

# Late HIV Diagnosis, Georgia, 2011-12

## Background

Georgia ranks fifth in the nation in number of new HIV diagnoses. Almost one third (30%) of new HIV diagnoses in Georgia in 2012 were diagnosed late in their disease course and already had developed Stage 3 disease (AIDS). This fact sheet describes characteristics of Georgia adults and adolescents with late HIV diagnoses defined as a CD4 count of <200 at or within 12 months of diagnosis.

Late HIV diagnosis is associated with shorter lifespan compared to those with earlier diagnosis.

It is estimated that persons with late HIV diagnosis have been living 8-10 years with HIV, but have been undiagnosed and untreated.

Persons with late HIV diagnosis have twice the lifetime risk of transmitting HIV to others compared to those diagnosed early.<sup>1</sup>

### What are the costs of late HIV diagnosis?

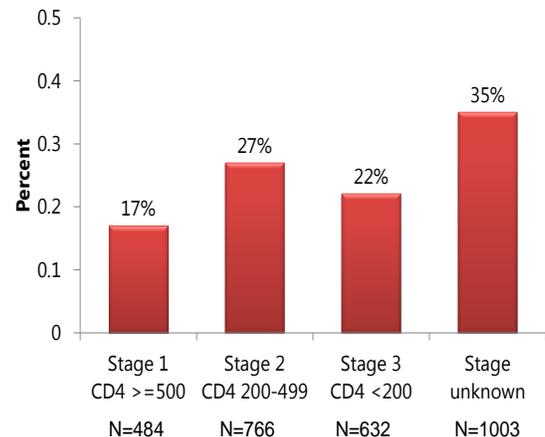
Lifetime direct medical costs and productivity losses for new HIV infections were estimated in 2002 as almost \$1 million per person.<sup>2</sup>

The costs are likely much higher today largely because of increased medical expenses.

### The biggest cost, however, is in terms of new infections transmitted.

Each person with late HIV diagnosis has an average lifetime risk of transmitted HIV to 1.4 others.<sup>1</sup> Depending on risk behaviors, number of partners, concurrent STDs, lifetime transmission risk can be even higher. Further, persons unaware of their HIV diagnosis have a higher annual rate of sexual transmission on HIV (9% vs. 0.4% per person per year).<sup>1</sup>

Stage of disease by earliest CD4 count within 12 months of HIV diagnosis, adults and adolescents, Georgia, 2011



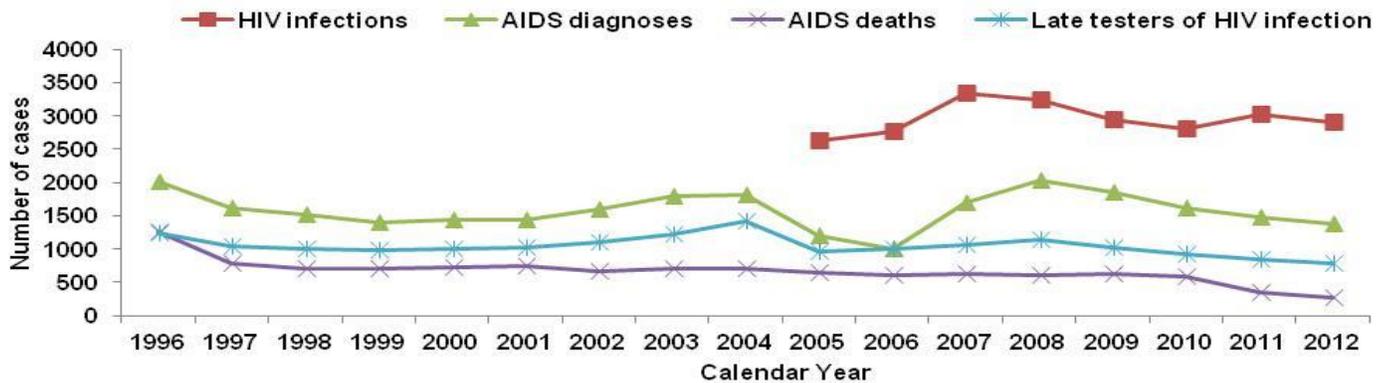
- More than one third (35%) of people diagnosed with HIV in 2011 in Georgia did not have a CD4 count within 12 months of diagnosis
- At least 22% of new HIV diagnoses in Georgia during 2011 had Stage 3 disease (AIDS) with first CD4 after diagnosis <200 cells/ml
- Almost half (49%) of Georgians diagnosed with HIV in 2011 were Stage 2 or 3 at diagnosis
- Interventions to improve early diagnosis of HIV are critical to improve clinical outcomes for individuals living with HIV but also to prevent ongoing transmission.

**The most cost-effective intervention for HIV prevention is early diagnosis and treatment of HIV positives**



# Late HIV Diagnosis, Georgia, 2011-2012

**Figure 3: New diagnoses of HIV infection, Stage 3 AIDS cases, AIDS deaths and late testers\* of HIV infection, Georgia, 1996 to 2012**



\*Late testers = persons diagnosed with AIDS within one year of HIV diagnosis

## Trends in Late HIV Diagnosis

Overall, the number of persons with late HIV diagnosis has decreased since 2008 in Georgia, but there are marked disparities among sub-populations in the proportion of late HIV diagnoses

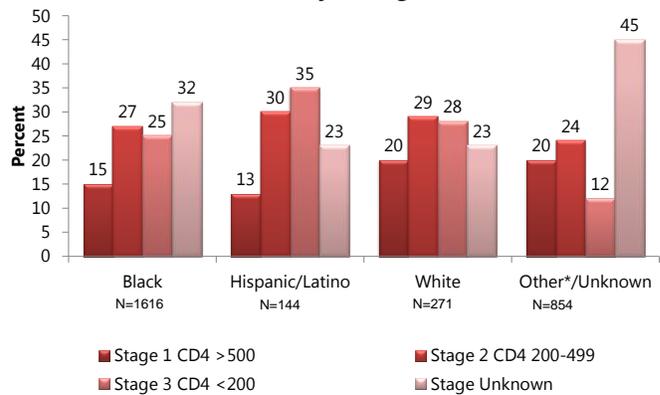
At least 35% of Hispanic/Latinos diagnosed in Georgia in 2011 had Stage 3 disease (AIDS) at diagnosis. An additional 23% of Hispanic/Latinos had no CD4 measured. Thus, the percent with late diagnosis may be even greater than 35%.

Almost half (46%) of males in the injection drug use (IDU) and heterosexual (HET) transmission categories were diagnosed late in Georgia in 2011.

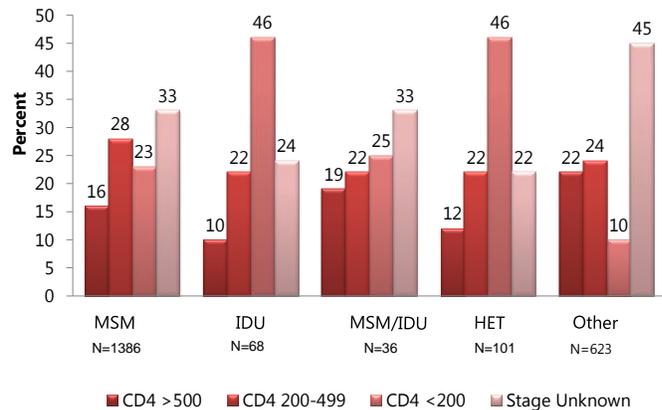
Even among men who have sex with men (MSM) and MSM/IDU, groups for whom annual HIV testing is recommended, almost a fourth of those with HIV had late diagnoses (23% of MSM, 25% of MSM/IDU).

Among females, at least 33% in the IDU and 28% in the HET transmission categories had late diagnoses (data not shown graphically).

**Stage of disease by earliest CD4 count within 12 months of HIV diagnosis, adults and adolescents, by race/ethnicity, Georgia 2011**



**Stage of disease by earliest CD4 count within 12 months of HIV diagnosis, adult and adolescent males, by transmission category\*, Georgia, 2011**



**KEY** MSM= Male to male sexual contact; IDU= Injection Drug Use; HET = Heterosexual contact with a person known to have, or be at high risk for, HIV infection  
Other/Unknown = includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

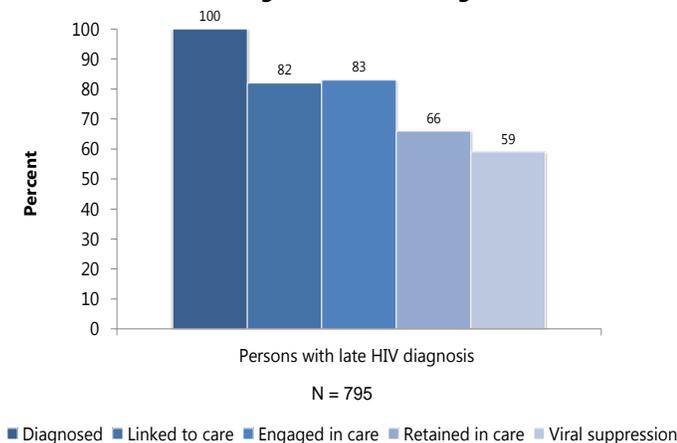
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## Late Diagnosis HIV Care Continuum

The HIV Care Continuum measures the proportion of people linked to care within 3 months of diagnosis, engaged in care with at least one CD4 or viral load (VL) measured in the next 12 months, retained in care with at least 2 CD4 or VL at least 3 months apart in 12 months, and with viral suppression with last VL <200 copies/ml.

Although persons with late HIV diagnosis have Stage 3 disease (AIDS) and may be symptomatic or quite ill, only 82% were linked to care within 3 months, 83% engaged in care over the subsequent 12 months, 66% retained in care and 59% virally suppressed in 2012 in Georgia.

Adults and adolescents with late HIV diagnosis, 2011, Georgia



## Technical Notes

- Cases with new diagnosis of HIV infection are based on residence at diagnosis in the state of Georgia
- Numbers are based on data entered into the Enhanced HIV/AIDS Reporting Surveillance (eHARS) database as of June 30, 2013
- Cases with missing information in required fields such as date of birth, race/ethnicity and gender were also included in the analyses
- Multiple imputation (MI), a statistical approach, was used to replace each missing transmission category with a set of plausible values that represent uncertainty about the true but missing value. MI methods were not applied to pediatric cases (less than 13 years) in Georgia

## Surveillance

- DPH began collecting name based data on AIDS cases in the early 1980s. Name based reporting of HIV (not AIDS) to DPH was mandated by Georgia law beginning on December 31, 2003
- Complete and timely reporting of HIV infections by clinical providers and laboratories is critical for monitoring the epidemic and ensuring adequate funding for prevention and care services in Georgia
- Georgia law (O.C.G.A § 31-22-9.2) requires that all diagnosed HIV infections be reported to the department of public health within seven days of diagnosis
- Race, sex and especially transmission category information are missing for a large number of HIV case report forms submitted in Georgia
- In 2012, 72% of the total number of new cases of HIV infection had no information reported about their transmission category. Incomplete reporting leads to under-estimation of the impact of HIV in Georgia and limits funding for services in HIV populations

## References

1. Farnham, P.G., et al, Updates of Lifetime Costs of Care and Quality-of-Life Estimates for HIV-infected Persons in the United States: Late Versus Early Diagnosis and Entry Into Care, *J Acquir Immune Defic Syndr*, Vo. 64, No. 2, Oct 1, 2013.
2. Hutchinson, A.B., et al. The Economic Burden of HIV in the United States in the Era of Highly Active Antiretroviral Therapy, *J Acquir Immune Defic Syndr*, Vol 43, No. 4, December 1, 2006.

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## **Reporting**

- All health care providers diagnosing and/or providing care to a patient with HIV are obligated by Georgia law to report HIV infection using the HIV/AIDS Case Report Form.
- Case report forms should be completed within seven (7) days of diagnosing a patient with HIV and/or AIDS or within seven (7) days of assuming care of an HIV positive patient who is new to the provider, regardless of whether the patient has previously received care elsewhere.
- **Adult and Pediatric case report forms are available at**  
<http://dph.georgia.gov/reporting-forms-data-requests>
- **For more questions on HIV case reporting in Georgia please contact the HIV Surveillance Coordinator at**  
**1-800-827-9769**

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