



Connecticut Department  
of Public Health

The background of the central section features a faint, light gray image of the Connecticut state seal and a map outline of the state. The seal is centered and contains two grapevines flanking a shield, with a banner below it that reads 'QUI TRANSTULIT SUSTINET'.

# EPIDEMIOLOGICAL PROFILE OF HIV CONNECTICUT -2016-

The *Epidemiological Profile of HIV in Connecticut* is published every three years by HIV Surveillance, within the TB, HIV, STD & Viral Hepatitis Section, Department of Public Health, Hartford, CT.

Data are presented for diagnosis of HIV infection reported to DPH through December 2015.

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**Abbreviations:**

AAMR	Age adjusted mortality rate
AIDS	Acquired immunodeficiency syndrome
CDC	Centers for Disease Control and Prevention
CI	Confidence interval
DPH	Department of Public Health
EMA	Eligible metropolitan area
HCV	hepatitis C virus
HIV	Human immunodeficiency virus
IDU	Injection drug user
MSM	Men who have sex with men
PLWH	People living with HIV or AIDS
STD	Sexually transmitted diseases
TGA	Transitional grant area

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## Executive Summary

Since 1981, over 20,000 HIV cases have been reported in Connecticut residents and of these almost half have died. The Department of Public Health (DPH) monitors HIV disease through a system of reporting by laboratories and providers. Information gathered through this system is used to analyze trends to determine who is at risk for infection and where services need to be provided. Each year funding from state and federal sources provide prevention services for infected people and others at high risk, HIV medications, housing support, syringe exchange, HIV testing, and other services.

The HIV Epidemiological Profile provides information about the trends and distribution of HIV to planning groups, DPH staff whose mission is to allocate prevention and care funding and other interested parties. Additional information about HIV and annual updates to the data provided here can be found on the DPH website ([www.ct.gov/dph/HIVsurveillance](http://www.ct.gov/dph/HIVsurveillance)).

### A quick look at HIV in Connecticut:

- As of December 2014, 10,727 people were living with HIV in Connecticut (298 per 100,000) based on address at diagnosis. HIV is found disproportionately among certain groups including blacks and Hispanics who, although they make up only 23% of Connecticut's population, comprise 66% of all HIV cases.
- During 2010–2014, 1,658 HIV disease cases were newly diagnosed and reported to DPH. Of these, 50% were in men who have sex with men (MSM), 14% in injection drug users (IDU), and 34% in persons with heterosexual contact (risks percentages adjusted for unknown risks). Over the last ten years, 2005–2014, there has been a 75% decrease in IDU reported as the mode of transmission.
- Thirty-one percent of newly diagnosed cases during 2010–2014 met the criteria of AIDS at diagnosis, meaning they have likely been infected for many years. The ongoing 'late tester' concern supports the need for more widespread HIV testing.
- Data from the HIV and STD surveillance systems continue to point to ongoing transmission of syphilis and HIV in MSM. During 2010–2014, 274 syphilis cases were in MSM, 84% of all cases reported. Importantly, 40% of these men were co-infected with HIV.
- Seventy percent of people diagnosed with HIV through 2013 and currently living in Connecticut based on last known residence were engaged in care in 2014.
- In 2014, 91% of adolescents and adults diagnosed with HIV were linked to care within 3 months of their diagnosis.
- People are living longer with HIV due to the advances in medications. There is a statistically significant difference ( $p < .0001$ ) between the mean age of death in 1993 (mean=39 years) vs the mean age of death in 2014 (mean=56 years).

## Section I: Connecticut's People

**Table 1: Estimate for the population of Connecticut by age group, sex, race, and Hispanic ethnicity: July 1, 2014**

Age Group	Race (non-Hispanic ethnicity)								Hispanic		Total
	White		Black		American Indian		Asian / Pacific Islander		All Races		
	M	F	M	F	M	F	M	F	M	F	
<1	10,329	9,809	2,511	2,422	52	52	1,062	1,047	4,828	4,659	<b>36,771</b>
1-4	43,538	41,331	10,164	9,786	320	356	4,479	4,540	19,247	18,905	<b>152,666</b>
5-9	62,180	59,330	13,479	12,953	316	313	5,997	6,085	25,193	24,320	<b>210,166</b>
10-14	73,515	69,273	14,141	13,700	332	349	5,705	5,911	24,027	22,869	<b>229,822</b>
15-19	82,870	79,407	15,893	14,914	353	371	5,308	5,733	24,490	22,932	<b>252,271</b>
20-24	77,026	71,745	17,242	15,927	380	349	5,978	6,177	26,052	22,910	<b>243,786</b>
25-29	68,889	65,739	13,963	13,889	299	271	6,678	7,311	23,490	21,351	<b>221,880</b>
30-34	65,680	66,210	12,553	13,490	281	301	7,534	8,304	22,842	22,237	<b>219,432</b>
35-39	62,555	64,010	11,503	12,896	255	299	7,156	7,987	20,808	20,965	<b>208,434</b>
40-44	74,764	77,934	11,867	13,534	267	269	6,798	7,625	18,883	19,071	<b>231,012</b>
45-49	92,112	96,011	12,429	14,370	339	350	5,620	6,148	16,791	17,992	<b>262,162</b>
50-54	106,934	111,541	12,149	14,405	365	347	4,861	5,126	14,098	15,265	<b>285,091</b>
55-59	105,604	109,643	10,432	12,004	320	335	3,881	4,215	10,531	11,642	<b>268,607</b>
60-64	87,290	92,593	7,409	9,143	241	267	2,876	3,421	7,134	8,280	<b>218,654</b>
65-69	70,284	77,475	5,377	7,525	170	195	2,190	2,587	5,092	6,208	<b>177,103</b>
70-74	50,007	57,826	3,700	5,409	115	110	1,637	1,659	3,095	4,256	<b>127,814</b>
75-79	33,316	42,914	2,396	3,875	71	78	924	1,015	2,106	2,854	<b>89,549</b>
80-84	25,743	37,516	1,446	2,697	37	67	526	695	1,136	1,809	<b>71,672</b>
85+	27,112	55,150	1,158	2,624	43	72	326	516	1,054	1,730	<b>89,785</b>
<b>All</b>	<b>1,219,748</b>	<b>1,285,457</b>	<b>179,812</b>	<b>195,563</b>	<b>4,556</b>	<b>4,751</b>	<b>79,536</b>	<b>86,102</b>	<b>270,897</b>	<b>270,255</b>	<b>3,596,677</b>

Source: Backus, K, Mueller, LM (2015) State-level Bridged Race Estimates for Connecticut, 2014, Connecticut Department of Public Health, Health Statistics & Surveillance, Statistics Analysis & Reporting, accessed 3/2/2016. Accessed at <http://www.ct.gov/dph/cwp/view.asp?a=3132&q=488836>

**Table 2: Town populations (n=169), Connecticut, US census, 2014 estimates**

Town	Pop	Town	Pop	Town	Pop
Bridgeport	147,612	Monroe	19,867	Easton	7,631
New Haven	130,282	Montville	19,635	Middlebury	7,591
Stamford	128,278	Waterford	19,427	Old Lyme	7,575
Hartford	124,705	Bethel	19,372	Durham	7,348
Waterbury	109,307	East Lyme	19,140	Lebanon	7,309
Norwalk	88,145	Ansonia	18,959	Westbrook	6,902
Danbury	83,784	Wilton	18,692	New Hartford	6,812
New Britain	72,878	Stonington	18,512	Essex	6,612
West Hartford	63,324	Avon	18,421	Killingworth	6,490
Greenwich	62,610	Madison	18,259	Marlborough	6,430
Hamden	61,422	Plainville	17,801	Beacon Falls	6,055
Fairfield	61,347	Killingly	17,172	Willington	5,934
Bristol	60,570	Brookfield	17,055	Bethany	5,531
Meriden	60,293	Wolcott	16,716	Harwinton	5,531
Manchester	58,106	Seymour	16,537	Columbia	5,454
West Haven	54,905	Colchester	16,192	North Stonington	5,288
Milford	53,358	Suffield	15,814	East Granby	5,212
Stratford	52,734	Ellington	15,795	Canterbury	5,088
East Hartford	51,033	Plainfield	15,135	Bolton	4,952
Middletown	47,043	Ledyard	15,121	Preston	4,748
Wallingford	45,074	Tolland	14,872	Deep River	4,571
Enfield	44,626	North Branford	14,322	Middlefield	4,424
Southington	43,815	New Fairfield	14,149	Lisbon	4,342
Shelton	41,295	Cromwell	14,113	Chester	4,316
Norwich	40,178	Orange	13,955	Ashford	4,259
Groton	40,167	Clinton	13,129	Salem	4,184
Trumbull	36,578	Oxford	12,914	Pomfret	4,179
Torrington	35,190	East Hampton	12,874	Sterling	3,773
Glastonbury	34,754	Derby	12,768	Barkhamsted	3,705
Naugatuck	31,659	Windsor Locks	12,565	Sherman	3,671
Newington	30,685	Coventry	12,419	Salisbury	3,665
Cheshire	29,250	Griswold	11,916	Bethlehem	3,501
Vernon	29,098	Plymouth	11,914	Washington	3,487
Windsor	29,069	Stafford	11,881	Andover	3,272
East Haven	29,044	East Windsor	11,423	North Canaan	3,214
Branford	28,225	Granby	11,310	Sprague	2,980
Newtown	28,152	Somers	11,303	Goshen	2,914
Westport	27,561	Winchester	10,929	Kent	2,910
New Milford	27,474	Weston	10,388	Sharon	2,725
New London	27,374	Canton	10,345	Bozrah	2,622
Wethersfield	26,446	Old Saybrook	10,217	Voluntown	2,593
Mansfield	25,977	Prospect	9,723	Lyme	2,389
South Windsor	25,823	Woodbury	9,719	Morris	2,314
Farmington	25,627	Burlington	9,576	Chaplin	2,262
Ridgefield	25,205	Hebron	9,564	Roxbury	2,201
Windham	25,005	Portland	9,444	Hartland	2,129
Simsbury	23,975	Putnam	9,416	Franklin	1,984
North Haven	23,909	Redding	9,309	Hampton	1,859
Guilford	22,413	Thompson	9,308	Eastford	1,734
Watertown	22,046	East Haddam	9,127	Scotland	1,694
Darien	21,689	Woodbridge	8,925	Bridgewater	1,675
Bloomfield	20,819	Haddam	8,333	Norfolk	1,655
Berlin	20,610	Litchfield	8,264	Colebrook	1,445
New Canaan	20,314	Brooklyn	8,254	Warren	1,427
Rocky Hill	20,094	Woodstock	7,860	Cornwall	1,398
Southbury	19,881	Thomaston	7,683	Canaan	1,195
				Union	846



## Section I.I: Social Determinants of Health

**Table 3: Socio-economic data in 5 cities with the highest rate of PLWH, 2014**

	People living with HIV <sup>1</sup> Rate	Below poverty <sup>2</sup> %	High school graduate or higher <sup>2</sup> %	Bachelor's degree or higher <sup>2</sup> %
Bridgeport	903.0	23.6	74.4	16.5
Hartford	1,495.5	34.4	70.3	15.0
New Haven	1,114.5	26.4	82.3	33.6
New London	697.7	25.3	81.2	21.1
Waterbury	671.5	24.2	79.5	16.0
<b>Connecticut</b>	<b>298.2</b>	<b>10.5</b>	<b>89.5</b>	<b>37.0</b>

<sup>1</sup> Prevalence rate per 100,000 people based on 2014 census estimates

<sup>2</sup> Source: 2014 American Community Survey 5 year estimates

Note: see 2014 American Community Survey 5 year estimates tables: S1501, S1701 for margin of errors

**Table 4: Percent uninsured by race and ethnicity in 5 cities with the highest rate of PLWH, 2014**

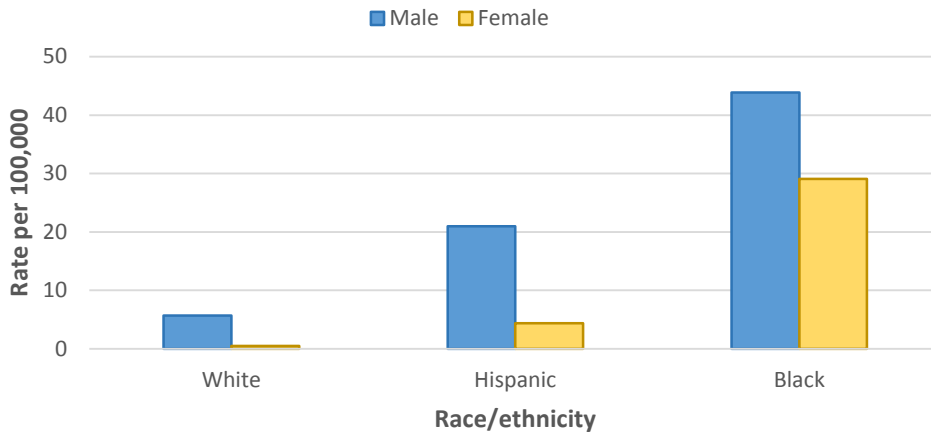
	White %	Black %	American Indian or Alaska Native %	Asian %	Native Hawaiian/Pacific Islander %	Other race alone %	Two or more races %	Hispanic (all races) %
Bridgeport	39.2	27.9	0.6	4.0	0.1	25.9	2.2	51.5
Hartford	37.0	34.1	0.7	2.6	0.0	21.6	4.1	50.7
New Haven	39.2	28.5	0.4	5.1	0.2	25.4	1.3	50.4
New London	10.5	15.4	0.0	19.0	0.0	21.4	3.0	15.7
Waterbury	58.5	19.8	0.1	4.0	0.0	13.1	4.5	38.9
<b>Connecticut</b>	<b>61.6</b>	<b>14.5</b>	<b>0.4</b>	<b>5.4</b>	<b>0.1</b>	<b>15.6</b>	<b>2.5</b>	<b>32.6</b>

Source: 2014 American Community Survey 5 year estimates

Note: see 2014 American Community Survey 5 year estimate table: S2702 for margin of errors

## Section II: Newly Diagnosed HIV

**Figure 1: Rate of HIV diagnoses by race/ethnicity and sex, Connecticut, 2014**



Source: HIV surveillance registry through 2015 and State-level Bridged Race Estimates for Connecticut, 2014

Note that reported numbers less than 12, which is the case for white females above (and accompanying rates and trends based on these numbers), should be interpreted with caution because the numbers have underlying relative standard errors greater than 30% and are considered unreliable.

In 2014, 291 HIV cases were diagnosed in Connecticut, 212 males and 79 females, an overall rate of 8.1 per 100,000 people. Of those cases, black males were diagnosed at a rate of approximately 8 times that of white males and Hispanic males were diagnosed at a rate approximately 4 times that of white males. The disparity among females was also significant with 72% of the females diagnosed classified as black or African American.

**Table 5: Rate of newly diagnosed HIV by age and sex, Connecticut, 2010–2014**

	Male					Female				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
<b>&lt;20</b>	2.1	2.6	1.5	2.8	1.3	**	**	**	1.1	1.2
<b>20–29</b>	32.9	43.5	26.9	33.9	29.2	10.6	7.4	9.1	4.5	5.3
<b>30–39</b>	26.1	22.1	27.9	22.4	22.7	13.3	10.3	7.5	5.6	7.8
<b>40–49</b>	30.4	22.0	20.2	23.8	16.3	13.0	9.7	5.5	6.9	7.5
<b>50–59</b>	15.6	12.2	12.0	15.7	11.9	6.7	5.4	4.3	4.6	6.7
<b>60+</b>	7.7	5.0	3.7	4.8	4.9	1.2	2.0	1.4	1.9	1.6

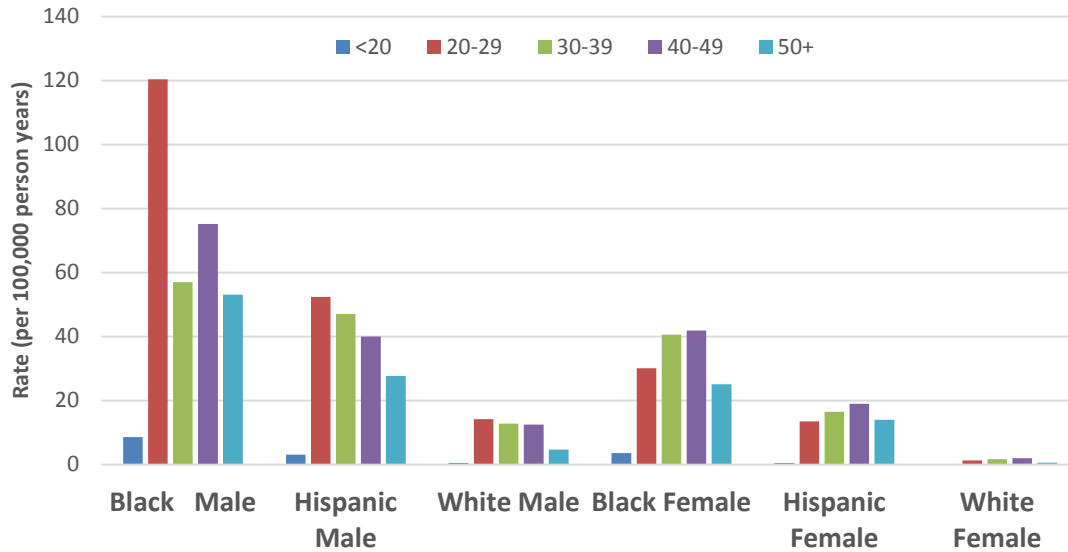
Source: HIV surveillance registry through 2015 and corresponding census or census estimates.

Note that reported numbers less than 12, which is the case for aged <20 males and females and females 60+ above (and accompanying rates and trends) based on these numbers, should be interpreted with caution because the numbers have underlying relative standard errors greater than 30% and are considered unreliable.

\*\* suppressed data due to small cell sizes.

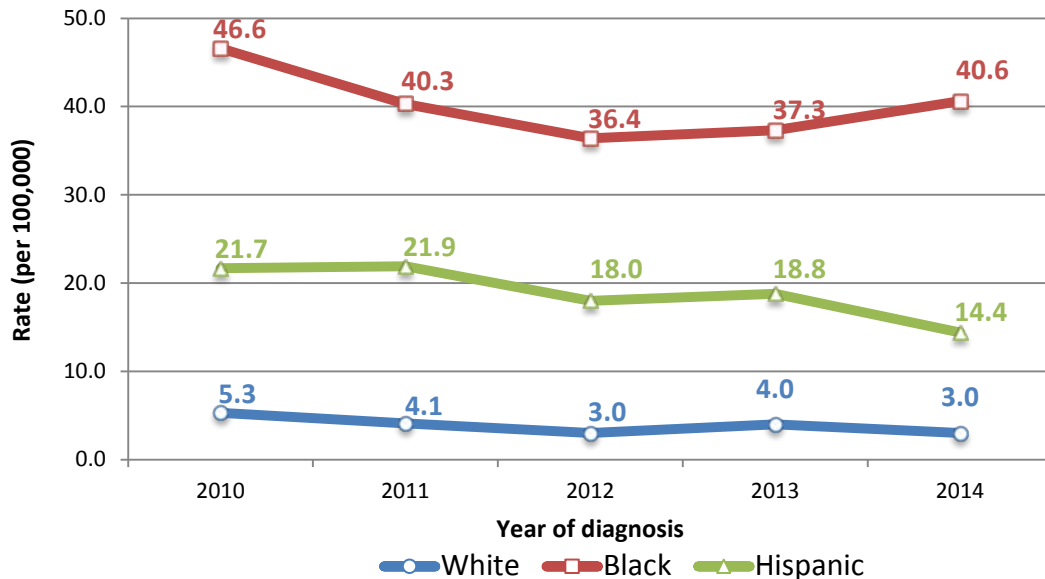
Between the years, 2010–2014, the highest rate of HIV diagnosis consistently was seen in 20–29 year old males, followed by 30–39 year old males and 40–49 year old males.

**Figure 2: Rate of newly diagnosed HIV by race, sex, and age, Connecticut, 2010–2014**



Source: HIV surveillance registry through 2015 and State-level Bridged Race Estimates for Connecticut, 2010. Note the reported numbers less than 12, which is the case for white females aged <20 and 20–29 years, white males aged <20, and Hispanic females aged <20 (and accompanying rates and trends based on these numbers), should be interpreted with caution because the numbers have underlying relative standard errors greater than 30% and are considered unreliable.

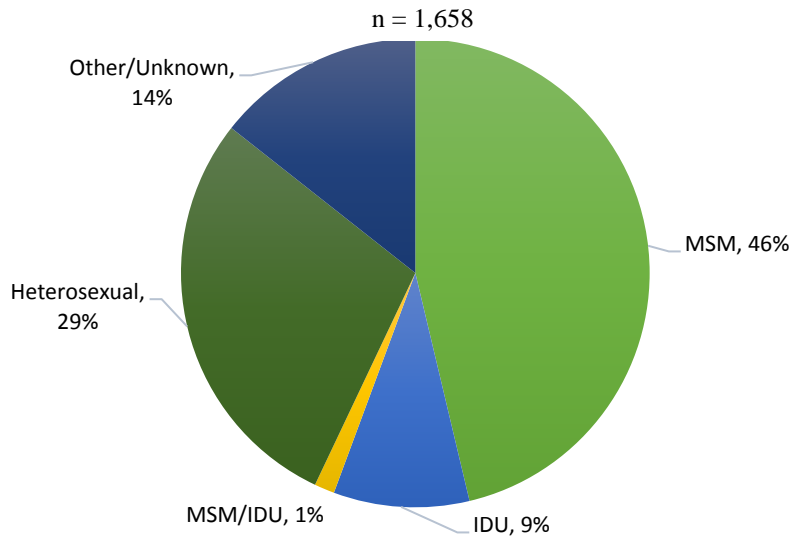
**Figure 3: Rate of newly diagnosed HIV by race, Connecticut, 2010–2014**



Source: HIV surveillance registry through 2015 and 2010 census table P4.

As also noted in 2014 in Figure 1, the five year trend above depicts a continuous disparity in HIV diagnosis based on race. Although there has been a downward trend in the rates of HIV diagnosis in all races, blacks or African Americans still maintain the largest burden.

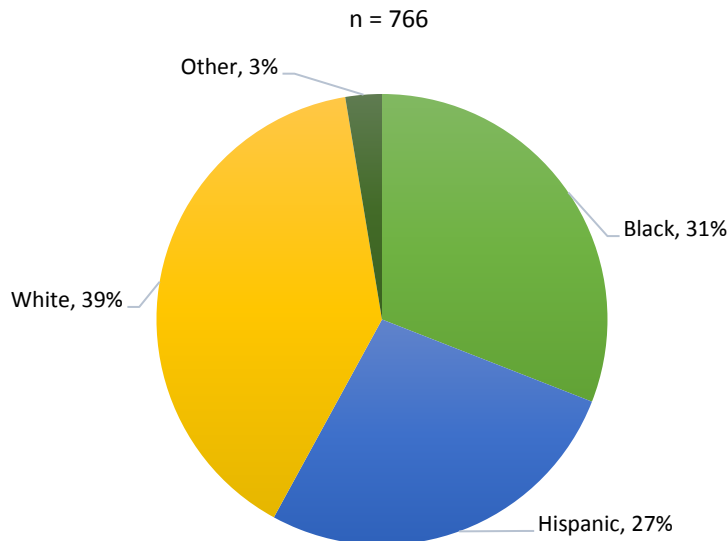
**Figure 4: Newly diagnosed HIV by transmission category, Connecticut, 2010–2014**



Source: HIV surveillance registry through 2015

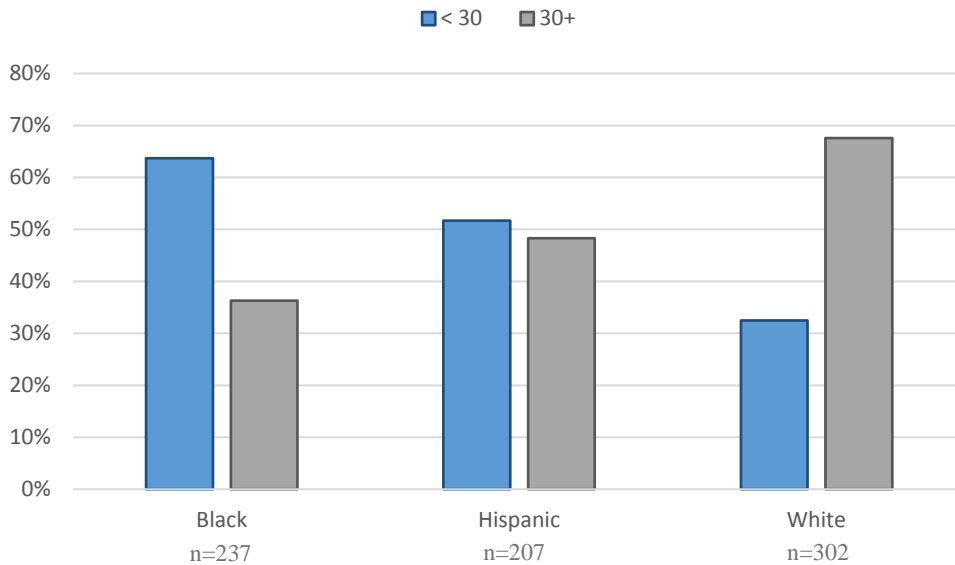
Consistent with what is being seen nationally, gay and bisexual men are most affected by the burden of HIV over the last several years. There has been a significant decrease in the number of IDU acquiring HIV, from 47% in 2003 to 13% in 2014, based on the multiple imputation or adjusted risk method.

**Figure 5: HIV diagnosis in MSM by race, Connecticut, 2010–2014**



Source: HIV surveillance registry through 2015

**Figure 6: HIV diagnosis in MSM by race and age group, Connecticut, 2010–2014**



Source: HIV surveillance registry through 2015

Connecticut is seeing a large number of young gay and bisexual men of color acquiring HIV over the last several years. Sixty-four percent of black MSM that were infected with HIV during 2010–2014 were under 30 as were 52% of Hispanic MSM. In contrast, the majority (68%) of white MSM were over 30.

According to a 2016 study by Bernstein et al., of the adult male population residing in Connecticut in 2013, 3.2% had had sex with another man in the past 5 years which is less than the overall percentage of adult men in the US who were MSM (3.9%). The Hartford TGA had the largest metropolitan population of MSM in Connecticut (51.1% of all MSM in the state). Of the adult men in the Hartford TGA, an estimated 4.9% were MSM.<sup>1</sup>

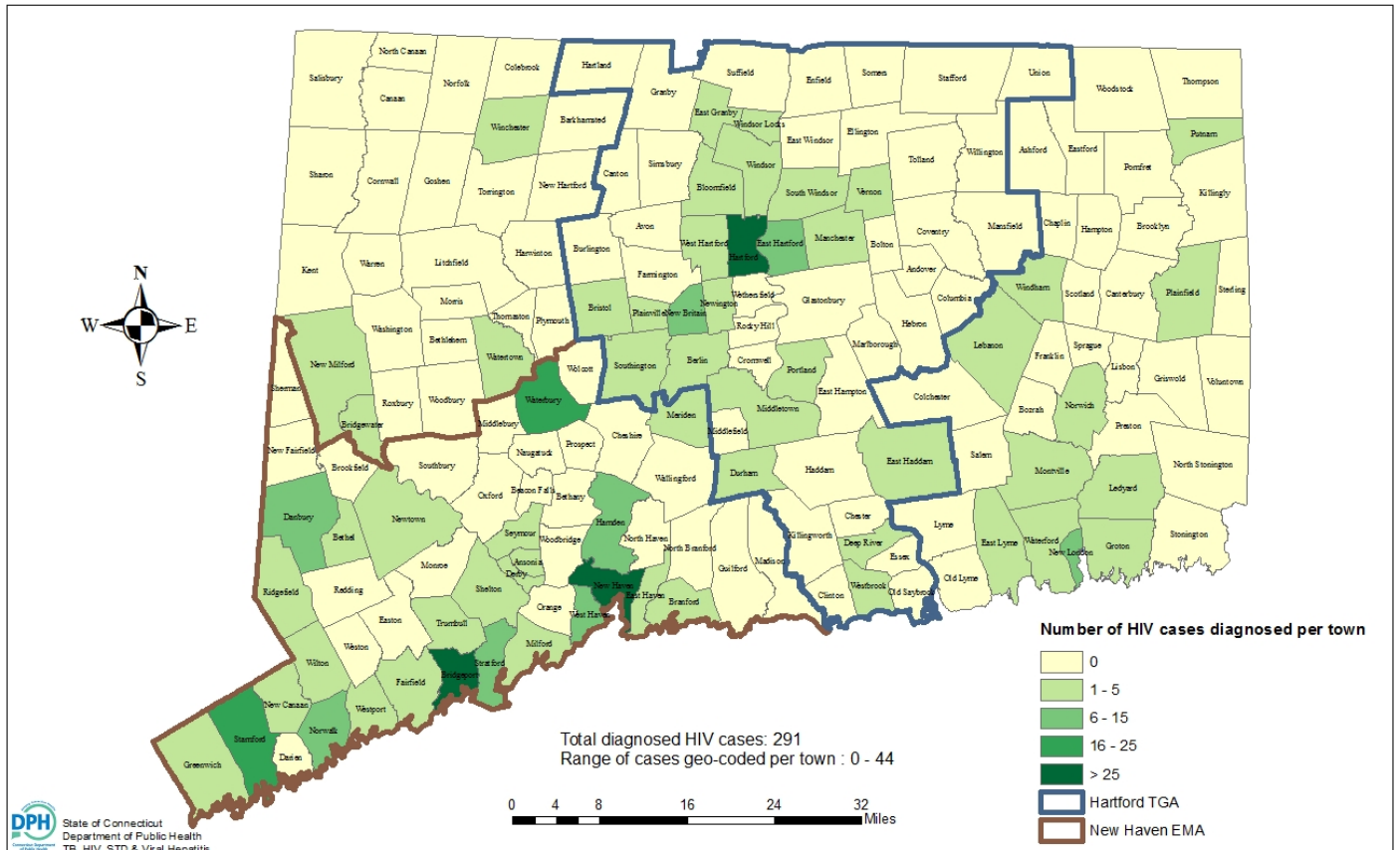
**Table 6: Prevalence estimate of diagnosed and undiagnosed HIV among MSM, Connecticut, 2012**

	MSM living with HIV infection		MSM living with undiagnosed HIV infection	
	N	Rate per 100 MSM	N	Rate per 100 MSM
<b>Connecticut</b>	4,600	10.57	710	1.63

Source Rosenberg ES, Grey JA, Sanchez TH, Sullivan PS, Rates of Prevalent HIV Infection, Prevalent Diagnoses, and New Diagnoses Among Men Who Have Sex With Men in US States, Metropolitan Statistical Areas, and Counties, 2012–2013, JMIR Public Health Surveill 2016;2(1):e22, Table 3.

<sup>1</sup> Grey JA, Bernstein KT, Sullivan PS, Purcell DW, Chesson HW, Gift TL, Rosenberg ES. Estimating the population sizes of men who have sex with men in US states and counties using data from the American Community Survey. JMIR Public Health Surveill 2016;2(1):e14. DOI: 10.2196/publichealth.5365

**Figure 7: Newly diagnosed HIV by town of residence at diagnosis, Connecticut, 2014**



Source: HIV surveillance registry through 2015

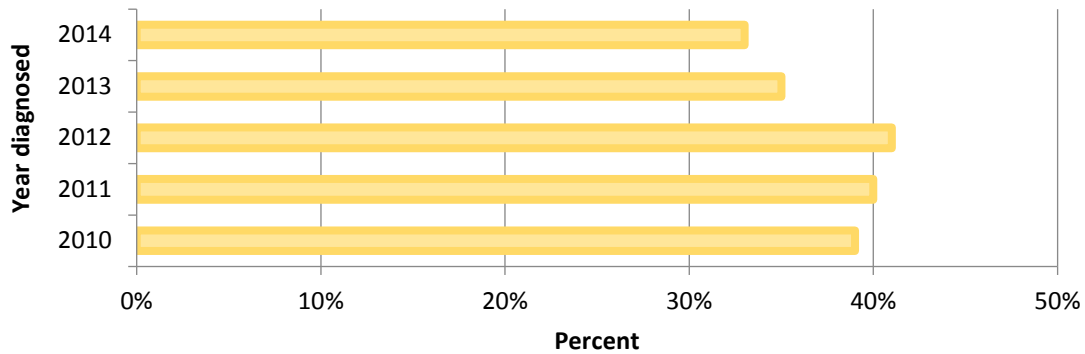
As is seen with people living with HIV, the highest numbers of new diagnoses are found in residents of Connecticut’s largest cities. During 2010–2014, the following cities had greater than 50 cases diagnosed in their residents: Bridgeport, Hartford, New Britain, New Haven, Stamford and Waterbury. Please see the following table for descriptive statistics for towns with 10 or more newly diagnosed cases during 2010–2014.

**Table 7: HIV cases diagnosed during 2010–2014 by city of residence, sex, race/ethnicity, and risk, Connecticut**

Residence at diagnosis	Sex			Race/Ethnicity				Risk				Other/Unknown	
	Total	Male	Female	Black	Hispanic	White	Other	IDU	MSM	MSM/ IDU	Hetero		Pedi
N	%	%	%	%	%	%	%	%	%	%	%	%	
Total	1,658	74.8	25.2	40.7	27.4	29.9	2.1	9.3	46.2	1.4	28.5	0.2	14.4
Hartford	245	69.8	30.2	44.1	42.4	12.7	0.8	16.3	42.9	2.4	24.5	0	13.9
Bridgeport	193	61.1	38.9	58.5	30.1	9.8	1.6	10.4	31.6	0	37.8	0	20.2
New Haven	153	73.9	26.1	62.7	22.2	11.8	3.3	8.5	45.8	2	35.3	0	8.5
Waterbury	112	75	25	40.2	33.9	24.1	1.8	15.2	50	0	25.9	0.9	8
Stamford	76	72.4	27.6	51.3	32.9	14.5	1.3	5.3	38.2	0	32.9	0	23.7
New Britain	62	67.7	32.3	33.9	53.2	9.7	3.2	11.3	37.1	0	40.3	0	11.3
Norwalk	48	83.3	16.7	33.3	35.4	29.2	2.1	2.1	60.4	0	25	0	12.5
East Hartford	45	73.3	26.7	64.4	22.2	8.9	4.4	8.9	40	0	28.9	0	22.2
Danbury	44	63.6	36.4	45.5	43.2	9.1	2.3	0	50	2.3	38.6	0	9.1
Hamden	44	72.7	27.3	63.6	11.4	20.5	4.5	11.4	40.9	2.3	36.4	0	9.1
West Haven	40	80	20	52.5	20	25	2.5	5	47.5	0	40	0	7.5
Middletown	30	76.7	23.3	43.3	16.7	40	0	3.3	63.3	0	30	0	3.3
New London	28	60.7	39.3	39.3	28.6	32.1	0	14.3	35.7	0	35.7	0	14.3
Norwich	27	63	37	37	3.7	55.6	3.7	0	37	3.7	44.4	0	14.8
Manchester	26	73.1	26.9	38.5	3.8	53.8	3.8	3.8	61.5	0	19.2	0	15.4
Meriden	24	83.3	16.7	16.7	25	58.3	0	20.8	54.2	4.2	8.3	0	12.5
Stratford	24	70.8	29.2	66.7	8.3	25	0	0	41.7	0	41.7	0	16.7
Greenwich	21	90.5	9.5	14.3	9.5	71.4	4.8	4.8	47.6	14.3	9.5	0	23.8
Bloomfield	20	65	35	80	5	15	0	15	45	0	25	0	15
Bristol	18	88.9	11.1	11.1	27.8	61.1	0	0	72.2	0	16.7	0	11.1
East Haven	17	88.2	11.8	29.4	41.2	29.4	0	11.8	52.9	0	17.6	0	17.6
Windsor	17	76.5	23.5	41.2	17.6	41.2	0	23.5	29.4	5.9	17.6	0	23.5
Shelton	14	92.9	7.1	14.3	21.4	64.3	0	0	57.1	0	28.6	14.3	0
Fairfield	12	66.7	33.3	8.3	33.3	58.3	0	8.3	33.3	0	33.3	0	25
Groton	12	91.7	8.3	0	25	58.3	16.7	0	41.7	8.3	25	0	25
Milford	11	81.8	18.2	9.1	18.2	72.7	0	9.1	18.2	0	27.3	0	45.5
Torrington	11	90.9	9.1	18.2	9.1	63.6	9.1	0	63.6	9.1	27.3	0	0
Naugatuck	10	90	10	30	30	40	0	10	80	0	10	0	0
West Hartford	10	100	0	10	0	80	10	0	70	0	10	0	20
Windham	10	80	20	10	80	10	0	40	30	0	20	0	10
Other towns	254	88.6	11.4	11.8	15	70.9	2.4	5.5	58.3	1.6	18.9	0	15.7

Source: HIV surveillance registry through 2015

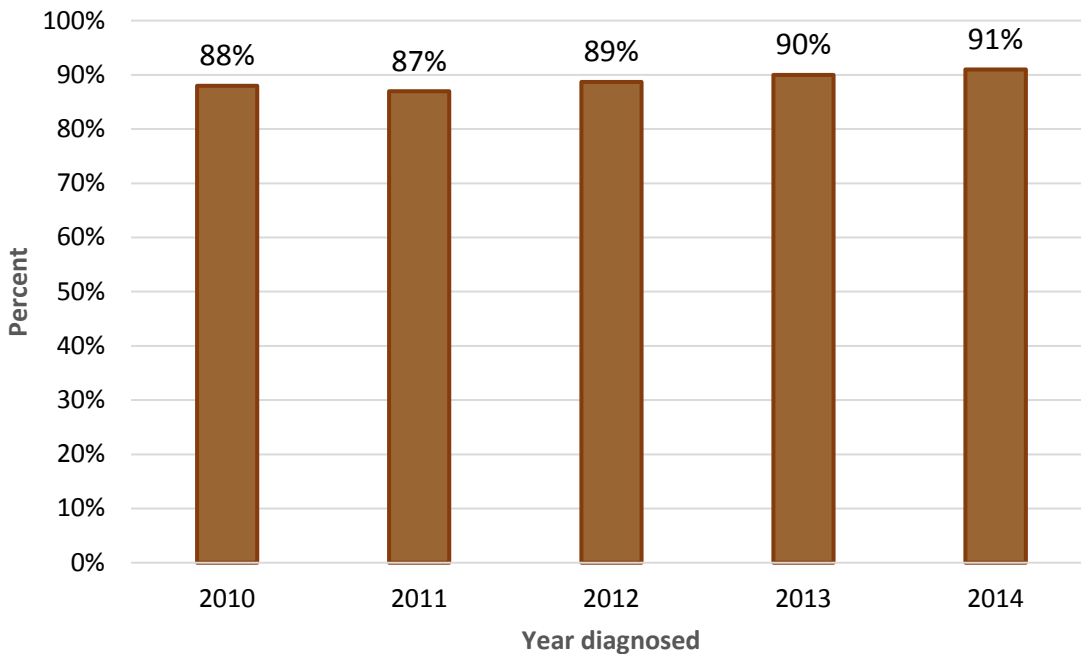
**Figure 8: Transitioning to AIDS within 1 year of HIV diagnosis, Connecticut, 2010–2014**



Source: HIV surveillance registry through 2015

A mean of 38% of cases diagnosed with HIV, presented with AIDS or transitioned to AIDS within a year of their HIV diagnosis during 2010–2014 (range 33–41%). Over the five year period, the percentage of “Late Testers” has trended downward. There was a statistically significant difference in mean age at diagnosis between the “Late testers” and others diagnosed, with late testers having a mean age of 43 years vs 36 years of others diagnosed. In addition, “Late testers” tended to have a transmission category of heterosexual sex with a high risk partner ( $p < 0.001$ ). There was no statistical significant difference between race and sex for HIV diagnosis and AIDS within 1 year of diagnosis.

**Figure 9: Adults and adolescents linked to care within 3 months of their HIV infection diagnosis, Connecticut, 2010–2014**



Source: HIV surveillance registry through 2015



## Section III: DPH funded - HIV Testing

- Since 1986, the DPH has funded HIV counseling and testing sites throughout Connecticut.
- DPH supports two different types of CDC-funded HIV testing components. Initiated in 2012, the first HIV testing component is Outreach, Testing and Linkage (OTL), which targets specific high risk populations at non-clinical sites. The second HIV testing component is Expanded Testing Initiative (ETI) which began in 2007 and annually tests all individuals during their visit to a funded HIV clinical setting (the individual has the option to opt-out of the HIV test).
- The goals of these HIV testing components are to:
  - Identify newly HIV diagnosed positives;
  - Provide newly HIV diagnosed positives with their test result;
  - Identify previously diagnosed HIV positives who fell out of care;
  - Refer and link all HIV diagnosed positive persons to HIV medical care;
  - Assure screening for HCV, STD and TB
  - Refer and link all HIV diagnosed positive persons to Partner Services (PS);
  - Refer and link all HIV diagnosed positive persons to HIV Prevention Services;
  - Refer and link all pregnant HIV diagnosed positive females to prenatal care;
  - Provide all HIV diagnosed people with information and tools in order to reduce HIV risk behaviors.
  - Refer high risk negative persons to Prevention Services
- HIV testing data was collected using EvaluationWeb® (XPEMS) and data measures were used to monitor the extent to which these goals were achieved.

### **HIV testing data for 2015:**

- 58,423 HIV tests were conducted. Of these, 94 (0.16%) were confirmed newly diagnosed positive persons and 24 (0.04%) were previously diagnosed persons.
- 28,291 (48%) of all HIV testing clients were male, 17,861 (31%) white, 16,821 (29%) black and 17,036 (29%) Hispanic.
- The majority of clients were classified as high-risk heterosexuals and having an unknown risk factor (94%). Other client risks included IDU (4%), MSM (2%), and MSM/IDU (0.14%).
- Of the 94 newly HIV diagnosed positive persons in 2015, 70 (74.5%) were male, 22 (23.4%) white, 42 (45%) black and 28 (30%) Hispanic. The risk category of the newly HIV diagnosed positive persons included: 41 (44%) MSM, 41 (44%) high risk heterosexual and 4 (4%) IDU.
- The newly diagnosed seropositivity rate by risk category was: 3% MSM, 0.44% high risk heterosexual and 0.18% IDU.
- 37,710 (65%) of all HIV testing clients were age 20–39 years old. The newly diagnosed seropositivity rate by age group was: 0.15% (20–29 years old), 0.16% (30–39 years old), 0.22% (40–49 years old) and 0.28% (50–59 years old).
- Connecticut’s CDC funded-HIV testing statistics from prior years can be requested from the DPH HIV Prevention Program.

**Table 8: HIV Testing at OTL and ETI Sites, Connecticut, 2015**

Characteristics	Number of OTL clients HIV test	Number of ETI clients HIV test	OTL and ETI columns total	Number of <b>newly</b> diagnosed positives	Number of <b>previously</b> diagnosed positives	Newly diagnosed seropositivity rate <sup>1</sup>
<b>Sex</b>						
Male	11,176	17,115	28,291	70	19	0.25%
Female	2,758	27,301	30,059	24	5	0.08%
Transgender-MTF	11	10	21	--	--	--
Transgender-FTM	4	7	11	--	--	--
Transgender-Unspecified	1	1	2	--	--	--
Unknown Gender	2	37	39	--	--	--
<b>Race</b>						
White	4,829	13,032	17,861	22	2	0.12%
Black	4,653	12,168	16,821	42	10	0.25%
Hispanic	4,113	12,923	17,036	28	12	0.16%
Asian	131	796	927	1	--	0.11%
AI/AN <sup>2</sup>	40	112	152	--	--	--
Native Hawaiian/ PI <sup>3</sup>	11	82	93	--	--	--
More than one race	94	89	183	--	--	--
Don't know /Declined	81	5,269	5,350	1	--	0.02%
<b>Age group (years)</b>						
13–19	649	2,904	3,553	--	1	--
20–29	5,140	17,567	22,707	34	9	0.15%
30–39	3,934	11,069	15,003	24	10	0.16%
40–49	2,327	6,015	8,342	18	2	0.22%
50–59	1,523	4,518	6,041	17	1	0.28%
60 and over	377	2,343	2,720	1	1	0.04%
Unknown	2	55	57	--	--	--
<b>Risk</b>						
High Risk Heterosexual	8,491	917	9,408	41	5	0.44%
IDU	2,073	122	2,195	4	--	0.18%
MSM	1,108	247	1,355	41	15	3.03%
MSM/IDU	83	2	85	--	--	--
Unknown	2197	43,183	45,380	8	4	0.02%
<b>Total</b>	<b>13,952</b>	<b>44,471</b>	<b>58,423</b>	<b>94</b>	<b>24</b>	<b>0.16%</b>

<sup>1</sup> Number of newly HIV diagnosed positives divided by the number of OTL and ETI columns total

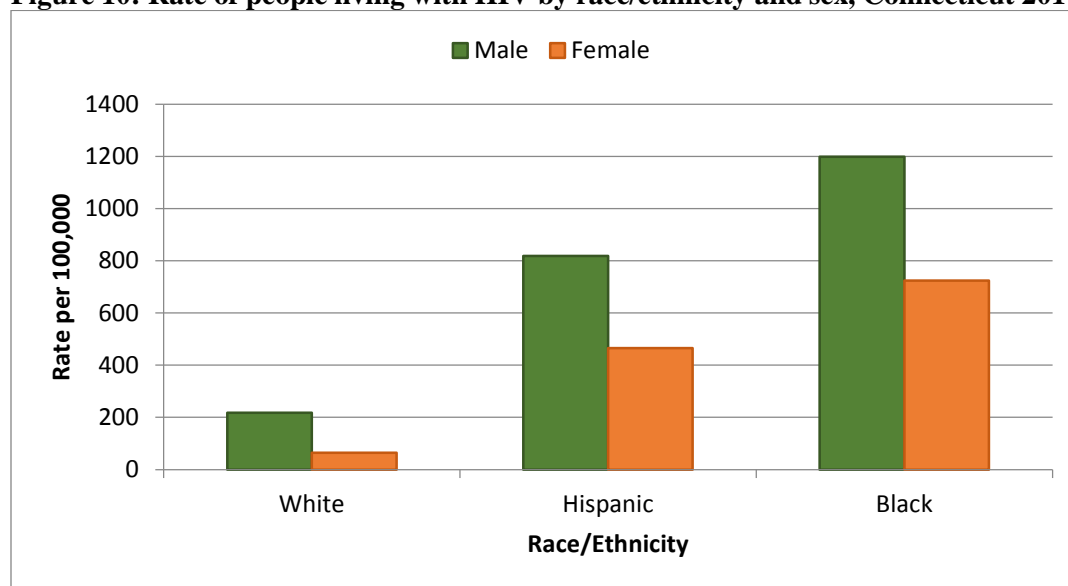
<sup>2</sup> American Indian/Alaskan Native

<sup>3</sup> Native Hawaiian/Pacific Islanders

Source: EvaluationWeb® (XPEMS)

## Section IV: People Living with HIV (PLWH)

**Figure 10: Rate of people living with HIV by race/ethnicity and sex, Connecticut 2014**



Source: HIV surveillance registry through 2015 and State-level Bridged Race Estimates for Connecticut, 2014

In Connecticut, there are 10,727 people living with HIV based on diagnosis address, a rate of 298 per 100,000 people. As with newly diagnosed cases of HIV, Connecticut continues to see racial disparities in people living with HIV. Black or African American males and Hispanic males are living with HIV at a rate approximately 6 and 4 times that of white males respectively. Black or African American females and Hispanic females are living with HIV at rates 11 and 7 times those of white females, respectively.

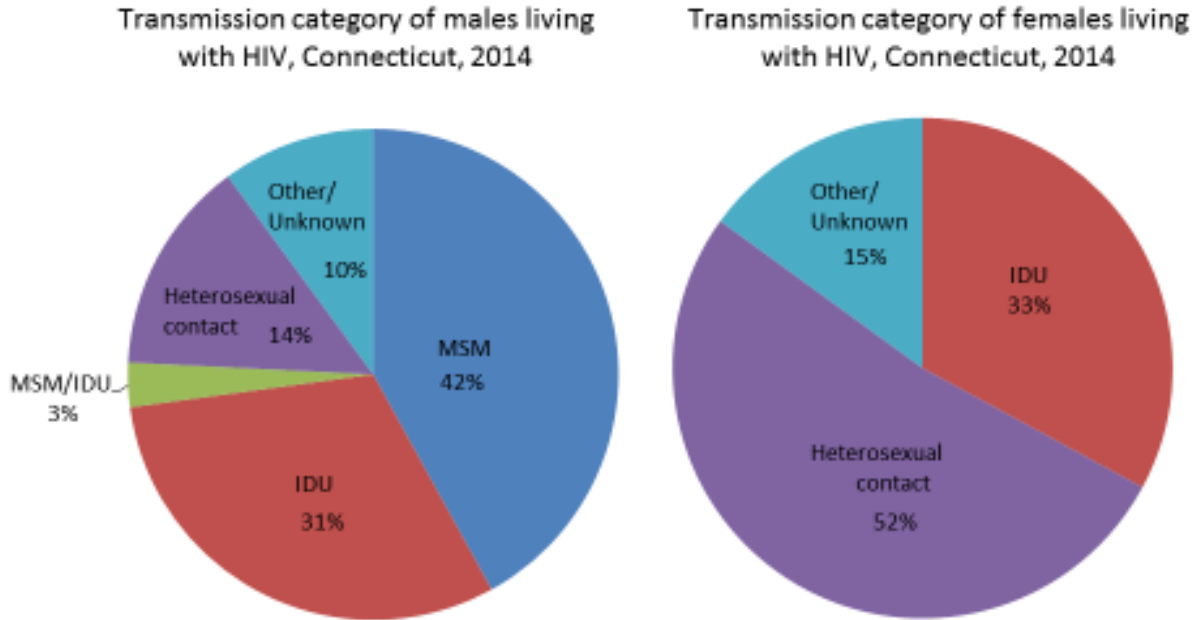
**Table 9: Persons living with HIV by age, Connecticut 2014**

Age (years)	Males		Females	
	N	Rate	N	Rate
<20	28	6.2	22	5.1
20–29	511	212.9	169	74.9
30–39	824	390.2	428	197.5
40–49	1,744	727.1	1,106	436.6
50–59	2,645	982.6	1,261	443.2
60+	1,408	409.3	581	134.9
Total	7,160	408.1	3,567	193.6

Source: HIV surveillance registry through 2015 and 2010 census table P12  
Rate per 100,000 people

Unlike the newly diagnosed HIV population in Connecticut, the largest rate of people living with HIV is seen for both males and females in the 50–59 year age group.

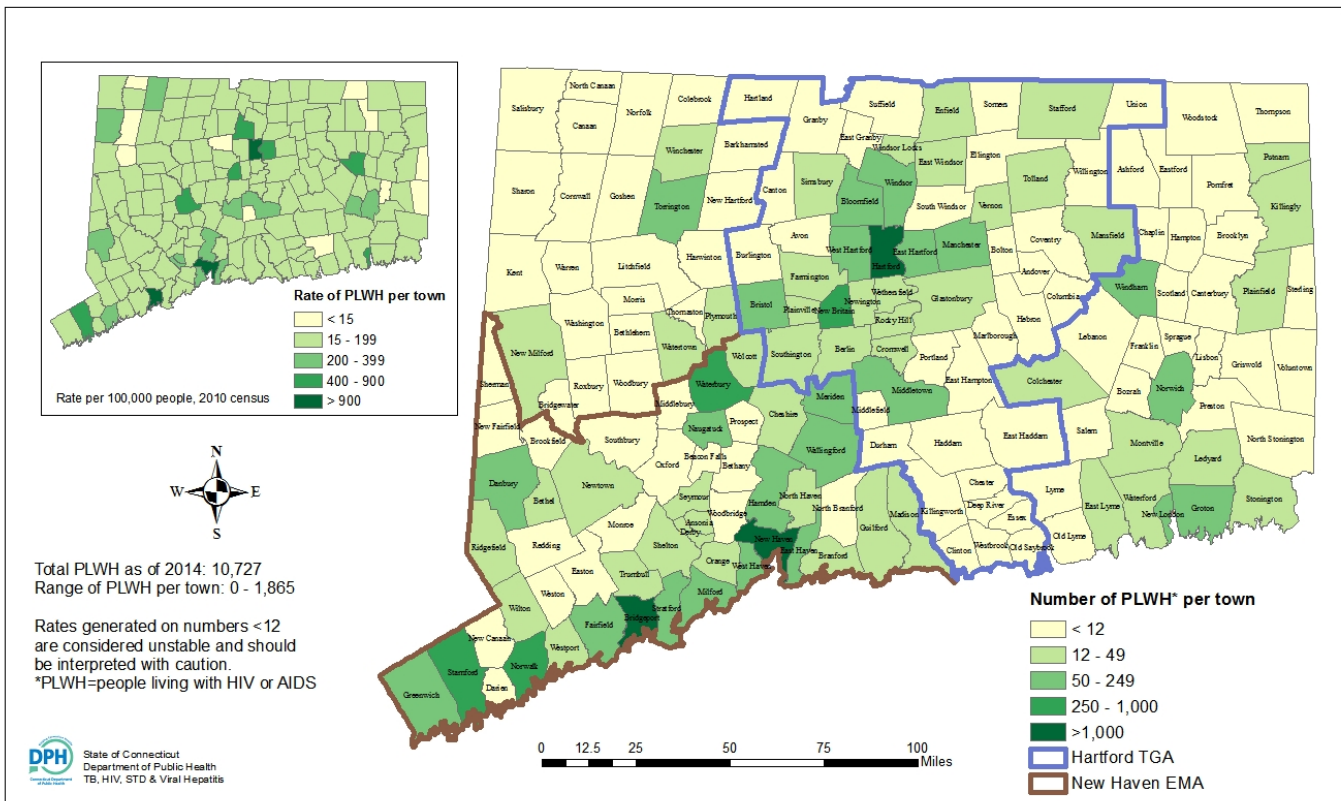
**Figure 11: People living with HIV by transmission category, Connecticut, 2014**



Source: eHARS data through 2015

Overall in 2014, 31% of people living with HIV in Connecticut have a transmission category attributed to injection drug use, followed by MSM at 28% and heterosexual sex with a high risk partner at 27%. The above charts reflect gender specific risk and describes males with 42% of the risk attributed to MSM and 31% to IDU while female risk predominately is attributed to heterosexual sex with a high risk partner at 52%.

**Figure 12: Prevalent HIV infection by residence at diagnosis, Connecticut, 2014**



Source: HIV surveillance registry through 2015 and 2010 census

Although most cities and towns in Connecticut are touched by the burden of HIV infection, the highest rates of people living with HIV correspond with Connecticut’s three largest cities: Bridgeport, Hartford, and New Haven. Of all people living with HIV, 43% were living in these 3 cities. The rates of people living with HIV in the Hartford TGA and New Haven EMA respectively are 298 and 347 per 100,000 persons. The following 10 towns have a rate of greater than 400 per 100,000 of people living with HIV.

**Table 10: Ten towns with the highest rate of people living with HIV, Connecticut, 2014**

Town	Population	Prevalence Number	Rate per 100,000
Hartford	124,775	1,865	1,494.6
New Haven	129,779	1,452	1,118.8
Bridgeport	144,229	1,333	924.2
New London	27,620	191	691.6
Waterbury	110,366	734	665
New Britain	73,206	403	550.6
Bloomfield	20,486	88	429.6
Stamford	122,643	524	427.2
East Hartford	51,252	217	423.4
Windham	25,268	107	423.4

Source: HIV surveillance registry through 2015 and 2010 census.

**Table 11: Estimated<sup>a</sup> HIV prevalence among persons<sup>b</sup> aged ≥13 years at diagnosis, undiagnosed HIV infection, and percentages of those with diagnosed HIV infection**

Characteristics <sup>d</sup>	year	Prevalence <sup>c</sup>		Undiagnosed HIV		% of diagnosed HIV	
		N	95% CI	N	95% CI	%	95% CI
Overall	2009	15,800	(15,500-16,200)	1,700	(1,100-2,100)	89	(86.7-92.8)
	2010	15,800	(15,500-16,100)	1,500	(850-1,900)	91	(87.8-94.0)
	2011	15,800	(15,300-16,200)	1,400	(670-1,800)	91	(88.2-95.1)
	2012	15,800	(15,100-16,200)	1,300	(680-1,900)	92	(88.5-95.7)
	2013	15,800	(15,100-16,400)	1,300	(530-2,000)	92	(87.4-96.0)
Female	2009	5,300	(5,100-5,500)	340	(0-620)	94	(88.7-99.3)
	2010	5,300	(5,100-5,500)	280	(0-570)	95	(90.0-99.5)
	2011	5,300	(5,100-5,500)	240	(0-530)	96	(90.6-99.4)
	2012	5,300	(5,000-5,500)	210	(0-550)	96	(90.7-99.6)
	2013	5,300	(5,000-5,500)	200	(0-610)	96	(89.8-99.5)
Male	2009	10,500	(10,200-10,800)	1,300	(740-1,700)	88	(84.0-92.1)
	2010	10,500	(10,200-10,900)	1,200	(630-1,700)	89	(84.7-93.3)
	2011	10,500	(10,100-10,800)	1,100	(560-1,600)	90	(85.2-94.3)
	2012	10,500	(10,100-10,800)	1,100	(560-1,600)	90	(85.3-93.8)
	2013	10,600	(10,200-11,000)	1,100	(550-1,700)	90	(85.2-94.0)
Black	2009	5,100	(4,900-5,300)	710	(320-1,000)	86	(80.5-92.1)
	2010	5,100	(4,900-5,300)	650	(260-970)	87	(82.1-93.0)
	2011	5,100	(4,900-5,300)	610	(190-930)	88	(83.1-94.0)
	2012	5,100	(4,800-5,400)	580	(120-920)	89	(83.9-94.6)
	2013	5,100	(4,800-5,400)	550	(40-930)	89	(84.4-96.1)
Hispanic or other	2009	5,600	(5,400-5,800)	450	(170-850)	92	(85.8-95.9)
	2010	5,600	(5,300-5,800)	420	(130-860)	93	(85.9-96.6)
	2011	5,500	(5,300-5,800)	380	(70-850)	93	(86.5-97.3)
	2012	5,500	(5,300-5,800)	370	(10-850)	93	(87.0-97.9)
	2013	5,600	(5,400-5,800)	360	(0-830)	94	(87.6-98.2)
White	2009	5,200	(4,900-5,400)	490	(30-820)	91	(85.3-97.7)
	2010	5,200	(4,900-5,400)	420	(0-760)	92	(86.6-98.4)
	2011	5,100	(4,800-5,300)	380	(0-750)	93	(86.8-98.3)
	2012	5,100	(4,800-5,300)	400	(0-830)	92	(85.7-98.0)
	2013	5,100	(4,800-5,400)	380	(0-840)	93	(86.1-97.9)
Heterosexual contact	2009	4,700	(4,500-4,900)	670	(310-940)	85.7	(80.7-90.8)
	2010	4,800	(4,600-4,900)	580	(230-860)	87.9	(82.8-92.3)
	2011	4,800	(4,600-5,000)	540	(220-850)	88.8	(83.2-93.8)
	2012	4,800	(4,600-5,000)	510	(150-860)	89.4	(83.6-94.6)
	2013	4,800	(4,600-5,100)	500	(120-870)	89.6	(83.9-95.8)
IDU or MSM/IDU or Other	2009	6,200	(5,900-6,400)	0	(0-200)	100	(94.3-97.1)
	2010	6,000	(5,700-6,200)	0	(0-150)	100	(94.1-96.4)
	2011	5,900	(5,600-6,100)	0	(0-140)	100	(93.8-96.0)
	2012	5,700	(5,400-6,000)	0	(0-130)	100	(93.7-95.7)
	2013	5,600	(5,300-5,900)	0	(0-100)	100	(93.6-95.4)
MSM	2009	4,900	(4,700-5,100)	980	(640-1,200)	80	(75.7-85.0)
	2010	5,000	(4,800-5,200)	910	(560-1,200)	81.8	(77.5-87.2)
	2011	5,100	(4,900-5,300)	840	(470-1,200)	83.5	(77.9-89.1)
	2012	5,200	(5,000-5,500)	830	(440-1,200)	84	(78.5-89.9)
	2013	5,400	(5,100-5,600)	790	(360-1,200)	85.4	(79.4-91.5)

<sup>a</sup> Estimates were derived by using back-calculation. Estimates were rounded to the nearest 100 for numbers >1,000 and to the nearest 10 for numbers <1,000 to reflect the uncertainty inherent in statistical estimates.

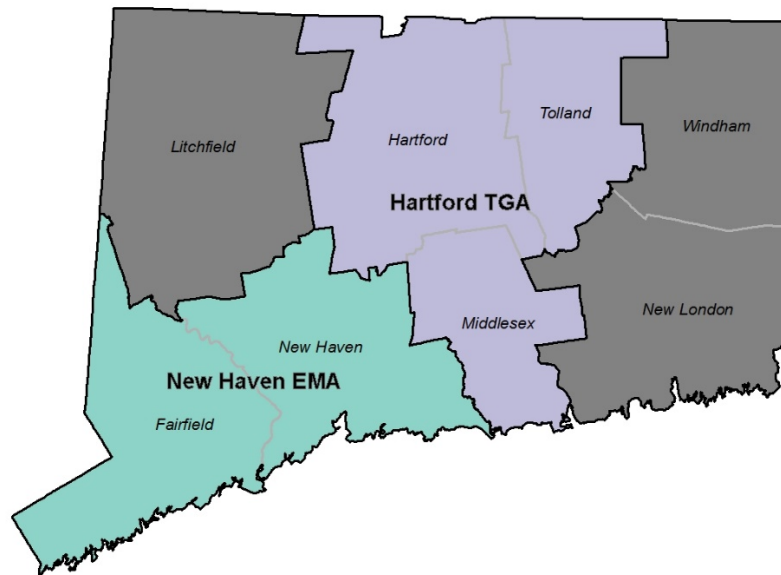
<sup>b</sup> Include persons whose most recent known address or residence at death is in Connecticut by 12/31/2013.

<sup>c</sup> Persons living with diagnosed or undiagnosed HIV infection.

<sup>d</sup> Some subgroups might be grouped together to meet the sample size criteria.

## Section V: Ryan White Grant Areas

**Figure 13: Ryan White Grant Areas, Connecticut, 2014**



Connecticut has two Part A Ryan White Service Areas: Hartford TGA and New Haven EMA. Of the 20,997 HIV infections reported during 1981–2014, 7,310 were residents of the Hartford TGA and 11,874 were residents of the New Haven EMA, totaling 91% of cases diagnosed in Connecticut.

**Table 12: People living with HIV by risk, sex, race, and age, Hartford TGA, 2014**

	IDU		MSM		MSM/IDU		Heterosexual		Pedi		Other/ Unknown		Total	
	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %
<b>Total</b>	1278	35.4	964	26.7	76	2.1	861	23.9	57	1.6	374	10.4	3610	100
<b>Sex</b>														
Male	870	35.5	964	39.4	76	3.1	289	11.8	23	0.9	227	9.3	2449	67.8
Female	408	35.1	0	0.0	0	0	572	49.3	34	2.9	147	12.7	1161	32.2
<b>Race/Ethnicity</b>														
Black	360	34.3	207	19.7	22	2.1	318	30.3	12	1.1	131	12.5	1050	29.1
Hispanic	662	46.8	212	15	31	2.2	370	26.1	35	2.5	106	7.5	1416	39.2
White	246	22.5	522	47.7	23	2.1	163	14.9	10	0.9	130	11.9	1094	30.3
Other	10	20.0	23	46.0	0	0.0	10	20.0	0	0.0	7	14.0	50	1.4
<b>Current Age (years)</b>														
<20	0	0.0	2	22.2	0	0.0	0	0.0	7	77.8	0	0.0	9	0.2
20–29	5	2.2	134	57.8	1	0.4	32	13.8	47	20.3	13	5.6	232	6.4
30–39	69	16.7	164	39.8	12	2.9	110	26.7	3	0.7	54	13.1	412	11.4
40–49	337	34.5	245	25.1	24	2.5	255	26.1	0	0.0	116	11.9	977	27.1
50–59	606	45	288	21.4	29	2.2	298	22.1	0	0.0	127	9.4	1348	37.3
60+	261	41.3	131	20.7	10	1.6	166	26.3	0	0.0	64	10.1	632	17.5

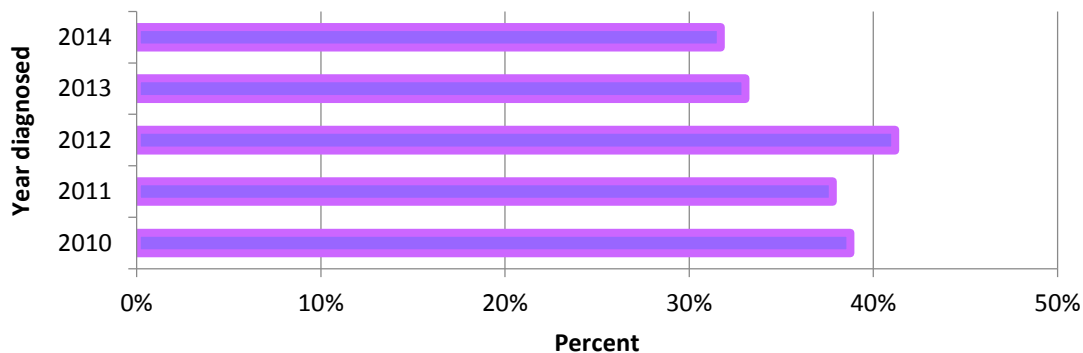
Source: HIV surveillance registry through 2015

**Table 13: Recently diagnosed HIV infection by age, sex, race, and risk, Hartford TGA, 2010-2014**

Years	<20		20-29		30-39		40-49		50-59		60+		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Total</b>	16	100	165	100	124	100	142	100	104	100	38	100	589	100
<b>Sex</b>														
Male	15	93.8	134	81.2	96	77.4	103	72.5	71	68.3	26	68.4	445	75.6
Female	1	6.3	31	18.8	28	22.6	39	27.5	33	31.7	12	31.6	144	24.4
<b>Race/Ethnicity</b>														
Black	10	62.5	61	37	35	28.2	47	33.1	54	51.9	12	31.6	219	37.2
Hispanic	4	25	56	33.9	51	41.1	36	25.4	21	20.2	13	34.2	181	30.7
White	2	12.5	44	26.7	36	29	56	39.4	28	26.9	13	34.2	179	30.4
Other	0	0.0	4	2.4	2	1.6	3	2.1	1	1	0	0	10	1.7
<b>Risk</b>														
IDU	0	0.0	10	6.1	9	7.3	21	14.8	19	18.3	8	21.1	67	11.4
MSM	14	87.5	120	72.7	64	51.6	52	36.6	31	29.8	3	7.9	284	48.2
MSM/IDU	0	0.0	2	1.2	4	3.2	3	2.1	0	0.0	0	0.0	9	1.5
Heterosexual	1	6.3	25	15.2	31	25	39	27.5	33	31.7	15	39.5	144	24.4
Other/Unknown	1	6.3	8	4.8	16	12.9	27	19	21	20.2	12	31.6	85	14.4

Source: HIV surveillance registry through 2015

**Figure 14: Transitioning to AIDS within 1 year of HIV diagnosis, Hartford TGA, 2010-2014**



Source: HIV surveillance registry through 2015



**Table 14: People living with HIV by risk, sex, race, and age, New Haven EMA, 2014**

	IDU		MSM		MSM/IDU		Heterosexual		Pedi		Other/ Unknown		Total	
	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %	N	Row %	N	%
<b>Total</b>	1828	29.6	1700	27.5	108	1.7	1757	28.4	125	2	665	10.8	6183	100
<b>Sex</b>														
Male	1150	28.3	1700	41.8	108	2.7	635	15.6	69	1.7	403	9.9	4065	65.7
Female	678	32.0	0	0.0	0	0.0	1122	53.0	56	2.6	262	12.4	2118	34.3
<b>Race/Ethnicity</b>														
Black	733	31.3	387	16.5	31	1.3	867	37.1	62	2.7	259	11.1	2339	37.8
Hispanic	618	33.3	430	23.2	31	1.7	548	29.5	44	2.4	185	10	1856	30.0
White	446	23.9	847	45.3	41	2.2	315	16.8	16	0.9	205	11	1870	30.2
Other	31	26.3	36	30.5	5	4.2	27	22.9	3	2.5	16	13.6	118	1.9
<b>Current Age (years)</b>														
<20	0	0.0	8	22.2	0	0.0	2	5.6	24	66.7	2	5.6	36	0.6
20–29	8	2.1	199	51.3	4	1	64	16.5	82	21.1	31	8	388	6.3
30–39	94	12.9	292	40.2	15	2.1	222	30.5	18	2.5	86	11.8	727	11.8
40–49	460	28.0	403	24.5	23	1.4	533	32.4	1	0.1	225	13.7	1645	26.6
50–59	826	37.4	526	23.8	49	2.2	609	27.6	0	0.0	200	9	2210	35.7
60+	440	37.4	272	23.1	17	1.4	327	27.8	0	0.0	121	10.3	1177	19.0

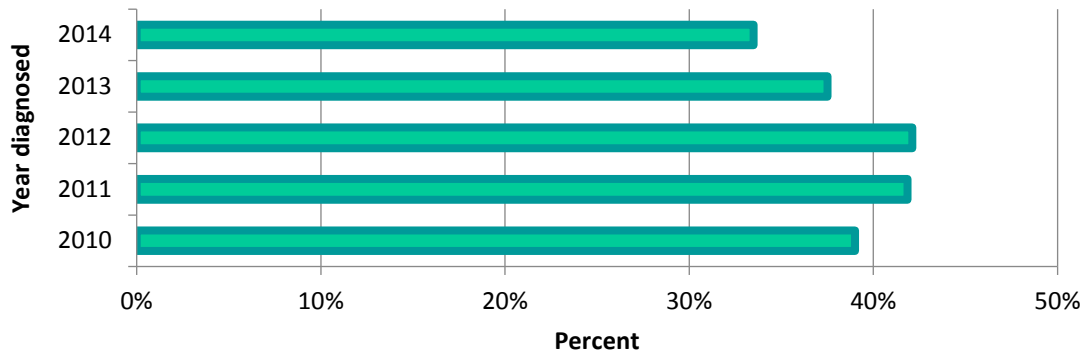
Source: HIV surveillance registry through 2015

**Table 15: Recently diagnosed HIV infection by age, sex, race, and risk, New Haven EMA, 2010–2014**

Years	<20		20–29		30–39		40–49		50–59		60+		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Total</b>	41	100	259	100	196	100	227	100	126	100	68	100	917	100
<b>Sex</b>														
Male	29	70.7	216	83.4	137	69.9	159	70.0	89	70.6	49	72.1	679	74
Female	12	29.3	43	16.6	59	30.1	68	30.0	37	29.4	19	27.9	238	26
<b>Race</b>														
Black	25	61	129	49.8	78	39.8	102	44.9	59	46.8	31	45.6	424	46.2
Hispanic	12	29.3	79	30.5	64	32.7	55	24.2	25	19.8	10	14.7	245	26.7
White	4	9.8	46	17.8	45	23.0	65	28.6	41	32.5	27	39.7	228	24.9
Other	0	0.0	5	1.9	9	4.6	5	2.2	1	0.8	0	0.0	20	2.2
<b>Risk</b>														
IDU	2	4.9	6	2.3	10	5.1	29	12.8	27	21.4	3	4.4	77	8.4
MSM	24	58.5	175	67.6	95	48.5	66	29.1	35	27.8	15	22.1	410	44.7
MSM/IDU	0	0.0	3	1.2	4	2.0	1	0.4	1	0.8	1	1.5	10	1.1
Heterosexual	5	12.2	57	22	66	33.7	82	36.1	45	35.7	32	47.1	287	31.3
Other/Unknown	10	24.4	18	6.9	21	10.7	49	21.6	18	14.3	17	25	133	14.5

Source: HIV surveillance registry through 2015

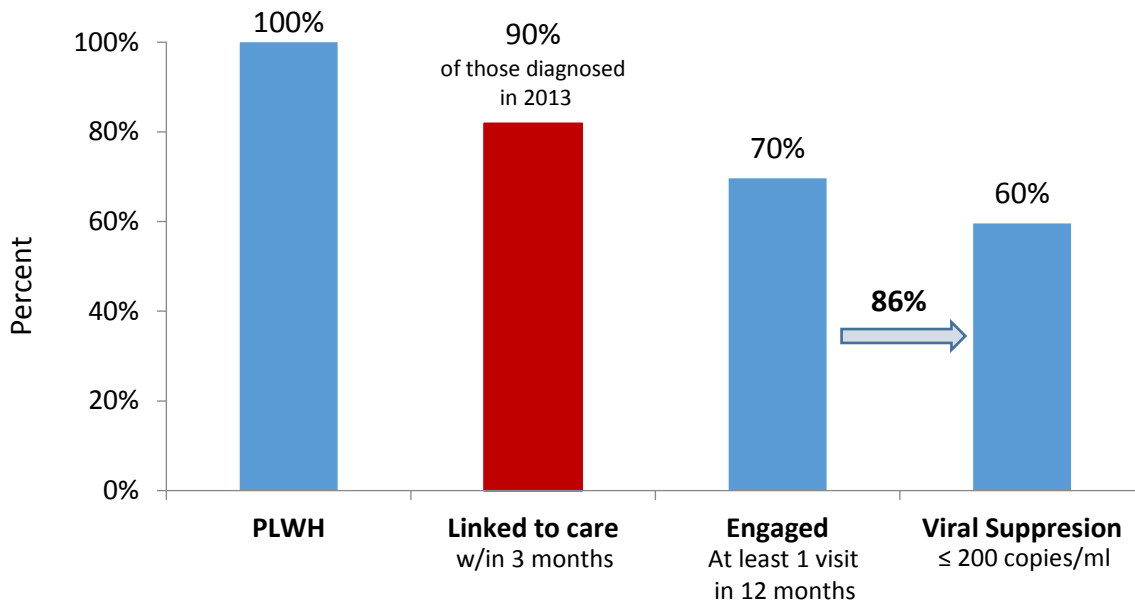
**Figure 15: Transitioning to AIDS within 1 year of HIV diagnosis, New Haven EMA, 2010–2014**



Source: HIV surveillance registry through 2015

## Section VI: Continuum of Care

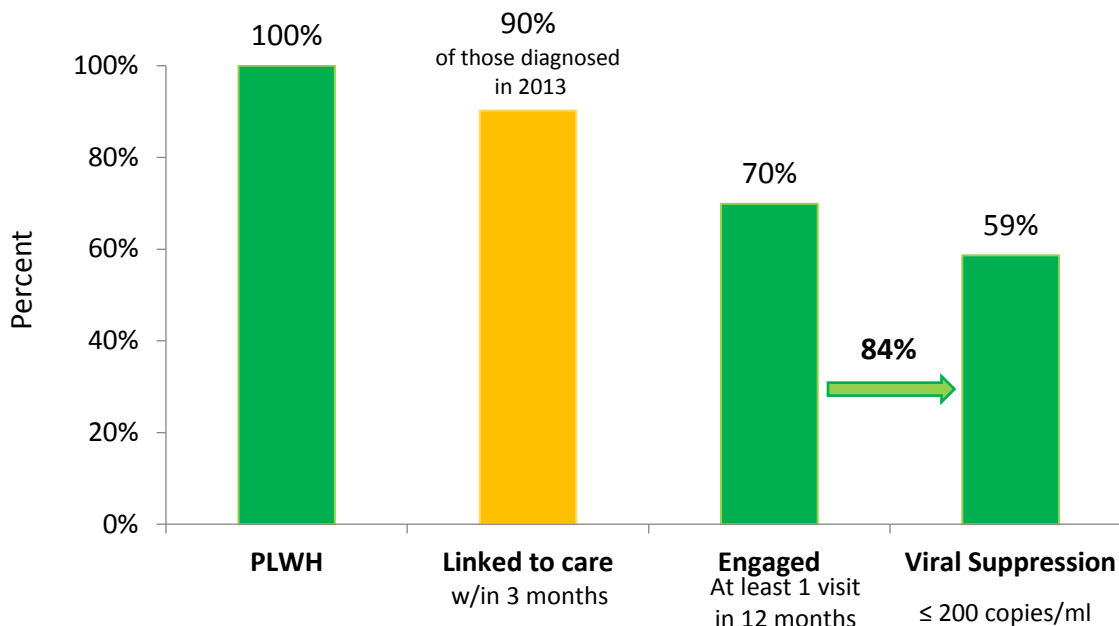
**Figure 16: HIV continuum of care, Connecticut, 2014**



Based on persons receiving HIV care in 2014 among persons  $\geq 13$  years old at diagnosis, resided in Connecticut (based on residence of diagnosis) and diagnosed with HIV infection through 2013 and living with HIV on 12/31/2014. Persons who have at least one CD4, viral load or HIV-1 genotype test are considered as receiving HIV care. Tests that have been done in the same month are considered as one care visit. The overall HIV population is overestimated because cases are only followed up for 11 months after 12/31/2014. CDC suggests that every case should be followed up at least 18 months to collect death certificate information.

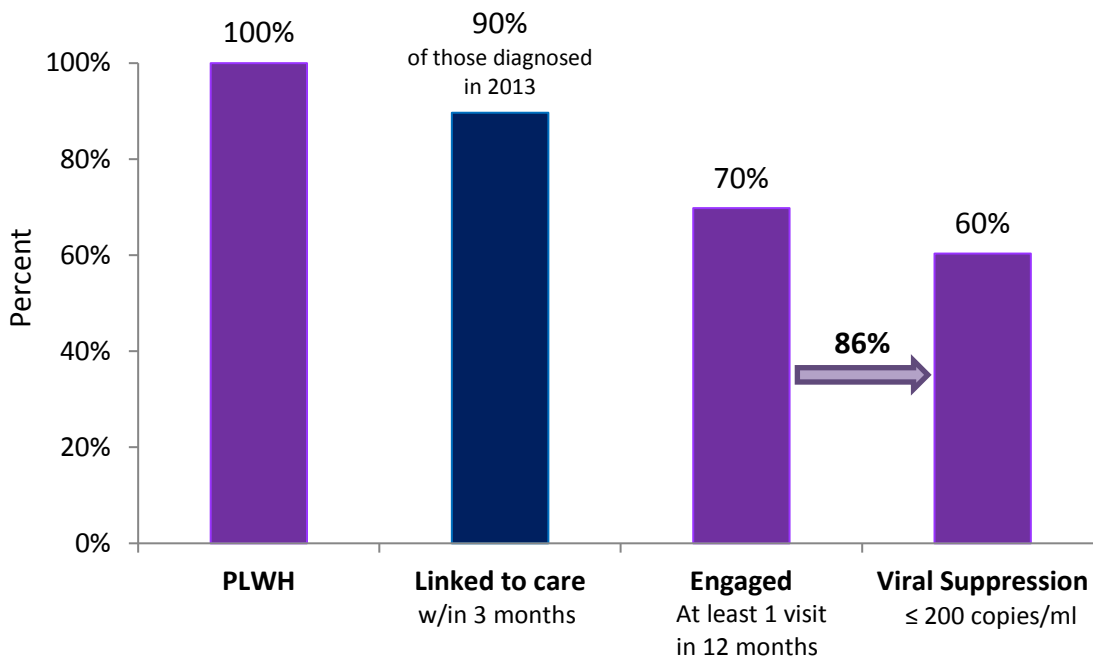
Source: HIV surveillance registry through 2015.

**Figure 17: HIV continuum of care, Hartford TGA, 2014**



Based on persons receiving HIV care in 2014 among persons  $\geq 13$  years old at diagnosis, resided in the Hartford TGA (based on residence of diagnosis) and diagnosed with HIV infection through 2013 and living with HIV on 12/31/2014. Persons who have at least one CD4, viral load or HIV-1 genotype test are considered as receiving HIV care. Tests that have been done in the same month are considered as one care visit. The overall HIV population is overestimated because cases are only followed up for 11 months after 12/31/2014. CDC suggests that every case should be followed up at least 18 months to collect death certificate information. Source: HIV surveillance registry through 2015.

**Figure 18: HIV continuum of care, New Haven EMA, 2014**



Based on persons receiving HIV care in 2014 among persons  $\geq 13$  years old at diagnosis, resided in the New Haven EMA (based on residence of diagnosis) and diagnosed with HIV infection through 2013 and living with HIV on 12/31/2014. Persons who have at least one CD4, viral load or HIV-1 genotype test are considered as receiving HIV care. Tests that have been done in the same month are considered as one care visit. The overall HIV population is overestimated because cases are only followed up for 11 months after 12/31/2014. CDC suggests that every case should be followed up at least 18 months to collect death certificate information. Source: HIV surveillance registry through 2015.

**Table 16: Continuum of care of adolescents and adults by select characteristics, Connecticut 2014**

Characteristics	Diagnosed	≥1 care visit	≥2 care visits at least 3 months apart	% of persons who have ≥2 care visits	% ≥2 care visits amongst persons have ≥1 care visit	% suppression among persons with ≥1 VL
<b>Sex</b>						
Male	6,884	4,660	3,750	54.47	80.47	88.80
Female	3,900	2,852	2,293	58.79	80.40	83.26
<b>Age (years) on 12/31/2013</b>						
13–24	319	224	175	54.86	78.13	68.35
25–34	1,017	683	514	50.54	75.26	79.20
35–44	2,074	1,375	1,052	50.72	76.51	84.06
45–54	4,019	2,839	2,282	56.78	80.38	87.62
55–64	2,636	1,890	1,594	60.47	84.34	90.12
65+	719	501	426	59.25	85.03	94.09
<b>Race/ethnicity</b>						
Black	3,576	2,577	2,098	58.67	81.41	83.87
Hispanic	3,564	2,399	1,960	54.99	81.70	84.87
White	3,460	2,394	1,869	54.02	78.07	91.35
Other	184	142	116	63.04	81.69	91.42
<b>Transmission category</b>						
MSM	2,787	1,925	1,491	53.5	77.45	90.45
IDU	3,457	2,394	2,001	57.88	83.58	86.25
MSM and IDU	200	144	114	57	79.17	87.41
Heterosexual contact	3,033	2,293	1,851	61.03	80.72	84.71
Other	198	124	107	54.04	86.29	65.85
Unknown	1,109	632	479	43.19	75.79	88.15
<b>Total</b>	<b>10,784</b>	<b>7,512</b>	<b>6,043</b>	<b>56.04</b>	<b>80.44</b>	<b>86.70</b>

Number and percentage of persons receiving HIV care between 01/01/2014 through 12/31/2014 among persons who were ≥13 years old on 12/31/2013, resided in Connecticut (based on residence of HIV disease diagnosis), diagnosed with HIV infection through 12/31/2013 and living with HIV on 12/31/2014.

Source: HIV surveillance registry through 2015

Based on residence at disease diagnosis, 60% of adolescents and adults living with HIV in Connecticut are virally suppressed. That number increases to 86% for those engaged in care in 2014. The people living with HIV that are not in care are more likely to be male ( $p<.0001$ ), Hispanic ( $p<.0001$ ), and more likely to have had an unknown risk factor ( $p<.0001$ ) and be aged 35–44 years ( $p<.0008$ ).

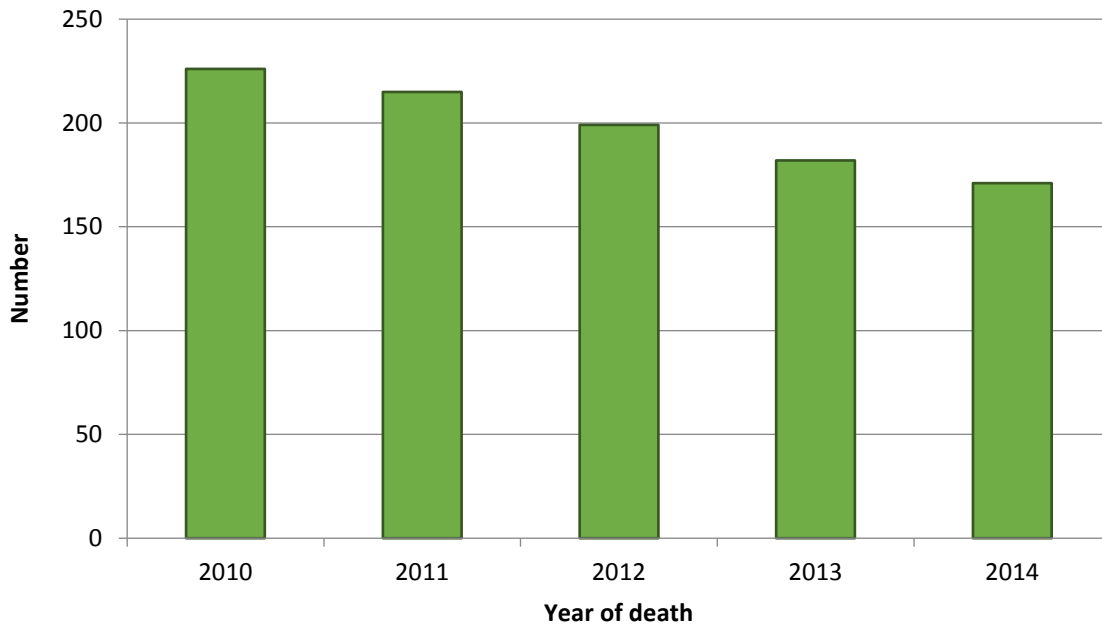
## Section VII: Deaths

**Tables 17: HIV as the primary cause of death by race and sex, Connecticut, 2008–2012**

	Both Sexes			Males			Females		
	No. of deaths	Crude rate	AAMR	No. of deaths	Crude rate	AAMR	No. of deaths	Crude rate	AAMR
<b>Black</b>	195	11.0	11.09	120	14.2	15.26	75	8.1	7.87
<b>Hispanic</b>	130	5.6	6.93	82	7.0	9.10	48	4.1	4.96
<b>White</b>	142	1.1	0.93	101	1.6	1.36	41	0.6	0.54
<b>Total (all races)</b>	470	2.6	2.35	303	3.5	3.10	167	1.8	1.66

Crude and age-adjusted mortality rate per 100,000 population. Age adjusted using 2000 U.S. standard million  
 Source: Backus K, Mueller L. (2015) Age-Adjusted Mortality Rates for Connecticut, 2008–2012. Hartford, CT: Connecticut Department of Public Health. Accessed at <http://www.ct.gov/dph/mortality>

**Figure 19: Trends in deaths among HIV infected people, Connecticut, 2010–2014**



Note: Deaths in the most recent year are preliminary and may not be completely reported.  
 Source: HIV surveillance registry through 2015

Although HIV is still an important cause of death in Connecticut, it is not ranked among the top 15 causes. People infected with HIV are continuing to live longer lives with medication adherence. There is a statistically significant reduction in the age adjusted mortality rate from HIV disease as the underlying cause from 4.19 during 2003–2007 to 2.35 during 2008–2012. Since 1981, 20,997 HIV cases have been reported with 10,270 (49%) known to have died through 2014.

## Section VIII: Behavioral Risks

**Table 18: HIV risk and prevention results, Connecticut BRFSS, 2014**

Demographics	Condoms Discussed for HIV Prevention			At Risk for Contracting HIV			Ever Tested for HIV		
	%	95% C.I.		%	95% C.I.		%	95% C.I.	
<b>Total</b>	15.4	14.0	16.8	26.7	25.2	28.3	35	33.4	36.6
<b>Age (years)</b>									
18–34	36.7	32.5	40.9	38.5	34.3	42.7	42.0	38.0	46.0
35–54	12.0	10.2	13.7	33.9	31.2	36.6	49.7	46.9	52.5
55+	4.4	3.4	5.3	13	11.5	14.4	16.4	14.8	17.9
<b>Gender</b>									
Male	15.2	13.1	17.4	28.5	26.2	30.8	33.8	31.4	36.1
Female	15.6	13.8	17.5	25.1	23.0	27.2	36.1	33.9	38.3
<b>Race/Ethnicity</b>									
White	10.6	9.1	12	27.5	25.7	29.3	29.5	27.8	31.3
Black	25.8	20.6	31.1	29.7	23.6	35.7	52.5	46.6	58.4
Hispanic	36.6	31.1	42	22.1	17.6	26.7	53.6	48.2	58.9
<b>Income</b>									
Less than \$35,000	24.2	21.1	27.2	18.9	16.2	21.6	41.5	38.3	44.7
\$35,000–\$74,999	12.6	9.9	15.2	26.3	23.0	29.6	33.2	29.9	36.6
\$75,000 and more	10.0	8.0	12.0	36.0	33.3	38.8	34.5	31.9	37.1
<b>Insurance Status</b>									
Insured	14.5	13.1	15.9	26.7	25.1	28.4	34.4	32.7	36.0
Not Insured	26.7	20.4	33	27.7	21.7	33.7	42.3	35.6	49.0
<b>Disability</b>									
Yes	18.4	15.1	21.6	18.9	15.7	22.1	40.1	36.4	43.8
No	14.7	13.1	16.2	28.6	26.8	30.4	33.7	31.9	35.4
<b>Education</b>									
HS graduate or less	20.6	18.0	23.3	21.0	18.4	23.6	35.3	32.4	38.2
More than HS education	12.2	10.6	13.7	30.5	28.5	32.4	34.7	32.9	36.6

Source: Stone, CL, Brackney, M. (2016) Health Indicators and Risk Behaviors in Connecticut: Results of the 2014 Connecticut Behavioral Risk Factor Surveillance Survey, Connecticut Department of Public Health, Hartford, Connecticut, p.56-57. Accessed at [www.ct.gov/dph/brfss](http://www.ct.gov/dph/brfss)

Note: Please see BRFSS report regarding methods for survey.

Highlighting just a few results in the BRFSS report: compared to their counterparts in Connecticut, the prevalence of participating in activities that are high risk for contracting HIV was significantly greater for high-income residents earning at least \$75,000 and \$35,000–74,999 annually and in young and middle aged adults (age groups: 18–34 years, 35–54 years). The prevalence of being tested for HIV was significantly greater for non-Hispanic Blacks and Hispanics adults and adults without health insurance as compared to their state counterparts.

Additionally, a separate behavioral survey, the Connecticut School Health Survey, is conducted among Connecticut youth. This survey is conducted in consenting schools with high school students, grades 9–12. Questions about sexual and drug use activity are included in the questionnaire. A complete report of findings for the 2013 report is available on the DPH website ([www.ct.gov/dph/cshs](http://www.ct.gov/dph/cshs)).

A few results relevant to HIV risk factors from the 2013 Youth Behavioral Component:

- 2.4% of surveyed youth had used a needle to inject an illegal drug into their bodies 1 or more times during their life
- 41.1% of surveyed youth had sexual intercourse
- 60.7% of surveyed youth who had sexual intercourse during the past 3 months used a condom during the last sexual intercourse
- 7.9% of surveyed youth describe themselves as gay or lesbian or bisexual

## Section IX: Sexually Transmitted Diseases

**Table 19: Chlamydia, gonorrhea, and primary and secondary syphilis, Connecticut, 2010–2014**

Year	Chlamydia		Gonorrhea		Syphilis	
	N	Rate	N	Rate	N	Rate
2010	12,692	355	2,568	72	99	3
2011	13,662	381	2,450	68	67	2
2012	13,521	376	2,197	61	81	2
2013	12,962	360	2,935	82	53	1
2014	13,134	365	2,223	62	87	2

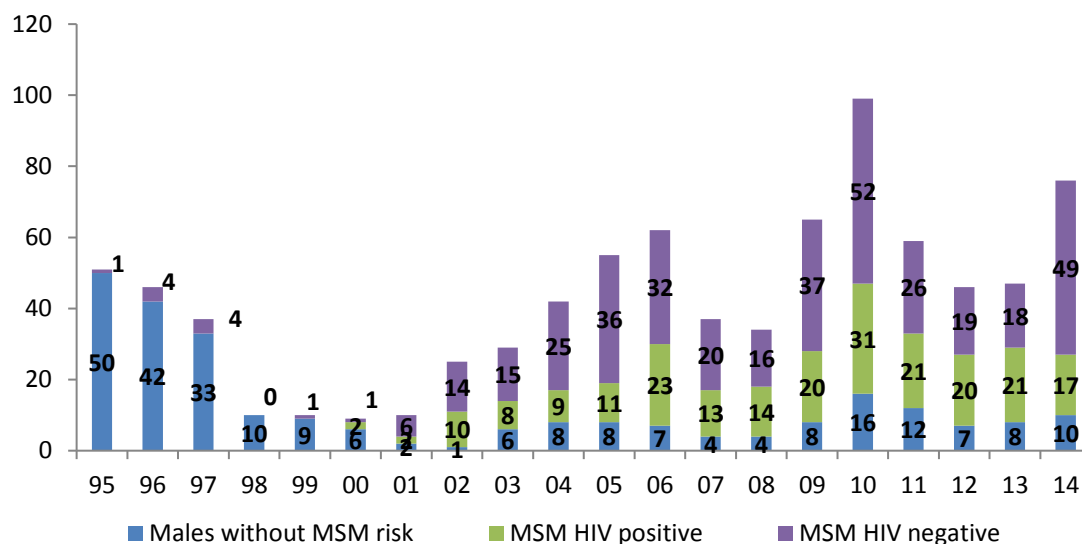
Source: Connecticut STD Control Program, STD\*MIS data and CDC Bridged-Race Population Estimates, intercensal population estimates (released by NCHS on 7/26/2012); postcensal population estimates (released by NCHS on 10/26/2012); postcensal population estimates (released by NCHS on 6/30/2015). Rates per 100,000 population.

**Table 20: Chlamydia, gonorrhea, and primary and secondary syphilis by county, Connecticut, 2014**

County	Chlamydia		Gonorrhea		Syphilis	
	N	Rate	N	Rate	N	Rate
Fairfield	2,844	301	450	48	20	2
Hartford	4,002	446	747	83	22	2
Litchfield	278	150	43	23	0	0
Middlesex	300	182	48	29	3	2
New Haven	3,859	448	689	80	35	4
New London	822	300	87	32	7	3
Tolland	244	161	38	25	0	0
Windham	299	256	16	14	0	0
<b>Total</b>	<b>13,134</b>	<b>365</b>	<b>2,223</b>	<b>62</b>	<b>87</b>	<b>2</b>

Source: Connecticut STD Control Program, STD\*MIS data and CDC Bridged-Race Population Estimates, intercensal population estimates (released by NCHS on 7/26/2012); postcensal population estimates (released by NCHS on 10/26/2012); postcensal population estimates (released by NCHS on 6/30/2015). Rates per 100,000 population. Rates based on counts <12 are considered unstable and should be interpreted with caution.

**Figure 20: Number of male primary and secondary syphilis cases with MSM risk and HIV positive status, Connecticut, 1995–2014**



Source: Connecticut STD Control Program, STD\*MIS

Over the last 10 years, syphilis cases have been predominately in MSM. Since 2002, the percentage of male cases with known MSM risk has ranged from 79%–96%. HIV testing is offered to all syphilis cases.

## Section X: Hepatitis C

**Table 21: Positive hepatitis C test results, Connecticut, 2010–2014**

Year Reported	Confirmed		Unconfirmed		Total N
	N	Row %	N	Row %	
2010	1,963	96.8	65	3.2	2,028
2011	1,942	97.9	42	2.1	1,984
2012	2,112	97.9	46	2.1	2,158
2013	2,077	99.0	21	1.0	2,098
2014	2,416	99.2	13	0.5	2,429
Total	10,510	98.3	187	1.7	10,697

Source: Hepatitis C surveillance registry through 2014



**Table 22: Rate of hepatitis C, past or present by age and sex, Connecticut, 2010–2014**

Age	Sex	2010	2011	2012	2013	2014
<15	Male	0.6	1.2	0.9	0.6	1.2
	Female	0.3	1.5	0.9	1.2	1.5
15-19	Male	7.0	2.3	8.5	9.3	5.4
	Female	8.2	5.7	10.7	17.2	9.0
20-29	Male	67.1	84.0	88.8	102.6	127.5
	Female	64.1	66.4	85.7	89.9	108.8
30-39	Male	79.3	96.4	102.5	121.5	130.5
	Female	45.4	42.2	54.1	56.0	75.7
40-49	Male	118.4	94.3	105.5	102.9	88.4
	Female	57.4	52.5	54.9	50.7	47.2
50-59	Male	172.1	153.7	162.3	129.5	155.3
	Female	69.9	68.1	67.7	63.6	72.9
60+	Male	52.6	60.0	56.8	65.5	102.7
	Female	21.0	22.7	29.2	27.0	33.5

Source: Hepatitis C surveillance registry through 2014 and 2010 census.

It is estimated that 3.5 million people are currently infected with hepatitis C in the United States, the majority of whom were born from 1945–1965 (baby-boomers). In 2012, CDC expanded its testing recommendations to include a one-time hepatitis C test for all baby boomers to assist in early diagnosis and treatment of the virus. Connecticut’s 2010–2014 data parallels the national data in which the largest percentage of people diagnosed with past or present HCV are in the baby boomer cohort. During 2010–2014, among HCV positive Connecticut residents, males over the age of 19 years were disproportionately affected by HCV as compared to females over 19 years.

**Table 23: Estimated number and percentage of people living with HIV-HCV co-infection by gender, race/ethnicity, age, and HIV transmission category, Connecticut, 2014**

	IDU		MSM		MSM/IDU		Heterosexual		Other/Unk <sup>2</sup>		Total
	N	%	N	%	N	%	N	%	N	%	N
<b>Gender</b>											
Male	807	70	149	13	49	4	92	8	64	6	1,161
Female	346	69	---	---	---	---	127	25	32	6	505
<b>Race</b>											
Black	332	68	37	8	13	3	80	16	29	6	491
Hispanic	494	72	48	7	18	3	92	13	32	5	684
White	315	66	62	13	18	4	46	10	34	7	475
Other <sup>3</sup>	12	75	2	13	---	---	1	6	1	6	16
<b>Age at report of co-infection (years)</b>											
<20	1	20	---	---	---	---	---	---	4	80	5
20–29	85	66	18	14	4	3	16	13	5	4	128
30–39	358	72	44	9	17	3	61	12	19	4	499
40–49	502	72	60	9	15	2	87	12	35	5	699
50+	207	62	27	8	13	4	55	16	33	10	335
<b>Total</b>	<b>1,153</b>	<b>69</b>	<b>149</b>	<b>9</b>	<b>49</b>	<b>3</b>	<b>219</b>	<b>13</b>	<b>96</b>	<b>6</b>	<b>1,666</b>

<sup>2</sup>Other/unknown transmission category includes perinatal

<sup>3</sup>Other race includes Asians, Asian Pacific Islanders, and multi-racial

Source: HIV surveillance registry through 2015 and HCV surveillance registry through 2014.

A match was performed using the HIV and HCV surveillance registries to estimate co-infection of people living with HIV. Using SAS 9.4 (SAS Institute, Cary, NC), electronic datasets limited to people reported to still be living, were extracted from each of the registries. The HIV file was further limited to cases diagnosed between 1994–2014 to correspond to the date range of the HCV registry. As a result, 51,017 cases of people living with probable or confirmed HCV and 8,481 cases of people living with HIV were included in the subset for matching. Matching between databases was conducted according to a standard sequence. The first match used exact first name, last name, and date of birth. Additional matches were performed using SOUNDEX, a code based on substitution of numbers for certain letters of the patient last name, and date of birth as follows: a) SOUNDEX and exact date of birth; b) SOUNDEX and month and year of birth, and; c) SOUNDEX and year of birth. Cases identified using the less exact SOUNDEX and incomplete dates of birth were evaluated manually to confirm the cases were the same. It is estimated that 20% of people living with HIV are co-infected with HCV and 3% of people living with HCV are co-infected with HIV.

## Appendix 1

### HIV Surveillance Methods

- Most Connecticut tables and graphs herein combine HIV and AIDS into “HIV disease” or simply, “HIV”. The initial year of diagnosis indicates the year first diagnosed with HIV infection regardless of HIV or AIDS status at the time of the diagnosis.
- **Uses of surveillance information:** The primary purpose of the DPH HIV Surveillance Program is to systematically collect, analyze, interpret, and disseminate information about HIV trends in Connecticut. This information is used by a variety of state and federal agencies to develop policies and allocate funding for local prevention and care needs. Surveillance information is also used by media, local health departments, non-governmental organizations and agencies, hospitals, physicians, students, and others. Other important functions of the surveillance system at the state and national level include monitoring national HIV strategy goals, estimating incidence of HIV infection, identifying cases of public health importance, and monitoring genetic variants and drug-resistant strains.
- **Reportable diseases:** Connecticut law requires DPH to maintain lists of reportable diseases and reportable laboratory findings. The lists include approximately 60 diseases and conditions of public health importance. Information is collected about each person with a disease or condition on the list. Reports are generated by the provider who diagnoses the disease and the laboratory that performs the test associated with the disease.
- **HIV surveillance:** AIDS has been on the list of reportable diseases since the early 1980s. HIV (not AIDS) was added to the reportable disease list in 2002. HIV viral load test results were made reportable in 2006, HIV genotype sequence was made reportable in 2009 and all CD4 results in 2015. HIV is reported when an individual is confirmed to be HIV positive. Subsequent reports are made with additional testing by viral load or CD4. The AIDS case definition consists of either HIV positive with a low CD4-positive cell count (below 200 cells/microliter or less than 14% of total lymphocytes), or HIV positive and a diagnosis with one of several opportunistic infections or conditions (for example, *Pneumocystis carinii* pneumonia, wasting, or cervical carcinoma). DPH maintains a computerized registry of HIV cases (eHARS).
- **Stage of disease:** The current HIV case definition includes criteria for staging at the time of initial diagnosis. HIV cases may be HIV (non AIDS) or HIV Stage 1 (CD4 >500), HIV Stage 2 (CD4 200–500), or HIV Stage 3 (AIDS) (CD4 <200). A case will be classified by the highest stage they attain at any time. Cases will not be reclassified at lower stages if their clinical condition improves.
- **Information collected about HIV cases:** Various demographic and medical information is collected about each HIV case including: laboratory test dates, sex, race, town of residence, exposure category, AIDS indicator diseases, treatment status, pregnancy status, vital status, country of birth, and provider information. Additional information about some of these data elements is below.
- **Year of report and diagnosis:** HIV cases may be diagnosed in years prior to the year in which they were reported. The year of report is based on the date that the case was first reported to the DPH. The year of diagnosis is based on the earliest date in eHARS which is indicative of confirmed HIV infection. Most surveillance reports use the year of diagnosis.

Annual surveillance reports are based on cases diagnosed up through December 31 of a specified year, allowing at least an additional 12 months for more complete reporting of newly diagnosed cases.

- **Sex:** For each case of HIV, information is collected about ‘Sex at Birth’ as well as enhanced information about gender (‘Current Gender Identity’). Options include ‘Male,’ ‘Female,’ ‘Transgender Male-to-Female,’ ‘Transgender Female-to-Male,’ and ‘Additional Gender Identity.’ Very few cases are reported with other than male or female sex. There are never cases with unknown sex. If a case is reported without sex, follow-up is conducted to obtain it.
- **Race/ethnicity:** For each HIV case, race and ethnicity information is collected. Race categories include: ‘White,’ ‘Black,’ ‘Asian,’ ‘Native Hawaiian or other Pacific Islander,’ and ‘American Indian/Alaska Native.’ Ethnicity is coded as ‘Hispanic’ or ‘Not Hispanic’ and entered into a separate variable from race. Cases can be of more than one race. ‘Black’ is used as shorthand to save space for the more complete description used by the US Census, ‘Black or African American’ and Hispanic is used as shorthand for ‘Hispanic or Latino.’ The majority of HIV cases are reported as white, black, or Hispanic but very small numbers of other race categories are also reported and categorized as ‘Other’ in HIV tables unless specific analyses are conducted. Also, ‘Multirace’ can be reported and is included in ‘Other’ unless specifically included in analysis. Race and ethnicity are collected in separate fields and can be analyzed separately but because most Hispanic cases are Hispanic-white or Hispanic with no race reported, any case reported as Hispanic will be in the Hispanic category regardless of race. There are never cases with unknown race/ethnicity. If a case is reported without race or ethnicity, follow-up is conducted to obtain it.
- **Residence:** The city of residence in HIV tables refers to the city where the case resided at the time of their initial diagnosis. With ongoing laboratory reporting of CD4 and viral load, more recent addresses can be reported and are included in eHARS. There are never cases with unknown initial city of residence. If a case is reported without city, follow-up is conducted to obtain it.
- **Age:** Information about age is presented in two ways, age at diagnosis and current age of PLWH. Current age refers to age at the time the data was created for analysis, typically December 31 of the specified year. Cases 0–13 years of age are considered ‘children’ and cases  $\geq 13$  are considered ‘adults and adolescents.’ Upper age group categories have been added as the number of cases in those age groups increases. There are never cases with unknown age. If a case is reported without age, follow-up is conducted to obtain it.
- **Country of birth:** Information about country of birth is collected but poorly reported. This information is not always available to providers. An analysis of country of birth was previously provided (QuickStat, June 10, 2009) and shows that for the majority of cases where country of birth was known, US was reported followed by Puerto Rico and then smaller percentages for Haiti and Jamaica and many others. For cases reported between 2005–2014, 35% were missing country of birth.
- **Exposure categories:** For each case of HIV, information is collected about the most likely way in which the person acquired HIV infection. This information may not always be available, especially for recently reported cases. The provider may not have reported the information, or the patient may not have volunteered the information to the provider, may not have returned to the diagnosing provider, may not be in care, may have moved to another state, or may have died. When the exposure category is unknown, HIV tables and graphs classify these cases in a separate category, ‘Oth/unlk.’ Over time, after additional follow-up

with providers, many of these cases will be reclassified into one of the known exposure categories. Essentially, all HIV cases are found to fall into one of the known risk categories when it is possible to make a complete risk assessment.

In the HIV surveillance system, HIV cases are only counted once in a hierarchy of exposure categories. Persons with more than one risk category are classified in the exposure category listed first in the hierarchy, except for men with both a history of sexual contact with other men and injecting drug use. They are in a separate category.

- **Men who have sex with men (MSM)** – Males who report having sexual contact with males (homosexual contact) and males who report sexual contact with both males and females (bisexual contact).
  - **Injection drug use (IDU)** – Persons who have injected non-prescription drugs.
  - **Heterosexual contact** – Persons who have had heterosexual contact with a person with HIV infection or who is at high risk of HIV infection (IDU, bisexual male).
  - **Other** – Other exposure categories include received clotting factor or hemophilia/coagulation disorder, transfusion recipient, transplant recipient, and worker in a health care or clinical laboratory setting. Due to low numbers, these cases are classified together as ‘Oth/unk’ in HIV tables and graphs.
- **Opportunistic infections:** There are 26 opportunistic infections or conditions (not all are infections) that, together with HIV infection, indicate development of AIDS (or HIV Stage 3). These are also referred to as ‘AIDS indicator diseases.’ Many of these diseases result from impaired immunity. Having one of these diseases does not necessarily indicate that the person has HIV infection. The HIV surveillance system collects information on the disease(s) that are reported with the initial diagnosis of AIDS. Indicator diseases that are subsequently diagnosed are not systematically monitored.
  - **HIV in children:** Information specific for pediatric cases of HIV (<13 years of age) are also collected. A pediatric case report form is used to collect this information. For each case of perinatal HIV exposure, a medical record extraction is conducted for the mother-child pair. Information collected about the mother includes demographics, risk behavior, HIV testing information, and adequacy of prenatal care. Information collected about the infant includes HIV preventive treatment, testing information and final HIV status.
  - **Death:** Reported cases are assumed to be alive unless specifically confirmed to be dead. Information about death is obtained from several sources. DPH Vital Records provides year end data and periodically comprehensive data for matching against the HIV registry to update case vital status and import cause of death. Also, the CDC provides data from the Social Security Master Death file as well as the National Death Index to permit the identification of deaths among Connecticut HIV cases that occur in other states. Due to the lag in reporting death information is analyzed at least 12 months after the most recent diagnosis year.
  - **Incidence estimation:** Connecticut has participated in HIV Incidence Surveillance since 2005. The data collected by this project contributes to the national estimate of HIV incidence and also allows for a Connecticut estimate to be generated. The estimate is based on results of a laboratory test conducted on remnant diagnostic specimens that indicates whether the person has been infected in the past six months. The test is licensed only for surveillance (not clinical) use because of the high false positive and high false negative rates for individuals. A statistical model adjusts for this as well as the testing history of the demographic and

behavioral risk group characteristics of the case yielding a more reliable population estimate. The estimate is conducted yearly.

- **Molecular HIV surveillance:** Since 2009 Connecticut has participated in an HIV surveillance project whose aims are to characterize genotype and resistance patterns of HIV in newly diagnosed cases. Surveillance is based on the laboratory reporting of the genome sequence in the *pol* region of HIV by laboratories.

## Appendix 2

### Description of Data Sources

Data source	Description of methods	Strengths and limitations
HIV Surveillance Registry	<p>Provider and laboratory reporting of HIV infection is required. eHARS is the HIV surveillance registry.</p> <p>Additional information about HIV surveillance data can be found at the following website:  <a href="http://www.ct.gov/dph/HIVsurveillance">www.ct.gov/dph/HIVsurveillance</a></p>	<p>Strengths:</p> <ul style="list-style-type: none"> <li>• Statewide data</li> <li>• Includes information about demographics and risk factors for infection</li> <li>• Can be matched with other databases (STD, death, HCV)</li> </ul> <p>Limitations:</p> <ul style="list-style-type: none"> <li>• Information about recent cases tends to be incomplete for a period of time</li> </ul>
Hepatitis C Surveillance Registry	<p>Laboratory findings for hepatitis C are laboratory reportable. Acute hepatitis C cases are physician reportable.</p> <p>Additional information about hepatitis C can be found at the following web site:  <a href="http://www.ct.gov/dph/Hepatitis">www.ct.gov/dph/Hepatitis</a></p>	<p>Strengths</p> <ul style="list-style-type: none"> <li>• Statewide data</li> </ul> <p>Limitations:</p> <ul style="list-style-type: none"> <li>• Information about residence and demographics is incomplete</li> <li>• Difficult to detect new infections</li> </ul>
Sexually Transmitted Diseases Surveillance Registry	<p>Chlamydia, gonorrhea, syphilis, chancroid, and neonatal herpes are required to be reported to DPH by laboratories and providers. DPH staff follow-up on all newly diagnosed syphilis cases to collect additional information about contacts, demographics, and behavioral characteristics.</p> <p>Additional information about STDs can be found at the following web site: <a href="http://www.ct.gov/dph/std">www.ct.gov/dph/std</a></p>	<p>Strengths:</p> <ul style="list-style-type: none"> <li>• Statewide data</li> <li>• Includes information about demographics and risk factors (syphilis) for infection</li> <li>• Interviews in the context of partner services are conducted with all syphilis cases and have established MSM as a primary risk factor</li> </ul> <p>Limitations:</p> <ul style="list-style-type: none"> <li>• Information about recent STD cases may be incomplete</li> </ul>

<p>Vital Records</p>	<p><u>Death data</u> - Vital records supplied data about deaths in Connecticut. Included is information about primary and secondary causes of death. Information about deaths is provided through the Death Certificate reporting process.</p> <p>Death data for Connecticut can be found at the following website:  <a href="http://www.ct.gov/dph/mortality">www.ct.gov/dph/mortality</a></p>	<p>Strengths:</p> <ul style="list-style-type: none"> <li>• Statewide data</li> <li>• Includes information about persons with HIV who die.</li> <li>• Matching with eHARS can update vital status of HIV/AIDS cases</li> </ul> <p>Limitations:</p> <ul style="list-style-type: none"> <li>• This data can be several years out of date due to time needed to complete reporting.</li> </ul>
<p>Behavioral Risk Factor Surveillance System (BRFSS)</p>	<p>The BRFSS is an ongoing telephone survey of adults conducted in all 50 states and coordinated by the CDC in Atlanta, GA. Households are randomly selected and contacted by a contractor who conducts most interviews in the evenings and on weekends. Once an interviewer reaches a household, a random selection of adult household members is made to choose one person to participate in the survey. Listed and unlisted residential telephone numbers are included in the sample, and in 2011, approximately fifteen percent of the interviews were completed by way of cellular telephones. The questionnaire changes somewhat from year-to-year and state-to-state to meet changing needs and address state specific priorities. The BRFSS originally collected data on health behaviors related to the leading causes of death, but has since been expanded to include issues related to health care access, utilization of preventive health services, and to address emerging issues such as cigar smoking or diet pill use. At the end of each year, data are compiled and adjusted to be representative of all adults in the state, and returned to states for analysis. Data for all states are available via the CDC BRFSS website.</p> <p>Information about the BRFSS in Connecticut can be found at the following website:  <a href="http://www.ct.gov/dph/BRFSS">http://www.ct.gov/dph/BRFSS</a></p>	<p>Strengths:</p> <ul style="list-style-type: none"> <li>• Statewide data</li> <li>• Includes information about demographics and risk factors for HIV</li> <li>• Includes information about HIV testing</li> <li>• Data are weighted to population characteristics</li> </ul> <p>Weaknesses:</p> <ul style="list-style-type: none"> <li>• Telephone survey.</li> <li>• Difficult to reach populations and groups which represent small percentages of the population will be contacted infrequently</li> </ul>
<p>Connecticut School Health Survey</p>	<p>The Connecticut School Health Survey (CSHS) is comprised of the <a href="#">Youth Tobacco Component (YTC)</a> (PDF) and the <a href="#">Youth Behavior Component (YBC)</a> (PDF). These two school surveys have been co-administered since 2005.</p> <p>The YTC is a school-based survey of students in grades 6 - 12, with randomly chosen classrooms within selected schools, and is anonymous and confidential. The YBC is also a school-based survey of students, but only of high-school grades 9 - 12 and it, too, is anonymous and confidential.</p> <p>Information about the CSHS in Connecticut can be found at the following website: <a href="http://www.ct.gov/dph/CSHS">http://www.ct.gov/dph/CSHS</a></p>	<p>Strengths</p> <ul style="list-style-type: none"> <li>• Conducted biennially</li> <li>• Describes prevalence of health-risk behaviors among youths</li> <li>• Asses trends over time</li> <li>• Nationally comparable data</li> <li>• Statistically significant sample size</li> </ul> <p>Limitations</p> <ul style="list-style-type: none"> <li>• Schools need to volunteer to be sampled</li> <li>• Questions can change year to year</li> </ul>