Texas HIV Plan

Update for 2014-2015

DEPARTMENT OF STATE HEALTH SERVICES

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Table of Contents

Table of Figures

Introduction

As of the end of 2012, there were 72,932 Texans known to be living with HIV. In that year alone, 4,265 new diagnoses were made, a number very similar to the new diagnoses reported each year since 2003. Advances in treatment have increased the quality and length of life for people living with HIV. The decrease in deaths from HIV coupled with the consistent number of new infections results in a five to six percent annual increase in the number of Texans living with HIV.[1]

Those in Texas communities working to reduce HIV and provide treatment and care for those living with HIV are aware of the day to day challenges associated with the infection. About 18 percent of those living with HIV have not yet been diagnosed, living without the life extending benefits of treatment; models of the spread of HIV have estimated that undiagnosed persons may drive almost half the new HIV infections. In 2011, about one in three of the diagnoses made in that year were made late in the course of disease, which worsens prognosis for these individuals and shortens life spans. About two in five Texans living with HIV in 2012 were not receiving HIV-related medical care, and about half of those who were did not have a suppressed HIV viral load, a marker for good health and reduced infectiousness.

> Even if there were no new infections in 2014 and onward, the number of Texans living with HIV would decline only by a little more than 1,000 persons a year. Short of a cure, HIV will remain an important and costly health issue for decades to come.

The profile of Texans with HIV shows some of the starkest disparities of any health condition. More than half of the new infections, as well as more than half of the persons living with HIV, are gay men and other men who have sex with men. In 2012, the rates of new diagnoses for Blacks were almost three times higher than those for Whites and Hispanics. Blacks also show lower levels of participation in care and viral suppression. In this same year the rate of late diagnosis among Hispanics was 1.5 times higher than the rate for Blacks and Whites, a trend which could frustrate efforts to reduce new infections in this group.

The continuing rise in the number of living cases of HIV and the significant burden placed on sexual and racial/ethnic minorities make it easy to overlook the gains that have been made in the fight against HIV in Texas over the last two decades. As a case in point, consider perinatal HIV, the transmission of HIV from mother to child. The number of these cases has been significantly reduced through comprehensive strategies that reduce the number of undetected and untreated cases. Since treatment of HIV infected mothers reduces the chance of transmission to the child, perinatal prevention strategies use the best of medicine and social science to assure that the greatest numbers of women with HIV are identified as early in their pregnancies as possible.

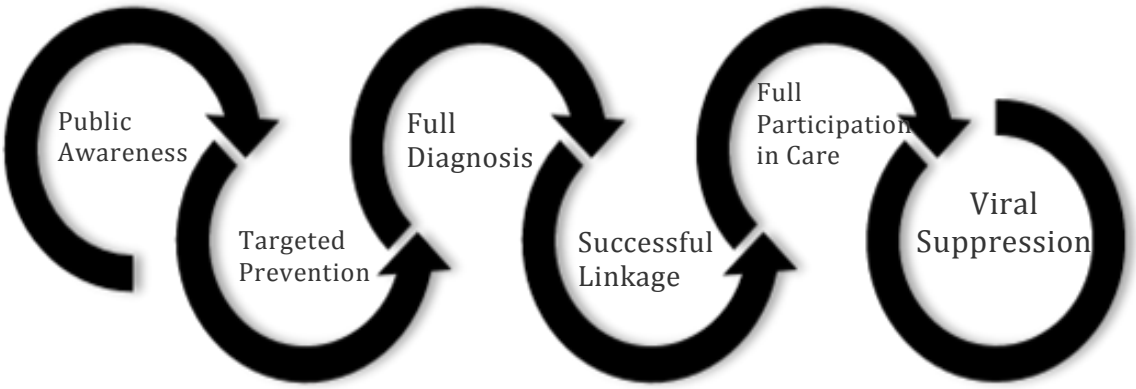
This success story may be an important pattern for other successes; new studies have demonstrated that increasing the number of people with low viral load reduces new HIV infections. This works by reducing the infectiousness of persons living with HIV at the individual level, and reducing the overall amount of HIV circulating in a community, both of which reduce the chances of new persons becoming infected. This trend can be seen in Texas: the number of new diagnoses holding steady despite increases in the overall number of persons living with HIV shows the effectiveness of prevention and treatment efforts. While these efforts hold new infections steady, reducing the annual number of new infections requires additional strategies and renewed energy.

The Texas HIV Plan uses a comprehensive approach based on public health principles and the Continuum of Care developed by the Health Resources and Services Administration (HRSA). The HRSA continuum shows the range of possible engagement in care, beginning with awareness of HIV status and spanning a range of engagement levels, ending with people with HIV fully engaged in medical care.[2]

The overarching goal of the Texas HIV Plan is to reduce new infections.

The HRSA continuum has been expanded into the Texas spectrum of HIV engagement. The overarching goal of the Texas HIV Plan is to reduce new HIV infections and is founded on two lines of attack: decreasing risk for populations and communities vulnerable to and reducing the amount of virus present in communities by reducing undiagnosed and untreated HIV infections.

Figure 1: Texas Spectrum of HIV Engagement



The DSHS spectrum has six domains:

- *Increasing HIV awareness among members of the general public, community leaders, and policy makers*
- *Increasing access to HIV prevention efforts for high risk groups*
- *Full diagnosis of everyone infected with HIV*
- *Timely linkage to HIV-related care and treatment*
- *Continuous participation in systems of care and treatment*
- *Increased viral suppression.*

The framework and strategies in this plan that correspond to these domains were taken from statewide and local HIV prevention and treatment plans; these plans combine voices of the community, providers, policy makers, and health professionals and contain strategies responsive to their unique needs.

This plan is not a detailed compilation of the strategies in local plans. This plan *is* intended to prioritize actions and coordinate the use of resources across individuals and organizations in communities and groups affected by HIV, to identify and common goals and begin to harmonize strategies and evaluation. It is meant to enrich local action rather than direct it. By seeing specific

actions and programs as a part of this broad spectrum of engagement, organizations and programs can amplify the effects of their response by connecting with others whose work may be up or down stream from theirs. Linked arms bridge gaps and make strong barricades against viral encroachers.

Current strategies to prevent and treat HIV have resulted in a contained epidemic, but there are still about 4,100 Texans diagnosed every year. For Texas to push past the plateau in new cases, the coordinated and comprehensive strategy in this plan that addresses how and why the virus is spread is necessary.

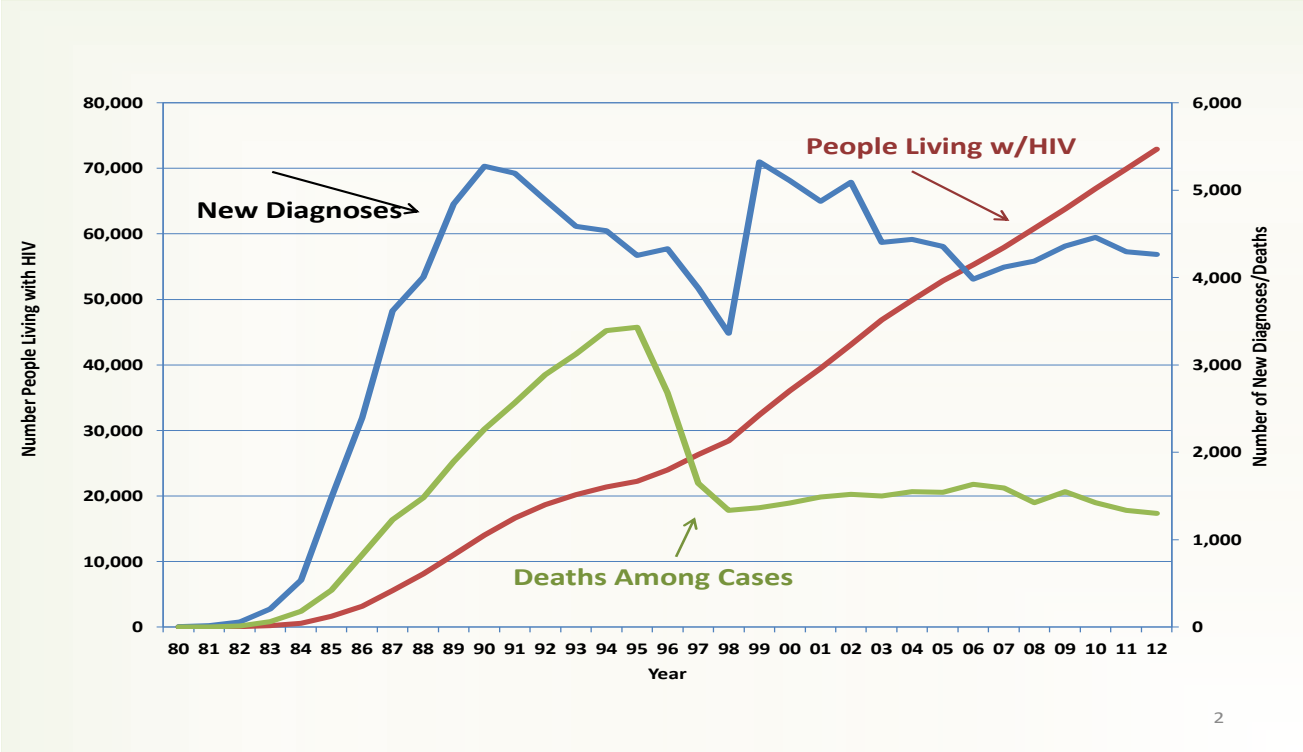
HIV in Texas

As of the end of 2012, there were 72,932 Texans living with a diagnosed HIV infection. The number of Texans living with HIV rises each year, as shown in Figure 2. What is also shown in this graph is the steep decline in the number of deaths among persons with HIV, and in recent years, a stable number of new diagnoses each year (about 4,300 a year for the past five years). In 2012, 4,265 Texans were newly diagnosed with HIV infection, and about 1,300 HIV-infected persons died.

The number of living HIV cases does not include undiagnosed infections. DSHS estimates that there are about 16,000 Texans living with undiagnosed infections.

If new cases are steady, why do the numbers of living with HIV continue to rise? The growth in prevalent cases[3] is explained by the consistently low number of deaths; treatment allows people with HIV to live longer. In fact, recent studies have shown that people on effective treatment medications have life expectancies that are similar to those of people without HIV.[4]

Figure 2: Living Cases, New Diagnoses, and Deaths in Texas, 1980 - 2012



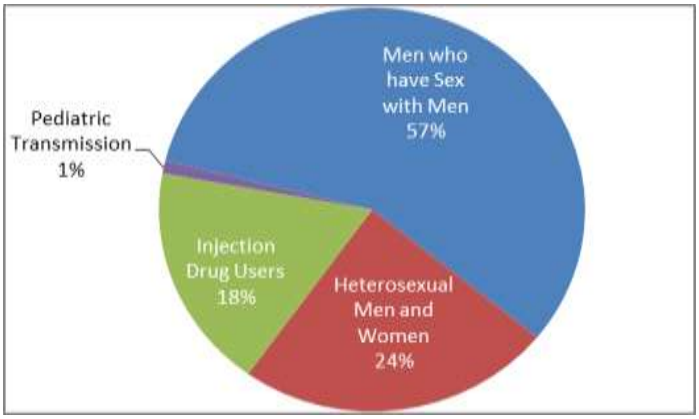
The Geography of HIV

More than half of persons with HIV live in the Dallas and Houston areas. About 7 percent each live in Fort Worth, Austin, San Antonio, the US-Mexico border, the East Texas area, or are incarcerated in facilities in the Texas Department of Criminal Justice.

HIV by Mode of Transmission

Mode of transmission is used to describe the most likely way that someone with HIV became infected. Figure 3 shows that more than half of the Texans living with HIV in 2012 were gay men and other men who have sex with men (MSM), with an additional quarter due to heterosexual sex and 18 percent attributed to injection drug use (IDU).

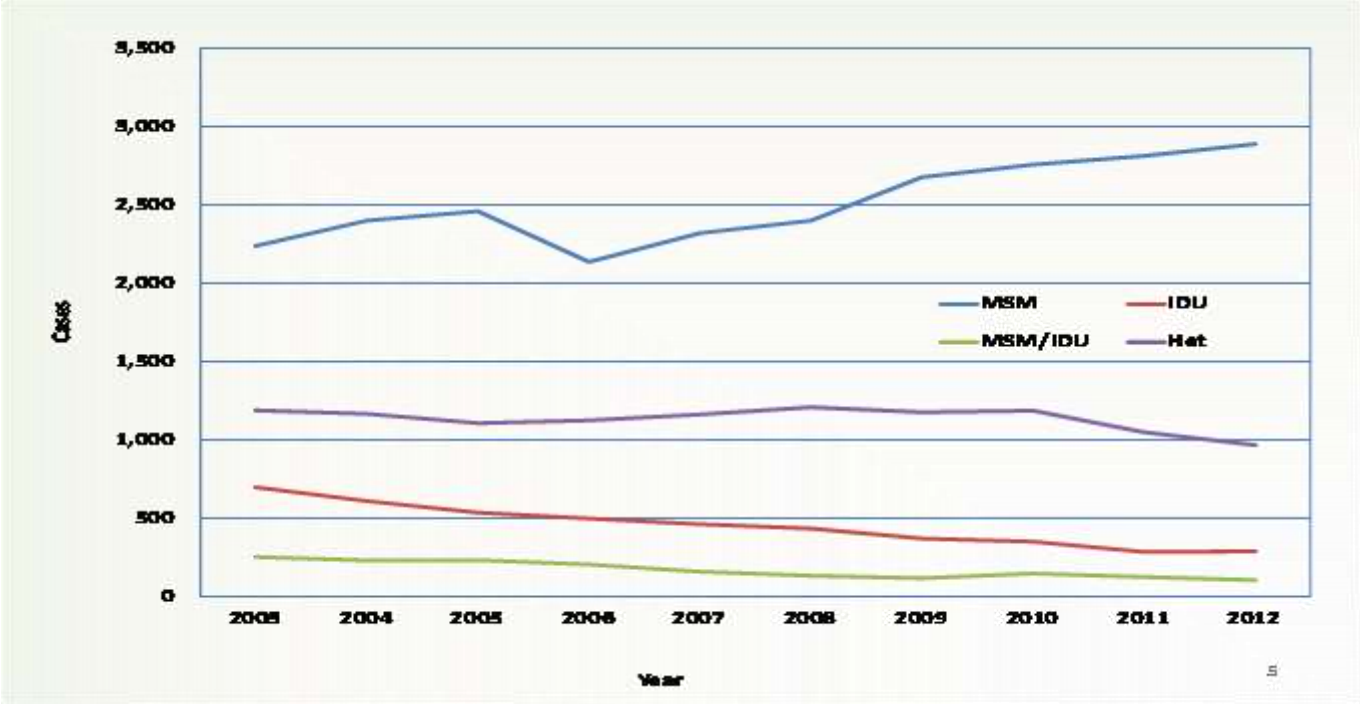
Figure 3: Mode of Transmission for Persons Living with HIV in Texas, 2012



In 2012 gay men and other MSM made up about 68 percent of the new HIV diagnoses. As

Figure 4 shows, over the past ten years new diagnoses attributed to IDU and heterosexual sex have decreased, but cases among MSM have been increased.

Figure 4: Number of New Diagnoses by Mode of Transmission, Texas, 2003 - 2012



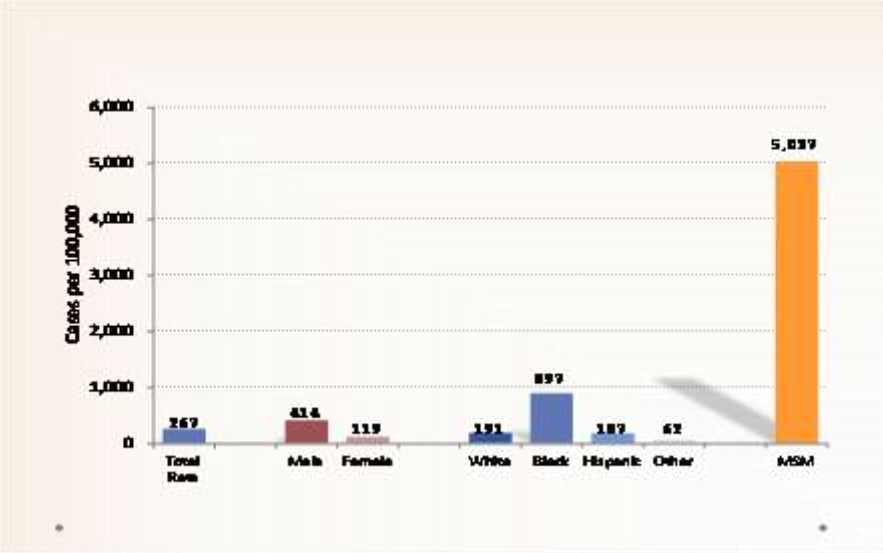
HIV Burden in Gay Men/MSM

While the proportions of new or living cases illustrates why these men should be a focus point of prevention and care action, these figures don't show the incredible health disparity in HIV carried by this group. There are an estimated 586,000 MSM in Texas, which is about 7.3 percent of the Texas population.[5] Dallas and Harris are the only counties with estimated MSM populations that exceed 100,000.

In 2012, almost eight new HIV cases in gay men/MSM were diagnosed every day.

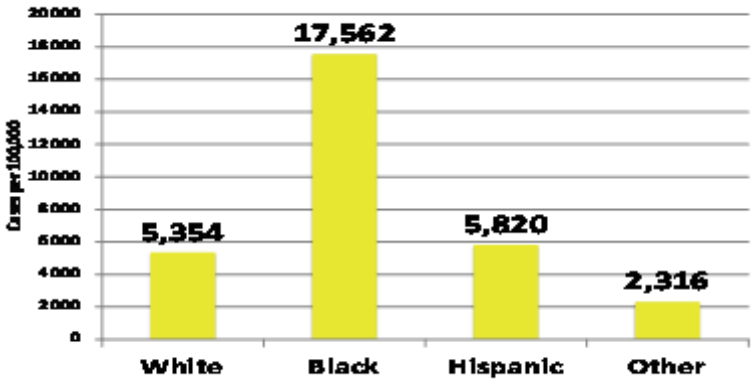
The rates of HIV prevalence in different demographic groups are compared in Figure 5. Calculating prevalence rates allows the direct comparison of groups that may be very different in size; it can show the true burden of disease in a group. The overall prevalence rate is 267 persons with HIV infection for every 100,000 Texans. When the size of the MSM population is taken into account, **1 in 20 MSM** are living with HIV. This prevalence rate is **19 times higher** than the overall prevalence.

Figure 5: Comparison of HIV Prevalence Rates in Selected Groups, Texas 2012



Health disparities within gay men/MSM are also sharp. Although more than five percent of the White and Hispanic gay men/MSM in Texas are living with HIV, the rate of living cases in Black gay men/MSM is more than three times higher (Figure 6). Similar differences are seen in new infections.

Figure 6: HIV Prevalence Rates in Gay Men/MSM by Race/Ethnicity, Texas, 2011



HIV and Race/Ethnicity

The majority of persons living with HIV in Texas are among racial and ethnic minorities, with 38 percent of the living cases among Blacks and 29 percent among Hispanics.

Black Texans made up about 38 percent of new diagnoses in 2012, with Hispanics making up 36 percent, and Whites about 28 percent. As can be seen in Figure 7, the number of new diagnoses in Hispanics increased beginning in 2008. This increase is almost wholly attributable to increases in gay men/MSM in this group.

Figure 7: New HIV Diagnoses by Race/Ethnicity, Texas

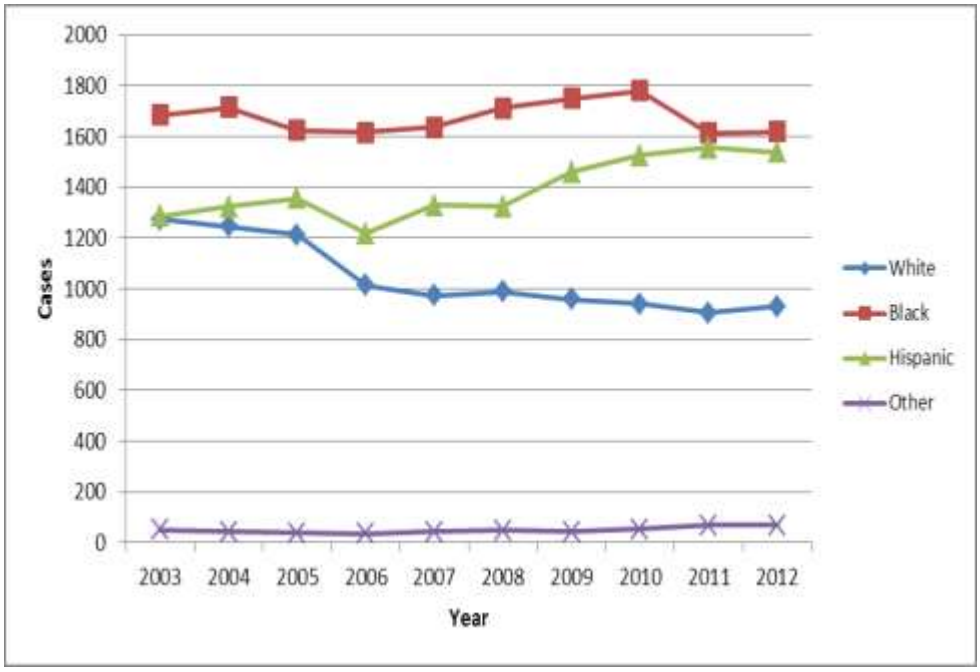
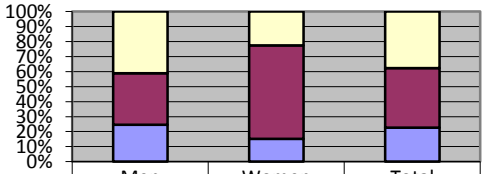


Figure 8: New Diagnoses by Race/ Ethnicity, 2012



	Men	Women	Total
Hispanic	1,360	179	1,539
Black	1,129	490	1,619
White	810	120	930

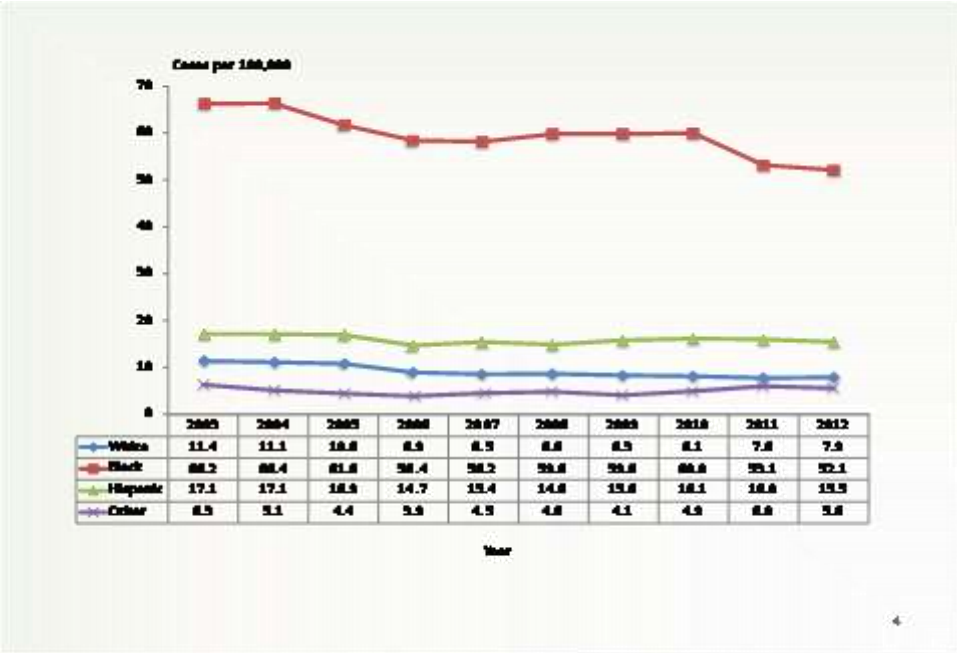
When cases diagnosed in 2012 are broken down by race/ethnicity and sex, further differences in race/ethnicity are seen. Among men diagnosed in 2012, Hispanics make up almost 40 percent and Blacks about 33 percent of the new cases. Among women diagnosed in 2012, Blacks made up 59 percent of the cases (Figure 8).

Burden of HIV in Black Texans

While the number of new infections in Blacks and Hispanics appear to be converging, the populations are of very different sizes (Blacks make up about 12 percent of the Texas population, Hispanics, 38 percent). As a result of the smaller overall population size, Blacks in Texas have disproportionate

rates of both living and newly diagnosed HIV infections. The rate of living cases among Blacks in 2012 was four to five times higher than rates for Whites or Hispanics (921.2 for Blacks, 184.8 for Whites, and 226.7 for Hispanics) and rates for new diagnoses are three to seven time higher than rates for other groups, although they have been slowly declining over the years (Figure 9).

Figure 9: Rates of New Diagnoses in Texas by Race/Ethnicity, 2003-2012



Rates for Black women show the need for focused attention on this group. Figure 9 shows rates of new diagnosis by race/ethnicity and sex. Rates of infection for Black women are second only to rates for Black men, higher than rates for Hispanics and Whites of either sex. Additionally, Black women have higher rates of both gonorrhea and syphilis, and while it is not tracked in Texas, the literature has established that Black women also have disportionate rates of HSV infection, all of which create a vulnerability for acquiring HIV.

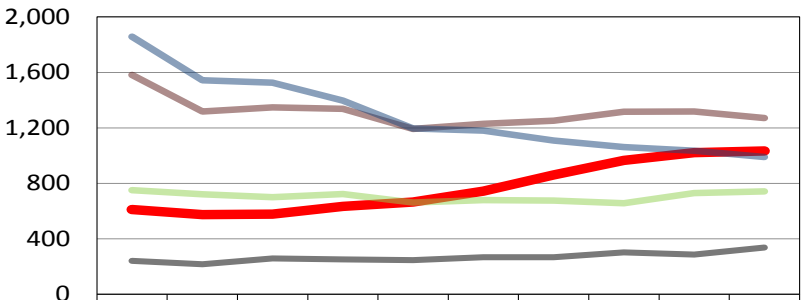
Table 1: Number, Percentage, and Rate of New Diagnoses by Sex and Race/Ethnicity, Texas 2012

	Male			Female			Total		
Race/Ethnicity	*Number*	*%*	*Rate*	*Number*	*%*	*Rate*	*Number*	*%*	*Rate*
White	810	23.6%	13.9	120	14.5%	2.0	930	21.8%	7.9
Black	1,129	32.9%	75.1	490	59.0%	30.5	1,619	38.1%	15.5
Hispanic	1,360	39.6%	27.1	179	21.6%	3.6	1,539	36.1%	15.5

HIV and Age

Most people living with HIV are between 35 and 55 years old, and as people with HIV live longer, the average age of persons living with HIV in Texas also rises. Contrasting with this trend, the age group showing the most change in recent years involves increases in infections in the 16 - 24 year old group, driven primarily of increases in diagnoses in gay men/MSM in their late teens to mid-twenties, as almost all the new diagnoses in this age group are among gay men/MSM (Figure 10).

Figure 10: New HIV Diagnoses by Age Group, Texas 2012



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
16-24	612	574	579	634	666	744	861	965	1021	1034
25-34	1582	1319	1347	1338	1192	1229	1251	1316	1318	1271
35-44	1858	1544	1526	1396	1196	1181	1108	1062	1035	990
45-54	751	722	701	723	662	679	676	657	730	742
55+	241	217	258	251	246	267	268	303	287	338

Following the Epidemic

If Texas reduces new infections, it will be because there was thoughtful and focused consideration of the factors that increase the vulnerability of gay men/MSM, especially Black and Hispanic gay men/MSM and young gay men/MSM, and Black women to HIV. From a population perspective, moving the needle on infections requires special attention to diagnosis and treatment for these populations.

Strengthening and Focusing HIV Strategies

Once diagnosed, people with HIV must stay on treatment drugs for the rest of their lives. Treatment drugs lower the amount of HIV in the blood of infected persons, also called *viral load*, and successful treatment is known as viral suppression. Staying virally suppressed slows the progression of disease, and decreases disability, hospitalization, and premature death. Effectively treating someone infected with HIV not only increases their survival but also decreases their likelihood of infecting someone else,[678] making effective treatment a key prevention strategy.

Both the health of infected individuals and the communities they live in can be described by viral load – the greater the number of HIV-infected people with suppressed viral load, the lower the community viral load, meaning that further transmission of HIV is much less likely in that community. Science-based programs to help persons in high risk groups reduce their risky behavior, combined with reducing the number of undiagnosed and untreated HIV infections, are the keys to reducing new HIV infections in Texas.

To be engaged in treatment, individuals must be diagnosed, consistently engaged in care and adherent to their medical regimens. The Health Resources and Services Administration (HRSA)

developed the continuum below to describe engagement in care for people living with HIV. The continuum encompasses the range of possible engagement in care levels, from those who are unaware of their HIV status to those who are fully engaged in HIV medical care.[9]

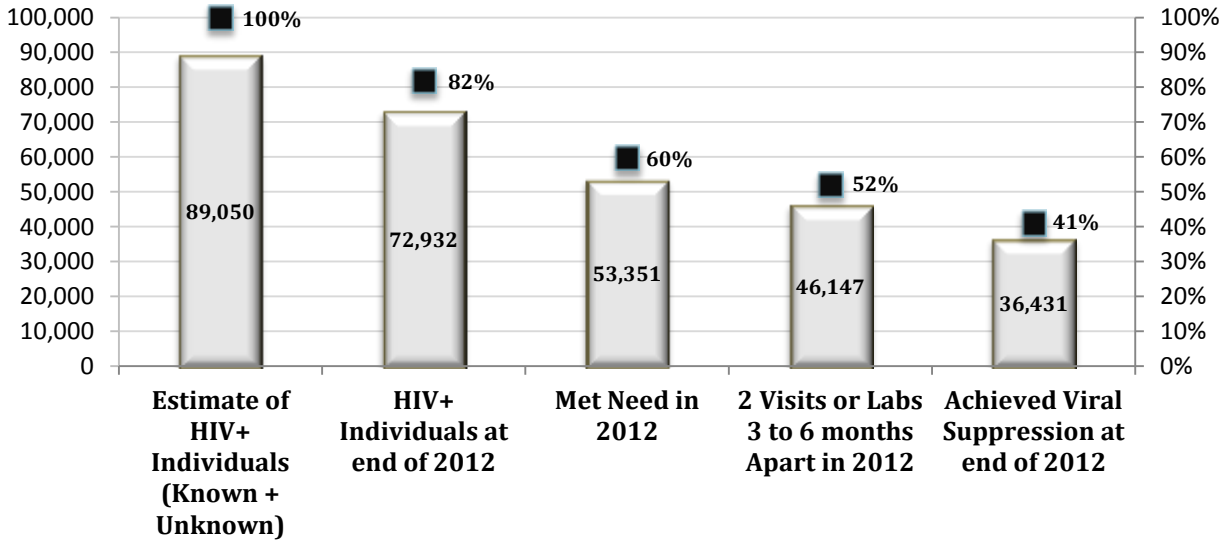
Figure 11: HRSA Continuum of Care

Not in Care			In Care		
Unaware of HIV status (not tested or never received results)	Know HIV status, but not referred to care or didn't keep referral	Know HIV status and receiving other medical care, but not HIV treatment	Entered HIV primary medical care but dropped out (lost to follow up)	In and out of HIV-related medical care	Fully engaged in HIV primary care

The Treatment Cascade

The treatment cascade is one way to show where Texas stands, and the figure below shows the state's standing in 2012. If the goal is viral suppression, persons with HIV must first be diagnosed and linked to care, placed on effective treatment and receive the supportive care coordination and services to help them stay adherent to treatments. Improvement in any single stage of the continuum will have minimal population based impact.[10] The chart below shows a snapshot of the treatment cascade in Texas in 2012.

Figure 12: Texas Treatment Cascade, 2012

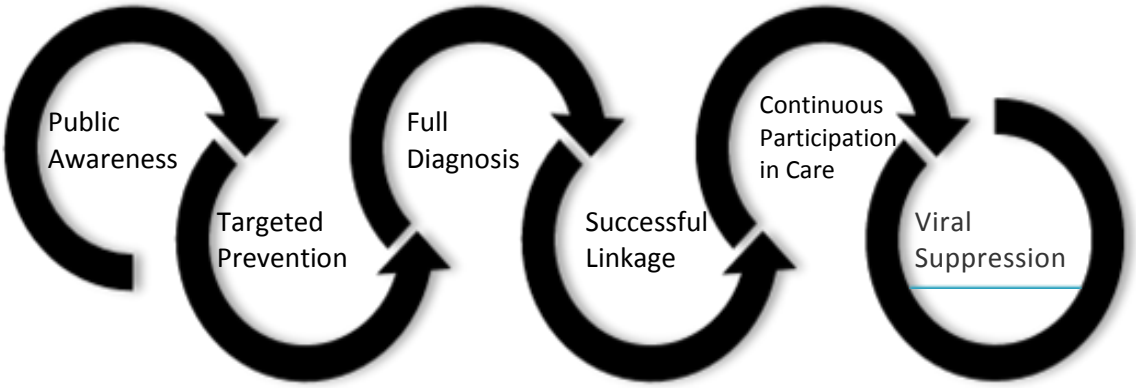


In 2012, there are an estimated 89,000 persons living with HIV infection in Texas, but only 82 percent had been diagnosed. Of the total number of persons with HIV (including undiagnosed persons), only about 60 percent were in medical care in 2012, and little more than half showed

consistent participation in treatment during 2012. Finally, only about 41 percent had viral loads that were considered suppressed or low enough to reduce the chances of transmitting to others. To reduce HIV infections in Texas, all the bars of the cascade must be raised.

The Texas Department of State Health Services (DSHS) has developed an expanded spectrum of HIV engagement that includes prevention for people who are uninfected and improved adherence for people living with HIV. The overarching goal of the Texas HIV Plan is to reduce new HIV infections in Texas and is founded on two strategies: decreasing behaviors that put people at risk for HIV infection and decreasing the likelihood of HIV transmission reducing the amount of virus present in communities.

Figure 13: Texas Spectrum of HIV Engagement



Domains in the Spectrum of HIV Engagement

Six domains serve as the foundation for reducing HIV in Texas

Increasing HIV awareness among members of the general public, community leaders, and policy makers

In 2011, only 40 percent of Americans reported that they saw, heard or read something about HIV in America.[11] As a result, many people do not have adequate knowledge about HIV risk behaviors. This lack of knowledge fuels both the spread of new infections and HIV related stigma. Increasing exposure to accurate information about HIV will increase awareness in the general public and decrease HIV related stigma.[12]

Additionally, building understanding of stakeholders, advocates, policy makers, and health professionals of the importance of each link in the spectrum of engagement and the potential for reduction in new HIV infections by strengthening these links should also be considered key communication goals. Finally, it is also essential to share the message that truly effective action to reduce HIV must also include actions to address the social and environmental factors that work against prevention and care goals.

Increasing access to HIV prevention efforts for high risk groups

To decrease new cases efficiently, HIV prevention must be focused on those at highest risk based not only on behavior, but on the prevalence in the social and sexual networks (illustrated by rates of infection or more specific evidence of density of HIV infection in a community or network). The summary of most recent information about prevalent and new infections shows that gay men/MSM, especially Black men, Hispanic men (based on recent increases in new cases) and young men, are especially vulnerable, as are Black heterosexual women. The Texas HIV Community Planning Group also recommends attention to injection drug users, Black heterosexual men, and transgendered individuals in addition to the groups listed above. Coordinated efforts to effectively engage these groups will pay off in lowered viral load in patients and communities.

Full Diagnosis of all HIV Infections

Based on the Centers for Disease Control and Prevention estimate, roughly 16,000 Texans are infected with HIV and do not know it.[13] These undiagnosed individuals are living without life-extending treatment, treatment that will also lower their viral loads and reduce the chance that they could pass HIV on to others. Undiagnosed individuals, who necessarily have higher viral loads, continue to engage in risk behaviors and may account for 50 percent to 70 percent of new infections.[14] Delays in diagnosis also contribute to poorer prognosis and aid in the further spread of HIV. About one in four persons with HIV in Texas receives a late diagnosis, although that figure rises to one in 3 for Hispanics. More complete and timely diagnosis will improve long term health outcomes and reduce new infections.

Speedy and timely linkage to HIV-related care and treatment

In 2012, about one in five newly diagnosed individuals in Texas did not receive a timely linkage into medical care. Although 85 percent of Whites and 82 percent of Hispanics were linked with HIV-related medical care within three months, only 72 percent of Blacks were linked into care within that time frame. Timely linkage ensures appropriate treatment is initiated, and is the first step towards reduction of viral load at the individual and community level.

Continuous participation in systems of care and treatment

As HIV is a chronic infection, continuous treatment is necessary. However, only 56 percent of Texans living with HIV had uninterrupted care between 2007 and 2010. Like any other chronic disease, it is hard for persons with HIV to consistently adhere to treatment, but since HIV affects the most vulnerable and disenfranchised individuals and communities, these challenges can be intensified. One in four HIV infected individuals may also have an untreated mental health or substance use problem.[15] Ensuring participation in care means assisting them in navigating medical systems, addressing mental health and substance abuse issues, consistently meeting basic needs such as food and housing, and dealing with stigma and other negative social issues.[16]

Increased viral suppression

Successful treatment of HIV results in higher CD4 counts and reduced viral load among people living with HIV. Successful results are influenced by the number of clinical visits a person keeps and their adherence to medical regimens.[17] [18] In addition to increasing the life span of people living with HIV, successful treatment reduces the collective amount of virus present in a

community, thereby reducing the likelihood of uninfected individuals becoming infected if they are exposed through participation in risk behaviors. However, in 2012 only half of those with diagnosed infections had suppressed viral load, and only 62 percent of those in consistent care in 2012 had evidence of suppressed viral load. Black men and women have lower proportions of suppression than Whites or Hispanics, and only 28 percent of diagnosed youth (ages 13 to 24) have evidence of suppression. Among young Black gay/MSM diagnosed with HIV, only 19 percent show evidence of suppression.

Cross-Cutting Approaches in this Plan

Comprehensive and Coordinated Approach

To reduce HIV infections in Texas, organizations that are charged with preventing or treating people with HIV must 'link arms' to enhance coordination and boost each other's effectiveness, for reduction in new cases depends on improvement in every link of the continuum.

Multiple levels of action: individuals, environments, systems

It also requires engaging issues that do not appear directly associated with HIV on the surface. Issues like poverty, family rejection, unstable housing, lack of access to treatment and care, and stigma promote risk behaviors, concentrate HIV in vulnerable populations, and place barriers in the way of consistent treatment and adherence. HIV prevention and treatment programs have traditionally focused on individual behaviors. But an individual's decisions and actions are influenced by their social networks, the cities and towns in which they live, the institutions and people they come in contact with, and the policies or systems that apply to their lives.[19] To reduce HIV, action is required at all levels. Individual behaviors will continue to be addressed but they must be understood in terms of the environments and systems that influence or restrict them. This understanding will lead to new efforts with non-traditional partners to improve the conditions that create vulnerability.

Evaluating Progress

The overall goal of any HIV plan is to reduce the number of new HIV infections, and the most direct measure of progress is the number of *incident* HIV infections. Incidence measures the number of new infections acquired, and is different from the number of new infections diagnosed each year because someone can be infected with HIV for many years before getting diagnosed. HIV incidence, however, estimates the true number of new infections. Estimating incidence required complex algorithms and special laboratory analysis of HIV tests, so it can be done only in retrospect. The estimates for the years 2006 to 2011 are currently being prepared, and once released, will serve as the key indicator of progress on statewide efforts.

In addition to the overall measure of new infections, DSHS has established a set of population level metrics for most plan domains that will be used to track improvements at a broad scale. These are introduced in each domain chapter. Showing change at a population level can take years of focused effort, so in addition to these population measures, most domains also have program measures that will show progress towards the population goals; these measures will use information from programs funded by DSHS, the Centers for Disease Control and Prevention

(CDC), the Health Resources and Services Administration (HRSA), Housing and Urban Development (HUD), and the Substance Abuse and Mental Health Services Administration (SAMHSA). Since this plan gathers the insights and strategies of many communities across Texas, these metrics are broad and statewide. The program measures are also found in domain chapters.

Increasing HIV awareness among members of the general public, community leaders, and policy makers

About this domain

In 2011, only 40 percent of Americans reported that they saw, heard or read something about HIV in America.[20] As a result, many people do not have adequate knowledge about HIV risk behaviors. This lack of knowledge fuels both the spread of new infections and HIV related stigma. Increasing exposure to accurate information about HIV will increase awareness in the general public and decrease HIV related stigma.[21]

But building a true understanding of how to fight HIV requires more than understanding personal risk. It is essential to build an awareness of the spectrum of engagement needed to lower viral load, and thus new HIV infections, among all stakeholders, advocates, policy makers, and health professionals in order to achieve the levels of coordination and collaboration required to reduce HIV. Finally, HIV program and policies often fail to address the fact that HIV is a health **and** social issue, and efforts to decrease HIV must ultimately address the social and environmental factors such as poverty, educational attainment, incarceration, cultural attitudes about race and sexual orientation, access to care, and stigma and shame that may block individuals from the behavior changes and treatment adherence that our programs promote. Addressing these factors cannot be the work of HIV programs solely, for they lack the scope, means and standing; it requires community mobilization and partnership with individuals and organizations focused on change at a broader level.

Priority strategies

- Assure availability of key information for consumers, providers and policy makers.
- Draw attention to the role of social determinants in the spread of HIV.
- Form broad community alliances of traditional and non-traditional stakeholders to support the HIV mission.

How we will track progress

These indicators will be monitored through standard program reporting and special inquiries. Details on these measures can be found in ***Indicators at a Glance***.

Number of mobilization efforts in the five communities with highest prevalence

Number of high prevalence communities with information campaigns coordinated with local action

Count of educational materials distributed

Summary of implementation plan

To assure availability of key information for consumers, providers, and policy makers, the actions in the implementation plans focus on development of media plans, development and distribution of materials, and dialogue with policy makers on the need for policy stances that maximize access to effective prevention and remove barriers to treatment and care. To draw attention to the role of social

determinants, the implementation plan focuses on training providers and policy makers and promoting broad approaches to mobilization. Texas prevention and care leaders will also use the changes in the health systems and the statewide planning process as opportunities to engage traditional and non-traditional providers.

Increasing access to HIV prevention efforts for high risk groups

About this domain

Federal, state, and local policy makers have an obligation to assure that the limited resources for HIV prevention are focused on the persons and communities at highest risk. In Texas, epidemiology and community prioritizations indicate that the groups most vulnerable to HIV are gay men/MSM (especially Black men, Hispanic men and youth) and Black women. While epidemiology can direct policy makers towards groups or communities, the providers of these services must further tailor their programs to the needs and assets of the communities and clients they serve. Lasting prevention also requires changes to the communities and systems that amplify risk.

Priority strategies

- Focus prevention programs on those most at risk as determined by epidemiology
- Address the environment and system issues that intensify HIV in vulnerable populations
- Increase knowledge and sense of urgency to act in high risk populations

How we will track progress

These indicators will be monitored through standard program reporting and special inquiries. Details on these measures can be found in *Indicators at a Glance*.

Number of persons in very high risk populations who complete evidence-based risk reduction programs. The focus populations include Black gay men/MSM, White gay men/MSM, Hispanic gay men/MSM, and Black heterosexual women

Number of persons with HIV infection who complete HIV risk reduction programs

Number of condoms distributed to members of high risk populations

Number of communities with established NPEP or PrEP access paths

Number of high prevalence communities with targeted social media campaigns coordinated with local action

Summary of implementation plan

The implementation plan for this domain emphasizes coordination across funding streams to tighten systems of prevention and treatment for HIV infected persons. It also references development of

materials and guidelines that focus attention on very high risk populations, especially on appropriate screening for sexually transmitted infections in gay men and sexual harm reduction approaches. Local plans have also referenced *intensifying* the focus of prevention interventions on those at highest risk and set aggressive goals for condom distribution, and increasing the effectiveness of partner services. The intervention plan also addresses development of allocation models; the plans also emphasize the expansion of targeted social media.

Diagnosis of all HIV infections

About this domain

Reducing the number of undiagnosed infections requires the efficient interplay of targeted and routine testing—targeted testing programs with high rates of identification of new positives, partner services programs that effectively plumb social and sexual networks, and routine testing programs in high morbidity areas that deliver testing volume. Increasing access, availability and acceptability of testing also requires attention to adoption of new technology and addressing stigma. This domain also challenges providers and communities in Texas to devise strategies to reduce late diagnosis and use new technologies to effectively identify acute infections and tailor coordinated action to curtail transmission during the highly infectious actuate phase of infection.

Priority Strategies

- Evaluate effectiveness of HIV testing programs at the population and program level
- Effectively identify and test individuals in populations at highest risk
- Ensure that social and sexual networks of HIV infected persons are offered testing and counseling
- Expand adoption of routine HIV testing as a part of medical care
- Address stigma that prevents providers from offering testing and people from seeking or accepting testing
- Adopt testing technologies that simplify testing, increase access or acceptability, or increase early diagnosis and diagnosis of acute infection
- Build social norms in high risk populations to seek health care

How we will track progress

These indicators will be monitored using information from program reports, disease reporting systems, and special inquiries. Details on these measures can be found in the *Indicators at a Glance.*

Number of persons with undiagnosed infection

The proportion of Texans who have ever received an HIV test.

Proportion of persons with late diagnosis of HIV infection, and racial/ethnic disparities in late diagnosis.

Positivity rate of targeted testing programs (goal of 1.2%)

Positivity rates for partners and clusters for testing through partner services

Positivity rate in routine HIV testing projects.

Number of new positives identified through targeted testing, funded routine screening programs, and public health follow up.

Number of Black and Latino gay men tested through targeted testing programs.

Summary of Implementation Plan

The implementation plan for this domain starts with the development of estimates of undiagnosed infection and evaluation of productivity of the approaches to testing implemented in Texas. Local plans also emphasize continued investment in targeted testing, partner services, and efforts to promote routine testing of HIV and other sexually transmitted infections. The implementation plan also includes actions to address stigma, take advantage of changes in the health care landscape, and promote new testing technology.

Timely linkage to HIV-related care and treatment

About the domain

Timely linkage is a relatively recent focus point for system improvement. Current thinking is that linkage should take place within three months of diagnosis, and must include evidence of a medical evaluation. Over the past three years, clinical treatment recommendations have endorsed earlier treatment, including additions of recommendations for earlier treatment to prevent further transmission. Studies have also shown that it is far more difficult to locate and return a person to care than to develop strong bonds with the patient as soon after diagnosis as possible. Communities understand, however, that not all newly diagnosed persons have the same concerns, resources, and circumstances. For example, linkage rates are low for both youth and Blacks, and for young gay men of color; raising these rates requires crafting responsive programs and systems to address challenges that might range from transportation to status disclosure, and build confidence, trust, and strong health habits in persons who may have had only limited (and perhaps negative) prior experiences with health care systems.

Priority strategies

Assure linkage systems that are client centered and responsive to circumstances and needs
Create approaches to locate and link HIV infected individuals who know their status but are not in care
Use technology that supports linkage to care
Address stigma and other issues that prevent HIV infected individuals from seeking medical care

How we will track progress

These indicators will be monitored using information from program reports and disease reporting systems. Details on these measures can be found in ***Indicators at a Glance.***

Proportion of newly-diagnosed persons who are linked to HIV-related care in 3 or fewer months

Racial/ethnic disparities in linkage

Linkage rates for funded targeted testing programs, routine testing programs, and tests conducted through PHFU.

Summary of implementation plan

The implementation plan includes attention to administrative and policy issues that will enhance monitoring and coordination of linkage activities and return to care initiatives, and promote evidence based approaches to improving linkage, including strategies that incorporate technology and address provider and client attitudes.

Continuous participation in systems of care and treatment

About the domain

The chronic nature of HIV infection requires life-long participation in treatment, which in turn requires attention to the co-morbidities and co-occurring conditions that can threaten participation in treatment. It also requires addressing the attitudes and beliefs that prevent participation.

Priority strategies

- Increase focus and training on retention in care
- Ensure that care systems include access to supportive services
- Ensure that care systems include access to behavioral health services
- Create mechanisms to identify and respond to individuals at risk of dropping out of care
- Address stigma issues and social norms that prevent HIV infected individuals from maintaining their HIV care

How we will track progress

Proportion of persons showing at least one instance of HIV related care during a 12 month period.

Proportion of persons showing at least one instance of care in each semiannual period during a 12 month period.

Proportions of persons who show intermittent patterns of care across 3 year spans.

Proportion of persons receiving Ryan White-funded case management or clinical services who receive an annual behavioral health screen.

Proportion of persons receiving RW-funded clinical services who have stable housing

Summary of implementation plan

The implementation plan includes an emphasis on identification and dissemination of best practices and increased emphasis on retention as a key measure of quality of care. The plan also emphasizes maintenance of supportive services, and enhanced screening for and response to behavioral health needs of clients.

Increased viral suppression

About the domain

While viral suppression is the goal of treatment and care, measures of suppression can also serve as indicators of the quality and completeness of care at a population level. Access to care and support for adherence to treatment are key strategies for increasing the number and proportions of Texans with suppressed HIV.

Priority strategies

- Increase understanding of viral suppression as a key health indicator
- Expand access to HIV clinical care
- Enhance access to medication and treatment for co-occurring and co-morbid conditions
- Create a focus on adherence that includes clients, clinicians and supportive services providers
- Address the stigma that prevents individuals infected with HIV from adhering to treatment

How we will track progress

Proportion of persons living with HIV who have suppressed viral loads

Racial/ethnic disparities in vial load suppression, especially among gay men/MSM

Proportions of persons living with HIV with continuous evidence of viral suppression across 3 year spans.

Summary of implementation plan

The implementation plan for this domain includes an emphasis on expanding access to HIV treatment, treatment for co-occurring conditions, and sharing best practices for enhancing adherence.

Endnotes

[1] All HIV data are from routine HIV disease surveillance and program data.
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