

Vermont Department of Health

2016 Vermont HIV Annual Report

Introduction

The 2016 Vermont HIV Annual Report presents HIV surveillance data collected through the end of 2016. The report provides information on Vermont's community of people living with diagnosed HIV infection (PLWDHI) including an update on HIV surveillance in the state, a brief history of Vermont HIV surveillance, information on newly reported cases of HIV, prevalence, and HIV care outcomes. Reporting this information annually allows the Vermont Department of Health to update community partners, policy makers, and service providers on trends and changes observed through the Department's HIV disease surveillance. Due to Vermont's relatively small HIV positive population, the analysis herein is strictly descriptive and readers are encouraged to review all citations and footnotes carefully.

Section 1: Integrated HIV Services

The Vermont Department of Health implemented AIDS case surveillance in 1982 and reporting of HIV infection was mandated by the Legislature in 1999, taking effect in the year 2000. In accordance with the Vermont Communicable Disease Regulations¹, certain HIV-related lab results must be reported to the Health Department. In addition, medical providers are required to report cases of both adult and pediatric HIV infection when they begin providing care or make a diagnosis.

The Health Department uses multiple methods to improve the quality and accuracy of HIV case surveillance. The Routine Interstate Duplicate Review (RIDR) is a semiannual process of comparing possible duplicates of cases with other states to establish correct dates and

locations of diagnoses. The Department also uses quarterly vital records reports and the semiannual Social Security Death Master File for death ascertainment.

The information provided to, and gathered by, the Health Department is confidential and is securely maintained using the Enhanced HIV/AIDS Reporting System (eHARS).

While the Health Department transmits aggregate data to the CDC for national surveillance purposes, no identifying information, such as an individual's name, is shared.

HIV surveillance data provides much more than indicators of the health of PLWDHI in Vermont. According to the CDC, PLWDHI that have an undetectable viral load (the measure of virus per milliliter of blood) "have effectively no risk of transmitting

2016 Annual Report Points of Interest



661

People living with HIV



9

Newly reported cases of HIV



81%

Viral suppression among PLWDHI



53%

Diagnosed HIV among MSM

HIV to their HIV-negative sexual partners." Therefore, the integration of HIV surveillance, care, and prevention efforts in Vermont is more important than ever. By monitoring new diagnoses and care outcomes, the Vermont Department of Health can make informed decisions about how to target HIV prevention efforts and funding in our state.

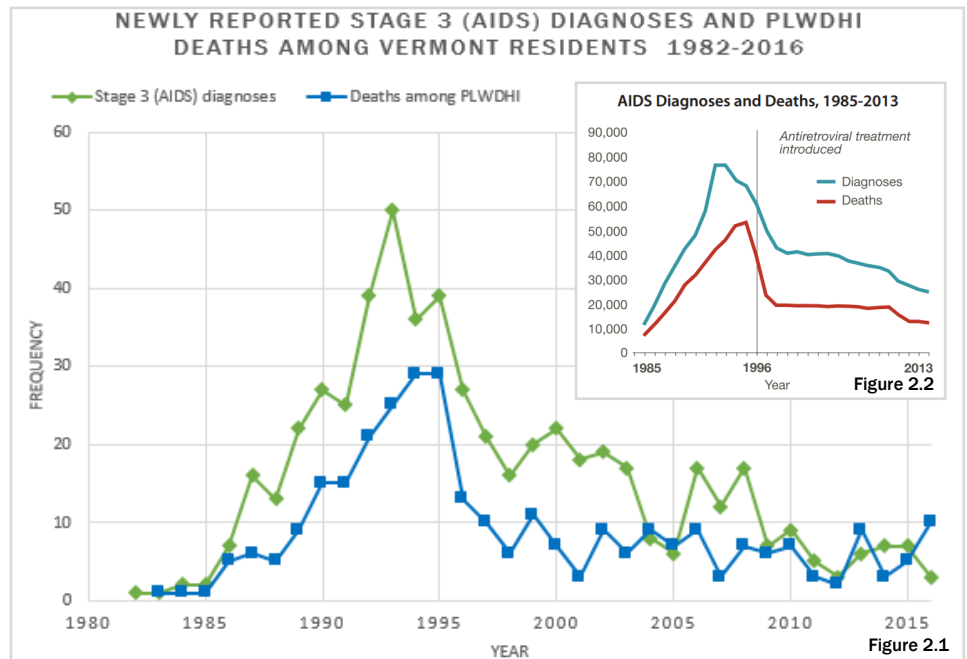
This report summarizes surveillance data gathered through the end of 2016. It is important to note that Vermont is one of the states with the lowest rates of HIV infection in the United States¹. Such low morbidity presents challenges when trying to analyze data because a single case represents a significant percentage of the total HIV positive population. In light of this, the reader is again encouraged to review all information, titles, tables, and citations carefully.

1. Vermont Department of Health. Communicable Disease Reporting in Vermont. <http://www.healthvermont.gov/disease-control/disease-reporting>. Accessed June 2017.

Section 2: History of HIV in Vermont

Figure 2.1 summarizes reported stage 3 (AIDS) diagnoses and deaths among people living with diagnosed HIV infection (PLWDHI) in Vermont from 1982 through 2016, according to reportable disease records. The overall trend in this figure mirrors that of the national stage 3 (AIDS) diagnoses and deaths statistics from 1985 through 2013 represented in figure 2.2. Significant declines in both stage 3 (AIDS) diagnoses and deaths can be observed in the mid nineties as HIV treatment improved. In 1995 the first antiretroviral therapy (ART), medications that slow the progression of HIV were introduced, greatly reducing the number of new stage 3 (AIDS) diagnoses and deaths among people living with HIV. As treatment has improved over the course of the epidemic, HIV infection has become more manageable.

While the value of HIV treatment to the person living with the virus has always been understood, it is now known that ART adherence also has powerful implications for HIV prevention. In September of 2017 the CDC released a “Dear Colleague” letter in which it was stated that “...people who take ART daily as prescribed and achieve and maintain an undetectable viral load have effectively no risk of sexually transmitting the virus to an HIV-negative partner.” This concept, known as “treatment as prevention”, emphasizes the importance of identifying undiagnosed cases of HIV, getting those people tested and on ART. More information about the treatment and viral suppression among Vermont’s HIV population can be found in Section 5.



Section 3: Newly Reported HIV in Vermont

According to the CDC, in 2016, there were 39,782 people diagnosed with HIV infection in the United States¹. During that year there were nine new diagnoses among Vermont residents that were reported to the Department of Health; the lowest number of newly reported diagnoses since 1983. Among the nine reported cases, six were HIV-only and three were concurrent diagnoses of HIV and stage 3 (AIDS). Diagnoses are considered concurrent if a stage 3 (AIDS) diagnosis occurs within 31 days of an HIV diagnosis. Concurrent diagnoses are of concern because they indicate that the person was unaware of their HIV status for an extended period of time. Without treatment, it can take ten years or more from the time of HIV infection until symptoms of HIV disease develop².

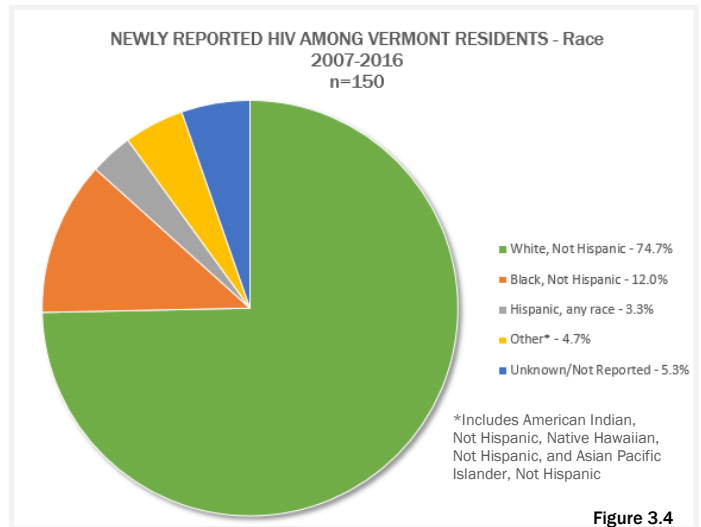
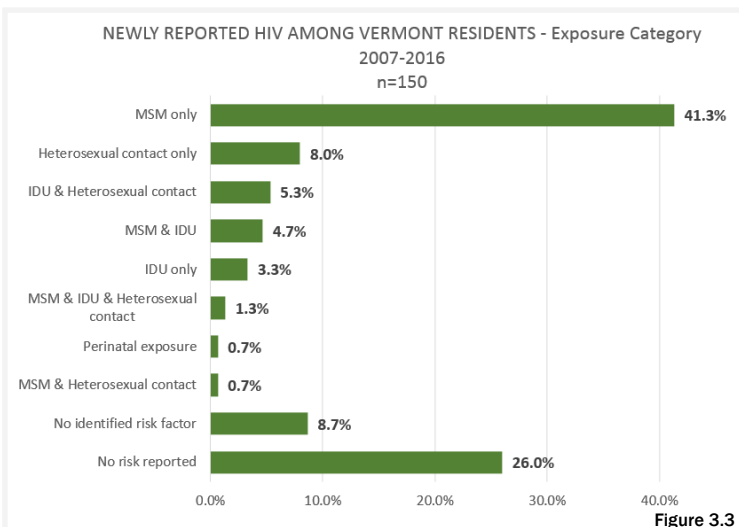
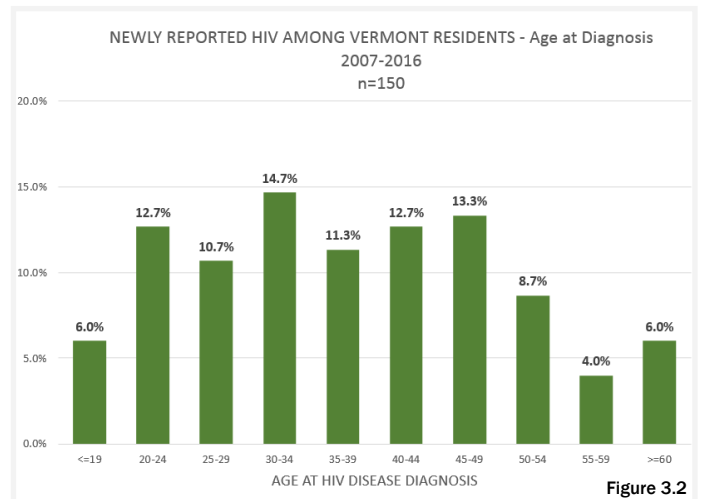
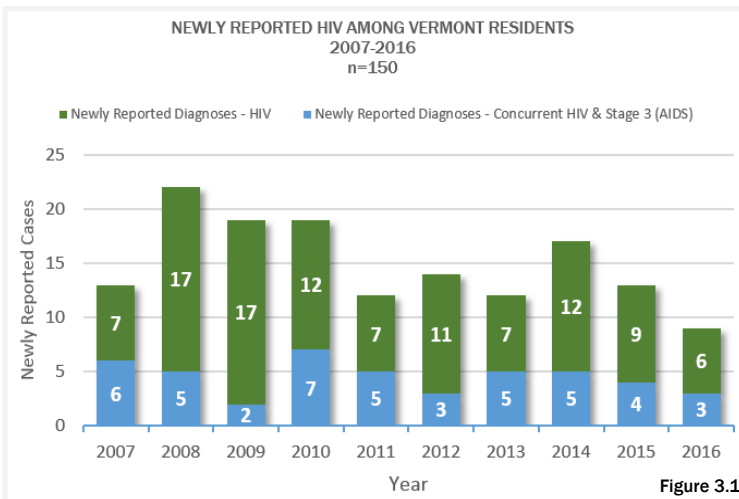
The newly reported infections in 2016 may have occurred many years prior and there were likely other cases in the state not yet diagnosed. It must be noted that the nine newly reported HIV infections are not necessarily new diagnoses. These cases may have been previously diagnosed elsewhere prior to moving to Vermont. De-duplication efforts, such as the aforementioned RIDR process, allow the Health Department to identify cases that were diagnosed or lived in other jurisdictions to prevent duplicate reporting to the CDC. When matches are identified through interjurisdictional RIDR communications, diagnosis and other pertinent lab data is shared to improve data quality. Over the ten year period between 2007-2016 there were 150 new

Section 3: Newly Reported HIV in Vermont continued

diagnoses of HIV reported among Vermont residents. Figure 3.1 summarizes these newly reported infections, showing both HIV-only and concurrent HIV and stage 3 (AIDS) diagnoses. From 2007 to 2016, the number of newly reported diagnoses has fluctuated from a high of 22 in 2008 to a low of nine in 2016. Figures 3.2, 3.3, and 3.4 show the percentage of the newly reported diagnoses according to age at diagnosis, exposure category, and reported race, respectively. Half of the new diagnoses (n=75) over the ten year period occurred among people

aged 20-39, with the highest percentage, 14.7%, of newly reported infections, among 30-34 year-olds. According to the 2016 HIV Surveillance Report¹ released by the CDC in November 2017, the highest percentage of newly reported infections nationally was among people aged 25-29 which accounted for 20% (n=7,964) of all newly diagnosed cases of HIV. The information regarding race among newly diagnosed cases in the last ten years presented in figure 3.4 is similar to the demography for the entire community of PLWDHI in

Vermont presented in figure 4.2. While White, Not-Hispanic people account for roughly three quarters of cases in figures 3.4 and 4.2, people of color are disproportionately affected by HIV. Over the last ten years in Vermont, 20% (n=30) of new diagnoses have been among people of color, despite people of color accounting for less than seven percent of the state's total population¹. This issue is further discussed in section four of this report, Prevalence and Demography.



1: United States Census Bureau. *Profile of Vermont Population and Housing Characteristics: Estimates for 2016*. <https://www.census.gov/quickfacts/table/PST045215/50>. Accessed June 2017

Section 4: Prevalence and Demography

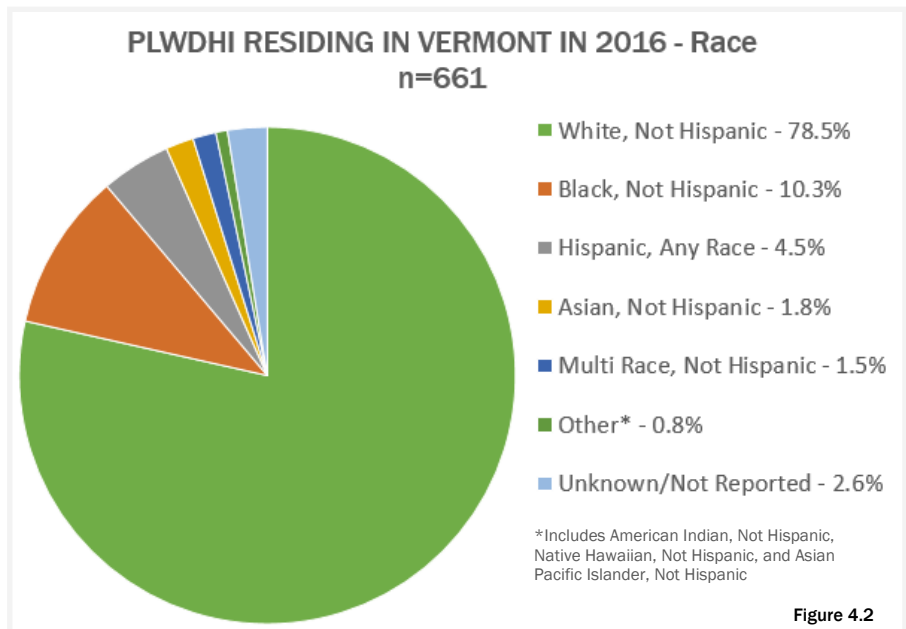
At the end of December 2016 an estimated 661 people living with diagnosed HIV infection (PLWDHI) were residing in Vermont, 311 of whom had been diagnosed with HIV while living in the state. The estimated 661 PLWDHI represents cases reported to the Health Department under the Reportable and Communicable Diseases Rule¹ and that had reported HIV-related lab results (evidence of care) within the last five years. Unlike the figures discussed in section three, the 661 cases were residents of Vermont as of the end of 2016, regardless of where they received their HIV diagnosis. Of the PLWDHI in Vermont in 2016, 316 had received a stage 3 (AIDS) diagnosis and 345 had been diagnosed with HIV infection only. Figure 4.1 summarizes sex at birth and race information for the PLWDHI population of Vermont. The rate of HIV in Vermont at the end of 2016 was 105.8 cases per 100,000 based on 2016 Census population estimates².

Race

While 78.5% (n=519) of Vermont’s PLWDHI population are White, Not Hispanic, people of color account for a disproportionately high rate of HIV in the state when compared with the general population. Figure 4.3 compares the number of people living with HIV who identify as White, Not Hispanic to those that identify as Black, Not Hispanic, Hispanic, Any Race, Asian, Not Hispanic, Multi Race, Not Hispanic, American Indian, Not Hispanic, Native Hawaiian, Not Hispanic, and Asian Pacific Islander, Not Hispanic (collapsed into “people of color”). Though people of color account for less than seven percent of Vermont’s general population, they account for nearly 19% of the state’s PLWDHI population (n=125).

Rate of PLWDHI and Stage 3(AIDS): Vermont - 2016		
	VT PLWDHI	Rate of HIV in Vermont per 100,000
Total	661	105.8
Sex at Birth		
Male	542	175.7
Female	119	37.7
Race		
Black or African American, Not Hispanic or Latino	68	837.4
Hispanic or Latino	30	252.8
White, Not Hispanic or Latino	519	89.3
Other*	27	116.8
Unknown	17	N/A

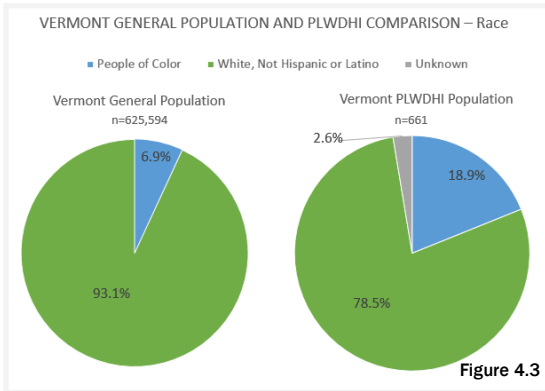
Figure 4.1



1: Vermont Department of Health. *Reportable Communicable Diseases Rule*. http://healthvermont.gov/sites/default/files/documents/2016/11/hs_id_reportable_communicable_diseases_rule.pdf. Accessed June 2017.

2: United States Census Bureau. *Profile of Vermont Population and Housing Characteristics: Estimates for 2016*. <https://www.census.gov/quickfacts/table/PST045215/50>. Accessed June 2017

Section 4: HIV Prevalence and Demography continued

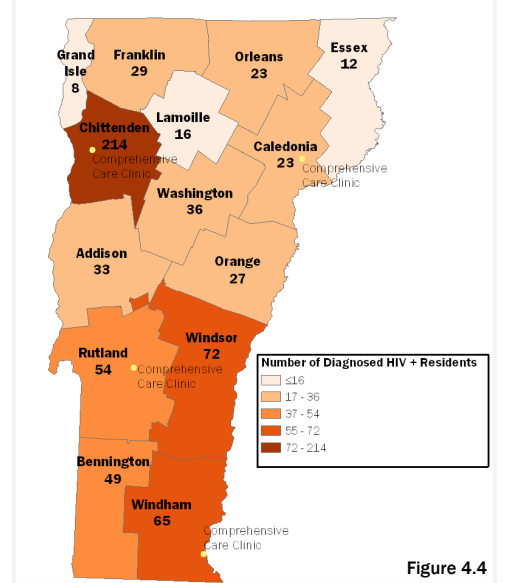


the fourth highest rate at 13.2 per 10,000.

Age

Over one third of PLWDHI in Vermont in 2016 were aged 50-59. Further, figure 4.6 shows that over 80% of PLWDHI in Vermont were 40 years of age or older; the same age range accounts for over 40% of new diagnoses in the last ten years, as represented in figure 3.2.

HIV Positive Residents by County: 2016



Geography

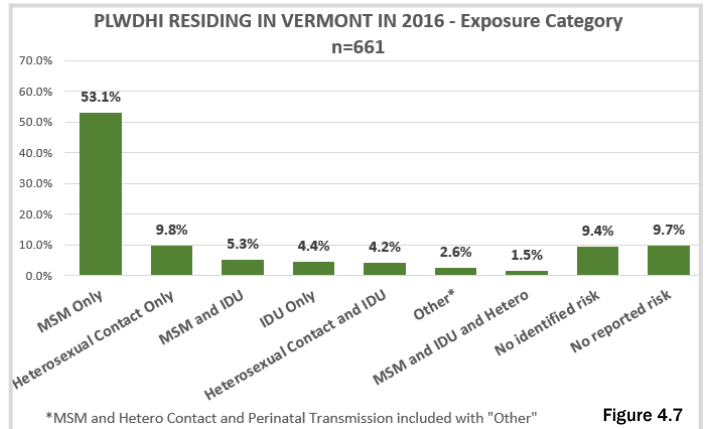
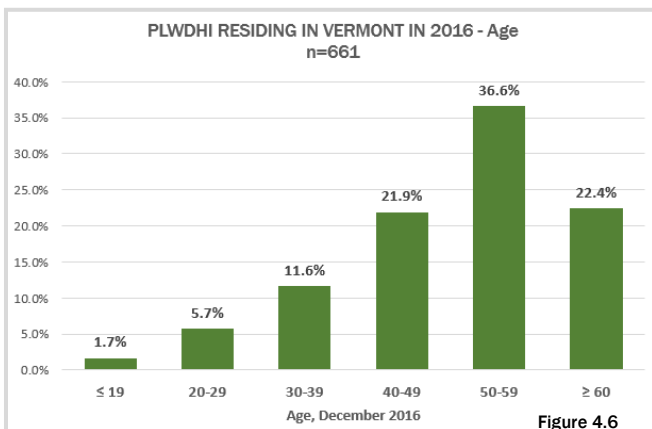
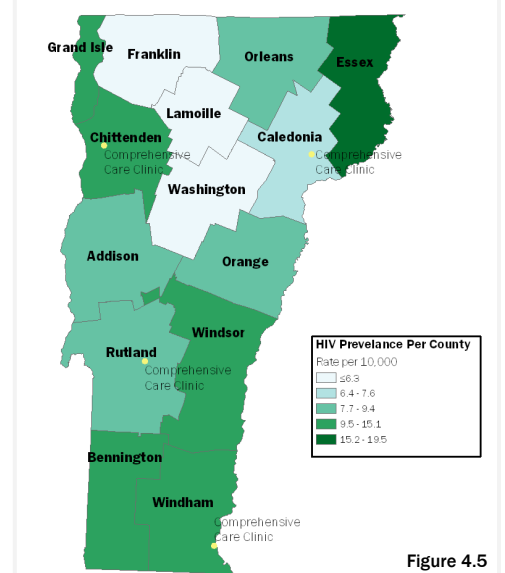
People living with diagnosed HIV infection (PLWDHI) reside throughout the state of Vermont as figure 4.4 demonstrates, with most PLWDHI, 32%(n=214), living in the most populous county of Chittenden. Also noted in figure 4.4 are the locations of the University of Vermont Medical Center’s Comprehensive Care Clinics (CCC). The CCC is the primary provider of HIV care in Vermont. The main office of the CCC is located in Burlington with three strategically located satellite offices around the state in Rutland, Brattleboro, and Saint Johnsbury.

Figure 4.5 shows the rate of HIV in Vermont according to county of residence. Essex County has the highest rate of HIV at 19.4 per 10,000 residents. Chittenden, despite having the highest percentage of HIV positive residents, has

Exposure Category

Figure 4.7 details PLWDHI in 2016 according to reported exposure category. Exposure category describes how a person may have acquired HIV infection and is calculated from their known risk factors. The majority of HIV infection in Vermont has consistently been reported among the Men who have Sex with Men (MSM) exposure category. In 2016, MSM was the calculated exposure category for 53.1% of PLWDHI in Vermont as, with the next most common being heterosexual contact at 9.8%. It must be noted that there were significant numbers of cases that did not report an exposure category. No risk was identified for 9.4% of cases (n=62) and no risk factor was reported for 9.7% of cases (n= 64).

HIV Prevalence by County: 2016



Section 5: HIV Linkage to Care and Viral Suppression

Number and percentage of persons linked to care^a within 30, 91, 182, and 365 days of their HIV infection diagnosis among persons who were \geq 13 years of age at diagnosis, resided in Vermont and diagnosed with HIV infection between 01/01/2016 through 12/31/2016

Persons diagnosed with HIV infection	Persons linked to care within 30 days of diagnosis		Persons linked to care within 91 days of diagnosis		Persons linked to care within 182 days of diagnosis		Persons linked to care within 365 days of diagnosis	
	No.	%	No.	%	No.	%	No.	%
9	9	100	9	100	9	100	9	100

^aPersons who have at least one CD4 or viral load or HIV-1 genotype test during a specific time period are considered as linked to care during that time.

Figure 5.1

The National HIV/AIDS Strategy¹ (NHAS), a five year plan released in 2010 and updated in 2015, established national goals for HIV prevention and care, the progress of which is monitored largely through state-level HIV surveillance efforts. One of the foci of the NHAS is timely linkage of newly diagnosed cases of HIV to medical care. Table 5.1 demonstrates that all nine of the newly diagnosed cases were linked to care within 30 days of diagnosis. Timely linkage to HIV medical care after initial diagnosis improves long-term health outcomes for PLWDHI. The HIV care continuum, figure 5.2, demonstrates linkage to care and viral suppression among PLWDHI. A person living with diagnosed HIV infection is considered to be virally suppressed if the number of copies of the virus in their blood is less than 200 per milliliter. In Vermont, 81% of people known to be living with HIV with evidence of care in the last five years are virally suppressed. That percentage increases to 96% viral suppression among PLWDHI with evidence of care in calendar year 2016. By comparison figure 5.3 shows that the CDC estimated that 49% of people known to be living with HIV nationally had attained viral suppression².

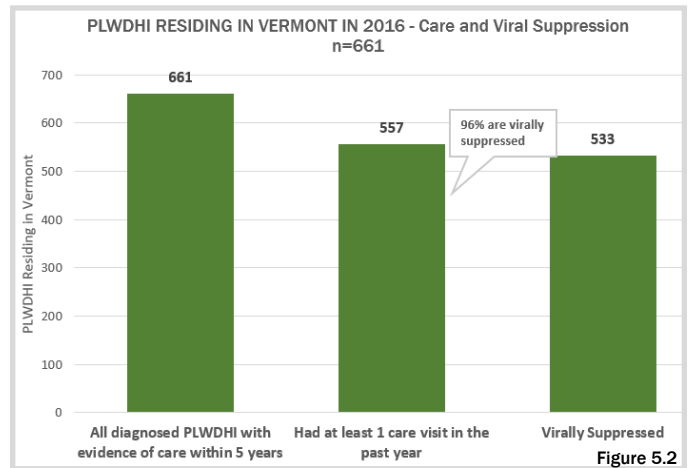


Figure 5.2

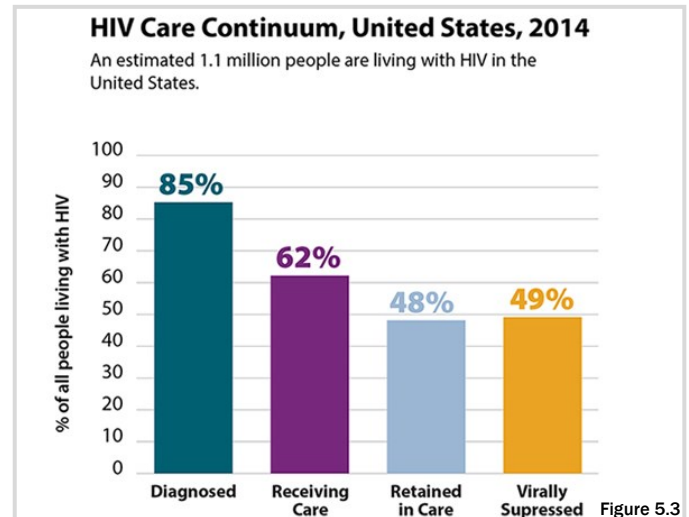


Figure 5.3

Additional HIV Resources

- HIV Hotline: 800-882-AIDS or 802-863-7345
- HIV Surveillance in Vermont: www.healthvermont.gov/
- CDC HIV/AIDS website: www.cdc.gov/hiv/
- NCHHSTP Atlas: www.cdc.gov/nchhstp/atlas
- Vermont Comprehensive Care Clinics: www.uvmhealth.org
- General Information: www.hiv.gov
- AIDS Project of Southern Vermont: <http://www.aidsprojectsouthernvermont.org/>
- HIV/Hepatitis C Resource Center (H2RC): <http://www.h2rc.org/>
- Vermont People With AIDS Coalition: <https://www.vtpwac.org/>
- Pride Center of Vermont: <https://www.pridecentervt.org/>
- Howard Center - Safe Recovery: <http://howardcenter.org/>
- Twin States Network: <https://twinstatesnetwork.net/>
- Vermont CARES: <http://vtcares.org/>



DEPARTMENT OF HEALTH

The statistics in this document are estimates and subject to change. Questions can be directed to:

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 State of Vermont
 Department of Health
 HIV/STD/Hepatitis Program

1. US Dept. of Health and Human Services. *NHAS Overview*. <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/overview>. Accessed June 2017.
 2. Centers for Disease Control and Prevention. Press Release: *More people with HIV have the virus under control*. <https://www.cdc.gov/nchhstp/newsroom/2017/2017-HIV-Continuum-Press-Release.html>. Press Release July 27, 2017. Accessed August 2017.