>Race/Ethnicity</b>				
Hispanic	187,611	2,953	1,574.0	
Black	644,287	12,273	1,904.9	
White	562,585	3,327	591.4	
Asian	95,521	187	195.8	
AIAN	3,498	36	1,029.2	
NHPI	457	*	*	
Other Race	4,105	*	*	
Multi-racial	27,942	411	1,470.9	
<b>Sex and Race/Ethnicity</b>				
Hispanic Female	94,484	800	846.7	
Black Female	353,319	3,916	1,108.3	
White Female	290,025	500	172.4	
Asian Female	49,137	41	83.4	
AIAN Female	1,882	9	478.2	
NHPI Female	237	*	*	
Other race Female	2,014	0	0	
Multi-racial Female	15,095	115	761.8	
Hispanic Male	93,127	2,153	2,311.9	
Black Male	290,968	8,357	2,872.1	
White Male	272,560	2,827	1,037.2	
Asian Male	46,384	146	314.8	
AIAN Male	1,616	27	1,670.8	
NHPI Male	220	*	*	
Other race Male	2,091	*	*	
Multi-racial Male	12,847	296	2,304.0	
<b>Total</b>	<b>1,526,006</b>	<b>19,199</b>	<b>1,258.1</b>	

**Notes** \*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.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Persons Living with Diagnosed HIV

FIGURE 4  
Prevalence by Race/Ethnicity and Transmission Category | 2017



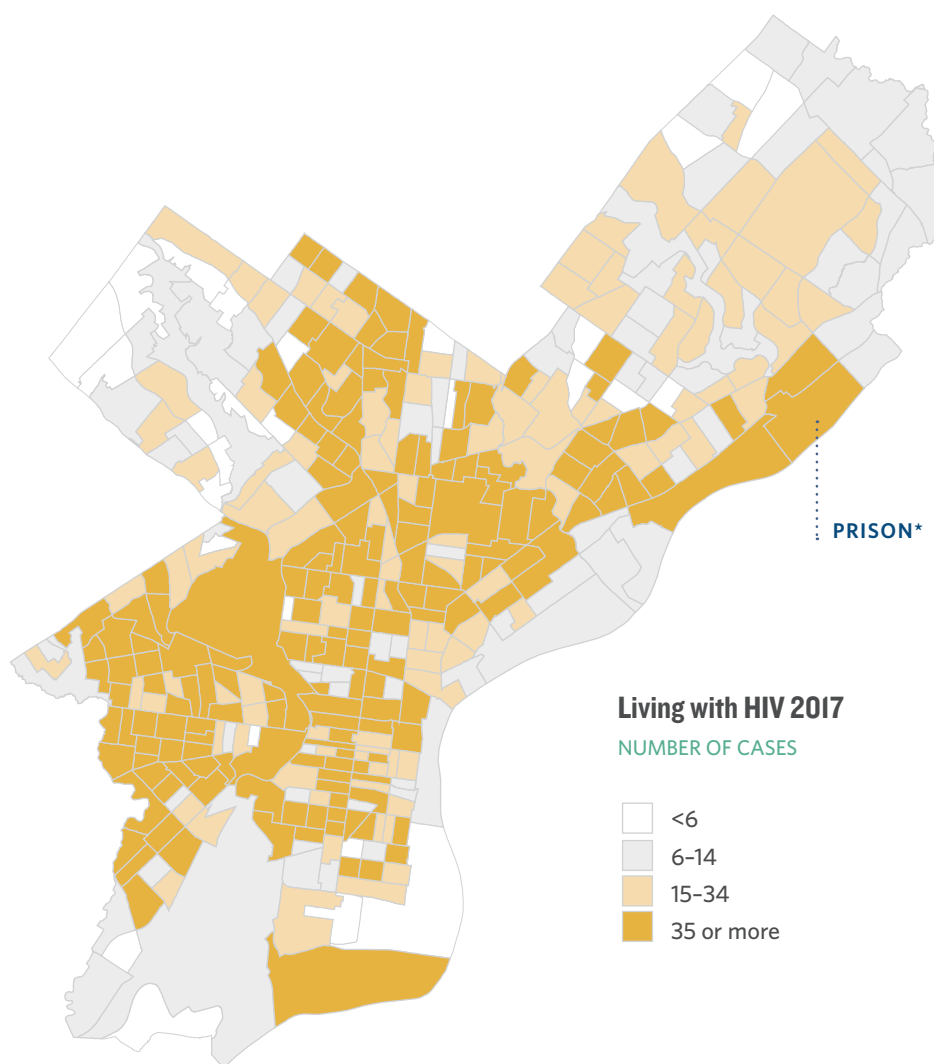
**Notes** \* MSM total population based on estimated number of active MSM in the past 5 years.  
† HIV prevalence is not displayed for PWID as there are currently no reliable estimates of PWID population size and racial composition for the city of Philadelphia. A population estimation methodology is being used among PWID in Philadelphia participating in the National HIV Behavioral Surveillance survey. AACO hopes to have reliable estimates for PWID prevalence by the release of the 2019 HIV Surveillance Report.  
‡ The population of individuals 18 and older living below poverty level is used as a proxy for high risk heterosexual population estimates.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Persons Living with Diagnosed HIV

MAP 2

By Census Tract | 2017



**Notes** \*The number of cases in this census tract is inflated due to the location of the prison system. Laboratory reports for incarcerated individuals frequently include the address of the prison facility as address at diagnosis rather than the inmate's home address. Interactive mapping data are available online at [www.AIDSVu.org](http://www.AIDSVu.org).

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Persons Living with Diagnosed HIV

TABLE 13

By Hepatitis B or C Co-Infection and Selected Characteristics† | 2017

	● Hepatitis B/HIV		● Hepatitis C/HIV		● HIV Total		
	N	Row %	N	Row%	N	Row%	
<b>Total</b>	<b>1,109</b>	<b>5.8%</b>	<b>3,375</b>	<b>17.6%</b>	<b>19,199</b>	<b>100.0%</b>	
<b>Sex at Birth</b>							
Female	268	5.0%	993	18.4%	5,384	100.0%	
Male	841	6.1%	2,382	17.2%	13,815	100.0%	
<b>Race/Ethnicity</b>							
Black	775	6.3%	1,934	15.8%	12,273	100.0%	
White	153	4.6%	601	18.1%	3,327	100.0%	
Hispanic	132	4.5%	720	24.4%	2,953	100.0%	
Multi-race	28	6.8%	98	23.8%	411	100.0%	
Asian	17	9.1%	19	10.2%	187	100.0%	
Other/Unknown	*	*	*	*	48	100.0%	
<b>Age Category†</b>							
Unknown	15	12.2%	43	35.0%	123	100.0%	
0-12	*	*	*	*	25	100.0%	
13-19	*	*	*	*	103	100.0%	
20-24	*	*	16	3.5%	463	100.0%	
25-29	26	2.0%	77	5.9%	1,313	100.0%	
30-39	121	3.7%	332	10.2%	3,244	100.0%	
40-49	277	7.0%	626	15.9%	3,941	100.0%	
50+	666	6.7%	2,278	22.8%	9,987	100.0%	
<b>Transmission Risk</b>							
MSM	393	5.5%	533	7.5%	7,128	100.0%	
PWID	309	7.9%	1,644	42.0%	3,912	100.0%	
Heterosexual	322	4.8%	867	13.0%	6,689	100.0%	
MSM/PWID	56	7.0%	278	34.8%	800	100.0%	
Pediatric	9	3.3%	10	3.6%	275	100.0%	
Other	*	*	6	42.9%	14	100.0%	
No Risk Reported	19	5.0%	37	9.7%	381	100.0%	
<b>TOTAL N</b>							
<div> <div></div> <div>Hep B/HIV: 1,109</div> <div>Hep C/HIV: 3,375</div> <div>HIV/AIDS Total: 19,199</div> </div>							

**Notes** \*Cells size < 6 are suppressed. ‡Row, not column, percentages are presented here. †Age as of December 31, 2017

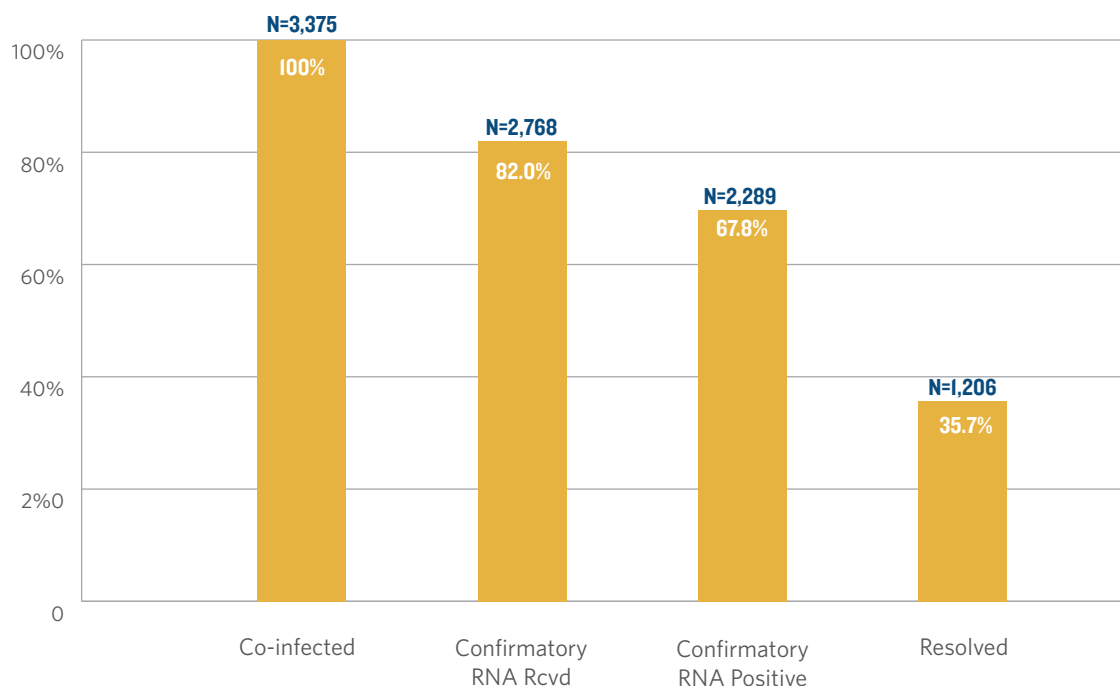
**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office



# Persons Living with Diagnosed HIV

FIGURE 5

## HCV Care Continuum among Persons Living with HIV, 2017



**Note** Resolved refers to the percentage of people with a negative HCV RNA result following a previously positive HCV RNA result.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Cumulative HIV Cases

TABLE 14

## Cumulative Adult HIV Cases | Diagnosed through December 31, 2017

		HIV (NON-AIDS)		AIDS		TOTAL	
		N	%	N	%	N	%
Total		9,062	100.0 %	23,770	100.0 %	32,832	100.0 %
<b>Sex at Birth</b>							
● Female	Female	2,572	28.3 %	5,740	24.1 %	8,312	25.3 %
● Male	Male	6,490	71.6 %	18,030	75.8 %	24,520	74.6 %
<b>Race/Ethnicity</b>							
	Black	5,832	64.3 %	15,508	65.2 %	21,340	64.9 %
	White	1,643	18.1 %	4,945	20.8 %	6,588	20.0 %
	Hispanic	1,305	14.4 %	2,743	11.5 %	4,048	12.3 %
	Multi-race	159	1.7 %	433	1.8 %	592	1.8 %
	Asian	91	1.0 %	117	0.4 %	208	0.6 %
	Other/Unknown	32	0.3 %	24	0.1 %	56	0.1 %
<b>Age Category†</b>							
	Unknown	0	0 %	2,571	10.8 %	2,571	7.8 %
	13-19	558	6.1 %	621	2.6 %	1,179	3.5 %
	20-24	1,486	16.3 %	1,940	8.1 %	3,426	10.4 %
	25-29	1,465	16.1 %	3,122	13.1 %	4,587	13.9 %
	30-39	2,607	28.7 %	7,633	32.1 %	10,240	31.1 %
	40-49	1,833	20.2 %	5,123	21.5 %	6,956	21.1 %
	50+	1,113	12.2 %	2,760	11.6 %	3,873	11.7 %
<b>Transmission Risk</b>							
	MSM	3,503	38.6 %	8,350	35.1 %	11,853	36.1 %
	PWID	1,645	18.1 %	7,546	31.7 %	9,191	27.9 %
	MSM/PWID	273	3.0 %	1,338	5.6 %	1,611	4.9 %
	Other	*	*	60	0.2 %	65	0.1 %
	Heterosexual	3,446	38.0 %	6,153	25.8 %	9,599	29.2 %
	Pediatric	*	*	*	*	*	*
	No Reported Risk	187	2.0 %	322	1.3 %	509	1.5 %
<b>Total N</b>							
		9,062		23,770		32,832	
		HIV (NON-AIDS)		AIDS		HIV/AIDS	

**Notes** \*Cell sizes <6 are suppressed. † Age as of December 31, 2017

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Perinatal Exposures

TABLE 15

## By Selected Demographics and Clinical Characteristics | 2013–2017

Perinatal exposures represent instances where HIV transmission might have occurred from mother to child during pregnancy, labor and delivery (L&D), or breastfeeding. Incidence of HIV infection among perinatally exposed children in Philadelphia has remained low in the past five years due to local perinatal prevention efforts.

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

### MATERNAL DEMOGRAPHICS

	N	%
<b>Maternal Age</b>		
13-19	16	4.80%
20-24	66	19.90%
25-34	185	55.70%
≥35	65	19.80%
<b>Maternal Race/Ethnicity</b>		
Black	269	81.00%
White	30	9.00%
Hispanic	23	7.00%
Other	10	3.00%
<b>Transmission Risk</b>		
Heterosexual	270	81.30%
PWID	32	9.60%
Pediatric	26	7.80%
Other/Unknown	*	*
<b>TOTAL N</b>	<b>332</b>	<b>100%</b>

**Notes** Cells size < 6 are suppressed for demographic data but not clinical data.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office






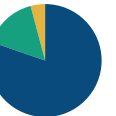
### CLINICAL CHARACTERISTICS

	NOT INFECTED		HIV-INFECTED	
	N	%	N	%
<b>Maternal Viral Load</b>				
<1000	268	81.40%	2	66.60%
≥1000	49	14.80%	1	33.30%
Unknown	12	3.60%	0	0.00%
<b>Prenatal care</b>				
No	66	20.00%	1	33.30%
Yes	263	79.90%	2	66.60%
Unknown	0	0.00%	0	0.00%
<b>Maternal Timing of Diagnosis</b>				
Early	328	99.60%	3	100.00%
Late	1	0.30%	0	0.00%
Unknown	0	0.00%	0	0.00%
<b>ARV medications during pregnancy</b>				
No	10	3.00%	1	33.30%
Yes	288	87.50%	2	66.60%
Unknown	31	9.40%	0	0.00%
<b>ARV medications during L&amp;D</b>				
No	81	24.60%	0	0.00%
Yes	149	45.20%	2	66.60%
Unknown	99	30.00%	1	33.30%
<b>Neonatal ARV medications</b>				
No	0	0.00%	0	0.00%
Yes	314	95.40%	3	100.00%
Unknown	15	4.50%	0	0.00%
<b>TOTAL N</b>	<b>329</b>		<b>3</b>	

# PrEP Indications

TABLE 16

**Estimates of Adults with Indications for HIV Pre-exposure Prophylaxis by Race/Ethnicity and Transmission Category, Philadelphia 2017<sup>1</sup>**

	NEGATIVE AT RISK			PrEP INDICATION			% NEGATIVE POPULATION		
	MSM	PWID	Heterosexual	MSM	PWID	Heterosexual	MSM	PWID	Heterosexual
Black	10,099	6,978	125,646	5,801	598	2,598	58.0%	8.6%	2.1%
Hispanic	3,588	9,643	48,283	1,326	404	500	37.0%	4.2%	1.4%
White	10,147	34,161	64,310	1,077	478	133	10.6%	1.4%	0.2%
									
<b>TOTAL</b>	26,596	52,195	260,726	8,287	1,495	3,331	31.2%	2.9%	1.3%

1 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*.

**Notes** The population of individuals 18 and older living below poverty level is used as a proxy for at risk heterosexual population estimates. MSM population estimate based on number of active MSM in the past 5 years. PWID population based on an estimated 55,000 active injection drug users in Philadelphia.

**Source** Philadelphia Department of Public Health, AIDS Activities Coordinating Office



# HIV-Related Deaths

TABLE 17

## HIV-Related Death by Year and Select Characteristics, Philadelphia 2012-2016

It is important to monitor the proportion of deaths among PLWH for which HIV is the underlying cause of death. The underlying cause of death was not HIV for persons in the **No** column. The underlying cause of death was HIV related for persons in the **Yes** column. The proportion of deaths for which the underlying cause is HIV has decreased from 34.8% in 2012 to 28.3% in 2016.

	2012			2013			2014			2015			2016		
	No	Yes		No	Yes		No	Yes		No	Yes		No	Yes	
	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %	N
Total	211	64.9%	113	34.8%	215	38.1%	235	67.7%	102	29.4%	234	71.3%	90	27.4%	213
Sex at Birth															
Female	59	56.2%	46	43.8%	67	37.6%	62	73.8%	21	25.0%	64	68.8%	29	31.2%	74
Male	152	69.1%	67	30.5%	148	58.5%	173	65.8%	81	30.8%	170	72.3%	61	26.0%	139
Race/Ethnicity															
Black	143	66.8%	71	33.2%	152	58.0%	137	64.9%	69	32.7%	155	69.8%	64	28.8%	139
White	39	65.0%	21	35.0%	30	57.7%	56	73.7%	17	22.4%	45	72.6%	16	25.8%	32
Hispanic	21	55.3%	16	42.1%	26	70.3%	30	65.2%	14	30.4%	24	75.0%	8	25.0%	35
Multi-race	7	58.3%	*	*	7	63.6%	11	84.6%	*	*	8	88.9%	*	*	7
Asian	*	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	*	*	*	*	0
Other/Unknown	0	0.0%	0	0.0%	0	0.0%	*	100.0%	0	0.0%	*	100.0%	0	0.0%	0
Age at HIV Dx															
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
0-12	*	100.0%	0	0.0%	*	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	*
13-19	*	*	*	*	*	*	*	*	6	66.7%	*	*	*	*	*
20-24	9	64.3%	*	*	13	48.1%	13	65.0%	7	35.0%	16	76.2%	*	*	15
25-29	21	44.7%	26	55.3%	18	58.1%	13	61.1%	12	33.3%	31	62.0%	18	36.0%	21
30-39	67	67.7%	32	32.3%	76	66.7%	37	68.5%	29	26.9%	60	70.6%	25	29.4%	59
40-49	65	74.7%	22	25.3%	59	61.5%	35	70.2%	23	27.4%	61	69.3%	27	30.7%	67
50+	44	62.9%	25	35.7%	47	53.4%	64	71.1%	25	27.8%	62	78.5%	15	19.0%	46
Transmission Risk															
MSM	41	62.1%	25	37.9%	34	51.5%	30	45.5%	28	32.6%	54	72.0%	19	25.3%	42
IDU	85	68.5%	38	30.6%	83	64.8%	43	33.6%	27	22.3%	89	75.4%	29	24.6%	76
MSM/IDU	10	58.8%	7	41.2%	15	68.2%	6	27.3%	8	32.0%	13	61.9%	7	33.3%	10
Heterosexual	70	63.6%	40	36.4%	80	55.9%	59	41.3%	39	34.2%	72	66.7%	35	32.4%	80
No Reported Risk	*	*	*	*	*	100.0%	0	0.0%	0	0.0%	*	100.0%	0	0.0%	*
Pediatric	*	100.0%	0	0.0%	*	100.0%	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%	*	100.0%	0	0.0%	0

**Notes:** \*Cells size < 6 are suppressed. 2017 HIV related deaths are not shown due to delays in reporting cause of death. Row percentages are based on total number of deaths in a calendar year among people living with HIV. A small number of deaths in each year have unknown cause of death and are not presented in this table.

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

# Reporting Information

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## 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 woman
- New HIV-positive result in a pregnant woman
- Birth of an infant to an HIV-infected woman

## 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:

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

Drop off or mail the completed HIV Case Report Forms to the Philadelphia Health Department. To drop off the forms, put them in a sealed envelope and bring them to:

PDPH HIV Surveillance Unit  
1101 Market Street, 8th floor, behind elevator C.

Call to drop off forms or for reporting questions:  
Melissa Miller (215-685-4781).

Do not leave forms with the receptionist.

If you would like to mail the 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 addressed to:

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





## 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 2017 and reported through June 2018.

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](mailto:AACOEPI@PHILA.GOV)

Please allow at least 10 business days for all data requests.