Ending the HIV Epidemic in Philadelphia

DRAFT

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Department of Public Health
CITY OF PHILADELPHIA

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Dear Reader,

Since the emergence of AIDS in the early 1980s, we have seen many plans and strategies come and go. Some were filled with more hope than expertise, while others made important but only incremental progress. Through it all, our public health community in continuous partnership with people living with and affected by HIV have focused on improving HIV prevention and care outcomes. Today, we have a once-in-a-generation opportunity to end the HIV epidemic in Philadelphia.

In early 2019, the federal government, announced the Ending the HIV Epidemic: A Plan for America initiative, which goes by the acronym "EHE". Through a special cooperative agreement with the Centers for Disease Control, the City of Philadelphia received funding in late 2019 to conduct a one-year process to develop the local EHE plan. The initial draft plan, which responds to CDC guidance, appears below. Its overall goal is consistent with federal aims to decrease new HIV infections by 75% in the next five years and by 90% by 2030.

In the pages that follow, you'll read a summary of the HIV epidemic in Philadelphia and learn about current PDPH HIV-related activities. The draft plan is organized around the EHE initiative's four pillars: diagnose, treat, prevent, and respond. The document reflects both current approaches as well as new and expanded prevention and care opportunities. It also includes focused efforts with different populations and additional strategies to ensure that resources align with population-specific prevention and care needs.

For detailed information on the characteristics of HIV/AIDS in the region, we invite you to review the Epidemiological Profile published by the Office of HIV Planning https://www.hivphilly.org/plan/ and the annual HIV surveillance report (https://www.phila.gov/documents/hiv-aids-data-and-research/). To learn more about the federal response please visit https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview

The final plan will be completed in September 2020. We hope that over the next nine months, stakeholders from across the city will contribute to the City's final EHE plan. Details on how you can participate in the EHE planning process are forthcoming.

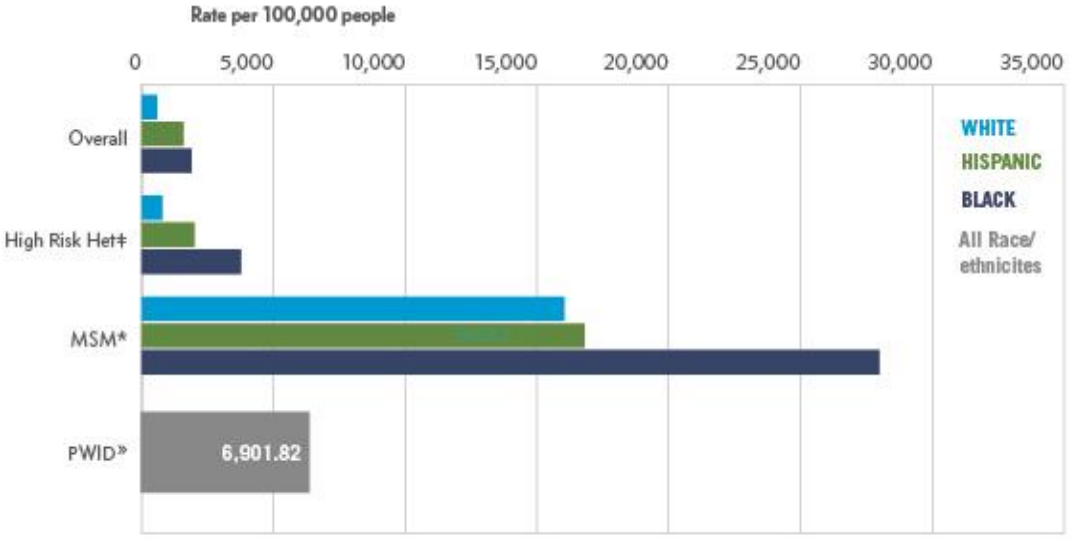
Epidemiological Snapshot

Characteristics of HIV in Philadelphia

In Philadelphia, reducing new HIV infections and improving health outcomes for People Living with HIV (PLWH) remains a challenge. Despite steady declines, Philadelphia is one of 48 counties in the U.S. with the highest number of new HIV diagnoses[1]. In 2018, there were 424 new diagnoses with significant differences between subpopulations[2] (*Chart 2* and *Appendix A*).

Currently, 19,011 PLWH live in Philadelphia[2]. This number has remained stable in the past last few years due to advances in HIV treatment and fewer deaths. As of 2018, 1.3% of Philadelphians were diagnosed and living with HIV with significant differences between subpopulations[2] (*Chart 1*).

Chart 1: Prevalence by Race/Ethnicity and Transmission Category, Philadelphia, 2018



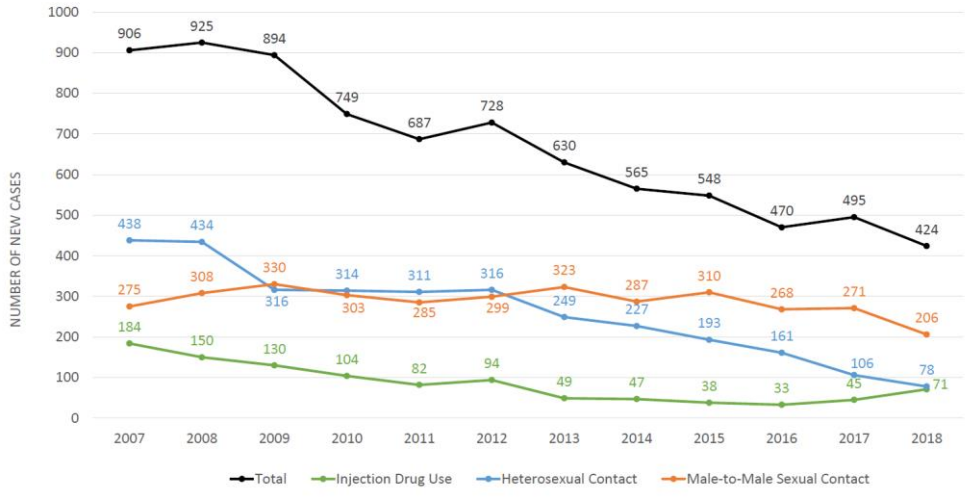
Please see *Appendix A* and *Appendix B* for prevention and care indicators arranged by pillar for all subpopulations.

Pillar One: Diagnose

The number of newly diagnosed PLWH decreased 14% from 495 diagnoses in 2017 to 424 new diagnoses in 2018[2] (Chart 2). The City has experienced steady declines in new HIV diagnoses since the mid-2000s, consistent with national trends.

- In 2018, there was a notable decline of 36% in new HIV diagnosis among Black men who have sex with men (MSM), but rates remain high in comparison to other subpopulations.
- In 2018, there were 71 newly diagnosed cases of HIV among people who inject drugs (PWID) (including MSM/PWID), which represents a 115% increase from 33 cases reported in 2016.
- Out of all new diagnoses in 2018, 1 in 4 were youth 13–24.
- Philadelphia Department of Public Health (PDPH) estimates that 2,019 people living with HIV are unaware of their status. These individuals accounted for 40% of new infections in 2018.
- Among transmission risk groups, MSM have the highest estimated unaware rate at 14%, with over 1,202 MSM estimated to be unaware of their HIV status.
- More than half of youth ages 13-24 are unaware of their HIV status.
- Although local data are currently not available for transgender or gender nonbinary individuals, PDPH estimates that approximately 17% are unaware of their HIV status (based on national data)[3].

Chart 2: New HIV Diagnoses by Transmission Category 2007-2018[1]



[1] *Data presented included newly diagnosed HIV reported through June 30, 2019.*
Note: In 2017, PDPH changed the method for identifying heterosexual transmission of HIV in order to align with CDC standards of risk factor collection.

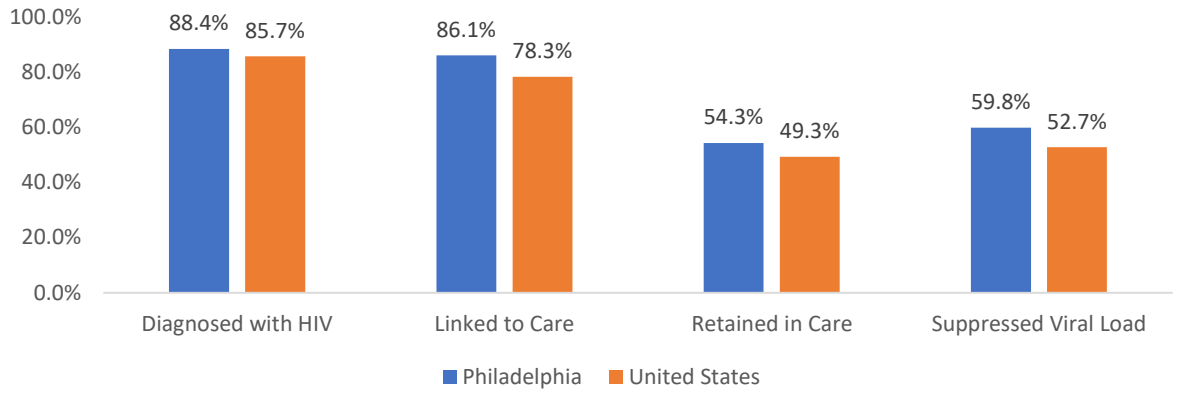
Pillar Two: Treat

HIV Care Continuum

Chart 3 below shows Philadelphia's modified prevalence-based HIV Care Continuum[4]. Use of total HIV public health data typically determines HIV Care Continuum outcomes. However, this methodology can overestimate the number of PLWH due to duplicate case reporting, migration, and missed deaths of PLWH. In this modified prevalence-based HIV Care Continuum, PDPH has excluded individuals without evidence of recent care in the last five years to more precisely evaluate our HIV Care Continuum outcomes and better identify individuals for intervention and re-engagement services for the EHE plan.

The definitions for each stage of the Modified HIV Care Continuum shown in *Appendix C*.

Chart 3: Modified HIV Care Continuum Philadelphia vs the United States 2018



- Nearly 4,000 PLWH with a last known home address in Philadelphia have not had care in the past five years. These individuals are likely either deceased or no longer reside in Philadelphia and are excluded from the *Modified HIV Care Continuum* and are under investigation.
- As shown in the Modified HIV Care Continuum, 86% of people diagnosed with HIV in 2018 were linked to care within 30 days. These rates were lower for PWID, transgender/gender nonbinary individuals and Black MSM. Disparities were seen among PWID and transgender/gender nonbinary individuals with 76% and 67% linking to care in 30 days, respectively (see attached tables).
- In Philadelphia, the greatest barrier to Ending the HIV Epidemic is poor retention in care. 2,395 PLWH, who had evidence of care in the last five years were not in care in 2018 in Philadelphia. In 2018 these individuals accounted for 35% of HIV transmissions in Philadelphia. There are disparities in retention across demographic and transmission risk groups which are presented in *Appendix B.*
- Another 1 in 10 PLWH in 2018 were in care and not virally suppressed. These individuals accounted for 25% of HIV transmissions in Philadelphia in 2018.

Pillar Three: Prevent

There are 342,201 people in Philadelphia estimated to be at risk for acquiring HIV[2]. Among these, 13,900 have an indication for PrEP with MSM estimated to be proportionally at highest risk and have the greatest indication for PrEP[2] (*Chart 4*).

Chart 4: Estimates of Adults with Indications for HIV Pre-exposure Prophylaxis by Race/Ethnicity and Transmission Category, Philadelphia 2018

	NEGATIVE AT RISK			PrEP INDICATION			% NEGATIVE POPULATION		
	MSM	PWID	Heterosexual	MSM	PWID	Heterosexual	MSM	PWID	Heterosexual
Black	9,926	N/A	125,713	4,880	480	2,290	49.2%	N/A	1.8%
Hispanic	3,516	N/A	48,243	1,680	560	560	47.8%	N/A	1.2%
White	10,197	N/A	64,349	1,320	1,360	200	12.9%	N/A	0.3%
									
TOTAL	26,406	55,000	260,795	8,290	2,480	3,130	31.4%	4.8%	1.2%

Methods based on Smith, Handel & Grey[5]; 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 persons who have ever injected drugs in Philadelphia.

Other significant factors that contribute to a higher risk of acquiring HIV include:

- **Sexually Transmitted Infections/Sexual Exposure to HIV** - Sexually transmitted infections increase the risk of both HIV transmission and acquisition[6]. In 2018 there were 408 cases of primary or secondary syphilis, 540 cases of early latent syphilis, 7,205 cases of gonorrhea, and 20,206 cases of Chlamydia in Philadelphia[7]. According to recent Philadelphia Medical Monitoring Project data, 30.7% of PLWH who were not virally suppressed had condomless sex with a person who was HIV-negative or of unknown status when the HIV+ person was unsuppressed[4].
- **Substance Use** - Substance use contributes to behaviors that increase risk for exposure to HIV. Substance use is associated with trauma, mental and behavioral health issues, and other factors impacting people at risk for and living with HIV[8]. Injection drug use particularly increases HIV risk. As of 2018, nearly 24% of PLWH in Philadelphia acquired HIV through current or past injection drug use[2]. After many years of low rates of new HIV infections among PWID, diagnoses are on the rise.

Pillar Four: Respond

Philadelphia is now experiencing an epidemic in use of and addiction to opioids. This epidemic is characterized by the introduction of fentanyl in the illicit drug supply, a rise in the number of people who inject drugs, an increase in homelessness among drug users, an increase in Hepatitis C transmission, and sharp increases in fatal and non-fatal drug overdoses. In September 2018, PDPH identified an increase in new HIV infections among PWID. These infections are associated with the opioid crisis.

At the same time, the epidemic in Philadelphia remains concentrated among MSM. This indicates a need to investigate new cases in all risk groups.

- In 2018, 71 new HIV diagnoses were reported among PWID, a 115% increase since 2016.
- Viral suppression in previously diagnosed PWID remains lower than average.
- In 2018, rates of newly diagnosed HIV were more than six times greater among MSM compared to PWID and heterosexuals.

Through routine public health data analysis, PDPH identified groups of rapidly growing, closely related HIV diagnosis in MSM. One group was identified in 2018 and the other, more recent group, was identified in June 2019. Recently diagnosed individuals in these groups received Partner Services and receive follow-up through a project that aims to identify patterns of missed opportunities in the HIV prevention system in Philadelphia. This project uses standardized chart reviews and interviews with sentinel cases of recently HIV-diagnosed individuals. Information gathered is reviewed through a regular, structured, inter-disciplinary Case Review Team and a Community Action Team to identify actionable policy changes to be implemented through a Policy Implementation Team.

Philadelphia continues to improve its capacity to investigate active HIV recent and rapid growth of HIV and respond to outbreaks.

Limitations

Data about HIV-positive transgender and gender nonbinary individuals has improved, but gaps remain. PDPH does appropriately classify gender identity where data is available; however, it can be limited. There is little information about disabilities among PLWH. Additionally, the current data does not adequately capture people with visual, hearing, cognitive, and motor impairments. This is significant since more than half of PLWH in Philadelphia are over the age of 50, and the afore-mentioned disabilities are often acquired over time.

Situational Analysis

The number of new HIV diagnoses in Philadelphia has declined for more than ten years. We are ready to end the HIV epidemic in Philadelphia.

The Philadelphia Ending the HIV epidemic (EHE) plan will reduce new infections in the City of Philadelphia by 75% in five years, consistent with the federal EHE Initiative. Philadelphia is the largest city in Pennsylvania, with a population of approximately 1.5 million people[9] and home to 19,011 people living with HIV (PLWH)[2].

For over 30 years, The Philadelphia Department of Public Health (PDPH) AIDS Activities Coordinating Office (AACO) has conducted HIV public health data collection and analysis, and provided HIV prevention, care, and planning activities in collaboration with the communities most impacted by HIV. As the recipient of federal, state, and local funding, PDPH also coordinates and monitors services for people living with HIV or at risk for acquiring HIV. This includes an extensive network of health care facilities and essential services providers to meet the needs of PLWH and those at risk for acquiring HIV, including eight city health centers operated by the PDPH, 18 medical facilities that provide HIV care (including the city health centers), and 45 facilities that provide pre-exposure prophylaxis (PrEP).

PDPH partners include the Pennsylvania and New Jersey Departments of Health, the Philadelphia Department of Prisons, the Philadelphia Department of Behavioral Health and Intellectual disAbilities and other PDPH divisions including the Division of Disease Control which includes the STD Control Program and the Viral Hepatitis Programs, and the Division of Substance Use Prevention and Harm Reduction. PDPH also coordinates with community health care providers, hospital emergency departments, Federally Qualified Health Centers, and various social services organizations.

The Office of HIV Planning supports the Philadelphia Eligible Metropolitan Area HIV Integrated Planning Council (HIPC), the decision-making body that plans HIV care and prevention services in Philadelphia and the surrounding areas. The HIPC considers public and private funding throughout its planning process to maximize the number of services and reduce duplicate efforts. The EHE Draft Plan is based on the "2017-2021 Philadelphia EMA Integrated HIV Prevention and Care Plan," authored by the Office of HIV Planning in collaboration with PDPH. The EHE Draft Plan maintains and expands critical services while incorporating novel approaches to end the HIV epidemic in Philadelphia.

Needs Assessment

Health is influenced by many factors such as social environment, economic conditions, accessibility of services, the behavioral choices people make, and the infrastructure of the medical care system. Philadelphia is one of 48 counties in the U.S. that have the highest incidence and prevalence of HIV. While newly diagnosed HIV cases in Philadelphia have

declined, there remains much work to be done in various communities. Barriers such as poverty, homelessness, HIV stigma, an expanding opioid crisis, and other social determinants of health continue to limit local efforts to end the HIV epidemic.

Racial and ethnic minorities represent the majority of Philadelphia's residents making Philadelphia one of the most diverse cities in the country. However, of the ten most populated cities in United States, Philadelphia is the poorest. Nearly 26% of residents live in **poverty**. Half of the city's 400,000 poor residents are also living in deep poverty. That means in 2018, a family with one adult with two children lives on an annual income of less than $10,000 [9, 10] (deep poverty is highest among Black and Latino/a residents). People living in poverty are more likely to develop the chronic diseases, including HIV, that are the leading causes of death and to have shorter life spans. Over one-third of Philadelphia residents have health insurance through Medicaid.

Racism, in conjunction with poverty, is one of the drivers of health disparities in Philadelphia. Structural racism threatens the sense of physical safety and increases stress responses, which research shows negatively impacts health over time[11]. Philadelphia remains racially segregated by neighborhood. Racial segregation impacts the ability to access vital services and needed resources.

Housing in Philadelphia is increasingly expensive. Lack of affordable housing within the City of Philadelphia is a pervasive problem. There is also a lack of federal, state, and local resources to combat the problem. The entrenched nature of poverty makes this lack of housing resources even more acute for vulnerable communities. About half of renters in the city spend more than 35% of their annual income on rent[9]. During a January 2018 nightly census, the Philadelphia Office of Homeless Services counted 5,788 homeless people, of these, 149 were PLWH[12]. PLWH experiencing homelessness were 53% less likely to receive ART. PLWH in temporary housing were 49% less likely to achieve viral suppression[4]. Stable housing improves health outcomes[13].

Philadelphia is home to a vibrant community of diverse sexual orientations and gender identities. However, stigma toward **lesbian, gay, bisexual, queer and transgender or gender nonbinary people (LGBTQIA+)** permeates the city even with increasing social acceptance and legal protections. Fear of discrimination based on sexual orientation or gender identity and expression present barriers to experiencing wellness and accessing healthcare. There are also emerging threats to previously protected legal rights with changes to policy at the state and federal level that affect LGBTQIA+ residents.

Limited English proficiency is a barrier for various cultural and ethnic communities within our diverse city. Even if language interpretation and translation are available at service providers, many people are unaware or do not feel comfortable seeking services outside their communities. It is estimated that 26% of residents speak a foreign language at home[9].

Medical mistrust is common among minority communities. Medical mistrust can lead to individuals not seeking HIV medical care and prevention services, as well as not adhering to treatment regimens.

Mental and behavioral health issues impact every element of the HIV Care Continuum. People with mental health issues (diagnosed and undiagnosed) have a much higher risk of acquiring HIV. Mental illness diagnoses are more common among PLWH than in the general population[14]. Philadelphia's Medical Monitoring Project found that 43% of PLWH had a mental health diagnosis, which includes depression, anxiety, and mood disorders[4].

Mental health issues are associated with poorer HIV health outcomes. PLWH with moderate to severe depression were 55% less likely to stay in care and 46% less likely to receive antiretroviral treatment. PLWH with untreated moderate to severe depression were 38% less likely to achieve viral suppression[15].

Fear of law enforcement and other authorities prevents some individuals (i.e., undocumented immigrants, sex workers, drug users) from seeking healthcare and other services. There are many individuals with a history of incarceration living with or at risk of HIV. In 2010, Philadelphia had the highest incarceration rate of any major city in the United States[16]. The jail population, though declining, remains high[17]. HIV prevalence is much higher in jails and prisons than in the general population[18]. In 2018, 1062 people living with HIV were released from incarceration in Philadelphia[4].

HIV stigma along with the dynamics cited above, all have the possibility of being part of one person's experience in Philadelphia. These factors must all be considered in the efforts to end the HIV epidemic.

Table 1: Needs Assessment Information for the Philadelphia Jurisdiction By Pillar	
Needs and Gaps	**Strategies to Address Needs and Gaps**
Pillar 1: Diagnose	
An estimated 12% of PLWH in Philadelphia are unaware of their status (n=2,019). Based on CDC estimates, these individuals accounted for 40% of HIV transmissions in Philadelphia in 2018[19].	Increase access to and options for HIV testing, including expansion of routine opt-out testing at various venues. Implement bio-social screening in health care settings. Realign focused community-based testing efforts to ensure key populations are reached.
Pillar 2: Treat	
In 2018 in Philadelphia, 10% of PLWH (n=1,710) with evidence of medical care were not virally suppressed. Based on CDC estimates, these individuals accounted for	Maintain and expand current core medical and other Ryan White funded services, as well as fund new services that support re-

Table 1: Needs Assessment Information for the Philadelphia Jurisdiction By Pillar	
Needs and Gaps	**Strategies to Address Needs and Gaps**
25% of HIV transmissions in Philadelphia[19]. In addition, 2,395 people had no evidence of medical care in 2018, accounting for 35% of HIV transmissions[19].	linkage, retention, and increased viral suppression rates.
Pillar 3: Prevent	
PDPH estimates that nearly 350,000 Philadelphians are at risk for HIV. An estimated 13,900 people in Philadelphia who are HIV negative have an indication for PrEP. This large group includes 8,290 MSM, 2,480 PWID, and 3,130 heterosexuals. Indications vary significantly by race/ethnicity with higher proportions of people of color with an indication for PrEP in all risk groups. Based on a recent survey of PrEP prescribers, PDPH estimates that a minimum of 2,790 individuals are on PrEP (21% of all people with an indication) in Philadelphia in 2018 for a PrEP gap of 10,323 individuals. The ongoing opioid crisis in Philadelphia has overwhelmed the existing syringe service programs in Philadelphia.	Maintain condom distribution program. Expand access to PrEP, nPEP. Expand syringe service programs.
Pillar 4: Respond	
PDPH recently identified an outbreak of HIV infections among PWID[2]. In 2018, 71 new HIV diagnoses were reported among PWID, reflecting an 115% increase since 2016. Meanwhile, the outbreak in Philadelphia remains concentrated among MSM, indicating the need to investigate new cases in all risk groups. In 2018, rates of newly diagnosed HIV were more than six times greater among MSM compared to PWID and heterosexuals (784 new HIV diagnoses per 100,000 population in MSM compared to 121 per 100,000 among PWID and 30 per 100,000 in heterosexuals).	Investigate and respond to all related HIV cases to stop chains of transmission. Initiate outbreak response. Make systemic changes based on the data.

Pillar 1: Diagnose

Philadelphia has an established network of testing sites in a variety of settings and has recently implemented distribution of in-home HIV test kits. There were nearly 70,000 publicly funded HIV tests in Philadelphia in 2018. In addition to community-based HIV testing programs, PDPH funded efforts include opt-out testing at three major emergency departments, two pediatric hospitals, and the Philadelphia Department of Prisons (Prison efforts have been hugely successful with most inmates tested at intake.)

Table 2: PDPH-Funded HIV Testing in Philadelphia, 2018

Location	Number of HIV Tests Performed	Number HIV Positive	Number of New HIV Diagnoses
Community-based settings	21,510	194	TBD
Clinical settings	23,374	134	TBD
Philadelphia Department of Prisons	23,010	80	TBD
Total	**67,894**	**408**	**TBD**

While our testing program is robust, there is still more work to do. In 2018, 12% of PLWH in Philadelphia did not know they had HIV. Those unaware of their status account for 40% of new transmissions. Multiple reports suggest local testing efforts need to be strengthened. In June 2019, CDC reported that just 58% of Philadelphia residents had ever taken an HIV test, and only 21% were tested in the past year. Philadelphia data from the National HIV Behavioral Surveillance found that although MSM, heterosexuals, and PWID had medical care in the last twelve months, many were not offered an HIV test or counseling for PrEP[20]. Frequency of HIV testing and missed opportunities are shown in *Table 3*.

Current testing efforts in community-based settings are not engaging key populations with only 23% of tests being in MSM (2018). Despite PDPH and providers' efforts in the last decade, routine opt-out testing has not been implemented system-wide. PDPH introduced revised funding criteria for community-based testing providers to emphasize and realign testing in key populations based on public health data estimates.

Table 3: HIV Testing and Medical Care Data Among Select Philadelphia Populations, National HIV Behavioral Surveillance (NHBS), 2017-2019						
NHBS population (number of Philadelphia respondents, and year)	**Percent HIV tested in past 2 years**	**Percent HIV tested in past 12 months (among HIV- or unknown)**	**Percent HIV tested in past 3 months (among HIV- or unknown)**	**Percent with HIV medical care visit past 12 months**	**Percent offered HIV test among persons with a medical visit in the past 12 months**	**Percent PrEP discussion among persons with a medical visit in the past 12 months**
Men who have sex with men (n=575 in 2017)	93.8%	77.2%	32.0%	83.0%	60.0%	26.3%
People who inject drugs (n=621 in 2018)	88.7%	49.1%	28.5%	82.0%	61.1%	12.0%
High risk heterosexuals (n=370 in 2019)	78.4%	44.2%	13.2%	85.6%	57.6%	1.6%
Transgender women	Pending	Pending	Pending	Pending	Pending	Pending

PDPH has implemented an HIV self-testing program which has the potential to normalize screening. It may also provide an alternative for people at high risk for acquiring HIV who are unwilling to get tested in other venues. HIV test kits are distributed in combination with a HIV testing campaign. As of December 2019, 527 in-home test kits were requested through the campaign website: http://www.PhillyKeepOnLoving.com. PDPH plans to evaluate the efficacy of this program.

Partner Services (PS) is an essential component in the HIV testing process that notifies partners of possible HIV exposure and links identified individuals to HIV medical care or PrEP. PS can also significantly impact the other three pillars of: treat, prevent and respond. In Philadelphia, Partner Services is conducted with (1) all people with newly identified HIV infection, previously diagnosed cases with high viral loads, and contacts to index cases who are locatable and consent to be interviewed; (2) PLWH with and a diagnosis of gonorrhea, or syphilis who can be located and consent to be interviewed; and (3) all people with newly diagnosed syphilis and

contacts to index cases who are locatable and consent to be interviewed. In 2018, 74% of people with newly diagnosed HIV were interviewed by Partner Services.

Identified Gaps:

1. Insufficient testing of key populations in community-based settings
2. Insufficient opt-out routine testing in clinical settings
3. Inadequate testing among people at high risk for exposure to HIV

Pillar 2: Treat

For people who achieve and maintain viral suppression, there is effectively no risk of transmitting HIV to their sexual partners. PDPH funds a system of 18 **outpatient medical facilities** with experienced HIV providers. In Philadelphia, the 12,671 patients who have been in HIV care in the past 12 months (at least one visit) have an 86% viral suppression rate. Rates of retention in medical care are low with only 54.3% of PLWH receiving at least two HIV visits in 2018.

Medical Case Management offers a range of client-centered activities to improve health outcomes in support of the HIV Care Continuum. PDPH funds 20 providers, which includes medical facilities where MCM services are co-located with HIV medical care (6,688 PLWH were served in 2018). MCM is a major retention intervention in Philadelphia and consists of two levels of care. Comprehensive case management services focus on individuals who are not virally suppressed. Standard case management services focus on maintaining virally suppressed individuals in HIV medical care. MCM activities include linkage to HIV medical care for newly diagnosed and out-of-care individuals and treatment adherence support.

Other core services offered to PLWH are mental health and substance abuse support, emergency HIV medications, medical nutritional services and oral health care (2,786 clients received these services in 2018). In addition, PDPH funds services to address social determinants of health including emergency financial assistance (for back-rent and utilities in arrears); food bank/home delivered meals; housing assistance; legal services; linguistic services (translation and interpretation); and transportation; (7,909 clients received services in 2018).

Data-to-Care (D2C) is an evidenced-based strategy that uses HIV public health and other data to support the HIV Care Continuum, by identifying PLWH who are out of medical care and facilitating re-engagement to care (322 people were served in 2018 through D2C activities; 269 were relinked to HIV medical care with 209 maintaining viral suppression at one-year post enrollment in data-to-care).

Identified Gaps:

1. Re-engagement of out-of-care individuals into medical care
2. Ongoing retention in HIV medical care
3. Increasing durable viral suppression rates
4. Increased access to low-threshold HIV medical care

Pillar 3: Prevent

PDPH participates in large scale **condom distribution** across Philadelphia. Last year PDPH distributed more than 1.3 million free condoms through multiple outreach activities, including education and social marketing.

PDPH is actively promoting other biomedical prevention interventions such as pre-exposure prophylaxis (PrEP). PDPH funded clinics provided 1,017 people with **PrEP Navigation services** in 2019. PrEP is safe and effective for preventing HIV acquisition. An estimated 13,900 people in Philadelphia who are HIV negative have an indication for PrEP. This large group includes MSM (8,290), people who inject drugs (2,480), and heterosexuals (3,130). Estimates for transgender women are forthcoming. Indications vary significantly by race/ethnicity with higher proportions of people of color with an indication for PrEP in all risk groups. **Health promotion activities** to expand knowledge of PrEP have been undertaken through the campaign website at http://www.PhillyKeepOnLoving.com. PDPH has developed a PrEP monitoring and evaluation plan in order to be able to assess uptake in various subpopulations.

Transgender Community Mobilization provides gender-affirming and culturally responsive spaces for transgender people who have sex with men to seek HIV prevention and treatment information, promote rights-based education around healthcare access, and conduct activities that reduce HIV stigma.

Since 1992, through the City General Fund, the PDPH has supported **Syringe Services Programs.** In 2018, the program served 14,000 unique exchangers, and dispensed 3.3 million syringes. Previous reductions in HIV infections from injection drug use in Philadelphia were due to several protective factors, including access to sterile syringes through Prevention Point Philadelphia, access to drug treatment, and behavioral changes among experienced users. In a recent study, it was estimated that syringe exchange programs in Philadelphia averted 10,000 new HIV infections over 10 years[21]. However, from 2016 to 2018, the number of newly diagnosed HIV infections among PWID increased 115% (n=71 cases) and new HIV diagnoses among this population continue to rise. In 2018, Philadelphia had one of the highest drug death rates in the country related to opioid misuse with an estimated 1,116 deaths[22]. This increase correlates with Philadelphia's opioid crisis, which is characterized by the introduction of illicit fentanyl, a rise in the number of people who inject drugs, an increase in homelessness among

drug users, an increase in hepatitis C transmission, and sharp increases in fatal and non-fatal drug overdoses. It is worth noting that fentanyl has a shorter duration of effect than heroin, so people who inject fentanyl may be injecting more frequently, increasing the likelihood of sharing syringes.

There have been no perinatal HIV infections in 2016, 2017, and 2018. PDPH maintains ongoing **perinatal HIV prevention** activities including sentinel case review and specialized case management for pregnant women living with HIV.

Identified Gaps:

1. Not enough people at risk for acquiring HIV are being prescribed PrEP
2. Insufficient data to evaluate the uptake of PrEP
3. Expansion of syringe services programs in the wake of the opioid crisis
4. Low awareness and access to post exposure prophylaxis

Pillar 4: Respond

HIV public health data analysis has been important in identifying new groups of related HIV infections. Geographic and time analysis of new infections was how an outbreak of HIV among PWID was identified. In addition, analysis of laboratory data (also known as "Molecular HIV Surveillance") has been able to identify new groups of related infections among men who have sex with men in Philadelphia. An outbreak response team that includes staff from different units of the health department has developed responses to these groups of related infections and to the outbreak of HIV among PWID.

In September 2018, PDPH identified an increase in HIV diagnosis among PWID. This increase was identified through routine analysis of HIV public health data by PDPH. Analysis showed an increase in the number of HIV cases with PWID transmission risk dispersed in specific geographic regions of Philadelphia. Of the 242 HIV cases identified that are related to the outbreak, half are PWID diagnosed after 2018. Responses by PDPH have involved increasing HIV testing in key areas of the city; increasing syringe services resources; efforts to use Partner Services to locate and link people affected by the outbreak. A focus on training and implementation of harm reduction approaches by both prevention and care providers. The activation of a group of "One-Stop-Shop" medical providers who have the resources to provide HIV care, PrEP, Medication assisted treatment for substance abuse, medical case management and connection to needed support services.

Molecular HIV surveillance (MHS) is the collection of HIV genetic data, originally ordered to make individual treatment decisions, that has been used to support local and state health departments in monitoring trends in HIV transmission and drug resistance[23]. This data is also used to compare various strains of the virus to each other and identify groups, or clusters, of people with HIV who have similar strains of the virus. MHS promises to be an effective tool for

responding to the HIV epidemic. Nonetheless, there are community concerns about the use of MHS. PDPH has worked with the city Law department to assess legal issues related to MHS and has worked to inform the community about MHS and get input on implementation

Demonstrating Expanded Interventional Surveillance (DExIS) is a multi-year CDC demonstration project launched in 2018 to identify missed opportunities for HIV prevention in Philadelphia using individual, system, and community level interventions. The project identifies and analyzes a cohort of sentinel cases (defined as either acute HIV infection or an HIV diagnosis within six months of a previous negative HIV test) to ascertain predictors of missed opportunities along the HIV Care Continuum; provides Partner Services to the identified individuals in the cohort paired with a confidential standardized interview and medical chart abstraction for each individual; develops and implements action steps through a cohort review process to address system-level gaps in HIV prevention based on the information gathered from individuals in the cohort, medical chart abstractions, and HIV prevention program data. The DExIS priority populations are MSM, youth ages 13-24, and transgender/gender nonbinary people who have sex with men.

Identified Gaps:

1. Community concerns regarding data security and privacy, and medical mistrust threaten to ongoing MHS efforts.

EHE Plan

Pillar 1: Diagnose

Goal: Over the 5-year period, 97% of PLWH will be aware of their status.

This includes (as of December 2019):

a. Diagnosing the 1,958 of the currently estimated 2,019 PLWH who are unaware of their status.
    - Of the 1,958 PLWH we hope to diagnose, we estimate that 59.5% are MSM, 30.2% are heterosexuals, and 6.2% are PWID.
    - Of the 1,958 PLWH we hope to diagnose, we estimate that 31.8% are youth, 13-24 (includes all risk groups).
b. Diagnosing the 1,325 people that we estimate will acquire HIV during the 5-year period.

Strategy 1. Increase access to HIV testing through bio-social screening in medical settings including primary and urgent care settings, Emergency Departments, and at prison intake.

The Philadelphia Department of Public Health(PDPH) will promote increased access and frequency of HIV testing through bio-social screenings. Bio-social screening aims to provide clear pathways for clinicians in healthcare settings to offer HIV testing to patients. Bio-markers for screening may include suspected or confirmed diagnoses of syphilis, gonorrhea, chlamydia, hepatitis C, hepatitis A, unintended pregnancy, overdose, or injection-related infection. Social-markers for screening include people in populations with a higher prevalence of HIV, including gay, bisexual, and other men who have sex with men—especially Black and Hispanic/Latino, Transgender or heterosexual women of color.

- Expand support for opt-out HIV testing as part of routine medical care in primary and urgent care settings, Emergency Departments, and at prison intake.
- Focus funding opportunities on structural practice improvements (changes in Electronic Medical Records, appointment scheduling and practice flow to increase access, etc.).
- Require significant participation by clinical leadership as a requirement of any funding provided to clinical settings for implementation of routine HIV testing.
- Identify key urgent care settings to build capacity for HIV testing when patients are seeking STD/STI treatment or emergency contraceptive care.
- Strengthen partnerships for routine screening in other key locations such as Family Planning Clinics, Sexual Health Clinics, Substance Use Treatment Clinics, and Philadelphia County Prison Health Services.
- Provide technical assistance and support by PDPH staff to clinical practices to assess barriers to and develop solutions for expanding routine HIV testing.

Strategy 2. Increase access to HIV testing through community-based programs.

- Realign community-based testing by geospatial need (geography/ time/location) to ensure alignment with population need.

- Explore pharmacy-based testing as a delivery mechanism for HIV testing, in which pharmacists offer and administer HIV testing to clients.
- Partner with home HIV test kit providers to explore innovative approaches to increase correct use of at-home HIV self-test kits.

Strategy 3. Increase the frequency of HIV testing among key populations.

- Expand capacity in strategic locations among key populations for low-barrier HIV testing including walk-in locations.
- Conduct health promotion activities to encourage more frequent HIV testing based on health assessment.

Strategy 4. Implement a status-neutral approach to linkage with realignment and expansion of key personnel – linkage to care includes either HIV medical care or linkage to PrEP.

- Support linkage to care by AIDS Activities Coordinating Office's (AACO) centralized Client Services Unit by facilitating HIV medical appointments for newly diagnosed and out-of-care individuals identified through the funded HIV prevention and care system as well as other diagnosing facilities (e.g., emergency room departments).
- Establish an AACO Field Services Unit responsible for providing intensive linkage to care services for people diagnosed with HIV in the community.
- Incentivize timely linkage to PrEP and HIV care of new patients via bi-directional partnerships (between testing and care) as a condition of funding for both types of services.
- Provide partner services for partner notification after possible HIV/STD/STI exposure and link people to care as appropriate.

Strategy 5: Develop the capacity of the Prevention workforce to meet the needs of ending the HIV epidemic

- Train community-based workforce to meet the goals of the EHE plan.
- Support expansion of the role of HIV testers to include responsibilities for active linkage to HIV medical care and PrEP through training and performance measures.
- Increase compensation of community=based HIV testing workforce to reflect increased responsibilities.

Key Partners: Philadelphia Office of HIV Planning, PDPH Division of Disease Control, clinical providers, health care facilities, community-based providers, Philadelphia County Prison Health Services, and home test kit providers

Potential Funding Resources: CDC HIV Prevention and Surveillance Prevention Cooperative Agreement, Pennsylvania Department of Health, City of Philadelphia General Revenue, Medicaid, and other public and private funding sources

Estimated Funding Allocation: Current PDPH funding: $6,375,007; Increase needed to fully implement plan: TBD

Outcomes:

Number of newly infected people with HIV to be diagnosed over the 5-year period: 1,325

Number of currently unaware PLWH who will be diagnosed over the 5-year period: 1,958

Table 4. Number of New HIV Infections Expected and Number of People Unaware of Their Status that Need to be Diagnosed in Philadelphia by Year		
Year	**Number of new HIV infections expected**	**Number of people unaware of their status that need to be diagnosed**
Baseline	*424*	
Year 1	424	
Year 2	345	489
Year 3	265	490
Year 4	186	489
Year 5	106	490

Monitoring Data Sources: EvaluationWeb, PDPH HIV Public Health Data

Pillar 2: Treat

Goal: Over the 5-year period, 91% of PLWH with evidence of care in the last 5 years will reach viral suppression.

Strategy 1. Improve access to rapid HIV medications and medical appointments.

- Increase access to immediate ART initiation (within 24 - 72 hours).
- Build capacity in high-volume Medication-Assisted Treatment programs to diagnose HIV, immediately initiate ART, and link PLWH not currently receiving medical care to existing services.
- Establish new low-threshold HIV treatment sites in underserved areas of the city.
- Continue to reduce individual barriers to accessing ART via AIDS Drugs Assistance Program enrollment and emergency pharmaceutical assistance.

Strategy 2. Improve the capacity of the HIV medical system to retain patients in care

- Increase re-engagement in HIV medical care by expanding the existing PDPH Data to Care Program to all existing HIV treatment sites.
- Support medical facility-initiated approaches based on institutional need and capacity to re-engage PLWH in HIV medical care using public health data to identify the unique needs of provider's patients and offer resources to implement new and expand existing activities that promote retention in care and viral load suppression. To accomplish this:
    - PDPH will identify the medical facility people not in care last attended (within five years) and provide this information to the facilities to use in assessing facility-specific plans to improve patient retention.
    - PDPH will suggest a range of options for facilities to implement to improve retention including:
        - Expand operating hours to include evening and weekend appointments for HIV medical care in community and hospital-based HIV treatment sites.
        - Increase the capacity for more intensive levels of medical case management services system-wide by adding more medical case managers at clinical sites.
        - Strengthen the multidisciplinary team approach by adding Community Health Workers at HIV treatment sites to implement the evidence-based Managed Problem Solving intervention.
        - Establish medical/legal partnership services consisting of lawyers and paralegals located in health care sites to serve PLWH whose health may be negatively impacted by health-harming legal needs such as access to health insurance or immigration status.
        - Ensure staff are trained in new and expanded interventions.

Strategy 3. Address the social determinants of health to improve healthcare outcomes among PLWH in Philadelphia through behavioral health care, housing, and supportive services.

Behavioral Health Care

- Address mental health challenges by expanding service access through partnership with the Department of Behavioral Health and Intellectual disAbility Services (DBHIDS) (e.g., telepsychiatry sessions).
- Increase the coordination of mental health care and HIV care for PLWH through additional Behavioral Health Consultants using the Primary Care Behavioral Health model (targeted assessment, short term intervention, and brief follow-up).

Housing

- Implement a Rapid Rehousing Program to assist PLWH experiencing homelessness to move into permanent housing by providing short-term subsidies.

Supportive Services

- Address transportation barriers for medical appointments and other necessary services.
- Support integration of trauma-informed approaches to HIV care.
- Continue to provide necessary linguistic services.
- Provide supportive services that reduce individual barriers to treatment adherence (i.e., food services, emergency financial assistance).

Strategy 4. Increase knowledge, close information gaps, and empower people living with HIV to improve their health.

- Develop and distribute rights-based, medical consumer education tool kits for PLWH.
- Increase the capacity of PDPH-funded HIV treatment providers to implement new and expanded activities through targeted technical assistance activities.
- Develop an online data dashboard presenting the most recently available EHE-related information for Philadelphia that visually tracks, analyzes, and displays key performance metrics. This will include retention and viral suppression metrics for individual medical facilities. It will provide PLWH with information needed to access medical care and other services.

Key Partners: PDPH AACO, PDPH Division of Disease Control, Office of HIV Planning, Philadelphia EMA Integrated Planning Council, clinical providers, health care facilities, community-based providers, Philadelphia County Prison Health Services, Prevention Point Philadelphia

Potential Funding Resources: Ryan White HIV/AIDS Program, HRSA EHE Initiative, HRSA Bureau of Primary Care, Medicaid, Medicare, private health insurers, PA DOH, and other public and private sources

Estimated Funding Allocation: Current PDPH funding: $28,095,566; Estimated additional needed to implement the plan: $9,000,000 in first year to $12,660,706in year 5.

Outcomes:

The number of PLWH who will reach viral suppression during the five years:

Table 5. Number of PLWH in Philadelphia Who Will Reach Viral Suppression by Year	
Year	**PLWH**
Baseline (2019)	*10,961*
Year 1	10,961
Year 2	12,109
Year 3	13,258
Year 4	14,406
Year 5 *	15,554
* At the end of the 5-year period, there will be no disparities in viral suppression.	

Monitoring Data Sources: PDPH HIV Public Health Data, PDPH AACO, CAREWare

Pillar 3: Prevent

Goal: Over the 5-year period, 50% of people with a PrEP indication will be prescribed PrEP, and 100% of people seeking nPEP will be prescribed treatment.

Strategy 1. Increase access to low-threshold pre- and post-exposure prophylaxis (PrEP/nPEP) for priority populations.

- Expand new PrEP clinical-community partnerships to engage focused populations.
- Expand PrEP access and provider capacity through low-threshold implementation models, (e.g., telePrEP, nurse-extended PrEP, pharmacy-administered PrEP; PrEP in drug treatment centers).
- Establish new PrEP partnerships between PDPH and grassroots and community-based organizations not currently involved in HIV services.
- Expand financial support for PrEP-related routine laboratory work and adherence services.
- Increase awareness and establish a centralized mechanism to distribute PEP through pharmacy partnerships, PEP centers of excellence, and PEP hotline.
- Expand PEP availability in key settings through starter packs, navigation support from proposed PDPH AACO Field Services Unit and PDPH Client Services Unit.
- Continue to provide ongoing clinical technical assistance for implementation of PrEP in settings across the city.
- Expand capacity to evaluate PrEP uptake.

Strategy 2. Ensure access to syringe service programs, substance disorder treatment, and harm reduction services.

- Expand capacity for syringe service programs to distribute and collect syringes.
- Provide organizational development and capacity building to expand local partnerships and establish new locations based on need and HIV public health data.
- Engage behavioral health consultants and community health workers to offer harm reduction strategies.

Strategy 3. Provide HIV prevention activities for the communities at risk.

- Continue City-wide distribution of free condoms including high schools, locations accessed by youth, and at syringe service programs sites.
- Re-establish community-based partnerships for sexual wellness and HIV education through existing health education programs including work with Philadelphia Schools.
- Expand capacity for HIV prevention workforce to provide primary HIV-related education.

Strategy 4: Provide perinatal HIV prevention activities.

- Continue sentinel case review and system improvement activities.
- Provide specialized case management for pregnant women living with HIV.
- Develop PrEP navigation support for pregnant HIV negative women at risk of HIV acquisition.

Key Partners: PDPH AACO, PDPH Division of Disease Control, PDPH Division of Substance Use Prevention and Harm Reduction, PA DOH, clinical providers, health care facilities, community-based providers, Prevention Point Philadelphia, The School District of Philadelphia
Potential Funding Resources: CDC HIV Prevention and Surveillance Cooperative Agreement, CDC EHE Initiative, HRSA Bureau of Primary Care, Pennsylvania Department of Health, City of Philadelphia General Revenues
Estimated Funding Allocation: Current PDPH funding $5,015,898; Estimated additional funding needed to implement the plan: TBD

Outcomes:

Table 6. PrEP-Related 5-Year Goals by Population		
Population	**Percent of population with PrEP indication on PrEP**	**Number on PrEP**
Overall	***50%***	***6,590***
Transgender persons	75%	TBD
MSM with recent syphilis	75%	TBD
Black MSM	50%	2,440
Cis-gender women	50%	1,565
PWID	50%	1,240
Latino MSM	50%	840
Young MSM	50%	TBD

Monitoring Data Sources: PDPH AACO, CAREWare, EvaluationWeb, NHBS

Pillar 4: Respond

Goal: Identify and investigate active HIV transmission clusters and respond to HIV outbreaks.

Strategy 1. Maintain a robust core HIV public health data system to identify outbreaks of HIV.

- Maintain a strong HIV public health data system.
- Increase the capacity for HIV-related lab reporting (as we focus on linking more PLWH to care the volume of labs will increase).
- Maintain capacity for new diagnoses follow-up.
- Maintain capacity molecular HIV surveillance activities and cluster investigation.
- Quickly Implement outbreak response plan as necessary to respond to rapidly growing networks of HIV transmission.
- Streamline systems of data management to avoid duplication, enhance data-linkage and ascertain death factors.

Strategy 2. Review incidences of HIV acquisition through Philadelphia's DExIS Project (Demonstrating Expanded Interventional Surveillance).

- Conduct systematic cohort reviews of sentinel new HIV diagnoses to identify missed HIV prevention opportunities and to deepen understanding of care seeking among people at risk of infection.
- Establish interventions for implementing system-wide changes based on findings of the review teams.

Key Partners: PDPH AACO, HIV Outbreak Response Team, PDPH Division of Disease Control, community partners, DExIS Case Review Team, Community Action Team, and Policy Implementation teams
Potential Funding Resources: CDC HIV Prevention and Surveillance Prevention Cooperative Agreement (includes Component B funding for DExIS), Pennsylvania Department of Health, HRSA EHE, CDC
Estimated Funding Allocation: Current PDPH funding $2,269,023; Increased funding needed to implement plan: TBD
Monitoring Data Sources: HIV public health data, HIV Prevention program data, RW CAREWare.
Outcomes: PDPH will finalize protocols of cluster detection and response procedures.

Workforce Development

Goal: Ensure that the HIV workforce is appropriately trained, supported, and capable of meeting the needs of the EHE plan.

Strategy 1. Utilize programmatic and HIV public health data to support public health workforce development.

- Build capacity for new community-based partners to promote testing and treatment.
- Provide technical assistance and support by PDPH staff to clinical practices to assess barriers to and develop solutions for expanding routine HIV testing.
- Support expansion of the role of HIV testers to include responsibilities for active linkage to HIV medical care and PrEP through training and performance measures.
- Increase compensation of community-based HIV testing workforce to reflect increased responsibilities.
- Ensure staff are trained in new and expanded interventions in Pillar 2.
- Continue to provide ongoing clinical technical assistance for implementation of PrEP in settings across the city.
- Expand community mobilization: to use community as a workforce partners in implementing the EHE plan.
- Increase pathways for leadership among frontline workers and people connected to affected populations.
- Expand HIV-related knowledge among hepatitis investigators and STD staff to link people into HIV treatment and PrEP care.
- Provide ongoing technical assistance and training for staff with direct client roles to improve cultural humility regarding such factors as how health care information is received, and how patient rights and protections are exercised.

Some of these activities are cross cutting, and many have been previously included under Pillars 1 – 4. These activities are listed here to provide focus on the workforce development needs of the EHE plan. Funding for these activities is included under Pillars 1 – 4.

Concurrence

PDPH will engage in the following activities to obtain concurrence by the HIPC for the final EHE Plan:

- Initiate and maintain EHE planning collaboration between the Philadelphia Department of Public Health (PDPH) and the HIPC staff through on-going coordination with Office of HIV Planning staff.
- Present a crosswalk of the existing Integrated HIV Prevention and Care Plan with the EHE planning documents now being developed: epidemiologic profile, situational analysis, and EHE plan
- Add EHE planning to the HIPC's standing meeting agenda.
- Incorporate comments and feedback from HIPC in epidemiologic profile and situational analysis.
- HIPC subcommittees complete review of proposed activities in Philadelphia EHE Plan to assess feasibility of programmatic implementation.
- Provide comments on draft Philadelphia EHE Plan during 30-day open comment period.
- Host open house for HIPC and community comments and provide technical support to key stakeholders to submit comments on Philadelphia EHE Plan draft.

Appendices

Appendix A: Priority Populations for the City of Philadelphia's Ending the HIV Epidemic Plan for Pillar 1: Diagnose and Pillar 3: Prevent

Category	Pillar 1: Diagnose			Pillar 3: Prevent
	2018 HIV Diagnoses	2018 Linkage to Care in 30 Days (#/%)	2017 Unaware (#/%)	# of HIV Negative Persons with a PrEP Indication
Total	424	365 (86.1%)	2,019 (9.6%)	13,900
Youth				
Youth 13 - 24	109	100 (91.7%)	643 (51.5%)	N/A
Heterosexual Contact				
Multi-Race non-Hispanic	0	N/A		
Asian/Pacific Islander	0	N/A		
American Indian/Alaskan Native	0	N/A		
Female (Birth Sex)				2,921
Black	8	7 (87.5%)	295 (7.2%)	
Hispanic/Latino	<6	<6 (100.0%)		
White	<6	<6 (100.0%)		
Multi-Race non-Hispanic	<6	<6 (100.0%)		
Asian/Pacific Islander	0	N/A		
American Indian/Alaskan Native	0	N/A		
Transgender				
Transgender	9	6 (66.7%)	N/A	
PWID				
PWID (Includes MSM/PWID)	71	54 (76.1%)	125 (3.2%)	2,480
MSM				
Black MSM	122	103 (84.4%)	1,202 (14.4%)	4,880

Category	Pillar 1: Diagnose			Pillar 3: Prevent
	2018 HIV Diagnoses	2018 Linkage to Care in 30 Days (#/%)	2017 Unaware (#/%)	# of HIV Negative Persons with a PrEP Indication
Hispanic/Latino MSM	42	37 (88.1%)		1,680
White MSM	33	31 (93.9%)		1,320
Multi-Race non-Hispanic MSM	<6	<6(100.0%)		N/A
Asian/Pacific Islander MSM	7	7 (100.0%)		N/A
American Indian MSM	<6	N/A (100%)		N/A

Appendix B: Priority Populations for the City of Philadelphia's Ending the HIV Epidemic Plan Pillar 2: Treat

Category	Total number of PLWH with evidence of care in last 5 years	PLWH with no care in 2018	PLWH in care not virally suppressed in 2018	Total not in care or virally suppressed	Percent of population not In care or virally suppressed
Total	15,066	2,395	1,710	4,105	27.2%
Youth					
Youth 13-19	80	8	13	21	26.3%
Youth 2024	482	78	100	178	36.9%
Heterosexual Contact					
Male (Birth Sex)					
Black	1,549	270	180	450	29.1%
Hispanic/Latino	322	68	25	93	28.9%
Multi-Race non-Hispanic	50	9	*	*	*
Asian/Pacific Islander	32	*	*	*	*
American Indian/Alaskan Native	10	*	*	*	*
Female (Birth Sex)					
Black	2,454	314	277	591	24.1%
Hispanic/Latino	452	45	38	83	18.4%
Multi-Race non-Hispanic	69	11	8	19	27.5%
Asian/Pacific Islander	32	*	*	*	*
American Indian/Alaskan Native	7	*	*	*	*
Transgender					
Sexual contact	199	31	37	68	34.2%
Other°	48	7	15	22	45.8%
PWID					

Category	Total number of PLWH with evidence of care in last 5 years	PLWH with no care in 2018	PLWH in care not virally suppressed in 2018	Total not in care or virally suppressed	Percent of population not In care or virally suppressed
PWID (Includes MSM/PWID)	3,261	478	444	922	28.3%
MSM					
Black MSM	3,485	610	430	1040	29.8%
Latino MSM	714	126	69	195	27.3%
White MSM	1,467	257	71	328	22.4%
Asian/PI MSM	76	13	*	*	*
American Indian MSM	9	*	*	*	*
° Includes IDU, Sexual Contact/IDU, and Unknown/NIR)					

Appendix C: Modified HIV Care Continuum Definitions by Stage

Indicator	Numerator Definition	Denominator Definition
Diagnosed HIV infection	Number of PLWH in Philadelphia with diagnosed HIV infection in 2018	Number of PLWH with diagnosed HIV infection with a reported CD4 or viral load in the last five years (1/1/2014 – 12/31/2018) and number of PLWH estimated to be unaware of their HIV status in Philadelphia in 2018
Linkage to care	Number of persons with newly diagnosed HIV in Philadelphia that were linked to care in 30 days in 2018	Number of persons with newly diagnosed HIV in 2018 in Philadelphia
Retention in care	Number of PLWH in Philadelphia who had evidence of ≥2 CD4 counts and/or viral loads at least 90 days apart in 2018	Number of PLWH with diagnosed HIV infection with a reported CD4 or viral load in the last five years (1/1/2014 – 12/31/2018) and number of PLWH estimated to be unaware of their HIV status in Philadelphia in 2018
Viral suppression	Number of PLWH in Philadelphia whose last viral load of the year was <200 copies/mL in 2018	Number of PLWH with diagnosed HIV infection with a reported CD4 or viral load in the last five years (1/1/2014 – 12/31/2018) and number of PLWH estimated to be unaware of their HIV status in Philadelphia in 2018

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