HIV Care Continuum

The ultimate goal of current HIV disease treatment is to achieve viral suppression–reducing the amount of HIV in the body to a very low or undetectable level. This is important for persons living with HIV disease (PLWHA) in order to stay healthy, live longer and also, to reduce the probability that they will transmit HIV (CDC, 2014). The HIV care continuum is used to monitor the population rate of PLWHA achieving viral suppression.

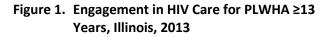
Community viral suppression rates have far-reaching implications including rates of new HIV infections, health care costs and quality of life for PLWHA. Tracking the proportion of people at each separate step of the HIV care continuum has helped guide IDPH and community partners to develop initiatives to increase rates of diagnosis and improve linkage to care for PLWHA in Illinois (see section, "IDPH HIV Programs").

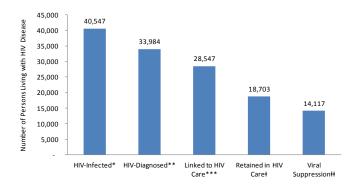
Engagement in Care and Viral Suppression

To calculate the number of persons who are virally suppressed, estimates are made at each step of the care continuum. In 2013, CDC estimated that 16% of persons infected with HIV were unaware of their status. This rate is used to estimate the total number of PLWHA (see section, "Unknown Diagnosis").

Approximately 84% of individuals aged ≥13 years diagnosed with HIV disease in Illinois in 2012 were linked to care within 3 months of diagnosis. Approximately 55% of persons ≥13 years in Illinois who were diagnosed with HIV disease were retained in care by the end of 2013. Among those in care, 81% were virally suppressed indicating that not all those in care are compliant with or responsive to treatment.

Among all diagnosed PLWHA ≥13 years in Illinois at the end of 2013, 42% were virally suppressed. Including PLWHA with unknown diagnoses, 35% of all PLWHA in Illinois were estimated to be virally suppressed. There are many stages along the care continuum where there is room for improvement including linkage to care, retention in care, initiation of treatment, and compliance with treatment regimens.





*In 2013, ~16% of HIV+ individuals were unaware of their status **Received HIV diagnosis through 12/31/12 and living with HIV on 12/31/13 based on HIV surveillance data reported through 1/02/15

***Based on the percentage of cases diagnosed in 2012 linked to care within 3 month of diagnosis (84%)
¹Persons who have at least one CD4 or viral load or HIV-1 genotype test are considered to be receiving HIV care
¹¹Persons whose most recent viral load test result was <=200 copies/ml between 01/01/2013 through 12/31/2013 are considered to have HIV viral suppression

Source: Illinois Department of Public Health, 2014

Sex

Rates of linkage to care and retention in HIV care were similar among men and women diagnosed with HIV. However, rates of viral suppression among women in care were lower than among men in care. The reasons for lower viral suppression among women are not well understood but similar patterns have been seen nationally (Beer, Mattson, Short, & Skarbinski, 2014). Women may be more likely than men to discontinue antiretroviral treatment (ART) use and a better understanding of barriers to staying on ART is needed to improve viral suppression rates (Beer et al., 2014).

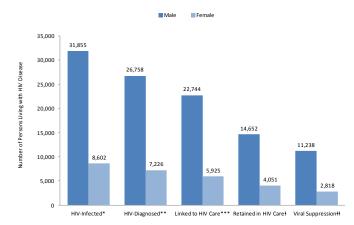


Figure 2. Engagement in HIV Care for PLWHA ≥13 Years by Sex, Illinois, 2013

*In 2013, ~16% of HIV+ individuals were unaware of their status **Received HIV diagnosis through 12/31/12 and living with HIV on 12/31/13 based on HIV surveillance data reported through 1/02/15

***Based on the percentage of cases diagnosed in 2012 linked to care within 3 month of diagnosis

¹Persons who have at least one CD4 or viral load or HIV-1 genotype test are considered to be receiving HIV care ¹¹Persons whose most recent viral load test result was <=200 copies/ml between 01/01/2013 through 12/31/2013 are considered to have HIV viral suppression

Source: Illinois Department of Public Health, 2014

Table 1. HIV Care Continuum Proportions for PLWHA ≥13 Years by Sex, Illinois, 2013

	Male	Female
Linked to HIV care within 3 months of diagnosis	85%	82%
Retained in HIV care	55%	56%
Viral suppression among diagnosed in care	83%	76%
Viral suppression among diagnosed	42%	39%

Source: Illinois Department of Public Health, 2014

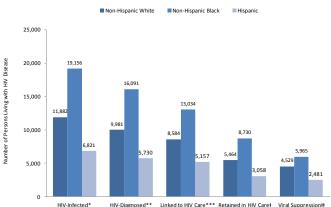
Race/Ethnicity

Rates for linkage to HIV care within three months of diagnosis varied by race/ethnicity. Hispanics were more likely to be linked to care than non-Hispanic (NH) blacks or NH whites. However, retention in care was slightly higher among NH whites compared to the other racial/ethnic groups. Rates of retention in HIV care for all racial/ethnic groups remained low at 53-55%.

Large differences in viral suppression rates among PLWHA by race/ethnicity were seen in 2013. Among NH white PLWHA, 91% of those in care achieved viral

suppression. Rates of viral suppression among those in care were lowest among NH blacks with 75% achieving viral suppression. Overall, NH blacks had the lowest overall rates of viral suppression among individuals diagnosed with HIV in Illinois. Lower rates of viral suppression may contribute to the higher rate of new diagnoses in this population (see section, "Blacks").

Figure 3. Engagement in HIV Care for PLWHA ≥13 Years by Race/Ethnicity, Illinois, 2013



HIV-Diagnosed* Linked to HIV Care*** Retained in HIV Care Viral Suppression

*In 2013, ~16% of HIV+ individuals were unaware of their status **Received HIV diagnosis through 12/31/12 and living with HIV on 12/31/13 based on HIV surveillance data reported through 1/02/15

***Based on the percentage of cases diagnosed in 2012 linked to care within 3 month of diagnosis

¹Persons who have at least one CD4 or viral load or HIV-1 genotype test are considered to be receiving HIV care [#]Persons whose most recent viral load test result was <=200 copies/ml between 01/01/2013 through 12/31/2013 are considered to have HIV viral suppression

Source: Illinois Department of Public Health, 2014

Table 2. HIV Care Continuum Proportions for PLWHA ≥13 Years by Race/Ethnicity, Illinois, 2013

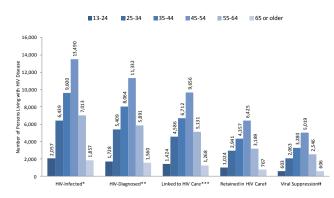
	NH White	NH Black	Hispanic
Linked to HIV care within 3 months of diagnosis	86%	81%	90%
Retained in HIV care	55%	54%	53%
Viral suppression among diagnosed in care	91%	75%	86%
Viral suppression among diagnosed	45%	37%	43%

Source: Illinois Department of Public Health, 2014

Age

Viral suppression rates among PLWHA in care increased with age with persons over ≥65 years having the highest rates of viral suppression at the end of 2013. Although young adults 13–24 years had the highest rate of retention in HIV care, this age group had the lowest rate of viral suppression. Highest rates of viral suppression occurred among adults 45–54 years where 44% of PLWHA were estimated to be virally suppressed.

Figure 4. Engagement in HIV Care for PLWHA ≥13 Years by Age, Illinois, 2013



*In 2013, ~16% of HIV+ individuals were unaware of their status **Received HIV diagnosis through 12/31/12 and living with HIV on 12/31/13 based on HIV surveillance data reported through 1/02/15

***Based on the percentage of cases diagnosed in 2012 linked to care within 3 month of diagnosis

¹Persons who have at least one CD4 or viral load or HIV-1 genotype test are considered to be receiving HIV care ^{II}Persons whose most recent viral load test result was <=200 copies/ml between 01/01/2013 through 12/31/2013 are considered to have HIV viral suppression

Source: Illinois Department of Public Health, 2014

Table 3. HIV Care Continuum Proportions for PLWHA ≥13 Years by Age, Illinois, 2013

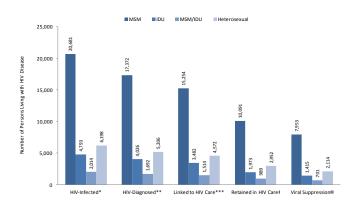
	13-24	25-34	35-44	45-54	55-64	≥65
Linked to HIV care within 3 months of diagnosis	82%	85%	83%	85%	87%	81%
Retained in HIV care	59%	54%	54%	57%	54%	49%
Viral suppression among diagnosed in care	61%	74%	81%	84%	88%	90%
Viral suppression among diagnosed	35%	38%	41%	44%	43%	39%

Source: Illinois Department of Public Health, 2014

Risk/Transmission Group

Men who have sex with men (MSM) had the highest rates of viral suppression among those diagnosed and in care. Individuals who acquired HIV through injection drug use had the lowest rates of viral suppression among those diagnosed and in care with overall viral suppression at 35% compared to 46% among MSM. Chemically dependent individuals may face a variety of medical, psychological, and social problems that can negatively affect their ability to adhere to ART, resulting in lower rates of viral suppression (Bruce and Altice, 2007).

Figure 5. Engagement in HIV Care for PLWHA ≥13 Years by Transmission Risk Category, Illinois, 2013



Source: Illinois Department of Public Health, 2014

Table 4. HIV Care Continuum Proportions for PLWHA ≥13 Years by Transmission Risk Category, Illinois, 2013

	MSM	IDU	MSM/IDU	Heterosexual
Linked to HIV care within 3 months of diagnosis	88%	86%	89%	88%
Retained in HIV care	58%	49%	58%	57%
Viral suppression among diagnosed in care	85%	77%	76%	77%
Viral suppression among diagnosed	46%	35%	41%	41%

Source: Illinois Department of Public Health, 2014

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