Texas HIV Epidemiologic Profile

2018

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Epi Profile Section 1 - Executive Summary

This epidemiologic profile is a snapshot of the Texas Human Immunodeficiency Virus (HIV) epidemic in 2018. It was created to assist public health planners, policy makers, and other stakeholders at the local and state level. The information comes primarily from routine disease surveillance and is supplemented with results of special studies and information on HIV care outcomes. More detailed information on data sources can be found at the end of the profile.

As of the end of 2018, 94,106 Texans were known to be living with a diagnosed HIV infection. This does not include the estimated 16,000 Texans who are living with HIV but were unaware of their status. Dramatic improvements in HIV treatment have lengthened the lifespans of people living with HIV (PLWH) and have kept deaths low at about 1,400 a year.

The annual number of HIV diagnoses in Texas has been stable for the past decade, with 4,520 new diagnoses in 2018. Since the number of new diagnoses are higher than the number of deaths, this results in increases in the number of Texans living with HIV.

Gay and bisexual men and other men who have sex with men (MSM) made up the largest group of PLWH and people with new diagnoses. Additionally, they are the only group that have shown steady increases in new diagnoses. This rise was driven primarily by increases in young Black and Hispanic MSM. We estimate that over 3% Black MSM and almost 1% of Hispanic MSM aged 18-24 years in Texas were diagnosed with HIV in 2018. The disproportionate impact on MSM is not limited to youth, as diagnosis rates are high in MSM of all ages and race/ethnicities.

While the number of Texans with new diagnoses was stable over the past 10 years, this masked changes. The number of Black Texans with new diagnoses fell by about 6% from 2009-2018, while the number of new diagnoses in Hispanic Texans rose by 19%. The decrease in new diagnoses in Black Texans was driven primarily by decreases among Black women, and the increase in Hispanic Texans was driven by increases in Hispanic MSM.

The decrease in the number of Black Texans with new diagnoses led to a 22% drop in the diagnosis rate for this group. Despite this decrease, the diagnosis rate for Black Texans was 2.8 times higher than the rate for Hispanic Texans, the group with the next highest rate. Racial and ethnic disparities can also be seen in death rates and rates of coinfection with sexually transmitted disease and tuberculosis. These disparities are detailed in later sections in this profile.

Information in this profile points the way to reducing the number of Texans with new HIV infections. One key strategy is increasing the number of PLWH who are aware of their status. People can live with an HIV infection for years before being diagnosed. People who are not aware of their HIV infections cannot receive life-extending treatment, and they also have the greatest likelihood of transmitting HIV to others. [1] DSHS estimates that about 85% of all Texans with HIV are aware of their HIV status. The DSHS goal is

for 90% of people living with HIV to be aware of their status by 2030. [2] This profile provides a solid picture of the profile of people with new diagnoses and with new infections that can be used to direct actions and resources.

A second key strategy is increasing the number of Texas PLWH who are consistently engaged in treatment and who have suppressed viral load, which means that they have a low level of HIV in the body. In addition to the health benefits of a suppressed viral load, there is scientific consensus that treatment also acts as prevention: people with suppressed viral load cannot sexually transmit the virus to others. [3] The DSHS goals are for 90% of Texans with diagnosed HIV to be in continuous treatment, and for 90% of people on treatment to have suppressed viral loads by 2030. [4] In 2018, around 70% of Texans diagnosed with HIV were in continuous treatment/retained in care, and around 86% of people on treatment had a suppressed viral load.

Reducing the number of Texans with HIV also rests on adopting effective prevention tools and strategies not covered in this report, such as scaling up use of pre-exposure prophylaxis medicine to prevent infections. No less important, but also beyond the scope of this report, is the exploration of the rich network of social and environmental factors that contribute to the disparities in HIV seen in racial/ethnic minorities and MSM and the role of stigma in reducing participation in prevention and treatment.

This profile provides a broad overview of HIV in Texas. Those interested in more detailed analysis or data on specific populations may send data requests to the Department of State Health Services at TBHIVSTDdata@dshs.texas.gov or create custom data tables at:
New HIV Diagnoses in Texas
People Living with HIV in Texas

Note 1. Sardinia, J. et al. Human Immunodeficiency Virus Transmission at Each Step of the Care Continuum in the United States. *JAMA Internal Medicine.* 2015;175(4):588-596
Note 2. *Achieving Together: A Community Plan to End the HIV Epidemic in Texas.* achievingtogethertx.org. Accessed September 13, 2019.
Note 3. RW Eisinger, CW Dieffenbach, AS Fauci. HIV viral load and transmissibility of HIV infection: undetectable equals untransmittable. *Journal of the American Medical Association.* 2019: (5):451-452.
Note 4. *Achieving Together: A Community Plan to End the HIV Epidemic in Texas.* achievingtogethertx.org. Accessed September 13, 2019.

Epi Profile Section 2 - Texans Living with HIV in 2018

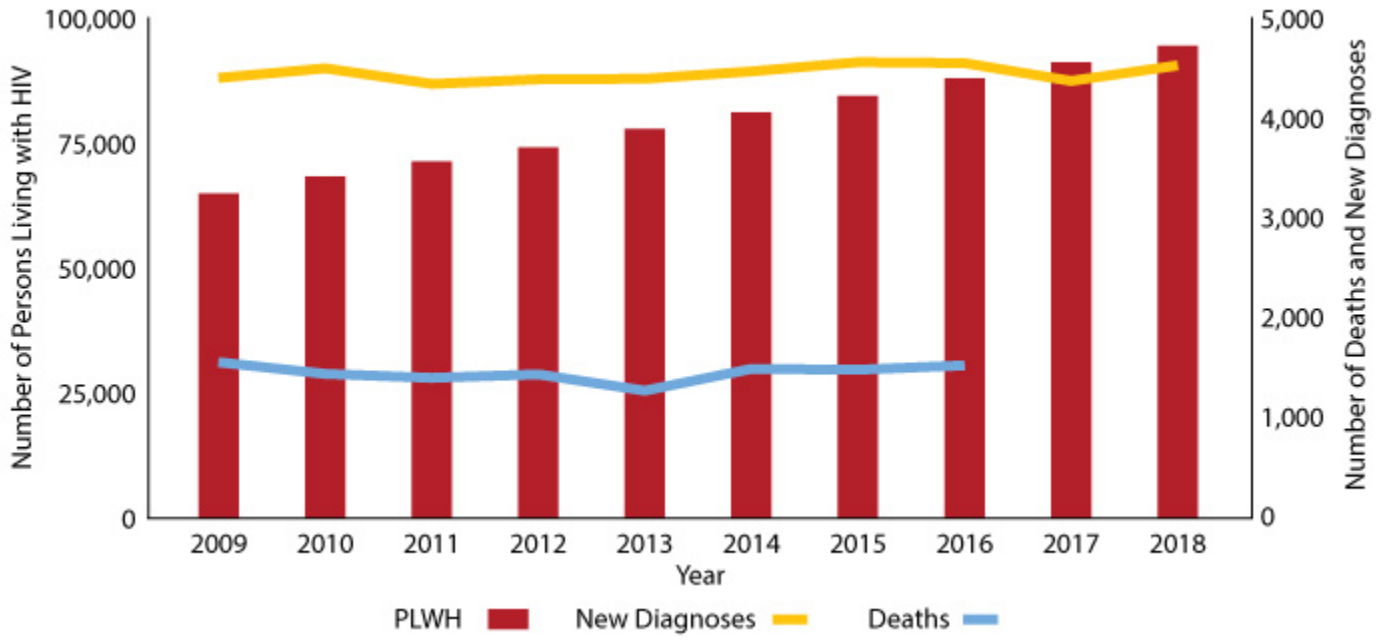
This section describes Texans living with diagnosed HIV infections, which is also called prevalence.

As of the end of 2018, over 94,000 Texans were living with a diagnosed HIV infection. The number of people living with HIV (PLWH) increased by 16% over the past 5 years, but this is not due to increases in the annual number of Texans getting diagnosed. The number of Texans diagnosed each year has been flat over the last decade at about 4,500 (Figure 1).

The number of PLWH increased because effective treatment extends the lifespan of PLWH. In fact, PLWH who are diagnosed early and begin treatment right away have lifespans almost as long as people who are not living with HIV. [5] Longer lives means that deaths in PLWH are low (about 1,400 a year). Since the annual number of deaths is lower than the number of people diagnosed each year, the number of people living with HIV rises.

Please note that the number of people living with HIV does not include an estimated 16,000 Texans who are living with undiagnosed HIV infections.

Figure 1: Texas PLWH, Texans with new HIV diagnoses, and deaths among Texas PLWH, 2009-2018



Source: Texas eHARS, 2018

Data for Figure 1

The profile of Texans living with HIV in 2018 shows:

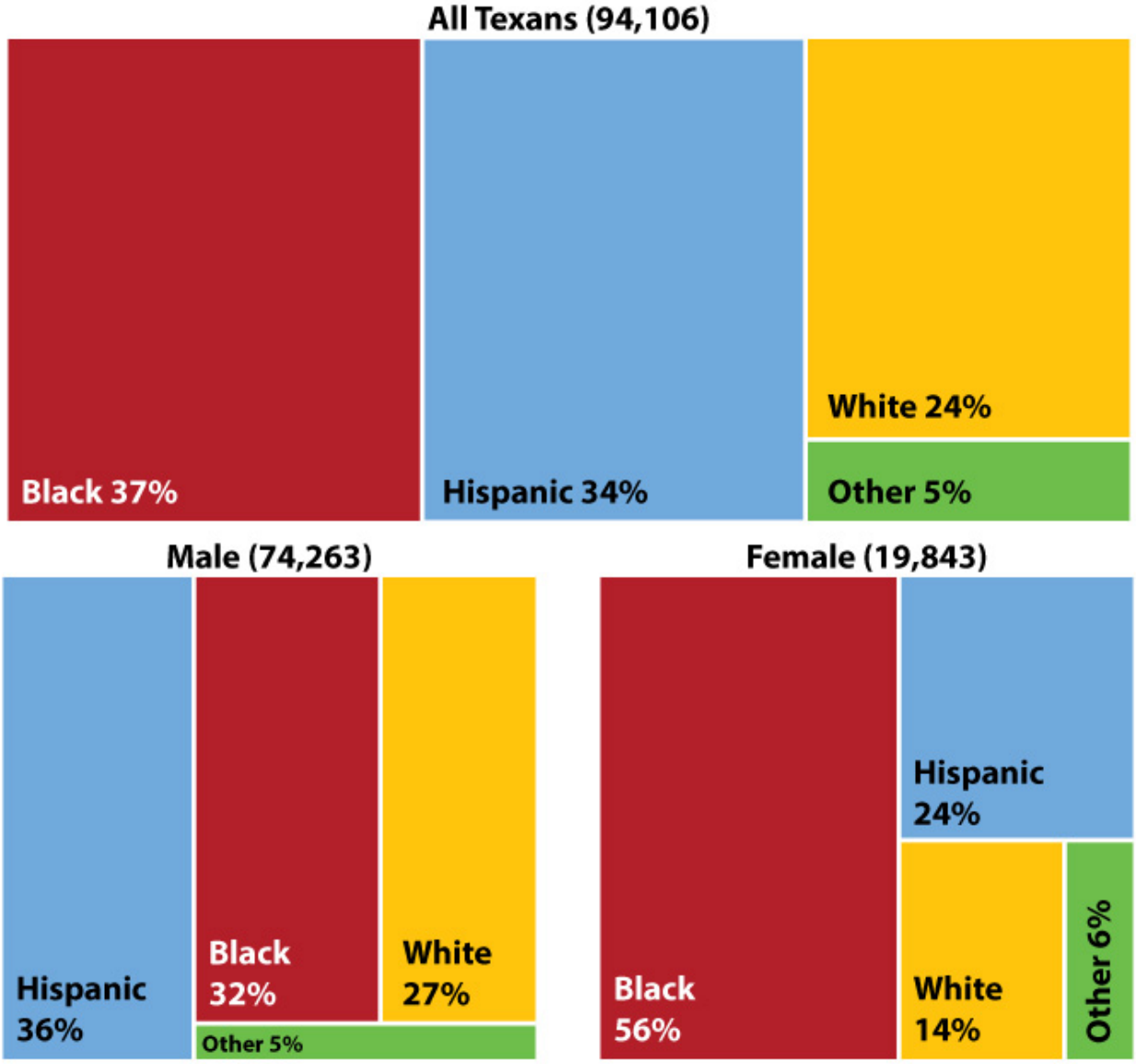
- Almost four out of five PLWH were male; [6]
- About 1% identified as transgender women;
- About 7 out of 10 of the PLWH were Black or Hispanic;
- About half of the PLWH were 45 or older;
- About three out of five were gay and bisexual men or other men who have sex with men (MSM);
- About half of all Texas PLWH lived in the Dallas and Houston areas; and that
- Black Texans and MSM were disproportionately affected by HIV.

Table 4 at the end of this section gives a detailed look at the profile of PLWH.

Texas PLWH by Sex at Birth and Race/Ethnicity

About 70% of the PLWH in 2018 were Black or Hispanic, but the profile differed by sex. Almost three out of five female PLWH were Black, but males showed a more even distribution across groups (Figure 2 and Table 1).

Figure 2: Texans living with HIV by race/ethnicity and sex at birth, 2018



Data for Figure 2

Table 1: Numbers and rates per 100,000 of Texans living with HIV in 2018 by sex at birth and selected race/ethnicities

	Males			Females		
	Number	**%**	**Rate**	**Number**	**%**	**Rate**
Race/Ethnicity						
White	20,208	27%	342.2	2,687	14%	45.6
Black	23,447	32%	1,408.8	11,201	56%	630.6
Hispanic	26,826	36%	468.7	4,817	24%	80.8

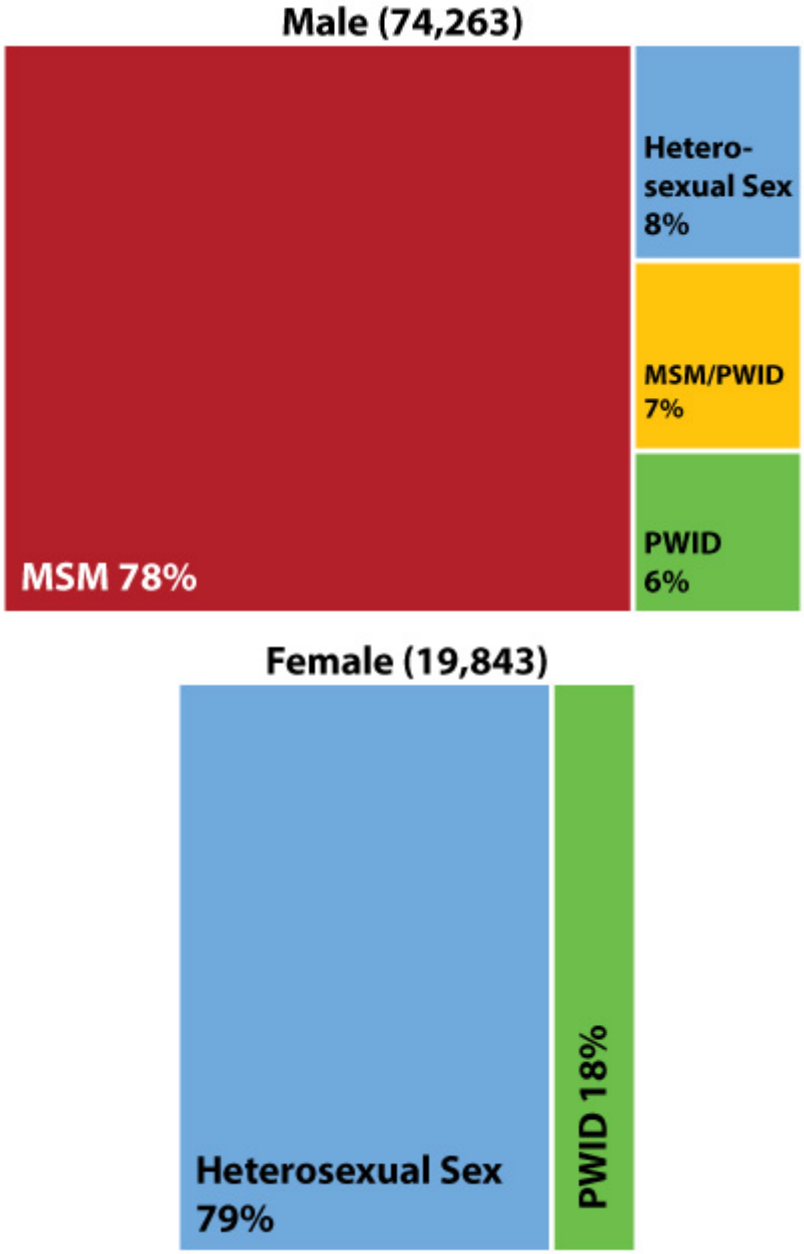
Source: Texas eHARS, 2018

Texas PLWH by Mode of Transmission Groups

Mode of transmission means the most likely way someone acquired HIV. We group people with the same mode of transmission together to follow trends and gauge the impact of HIV. The most common mode of transmission groups in Texas are MSM, people who inject drugs (PWID), MSM who inject drugs (MSM/PWID), and men and women who acquired HIV through heterosexual sex.

In Texas, over 6 out of 10 PLWH were MSM, but men and women had different profiles. Close to four out of five men and four out of five women acquired HIV through sex with a man (Figure 3 and Table 4).

Figure 3: Transmission group profiles of Texas PLWH by sex at birth, 2018



PLWH with other mode of transmission categories made up 1% of male PLWH and 3% of female PLWH.
Source: Texas eHARS, 2018
Data for figure 3

Texans Living with HIV by Geography

More than half of PLWH lived in the Dallas and Houston areas in 2018. An additional 21% live in the Austin, Fort Worth, and San Antonio areas.

Table 2: Texas PLWH by current residence, 2018

	Number	%
Austin Transitional Grant Area (TGA) [7]	6,445	7%
Dallas Eligible Metropolitan Area (EMA)	23,036	25%
Fort Worth TGA	6,290	7%
Houston EMA	29,078	31%
San Antonio TGA	6,893	7%
All other areas	18,241	19%
Texas Department of Criminal Justice facilities/ Immigration and Customs Enforcement facilities/ Federal Prisons	4,123	4%
Total	86,669	100%

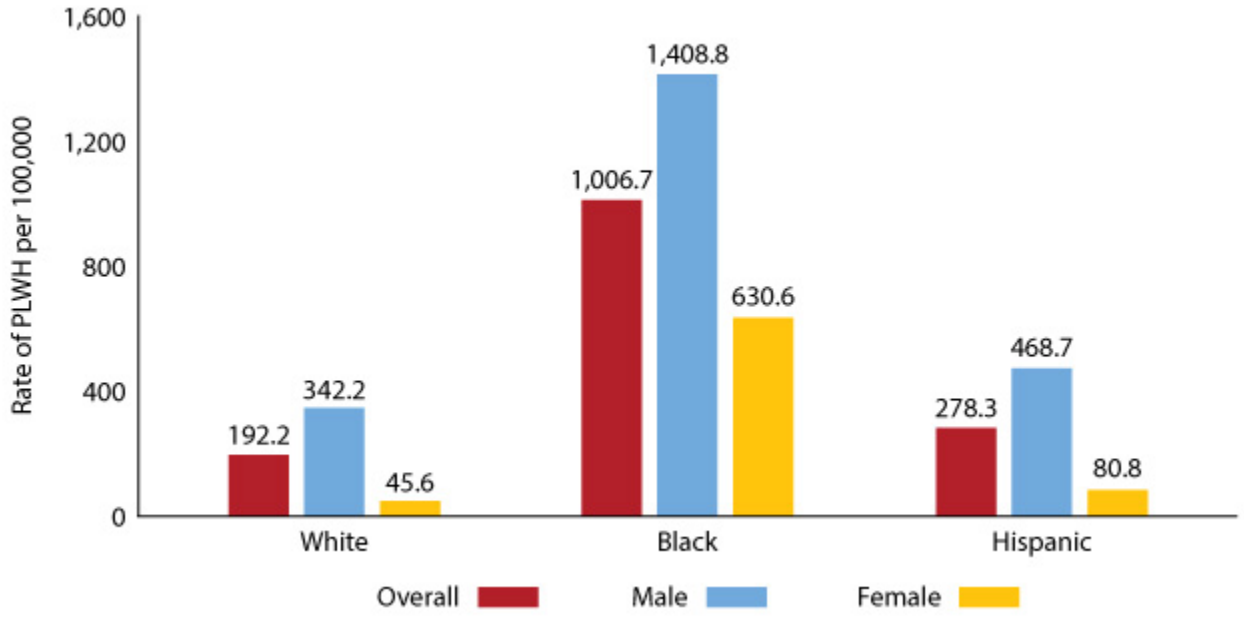
Source: Texas eHARS, 2018

Prevalence Rates

Rates allow direct comparison of the impact of HIV on groups of different size and are used to show health disparities. The HIV prevalence rate is the number of people with HIV in a group for every 100,000 members of that group.

Figure 4 shows that Black Texans had rates that were 3 to 13 times higher than those for White and Hispanic Texans.

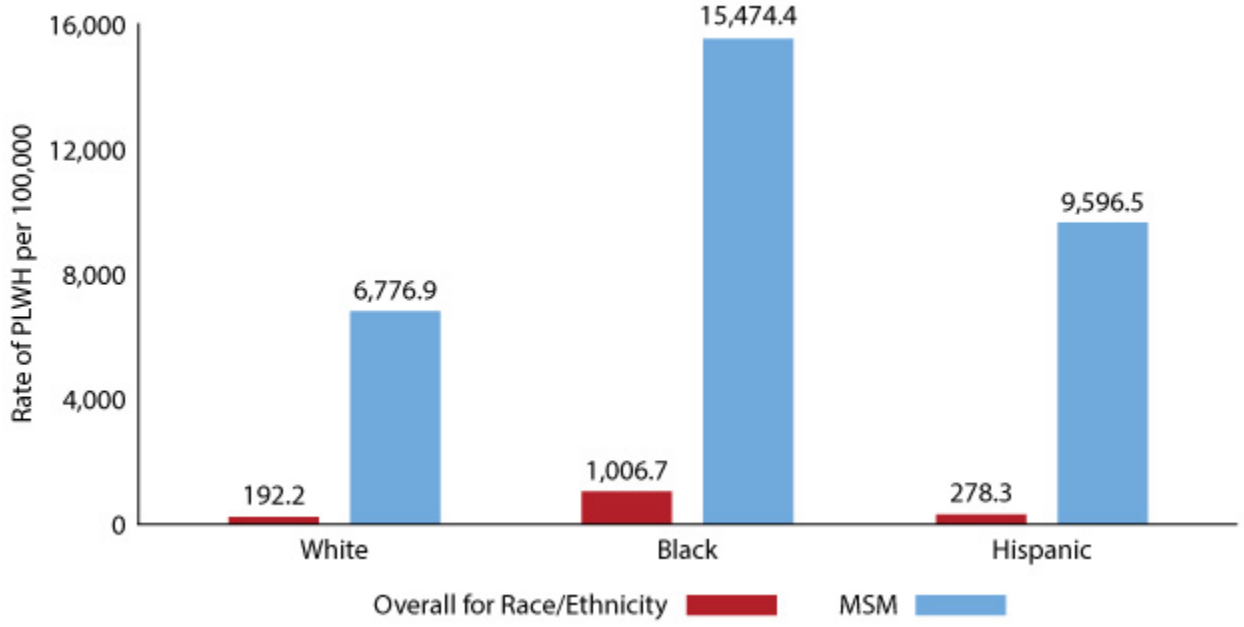
Figure 4: Prevalence rates by sex at birth and selected race/ethnicities, Texas 2018



Data for Figure 4

MSM were also disproportionately affected; White, Black, and Hispanic MSM had rates that were 15 to 35 times higher than the overall rates for these race/ethnicity groups (Figure 5).

Figure 5: Prevalence rates per 100,000 in MSM, Texas 2018



Data for Figure 5

The other way of looking at burden of disease is ‘1 in’ statements. For Texas overall in 2018, 1 in 305 Texans was living with a diagnosed HIV infection. DSHS estimates that about 1 in 6 Black MSM were living with diagnosed HIV in 2018, as were 1 in 10 Hispanic MSM, and 1 in 15 White MSM.

Table 3: 'One in' statements for groups of Texans living with HIV in 2018

	1 in		1 in
All Texans	305	White Texans	359
Men	192	White men	292
Women	728	White women	2,193
MSM	11	Black Texans	99
White MSM	15	Black men	71
Black MSM	6	Black women	159
Hispanic MSM	10	Hispanic Texans	359
		Hispanic men	213
		Hispanic women	1,238

Source: Texas eHARS, 2018

Table 4: Texans living with HIV by select characteristics, 2018

	Number	%	Rate per 100,000
Sex at birth			
Male	43,263	79%	520.7
Female	19,843	21%	137.4
Current Gender Identity			
Transgender Women	683	1%	
Transgender Men	17	<1%	

	Number	%	Rate per 100,000
Race/Ethnicity			
White	22,895	24%	192.2
Black	31,648	37%	1,006.7
Hispanic	31,643	34%	278.3
Age group (years)			
0-14	206	<1%	3.3
15-24	3,747	4%	93.0
25-34	19,039	20%	449.4
35-44	21,321	23%	549.3
45-54	25,109	27%	706.7
55-64	18,650	20%	576.6
65+	6,034	6%	167.5
Mode of transmission group			
MSM	57,602	61%	8,818.8
PWID	8,390	9%	
MSM/PWID	5,263	6%	
People with heterosexual contact	21,853	23%	
All other modes	998	1%	
Total	94,106		327.9

Source: Texas eHARS, 2018 rates cannot be calculated for most transmission groups due to a lack of established methods of estimating the denominator.

Note 5. cdc.gov/vitalsigns/hiv-aids-medical-care/infographic.html
Note 6. Based on sex at birth
Note 7. The EMA and TGA designations come from the Ryan White HIV/AIDS Program. It is a common geographic unit used in HIV analysis.

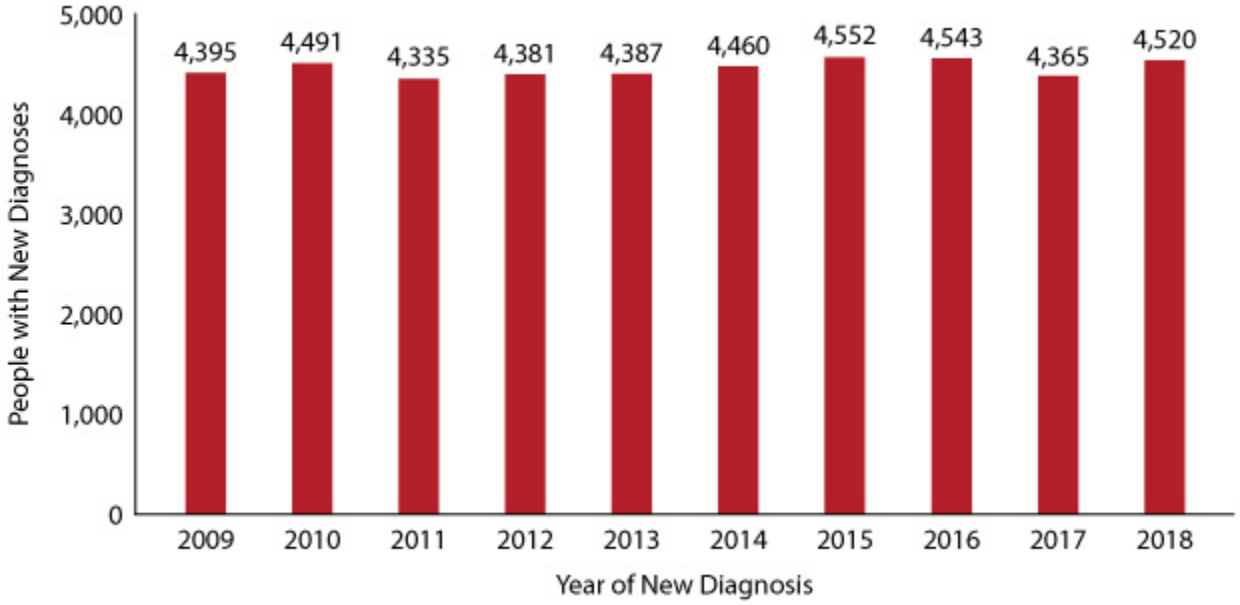
Epi Profile Section 3 - Texans with New HIV Diagnoses

Since people can live with HIV for years before being diagnosed, this section does not show the number of Texans who have new HIV infections, which is found in *Section 5: Texans with Newly Acquired HIV*. Overall Trends and Profile of Texans with New HIV Diagnoses.

In 2018, 4,520 Texans were newly diagnosed with HIV, which means that every day about 12 Texans were diagnosed with HIV. The annual number of people with new HIV diagnoses has remained constant for the last 10 years (Figure 6).

Although the overall number of people with new diagnoses were flat over the past decade, new diagnoses decreased in Black women, PWID, and people who acquired HIV through heterosexual sex. The number of diagnoses in Hispanic MSM increased. These trends are shown later in this section.

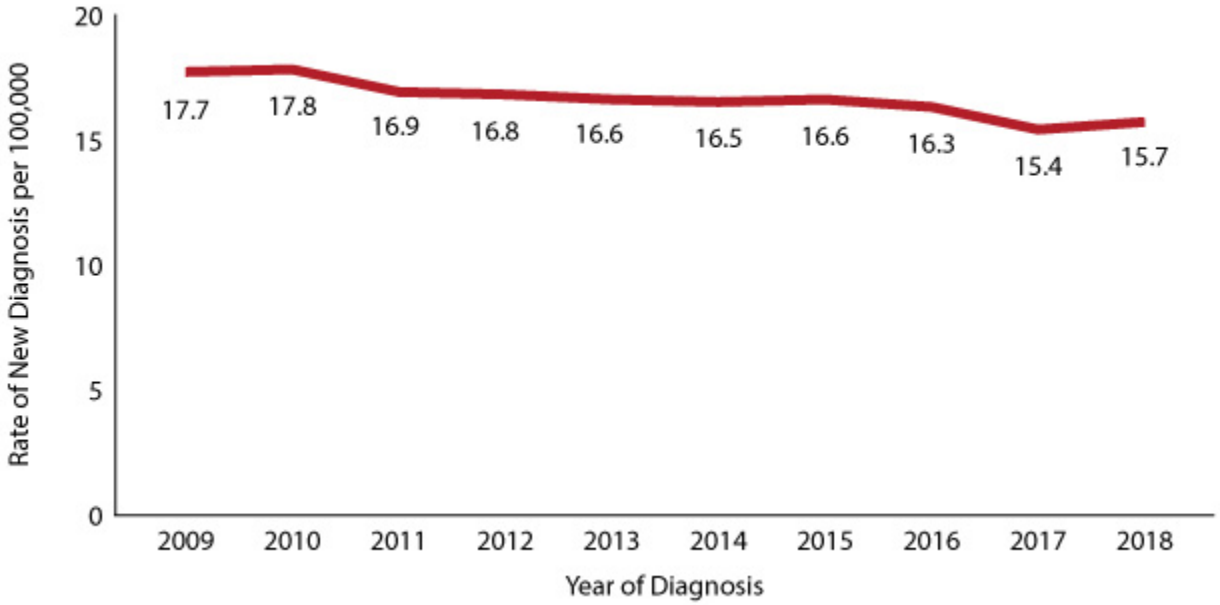
Figure 6: Number of Texans with new diagnoses, 2009-2018



Source: Texas eHARS, 2018
Data for Figure 6

The diagnosis rate for Texas fell by 11% over the past 10 years. Since the overall annual number of Texans with new diagnosis did not change, the decline in rate is due to the increases in the total population of Texas.

Figure 7: Rate of Texans with new diagnoses, 2009-2018



Source: Texas eHARS, 2018
Data for Figure 7

The profile of Texans with new diagnoses in 2018 shows a continuation of recent trends:

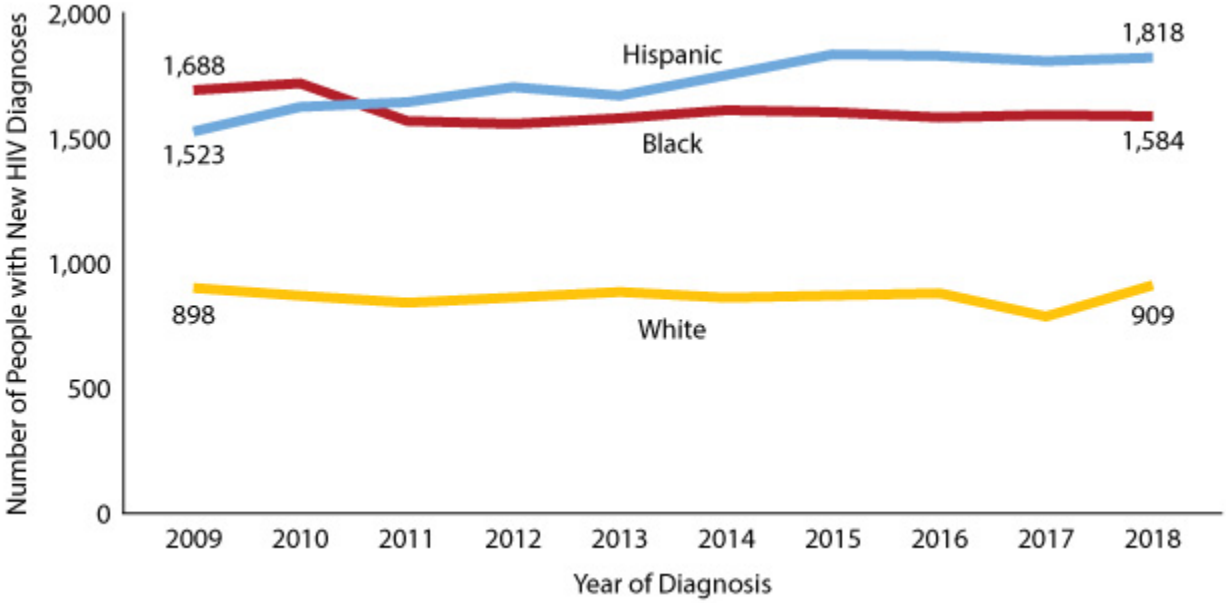
- Four out of five people with new diagnoses were male; [8]
- Three out of four were Black or Hispanic;
- Three out of five were younger than 35;
- At least half were Hispanic and Black MSM; and
- Black and MSM Texans had disproportionately high diagnosis rates.

Table 9 at the end of this sections shows detailed breakdowns of profile of Texans with new diagnoses over time.

Texans with New Diagnoses by Race/Ethnicity and Sex at Birth

Even though the overall number of Texans with new diagnoses was steady across the years, this masked changes. The number of Black Texans with new diagnoses fell by about 6% from 2009-2018, while the number of new diagnoses in Hispanic Texans rose by 19% (Figure 8 and Table 9). The decrease in Black Texans was driven primarily by decreases among Black women, and the increase in Hispanic Texans was driven by increases in Hispanic MSM.

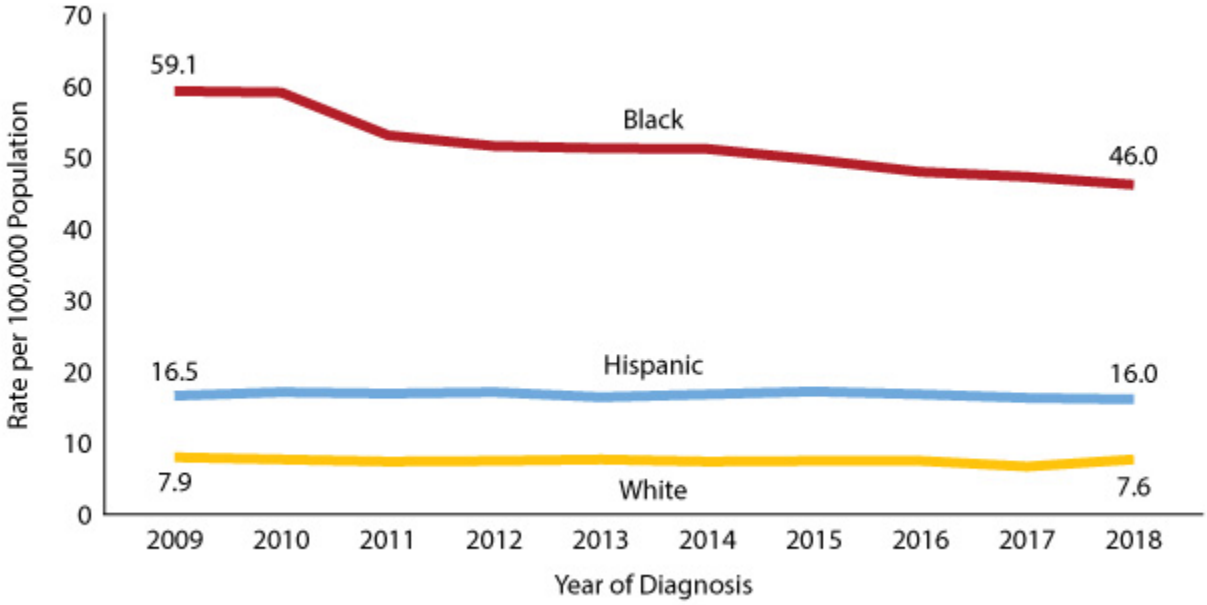
Figure 8: Texans with new HIV diagnoses by race/ethnicity, 2009-2018



Data for Figure 8

The decrease in the number of Black Texans with new diagnoses led to a 22% decrease in the diagnosis rate for this group (Figure 9). Despite this decrease, the diagnosis rate for Black Texans was 2.8 times higher than the rate for Hispanic Texans, the group with the next highest rate. The diagnosis rate for Black females is five times higher than the rate for Hispanic females, the group with the next highest rate (Table 5).

Figure 9: Rates of new HIV diagnosis in Texas by selected race/ethnicity groups, 2009-2018



Source: eHARS, 2018
Data for Figure 9

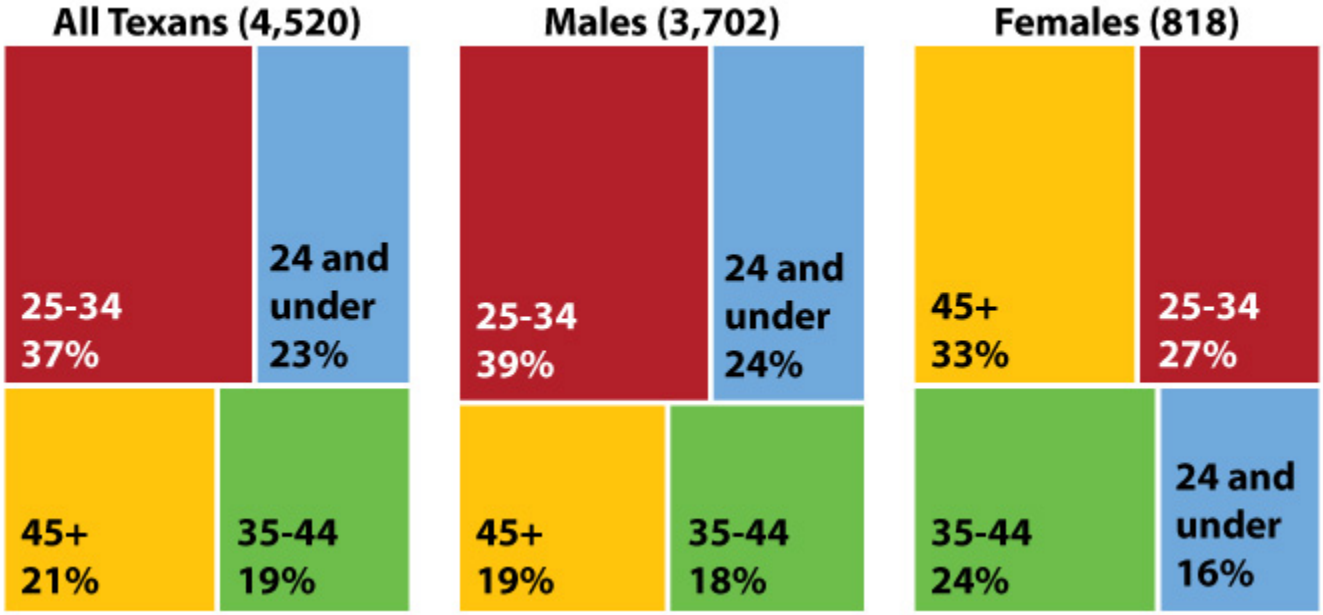
Table 5: Texans with new diagnoses and diagnosis rates by sex at birth and selected race/ethnicities, 2018

	Males			Females			Total		
Race/Ethnicity	**Number**	**%**	**Rate**	**Number**	**%**	**Rate**	**Number**	**%**	**Rate**
White	790	21%	13.4	119	15%	2.0	909	20%	7.6
Black	1,169	32%	70.2	415	51%	23.4	1,584	35%	46.0
Hispanic	1,565	42%	27.3	250	31%	4.4	1,815	40%	16.0
All Others	178	5%		34	4%		212	5%	
TOTAL	**3,702**		**26.0**	**818**		**5.7**	**4,520**	**100%**	**15.7**

Texans with New Diagnoses by Age

The age profile of Texans who were diagnosed in 2018 clearly varies by sex at birth in ways that have implications for designing testing and treatment programs. The profile of males leans towards younger ages and reflects increases in new diagnoses in young MSM of color. The age of females at diagnosis is tilted towards older women, with one in three females diagnosed in 2018 being 45 or older. During discussions in changes of the age profile of those newly diagnosed, keep in mind these differences.

Figure 10: Age profiles of Texans with new HIV diagnoses by sex at birth, 2018



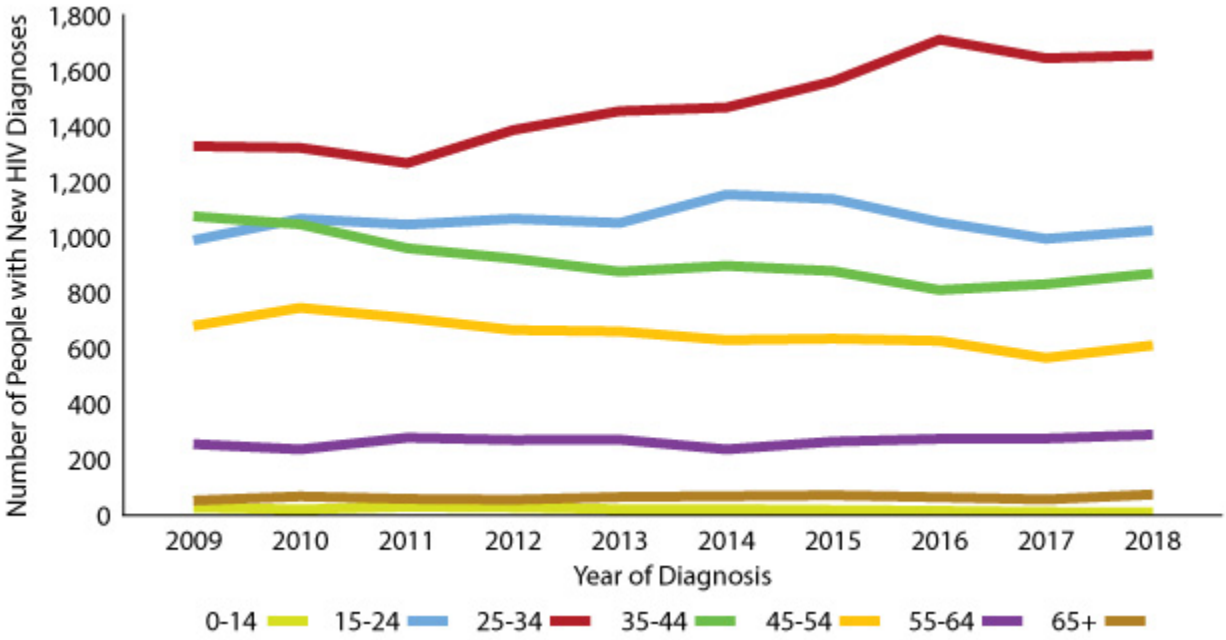
[Data for Figure 10]

Across the last 10 years, at least half of the newly diagnosed Texans were younger than 35 years old (Figure 11). New diagnosis in the 25-34-year-old age group increased by 25% over the past 10 years with consistent year after year increases.

Trends in youth (15-24-year-olds) are more complex. Comparing the number of new diagnoses in youth in 2009 and in 2018 makes it appear that the number of diagnoses made in this group was stable, but this is not the case. Between 2009 and 2013, the number of new diagnoses in youth increased, but between 2014 and 2018, the number of youth with new diagnoses fell by 11%. This decrease mirrors changes in the number of youth with new HIV infections, which fell significantly from 2010 to 2017 (data not shown).

While the decrease in new infections in youth is good news, the decrease in new diagnoses is a problem. Since we estimate that only about half of the youth living with HIV have been diagnosed (data not shown), the number of youth diagnosed each year needs to increase to assure full diagnosis and participation in care, and these efforts should be focused on young MSM.

Figure 11: Texans with new diagnoses by age, 2009 - 2018



Data for Figure 11

Table 6: Texans diagnosed with HIV in 2018 by sex at birth and age

	Males			Females			Total		
Age group (years)	Number	%	Rate	Number	%	Rate	Number	%	Rate
0-14	5	<1%	0.2	4	<1%	0.1	9	<1%	0.2
15-24	897	24%	43.4	125	15%	6.4	1,022	23%	25.4
25-34	1,429	39%	66.2	223	27%	10.7	1,652	37%	39.0
34-44	672	18%	34.5	195	24%	10.1	867	19%	22.3
45-54	450	12%	25.5	159	19%	8.9	609	14%	17.1
55-64	198	5%	12.6	90	11%	5.4	288	6%	8.9
65+	51	1%	3.2	22	3%	1.1	73	2%	2.0
TOTAL	**3,702**		**26.0**	**818**		**5.7**	**4,520**	**100%**	**15.7**

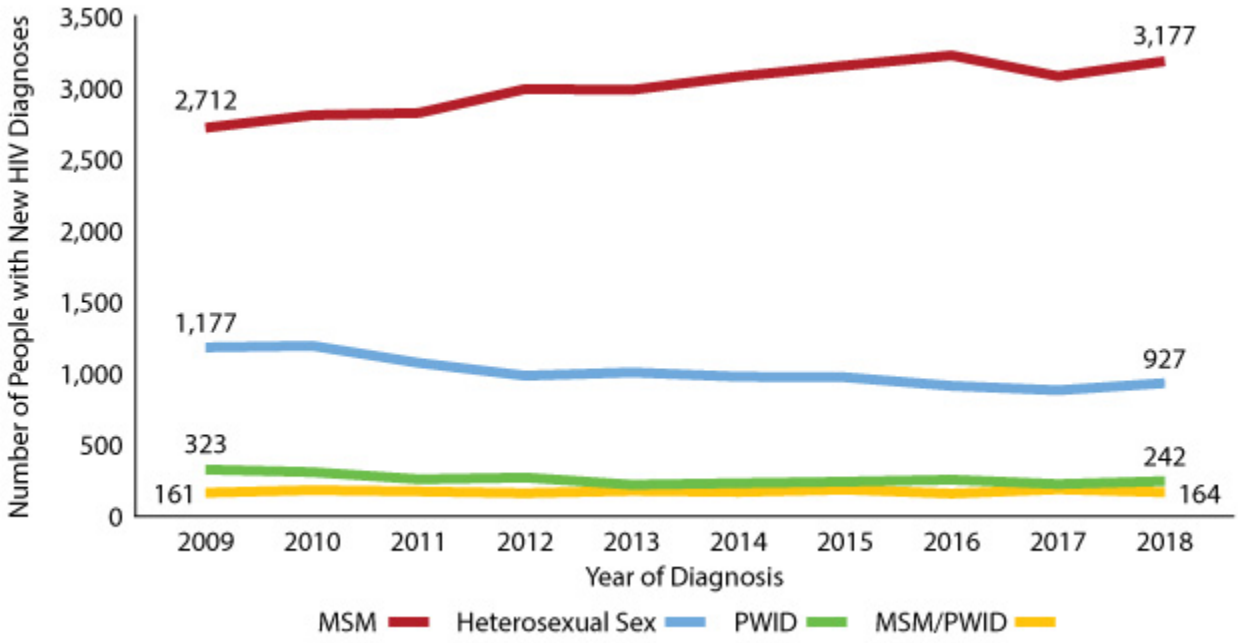
Texans with New Diagnoses by Mode of Transmission Groups

Over the past 10 years, MSM made up about 7 out of every 10 Texans with a new HIV diagnosis—an MSM was diagnosed with HIV every three hours. MSM is the only group to consistently show annual increases in new diagnoses (Figure 12). Most of these increases came from young MSM of color.

In addition to having the greatest number of people with new HIV diagnoses, MSM had much higher diagnosis rates—up to 31 times higher than the overall diagnosis rate in 2018. The highest rates are seen in MSM of color. Section 4 of this profile has more details on new diagnoses in MSM.

The number of new diagnoses in PWID and people who acquired HIV through heterosexual contact decreased across these years. These changes are also seen in Texans with new infections. The declining diagnoses in people who acquired HIV through heterosexual sex reflect the downward trends in the number of new diagnoses in Black women.

Figure 12: Texans with new diagnoses by selected mode of transmission groups, 2009-2018



Data for Figure 12

Mode of Transmission by Sex

As shown in Table 7, more than four out of five women diagnosed in 2018 acquired HIV

though sex with a man. Most men also acquired HIV through sex with a man; a much smaller number of men acquired HIV through sex with a woman. Women have a higher biological risk of acquiring HIV from heterosexual contact than do men [9,10] which partially explains why males have a lower number of diagnoses attributable to heterosexual contact compared to females.

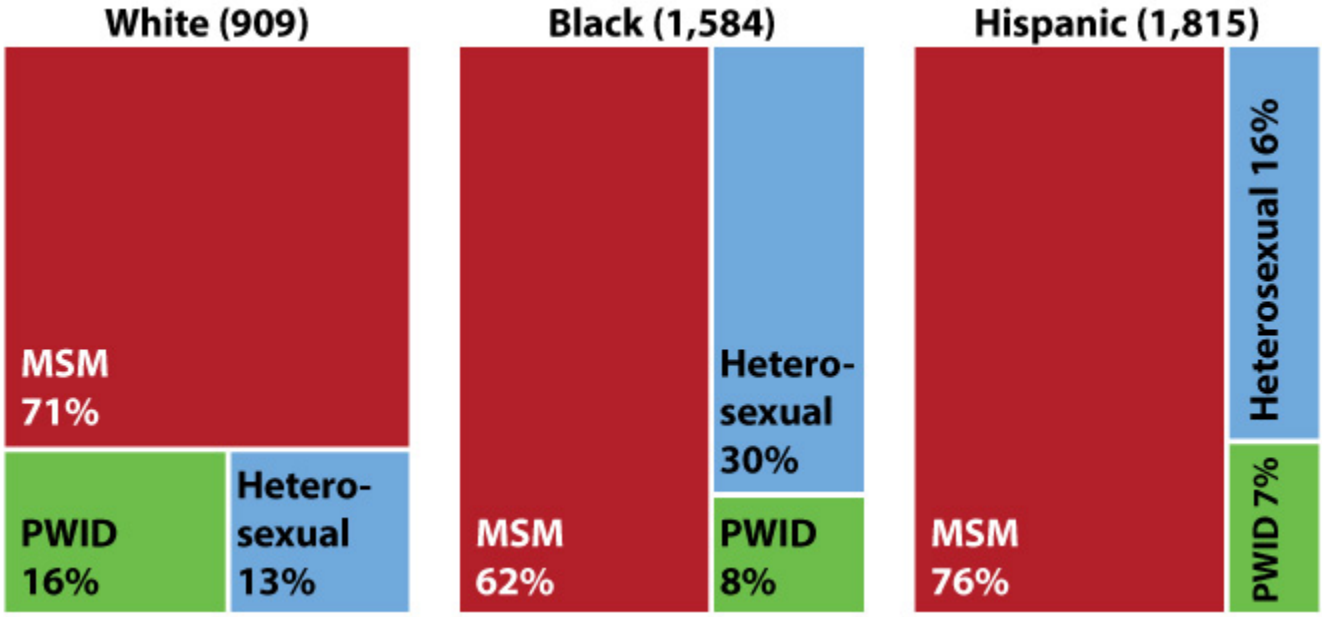
Table 7: Texans with new HIV diagnoses by transmission group and sex at birth, 2018

	Males		Females		Total	
Mode of transmission group	**Number**	**%**	**Number**	**%**	**Number**	**%**
MSM	3,177	86%			3,177	70%
PWID	126	3%	116	14%	242	5%
MSM/PWID	164	4%			164	4%
Heterosexual contact	229	6%	698	85%	927	21%
Pediatric transmission	6	<1%	4	1%	10	<1%
Total	3,702		818		4,520	100%

Mode of Transmission by Race

Mode of transmission profiles differ by race/ethnicity. MSM made up three out of four White and Hispanic Texans diagnosed in 2018. Although MSM were still the largest group of Black Texans diagnosed in 2018, people who acquired HIV through heterosexual sex made up almost one in three Black Texans with new HIV diagnosis. Since people with heterosexual transmissions are predominately Black women, any decrease in new diagnoses in Black women will also show up as a decrease in cases due to heterosexual transmission.

Figure 13: Transmission group profile of Texans with new HIV diagnosis by race/ethnicity, 2018



Source: Texas eHARS, 2018

Data for Figure 13

Table 8: Texans with new HIV diagnoses by race/ethnicity and mode of transmission group, 2018

	White		Black		Hispanic	
Mode of transmission group	**Number**	**%**	**Number**	**%**	**Number**	**%**
MSM	650	71%	987	62%	1,385	76%
PWID	69	8%	90	6%	77	4%
MSM/PWID	70	8%	23	2%	59	3%
Heterosexual contact	120	13%	479	30%	290	16%
Pediatric transmission			5	<1%	4	<1%
Total	938	20.9%	1,622	36.1%	1,745	38.8%

Source: Texas eHARS, 2018

Table 9: Texans diagnosed with HIV by selected characteristics, 2014-2018

	2014		2015		2016		2017		2018	
	Number	%	Number	%	Number	%	Number	%	Number	%
TOTAL	4,460	100%	4,552	100%	4,543	100%	4,365	100%	4,520	100%
Sex at birth										
Male	3,626	81%	3,714	82%	3,748	83%	3,607	83%	3,702	82%
Female	834	19%	838	18%	795	17%	758	17%	818	18%
Race/Ethnicity										
White	859	19%	868	19%	877	19%	784	18%	909	20%
Black	1,608	36%	1,600	35%	1,579	35%	1,589	36%	1,584	35%
Hispanic	1,748	39%	1,831	40%	1,825	40%	1,804	41%	1,818	40%
Other	68	2%	85	2%	76	2%	62	1%	83	2%
Multiple races	177	4%	168	4%	186	4%	126	3%	129	3%
Age Group (years)										
0-14	20	0%	17	0%	14	0%	10	0%	9	0%
15-24	1,151	26%	1,135	25%	1,052	23%	992	23%	1,022	23%
25-34	1,464	33%	1,558	34%	1,708	38%	1,641	38%	1,652	37%
35-44	895	20%	876	19%	808	18%	829	19%	867	19%
45-54	628	14%	633	14%	625	14%	564	13%	609	13%
55-64	235	5%	263	6%	273	6%	274	6%	288	6%
65+	67	2%	70	2%	63	1%	55	1%	73	2%

	2014		2015		2016		2017		2018	
	Number	%	Number	%	Number	%	Number	%	Number	%
Transmission group										
MSM	3,071	69%	3,146	69%	3,218	71%	3,072	70%	3,177	70%
PWID	228	5%	238	5%	252	6%	221	5%	242	5%
MSM/PWID	165	4%	183	4%	155	3%	185	4%	164	4%
Heterosexual sex	976	22%	968	21%	908	20%	877	20%	927	21%
Perinatal	20	<1%	17	<1%	10	<1%	10	<1%	10	<1%

Note: Due to rounding, numbers may not add up to 100%.
Source: Texas eHARS, 2018

Note 8. Sex at birth
Note 9. Higgins, J. A., Hoffman, S., & Dworkin, S. L. (2010). Rethinking gender, heterosexual men, and women's vulnerability to HIV/AIDS. *American journal of public health*, 100(3), 435-445
Note 10. Scully, E. P. (2018). Sex differences in HIV infection. *Current HIV/AIDS Reports*, 15(2), 136-146.

Epi Profile Section 4 - New Diagnoses in MSM

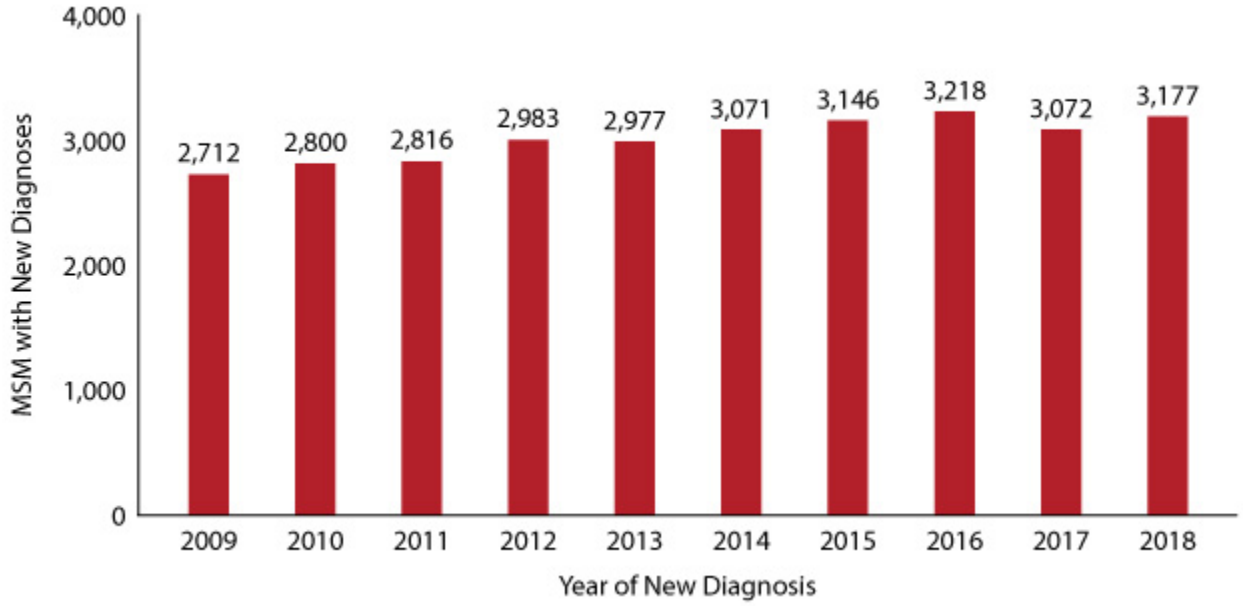
Overall Trends and Profile of Texans with New HIV Diagnoses

In 2018, 3,177 MSM were diagnosed with HIV infections, meaning that each day between eight and nine MSM were diagnosed. MSM made up 70% of the Texans with new diagnoses in 2018.

The annual number of MSM who were diagnosed rose 17% between 2009 and 2018. The profile of MSM with new diagnoses in 2018 shows continuation of trends from past years:

- Three out of four were Black or Hispanic;
- Two out of three were younger than 35; and
- All MSM were disproportionately affected by HIV, but the diagnosis rates were highest among Black MSM and those under 35.

Figure 14: Number of Texas MSM with new diagnoses, 2009-2018



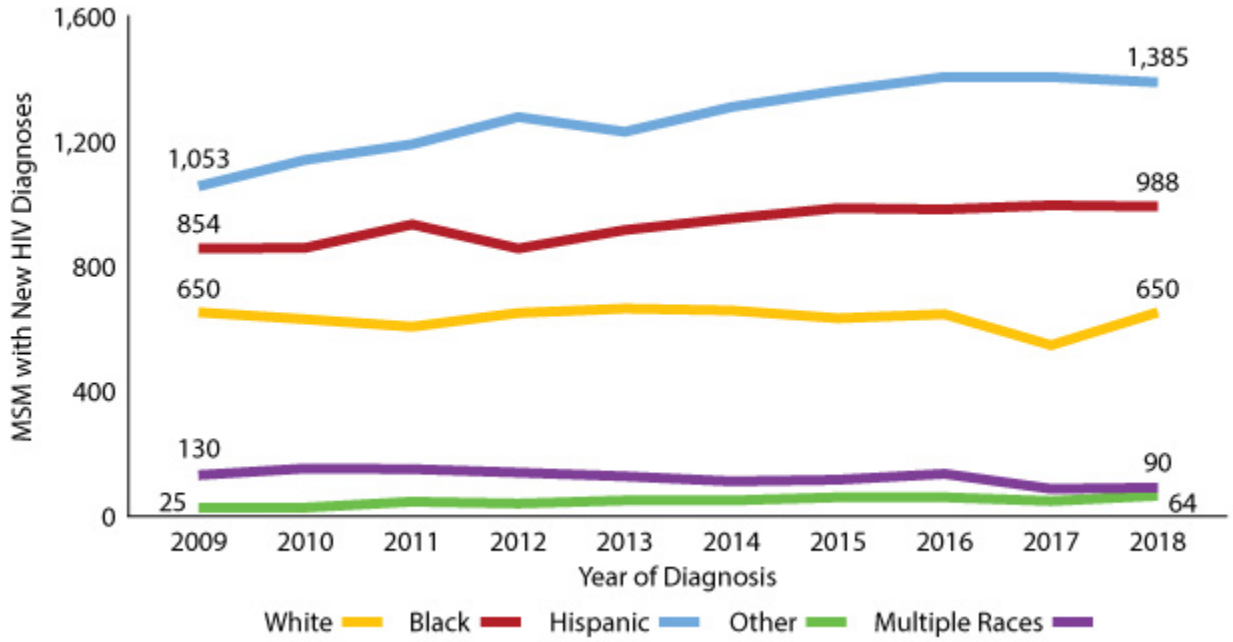
Source: Texas eHARS, 2018

Data for Figure 14

MSM with New Diagnoses by Race/Ethnicity

The number of Black and Hispanic MSM with new HIV diagnoses rose over the past 10 years, with new diagnoses in Black MSM rising 16% and new diagnoses in Hispanic MSM increasing at twice that rate (Figure 15).

Figure 15: Texas MSM with new HIV diagnoses by race/ethnicity, 2009-2018



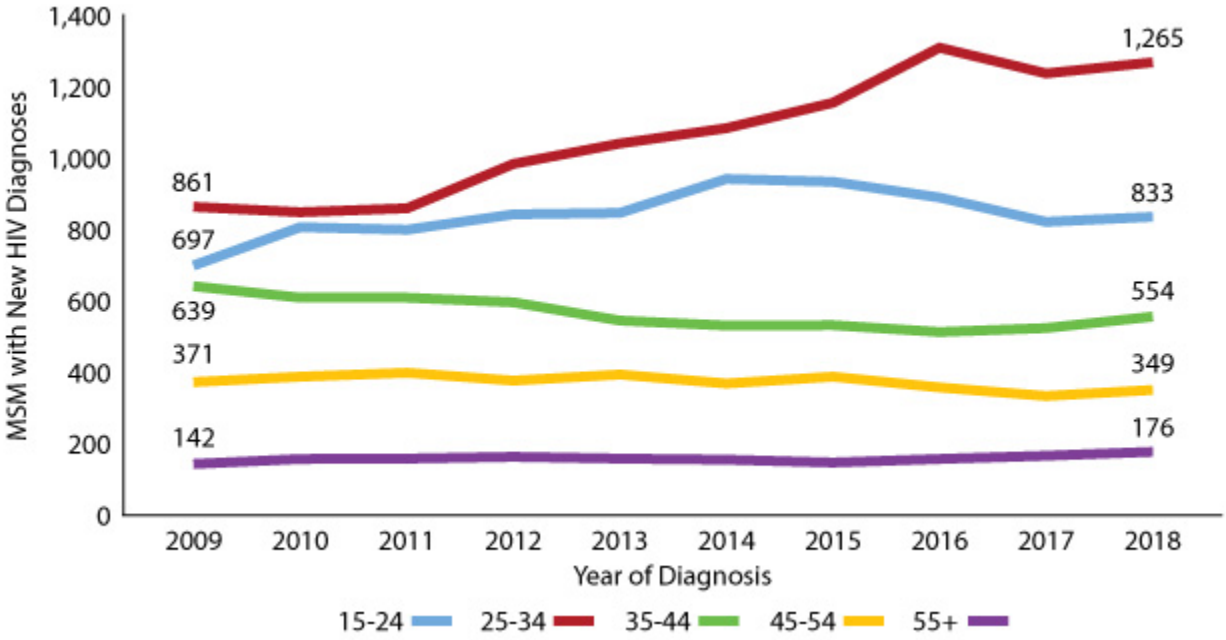
Source: Texas eHARS, 2018

Data for Figure 15

MSM with New Diagnoses by Age

In 2018, 2 out of 3 MSM with new diagnoses were between 15 and 34 years old. The number of new diagnoses in both the 15-24 (youth) and 25-34 age groups rose together from 2010 to 2014. From 2015 to 2018, new diagnoses in 25-34-year-olds continued to rise, but new diagnoses in youth fell by about 11%.

Figure 16: Texas MSM with new HIV diagnoses by age groups, 2009-2018



Source: Texas eHARS, 2018

[Data for Figure 16]

Diagnosis Rates

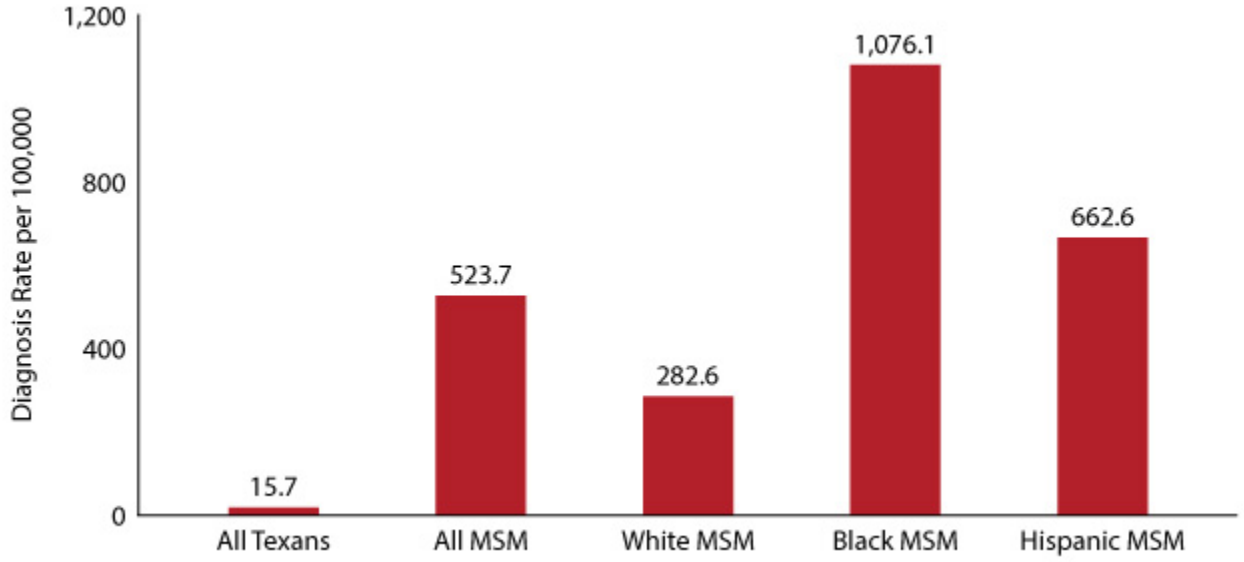
MSM diagnosis rates are 33 times higher than the rates for Texans overall, and the rates for Black and Hispanic MSM are especially high. The rate for Black MSM means that DSHS estimates that 1 in 100 Black MSM in Texas received an HIV diagnosis in 2018.

The diagnosis rates for MSM between 18 and 34 years old are much higher than the rates for other age groups. They suggest that 1 in 100 of the MSM in those two age groups were diagnosed with HIV in 2018.

Another way of looking at burden of disease is ‘1 in’ statements. For Texas overall in 2018, 1 in 305 Texans received an HIV diagnosis in 2018. The HIV burden is much higher for MSM: 1 in 191 MSM were given an HIV diagnosis in 2018 (Table 11). The rates for young MSM of color are even higher:

- 1 in 30 Black MSM 18-24 years old were diagnosed in 2018;
- 1 in 105 Hispanic MSM in this age group were diagnosed in 2018;
- 1 in 26 Black MSM 25-34 years old were diagnosed in 2018; and
- 1 in 81 Hispanic MSM in this age group were diagnosed in 2018.

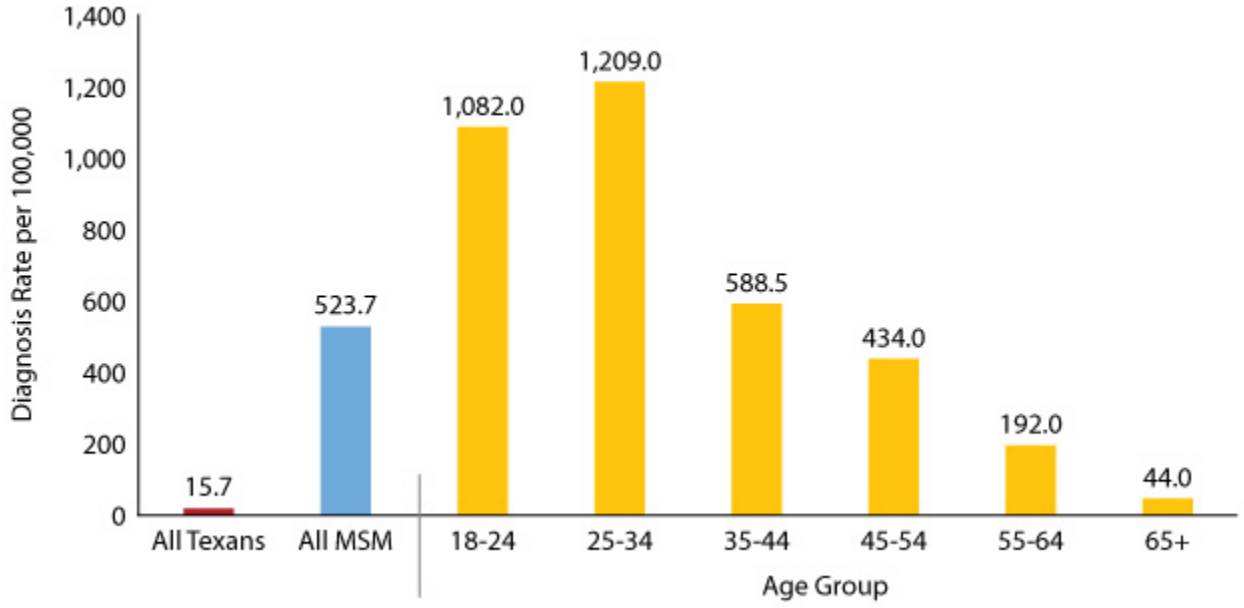
Figure 17: Diagnosis rates in MSM by race/ethnicity, Texas 2018



Source: Texas eHARS, 2018 rates per 100,000

Data for Figure 17

Figure 18: Diagnosis rates in MSM by age group, Texas 2018



Source: Texas eHARS, 2018 rates per 100,000

Data for Figure 18

Table 10: Texas MSM with new HIV diagnoses by age and race/ethnicity, 2018

	White		Black		Hispanic		Total	
Age group (years)	Number	Rate	Number	Rate	Number	Rate	Number	Rate
18-24	102	404.4	322	3,332.2	326	955.7	789	1,082.0
25-34	228	546.0	423	3,801.5	542	1,230.9	1,265	1,209.0
35-44	120	320.8	134	1,282.8	277	712.9	554	588.8
45-54	118	326.0	60	664.2	157	533.0	349	434.0
55-64	61	154.9	22	254.9	55	259.3	141	192.0
65+	19	38.4	8	104.0	7	41.5	35	44.0
Total	648	282.6	968	1,076.1	1,364	662.6	3,133	523.7

A rate above 1,000 in this table can be translated into a percentage. For example, DSHS estimates that 3.3% of Black MSM between 18 and 24 were diagnosed with HIV in 2018.

Source: Texas eHARS, 2018

Table 11: '1 in' statements for diagnosis in MSM by age and race/ethnicity, 2018

	White	Black	Hispanic	Total
Age group (years)	1 in	1 in	1 in	1 in
18-24	247	30	105	92
25-34	183	26	81	83
35-44	312	78	140	170
45-54	307	151	188	230
55-64	646	392	386	521
65+	2,604	962	2,410	2,273
Total	354	93	151	191

Table 12: New HIV diagnoses in Texas MSM, 2014-2018

	2014		2015		2016		2017		2018	
	Number	%	Number	%	Number	%	Number	%	Number	%
All MSM	3,071	100%	3,146	100%	3,218	100%	3,072	100%	3,177	100%
Race/Ethnicity										
White	656	21%	631	20%	644	20%	545	18%	650	21%
Black	950	31%	983	31%	979	30%	992	32%	988	31%
Hispanic	1,306	43%	1,385	43%	1,402	44%	1,402	46%	1,385	44%
Other	49	2%	59	2%	59	2%	47	2%	64	2%
Multiple Races	110	4%	115	4%	134	4%	86	3%	90	3%
Age Group (years)										
0-14	1	<1%			3	<1%			1	<1%
15-24	939	31%	931	30%	887	28%	819	27%	833	26%
25-34	1,081	35%	1,152	37%	1,306	41%	1,234	40%	1,265	40%
35-44	529	17%	530	17%	511	16%	522	17%	554	17%
45-54	367	12%	386	12%	356	11%	332	11%	349	11%
55-64	118	4%	117	4%	126	4%	145	5%	141	4%
65+	36	1%	29	1%	30	1%	20	1%	35	1%

Source: Texas eHARS, 2018

Epi Profile Section 5 - Texans with Newly Acquired HIV

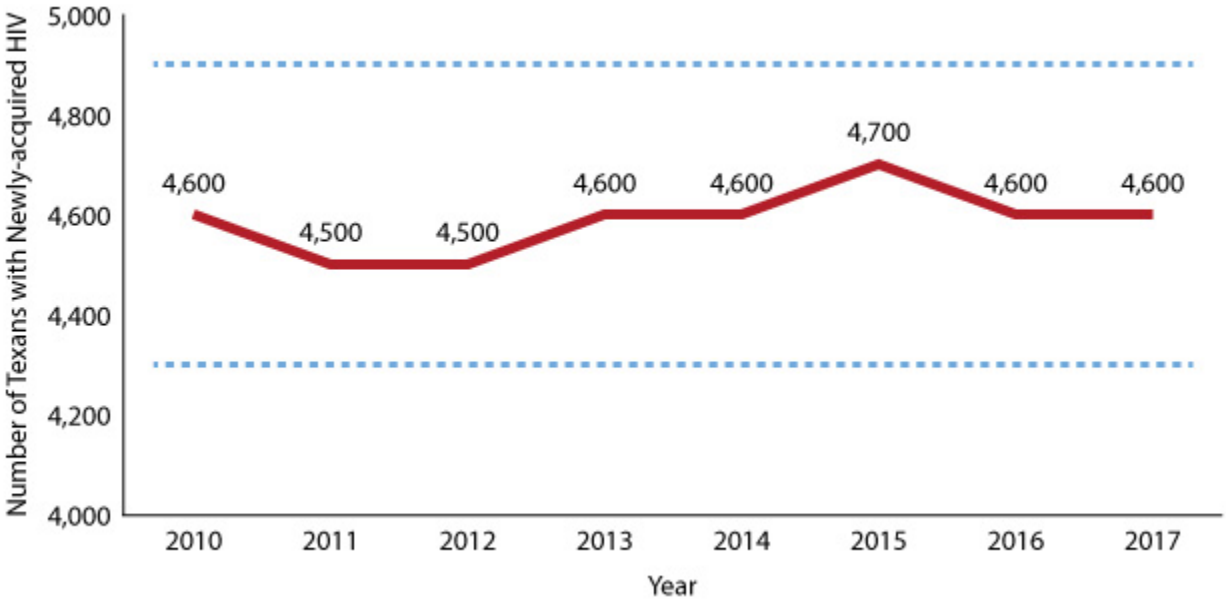
This section provides the estimated number and profile of Texans aged 13 and older who have newly acquired HIV infections (also called incidence). The number of people with *newly acquired* HIV is different from counts of people with *newly diagnosed* HIV. In the US, about 50% of people with HIV live with it for at least 3 years before they get a diagnosis. [11] Because of this delay, incidence shows the true leading edge of the epidemic.

The incidence estimates come from a model developed by the CDC. Information is available for 2010 through 2017. This model does not produce stable estimates for small groups and does not calculate estimates for transgender persons.

The information included in this section uses both midpoint estimates and 95% confidence intervals. The midpoint is the best estimate of the number of people with new HIV infections each year. We also use a confidence interval to mark off the range of values that we are 95% sure contains the true number of people with new HIV infections. On the graphs below, the midpoint estimates are shown as solid lines. The 95% confidence interval boundaries are shown as dotted blue lines.

As Figure 19 shows, the estimated number of Texans with newly acquired HIV did not change between 2010 and 2017: around 4,600 per year. This means that a Texan acquired HIV every two hours.

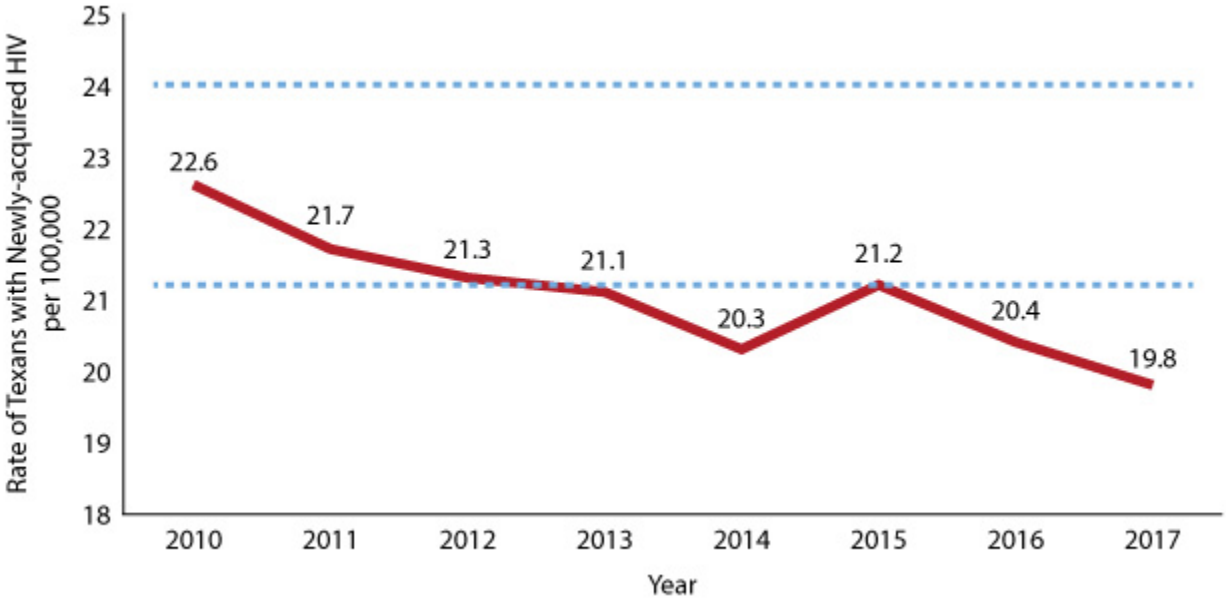
Figure 19: The estimated number of Texans with newly acquired HIV, 2010-2017



Source: Estimates of incidence run in 2019
[Data for Figure 19]

The rate of Texans with newly acquired infections fell significantly between 2010 and 2017 (Figure 20). The drop in the rate is due to the growth of the overall population of Texas, and not decreases in the number of Texans acquiring HIV each year.

Figure 20: Rate of Texans with newly acquired HIV per 100,000, 2010-2017

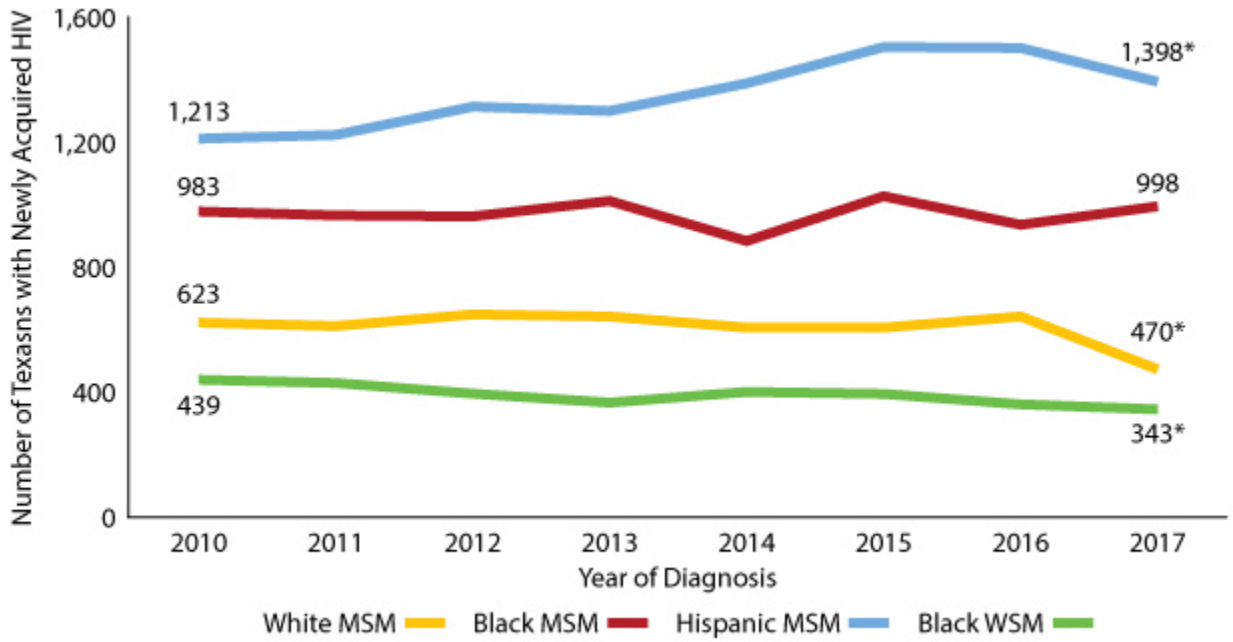


Source: Estimate of incidence run in 2019
[Data for Figure 20]

Although the overall number of people with new HIV infections did not significantly change, some key populations showed significant increases and decreases. We were able to estimate the number of people with newly acquired HIV in four of the five of the priority populations in the Texas HIV Plan: Hispanic MSM, Black MSM, White MSM, and Black women who have sex with men (WSM). We are not able to estimate the number of new infections in the fifth priority population, transgender people. [12]

Comparing 2017 to 2010 estimates show significant decreases in newly acquired HIV in White MSM and Black women who have sex with men. This means that Texas is making progress in driving down the number of people with new HIV infections in these groups. The number of Black MSM with newly acquired HIV was flat across the years. Unfortunately, the number of Hispanic MSM with new HIV infections showed significant increases from 2010 to 2017.

Figure 21: Newly acquired HIV in Texas HIV Plan priority populations, 2010-2017



*Statistically significant changes
Source: Estimates of incidence run in 2019

The Profile of Texans with Newly Acquired HIV

Table 13 shows the profile for Texans with newly acquired HIV in 2017. As with new

diagnoses, the greatest number of people with new HIV infections are MSM of color and those who are 13-34 years old.

Table 13: The profile of Texans with newly acquired HIV, 2017

		95% Confidence Interval		
	Estimated Number	**Lower Bound**	**Upper Bound**	**Rate per 100,000 population**
Total	**4,600**	**3,800**	**5,300**	**19.8**
Sex at birth				
Male	3,800	3,000	4,500	33.1
Female	790	520	1,100	6.8
Race/Ethnicity				
White	720	460	990	7.1
Black	1,600	1,200	2,000	58.8
Hispanic	2,000	1,400	2,600	23.4
Age group (years)				
13-24	1,200	750	1,600	23.9
25-34	1,900	1,400	2,000	45.4
35-44	830	490	1,200	21.7
45-54	470	220	730	13.4
55+	240	70	410	3.6
Transmission group				
MSM	3,000	2,300	3,600	
PWID	160	20	310	

		95% Confidence Interval		
	Estimated Number	Lower Bound	Upper Bound	Rate per 100,000 population
MSM/PWID	220	30	410	
Heterosexual sex	790	490	1,100	
Texas HIV priority population				
Hispanic MSM	1,398	899	1,896	
Black MSM	998	656	1,339	
White MSM	470	252	688	
Black women who have sex with men	343	163	522	

The sum of the estimates of the age groups is greater than the total estimated incidence because of rounding in the calculation model.
Source: Estimates of incidence run in 2019

Note 11. cdc.gov/vitalsigns/hiv-testing/
Note 12. We are using the names of the priority populations as they appear in the *Texas HIV Plan*.

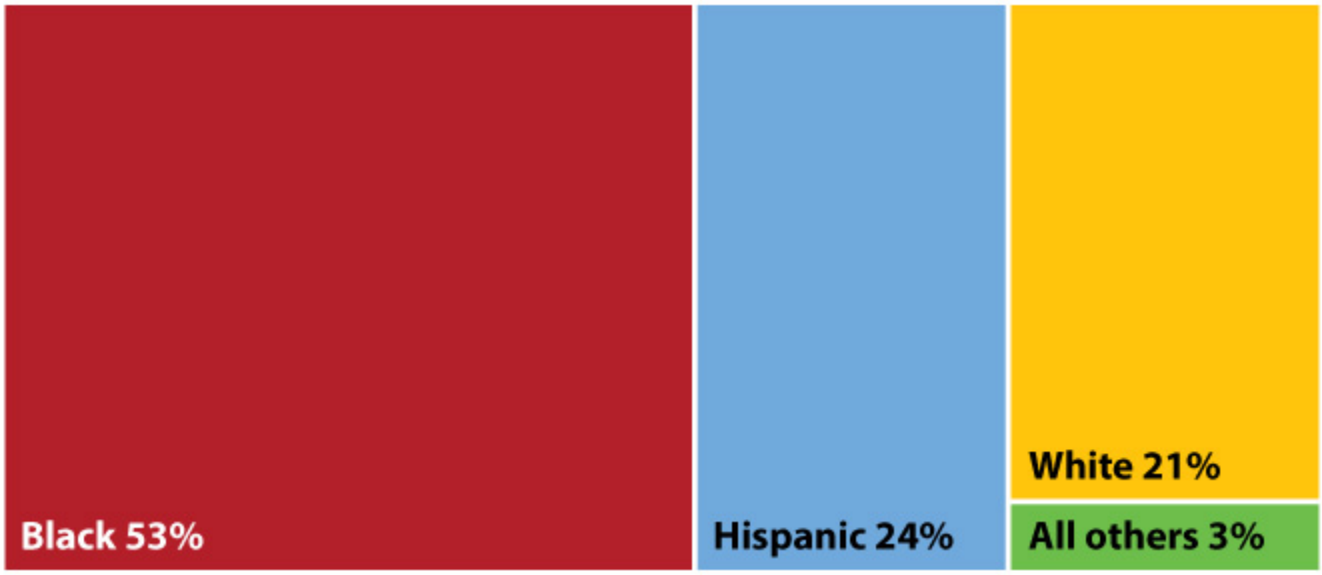
Epi Profile Section 6 - Deaths in Texans Living with HIV

There are some special technical notes for this section. Information on deaths is always delayed, so the most recent information available is for 2016. All rates in this section are per 100,000 members of the population unless otherwise specified. Rates are adjusted by age using the CDC's Statistical Notes for the 2000 U.S. Standard Population (11 age groups, Distribution #1) (PDF) [CDC]. When the number of people in a group are very small, the rates and numbers of PLWH will not be shown. As with other sections, the *other race/ethnicity* category includes cases with unknown race/ethnicity and those in the multiple race category.

Deaths due to HIV in Texas PLWH

The impact of HIV is shown clearly in the information on deaths in Texans 25-44 years old, found in Table 17 at the end of this section. HIV is the 9th leading cause of death in Texans in this age group. As Table 17 shows, it is the 5th leading cause of death for Black Texans in this age group, and the 10th and 11th for White and Hispanic Texans, respectively. Black Texans made up more than half of the 25-44-year-olds with HIV listed as the cause of death in 2016 (Figure 22).

Figure 22: Race/ethnicity of 25-44-year-olds in Texas with HIV as the cause of death, 2016



Data for Figure 22

Table 14 shows the age-adjusted rate of death due to HIV in 2016. Rates for Black Texas men were 5 times higher and rates for Black women were about 10 times higher than the rates for Whites or Hispanics. These higher rates show the disparities in access to effective medical care for HIV as well as the effect of social and environment forces that increase vulnerability to HIV and perpetuate the poor health outcomes for racial/ethnic minorities.

Table 14: Age-adjusted rate of death due to HIV per 100,000 population in Texas by sex and race/ethnicity,2016

Race/ethnicity	Males	Females	Total
White	2.5	0.6	1.5
Black	11.2	5.6	8.2
Hispanic	2.5	0.5	1.5
Total	3.4	1.1	2.2

Deaths Due to Any Cause in Texas PLWH

Table 15 shows the age-adjusted rate of death due to any cause in PLWH. As PLWH live longer, diseases and conditions associated with aging will increase as a cause of death. PWID had the highest death rates in PLWH, which may be due to comorbidities associated with injection drug use such as Hepatitis B and C.

Table 15: Age-adjusted rates of death due to any cause (per 1,000) in Texas PLWH by race/ethnicity and sex at birth, 2016

	Male	Female	Total
Race/ethnicity			
White	19.0	14.0	18.5
Black	20.2	16.4	19.0
Hispanic	15.1	11.3	14.2
Transmission group			
MSM	16.0	N/A	16.0
PWID	30.1	16.6	24.8
MSM/PWID	27.0	N/A	27.0
Heterosexual contact	17.4	13.3	15.4
Total	18.4	14.3	17.5

Source: Texas eHARS, 2018

In female PLWH who died in 2016, about half of the deaths were due to HIV. In transgender people living with HIV who died in 2016, three out of five deaths were caused by HIV.

Table 16: Deaths due to HIV and all other causes in PLWH by sex at birth and current gender identity, 2016

	Total Deaths	Due to HIV		All other causes	
	Number	**Number**	**%**	**Number**	**%**
Sex at Birth					
Male	1,198	510	43%	688	57%
Female	327	170	52%	157	48%
Total	1,525	680	45%	845	55%
Current Gender Identity					
Transgender persons	11	7	64%	4	36%

Source: Texas eHARS, 2018

Table 17: Cause of death rankings in adults age 25-44, Texas 2016

Cause of Death	All Races		White		Black		Hispanic		Other	
	Rank	Number	Rank	Number	Rank	Number	Rank	Number	Rank	Number
Accidents	1	2,872	1	1,459	1	366	1	968	2	79
Malignant Neoplasms (Cancer)	2	1,378	3	539	4	218	2	521	1	100
Diseases of the Heart	3	1,244	4	525	2	332	3	345	4	42
Intentional Self-Harm (Suicide)	4	1,235	2	771	6	103	4	307	3	54
Assault (Homicide)	5	761	5	164	3	293	5	277	5	27
Chronic Liver Disease and Cirrhosis	6	316	6	147	15	16	6	147	7	*
Cerebrovascular Diseases	7	229	8	78	8	46	7	93	6	12
Diabetes Mellitus	8	226	7	8	7	51	8	83	10	*
HIV Disease	***9***	***211***	***11***	***44***	***5***	***111***	***10***	***50***	***8***	*
Septicemia	10	155	9	59	9	38	9	55	11	*

* Number of deaths masked due to low numbers

Source: Texas eHARS, 2018

Epi Profile Section 7 - Comorbidities in Texans Living with HIV

Sexually Transmitted Diseases (STD) in Texans Living with HIV

STDs are infections that spread from person to person through sexual activity, including anal, vaginal, or oral sex. HIV is an STD, and chlamydia (CT), gonorrhea (GC), and syphilis [13] are also STDs. You can learn more in the Texas STD Surveillance Report (PDF : 2,837 kB) for 2018.

Having an STD can make it easier to get HIV. For example, an STD can cause a sore or a break in the skin, which can make it easier for HIV to enter the body. Having an STD can make it easier to transmit HIV, but only if the person living with HIV is not on antiretroviral treatment (ART). [14] If the person living with HIV is on ART, then an STD does not increase the risk of transmitting HIV. [15] Finally, people living with HIV can get an STD even if they are on ART.

Between 2011 and 2018, the overall annual number of Texans with an STD diagnosis rose sharply (Table 18). Most notable were the 53% increase in the number of Texans diagnosed with gonorrhea and the 91% increase in primary or secondary (P&S) syphilis diagnoses. This growth was not due to growth in the overall population, because rates of STD also rose.

The annual number of PLWH with STD also increased. The number of PLWH with a chlamydia or a gonorrhea diagnosis more than tripled. The number of PLWH with a P&S syphilis diagnosis doubled. Rates for all STD rose for both the overall population and PLWH. The STD increases likely reflect increased testing and improved reporting as well as true increases in the number of people with these STDs.

Table 18: Number and rate (per 1,000) of selected STD for all Texans and Texans living with HIV, 2011 and 2018

	Chlamydia				Gonorrhea				P&S Syphilis			
	All Texans		PLWH		All Texans		PLWH		All Texans		PLWH	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
2011	122,872	4.8	792	12.2	306	1.2	934	13.2	1,175	0.05	329	4.7
2018	145,874	5.1	2,829	30.1	470	1.6	3,377	35.9	2,528	0.09	775	8.2
Increase	19%	6%	257%	146%	53%	37%	262%	171%	115%	91%	136%	76%

Source: Texas eHARS, 2018

Comparing rates can uncover health disparities. PLWH carry a much higher burden of STD than the general population. In 2018, rate of CT in PLWH was 6 times higher than the overall population rate, the GC rate was 22 times higher, and the P&S Syphilis rate was 94 times higher. In general, STD rates are higher in transgender women and in non-transgender men; in Black PLWH; in PLWH between 15 and 34 years old; and in MSM living with HIV, especially Black MSM (Table 20).

MSM have been particularly hard hit by syphilis. MSM made up the largest group of people with P&S and early latent syphilis diagnoses in 2018. MSM living with HIV made up about a quarter of Texans with P&S and early latent syphilis diagnoses in 2018 (Table 19).

Table 19: 2018 Syphilis diagnoses in Texas MSM

	P&S Syphilis			Early Latent Syphilis		
	Total Cases	Cases in PLWH	%	Total Cases	Cases in PLWH	%
Total MSM	1,384	581	42%	1,846	1,058	57%
White MSM	393	148	38%	464	239	51%
Black MSM	399	223	56%	517	368	71%
Hispanic MSM	509	188	37%	771	417	54%
Total	2,526	776	31%	4,220	1,873	44%

Table 19: 2018 Syphilis diagnoses in Texas MSM

Source: Texas eHARS, 2018

Table 20: Rates of STD in PLWH (per 1,000), 2018

		Chlamydia		Gonorrhea		P&S Syphilis		Early Latent Syphilis	
	PLWH	Cases in PLWH	Rate	Cases in PLWH	Rate	Cases in PLWH	Rate	Cases in PLWH	Rate
Birth sex/Gender identity									
Women	19,821	292	14.7	145	7.3	15	0.8	24	1.2
Men	73,462	2,493	33.9	3,196	43.5	748	10.2	1,817	24.7
Transgender women	801	45	56.2	37	46.2	13	16.2	32	40.0
Transgender men	22	0		0		0		0	
Race/Ethnicity									
White	22,895	565	24.7	750	32.8	181	7.9	431	18.8
Black	34,648	1,092	31.5	1,385	40.0	309	8.9	686	19.8
Hispanic	31,643	873	27.6	898	28.4	250	7.9	678	21.4

		Chlamydia		Gonorrhea		P&S Syphilis		Early Latent Syphilis	
	PLWH	Cases in PLWH	Rate	Cases in PLWH	Rate	Cases in PLWH	Rate	Cases in PLWH	Rate
Age groups (years)									
15-24	3,747	491	131.0	601	160.4	140	7.4	216	57.6
25-34	19,039	1,269	66.7	1,649	86.6	334	17.5	767	40.3
35-44	21,321	620	29.1	658	30.9	147	6.9	451	21.2
45-54	25,109	323	12.9	334	13.3	108	4.3	291	11.6
55-64	18,650	112	6.0	117	6.3	40	2.1	129	6.9
65+	6,034	14	2.3	18	3.0	6	1.0	19	3.1
Transmission Group									
All MSM	57,602	2,310	40.1	2,950	51.2	693	12.0	1,683	29.2
Black MSM	16,373	841	51.4	1,214	74.1	289	17.7	636	38.8
Hispanic MSM	21,614	755	34.9	804	37.2	223	10.3	613	28.4
White MSM	16,639	470	28.2	628	37.7	151	9.1	365	21.9
Total	**94,106**	**2,830**	**30.1**	**3,378**	**35.9**	**775**	**8.2**	**1,873**	**19.9**

PLWH with unknown age are not broken out, but they are included in the total for each disease. The count of MSM in this table differs from others in this report because the methods used to redistribute case reports with no known risk cannot be used with matched data.

Source: Texas eHARS, 2018

Tuberculosis in People Living with HIV

The rate of Tuberculosis (TB) in Texas PLWH is 15.7 times higher than in the general population (4.0/100,000). However, TB is still relatively rare in PLWH–less than 2% of the Texans living with HIV in 2018 had been diagnosed with TB in the years following their HIV diagnosis. PLWH who also have latent TB infections are more likely to develop TB disease because their immune system is weakened.

As seen in Table 21, Hispanic and Black PLWH made up 85% of those co-infected with TB in 2018. Although not shown explicitly in this table, persons of Asian descent living with HIV are more likely to develop TB disease. Disproportionate impact on these three groups is shown in their higher rates, which is mainly due to a higher prevalence of latent TB infection in these populations.

Table 21: Number and percent of Texas PLWH with a TB co-morbidity

	TB Diagnoses Ever (1993-2018)			In 2018		
	PLWH	PLWH with TB Diagnosis after HIV Diagnosis	% of PLWH	Number of PLWH with TB Diagnosis	% of Persons with TB-HIV coinfection	Rate per 100,000 population
Sex at birth						
Female	19,843	318	1.6%	15	25.4%	75.6
Male	74,264	1,171	1.6%	44	74.6%	59.8
Race/Ethnicity*						
White	22,895	124	0.5%	4	6.8%	17.5
Black	34,648	610	1.8%	25	42.4%	72.2
Hispanic	31,643	653	2.1%	25	42.4%	79.0
Age group (years)						
0-14	206	1	0.5%	0	0.0%	0.0
15-24	3,747	8	0.2%	4	0.0%	106.8
25-34	19,039	86	0.5%	11	18.6%	57.8

	TB Diagnoses Ever (1993-2018)			In 2018		
	PLWH	PLWH with TB Diagnosis after HIV Diagnosis	% of PLWH	Number of PLWH with TB Diagnosis	% of Persons with TB-HIV coinfection	Rate per 100,000 population
35-44	21,321	303	1.4%	16	27.1%	75.0
45-54	25,109	541	2.2%	17	28.8%	67.7
55-64	18,650	422	2.3%	10	16.9%	53.6
65+	6,034	182	2.1%	1	9.1%	16.6
Current Residence						
Austin TGA	6,445	101	1.6%	4	6.8%	62.1
Dallas EMA	23,036	365	1.6%	14	23.7%	60.8
Fort Worth TGA	6,290	365	1.6%	6	10.2%	95.4
Houston EMA	29,078	520	1.8%	20	33.9%	68.8
San Antonio TGA	6,893	86	1.0%	4	7.0%	58.0
Total	**94,106**	**1,489**	**1.6%**	**59**	**100.0%**	**62.7**

* The percentages do not add up to 100% as multi-race and other race/ethnic categories were not illustrated for brevity.

Note 13. Syphilis is divided into four stages: primary, secondary, latent, and tertiary. It is most transmissible during the primary and secondary stages and can also be transmitted in the early latent stage.

Note 14. Cohen MS, Hoffman IF, Royce RA, et al. Reduction of concentration of HIV-1 in semen after treatment of urethritis: implications for prevention of sexual transmission of HIV-1. *Lancet* 1997; 349:1868-1873.

Note 15. Cohen MS, Council OD, Chen JS. Sexually transmitted infections and HIV in the era of antiretroviral treatment and prevention: the biologic basis for epidemiologic synergy. *Journal of the International AIDS Society* 2019, 22(s6) e25355.

Epi Profile Section 8 - Indicators of HIV Risk in HIV-negative Persons at High Risk for HIV

This section describes public health testing programs funded by the Texas Department of State Health Services (DSHS). DSHS funds two types of HIV testing programs: focused testing programs and routine testing programs in medical care settings. Funded providers either work with populations who carry a high burden of HIV or offer testing through their broader health services in areas and settings likely to serve low income and uninsured people.

The program profiles and outcomes are shown in Table 22. The first set of columns for each program show the number and proportion of tests for various groups of clients. The second set of columns show the number of positive test results within groups of clients and the positivity rate, which is the number of clients with positive test results for every hundred clients tested. The final set of columns shows the number of diagnoses and diagnosis rate. Some of the clients with positive test results had been previously diagnosed. The diagnosis columns show only those clients who were newly diagnosed by the testing program.

Focused Testing Programs

Focused testing sites offer HIV testing to persons at highest risk for HIV, such as MSM. These programs are carried out by community-based organizations and some local health departments. To be effective, these programs should have client profiles like the profile of Texans with new diagnoses. We also expect a diagnosis rate that is higher than the diagnosis rate for Texans overall (0.016%). [16]
The focused testing client profile shows the following:

- Two-thirds of the tests were for men;
- 70% of the tests were for Black or Hispanic clients;
- 3 out of 5 tests were for clients younger than 35 years old;
- 72% of the tests were for clients in the areas with the greatest number of PLWH—Austin, Dallas, Fort Worth, Houston, and San Antonio; and
- 1 in 3 of the tests were for MSM.

391 clients were diagnosed through the focused program in 2018. The diagnosis rate was 0.8%, which was 47 times higher than the overall diagnosis rate.

Routine HIV Testing in Health Care Settings

Routine testing programs test all clients in a medical care setting unless they decline. The testing is not based on individual patient risk. These programs are primarily carried out in hospital emergency departments in areas with higher numbers of people living with HIV. A relatively small number of tests in this program are conducted in primary care settings. Since all clients in a setting are tested, risk information is usually not collected by routine testing programs and is not shown in the tables below.

The routine testing client profile shows the following:

- More than half of the tests were for women;
- Almost 70% of the tests were for Black or Hispanic clients;
- 36% of the tests were for clients younger than 35 years old; and
- Almost 90% of the tests were for clients in the areas with the greatest number of PLWH and new diagnoses—Austin, Dallas, Fort Worth, and Houston.

293 clients were diagnosed through the focused program in 2018. The diagnosis rate was 0.1%, which was 8 times higher than the overall diagnosis rate in the general population.

Table 22a: Profiles of HIV testing programs funded by DSHS in 2018

	Focused Testing Programs					
	Tests		All positive tests		Only new diagnoses	
	Number	% of tests	Number	Positive rate	Number	Diagnosis rate
Total	51,952		637	1.2%	391	0.8%
Sex						
Men	34,211	66%	555	1.6%	352	1.0%
Women	17,307	33%	68	0.4%	34	0.2%
Transgender women	362	1%	14	3.9%	5	1.4%
Transgender men	11	0%	0	0.0%	0	0.0%
Unknown	61	0%	0	0%	0	0%
Race/Ethnicity						
White	13,062	25%	118	0.9%	76	0.6%
Black	15,290	29%	219	1.4%	122	0.8%
Hispanic	21,081	41%	271	1.3%	178	0.8%
Other	2,071	4%	23	1.1%	12	0.6%
Multi-race	448	1%	6	1.3%	3	0.7%
Age group (years)						
0-14	62	0%	1	1.6%	0	0%
15-24	14,109	27%	148	1.0%	107	0.8%
25-34	18,853	36%	269	1.4%	170	0.9%

	Focused Testing Programs					
	Tests		All positive tests		Only new diagnoses	
	Number	% of tests	Number	Positive rate	Number	Diagnosis rate
35-44	9,468	18%	123	1.3%	73	0.8%
45-54	5,501	11%	67	1.2%	31	0.6%
55-64	3,077	6%	22	0.7%	31	0.3%
65+	851	2%	7	0.8%	2	0.2%
Unknown	51	0%	0	0%	0	0%
Geography						
Austin TGA	4,776	9%	28	0.6%	21	0.4%
Dallas EMA	9,991	19%	192	1.9%	99	1.0%
Fort Worth TGA	5,595	11%	67	1.2%	50	0.9%
Houston EMA	5,158	10%	55	1.1%	37	0.7%
San Antonio TGA	11,728	23%	126	1.1%	68	0.6%
Rest of Texas	14,703	28%	169	1.1%	116	0.8%
Reported Risk						
MSM	17,706	34%	469	2.6%	308	1.7%
PWID	3,164	6%	19	0.6%	8	0.3%
MSM/PWID	655	1%	27	4.1%	14	2.1%
Adult Other	29,277	56%	115	0.4%	58	0.2%
Unknown	1,089	2%	7	0.6%	3	0.3%

Table 22a: Profiles of HIV testing programs funded by DSHS in 2018

	Routine Testing Programs					
	Tests		All positive tests		Only new diagnoses	
	Number	% of tests	Number	Positive rate	Number	Diagnosis rate
Total	227,860		1,496	0.7%	293	0.1%
Sex						
Men	99,825	44%	1,087	1.1%	217	0.2%
Women	128,000	56%	407	0.3%	75	0.1%
Transgender women	10	0%	2	20.0%	1	10.0%
Transgender men						
Unknown	25	0%	0	0%	0	0%
Race/Ethnicity						
White	55,205	24%	288	0.5%	65	0.1%
Black	63,594	28%	837	1.3%	132	0.2%
Hispanic	91,173	40%	268	0.3%	83	0.1%
Other	17,994	8%	90	0.5%	12	0.1%
Multi-race	17	0%	13	76.5%	1	5.9%
Age group (years)						
0-14	697	0%	1	0.1%	0	0%
15-24	37,475	16%	132	0.4%	47	0.1%
25-34	46,242	20%	430	0.9%	88	0.2%

	Routine Testing Programs					
	Tests		All positive tests		Only new diagnoses	
	Number	% of tests	Number	Positive rate	Number	Diagnosis rate
35-44	44,045	19%	353	0.8%	63	0.1%
45-54	40,838	18%	306	0.7%	51	0.1%
55-64	36,739	16%	228	0.6%	41	0.1%
65+	21,820	10%	43	0.2%	3	0.0%
Unknown	127	0%	3	2.4%	0	0%
Geography						
Austin TGA	40,961	18%	126	0.3%	24	0.1%
Dallas EMA	60,133	26%	431	0.7%	156	0.3%
Fort Worth TGA	66,884	29%	492	0.7%	43	0.1%
Houston EMA	31,117	14%	315	1.0%	41	0.1%
San Antonio TGA						
Rest of Texas	28,888	13%	132	0.5%	29	0.1%
Reported Risk						
MSM			46		17	
PWID			6		1	
MSM/PWID			1		0	
Adult Other			196		30	
Unknown			1,247		245	

Epi Profile Section 9 - Sex and Substance Use in PLWH

The Texas Medical Monitoring Project (MMP) uses interviews and medical record abstractions of a representative sample of Texans living with diagnosed HIV to better understand the experiences of PLWH. More information on the project is in the data sources and notes. This section provides information on condomless sex and on drug use among PLWH in Texas.

MSM Living with HIV

Nearly two-thirds of the sexually active MSM living with HIV in the sample reported having condomless anal sex with a male partner in the past 12 months (Table 23). However, more than 6 out of 10 of these men only had condomless sex with partners who were also living with HIV. Of the men who had condomless sex with partners who were not PLWH, almost 8 out of 10 had suppressed viral load.

More than a third of MSM living with HIV reported using non-injection or injection drugs in the past 12 months. Drug use decreases with age. Only a quarter of the MSM over the age of 55 years reported using injection or non-injection drugs compared to about half of those between the ages of 18-34 years. White and Black men were twice as likely to report drug use than were Hispanic men.

Men and Women Living with Heterosexually Acquired HIV

The patterns of condomless sex and substance use reported by heterosexual men and women were different. Almost half of this group reported condomless sex with a partner of the opposite sex in the previous 12 months, but around 7 out of 10 people who had condomless sex reported that they had condomless sex with only other PLWH. Two-thirds of the men and women who had condomless sex with partners who were not PLWH had suppressed viral load.

The proportion of people in the sample who reported injection or non-injection drug use increased with age, and White men and women were three times more likely to report using drugs than were Black and Hispanic men and women.

Table 23: Sexual activity and substance use in MSM living with HIV in Texas, MMP 2017-2018

Sexually Active MSM		Average number of male sex partners in past 12 months	Had condomless anal sex with a male partner in the past 12 months		Had condomless anal sex with a male partner whose HIV status was discordant or unknown in the past 12 months		Used injection or non-injection drugs in the past 12 months	
	Number	Number	Number	%*	Number	%*	Number	%*
Race/Ethnicity								
White	35	8	28	82%	12	36%	16	48%
Black	41	3	22	54%	14	31%	14	40%
Hispanic	45	6	27	60%	17	44%	11	24%
Total	121	6	77	64%	43	37%	41	37%
Age group (years)								
18-34	43	8	26	63%	17	39%	16	49%
35-44	30	4	20	69%	14	50%	11	27%
45-54	22	5	15	62%	6	27%	8	37%
55+	26	4	16	63%	6	26%	6	23%
Total	121	6	77	64%	43	37%	41	37%

* Percentages are weighted

Cell sizes less than 10 may produce unstable estimates

Table 24: Sexual activity and substance use in heterosexuals living with HIV in Texas, MMP 2017-2018

Sexually Active Men and Women Who Engaged in Heterosexual Contact		Average number of sex partners of the opposite sex in the past 12 months	Had condomless vaginal or anal sex with a partner of the opposite sex in the past 12 months		Had condomless vaginal or anal sex with a partner whose HIV status was discordant or unknown in past 12 months		Used injection or non-injection drugs in the past 12 months	
	Number	Number	Number	%*	Number	%*	Number	%*
Race/Ethnicity								
White	7	1	6	84%	**	**	4	50%
Black	54	1	19	40%	14	31%	8	13%
Hispanic	16	2	7	50%	5	41%	3	16%
Total	77	1	32	48%	19	29%	15	18%
Age group (years)								
18-34	15	2	7	58%	5	44%	4	19%
35-44	31	1	12	35%	7	16%	7	24%
45-54	16	1	8	70%	5	51%	**	**
55+	15	1	5	41%	**	**	3	25%
Total	77	1	32	48%	17	26%	14	18%

* Percentages are weighted
** Cell suppressed for numbers less than 3
Cell sizes less than 10 may produce unstable estimates

Epi Profile Section 10 - Sex and Substance Use in People at Increased Risk for HIV in Dallas, Texas

The National HIV Behavioral Surveillance Survey (NHBS) project conducts interviews in Dallas with MSM, PWID, and heterosexually active people who are not living with HIV. The data collection is completed in rotating, annual cycles of the three groups. Since the interviews are conducted in Dallas, the results may not reflect other areas of the state.

MSM

In 2017, 427 MSM who were not living with HIV were interviewed (Table 25). Of this group, 72% had condomless anal sex with a male partner, 54% used injection or non-injection drugs, and 12% had condomless anal sex with a male partner whose HIV status was unknown within the past 12 months. Only 2% reported having condomless anal sex with a partner living with HIV in the past 12 months. Seven percent reported having syphilis in the past 12 months.

In Texas, young Black MSM experience the highest rates of new HIV diagnoses (see Section 4: New Diagnoses in MSM). However, NHBS data indicates that White MSM and Hispanic MSM in Dallas are more likely to report having condomless anal sex: 80% of White MSM and 70% of Hispanic MSM had condomless anal sex compared to 66% of Black MSM. Furthermore, 5% of White MSM had condomless anal sex with a partner living with HIV compared to 0% of Black MSM and 1% of Hispanic MSM.

In general, risk behavior among MSM decreased with age. A lower proportion of respondents 45 years of age or older had condomless anal sex (56%), had condomless anal sex with a male partner whose HIV status was unknown (16%), or had condomless anal sex with a partner living with HIV (0%) compared to those in the younger age groups.

PWID

Interviews with people who inject drugs (PWID) in Dallas were conducted in 2015

(Table 26). Over 70% of PWID recruited for this survey were over the age of 45 and 77% were Black.

Respondents reported that in the last 12 months they had shared needles (28%) or other injection equipment (54%), exchanged money or drugs for sex (19%), or had condomless sex (67%).

White PWID more frequently reported sharing needles compared to Hispanic (45%) and Black participants (21%). In addition, 65% of Hispanic participants shared drug paraphernalia compared to 59% of White and 52% of Black participants. Slightly more Black participants (20%) exchanged money or drugs for sex compared to all other race/ethnic groups (15% for each).

In general, risk behavior among PWID decreased with age. A lower proportion of respondents 45 years of age or older shared needles (23%) or drug paraphernalia (53%) compared to their 18 to 24-year-old counterparts (50% and 67%). Fewer older respondents exchanged money or drugs for sex (19%) compared to those 18 to 24-years-old (33%). Finally, fewer older respondents had condomless sex (60%) compared to those 18 to 24-years-old (92%).

Persons who Acquired HIV through Heterosexual Contact

Ninety-one percent of heterosexual study participants in Dallas reported having condomless sex with a partner of the opposite sex. Twenty-two percent exchanged money or drugs for sex in the past 12 months. Only 1% reported having condomless sex with a person living with HIV within the last 12 months.

Age appears unrelated to patterns in condomless sex, as it was reported by 93% of those 18-24 years of age and by 91% of those 45 years of age or older. Furthermore, older respondents were more likely to report exchanging sex for money or drugs. More information on this wave of the project can be found in Table 27.

Table 25: Sex and drug use in Dallas MSM who are not living with HIV, 2017 (weighted)

MSM		Average number of male sex partners in past 12 months	Had condomless anal sex with a male partner in the past 12 months		Had condomless anal sex with last male partner whose HIV status was unknown		Had condomless anal sex with last partner living with HIV		Used injection or non-injection drugs in the past 12 months		Self-reported syphilis infection in the past 12 months	
	Number	Number	Number	%	Number	%	Number	%	Number	%	Number	%
Race/Ethnicity												
White	137	13	109	80%	15	11%	7	5%	79	58%	11	8%
Black	68	6	45	66%	8	12%	0	0%	31	46%	5	7%
Hispanic	192	11	134	70%	27	14%	2	1%	102	53%	14	7%
Other	29	14	20	69%	3	10%	0	0%	17	59%	1	3%
Total*	427	11	308	72%	53	12%	9	2%	230	54%	31	7%
Age group (years)												
18-24	100	9	70	70%	13	13%	1	1%	58	58%	8	8%
25-34	196	9	152	78%	18	9%	7	4%	112	57%	17	9%

MSM		Average number of male sex partners in past 12 months	Had condomless anal sex with a male partner in the past 12 months		Had condomless anal sex with last male partner whose HIV status was unknown		Had condomless anal sex with last partner living with HIV		Used injection or non-injection drugs in the past 12 months		Self-reported syphilis infection in the past 12 months	
	Number	Number	Number	%	Number	%	Number	%	Number	%	Number	%
35-44	63	9	48	76%	11	17%	1	2%	28	44%	3	5%
45+	68	22	38	56%	11	16%	0	0%	32	47%	3	4%
Total	427	11	308	72%	53	12%	9	2%	230	54%	31	7%

* One participant whose race/ethnicity was missing was included in the total.

Table 26: Sex and drug use in Dallas PWID who were not living with HIV, 2015 (unweighted)

People who Inject Drugs		Shared needle in past 12 months		Sharing of drug paraphernalia in past 12 months		Exchanged money or drugs for sex in past 12 months		Average number of sex partners in the past 12 months *	Had condomless sex in the past 12 months	
	Number	Number	%	Number	%	Number	%	Number	Number	%
Race/Ethnicity										
White	86	46	53%	51	59%	13	15%	4	66	77%

People who Inject Drugs		Shared needle in past 12 months		Sharing of drug paraphernalia in past 12 months		Exchanged money or drugs for sex in past 12 months		Average number of sex partners in the past 12 months *	Had condomless sex in the past 12 months	
	Number	Number	%	Number	%	Number	%	Number	Number	%
Black	390	81	21 %	203	52%	79	20 %	3	253	65 %
Hispanic	20	9	45 %	13	65%	3	15 %	3	16	80 %
Other	13	6	46 %	8	62%	2	15 %	3	7	54 %
Age group (years)										
18-24	12	6	50 %	8	67%	4	33 %	6	11	92 %
25-34	60	27	45 %	32	53%	8	13 %	5	54	90 %
35-44	71	24	34 %	40	56%	14	20 %	7	56	79 %
45+	366	85	23 %	195	53%	71	19 %	2	221	60 %
Total	509	142	28 %	275	54%	97	19 %	3	342	67 %

* This analysis excluded female PWID who reported sex exclusively with other females.

Persons Who Engage in Heterosexual Contact		Average number of sex partners of the opposite sex in the past 12 months	Had condomless sex with a partner of the opposite sex in the past 12 months*		Exchanged money or drugs for sex in past 12 months		Had condomless sex with an HIV-positive partner in the past 12 months*	
	Number	**Number**	**Number**	**%**	**Number**	**%**	**Number**	**%**
Race/Ethnicity								
White	9	5	9	100%	2	22%	0	0%
Black	364	5	331	91%	86	24%	6	2%
Hispanic	34	2	32	94%	2	6%	0	0%
Other	20	7	17	85%	4	20%	0	0%
Age group (years)								
18-24	73	4	68	93%	7	10%	1	1%
25-34	123	6	111	90%	29	24%	0	0%
35-44	89	6	81	91%	22	25%	3	3%
45+	142	5	129	91%	36	25%	2	1%
Total	427	5	389	91%	94	22%	6	1%

Table 27: Sexual behavior in Dallas HIV-negative people at an increased risk for HIV because of their heterosexual status, Dallas, 2016 (unweighted)

* This item is referring to condomless sex with either a main or casual partner.

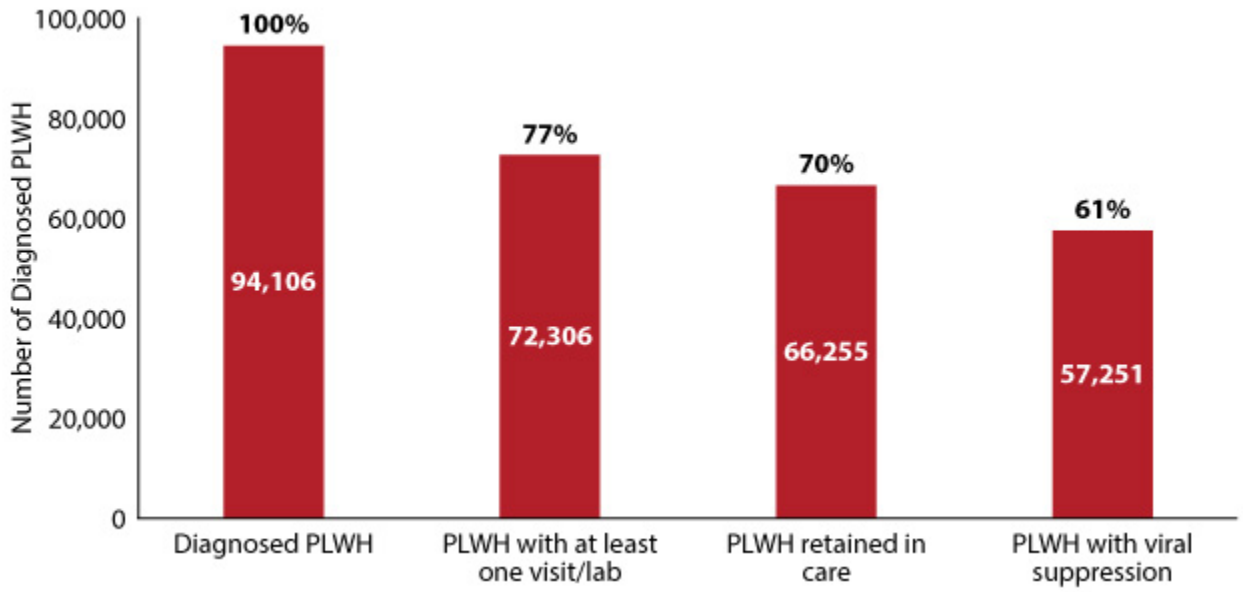
Epi Profile Section 11 - HIV Treatment Cascade

The HIV Treatment Cascade is a visual representation of the continuum of care for Texans living with diagnosed HIV, as shown in Figure 23. The bars represent the steps between HIV diagnosis and the goal of viral load suppression. PLWH with suppressed viral load have better health and cannot transmit HIV through sex.

In 2018, almost 4 out of 5 Texans with a diagnosed HIV infection had evidence of care; 70% were retained in continuous care; and 61% had a suppressed viral load. Out of those with any care, almost 8 in 10 had a suppressed viral load.

We can also put the cascade results in terms of *Achieving Together* measures. We estimate that around 70% of Texans diagnosed with HIV were on treatment/retained in care, and around 86% of people on treatment had a suppressed viral load. The goal for both measures is 90%.

Figure 23: Texas HIV Treatment Cascade for 2018



Data for Figure 23

PLWH with at least one visit/lab - This bar includes all diagnosed PLWH who had at least one episode of HIV care in 2018. Evidence of an episode of care includes records showing an outpatient medical visit; a filled prescription for antiretroviral therapy (ART) drugs; a viral load test result; or a CD4 test result.

PLWH retained in care - This bar includes all diagnosed PLWH who had at least two episodes of care that were at least three months apart. It also includes PLWH who had a suppressed viral load as of the end of 2018 regardless of their patterns of care.

PLWH with viral suppression - This bar includes all diagnosed PLWH whose last viral load test value of 2018 was <200 copies/mL.

Epi Profile - Data Sources and Notes

This profile presents information on people with HIV in Texas diagnosed through December 31, 2018 and reported as of June 20, 2019. The section on people with new HIV diagnoses includes all people who were newly diagnosed regardless of their stage of disease at diagnosis. Statistics on people with new diagnoses are based on the earliest available diagnosis date for that person, regardless of when the information was reported through surveillance. For example, if someone was diagnosed with HIV in 2017, but the report was delayed until 2018, the person would still be shown as being newly diagnosed in 2017.

The primary source of information for this report comes from routine disease surveillance. Texas laws and regulations require that certain health care professionals and laboratories report test results or results of diagnostic evaluation that indicate infection with HIV. These results are maintained in Texas' Electronic HIV/AIDS Reporting System (eHARS).

A Note on Mode of Transmission

The mode of transmission assigned to each person in eHARS represents the most likely way they acquired HIV based on the risk behaviors documented during disease reporting or investigation. Nearly one-third of the surveillance reports on persons with new diagnoses do not have an identified risk factor. DSHS uses multiple imputation to assign a risk factor when it is missing.

A Note on Gender Identity

HIV and STD surveillance staff are working to improve data collection on transgender persons. Gender identity information is more complete for people who were diagnosed in 2014 or later.

Data on STD/HIV and TB/HIV Comorbidity

A cross-registry match was performed between eHARS and Texas STD and TB registries to identify individuals co-infected with TB or chlamydia, gonorrhea, and syphilis during 2018. A PLWH was co-infected if their co-infection was diagnosed at least 30 days prior to their HIV diagnosis or at any time after their HIV diagnosis.

A Note on Rates

Rates allow the comparison of groups of different sizes. Comparing rates allows us to see which demographic groups and geographic areas carry the greatest burdens of HIV. Rates cannot be calculated for PWID, people who acquired HIV through heterosexual sex, or MSM/PWID because denominators for these groups are unknown. DSHS is actively working on estimates of HIV rates in transgender people. The standard case rate when dealing with HIV is the number of people with HIV per 100,000 members of that population.

The Medical Monitoring Project

The Medical Monitoring Project (MMP) is a special surveillance study designed to learn more about the experiences and needs of PLWH in Texas. Interviews were done with a representative sample of PLWH between June 2017 and April 2018. In addition, patients' medical records were abstracted for documentation of medical care, including prescription of HIV treatment drugs and HIV viral load for the 24 months preceding the interview.

National HIV Behavioral Surveillance

The National HIV Behavior Surveillance [CDC] project is an ongoing behavioral surveillance system that collects data from MSM, PWID, and people at higher risk for HIV through heterosexual sex. NHBS activities are implemented in one-year cycles so that data are collected from each group every three years. The anonymous interview covers behavioral risk factors for HIV, HIV testing, the receipt of prevention services, and use of prevention strategies (e.g. condoms, PrEP). In addition to these interview data, all NHBS participants are offered an HIV test.