Late diagnosis in Virginia is defined as a person who is diagnosed with AIDS at or within one year of their first HIV diagnosis. Concerns for both the individual and the public are associated with late diagnosis of HIV. Persons diagnosed late have a higher risk of illness, higher health costs, and weakened responses to antiretroviral therapy (ART).\(^1\)\(^2\) Late diagnoses show how important access to HIV testing is in order to increase timely diagnosis and early engagement in HIV medical care.\(^3\)\(^4\)

The Centers for Disease Control and Prevention (CDC) report that 1 in 8 HIV-infected people in the United States (US) do not know that they have HIV. Many are tested late, usually as a result of illness. Late testing represents missed opportunities for HIV prevention and treatment. Research shows that there may be demographic differences among people diagnosed late with HIV. Late diagnosis may also affect retention in care and viral suppression among persons living with HIV (PLWH).\(^3\) The CDC reports that 24% of the 41,661 new HIV diagnoses in the US in 2013 were diagnosed with AIDS at the same time.\(^4\)

**Figure 1: Late Diagnosis of HIV/AIDS in Virginia, 2010-2014**

- In the US, 1 in 8 HIV-positive people do not know that they have HIV.

LATE DIAGNOSES IN VIRGINIA

To categorize late diagnosis, one year of follow-up from the first HIV diagnosis is needed to determine if a person is also diagnosed with AIDS in that year. The most recent year of data available in Virginia is 2014. Of the 4,790 new HIV cases in Virginia from 2010-2014, 29% were late diagnoses. Over time, late diagnoses in Virginia have decreased (Figure 1). In 2014, 24% of the 924 new HIV diagnoses were considered late. Of the new HIV cases in 2014, 28% of females and 24% of males were late diagnoses.

**Figure 2: Late Diagnosis among Newly Diagnosed HIV Disease Cases, by Sex and Race/Ethnicity, 2014**

Over 29% of new HIV diagnoses among Hispanic/Latino persons were considered late in 2014. Among both males and females in 2014, Hispanics/Latinos had the highest percent of late diagnoses by race and gender (Figure 3). In 2014, 24% of White and 23% of Black persons were late diagnoses. White females and Black males had the lowest percent of late diagnoses among race and gender groups. Hispanic/Latino females were the only demographic group more likely to be diagnosed late than not late.
Late diagnoses due to injection drug use (IDU) decreased from 64% in 2010 to 18% in 2014. Among newly diagnosed MSM cases, late diagnosis was stable over time (Figure 2). Higher rates of late diagnosis were seen in older people than younger people from 2010 to 2014. Nearly 45% of those ages 45 and older at HIV diagnosis were considered diagnosed late. Overall, around 13% of new HIV diagnoses among youth (ages 13-24) were considered late.

Virginia is divided into five health regions: Central, Eastern, Northern, Northwest, and Southwest. Among the new HIV diagnoses in 2014, late diagnosis was highest in the Northern region at 33%, followed by the Northwest at 26%. Only 18% of persons in the Central region were diagnosed late in 2014.

HIV CARE CONTINUUM

The HIV Care Continuum (HCC) is a framework for assessing health outcomes among PLWH (Figure 4). Persons diagnosed with HIV late had better overall HCC outcomes than non-late diagnoses, except for linkage. Of new HIV diagnoses in 2013, 60% of late diagnoses and 64% of non-late diagnoses were linked to care in 30 days. Figure 5 compares retention and viral suppression over time of late and non-late new HIV diagnoses in 2013.5 Late diagnoses had higher retention and viral suppression outcomes in 2014 and 2015 than non-late diagnoses.

Better health outcomes were seen in persons diagnosed late, despite evidence of an increased risk of illness and death. This could be due to more comprehensive treatment since the disease has advanced, and better adherence to ART in response to HIV-related symptoms.2

REFERENCES