Fact Sheet: HIV Surveillance, Georgia, 2011

Human immunodeficiency virus (HIV) can lead to acquired immunodeficiency syndrome (AIDS). Unlike some other viruses, the human body cannot develop an effective immune response to HIV. Once a person has been infected with HIV; there is treatment but no cure. HIV damages a person's immune system by destroying specific immune system cells, called CD4 cells. Based on the CD4 count (cells/ml), HIV infection is classified as stage 1 (CD4 count \geq 500), stage 2 (200-499) and stage 3, AIDS (<200). In Stage 3, AIDS, the individual is susceptible to infections and tumors. HIV is spread by contact with infected bodily fluids such as blood, semen, vaginal fluids, and breast milk. The HIV/AIDS Epidemiology Section, Georgia Department of Public Health (DPH) is authorized under Georgia law (O.C.G.A. §31-12-1) to conduct notifiable disease surveillance for HIV (not AIDS) and AIDS [§]. HIV infection includes both HIV (not AIDS) and AIDS see the stage of disease.

Persons Living with HIV infection and stage 3 (AIDS), Georgia, through December 31, 2011

- Georgia was ranked sixth highest in the nation for total number of adults and adolescents living with HIV infection in 2010
- As of December 31, 2011, the total number of persons living with HIV infection in Georgia was 47,754(Table 1)
- This represents an increase in HIV prevalence of 45% from 2005 (Figure 2)
- Of these, 45% (21,645) had HIV (not AIDS) and 55 % (26,209) had Stage 3 (AIDS) (Table 1)
- Among the 18 Public Health Districts of Georgia, Fulton and DeKalb had the highest numbers and rates of persons living with HIV infection and stage 3 disease, or AIDS through 2011 (Table 1)
- Sixty-four percent (30,652) of persons living HIV infection resided in the Atlanta, Metropolitan Statistical Area (MSA) (Figure 1)

Figure 1: Persons living with HIV infection Atlanta MSA vs. Georgia non-MSA, through December 31, 2011



Atlanta MSA: 30,652 Georgia non-MSA: 17,102 Total: 47,754

Atlanta MSA Counties:

Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Newton, Paulding, Pickens, Pike, Rockdale, Spalding,

Table 1: Number and rates of persons living with HIV infection and stage 3 (AIDS), Georgia, through December 31, 2011				
	HIV Infection		Stage 3 (AIDS)	
Public Health Districts	No.	Crude Rate*	No.	Crude Rate
1-1 Northwest (Rome)	768	120	446	70
1-2 North Georgia (Dalton)	483	109	266	60
2 North (Gainesville)	564	90	302	48
3-1 Cobb-Douglas	2,782	335	1,483	178
3-2 Fulton	13,890	1,463	7,962	838
3-3 Clayton (Jonesboro)	1,678	642	906	346
3-4 East Metro	2,758	273	1,459	144
3-5 DeKalb	7,280	1,040	3,978	568
4 LaGrange	1,447	179	823	102
5-1 South Central (Dublin)	608	395	294	191
5-2 North Central (Macon)	1,739	332	953	182
6 East Central (Augusta)	2,011	433	1,143	246
7 West Central (Columbus)	1,516	405	730	195
8-1 South (Valdosta)	945	368	464	181
8-2 Southwest (Albany)	1,276	358	706	198
9-1 Coastal (Savannah)	2,404	414	1,393	240
9-2 Southeast (Waycross)	1,031	280	566	154
10 Northeast (Athens)	714	154	413	89
Unknown Health District	3,860		1,822	
Total	47,754	487	26,109	266
* Crude rates are per 100,000 population				



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<u>New Diagnoses of HIV Infection and stage 3 (AIDS),</u> <u>Georgia, 2011</u>

- Georgia was ranked fourth highest in the nation for the total number of new diagnoses of HIV infection for 2011¹
- The number of new diagnoses of HIV infection in Georgia during 2011 (3,023) increased by 7.5% from 2010 (2,812) (Figure 3)
- The number of annual AIDS diagnoses continues to decrease steadily since 2008, including an 8.7% decrease from 2010 [1,620] to 2011 [1,479] (Figure 3)
- The number of new diagnoses of AIDS in Georgia decreased to its lowest point in 2006 then sharply increased during 2007-2008. This may reflect decreased reporting of CD4 counts by laboratories during 2005-2006. The 14% increase from 2006 to 2008 in the number of apparent late testers of HIV infection (i.e. those diagnosed with AIDS within one year of HIV diagnosis) could reflect a change in HIV testing practices or represent missing laboratory data in 2005-2006 (Figure 3)
- In 2011 in Georgia, late testers accounted for 58% of new AIDS diagnoses. Late testing results in missed opportunities for prevention and treatment of HIV infection and emphasizes the need for earlier testing, linkage and retention in care of persons living with HIV infection in Georgia (Figure 3)
- Since the advent of highly active antiretroviral therapy in the mid nineties, deaths due to AIDS declined by 53% between 1995 (1,553 deaths) and 2000 (723 deaths) in Georgia. There were 343 deaths due to AIDS in Georgia in 2011 (Figure 3).

- Seventy-seven percent (2,325) of those diagnosed with HIV infection in Georgia in 2011 were male and 23% (681) were female. Seventeen new cases had no information on gender and were excluded in Figures 5, 6
- Fifty-six percent (1,699) of new diagnoses of HIV infection in Georgia during 2011 were among Black/Non-Hispanics. Twenty-seven percent (807) of new HIV infections lacked information on race/ethnicity (Figure 4)
- The highest number of new HIV infections in Georgia during 2011 occurred among persons 30-39 and 40-49 years of age for both males and females (Figure 5)
- In 2011, among male adults and adolescents, 64% (1,471) of HIV infections and 74% (789) of Stage 3 of HIV disease or AIDS cases were seen among men who have sex with men (Figures 6, 7)
- Among female adults and adolescents diagnosed with HIV in 2011, heterosexual contact accounted for 63% (427) of new HIV infections and 76% (296) of new AIDS diagnoses in Georgia (Figures 6, 7). Cases with missing date of birth and gender were excluded from Figures 6 and 7



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Figure 6: New diagnoses of HIV infection by sex and transmission category among adults and adolescents (13 years and older), Georgia, 2011





<u>KEY</u> 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

Technical Notes

- Persons living with HIV infection are based on current residence in the state of Georgia regardless of state of diagnosis. Cases with new diagnoses of HIV infection are based on residence at diagnosis in the state of Georgia.
- Crude rates measure the overall frequency which has not been adjusted for significant factors (e.g. age, sex, race/ethnicity etc) which might have influenced the rate.
- Population denominators used to compute the rates for Public Health Districts and state of Georgia were based on the 2011 population estimates from the Georgia DPH,Office of Health Indicators and Planning
- Numbers are based on data entered into the enhanced HIV/AIDS Reporting System (eHARS) as of June 30, 2013.
- Data are not adjusted for reporting delays and include incarcerated cases that may artificially inflate the numbers in a given location.
- Cases with missing information for required fields such date of birth, race/ethnicity, and gender were included in the analysis.
- Multiple imputation (MI), a statistical approach, was used to replace each missing transmission category with a set of plausible values that represent the uncertainty about the true, but missing value. MI methods_were not applied to pediatric cases (less than 13 years) in Georgia

<u>References</u>

 Centers for Disease Control and Prevention. HIV Surveillance Report, 2011; vol. 23. <u>http://ww.cdc.gov/hiv /topics/surveillance/reports/.</u> <u>Published February 2013</u>. Accessed [August 2013]

§Surveillance

- Georgia DPH began collecting name based data on AIDS cases in the early 1980's. 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 health care providers and laboratories is critical for monitoring the epidemic and ensuring adequate funding for prevention and care services in Georgia.
- Race, sex and especially transmission category data are missing on a large number of HIV case report forms submitted to DPH.
- In 2011, 69% of new cases with HIV infection among adults and adolescents had no information on their transmission category. Incomplete reporting leads to under-estimation of the impact of HIV in Georgia and limits funding for services in HIV populations.

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Reporting

- All health care providers diagnosing and/or providing care to a patient with HIV are required by Georgia law (O.C.G.A. §31-12-1) 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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This report was prepared by Deepali Rane, MBBS, MPH; Jane Kelly, MD; Cherie Drenzek, DVM, MS.



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