#### **Vermont Department of Health**

# Vermont HIV/AIDS Annual Report

### Highlights

## Special points of interest:

- History of the HIV/ AIDS epidemic in Vermont
- New cases among residents of Vermont
- Prevalence and demographics of current PLWHA
- Retention in care and viral load suppression
- Geographic
  distribution of PLWHA
  in Vermont
- Additional resources

#### **Inside this report:**

mortality	2
New HIV diagnoses among Vermonters	3
Gender and Race of PLWHA in Vermont	3
Gender and Race comparisons	4
Risk categories for PLWHA in Vermont	4
Age distribution for PLWHA in Vermont	4
Viral suppression and geography	5
Resources	6
VT residents-at-dx 2010-2014	7

As of December 31, 2014, a total of 665 persons are known to be living with HIV/AIDS in Vermont. This results in a rate of 106 cases per 100,000. The national HIV/AIDS rate is 340 per 100,000<sup>‡</sup>.

Of the 665 persons currently residing in the state, 69% were residents of Vermont at the time of their HIV and/or AIDS diagnoses.

One third of Vermont's PLWHA population resides in Chittenden County. 46% of people who were residents of Vermont at time of diagnosis were diagnosed at the

### Background

This report presents the 2014 surveillance data on the HIV epidemic in Vermont. It highlights a range of important aspects of HIV/AIDS in Vermont and compares the burden of disease to the nation as a whole. The past decade of the epidemic has seen a shift in the HIV burden to a manageable disease. This report reflects that transition by describing Comprehensive Care Clinic at the University of Vermont Medical Center in Burlington.

The number of new HIV cases in Vermont has remained relatively stable since 1995, fluctuating between 11 combined new HIV/ AIDS cases and 30 per year.

Of the 17 cases diagnosed in Vermont in 2014, 15 were linked to care within one month.

Deaths among PLWHA in Vermont have dropped dramatically since the peak of 32 deaths in 1994 to 9 in 2013. There is a 16-month reporting delay for deaths in Vermont.



longitudinal trends, survival and retention in care.

Vermont continues to have one of the smallest HIV epidemics in the United States. Low morbidity can pose problems when attempting to draw conclusions about trends and statistically significant differences between populations. The statistics in this report are purely descriptive and assist with the process of organizing and summarizing HIV data for the state of Vermont.

Data are collected via lab reports and case report forms and entered into the CDC provided Electronic HIV/AIDS Reporting System (eHARS). Data are then exported for analysis in SAS and Microsoft Excel.

<sup>‡</sup> Based on US population estimates in 2011, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas

### History of the epidemic in Vermont



Figure 1.1 shows a familiar arc of the HIV/AIDS epidemic. New diagnoses and deaths among PLWHA rise in the late 1980s and early 1990s before sharp decreases in 1995 when the first antiretroviral treatment was introduced. This mirrors progression of the epidemic experienced by the nation as a whole (Figure 1.2). Though the HIV death rate has dropped considerably, new diagnoses in the United States has hovered around 50,000 a year for over a decade.

The Vermont Department of Health implemented AIDS case surveillance in 1982. HIV infection reporting was added by the Vermont legislature in 1999 and implemented in March of 2000. Healthcare providers are required to fill out a standardized case report form with demographic information, transmission category and laboratory and clinical information each time they diagnose a patient with HIV. Death ascertainment is performed biannually using vital records and the Social Security Death Master File.

In addition to deaths and diagnoses, Figure 1.1 shows a decrease in the gap between HIV (non-AIDS) diagnoses (blue) and concurrent HIV/AIDS diagnoses (red) and since 2004, the HIV (non-AIDS) diagnoses represent the same or greater proportion of total HIV/AIDS diagnoses. This shows



progress in testing and treating HIV patients before HIV progresses to AIDS.

Keep in mind the scale of the graph in Figure 1.1. Fluctuations from year to year are less important to look at than the overall shape of the epidemic in Vermont.

#### Data through December 2014

#### **HIV/AIDS** cases among Vermonters





Figure 2.1 presents a closer look at the HIV and AIDS incidence counts from Figure 1.1. Without timely diagnosis and effective antiretroviral therapy, HIV takes, on average, 11 years to progress to AIDS. An AIDS diagnosis within 31 days of a person's HIV diagnosis is considered concurrent. Vermont's proportion of concurrent diagnoses to HIV-only diagnoses fluctuates from year to year, shown in Figure 2.1. Persons who receive concurrent

diagnoses represent missed opportunities for prevention and treatment. Early diagnosis is important to reduce morbidity for the infected individual and for reducing the risk of further disease transmission.

Figure 2.2 takes a closer look at the age of diagnosis for those persons diagnosed in Vermont in the last ten years (Figure 2.1). 60.1% were 35 and over at the time of diagnosis. Identifying subpopulations most at risk of infection is important when creating targeted HIV prevention initiatives. While it is important for prevention efforts to include youth education and risk reduction, information from Figure 2.2 demonstrates older adults also need to be included when designing prevention activities.

### People living with HIV/AIDS in Vermont

This section of the report describes the population of the estimated 665 people living with HIV/AIDS (PLWHA) in Vermont. 352 have been diagnosed with HIV (not AIDS) while 313 have an AIDS diagnosis. 31% of the PLWHA were diagnosed out of state. See the table on page 7 for a full report of demographics for VT residents-at-diagnosis from 2010 through 2014.



#### Race



### People living with HIV/AIDS in Vermont continued

Demographic	% of Vermont's PLWHA	% of United States PLWHA <sup>1</sup>	% of Vermont's population <sup>2</sup>	% of United States population <sup>2</sup>	
Male	81.0	76.0	49.3	49.2	Figure
Female	19.0	24.0	50.7	50.8	3.1
Black	11.9	44.0	1.2	13.2	
Hispanic	4.9	19.0	1.8	17.1	
White	80.2	43.3	93.8	62.6	

Figures 2.3 and 2.4 on the previous page illustrate the proportions of basic demographics in Vermont's PLWHA.

Figure 3.1 details the percentages of PLWHA in Vermont and how they compare to the state's population as a whole as well as the population of the United States and PLWHA in the United States. Vermont has comparable sex ratios to the US in terms of general population but a larger proportion of men living with HIV/AIDS. Though Vermont is much less diverse than the rest of the country, minorities are still disproportionately affected by HIV. Black PLWHA experience the most severe burden compared to other races and ethnicities.

Figure 3.2 shows that over 50% of Vermont's PLWHA are men whose only exposure was sex with an infected man. 'Unknown' refers to persons who declined to disclose their



risk factors to their healthcare provider such that risk is unknown on the case report form. Persons who are in a category with multiple risk factors may not know which risk led to their exposure to HIV.

#### Age groups



Figure 3.3 shows that a majority of Vermont's PLWHA are 40 years of age and older. In the United States, persons aged 50 and older account for 40% of all PLWHA. Vermont has a slightly older population of infected people. More people with the disease are living longer than in the past as a result of new medications and treatments. The life expectancy of a person living with HIV who maintains viral suppression is on par with that of a person who has not acquired the disease.

Centers for Disease Control and Prevention. HIV Surveillance Report, 2013; vol. 25. http://www.cdc.gov/hiv/library/reports/surveillance/ Based on United States Census Bureau population estimates for 2013 Page 4

#### Data through December 2014

### People living with HIV/AIDS in Vermont continued

#### Viral suppression and retention in care

Figure 3.3 shows that 58% of all PLWHA in Vermont have achieved viral suppression, meaning a very low level of HIV in the blood. Being virally suppressed keeps infected persons healthy, helps them live longer, and greatly reduces the chances of passing HIV on to others.

78% of PLWHA in Vermont have had a care visit in the last year. A care visit would include a viral load test or a CD4 test. For these people, the percentage who are virally suppressed is 75%.



#### **County of current residence**



Over one third of Vermont's PLWHA live in Chittenden County. 46% of PLWHA who were residents of Vermont at time of diagnosis were diagnosed at the Comprehensive Care Clinic in Burlington. There are three additional Comprehensive Care Clinics located in St. Johnsbury, Brattleboro and Rutland. These clinics are supported by Ryan White CARE Act funding. Available services include testing, prevention and counseling, confidential services and advanced medical care.



The statistics in this document are estimates and subject to change. Questions can be directed to: Alexandra Goode, MSc HIV Surveillance Coordinator 802.863.7572 Alexandra.Goode@state.vt.us State of Vermont HIV/STD/Viral Hepatitis Program Department of Health

### **Additional Resources**

AIDS Hotline: 800-882-AIDS or 802-863-7245

HIV Surveillance in Vermont: www.healthvermont.gov/prevent/aids/hiv\_surveillance.aspx

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.aids.gov

#### Persons living with diagnosed HIV infection, by year and selected characteristics, 2010 - 2014<sup>+</sup> Vermont Persons who were residents of Vermont at time of diagnosis

	20	2014 <sup>+</sup> 2013		2012		2011		2010		
Clinical Status	N	%	N	%	N	%	Ν	%	Ν	%
HIV (not AIDS)	203	44.8%	187	42.2%	189	43.1%	180	42.1%	171	41.0%
AIDS	250	55.2%	256	57.8%	250	56.9%	248	57.9%	246	59.0%
Total	453	100.0%	443	100.0%	439	100.0%	428	100.0%	417	100.0%
Age at the End of Year										
< 13	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%
13-19	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%
20-29	29	6.4%	16	3.6%	23	5.2%	21	4.9%	23	5.5%
30-39	40	8.8%	49	11.1%	53	12.1%	53	12.4%	47	11.3%
40-49	113	24.9%	122	27.5%	143	32.6%	146	34.1%	166	39.8%
50-59	174	38.4%	170	38.4%	160	36.4%	151	35.3%	132	31.7%
60+	94	20.8%	84	19.0%	55	12.5%	52	12.1%	44	10.6%
Race/Ethnicity										
Hispanic/Latino <sup>*</sup>	20	4.4%	20	4.5%	19	4.3%	19	4.4%	18	4.3%
American Indian/Alaska Native	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%
Asian	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%
Black/African American	46	10.2%	43	9.7%	44	10.0%	42	9.8%	42	10.1%
Native Hawaiian/Other Pacific Islander	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%
White	372	82.1%	365	82.4%	368	83.8%	361	84.3%	351	84.2%
Multiple races	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%
Transmission Category: Male Adult or Adolescent										
Male-to-male sexual contact	234	51.7%	236	53.3%	235	53.5%	232	54.2%	225	54.0%
Injection drug use	33	7.3%	34	7.7%	32	7.3%	31	7.2%	32	7.7%
Male-to-male sexual contact & injection drug use	22	4.9%	23	5.2%	22	5.0%	22	5.1%	22	5.3%
Heterosexual contact <sup>**</sup>	19	4.2%	19	4.3%	20	4.6%	20	4.7%	19	4.6%
Perinatal exposure	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 1%	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%
Other <sup>***</sup>	55	12.1%	44	9.9%	46	10.5%	44	10.3%	41	9.8%
Sub-total	365	80.6%	356	80.4%	357	81.3%	351	82.0%	341	81.8%
Transmission Category: <u>Female</u> Adult or Adolescent										
Injection drug use	21	4.6%	19	4.3%	19	4.3%	19	4.4%	19	4.6%
Heterosexual contact <sup>**</sup>	33	7.3%	36	8.1%	36	8.2%	33	7.7%	32	7.7%
Other***	34	7.5%	27	6.1%	25	5.7%	24	5.6%	24	5.8%
Sub-total	88	19.4%	82	18.5%	80	18.2%	76	17.8%	75	18.0%
Transmission Category: Child (<13 Years Old at the End of Year)										
Other <sup>***</sup>	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%	<u>&lt;</u> 5	<u>&lt;</u> 1%

+ 2014 figures are estimates using SAS Enterprise Guide. CDC provides a SAS program for HIV surveillance tables that requires a 16 month reporting delay. 2010-2013 data were acquired using the CDC SAS program \*Hispanics/Latinos can be of any race.

\*\*Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

\*\*\*Includes hemophilia, blood transfusion, and risk factor not reported or not identified.