

District of Columbia Department of Health HIV/AIDS, Hepatitis, STD, and TB Administration (HAHSTA)

# Annual 2011



Vincent C. Gray, Mayor District of Columbia GOVERNMENT OF THE DISTRICT OF COLUMBIA





## **Government of the District of Columbia**

### **Department of Health**

# ANNUAL 2011

HIV/AIDS, Hepatitis, STD, and TB Epidemiology in the District of Columbia





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#### **Executive Summary**

This report heralds a new era in reporting on HIV, STDs, Hepatitis and Tuberculosis in the District of Columbia. Over the past five years, the DC Department of Health has reported for the first time, HIV cases, hepatitis cases, and cases with co-infections, and prepared the first integrated epidemiology report on HIV, STDs, hepatitis and TB. During that period of time, the Department of Health's HIV/AIDS, Hepatitis, STD and TB Administration (HAHSTA) worked on and met relevant standards and requirements of the U.S. Centers for Disease Control and Prevention (CDC) by improving the method and quality of its surveillance data collection. This report provides a more accurate snapshot of HIV, STDs, Hepatitis and TB in the District than previous reports.

The major improvements in this year's report are: an adjusted number of total HIV cases in the District, made possible by the completed transition from code-based to name-based reporting. The adjusted number is more accurate as a result of eliminating duplications between code-based and name-based cases, accounting for cases originally diagnosed in other locations, and incorporating a review of national death registries. This new adjusted number of HIV cases and the change in the District's population from the 2010 census slightly lowers the percentage of persons in DC with HIV. This report also uses the term "HIV" for all cases which aligns with CDC's current practice to use HIV to apply to all cases, regardless of progression to AIDS in those diagnosed with HIV.

In this report, HAHSTA reports for the first time since 2007, cases of persons with HIV only (not AIDS) as well as viral load data among newly diagnosed cases of HIV. This year's report also introduces a new analysis of persons diagnosed with multiple conditions – known as a syndemic or combination of epidemics – in the District. These new features provide a more accurate number of new HIV cases, present a better understanding of the health outcomes in persons living with HIV and underscore the importance of managing and preventing multiple infections.

In 2012, the District of Columbia hosts AIDS 2012, the 19<sup>th</sup> International AIDS Conference, which is returning to the United States after a hiatus of 20 years. It is timely that this report provides the most up-to-date profile on the extent of the HIV epidemic in the nation's capital and the breadth of other epidemics within the District.

The District continues to be impacted by severe epidemics. The update of the District epidemics in the year 2010 is:

- 14,465 residents of the District of Columbia or 2.7% of the population is living with HIV. The 2.7% exceeds the World Health Organization definition of 1% as a generalized epidemic.
- All race/ethnicities with HIV exceed 1% of their respective populations, with African Americans disproportionately impacted at 4.3%.
- Men who have sex with men and heterosexual contact are the two leading transmission modes of new HIV cases.
- Among STDs, there were 5,592 new cases of chlamydia, 2,104 new cases of gonorrhea and 134 new cases of primary and secondary syphilis reported.
- There were 3,127 cases of hepatitis B and 13,236 cases of hepatitis C reported diagnosed between 2006 and 2010.
- 43 new cases of TB were reported.

The District continues to make progress in decreasing new cases across epidemics and in improving health outcomes.

#### **Reducing New Infections**

- The number of newly diagnosed HIV cases in the District decreased slightly from 853 cases in 2009 to 835 cases in 2010, however there has been a 24% reduction from 1,103 cases in 2006.
- There have been no children born with HIV in DC since 2009.
- There was a 72% decrease in the number of newly diagnosed HIV cases attributable to injection drug use from 150 in 2007 prior to the scale up of DC's needle exchange program to 42 in 2010.
- STD rates dropped between 2009 and 2010: chlamydia cases by 15% from 6,568 in 2009 to 5,592 in 2010, gonorrhea cases by 18% from 2,567 in 2009 to 2,104 to 2010 and primary and secondary syphilis by 17% from 162 to 134.

#### **Increasing Access to Care and Improving Health Outcomes**

- The number of new AIDS cases decreased by 32% from 700 in 2006 to 477 in 2010.
- Between 2005 and 2009, 4,879 HIV cases were diagnosed. Approximately 89% of diagnosed cases (4,347) were linked to HIV medical care by the end of 2010. Of those linked to care, 3,729 had their first appointments with nearly 60% receiving care. Of diagnosed cases, 2,730 HIV cases or 60% achieved viral suppression. The challenge remains to increase the number of persons who stay suppressed. Overall, less than one-third of diagnosed cases maintained viral load suppression.
- Average CD4 count at diagnosis jumped from 355 in 2009 to 391 in 2010. Overall, the average count has nearly doubled from 191 in 2006.
- The number of deaths among persons with HIV decreased by almost half from 399 in 2006 to 207 in 2010.

#### National HIV/AIDS Strategy

The District of Columbia continues to embrace and follow the direction of the National HIV/AIDS Strategy. This report provides progress on how DC is meeting the National Strategy goals and objectives. The following is a chart on the nine specific objectives and their targets.



Objective	National Target 2015	DC 2009	DC 2010	DC 2015 Target	Data Source
Reducing Ne	w HIV Infections				
Objective 1	Reduce the number of new infections by 25%	853 new HIV cases	835 new HIV cases	640 new cases	DC plans to release HIV incidence estimates in 2013. Interim newly diagnosed HIV cases used to approximate incidence or new infections.
Objective 2	Reduce the HIV transmission rate, which is a measure of annual transmissions in relation to the number of people living with HIV, by 30%	5.1 persons per 100 people living with HIV	5.8 persons per 100 people living with HIV	3.6 persons per 100 people living with HIV	Estimate based on newly diagnosed HIV cases.
Objective 3	Increase the percentage of people living with HIV who know their serostatus from 79% to 90%.	Heterosexual-1 (2007):53% MSM-2 (2008):59% IDU-2 (2009):70%	Heterosexual-2 (2010):79% MSM-3* IDU-3*	90%	National HIV Behavioral Surveillance Data
	ccess to Care and Improving He				
Objective 4	Increase the proportion of newly diagnosed patients linked to clinical care within 3 months of their HIV diagnosis from 65% to 85%	70%	76%	85%	Name-based HIV surveillance and laboratory data
Objective 5	Increase the proportion of Ryan White HIV Program clients who are in continuous care (at least 2 visits for routine HIV medical care in 12 months at 3 months apart) from 73% to 80%	23%	35%	80%	Name-based HIV surveillance and laboratory data. Continuous care is defined as having HIV- related lab test in at least 2 visits to an HIV medical provider 10- 14 weeks apart.
Objective 6	Increase the number of Ryan White clients with permanent housing from 82% to 86%	70%	69%	86%	Ryan White Program/HOPWA
Reducing HI	V-Related Health Disparities	<u> </u>			I
Objective 7	Increase the proportion of HIV diagnosed gay and bisexual men with undetectable viral load by 20%	28%	39%	33%	Name-based HIV surveillance and laboratory data
Objective 8	Increase the proportion of HIV diagnosed Blacks with undetectable viral load by 20%	25%	38%	29%	Name-based HIV surveillance and laboratory data
Objective 9	Increase the proportion of HIV diagnosed Hispanics with undetectable viral load by 20%	32%	41%	38%	Name-based HIV surveillance and laboratory data

#### **Scaling Up Success**

The District Government and its community partners continue to scale up accomplishments in reducing the impact of HIV, STDs, hepatitis and TB on residents of Washington, DC. The most recent achievements by the District include:

#### **Reducing New Infections**

- New record of 122,000 publicly supported HIV tests in 2011, up from 110,000 in 2010 and triple the 43,000 tests in 2007.
- Distributed more than 5 million male and female condoms in 2011, a 10-fold increase from 2007.
- Removed more than 340,000 needles from the street in 2011, an increase from 317,000 in 2010, through the DC needle exchange programs despite one program closing during the year.
- Provided free STD testing for 4,300 youth ages 15 to 19 years old through the school based STD screening and community screening programs in 2011, up from 3,000 in 2010.
- Launched first in the nation HIV testing program at Department of Human Service Social Service center through a public-private partnership. More than 3,000 persons have been tested.

#### Improving Access to Medical Care and Health Outcomes

- Maintained "Treatment on Demand" with universal access to HIV medical care with no waiting lists for treatment and medications.
- The Red Carpet Entry Program linked 70% of newly diagnosed persons into care within 72 hours.

#### Improving Coordination and Integration of Services

- Mayor's Commission on HIV/AIDS actions:
  - $\circ\,$  Letter sent to more than 4,000 doctors in DC highlighting the District's policy of offering routine HIV tests to all adults and adolescents.
  - Ongoing collaboration between DOH and the Department of Insurance, Securities and Banking to enforce District law on insurance reimbursement of HIV testing in emergency rooms.
- Under the national Program Collaboration and Service Integration (PCSI) initiative, HAHSTA creates crossbureau teams to assess program activities and align goals and objectives with National HIV/AIDS Strategy.

#### Next Steps: One Healthy City

This new era report provides the District's leadership and community the vital data necessary to drive a modern response to the city's multiple epidemics. The District continues to build on its core strategies of testing to find undiagnosed residents, immediate linkage into care and treatment to promote healthy outcomes and large-scale strategies to prevent new infections. The next couple of years offer tremendous opportunity and challenge to the public health field. The Affordable Care Act has set in motion changes in the country's health care system to ensure secure, stable, affordable and expanded health insurance. There have been advances in scientific findings that are redefining strategies of treatment and prevention. And, there is momentum in the



direction toward creation of patient-centered medical homes to provide comprehensive care for persons living with HIV and multiple conditions. The Mayor's Commission on HIV/AIDS is developing a framework for this new public health system. HAHSTA is moving forward with developing program models for patient-centered medical homes, plans to enhance its STD and TB programs by leveraging new resources, and new efficiencies through greater program collaboration and service integration. Community engagement and public official leadership are crucial to maximize these opportunities in this new public health era. By uniting government, community partners, residents, medical providers, academia, experts, and the private sector, there can truly be one city for all to live long and healthy lives.

#### **Section I. Understanding Surveillance Data**

In order to better understand surveillance data it is important to understand a few key terms first. **Newly diagnosed, or new diagnoses,** indicates cases that were diagnosed with disease in a given time period. **Incidence** is the number of *new infections* of a disease in a defined population during a specific period of time. It is important to understand the difference between incidence and 'newly diagnosed'. The number of new diagnoses does not necessarily reflect trends in incidence because some new cases of HIV will have been infected recently while others will have been infected sometime in the past at the time of diagnosis. Considering new cases alone also does not consider changes in numerators, the population at risk over the time period.

**Prevalence** is the total number of people in a population affected with a particular disease or condition at a given time. Prevalence can be thought of as a snapshot of all existing cases of a disease or condition at a specified time. The **prevalence rate** is the total or cumulative number of cases of a disease per unit of population during a defined period of time, such as the rate of AIDS cases per 100,000 population diagnosed in the District of Columbia through December 31, 2010.

Throughout this report, HAHSTA provides information about new diagnoses and prevalent, or living, cases of HIV, viral hepatitis, and tuberculosis. HAHSTA does not include incidence estimates for these diseases in this report because accurate estimation procedures for incidence for small populations like the District of Columbia have not yet been developed.

#### **Understanding HIV Surveillance**

The District of Columbia Municipal Code (22 DCMR 206) mandates reporting of all HIV and AIDS diagnoses. Under the old definition, an HIV diagnosis or case refers to a person with HIV infection who has not progressed to AIDS. An AIDS case refers to a person with a diagnosis of HIV infection and a later diagnosis of AIDS, or a person with a concurrent (that is at the same time) diagnosis of HIV infection and AIDS. AIDS is defined by CD4 counts less than 200 cells/µL or an AIDS defining opportunistic infection. Only reports of confirmed HIV and AIDS cases are accepted and anonymous tests are not reported. Reports are received from a variety of sources including hospitals, private physicians' offices, community-based organizations, clinics, and laboratories. Data on HIV and AIDS cases are currently entered into the federally issued enhanced HIV/AIDS Reporting System (eHARS) and deidentified case information is shared with CDC monthly. CDC uses these data to prepare national surveillance reports.

Please note that this report reflects a change in terminology. Cases of HIV infections alone and AIDS cases are both considered as HIV cases in this report. Tables that include HIV only cases, or HIV, not AIDS, cases are referred to as "HIV (not AIDS)." This change is consistent with the Centers for Disease Control HIV Surveillance Reports.

#### **Understanding our HIV Prevalence Estimate**

There were 835 newly diagnosed HIV cases reported in 2010. However the total number of living HIV cases in the District is less than the number reported in the 2010 Annual Epidemiology Report by 2,256 cases. In addition, the prevalence estimate dropped from 3.2% in 2009 to 2.7% in 2010. The reasons for this difference include the following:

1. The transition to name-based HIV reporting is now complete. HIV (not AIDS) surveillance began as codebased reporting in 2001. A unique identifier was generated for each HIV report and was a combination of the person's last name, date of birth, sex, and social security number. The District's code-based reporting system had a number of limitations. The code created to report HIV cases was not evaluated for the uniqueness of the code elements or redundancy and the reported data were not complete. As a result, there was a potential for duplicative reports both within the code-based HIV reporting system and between

the individual HIV and AIDS reporting systems. Effective November 17, 2006, as per CDC requirements, the District began implementing HIV reporting by name. This required both laboratories and providers to report all HIV cases by name to DOH.

The CDC estimates that fully maturing a name-based system will take jurisdictions approximately five years; the District's system fully matured in November 2011. As expected and described in the 2010 Annual Epidemiology Report, the prevalence estimate dropped because it does not include 2,041 code-based HIV cases in the overall number of living cases. As a result of new reporting standards, the only District will only cite name-based cases in future reports and for data purposes.

- 2. Completeness of death data has improved since the last report. HAHSTA has matched HIV cases reported with the Social Security Death files as well as the National Death Index. While HAHSTA routinely receives information regarding District of Columbia residents that have died, these national death matches provide information about persons diagnosed in the District that have moved and subsequently died elsewhere. Executing such matches reduces the prevalence and increases the accuracy of the report.
- 3. CDC routinely notifies HAHSTA if an HIV case appears to be the same person reported in another state or jurisdiction. CDC makes this determination based on the 'soundex' (a phonetic algorithm for indexing names) of a case's name, date of birth, and sex at birth. Each case is investigated to determine if it is the same individual. If such a determination is made, the state with the earliest report date claims the case. The summary table below shows the number of times newly diagnosed cases were identified as a possible duplicate and the number and proportion of possible duplicates that were assigned to another state.

Year of HIV Diagnosis	Potential Duplicate Cases Identified	Cases Assigned to Other States	
		Ν	%
2006	712	208	29.2
2007	900	239	26.6
2008	710	192	27.0
2009	577	280	48.5
2010	410	126	30.7

4. The District of Columbia's population is changing as evidenced by the 2010 Census. Below is a table that depicts the percent change between the 2009 Census population estimates and the 2010 decennial Census. There was a 2.3% increase in the total number of persons 13 years of age and older living in the District between 2009 and 2010. This contributes to the decrease in HIV prevalence because the denominator used to calculate prevalence, i.e. total number of people living in the District, increased.

There were also substantial changes in the composition of District residents by race and ethnicity. Most notable was the 32.6% increase in the number of persons that are classified as other race. There was a 7.2% increase in the number of whites and an 8.7% increase in the number of Hispanics living in the District. The number of black residents has decreased, down 4.6% from 2009 estimates.

There was also a substantial increase (20.9%) in the number of persons living in the District that were between 20 and 29 years of age. The numbers of persons in almost all other age groups decreased.

	Estimated District Population, 2009	District Population, 2010	Percent Change
Sex	Ν	Ν	%
Male	240,044	246,885	2.8
Female	275,945	281,224	1.9
Total	515,989	528,109	2.3
<b>Race/Ethnicity</b>			
White	181,844	194,895	7.2
Black	268,212	255,758	-4.6
Hispanic	41,728	45,361	8.7
Other*	24,205	32,095	32.6
Total	515,989	528,109	2.3
Current Age			
13-19	52,695	50,106	-4.9
20-29	110,670	133,759	20.9
30-39	97,452	98,021	0.6
40-49	80,489	76,273	-5.2
50-59	73,814	71,438	-3.2
≥60	100,869	98,512	-2.3
Total	515,869	528,109	2.3

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and Unknowns

#### **Understanding STD Surveillance**

Currently, chlamydia, gonorrhea, and syphilis are the only STDs in which surveillance data is routinely collected and analyzed in the District. Local reporting laws require all clinicians and laboratories to report findings relevant to STDs – including positive test results, patients receiving STD treatment, and suspicious STD related symptoms – to the DOH.

STD morbidity reports should include the patient's name, address, and requested demographic information (sex, age, race, ethnicity, etc.); however, demographic information is often missing from these reports. The percentage of cases missing pertinent data varies depending on the disease and the variable of interest. For example, in 2010, only 3 (0.1%) cases of reported gonorrhea had "Unknown" sex but 1,905 (34.1%) cases of reported chlamydia had "Unknown" ethnicity.

Data on race and ethnicity are also reported separately and they are not mutually exclusive variables. Therefore, an individual of Hispanic and black origins could be counted as black non-Hispanic, black Hispanic, black of unknown ethnicity, Hispanic of unknown race, or possibly non-Hispanic of unknown race – depending on the completeness of information reported. For these reasons, the reported totals by demographic factors such as race and ethnicity represent minimal estimates and should be interpreted with caution.

In addition, unlike HIV surveillance, STD surveillance is based on new (incident) infections. Therefore, some reported cases may come from the same individual with multiple infections over time. Additionally, primary and secondary syphilis cases are used as a measure of disease incidence while early latent and late latent syphilis cases are a better indicator of disease prevalence but are not presented in this report.

#### Understanding Viral Hepatitis Surveillance for the District of Columbia

Viral hepatitis is a nationally and locally reportable disease. The District of Columbia municipal code (22 DCMR Chapter 2 201.5) mandates reporting of "hepatitis, infections and serum" by healthcare providers, medical institutions such as hospitals, and laboratories. Hepatitis cases are primarily reported to the DOH by laboratory reports. Cases are also identified through reports from health care providers, hospitals, clinics and reports from other health departments. In some instances, cases require additional information. This is acquired by hepatitis program investigators who contact providers and patients to obtain more complete information to classify the disease. Of note, no federal funding is currently available to support or strengthen case surveillance for viral hepatitis.

The District's hepatitis surveillance program uses a confidential name-based Viral Hepatitis Registry (VHR) which captures basic demographic data, diagnosis, and event/illness onset dates when available. In addition, supplemental information collected through the case investigation process is documented, and often includes clinical features, serologic test results, and risk factors for infection. This information is compiled and used to classify cases according to the CDC/Council of State and Territorial Epidemiologists (CSTE) and DC-specific case definitions. Locally, confirmed chronic hepatitis B or C cases are reported cases with a complete series of labs. A probable case of chronic hepatitis B or C has a combination of reported lab results but an incomplete series of results necessary to confirm a diagnosis. A suspect case of chronic hepatitis C has a single positive lab result indicative of possible chronic hepatitis C.

#### **Understanding Tuberculosis Surveillance**

In the District of Columbia, active tuberculosis (TB) is a reportable condition by both medical providers and laboratories. Medical providers must report anyone diagnosed with or who has symptoms suspicious of TB. Laboratories are required to report preliminary tests indicative of active TB as well as confirmed tests. In any given year, approximately 25-30% of initial reports of persons with suspicious clinical or laboratory findings will be ultimately verified by laboratory confirmation or clinical case definition as TB. Receiving these initial reports allows HAHSTA to begin immediate medical and epidemiological follow-up on these suspect cases. This is done to interrupt disease transmission while the person waits for final results, which could take as long as eight weeks.

#### Section II. Overview of HIV in the District of Columbia

This section provides an overview of the HIV epidemic in the District and a more detailed look at HIV with regards to demographics such as sex, race/ethnicity, and age as well as mode of transmission. Subsequent sections will also provide information on the geographic distribution of cases throughout the city.

#### Summary

The World Health Organization defines generalized epidemics as those in which the prevalence of HIV is greater than 1% in the overall population. As of December 31, 2010 there were 14,465 residents of the District of Columbia living with HIV. This accounts for approximately 2.7% of the population 13 years of age and older, indicative of a continued generalized epidemic in the District.

District residents over 40 years of age continue to be disproportionately impacted by HIV. Approximately 6.6% of residents 40-49 years of age and 5.5% of residents 50-59 years of age are living with HIV.

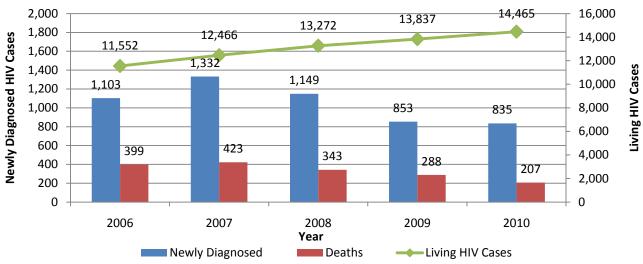
Blacks still account for the majority of living HIV cases in the District. At the end of 2010, 4.3% of black residents were living with HIV. The highest burden of disease however is among black males with 6.3% of black males living

with HIV in the District. Approximately 1.8% of Hispanic residents and 1.2% of white residents were also living with HIV.

As seen in previous years, men who have sex with men is the leading mode of transmission of all HIV cases in the District of Columbia. By the end of 2009, 38.8% of all living HIV cases among adults and adolescents were attributed to this mode of transmission. Heterosexual transmission accounted for 27.2% of living cases followed by injection drug use at 16.4%. Mode of transmission differs greatly by race/ethnicity however. While men who have sex with men is the leading mode of transmission among whites (79.0%) and Hispanics (51.8%), heterosexual contact is the leading mode of transmission among blacks (32.4%) living with HIV.

#### **Detailed Description**

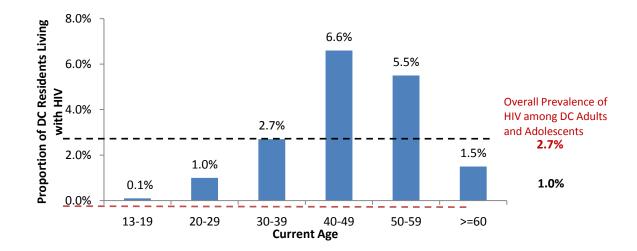
The following figures and tables contain details about the HIV and AIDS epidemics in the District of Columbia.



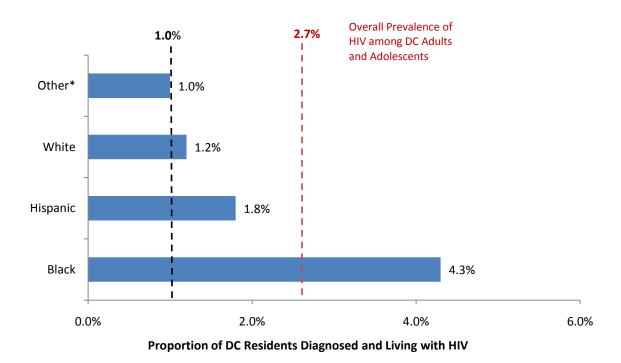


• The total number of deaths among HIV cases was 1,660 between 2006 and 2010. The number of deaths among HIV cases each year decreased by 48% during this time period.

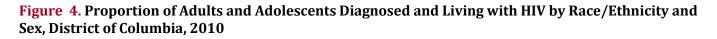
# **Figure 2.** Proportion of Adults and Adolescents Diagnosed and Living with HIV by Current Age, District of Columbia, 2010

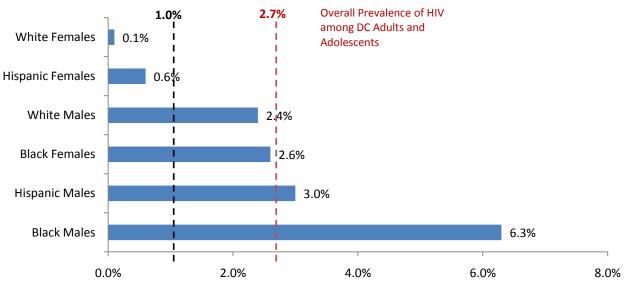


**Figure 3.** Proportion of Adults and Adolescents Diagnosed and Living with HIV by Race/Ethnicity, District of Columbia, 2010



\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and Unknowns.





Proportion of DC Residents Diagnosed and Living with HIV

Table 1. Living HIV Cases and Rates among Adults and Adolescents by Sex, Race/Ethnicity, and CurrentAge, District of Columbia, 2010

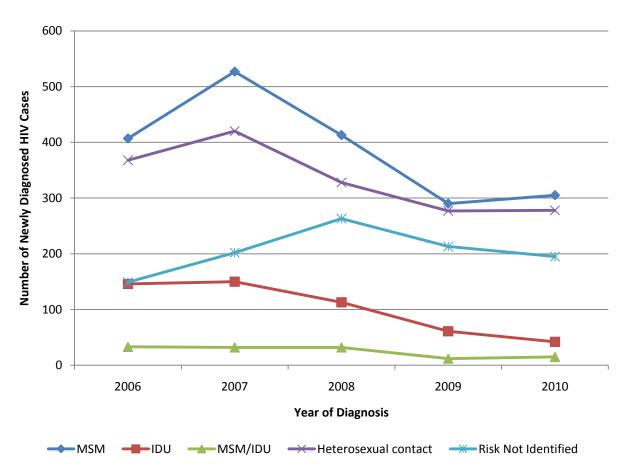
	Living HIV Ca 12/31/		DC Populatio	n, 2010	Rate per 100,000
Sex	N	%	Ν	%	
Male	10,465	72.3	246,885	46.7	4,238.8
Female	4,000	27.7	281,224	53.3	1,422.4
Total	14,465	100.0	528,109	100.0	2,739.0
Race/Ethnicity					
White	2,390	16.5	194,895	36.9	1,226.3
Black	10,907	75.4	255,758	48.4	4,264.
Hispanic	833	5.8	45,361	8.6	1,836.4
Other*	335	2.3	32,095	6.1	1,043.8
Total	14,465	100.0	528,109	100.0	2,739.
Male					
White	2,285	21.8	96,247	39.0	2,374.
Black	7,210	68.9	113,649	46.0	6,344.
Hispanic	703	6.7	23,459	9.5	2,996.
Other*	267	2.6	13,530	5.5	1,973.
Total	10,465	100.0	246,885	100.0	4,238.
Female					
White	105	2.6	98,648	35.1	106.4
Black	3,697	92.4	142,109	50.5	2,601.
Hispanic	130	3.3	21,902	7.8	593.
Other*	68	1.7	18,565	6.6	366.
Total	4,000	100.0	281,224	100.0	1,422.4
Current Age					
13-19	53	0.4	50,106	9.5	105.
20-29	1,271	8.8	133,759	25.3	950.
30-39	2,656	18.4	98,021	18.6	2,709.
40-49	5,033	34.8	76,273	14.4	6,598.
50-59	3,951	27.3	71,438	13.5	5,530.
≥60	1,501	10.4	98,512	18.7	1,523.
Total	14,465	100.0	528,109	100.0	2,739.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and Unknowns

• At the end of 2010, 14,465 adults and adolescents were living with HIV in the District, accounting for 2.7% of District residents.

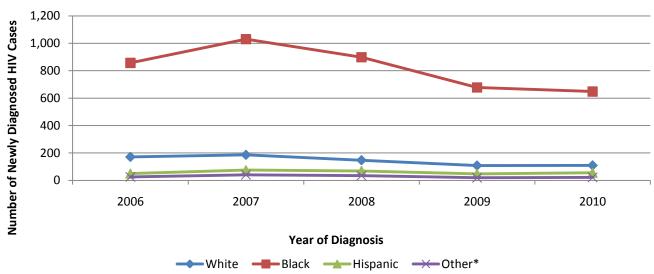
- Approximately 4.2% of men and 1.4% of women are diagnosed and living with HIV.
- Men accounted for less than half (46.7%) of District residents but almost three-quarters (72.3%) of living HIV cases.
- Although blacks accounted for just under half (46.0%) of District residents over the age of 12, three quarters (75.4%) of District residents living with HIV were black.
- Among District women, black women accounted for the majority of living HIV cases (92.4%).
- District residents between 40-49 years of age and black men have the highest rates of HIV at 6,598.7 and 6,344.1 cases per 100,000 population respectively.

**Figure 5.** Newly Diagnosed HIV Cases by Year of Diagnosis and Mode of Transmission, District of Columbia, 2006-2010



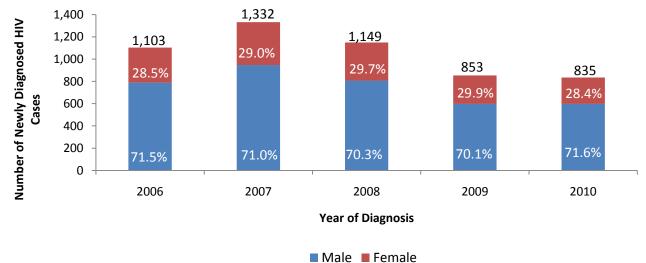
- The number of MSM cases diagnosed between 2006 and 2010 decreased by 25%. In 2006 there were 407 HIV cases diagnosed among MSM and in 2010 there were 305 cases diagnosed.
- HIV cases attributed to heterosexual contact declined from 368 cases in 2006 to 278 cases in 2010, a decrease of 24%.
- Overall the number of cases due to injection drug use has decreased by 70% since 2006. The decline began in 2007 when the District expanded needle exchange services. In 2007 there were 150 newly diagnosed HIV cases attributed to injection drug use compared to 42 cases in 2010.

**Figure 6**. Newly Diagnosed HIV Cases by Year of Diagnosis and Race/Ethnicity, District of Columbia, 2006-2010



- The number of newly diagnosed HIV cases among whites in DC decreased by 36% from 2006 to 2010. In 2006 there were 171 newly diagnosed HIV cases among whites and in 2010 there were 109.
- The number of newly diagnosed HIV cases among blacks in DC decreased by 24% from 857 cases in 2006 to 648 in 2010.





• Although the number of newly diagnosed HIV cases varies by year, the proportion of newly diagnosed HIV cases among men and women is consistent between 2006 and 2010.

#### Section III. HIV (not AIDS) Trends in the District of Columbia

This section discusses HIV (not AIDS) cases reported to the District of Columbia Department of Health by December 2010. This is the first time since 2007 that the District has included an HIV (not AIDS) section within the Annual Epidemiology Report. As described in Section 1. Understanding Surveillance, the name-based HIV surveillance system has fully matured and the District is now able to release this data.

Examining HIV (not AIDS) cases separately from AIDS cases allows a closer look at the characteristics of more recent infections. This will provide insight into where current prevention and early treatment strategies should be focused.

#### Summary

There were 5,840 HIV (not AIDS) adult and adolescent cases living in the District of Columbia as of December 2010. More than two-thirds of these cases (71.6%) were men and black (70.4%). The leading mode of transmission among living HIV (not AIDS) cases was men who have sex with men (42.6%). One-third (28.5%) of HIV (not AIDS) cases were heterosexuals.

Between January 1, 2006 and December 31, 2010, 3,319 new HIV (not AIDS) cases were diagnosed among District residents. Consistent with the overall HIV epidemic in the District, blacks account for approximately three-quarters (74.4%) of newly diagnosed HIV (not AIDS) cases. Three-quarters of these cases were men (71.7%) and diagnosed between 20-49 years of age (77.8%). The leading mode of transmission among newly diagnosed HIV (not AIDS) cases was MSM sexual contact (40.4%) and the second most common mode of transmission was heterosexual contact (30.9%). There was also a substantial reduction in the proportion of new cases attributed to injection drug use. In 2006 11.8% of newly diagnosed cases were attributed to injection drug use while in 2010 5.2% of newly diagnosed cases were attributed to this mode.

#### **Detailed Description**

The following tables, figures, and data points contain a detailed description of the HIV (not AIDS) epidemic in the District.

	White		Blac	Black		Hispanic		Other*		Total	
	Ν	%	N	%	N	%	Ν	%	Ν	%	
Sex											
Males	1,164	96.7	2,581	62.7	283	85.0	153	81.0	4,181	71.	
Females	40	3.3	1,533	37.3	50	15.0	36	19.0	1,659	28.	
Total	1,204	100.0	4,114	100.0	333	100.0	189	100.0	5,840	100.	
Mode of Transmission											
MSM	977	81.1	1,208	29.4	202	60.7	98	51.9	2,485	42.	
IDU	19	1.6	536	13.0	17	5.1	16	8.5	588	10.	
MSM/IDU	22	1.8	103	2.5	6	1.8	5	2.6	136	2	
Heterosexual											
contact	52	4.3	1,523	37.0	59	17.7	28	14.8	1,662	28	
RNI	134	11.1	742	18.0	49	14.7	42	22.2	967	16	
Other**	0	0.0	<3	-	0	0.0	0	0.0	<3		
Total	1,204	100.0	4,114	100.0	333	100.0	189	100.0	5,840	100	
Age at Diagnosis											
13-19	6	0.5	198	4.8	10	3.0	10	5.3	224	3	
20-29	232	19.3	1,075	26.1	108	32.4	39	20.6	1,454	24	
30-39	449	37.3	1,142	27.8	126	37.8	76	40.2	1,793	30	
40-49	352	29.2	1,061	25.8	57	17.1	52	27.5	1,522	26	
50-59	140	11.6	516	12.5	26	7.8	8	4.2	690	11	
≥60	25	2.1	122	3.0	6	1.8	4	2.1	157	2	
Total	1,204	100.0	4,114	100	333	100.0	189	100.0	5,840	100	

# Table 2. Living HIV (not AIDS) Cases by Race/Ethnicity, Sex, Mode of Transmission, and Age atDiagnosis, District of Columbia, 2010

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race \*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission.

- Almost three quarters (71.6%) of adults and adolescents living with HIV (not AIDS) were men and the majority of cases in each racial group were also men.
- The majority (92.4%) of women living with HIV (not AIDS) in the District were black women.
- Among blacks, the leading mode of transmission among living HIV (not AIDS) cases was heterosexual contact (37.0%). However among whites, Hispanics, and those of other races the leading mode of transmission was MSM sexual contact (81.1%, 60.7%, and 51.9% respectively).
- The proportion of Hispanic HIV (not AIDS) cases diagnosed between 20-39 years of age (70.2%) is substantially larger than all other racial groups (56.6% of white cases, 53.9% of black cases, and 60.8% of

#### **14** Section III. HIV (not AIDS) Trends in the District of Columbia

cases classified as other race).

**Figure 8**. Newly Diagnosed HIV (not AIDS) Cases by Year of Diagnosis and Sex, District of Columbia, 2006-2010

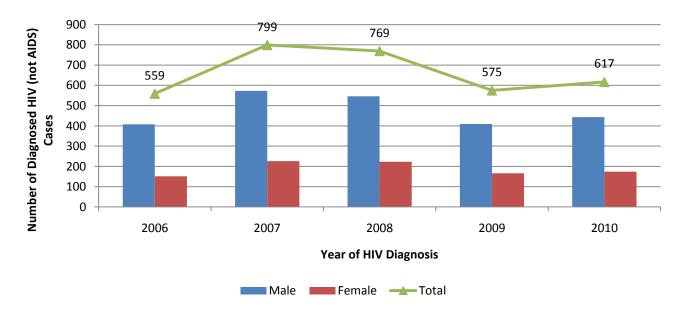
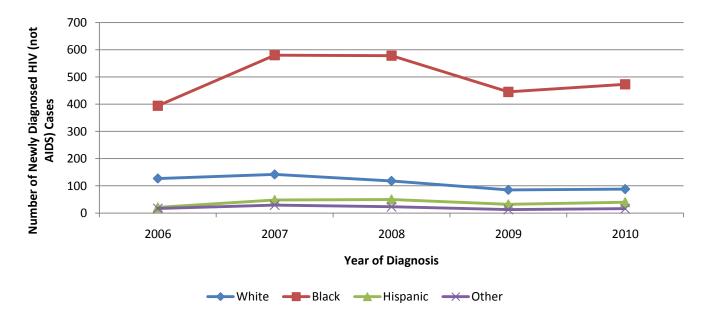
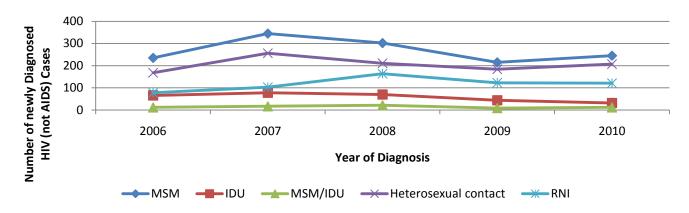


Figure 9. Newly Diagnosed HIV (not AIDS) Cases by Race/Ethnicity, District of Columbia, 2006-2010



- The number of newly diagnosed HIV (not AIDS) cases among blacks has increased by approximately 20% between 2006 and 2010. There were 394 black HIV (not AIDS) cases diagnosed in 2006 and 473 black HIV (not AIDS) cases diagnosed in 2010.
- The number of newly diagnosed HIV (not AIDS) cases among whites decreased by 31% between 2006 and 2010. There were 127 cases diagnosed in 2006 and 88 diagnosed in 2010.

**Figure 10**. Newly Diagnosed HIV (not AIDS) Cases by Year of Diagnosis and Mode of Transmission, District of Columbia, 2006-2010



- The leading mode of transmission among newly diagnosed HIV (not AIDS) cases in the District of Columbia between 2006 and 2010 was MSM sexual contact. This is in contrast to newly diagnosed AIDS cases in which the leading mode of transmission is heterosexual contact.
- The number of newly diagnosed HIV (not AIDS) cases among injection drug users declined by 51% between 2006 and 2010.

# Table 3. Newly Diagnosed HIV (not AIDS) Cases by Race/Ethnicity and Sex, Mode of Transmission andAge at Diagnosis, District of Columbia, 2006-2010

	White		Bla	ck	Hisp	anic	Oth	er*	Tot	al
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex										
Males	531	94.8	1,609	65.1	162	84.8	77	78.6	2,379	71.7
Females	29	5.2	861	34.9	29	15.2	21	21.4	940	28.3
Total	560	100.0	2,470	100.0	191	100.0	98	100.0	3,319	100.0
Mode of Transmis	sion									
MSM	432	77.1	759	30.7	106	55.5	45	45.9	1,342	40.4
IDU	14	2.5	256	10.4	12	6.3	8	8.2	290	8.7
MSM/IDU	11	2.0	53	2.1	5	2.6	3	3.1	72	2.2
Heterosexual										
contact	26	4.6	945	38.3	37	19.4	18	18.4	1,026	30.9
RNI	77	13.8	457	18.5	31	16.2	24	24.5	589	17.7
Total	560	100.0	2,470	100.0	191	100.0	98	100	3,319	100.0
Age at Diagnosis										
13-19	<3		108	4.4	4	2.1	4	4.1	117	3.5
20-29	114	20.4	651	26.4	65	34.0	20	20.4	850	25.6
30-39	175	31.3	566	22.9	62	32.5	37	37.8	840	25.3
40-49	174	31.1	651	26.4	41	21.5	28	28.6	894	26.9
50-59	83	14.8	374	15.1	14	7.3	6	6.1	477	14.4
≥60	13	2.3	120	4.9	5	2.6	3	3.1	141	4.2
Total	560	100.0	2,470	100.0	191	100.0	98	100.0	3,319	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race

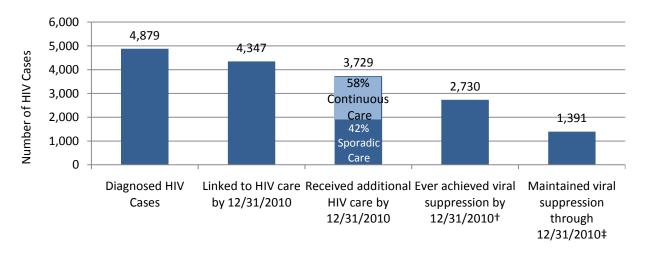
- Black women represent 91.5% of all HIV (not AIDS) cases diagnosed among women in the District between 2006 and 2010.
- Black men represent 67.6% of all HIV (not AIDS) cases diagnosed among men in the District.
- The leading mode of transmission among blacks newly diagnosed with HIV (not AIDS) was heterosexual contact (38.3%) followed by MSM (30.7%).
- The leading mode of transmission among whites, Hispanics, and those classified as other race was MSM (77.1%, 55.5%, and 45.9% respectively).
- Newly diagnosed HIV (not AIDS) cases among black IDU represent 88.3% of all newly diagnosed HIV (not AIDS) cases among IDU between 2006 and 2010.
- Similar to all living HIV (not AIDS) cases, Hispanics newly diagnosed with HIV (not AIDS) were younger than the other racial groups. Approximately 63% of Hispanics were diagnosed between 20-39 years of age, while 51.7% of whites, 49.3% of blacks, and 58.2% of those classified as other race were between 20-39 years of age.

#### Section IV. HIV Continuum of Care, Disease Status, and Mortality

This section of the report focuses on select indicators related to the HIV continuum of care, including HIV disease status, HIV care patterns, and mortality. Laboratory measures such as CD4 counts and viral loads are used to provide a glimpse of when people are being diagnosed in the course of the illness, when they are accessing medical care, the status of their immune system, and if their viral load is suppressed. With improved reporting of laboratory data through the electronic laboratory reporting system, HAHSTA is able to obtain a more complete picture of the HIV continuum of care.

HAHSTA's strategy to end the epidemic is to diagnose all persons living with HIV, connect and maintain them in HIV care and achieve viral suppression. The goal of viral suppression is also part of the National HIV/AIDS Strategy. Viral suppression ensures healthy outcomes for persons living with HIV and reduces new transmissions, also known as treatment as prevention.

Statistics representing the District of Columbia's continuum of HIV care are presented below in Figure 11. This snapshot or cross-sectional look examines HIV cases diagnosed within the District between 2005 and 2009 and follows their progress through the continuum of care until December 31, 2010.



#### Figure 11. HIV Continuum of Care for HIV Cases Diagnosed in the District of Columbia, 2005-2009

<sup>+</sup>Viral suppression indicates that at least one viral load test result prior to 12/31/2010 was <400 copies/mL. ‡Maintained viral suppression indicates that all subsequent viral load test results were ≤400 copies/mL.

As depicted in the first bar above, 4,879 HIV cases were diagnosed in the District between 2005 and 2009. Approximately 89% (n=4,347) of diagnosed cases were linked to HIV medical care by December 31, 2010 (bar two). Linkage to HIV medical care is defined as having at least one CD4 count, CD4 percentage, or viral load test reported to HAHSTA.

The third bar represents cases that received additional HIV care after they were linked –'continuous care' or 'sporadic care'. Cases were considered to have received additional HIV care if they had at least one CD4 count, CD4 percentage, or viral load test reported to HAHSTA after the date of their linkage to care. Under that definition 3,729 cases, or 76% of diagnosed cases, received additional HIV care before December 31, 2010. 'Continuous care' is defined by the Health Resources and Services Administration (HRSA) as receiving two HIV related lab tests 90 days apart. 'Sporadic care' was defined by HAHSTA and includes cases that had only one additional HIV related lab reported or cases that had two or more labs reported but the labs were less than 10 weeks apart or more than 14 weeks apart. More than half, or 58%, of the 3,729 cases receiving additional HIV care were considered to be in continuous care and 42% cases met the sporadic care definition.

In the next bar HAHSTA examined the proportion of diagnosed cases that achieved viral suppression prior to December 31, 2010. Cases included in this bar had at least one viral load test result reported that was less than 400 copies/mL. As shown, 2,730 HIV cases, or 60% of diagnosed cases, achieved viral suppression. It is important to note that 3,693, or 76% of the cases diagnosed between 2005 and 2009, had at least one viral load test reported to HAHSTA prior to December 31, 2010 (data not depicted above).

The last bar focuses on cases that had subsequent viral load test results reported to HAHSTA after they achieved viral suppression. In this category 2,181 or 80% of the cases that achieved viral suppression had at least one additional viral load test result reported to HAHSTA and could be included in this analysis (data not shown). As depicted above, 1,391 cases maintained viral suppression until December 31, 2010. Maintenance of viral suppression was defined by having all subsequent viral load results less than 400 copies/mL.

#### HIV Linkage to Care, Disease Status, and Mortality Summary

HAHSTA routinely measures time between a person's initial HIV diagnosis and their first CD4 and/or viral load test reported to the HIV surveillance system to better understand how long it takes for newly diagnosed persons to seek and access HIV medical care. CD4 counts, CD4 percentages, and viral loads are laboratory tests that are generally measured during the initial medical assessment or early in the course of HIV care and routinely thereafter. The majority (88.7%) of HIV cases diagnosed in 2010 entered care within 12 months of their initial diagnosis and three quarters (76.1%) entered care within 3 months. The proportion of cases entering care has steadily increased since 2006, when only 58.1% of cases entered care within 3 months of their initial diagnosis.

There has been a steady increase in the median CD4 count at diagnosis since 2006 as well. In 2006 the median CD4 count among newly diagnosed cases was 191 cells/mL, while in 2010 the median CD4 count was 391 cells/mL, a 104% increase. This trend may be explained by the increased emphasis on routine HIV testing city-wide and thus earlier diagnosis and entry into care.

After a person is diagnosed with HIV, their CD4 count is routinely measured, which indicates how well their immune system is working. A CD4 count of less than 200 is considered an AIDS diagnosis, increasing the risk for severe illnesses such as opportunistic infections. In 2006, 700 AIDS cases were diagnosed in the District of Columbia. In 2010, 477 AIDS cases were diagnosed. This represents a 31.9% decrease in newly diagnosed AIDS cases over the past 5 years. Two thirds (67.7%) of the newly diagnosed AIDS cases were men, the majority were black (83.7%) and the two most common modes of transmission were heterosexual contact (32.4%) and MSM (31.2%). More than half (57.3%) of the AIDS cases diagnosed were between 30-49 years of age.

To better understand the burden of severe disease and disease progression, HAHSTA examined the number of newly diagnosed AIDS cases that had their first HIV diagnosis within 12 months of their AIDS diagnosis ("late

**18** Section IV. HIV Continuum of Care, Disease Status, and Mortality

testers") as well as the number of people with HIV who progressed to AIDS ("HIV disease progression"). Measures of late testing and HIV disease progression identify opportunities for early routine testing and assistance with accessing and entering care. Over the reporting period, there was a substantial decrease in the proportion of AIDS cases that were classified as late testers, from 424 in 2006 to 248 in 2010. The number of newly diagnosed HIV cases that progressed to AIDS within 12 months of initial HIV diagnosis (HIV disease progression) has also decreased over time, from 374 in 2005 to 258 in 2009.

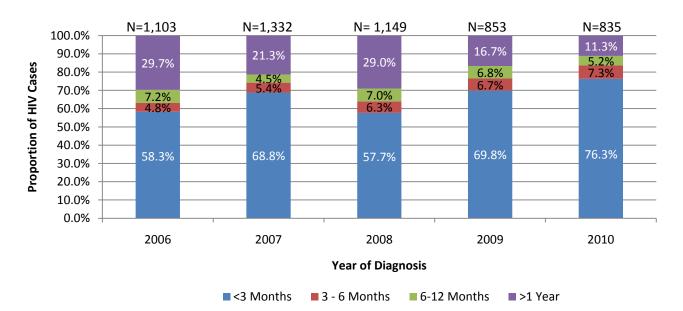
Deaths among persons with HIV, as reported to HAHSTA from the Office of Vital Statistics, have decreased since 2006. In 2006, 399 deaths occurred among those with HIV. More than half of these deaths (59.6%) were related to HIV disease. In 2010, 207 deaths occurred among those with HIV and 31.9% of these were related to HIV disease. The decrease in deaths related to HIV disease during this time period coincides with an increase in deaths due to non-AIDS defining malignances and unknown causes.

#### Detailed Description of Linkage to Care, HIV Disease Status, Survival, and Mortality

It is important that persons diagnosed with HIV enter care as soon as possible. Early entry into HIV care may improve health outcomes because immediate anti-retroviral therapy reduces the amount of virus in the body and slows progression to AIDS. According to the U.S. Public Health Service Guidelines, CD4 cell counts and viral load tests are performed as part of routine HIV management. CD4 and viral load laboratory results reported to the surveillance system were used to assess whether District cases were accessing HIV primary medical care and how long after their initial HIV diagnosis they received services. Figure 12 shows the time from initial HIV diagnosis to first CD4 or viral load test.

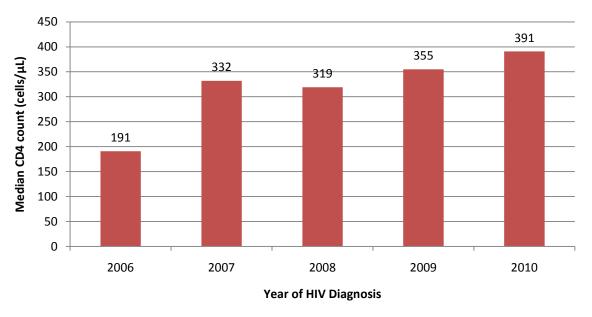
Note: Incomplete reporting suggests that the data below underestimate the proportions entering care. As completeness of data continues to improve, future analyses will provide better estimates and also be able to measure retention in care over time.

#### **Figure 12.** Time Between HIV Initial Diagnosis and Entry into Care as Evidenced by First CD4 Count, Percentage or Viral Load Test among HIV/AIDS Cases by Year of HIV Diagnosis, District of Columbia, 2006-2010



- There were 5,272 people diagnosed with HIV between 2006 and 2010 in the District of Columbia.
- The proportion of HIV cases entering care within 3 months of their initial diagnosis increased by 31.0% between 2006 and 2010.

**Figure 13.** Median CD4 Cell Count at Diagnosis\* for HIV Cases by Year of HIV Diagnosis, District of Columbia, 2006-2010



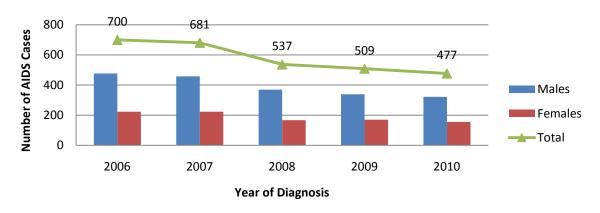
\*Includes CD4 cell count tests reported within 6 months of the date of HIV diagnosis

• There was a 104% increase in the median CD4 at diagnosis between 2006 and 2010 in the District of Columbia. This trend may be explained by an increased emphasis on routine HIV testing city-wide and earlier entry into care.

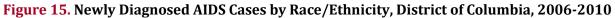
#### **Newly Diagnosed AIDS Cases**

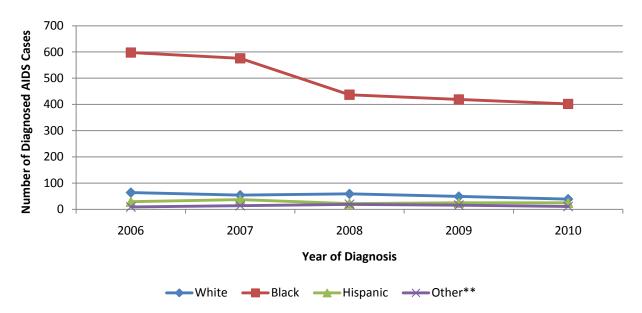
Confidential name based AIDS case surveillance has been conducted in the District since 1985. Over the years, the decline in the number of newly diagnosed AIDS cases has been influenced by the advent of medications to treat HIV. The following tables and figures depict trends in new AIDS diagnoses between 2006 and 2010.





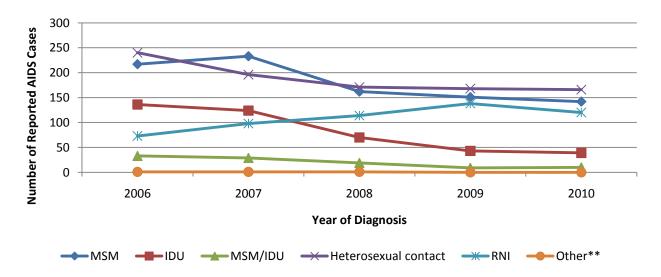
- The number of newly diagnosed AIDS cases decreased by 31.9%, from 700 cases in 2006 to 477 in 2010.
- This declining trend may be attributed to expanded HIV testing, whereby people living with HIV are diagnosed and linked to care earlier which prevents the progression of disease.





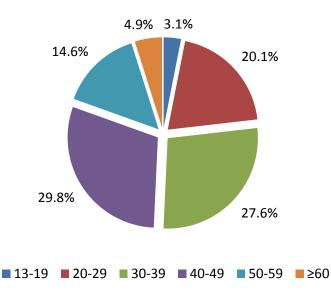
• While the number of newly diagnosed AIDS cases among whites, Hispanics, and those of other races were steady from year to year, there was a 32.8% decrease in newly diagnosed AIDS cases among blacks between 2006 and 2010.

Figure 16. Newly Diagnosed AIDS Cases by Mode of Transmission, District of Columbia, 2006-2010



- Newly diagnosed AIDS cases among IDU decreased by 67.6% between 2006 and 2010.
- The number of newly diagnosed AIDS cases with risk not identified has increased by 30.8% between 2006 and 2010. The Department of Health plans on reviewing charts among persons with no risk identified in order to better classify these individuals.

**Figure 17**. Newly Diagnosed AIDS Cases by Age at Diagnosis 2006-2010



- Approximately one-third (27.6%) of newly diagnosed AIDS cases were diagnosed between 30-39 years of age and another third (29.8%) were diagnosed between 40-49 years of age.
- The age distribution of newly diagnosed AIDS cases is similar to that of all HIV cases diagnosed between 2006 and 2010 in the District of Columbia.

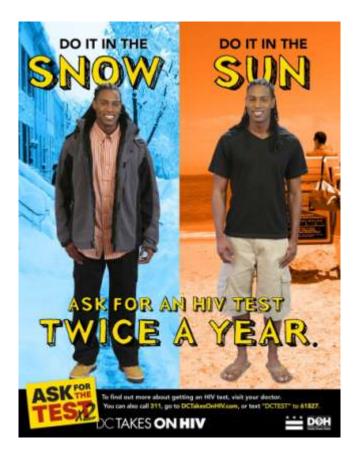


Table 4. Newly Diagnosed AIDS Cases among Adults and Adolescents by Sex, Race/Ethnicity, Mode ofTransmission, and Age at Diagnosis, District of Columbia, 2006-2010

	White		Black		Hisp	Hispanic		Other**		Total	
	Ν	%	Ν	%	N	%	Ν	%	Ν	%	
Sex											
Males	254	95.8	1,544	63.5	111	80.4	57	82.6	1,966	67.7	
Females	11	4.2	888	36.5	27	19.6	12	17.4	938	32.3	
Total	265	100.0	2,432	100.0	138	100.0	69	100.0	2,904	100.0	
Mode of Transmission											
MSM	197	74.3	623	25.6	52	37.7	33	47.8	905	31.2	
IDU	4	1.5	390	16.0	11	8.0	7	10.1	412	14.2	
MSM/IDU	16	6.0	77	3.2	<3		5	7.2	100	3.4	
Heterosexual contact	13	4.9	865	35.6	49	35.5	14	20.3	941	32.4	
Risk not identified	35	13.2	474	19.5	24	17.4	10	14.5	543	18.7	
Other**	0	0.0	3	0.1	0	0.0	0	0.0	3	0.1	
Total	265	100.0	2,432	100.0	138	100.0	69	100.0	2,904	100.0	
Males											
MSM	197	77.6	623	40.4	52	46.9	33	57.9	905	46.0	
IDU	4	1.6	205	13.3	8	7.2	3	5.3	220	11.2	
MSM/IDU	16	6.3	77	5.0	2		5	8.8	100	5.1	
Heterosexual contact	6	2.4	342	22.2	30	27.0	6	10.5	384	19.5	
Risk not identified	31	12.2	295	19.1	19	17.1	10	17.5	355	18.1	
Other**	0	0.0	<3		0	0.0	0	0.0	<3		
Subtotal	254	100.0	1,544	100.0	111	100.0	57	100.0	1,966	100.0	
Females											
IDU	0	0.0	185	20.8	3	11.0	4	33.3	192	20.5	
Heterosexual contact	7	63.6	523	58.9	19	70.4	8	66.7	557	59.4	
Risk not identified	4	36.4	179	20.2	5	18.5	0	0.0	188	20.0	
Other**	0	0.0	<3	0.0	0	0.0	0	0.0	<3		
Subtotal	11	100.0	888	100.0	27	100.0	12	100.0	938	100.0	
Age at Diagnosis											
13-19	6	2.3	79	3.2	3	2.2	<3		90	3.1	
20-29	50	18.9	477	19.6	44	31.9	12	17.4	583	20.1	
30-39	97	36.6	650	26.7	36	26.1	17	24.6	800	27.5	
40-49	74	27.9	740	30.4	31	22.5	19	27.5	864	29.8	
50-59	32	12.1	359	14.8	19	13.8	15	21.7	425	14.6	
≥60	6	2.3	127	5.2	5	3.6	4	5.8	142	4.9	
Total	265	100.0	2,432	100.0	138	100.0	69	100.0	2,904	100.0	

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiians, Pacific Islanders, and unknown races. \*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission.

- The proportion of 20-29 year old Hispanics diagnosed with AIDS (31.9%) was higher than among whites (18.9%), blacks (19.6%) and those classified as other race (17.4%).
- Between 2006 and 2010, 53.2% of newly diagnosed AIDS cases were among black men, followed by black women at 30.6%.
- Among blacks, the proportion of newly diagnosed AIDS cases among women (36.5%) was greater than in any other racial/ethnic group. Women represented 4.2% whites, 19.6% of Hispanics, and 17.4% of those classified as other race.
- MSM continued to be the leading mode of transmission among white males (77.6%) and among all whites (74.3%) newly diagnosed with AIDS.
- Heterosexual contact was the leading mode of transmission among blacks (35.6%) overall and the second leading mode of transmission among black men (22.2%) newly diagnosed with AIDS.
- MSM was the leading mode of transmission among Hispanic men (46.9%), followed by heterosexual contact (27.0%). Seventy percent (70.4%) of newly diagnosed AIDS cases among Hispanic women were due to heterosexual contact.

• Heterosexual contact remained the leading mode of transmission in women across all races. However, among black women, IDU still accounted for 20.8% of newly diagnosed AIDS cases.

#### Late Testers

HAHSTA assessed the proportion of newly diagnosed AIDS cases between 2006 and 2010 with HIV diagnoses that occurred within 12 months of AIDS diagnosis in Table 9. These cases are referred to as *"late testers"*. This approach is the same as that presented in the 2009 and 2010 Annual Epidemiology Reports.

# Table 5. Characteristics of Late Testers among Newly Diagnosed AIDS Cases,District of Columbia, 2006-2010

	<u>&gt;</u> 12 months diagnosis of		< 12 months after diagnosis of HIV (Late Testers)				
	diagnosis of N	HIV %	of HIV (Late Test	ers) %	Tota		
Sex		/0		70			
Male	806	41.1	1,153	58.9	1,959		
Female	437	46.9	495	53.1	932		
Total	1,243	43.0	1,648	57.0	2,89		
Race/Ethnicity							
White	125	47.3	139	52.7	26		
Black	1,045	43.1	1,377	56.9	2,42		
Hispanic	43	31.4	94	68.6	13		
Other*	30	44.1	38	55.9	6		
Total	1,243	43.0	1,648	57.0	2,89		
Mode of transmission							
MSM	395	43.7	509	56.3	90		
DU	221	53.9	189	46.1	41		
MSM/IDU	62	62.0	38	38.0	10		
Heterosexual contact	395	42.1	543	57.9	93		
Risk not identified	168	31.3	368	68.7	53		
Other**	<3		<3		<		
Total	1,243	43.0	1,648	57.0	2,89		
Age at Diagnosis							
13-19	54	60.7	35	39.3	8		
20-29	310	53.2	273	46.8	58		
30-39	380	47.7	417	52.3	79		
40-49	346	40.1	516	59.9	86		
50-59	119	28.3	301	71.7	42		
≥60	34	24.3	106	75.7	14		
Total	1,243	43.0	1,648	57.0	2,89		
Insurance							
Public	534	52.9	475	47.1	1,00		
Private	205	45.2	249	54.8	45		
None	38	35.8	68	64.2	10		
Unknown	466	35.2	856	64.8	1,32		
Total	1,243	43.0	1,648	57.0	2,89		
Country of Birth							
US	1,153	45.1	1,402	54.9	2,55		
US Dependency	3	50.0	3	50.0			
Outside of US	73	26.2	206	73.8	27		
Unknown	14	27.5	37	72.5	5		
Total	1,243	43.0	1,648	57.0	2,89		
Initial AIDS Diagnosis	4 050	40.0	4 400	F0 1	0.07		
CD4 Count < 200	1,059	46.9	1,198	53.1	2,25		
Opportunistic infection	34	40.0	51	60.0	8		
Low CD4 and OI	150 1,243	27.3 43.0	399 1,648	72.7 57.0	54 2,89		

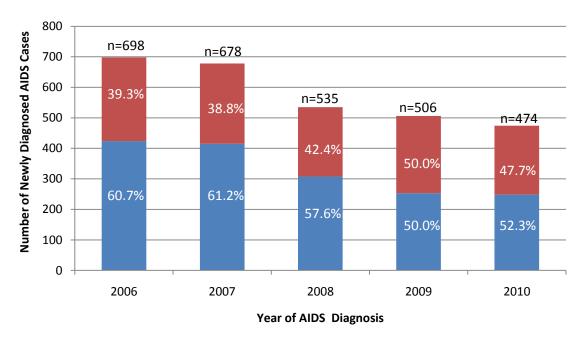
\* Other race/ethnicity includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiians, Pacific Islanders, and unknown races. \*\* Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (healthcare workers), and perinatal.

Note: This table excludes 13 cases that are either missing an HIV diagnosis date or their AIDS diagnosis date was prior to the reported HIV diagnosis date.

#### 24 Section IV. HIV Continuum of Care, Disease Status, and Mortality

- Of the 2,891 AIDS cases diagnosed between 2006 and 2010 and with available data, 57.0% were late testers, meaning they progressed from HIV to AIDS in less than 12 months after their initial HIV diagnosis date.
- Men (58.9%) and Hispanics (68.6%) had higher proportions of late testing. Persons 50 years of age and older at the time of diagnosis (71.7% among 50-59; 75.7% among 60 and older) also had higher proportions of late testing. This may reflect lower testing rates or inadequate care among these populations.

**Figure 18.** Persons Newly Diagnosed with AIDS and Proportion of Late Testers by Year of AIDS Diagnosis, District of Columbia, 2006-2010



< 12 months after diagnosis of HIV (Late Testers)</p>

• There was a substantial decrease in the proportion of AIDS cases that were classified as late testers from 60.7% in 2006 to 52.3% in 2010. This may be due to increased testing efforts city wide as well as earlier diagnosis and entry into care.

#### **HIV Disease Progression**

In the following table and figure, HAHSTA determined the proportion of HIV cases diagnosed between 2005 and 2009 that developed AIDS within 12 months of the initial HIV diagnosis, after 12 months of their initial HIV diagnosis, and those that have not yet developed AIDS (referred to as "non-progressors"). This approach is one that is used by other jurisdictions and the CDC to understand disease progression. Cases that were diagnosed in 2010 were excluded from this analysis because they did not have 12 full months of observation needed to classify their disease progression.

Table 6. Progression from HIV to AIDS after a Diagnosis of HIV, by Selected Characteristics, District ofColumbia, 2005-2009

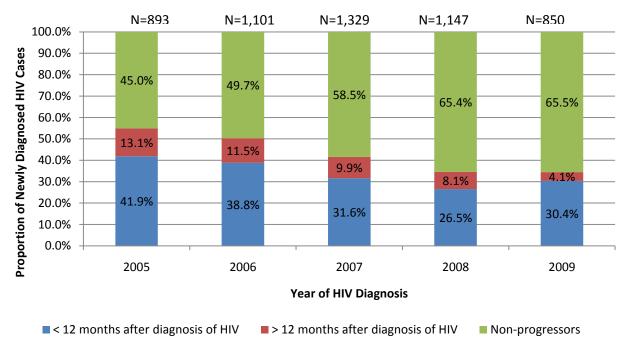
	Non-progr	Non-progressors		ns after of HIV	< 12 Montl Diagno		
Characteristic	N	%	N	%	N	%	Total
Sex		0					
Male	2,166	57.8	346	9.2	1,238	33.0	3,750
Female	867	55.2	158	10.1	545	34.7	1,570
Total	3,033	57.0	504	9.5	1,783	33.5	5,320
Race/Ethnicity							
White	551	74.1	48	6.5	145	19.5	744
Black	2,223	53.6	430	10.4	1,493	36.0	4,146
Hispanic	162	57.7	16	5.7	103	36.7	281
Other*	97	65.1	10	6.7	42	28.2	149
Total	3,033	57.0	504	9.5	1,783	33.5	5,320
Mode of transmission							
MSM	1,246	64.2	157	8.1	538	27.7	1,941
IDU	286	46.2	74	12.0	259	41.8	619
MSM/IDU	67	49.3	20	14.7	49	36.0	136
Heterosexual	901	54.7	160	9.7	585	35.5	1,646
contact							,
Risk not identified	533	54.6	92	9.4	351	36.0	976
Other**	0	0.0	<3		<3		<3
Total	3,033	57.0	504	9.5	1,783	33.5	5,320
Age at Diagnosis							
13-19	104	68.0	18	11.8	31	20.3	153
20-29	729	65.7	103	9.3	278	25.0	1,110
30-39	805	57.0	130	9.2	477	33.8	1,412
40-49	823	52.7	163	10.4	577	36.9	1,563
50-59	449	54.0	72	8.7	310	37.3	831
≥60	123	49.0	18	7.2	110	43.8	251
Total	3,033	57.0	504	9.5	1,783	33.5	5,320
Country of Birth							
US	2,653	57.0	452	9.7	1,547	33.3	4,652
US Dependency	12	75.0	<3		<3		16
Outside of US	156	48.1	22	6.8	146	45.1	324
Unknown	212	64.6	28	8.5	88	26.8	328
Total	3,033	57.0	504	9.5	1,783	33.5	5,320

\* Other race/ethnicity includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiians, Pacific Islanders, and unknown races.

\*\* Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (healthcare workers), and perinatal.

- Of the 5,320 HIV cases diagnosed between 2005 and 2009, 33.5% progressed from HIV to AIDS less than 12 months after their initial HIV diagnosis date.
- Blacks, (36.0%), Hispanics (36.7%), IDU (41.8%), those classified as other mode of transmission (50.0%), individuals ≥60 years of age at diagnosis (43.8%), and those born outside of the US (45.1%) had higher proportions of persons progressing to AIDS within 12 months. This may reflect lower testing rates and delays in access or inadequate care among these populations.

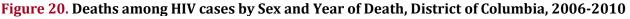
**Figure 19.** Progression from HIV to AIDS after a Diagnosis of HIV, by Selected Characteristics, District of Columbia, 2005-2009

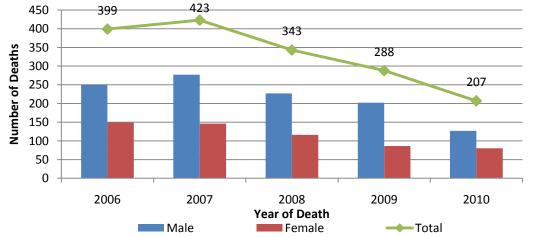


• The proportion of those that progress to AIDS within 12 months of their HIV diagnosis has decreased substantially as well from 41.9% in 2005 to 30.4% in 2009.

#### **HIV Survival and Mortality**

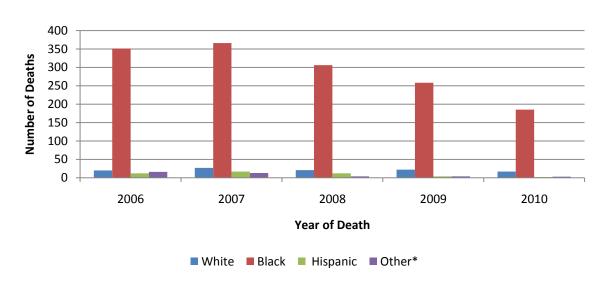
From 2006-2010, there were 1,660 deaths among adults and adolescents diagnosed with HIV. The number of deaths among HIV cases has decreased by 48.1% since 2006. Approximately two-thirds (65.2%) of deaths occurred among men and 88.3% of all deaths were among black District residents. Approximately one-third (32.9%) of deaths occurred in people 40 to 49 years old and another third (33.4%) occurred among people 50-59 years of age. By mode of transmission, the largest proportion of deaths was among those with transmission attributed to IDU (31.7%), followed by heterosexual contact (26.0%), and MSM (22.0%). Among whites and Hispanics, the majority of deaths were among MSM. This is in contrast to blacks among whom most deaths occurred among those infected through IDU.





• The number of deaths among HIV cases declined by 48% between 2006 and 2010.

• Approximately two-thirds (65.2%) of the deaths over this five year period were among men.

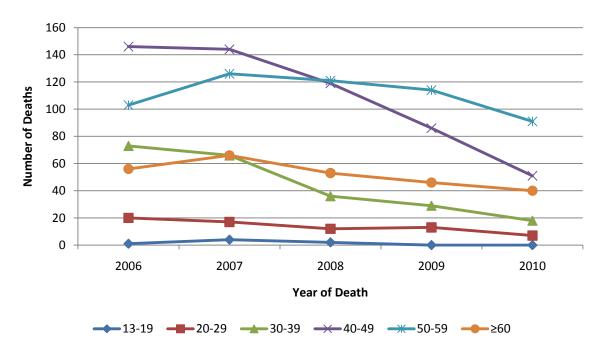


**Figure 21**. Deaths among HIV cases by Race/Ethnicity and Year of Death, District of Columbia, 2006-2010

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race

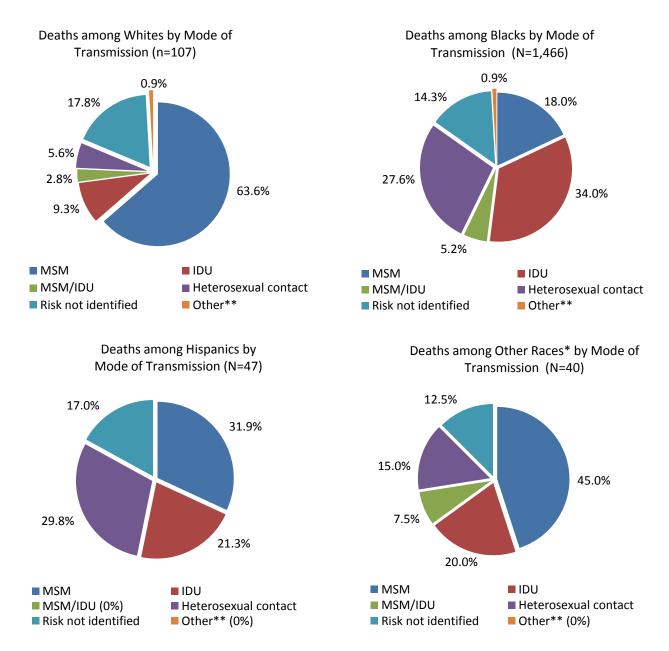
• Although the total number of deaths among HIV cases declined between 2006 and 2010, the proportion of deaths each year among blacks remained constant, at approximately 88%.

Figure 22. Deaths among HIV cases by Age at Death and Year of Death, District of Columbia, 2006-2010



• In 2006 and 2007 the greatest number of deaths occurred among those 40-49 years of age. However in 2008 and in each subsequent year, the greatest number of deaths occurred among those 50-59 years of age. This may indicate that people with HIV are living longer in the District of Columbia.

Figure 23. Deaths among HIV cases by Race/Ethnicity and Mode of Transmission, District of Columbia, 2006-2010



\*Other race includes multi-race individuals, Asian, American Indians, Alaska Natives, Native Hawaiians, Pacific Islanders, and unknown races.

\*\*Other mode of transmission includes hemophilia, blood transfusion, and occupational exposure (healthcare workers)

- Among blacks, the largest proportion of deaths occurred among those whose HIV was attributed to IDU (34.0%), followed by heterosexual contact (27.6%).
- Among whites, Hispanics, and those of other races however, the largest proportion of deaths was among those with risk attributed to MSM (63.6%, 31.9%, and 45.0% respectively).

# Table 7. Cause of Death among Adults and Adolescents with HIV, by Year of Death, District of Columbia,2006-2010

	N	2006 %	N	2007 %	N	2008 %	N	2009 %	N	2010 %	N	Total %
Cause of Death												
HIV-related Causes*	238	59.6	218	51.5	191	55.7	71	24.7	66	31.9	784	47.2
Non-AIDS Defining Malignancies	27	6.8	42	9.9	37	10.8	21	7.3	26	12.6	153	9.2
Cardiovascular	37	9.3	47	11.1	35	10.2	28	9.7	29	14.0	176	10.6
Substance Abuse	3	0.8	3	0.7	0	0.0	5	1.7	11	5.3	22	1.3
Accidental Death	7	1.7	5	1.2	6	1.7	10	3.5	11	5.3	39	2.4
Other**	56	14.0	75	17.8	58	16.9	24	8.3	35	16.9	248	14.9
Unknown	31	7.8	33	7.8	16	4.7	129	44.8	29	14.0	238	14.4
Total	399	100.0	423	100.0	343	100.0	288	100.0	207	100.0	1,660	100.0

\*HIV-related causes include opportunistic infections and AIDS defining cancers

\*\*Other causes of death include homicide, suicide, pneumonia, sudden death, etc.

• Almost half of the deaths (47.2%) among persons with HIV were due to HIV-related causes such as opportunistic infections and AIDS-defining cancers between 2006 and 2010.

- The underlying cause was unknown for 14.4% of deaths between 2006 and 2010. This large percentage is because the underlying cause of death was unknown for 44.8% of all deaths in 2009. HAHSTA is working with the Office of Vital Statistics to ascertain the cause of death for these cases and will reclassify them in subsequent reports.
- Of the 1,422 cases with a known cause of death, the underlying cause was HIV related in more than half (55.1%) of deaths.

## **Section V. Pediatric HIV Cases**

Pediatric HIV cases are defined as those cases diagnosed before the age of 13. Since the introduction of recommendations to provide antiretrovirals to women during pregnancy, at labor and delivery, and to the infant in the neonatal period, there has been a 95% reduction in mother to child transmission of HIV nationally. Transmission rates among mothers and babies who receive proper treatment during and after pregnancy are as low as 1%.

#### Summary

There are currently 161<sup>+</sup> living pediatric HIV cases in the District of Columbia. Over 73% of pediatric HIV cases were over the age of 13 at the end of 2010, with almost half (44.7%) between 13-19 years of age. These data show that early diagnosis and access to care and treatment among infected children can significantly prolong their lives. The number of mother-to-child transmissions also decreased from 9 in 2005 to 0 in 2010. The number of transmissions may be adjusted each year as diagnoses are reported in years subsequent to the birth year.

<sup>†</sup>229 living pediatric cases were reported in the 2010 DC Annual Report. This decrease is due to our de-duplication efforts between the name-based reporting system and the code-based reporting system as well as the CDC's efforts to de-duplicate cases between jurisdictions.

Table 8. Living Pediatric HIV Cases by Mode of Transmission, Sex, Race/Ethnicity, Age at Diagnosis andCurrent Age, District of Columbia, 2010

Pediatric HIV Cases		
Mode of Transmission	N	%
Perinatally acquired	161	18.1
Other*	29	81.9
Total	161	100.0
Sex		
Male	73	45.4
Female	88	54.6
Total	161	100.0
Race/Ethnicity		
White	<3	
Black	151	93.8
Hispanic	7	4.4
Other**	<3	
Total	161	100.0
Age at Diagnosis		
< 1	75	46.6
1 to 2	47	29.2
3 to 4	11	6.8
5 to 12	28	17.4
Total	161	100.0
Current Age		
< 1	0	0.0
1 to 2	3	1.9
3 to 4	<3	
5 to 12	37	23.0
13 to 19	72	44.7
20 to 29	42	26.1
30 to 45	5	3.1
Total	161	100.0

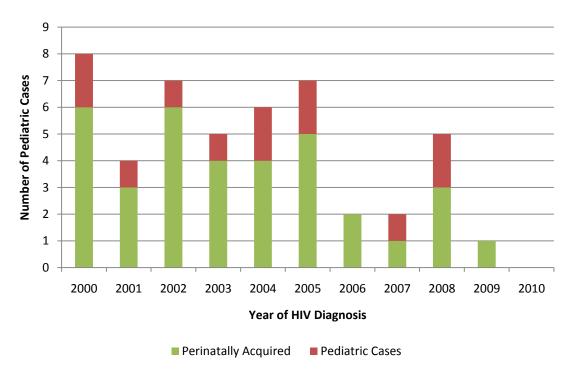
\*Other modes of transmission include MSM,

transfusion/transplant, and risk not identified \*\*Other race includes multi-race individuals, Asian, American

Indians, Alaska Natives, Native Hawaiians, Pacific Islanders, and unknown race.

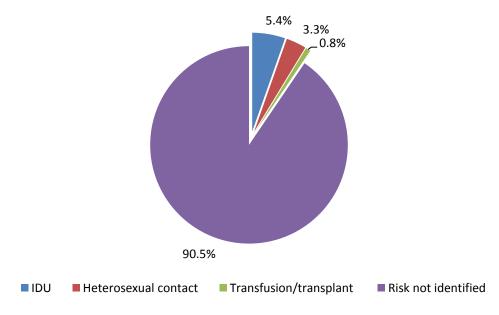
• Approximately three quarters (75.8%) of living perinatally infected cases were diagnosed within the first two years of life, with almost half (46.6%) of these cases diagnosed at less than 12 months of age.

**Figure 24.** Pediatric HIV Cases by Year of Diagnosis and Mode of Transmission, District of Columbia, 2000-2010



• Over the past 10 years the number of pediatric cases diagnosed in the District has declined and there were no cases reported during 2010.

# **Figure 25.** Proportion of Perinatally Acquired HIV Cases by Maternal Mode of Transmission, District of Columbia, 2010



• Maternal mode of transmission is missing for approximately 90% of the 161 living pediatric cases. Additional efforts to collect maternal mode at the time of the child's diagnosis will assist in reclassifying this high proportion of cases.

## **Section VI. Sexually Transmitted Diseases**

This section provides an overview of the incidence and trends of sexually transmitted diseases – chlamydia, gonorrhea, and primary and secondary syphilis – in the District of Columbia. Sexually transmitted diseases (STDs) continue to have a major impact on the health of District residents, particularly adolescents and MSM. The HAHSTA STD Control Program, working in collaboration with community partners, medical providers, DC Public schools, DC Public Charter schools and others, has broadened the response to the STD epidemic with increased testing and access to treatment. Specialized efforts include the School-based STD screening program, Gonorrhea Screening Project, the Infertility Prevention Project, Internet Partner notification and partnerships for screening gay and bisexual men.

#### Summary

From 2006 to 2010 the District received 28,461 reports of chlamydia infections. Among those, more than two-thirds of cases were among women (67.1%), over half (60.4%) were black, and more than two-thirds (69.1%) were between 15-24 years of age. Geographically, the greatest number of chlamydia cases was reported from Wards 7 and 8 (34.0%).

In addition, reported chlamydia cases more than doubled from 2006 (3,360) to 2008 (6,899) but have leveled off since then. This increase is likely due to expanded screening programs among high-risk populations and more sensitive diagnostic tests. These new tests can be performed on urine specimens that can be collected in non-traditional venues (such as high schools and non-clinical community programs) and are more effective at detecting infections.

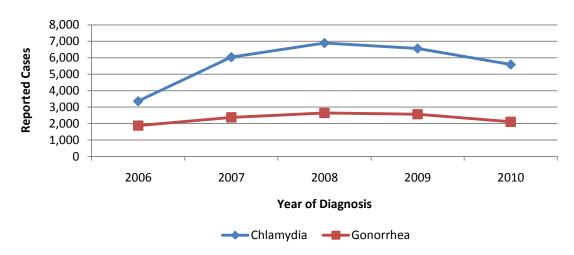
From 2006 to 2010 the District received 11,569 reports of gonorrhea infections. Unlike chlamydia, the sex of reported cases was divided almost equally between men and women at 52.7% and 47.0%, respectively. Almost three-quarters of reported cases were among blacks (70.4%) and more than half (59.2%) were between 15-24 years of age. The greatest number of gonorrhea cases was also reported from Wards 7 and 8 (37.6%).

There were 735 cases of primary and secondary syphilis, also known as infectious syphilis, reported in the District between 2006 and 2010. Unlike chlamydia and gonorrhea, which predominately affected youth and young adults less than 24 years of age, almost two-thirds (65.3%) of infectious syphilis cases were 30 years of age or older. Slightly more than half (55.4%) of reported primary and secondary syphilis cases were among blacks and almost all cases (96.4%) were reported among men. In contrast to chlamydia and gonorrhea, the greatest number of primary and secondary syphilis cases was reported in Wards 1 and 2 (40.4%).

#### Reported Cases of Chlamydia and Gonorrhea in the District of Columbia

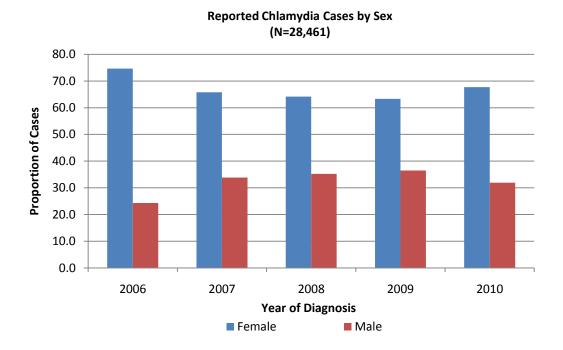
The following section contains a detailed description of reported cases of chlamydia and gonorrhea in the District with figures and specific data points.

**Figure 26**. Reported Cases of Chlamydia and Gonorrhea by Year of Diagnosis, District of Columbia, 2006-2010

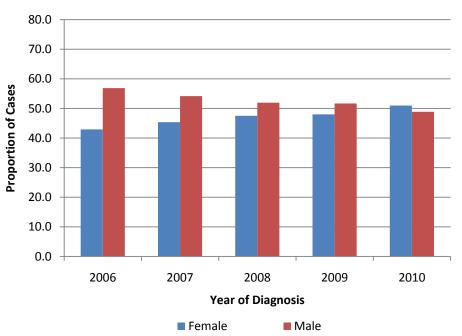


- Due to more sensitive chlamydia testing technology, an increase in youth-focused screening programs, and an increase in the non-genital (throat and rectum) screening of men who have sex with men, the number of chlamydia cases doubled from 2006 to 2008 but has leveled off since.
- Because chlamydia is the "silent disease," the more "you look for it "(i.e. screen for it) the more "you find it" (asymptomatic infections). By contrast, the number or gonorrhea cases, which are usually symptomatic, remained relatively stable over the last 5 years.

#### Figure 27. Reported Chlamydia and Gonorrhea Cases by Sex, District of Columbia, 2006-2010

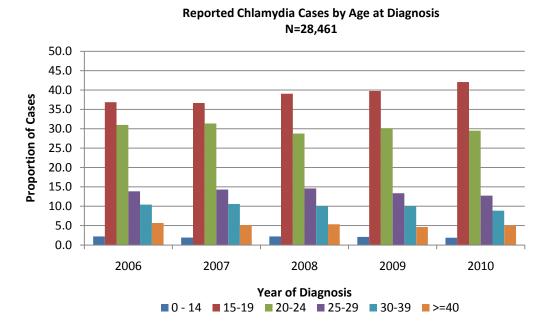


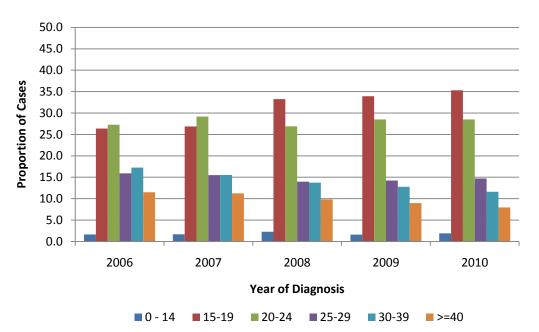
Reported Gonorrhea Cases by Sex (N=11,569)



- In 2006, the female to male ratio of reported chlamydia cases was 3.1 to 1. In 2010 it was 2.1 to 1. Historically, most chlamydia screening programs targeted women of childbearing age but HAHSTA youth initiatives, such as the School-based STD Screening Program, have increased the number of men that are screened for chlamydia and found to be infected.
- In contrast, the female to male ratio of reported gonorrhea cases was 1.0 to 1 in 2010. Unlike chlamydia cases, gonorrhea cases are usually symptomatic and often seek medical care for testing and treatment.
- The female to male ratios for chlamydia and gonorrhea are consistent with national surveillance data.

**Figure 28.** Reported Chlamydia and Gonorrhea Cases by Age at Diagnosis, District of Columbia, 2006-2010

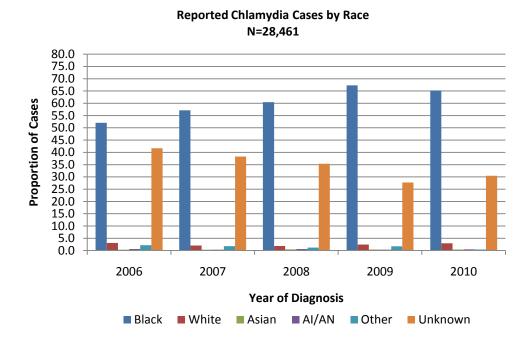


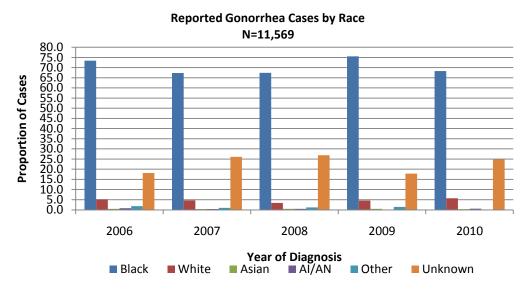


Reported Gonorrhea Cases by Age at Diagnosis N=11,569

- In 2006, 36.9% of reported chlamydia cases were among 15-19 year olds. In 2010, 42.0% were reported among this same age category.
- In 2006, 26.4% of reported gonorrhea cases were among 15-19 year olds. In 2010, 35.3% were reported among this same age category.
- Both of these increases are most likely due to targeted screening of adolescents and differ from national surveillance data where most cases of both infections are reported among 20-24 year olds.

Figure 29. Reported Chlamydia and Gonorrhea Cases by Race, District of Columbia, 2006-2010



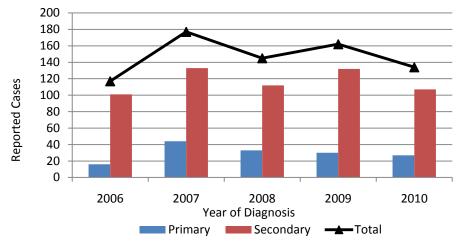


- More than half (60.4%) of the chlamydia cases diagnosed between 2006 and 2010 were black. However, among chlamydia cases with known race, the proportion reported among blacks ranged from 89.2% in 2006 to 93.8% in 2010.
- More than two-thirds (70.4%) of the gonorrhea cases diagnosed between 2006 and 2010 were among blacks. Among gonorrhea cases with known race data, the proportion reported among blacks ranged from 89.7% in 2006 to 92.2% in 2010.
- Consistent with national surveillance data, blacks are disproportionately affected by both chlamydia and gonorrhea in the District.

#### Reported Cases of Primary and Secondary Syphilis in the District of Columbia

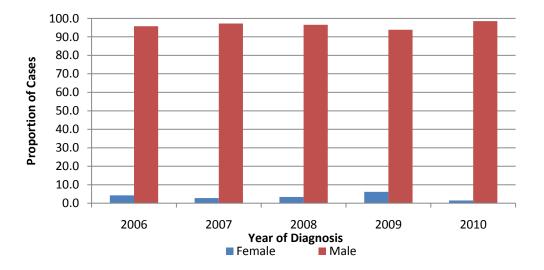
Primary syphilis is defined as the stage of syphilis characterized by a large painless lesion (chancre) where the bacteria entered the body. This lesion can be on or in the mouth, rectum, vagina, or penis. The time from exposure/infection to the onset of symptoms ranges from 10 to 90 days, with an average of 21 days. Secondary syphilis is characterized by rashes that can appear anywhere on the body, but typically involve the hands and feet. Other secondary syphilis symptoms include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches and fatigue. Primary and secondary syphilis surveillance data is used as a measure of the incidence (new cases) of syphilis.

**Figure 30**. Reported Cases of Primary and Secondary Syphilis by Year of Diagnosis, District of Columbia, 2006-2010



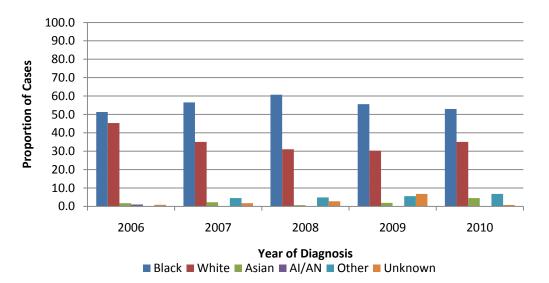
- Since 2000, there has been a reemergence of syphilis cases in Washington, DC. In 2000, there were less than 40 cases of infectious syphilis reported in Washington, DC while in 2010 there were 134 cases reported. This trend is similar to the entire United States.
- Between 2006 and 2010 secondary syphilis cases represented more than 75% of infectious syphilis cases diagnosed each year.

#### Figure 31. Reported Cases of Primary and Secondary Syphilis by Sex, District of Columbia, 2006-2010



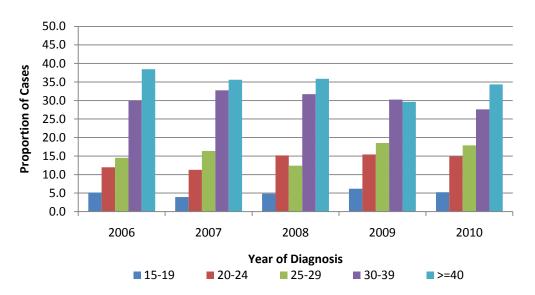
• In 2000 the male to female ratio of reported infectious syphilis cases was approximately 2.8 to 1. In 2010 the male to female ratio for infectious syphilis was 66 to 1. This indicates that the primary mode of transmission driving the reemergence of infectious syphilis is men who have sex with men (MSM).

Figure 32. Primary and Secondary Syphilis Cases by Race, District of Columbia, 2006-2010



- From 2006 to 2010, blacks represented 55.4% of reported infectious syphilis cases. This is substantially lower than for chlamydia (60.4%) and gonorrhea (70.4%)
- In 2006, 45.3% of primary and secondary syphilis cases were reported among whites. In 2010, this percentage was 35.1%.

Figure 33. Reported Cases of Primary and Secondary Syphilis by Age, District of Columbia, 2006-2010



- Regardless of report year, unlike chlamydia and gonorrhea (in which a majority of cases were diagnosed among people aged 15-24) the highest number of primary and secondary syphilis cases was reported among those 30 years old and older.
- In 2006, 26.5% of infectious syphilis cases were reported among 20-29 year olds. In 2010, this percentage was 32.8%.

#### **Programmatic Priorities**

Current STD Control Program priorities include screening, diagnosing, treating, and preventing infections among adolescents, men who have sex with men (MSM), and persons co-infected with HIV. The School-based STD Screening Program (SBSP) routinely screens thousands of senior high school (grades 9 through 12) students for chlamydia and gonorrhea. The program also collaborates with the Department of Employment Services (DOES) to provide urine-based screening to the Summer Youth Employment Program (SYEP) participants. HAHSTA actively identifies hundreds of infected youth in non-traditional settings and also provides sex education, on-site STD treatment, risk reduction counseling, partner management, and linkages to additional services, if needed. The program has collaborated with Metro TeenAIDS to start addressing those high-risk adolescents with repeat STDs over time in an attempt to prevent them from eventually becoming infected with HIV. HAHSTA also collaborates with Unity Health Care to provide HIV and pregnancy testing for high-risk adolescents during in-school treatment.

In addition, HAHSTA has created a gonorrhea/chlamydia Reactor Grid to focus limited resources on following-up with youth (<25 years of age), pregnant women, and HIV infected persons who are diagnosed with gonorrhea and/or chlamydia. This resource has helped increase the number of infected persons brought in for examination and treatment and decrease the number of infected persons for whom appropriate treatment was merely confirmed.

The re-emergence of syphilis in Washington, DC from 2000 to present is predominately among MSM of all races and ethnicities. With many of these cases, traditional partner management is ineffective because their sexual encounters are pseudo-anonymous, (i.e., they don't know the person's full name, phone number, or address). Consequently, HAHSTA started an Internet Partner Notification (IPN) program in March 2007 for syphilis cases. This allows for partner notification of these pseudo-anonymous partners that are met online. IPN augments traditional syphilis case management and aids in the location, notification, testing, and treatment of partners. HAHSTA has begun using IPN for HIV cases as well.

Much of the primary and secondary syphilis among MSM is reported from sites other than the publicly operated SE STD Clinic. In response, HAHSTA has embedded a Disease Investigation Specialist at Whitman-Walker Health, the largest healthcare provider for the LGBT population in Washington, DC. This has facilitated more timely interviews with syphilis cases and improved the location, testing, and treatment of their partners. HAHSTA is considering expanding this initiative to other MSM providers in the community.

In addition, HAHSTA has collaborated with several community-based organizations to offer STD and HIV screening in the Crew Club, the city's main bathhouse serving MSM. This effort facilitates engagement of hard-to-reach men who do not self-identify as gay or bisexual but still have sex with other men.

As technology evolves, STD programs should also evolve. Besides IPN, HAHSTA is also using the internet to facilitate partner notification of other STDs. Developed by Internet Sexuality Information Services, Inc. (ISIS), inSPOT (www.inSPOT.org) provides a completely anonymous way to inform partners of persons diagnosed and treated for STDs about their exposure and provides immediate linkages to information and testing locations.

HAHSTA also partners with ISIS, Inc. to provide text message reminders to adolescents screened during the SBSP to call in for their results. This initiative has been overwhelmingly successful at increasing the number of tested

adolescents aware of their infection status and HAHSTA intends to further evaluate this collaboration to determine if it improves the timeliness of treatment and linkage to additional resources. Based on the initial success HAHSTA has started using text messages to remind infected youth to get their partners treated and to get re-screened for STDs three months after treatment.

The SE STD Clinic began opt-out HIV testing in July 2009. Since then more clients have been screened for HIV. Clients with a previous HIV infection are linked into comprehensive care if they do not have a medical home. HAHSTA is also providing mental health and substance abuse screening at the SE STD Clinic in an attempt to better address the needs of clients with repeat STD infections.

## **Section VII. Viral Hepatitis**

Hepatitis is defined as inflammation or swelling of the liver. The most common types of viral hepatitis in the United States are hepatitis A virus, hepatitis B virus, and hepatitis C virus. Although all these viruses affect the liver, symptoms, severity, and primary modes of transmission differ based on the type of hepatitis. The following section presents a detailed look at persons that met the minimum surveillance diagnostic criteria for viral hepatitis between 2006 and 2010. This report does not describe all persons in the District living with viral hepatitis and does not provide information on clinical disease activity or severity.

The purpose of the viral hepatitis surveillance system in DC is to systematically assess the burden of disease, monitor trends, and identify possible outbreaks. For this report, unless otherwise noted "Chronic Hepatitis B" refers to confirmed or probable cases; "Chronic Hepatitis C" refers to confirmed, probable, or suspect cases; and "Acute Hepatitis A" refers to a confirmed case.

In late 2007 HAHSTA conducted an assessment of the Viral Hepatitis Registry and created a transition plan that resulted in a new and expanded registry allowing for thorough and accurate analysis of case reports. The plan involved the development of local hepatitis surveillance and quality control guidelines, extensive reorganization of historical records, de-duplication of cases, and data cleaning. Pediatric cases of hepatitis B are reported to HAHSTA and case investigation falls under the jurisdiction of the DOH Division of Immunizations. However, pediatric cases of chronic hepatitis B are incorporated into the data presented here.

#### **Chronic Hepatitis B**

Hepatitis B virus is transmitted through contact with bodily fluids of an infected person, including blood, semen, and vaginal fluid. Chronic hepatitis B begins as an acute infection, but in some people the immune system fails to clear the infection and results in chronic disease. According to the CDC, among persons exposed to hepatitis B virus, the risk for chronic infection varies according to the age at infection and is greatest among young children. Approximately 90% of infants and 25-50% of children less than 5 years of age will remain chronically infected with hepatitis B. By contrast, approximately 95% of adults recover completely from acute infection and will not develop chronic disease. Between 2006 and 2010, 3,127 people were reported with chronic hepatitis B in the District. More than half (60.1%) of these cases were men. Race and ethnicity data was missing for 65.0% of cases. Among those with available information, 73.2% were black. In addition, more than half of the cases (51.3%) of the cases were between 30 and 49 years of age.

Table 9. Reported Chronic Hepatitis B Cases by Gender, Race/Ethnicity, Age at Diagnosis, and Year ofDiagnosis, 2006-2010

Chronic Hepatitis B Cases		
	N	%
Gender		
Male	1,879	60.1
Female	1,226	39.2
Transgender	<3	
Unknown	21	0.7
Total	3,127	100.0
Race/Ethnicity		
Black	802	25.7
White	110	3.5
Hispanic	33	1.1
Asian/Pacific Islander	131	4.2
American Indian	3	0.1
Mixed	17	0.5
Unknown	2,031	65.0
Total	3,127	100.0
Age at Diagnosis		
0 - 12	15	0.5
13 - 19	61	2.0
20 - 29	471	15.1
30 - 39	775	24.8
40 - 49	828	26.5
50 - 59	608	19.4
≥60	369	11.8
Total	3,127	100.0
Year of Diagnosis		
2006	721	23.1
2007	781	25.0
2008	499	16.0
2009	541	17.3
2010	585	18.7
Total	3,127	100.0

- The total number of chronic hepatitis B cases reported to the District has decreased by 25% since 2007.
- Among those with known race and gender, almost half (45.7%) were black men.

#### **Chronic Hepatitis C**

Hepatitis C is transmitted through blood and the most common mode of transmission is sharing contaminated injection drug equipment, needles, or syringes. Hepatitis C is also transmitted through sexual contact with an infected person, needle sticks, and from pregnant women to their children, although these modes occur less frequently. According to the CDC, of every 100 persons infected with hepatitis C approximately:

- 75-85 will develop chronic infection
- 60-70 will develop chronic liver disease
- 5-20 will develop cirrhosis, or scarring of the liver, 20-30 years later
- 1-5 will die from the consequences of chronic infection (liver cancer or cirrhosis)

Chronic hepatitis C is the leading cause of liver transplantation in the US. However, infected persons can take measures to prolong the health of their liver. These precautions include reducing or stopping alcohol use, following a healthy diet, and checking with health professionals before taking any medications.

From 2006-2010, there were 13,236 reports of chronic hepatitis C in the District. Approximately two-thirds (65.6%) of these cases were men. As with hepatitis B, two-thirds (65.0%) of the cases had unknown race/ethnicity. Among cases with known race however, 90.9% of the cases were black. Nearly all (91.3%) chronic hepatitis C cases were diagnosed at 40 years of age or older, with the largest proportion (48.8%) of any age group occurring among those 50 to 59 years of age.

# Table 10. Reported Chronic Hepatitis C Cases by Gender, Race/Ethnicity, Age at Diagnosis, and Year ofDiagnosis, 2006-2010

GenderMale8,68065.4Female4,48133.9Transgender<3 $3.9$ Unknown730.0Total13,236100.0Race/EthnicityBlack4,21931.9Black4,21931.931.9White2441.4Hispanic550.4Asian/Pacific Islander1040.3American Indian<3 $-$ Mixed180.1Unknown8,59465.0Total13,236100.0Age at Diagnosis $-$ 0 - 12340.120 - 293772.330 - 396875.140 - 493,46326.150 - 596,46448.8≥602,15716.3Unknown130.1Total13,236100.0Year of Diagnosis $-$ 20062,07315.120073,22524.220082,70320.220092,74120.220102,49418.8	Chronic Hepatitis C Cases		
Male8,68065.0Female4,48133.9Transgender<3 $3.9$ Unknown730.0Total13,236100.0Race/Ethnicity $13,236$ 100.0Black4,21931.9White2441.8Hispanic550.4Asian/Pacific Islander1040.3American Indian<3 $-$ Mixed180.1Unknown8,59465.0Total13,236100.0Age at Diagnosis $-$ 0 - 12340.313 - 19410.320 - 2937772.930 - 396875.540 - 493,46326.550 - 596,46448.8≥602,15716.3Unknown130.3Total13,236100.0Year of Diagnosis $-$ 20062,07315.320073,22524.220082,70320.220092,74120.320102,49418.8		N	%
Initial3,48133.3Transgender<3	Gender		
Transgender<3Unknown730.0Total13,236100.0Race/Ethnicity13,236100.0Black4,21931.9White2441.8Hispanic550.4Asian/Pacific Islander1040.3American Indian<3	Male		65.6
Unknown         73         0.4           Total         13,236         100.0           Race/Ethnicity         31.9           Black         4,219         31.9           White         244         1.8           Hispanic         55         0.4           Asian/Pacific Islander         104         0.3           American Indian         <3	Female	4,481	33.9
Total13,236100.0Race/Ethnicity100.0Black4,21931.9White2441.8Hispanic550.4Asian/Pacific Islander1040.3American Indian<3	Transgender	-	-
Race/EthnicityBlack4,21931.9White2441.8Hispanic550.4Asian/Pacific Islander1040.8American Indian<3	Unknown		0.6
Black4,21931.9White2441.3Hispanic550.4Asian/Pacific Islander1040.3American Indian<3		13,236	100.0
White2441.3Hispanic550.4Asian/Pacific Islander1040.3American Indian<3	Race/Ethnicity		
Hispanic       55       0.4         Asian/Pacific Islander       104       0.3         American Indian       <3		, -	31.9
Asian/Pacific Islander       104       0.3         American Indian       <3	White	244	1.8
American Indian       <3	Hispanic	55	0.4
Mixed180.:Unknown $8,594$ $65.0$ Total $13,236$ $100.0$ Age at Diagnosis $0 - 12$ $34$ $0 - 12$ $34$ $0.3$ $13 - 19$ $41$ $0.3$ $20 - 29$ $377$ $2.3$ $30 - 39$ $687$ $5.3$ $40 - 49$ $3,463$ $26.3$ $50 - 59$ $6,464$ $48.3$ $≥60$ $2,157$ $16.3$ Unknown $13$ $0.3$ Total $13,236$ $100.4$ Year of Diagnosis $2006$ $2,073$ $2006$ $2,703$ $20.4$ $2008$ $2,703$ $20.4$ $2009$ $2,741$ $20.5$ $2010$ $2,494$ $18.5$	,	104	0.8
Unknown       8,594       65.0         Total       13,236       100.0         Age at Diagnosis       0       1         0 - 12       34       0.1         13 - 19       41       0.1         20 - 29       377       2.1         30 - 39       687       5.1         40 - 49       3,463       26.1         50 - 59       6,464       48.3         ≥60       2,157       16.3         Unknown       13       0.1         Total       13,236       100.4         Year of Diagnosis       2       2         2006       2,073       15.1         2007       3,225       24.4         2008       2,703       20.2         2009       2,741       20.2         2010       2,494       18.8	American Indian	<3	-
Total13,236100.0Age at Diagnosis $0 - 12$ $34$ $0.3$ $0 - 12$ $34$ $0.3$ $13 - 19$ $41$ $0.3$ $20 - 29$ $377$ $2.3$ $30 - 39$ $687$ $5.3$ $40 - 49$ $3,463$ $26.3$ $50 - 59$ $6,464$ $48.3$ $\geq 60$ $2,157$ $16.3$ Unknown $13$ $0.3$ Total $13,236$ $100.0$ Year of Diagnosis $2,073$ $15.3$ $2006$ $2,703$ $20.43$ $2008$ $2,703$ $20.43$ $2009$ $2,741$ $20.53$ $2010$ $2,494$ $18.33$	Mixed		0.1
Age at Diagnosis $0 - 12$ $34$ $0.3$ $13 - 19$ $41$ $0.3$ $20 - 29$ $377$ $2.3$ $30 - 39$ $687$ $5.3$ $40 - 49$ $3,463$ $26.3$ $50 - 59$ $6,464$ $48.3$ $\geq 60$ $2,157$ $16.3$ Unknown $13$ $0.3$ Total $13,236$ $100.0$ Year of Diagnosis $2,073$ $15.3$ $2006$ $2,073$ $15.3$ $2007$ $3,225$ $24.4$ $2008$ $2,703$ $20.43$ $2009$ $2,741$ $20.53$ $2010$ $2,494$ $18.33$			65.0
0 - 12340.3 $13 - 19$ 410.3 $20 - 29$ $377$ 2.9 $30 - 39$ $687$ 5.3 $40 - 49$ $3,463$ 26.3 $50 - 59$ $6,464$ 48.3≥602,15716.3Unknown130.3Total13,236100.0Year of Diagnosis220062,07315.320073,22524.420082,70320.420092,74120.320102,49418.3		13,236	100.0
$13 - 19$ $41$ $0.7$ $20 - 29$ $377$ $2.9$ $30 - 39$ $687$ $5.7$ $40 - 49$ $3,463$ $26.7$ $50 - 59$ $6,464$ $48.8$ $\geq 60$ $2,157$ $16.7$ Unknown $13$ $0.7$ <b>Total 13,236 100.0 Year of Diagnosis</b> $2,073$ $15.7$ 2006 $2,703$ $20.7$ 2008 $2,703$ $20.7$ 2009 $2,741$ $20.7$ 2010 $2,494$ $18.87$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		•	0.3
$30 - 39$ $687$ $5.2$ $40 - 49$ $3,463$ $26.2$ $50 - 59$ $6,464$ $48.3$ $\geq 60$ $2,157$ $16.3$ Unknown $13$ $0.3$ Total $13,236$ $100.0$ Year of Diagnosis $2,073$ $15.2007$ $2006$ $2,073$ $15.2007$ $2008$ $2,703$ $20.225$ $2009$ $2,741$ $20.2020$ $2010$ $2,494$ $18.3200$		•	0.3
$40 - 49$ $3,463$ $26.3$ $50 - 59$ $6,464$ $48.3$ $\geq 60$ $2,157$ $16.3$ Unknown $13$ $0.3$ Total $13,236$ $100.4$ Year of Diagnosis $2,073$ $15.3$ 2006 $2,073$ $15.3$ 2007 $3,225$ $24.4$ 2008 $2,703$ $20.43$ 2009 $2,741$ $20.53$ 2010 $2,494$ $18.33$		÷	2.9
50 - 59 $6,464$ $48.3$ ≥60 $2,157$ $16.3$ Unknown13 $0.3$ Total $13,236$ $100.4$ Year of Diagnosis $2,073$ $15.3$ 2006 $2,073$ $15.3$ 2007 $3,225$ $24.4$ 2008 $2,703$ $20.4$ 2009 $2,741$ $20.3$ 2010 $2,494$ $18.3$			
≥60       2,157       16.3         Unknown       13       0.3         Total       13,236       100.4         Year of Diagnosis       2006       2,073       15.3         2007       3,225       24.4         2008       2,703       20.2         2009       2,741       20.3         2010       2,494       18.3			
Unknown         13         0.1           Total         13,236         100.0           Year of Diagnosis         2006         2,073         15.           2007         3,225         24.         20.03         20.02           2008         2,703         20.02         20.03         20.02           2009         2,741         20.0         20.10         2,494         18.5			
Total13,236100.0Year of Diagnosis2,07315.120062,07315.120073,22524.220082,70320.220092,74120.120102,49418.3			
Year of Diagnosis         2,073         15.           2006         2,073         15.           2007         3,225         24.           2008         2,703         20.           2009         2,741         20.           2010         2,494         18.3	******		0.1
20062,07315.20073,22524.20082,70320.20092,74120.20102,49418.		13,236	100.0
2007       3,225       24.         2008       2,703       20.         2009       2,741       20.         2010       2,494       18.			
2008         2,703         20.           2009         2,741         20.           2010         2,494         18.		,	15.7
2009         2,741         20.           2010         2,494         18.			24.4
2010 2,494 18.8			20.4
Total 13,236 100.0		2,494 13,236	18.8 100.0

• Among cases with known race and gender, more than half (55.9%) were black men.

#### Acute Hepatitis A

Hepatitis A infection is an acute or newly occurring liver disease, which can last from a few weeks to several months. The majority of people with hepatitis A are able to clear the infection from their bodies and their symptoms can improve without treatment. Once exposed to hepatitis A either by vaccination or natural infection, a person develops lifelong antibodies that will protect them against the virus should they be exposed again. Hepatitis A is spread by ingesting fecal matter contaminated by the hepatitis A virus. Common modes of transmission include direct contact with objects, foods, or drinks that have been handled by an infected individual, engaging in oral-anal sexual activity (rimming) with an infected person, eating contaminated produce, or eating raw or undercooked mollusks from contaminated waters.

Table 11. Reported Acute Hepatitis A Cases by Gender, Race/Ethnicity, Age at Diagnosis, Year ofDiagnosis, District of Columbia, 2006-2010

Acute Hepatitis A		
	N	%
Gender		
Male	117	60.9
Female	73	38.0
Transgender	0	0
Unknown	<3	
Total	192	100.0
Race/Ethnicity		
Black	62	32.3
White	28	14.6
Hispanic	4	2.1
Asian/Pacific Islander	3	1.6
American Indian	<3	
Mixed	3	1.6
Unknown	91	47.4
Total	192	100.0
Age at Diagnosis		
0 - 12	<3	
13 - 19	6	3.1
20 - 29	33	17.2
30 - 39	37	19.3
40 - 49	30	15.6
50 - 59	47	24.5
≥60	38	19.8
Total	192	100.0
Year of Diagnosis		
2006	30	15.6
2007	41	21.4
2008	37	19.3
2009	50	26.0
2010	34	17.7
Total	192	100.0

- More than half (60.9%) of acute hepatitis A cases occurred among men.
- Almost half (47.4%) of individuals diagnosed with acute hepatitis A have unknown race. Among those with known race, 61.4% of the cases were black.
- Acute hepatitis A is most common among the 50-59 age group (24.5%) and 44.3% of all cases were 50 years of age and older.

#### **Sub-Specialty Clinics**

In 2009, the Partnership for HIV/AIDS Progress integrated subspecialty medical services into existing community clinics to expand access and research for people living with HIV in DC. The Subspecialty Clinics provide enhanced services to persons with and without HIV and hepatitis B or hepatitis C. The clinics are based in five existing HIV health centers in the District.

From June 2009 through December 2011, 401 patients were seen at the subspecialty clinics. The average age of these patients was 54 years, more than two-thirds (71%) were men, and the majority (84%) were black. Of these patients, 365 were infected with hepatitis C. Of the hepatitis C patients that needed a liver biopsy, 76% of them received a biopsy at the clinic and approximately half have been referred for hepatitis C treatment.

#### **Programmatic Priorities**

Viral hepatitis infections are a major public health problem in the District of Columbia. The Viral Hepatitis program at HAHSTA works to effectively monitor the status of hepatitis disease, reduce transmission and improve health outcomes for individuals infected with hepatitis. Efforts are currently underway to scale up prevention and treatment of hepatitis. For instance, HAHSTA has facilitated trainings of substance abuse agencies serving at-risk populations in DC on prevention, harm reduction, and screening for hepatitis.

HAHSTA also maintains web pages at www.doh.dc.gov/hepatitis with information on hepatitis and community services. HAHSTA has developed and is distributing a handbook for medical providers and has launched a social marketing campaign with metro advertising and outreach materials.

The DC Immunization Program works diligently to prevent perinatal transmission of hepatitis B and significant efforts are also underway to promote and scale-up vaccination among at-risk persons. Program staff works with agencies to inform residents of the hepatitis resources available within the District and to educate infected persons about the importance of monitoring liver function and ways to reduce further liver damage.

Ongoing and more complete surveillance is needed to better understand the trends in hepatitis infection in the District. A continued analysis of hepatitis case reports over time will help to better direct funding efforts to prevent future cases from occurring and to direct resources for care and treatment of persons living with viral hepatitis.

## **Section VIII. Tuberculosis**

Tuberculosis (TB) is an infection caused by the bacteria *Mycobacterium tuberculosis*. TB is a disease that is spread from person to person through the air. This can occur by sharing airspace for an extended period of time in an enclosed setting such as one's home or in a small office. TB usually affects the lungs. The bacteria are put into the air when a person with active TB of the lungs coughs, sneezes, laughs, or sings. Some people exposed to TB (close contacts) will be infected with TB.

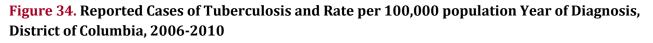
TB skin or blood tests help identify persons who have been infected with TB. Most people who are infected with TB, known as latent TB infection (LTBI), do not develop active TB disease. Some people with LTBI will progress to active TB disease, but it may be several years after they were initially infected before they become sick. LTBI is a condition in which TB bacteria are alive but inactive in the body. People with LTBI may greatly reduce the chance of progressing to TB disease by taking treatment for their infection. Persons with weakened immune systems (e.g., those with HIV) are at greater risk for progressing from LTBI to active TB disease.

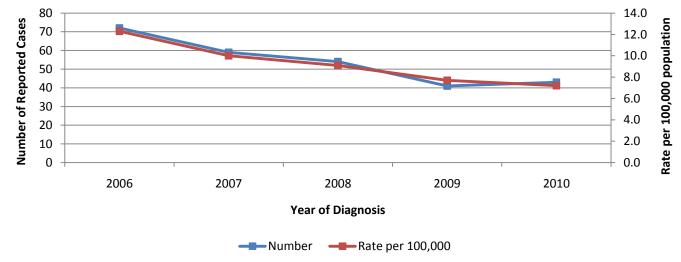
Active TB is defined as an illness in which TB bacteria are multiplying and attacking a part of the body, usually the lungs. Symptoms of TB of the lungs may include a cough that lasts for three weeks or more, coughing up blood or blood stained mucus, loss of appetite, unexplained weight loss, drenching night sweats, extreme fatigue, sore throat or hoarseness. A person with active TB disease may be infectious and spread TB bacteria to others. TB is a disease than can be cured if treated properly.

The following section describes TB surveillance data reported in the District from 2006 to 2010. It is important to note that the cases reported in the figures represent cases of active TB disease and not LTBI. LTBI is not a reportable condition in the District.

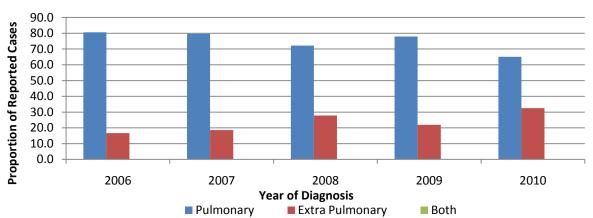
#### **Reduction in TB**

The District has experienced considerable success over the last five years in reducing the number of TB cases and consequently the TB case rate among District residents. In 2010, 43 cases of TB were reported, a 40% decrease from the 72 cases reported in 2006 (Figure 34). During the report period, the TB case rate fell from 12.3 to 7.2 per 100,000 people. The number of cases from 2009 to 2010 has leveled off, at 41 and 43 respectively.





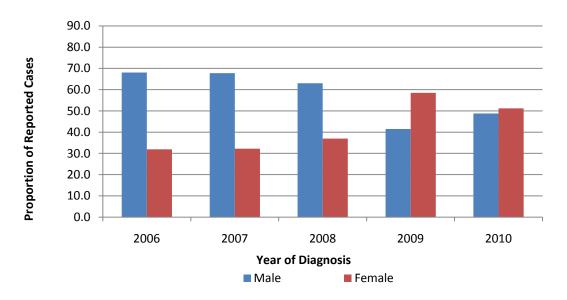




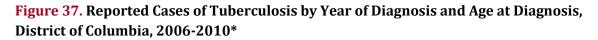
\*Less than 3 persons were infected with TB at both sites per year, therefore no bars appear in the figure.

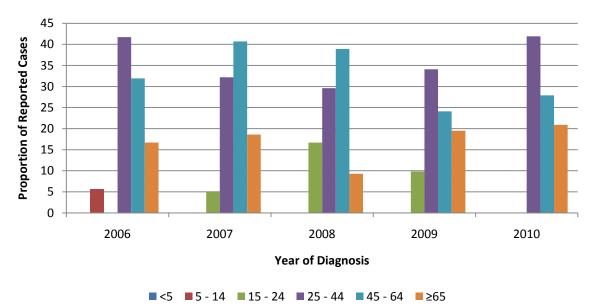
- The number of extrapulmonary cases of TB as a proportion of all cases has increased over time, from 16.7% in 2006 to 32.5% in 2010. Extrapulmonary TB, by definition, occurs in sites other than the lungs or respiratory system and is not considered infectious.
- Occasionally, persons may be infected with TB in multiple sites. Over the report period, a total of four people were infected with both pulmonary and extrapulmonary TB.

**Figure 36.** Reported Cases of Tuberculosis by Year of Diagnosis and Sex, District of Columbia, 2006-2010



Overall 59.9% of reported TB cases were among men. In 2009 and 2010, however, this long standing trend was reversed somewhat, with more than half (54.8%) of cases being reported among women.

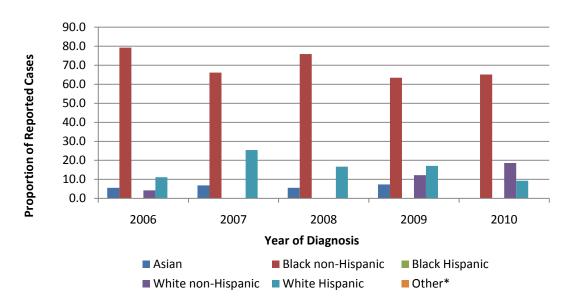




\*When age categories are less than 3, no bar appears for this category.

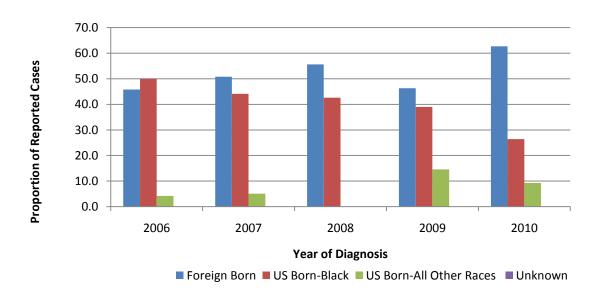
- The majority of cases (71.0%) during this time period were 25-64 years of age.
- For each year the number of cases in children 5 years or younger was less than 3 except for 2008, in which there were 3 cases reported in this age group. Over the report period, a total of 8 cases were reported in this age group.

**Figure 38.** Reported Cases of Tuberculosis by Year of Diagnosis and Race/Ethnicity, District of Columbia, 2006-2010



• The vast majority of reported cases were among black non-Hispanic residents (71%). White Hispanic residents accounted for 16.0 % of reported cases.

# **Figure 39.** Reported Cases of Tuberculosis by Year of Diagnosis and Place of Birth, District of Columbia, 2006-2010



- Generally, the proportion of cases reported among foreign born persons has risen over the period, from 45.8% in 2006 to 62.7% in 2010, reflecting national trends.
- TB cases in US-born blacks have decreased from 36 reported cases in 2006 to 14 in 2010.
- Both the absolute number of cases and the case rate in US-born blacks have substantially decreased over time.

All positive TB cultures are tested for susceptibility to the drugs used in treatment. Multi-drug resistant TB (MDR-TB), or TB that is resistant to two of the first line treatment agents (isoniazid and rifampin) has been observed infrequently in the District. Two cases of MDR-TB were reported in 2006 and one case of MDR-TB was reported in 2010.

HAHSTA attributes the successful reduction in TB cases and the low number of drug resistant cases to using directly Observed Therapy (DOT) as the standard of care for all active TB cases, the provision of case management services for all active TB cases, and rapid contact investigation, which includes education and evaluation.

#### **Program Priorities**

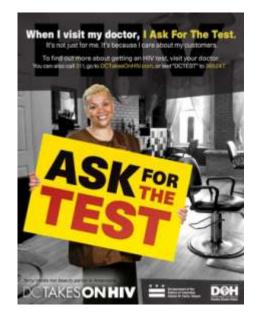
The TB program carries out activities that will contribute to the prevention, control, and eventual elimination of TB in the District. Program priorities include:

- Diagnosis, management, and treatment of all reported TB cases.
- Evaluation and treatment, as appropriate, of persons found to be close contacts of persons with pulmonary TB.
- Identification and treatment, as appropriate, of others at high risk for developing pulmonary TB.

The primary methods used to achieve the program priorities include the following: comprehensive case management; field outreach for contact investigations; medication adherence strategies, such as Directly Observed Therapy; application of the most current diagnostic techniques; consultation and education of medical and community partners; and the collection, analysis and dissemination of data.

By 2015, the TB program intends to reduce TB case rates among all District residents and in selected subpopulations to:

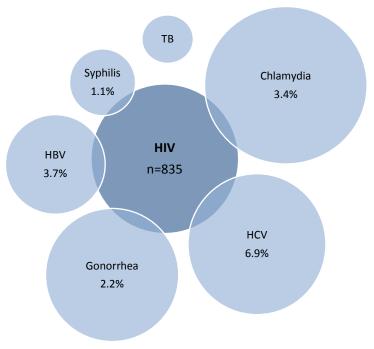
- Reduce TB in District residents to 3.0 cases per 100,000
- Reduce TB in US-born persons to 0.7 cases per 100,000
- Reduce TB in foreign-born persons to 18.4 cases per 100,000
- Reduce TB in US-born blacks to 1.3 cases per 100,000
- Reduce TB in children less than 5 years of age to 0.4 cases per 100,000



## **Section IX. Syndemics**

Syndemics can be defined as two or more diseases, or conditions, that interact to create an increase in transmissions or to worsen the health outcomes of people and communities. HAHSTA has examined HIV, STDs, viral hepatitis and TB to assess the prevalence of each disease as well as how they intersect in communities and populations. Syndemics are influenced not only by background prevalence but also by people, communities and environmental conditions. This syndemic analysis looks to describe focus populations and their risk factors as well as burden of disease.

The syndemic analyses were completed by matching newly diagnosed cases of each disease (HIV, chlamydia, gonorrhea, syphilis, chronic hepatitis C, chronic hepatitis B, and TB) in 2010 to newly diagnosed cases of the remaining STDs and tuberculosis and prevalent cases of the remaining chronic conditions (HIV, hepatitis B and hepatitis C). In order to accurately match the data registries the link program, Link-King®, was used. Cases were matched by last name, first name, date of birth, sex, and race and potential matches were reviewed for accuracy. **HIV Syndemics** 



#### Figure 40. Proportion of HIV Cases Diagnosed in the District of Columbia with a Co-Infection, 2010

Persons diagnosed with HIV are often infected with other communicable diseases. Of the 835 HIV diagnoses in 2010, approximately 17% were identified as having a co-infection. Seven percent (7%) were co-infected with chronic hepatitis C, and approximately 4% were co-infected with chronic hepatitis B. Co-infections with sexually transmitted diseases (STD) were also present. Approximately 3% percent of the HIV diagnoses were co-infected with chlamydia and 2.2% were co-infected with gonorrhea. Approximately 1% were infected with syphilis during 2010. There were slight differences among HIV diagnoses that were co-infected in comparison with those in infected with HIV only. Co-infected cases were more likely to be black (85.4% vs. 76.2%), MSM (40.0% vs. 35.9%) and over the age of 40 (49.3% vs. 42.7%).

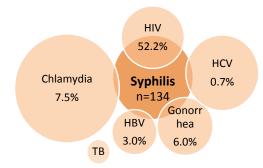
#### Table 12. Characteristics of Co-Infected and HIV Only Cases, District of Columbia, 2010

	Co	o-Infected		HIV Only		Total
	Ν	%	Ν	%	Ν	%
Sex						
Male	97	74.6	501	71.1	598	71.6
Female	33	25.4	204	28.9	237	28.4
Total	130	100.0	705	100.0	835	100.0
Race/Ethnicity						
White	14	10.8	95	13.5	109	13.1
Black	111	85.4	537	76.2	648	77.6
Hispanic	5	3.8	51	7.2	56	6.7
Other *	0	0.0	22	3.1	22	2.6
Total	130	100.0	705	100.0	835	100.0
Mode of Transmission						
MSM	52	40.0	253	35.9	305	36.5
MSM/IDU	<3		14	2.0	15	1.8
IDU	5	3.8	37	5.2	42	5.0
Heterosexual	43	33.1	235	33.3	278	33.3
RNI/Unknown	29	22.3	166	23.5	195	23.4
Total	130	100.0	705	100.0	835	100.0
Age at HIV Diagnosis						
13-19	6	4.6	20	2.8	26	3.1
20-29	35	26.9	211	29.9	246	29.5
30-39	25	19.2	173	24.5	198	23.7
40-49	27	20.8	170	24.1	197	23.6
50-59	33	25.4	91	12.9	124	14.9
≥60	4	3.1	40	5.7	44	5.3
Total	130	100.0	705	100.0	835	100.0



#### **Syphilis Syndemics**

Figure 41. Proportion of Syphilis Cases Diagnosed in the District of Columbia with a Co-Infection, 2010



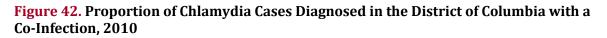
The co-occurring conditions of syphilis and HIV are a major public health priority in the District. Among the 134 syphilis diagnoses in 2010, more than half (52.2%) were previously diagnosed with HIV. Approximately 13.5% (7.5% Chlamydia and 6.0% gonorrhea) of syphilis diagnoses were co-infected with another STD. Three percent (3%) of syphilis cases were co-infected with chronic hepatitis B and less than 1% were co-infected with chronic hepatitis C. No syphilis cases were co-infected with tuberculosis in 2010.

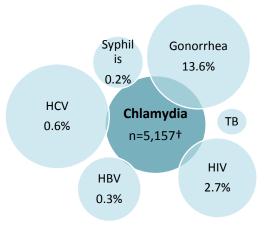
Few differences exist between co-infected and syphilis only cases diagnosed in 2010. All co-infected cases were men compared to 96.3% of syphilis only cases. Approximately 9% of the co-infected cases were over 50 years of age at diagnosis while less than 1% of the syphilis only cases were over 50 years old.

	Co	Infected	Syph	ilis Only		Total
	N	%	Ν	%	Ν	%
Gender						
Male	80	100.0	52	96.3	132	98.5
Female	0	0.0	<3		<3	
Total	80	100.0	54	100.0	134	100.0
Race/Ethnicity						
White	27	33.8	18	33.3	45	33.6
Black	42	52.5	29	53.7	71	53.0
Hispanic	7	8.8	4	7.4	11	8.2
Other*	<3		3	5.6	5	3.7
Unknown	<3		0	0.0	<3	
Total	80		54			
Age at Syphilis Diagnosis						
0-19	3	3.8	4	7.4	7	5.2
20-29	26	32.5	18	33.3	44	32.8
30-39	23	28.8	14	25.9	37	27.6
40-49	20	25.0	17	31.5	37	27.6
50-59	7	8.8	<3		8	6.0
60 +	<3		0	0.0	<3	
Total	80		54			

#### Table 13. Characteristics of Co-Infected and Syphilis Only Cases, District of Columbia, 2010

#### **Chlamydia Syndemics**





<sup>+</sup> People may be diagnosed with chlamydia more than once per year. There were 5,157 unique persons diagnosed with chlamydia in 2010 but the total number of cases of chlamydia reported was 5,577.

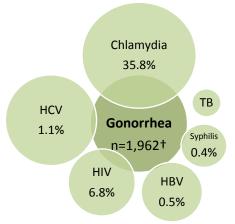
There were 5,157 unique persons diagnosed with chlamydia in 2010. Of those, 17% had a co-occurring disease. Of chlamydia cases, 13.6% were also diagnosed with gonorrhea, 0.6% with hepatitis C, 0.3% with hepatitis B, and 0.2% with syphilis. There were no chlamydia cases diagnosed with TB. In addition, 138 (2.7%) chlamydia cases had a previous HIV diagnosis. In comparison with persons only infected with chlamydia, co-infected cases were significantly more likely to be men (45.0% vs. 30.5%) and black (70.0% vs. 62.1%).

	Co	o-Infected	Chlam	ydia Only		Total
	N	%	Ν	%	Ν	%
Gender						
Male	379	45.0	1,317	30.5	1,696	32.9
Female	464	55.0	2,978	69.0	3,442	66.7
Unknown	0	0.0	19	0.4	19	0.4
Total	843	100.0	4,314	100.0	5,157	100.0
Race/Ethnicity						
White	34	4.0	107	2.5	141	2.7
Black	590	70.0	2,681	62.1	3,271	63.4
Hispanic	26	3.1	102	2.4	128	2.5
Other*	7	0.8	85	2.0	92	1.8
Unknown	186	22.1	1,339	31.0	1,525	29.6
Total	843	100.0	4,314	100.0	5,157	100.0
Age at Chlamydia Diagnosis						
0-14	12	1.4	90	2.1	102	2.0
15-19	362	42.9	1,723	39.9	2,085	40.4
20-24	221	26.2	1,318	30.6	1,539	29.8
25-29	93	11.0	587	13.6	680	13.2
30-39	78	9.3	397	9.2	475	9.2
≥40	77	9.1	190	4.4	267	5.2
Unknown	0	0.0	9	0.2	9	0.2
Total	843	100.0	4.314	100.0	5,157	100.0

#### Table 14. Characteristics of Co-Infected and Chlamydia Only Cases, District of Columbia, 2010

#### **Gonorrhea Syndemics**

**Figure 43.** Proportion of Gonorrhea Cases Diagnosed in the District of Columbia with a Co-Infection, 2010



<sup>+</sup> People may be diagnosed with gonorrhea more than once per year. Therefore there were 1,962 unique persons diagnosed with gonorrhea in 2010 but the total number of cases of gonorrhea reported was 2,104.

In 2010, 1,962 unique persons were diagnosed with gonorrhea in the District. More than one-third (35.8%) were co-infected with chlamydia. Approximately 7% of new gonorrhea diagnosis were persons living with HIV (n=133). There were no gonorrhea cases diagnosed with TB and less than 2% of gonorrhea cases had chronic hepatitis C (1.1%), chronic hepatitis B (0.5%) and syphilis (0.4%).

In comparison with persons only infected with gonorrhea, co-infected cases were more likely to be women (53.4% vs. 49.6%), black (70.0% vs. 62.1%), and between 15-19 years of age (43.4% vs. 29.2%).

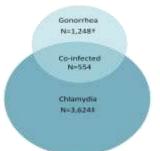
		Co-Infected	Go	norrhea Only		Total
	Ν	%	Ν	%	Ν	%
Gender						
Male	386	46.6	569	50.2	955	48.7
Female	442	53.4	562	49.6	1,004	51.2
Unknown	0	0.0	3	0.3	3	0.2
Total	828	100.0	1,134	100.0	1,962	100.0
Race/Ethnicity						
White	32	3.9	74	6.5	106	5.4
Black	588	71.0	734	64.7	1,322	67.4
Hispanic	26	3.1	15	1.3	41	2.1
Other*	10	1.2	28	2.5	38	1.9
Unknown	172	20.8	283	25.0	455	23.2
Total	828	100.0	1,134	100.0	1,962	100.0
Age at Gonorrhea Diagn	osis					
0-14	12	1.4	26	2.3	38	1.9
15-19	359	43.4	331	29.2	690	35.2
20-24	215	26.0	343	30.2	558	28.4
25-29	95	11.5	191	16.8	286	14.6
30-39	76	9.2	154	13.6	230	11.7
≥40	71	8.6	86	7.6	157	8.0
Unknown	0	0.0	3	0.3	3	0.2
Total	828	100.0	1,134	100.0	1,962	100.0

#### Table 15. Characteristics of Co-Infected and Gonorrhea Only Cases, District of Columbia, 2010

#### Gonorrhea and Chlamydia among Youth (Ages 15-24)

With the significant amount of chlamydia and gonorrhea co-infection in 2010, particularly among individuals under 25 years of age, HAHSTA includes this special section. The following graphic and table examine the prevalence of chlamydia and gonorrhea co-infection among youth in DC and the demographic characteristics associated with having this co-infection.

# **Figure 44**. Chlamydia and Gonorrhea Co-Infection Among Youth (Ages 15-24) in the District of Columbia, 2010



<sup>+</sup> Some youths were diagnosed with gonorrhea more than once in 2010. There were 1,248 youths diagnosed with gonorrhea but 1,343 total cases were reported.

\$Some youths were also diagnosed with chlamydia more than once in 2010.

There 3,624 youths were diagnosed with chlamydia, however 4,001 total cases were reported.

There were 3,624 chlamydia cases and 1,248 gonorrhea cases diagnosed among youth between 15 and 24 years of age. Of these young persons, 554 were diagnosed with both chlamydia and gonorrhea during 2010. This represents 44.4% of youth diagnosed with gonorrhea and 15.3% of youth diagnosed with chlamydia in 2010.

In comparison with chlamydia only cases, chlamydia/gonorrhea co-infections were more likely to be men (32.9% vs. 28.3%), black (77.4% vs. 68.6%), and between 15-19 years of age (64.1% vs. 56.4%).

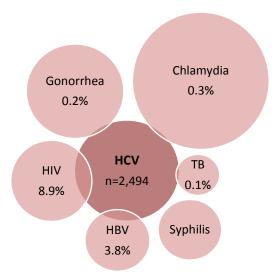
In contrast with gonorrhea only cases, chlamydia/gonorrhea co-infections were more likely to be women (67.1% vs. 57.8%), black (77.4% versus 72.3%), and between 15-19 years of age (64.1% vs. 48.3%).

# Table 16. Characteristics of Co-Infected, Chlamydia Only, and Gonorrhea Only Cases,District of Columbia, 2010

		Co-Infected	Chlar	nydia Only	Gonor	rhea Only
	N	%	N	%	Ν	%
Gender						
Male	182	32.9	870	28.3	290	41.8
Female	372	67.1	2,187	71.2	401	57.8
Unknown	0	0.0	13	0.4	3	0.4
Total	554	100.0	3,070	100.0	694	100.0
Race/Ethnicity						
White	3	0.5	42	1.4	19	2.7
Black	429	77.4	2,105	68.6	502	72.3
Hispanic	9	1.6	70	2.3	8	1.2
Other*	3	0.5	60	2.0	20	2.9
Unknown	110	19.9	793	25.8	145	20.9
Total	554	100.0	3,070	100.0	694	100.0
Age at Diagnosis						
15-19	355	64.1	1,730	56.4	335	48.3
20-24	199	35.9	1,340	43.6	359	51.7
Total	554	100.0	3,070	100.0	694	100.0

#### **Hepatitis C Syndemics**

**Figure 45.** Proportion of Chronic Hepatitis C Cases Diagnosed in the District of Columbia with a Co-Infection, 2010



Approximately 9% of the 2,494 chronic hepatitis C diagnoses in 2010 were co-infected with HIV and 3.8% were co-infected with chronic hepatitis B. Less than 1% of chronic hepatitis C diagnoses also had a tuberculosis, gonorrhea, chlamydia or syphilis diagnosis during 2010.

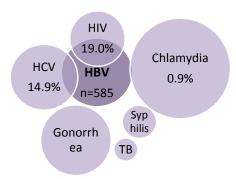
When comparing co-infected hepatitis C cases to cases infected with hepatitis C only, a greater proportion of co-infected cases were black (46.4% versus 27.1%).

Gender/Sex	N	%	N	-		
Gender/Sex			IN	%	N	%
Male	208	68.4	1,470	67.1	1,678	67.3
Female	94	30.9	709	32.4	803	32.2
Missing	<3		11	0.5	13	0.5
Total	304	100.0	2,190	100.0	2,494	100.0
Race/Ethnicity						
White	11	3.6	51	2.3	62	2.5
Black	141	46.4	594	27.1	735	29.5
American Indian	0	0.0	0	0.0	0	0.0
Asian/Pacific Islander	3	1.0	<3		5	0.2
Hispanic	0	0.0	9	0.4	9	0.4
Mixed	0	0.0	6	0.3	6	0.2
Other	149	49.0	1,528	69.8	1,677	67.2
Total	304	100.0	2,190	100.0	2,494	100.0
Age at Hepatitis C Diagnosis						
0-19	0	0.0	17	0.8	17	0.7
20-29	15	4.9	41	1.9	56	2.2
30-39	30	9.9	94	4.3	124	5.0
40-49	72	23.7	391	17.9	463	18.6
50-59	147	48.4	1,107	50.5	1,254	50.3
60-69	40	13.2	540	24.7	580	23.3
Total	304	100.0	2,190	100.0	2,494	100.0

#### Table 17. Characteristics of Co-Infected and Chronic Hepatitis C Only Cases, District of Columbia, 2010

#### **Hepatitis B Syndemics**

**Figure 46.** Proportion of Chronic Hepatitis B Cases Diagnosed in the District of Columbia with a Co-Infection, 2010



Of the 585 cases of chronic hepatitis B diagnosed in 2010, 19.0% were co-infected with HIV and 14.9% were co-infected with chronic hepatitis C. There were no TB, syphilis, or gonorrhea co-infections and less than 1% chlamydia co-infections.

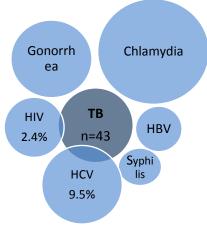
Co-infected chronic hepatitis B cases were more likely to be men (74.4% versus 57.5%) and black (40.9% versus 24.0%). Co-infected hepatitis B cases were also slightly older than hepatitis B only cases, as 41.5% of co-infected cases were 50 years of age and older while only 35.9% of hepatitis B only cases were over 50 years old.

#### Table 18. Characteristics of Co-Infected and Chronic Hepatitis B Cases, District of Columbia, 2010

		Co-Infected	Нера	atitis B Only		Total
	Ν	%	Ν	%	Ν	%
Gender/Sex						
Male	131	74.4	235	57.5	366	62.6
Female	41	23.3	170	41.6	211	36.1
Transgender	<3		<3	-	<3	-
Missing	3	1.7	4	1.0	7	1.2
Total	176	100.0	409	100.0	585	100.0
Race/Ethnicity						
White	9	5.1	12	2.9	21	3.6
Black	72	40.9	98	24.0	170	29.1
American Indian	0	0.0	0	0.0	0	0.0
Asian/Pacific Islander	<3		23	5.6	25	4.3
Hispanic	0	0.0	3	0.7	3	0.5
Mixed	0	0.0	0	0.0	0	0.0
Other*	93	52.8	273	66.7	366	62.6
Total	176	100.0	409	100.0	585	100.0
Age at Hepatitis B Diagnosis						
0-19	3	1.7	11	2.7	14	2.4
20-29	15	8.5	60	14.7	75	12.8
30-39	35	19.9	96	23.5	131	22.4
40-49	50	28.4	95	23.2	145	24.8
50-59	57	32.4	77	18.8	134	22.9
60-69	16	9.1	70	17.1	86	14.7
Total	176	100.0	409	100.0	585	100.0

#### **Tuberculosis Syndemics**

**Figure 47.** Proportion of Tuberculosis Cases Diagnosed in the District of Columbia with a Co-Infection, 2010



Of the 43 cases of active TB disease diagnosed in 2010, nearly 10% had a previous chronic hepatitis C diagnosis. No substantial differences were noted among co-infected cases and TB only cases in 2010. While only 2.4 % of TB cases in 2010 were diagnosed with HIV, this figure is not typical of the previous 5 year period, in which the average proportion of persons with TB who also had a diagnosis of HIV was 27.9%.

## Section X. Geographic Distribution

This section contains a portrait of the geographic distribution of HIV/AIDS, sexually transmitted diseases (STDs), viral hepatitis and tuberculosis cases in the District with maps and specific data points. The District is divided into eight geopolitical areas called "Wards." Ward information is collected for all reported cases. For persons who were incarcerated or in temporary housing or lacking housing at the time of diagnosis, the ward of residence is not collected and is reported separately from the maps as "jail" and "homeless" cases respectively. The availability of ward data varies by disease; however, where these data were not available, the cases were not included in the maps. When calculating rates by ward, the base population used is the total number of persons residing in that ward from the most recent census data, in 2010. It is also important to note that the ward of residence is not indicative of where a person was infected but represents where the person resided at the time of diagnosis. While these cases reported living in these wards at the time of diagnosis, they may no longer live in these wards as there is a large amount of movement both within and outside of the District.

#### Summary

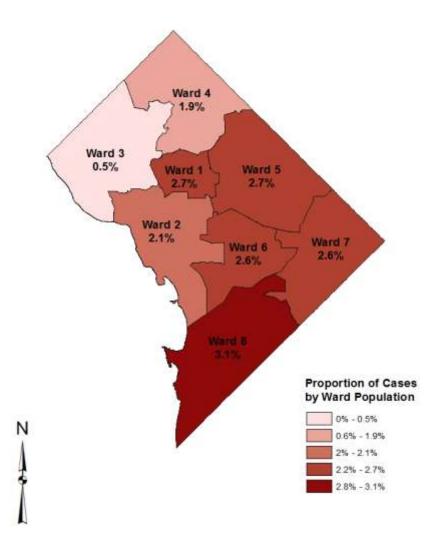
The rates of persons living with HIV at the end of 2010 were calculated for each ward in the District of Columbia. Similar to previous years, the rate of HIV in nearly all wards was greater than 1%. This indicates that the HIV epidemic is severe in seven of the city's eight wards. Ward 8 had the highest rate of persons living with HIV in the District, at 3.1%. Ward 1 had the greatest number of cases living with HIV at the end of 2010.

More than three quarters of chronic hepatitis B and C cases diagnosed between 2006 and 2010 had address and ward information available. Ward 8 had the greatest number of chronic hepatitis C cases while Ward 1 had the greatest number of chronic hepatitis B cases.

Address information was available for more than three quarters of chlamydia and gonorrhea cases and for all primary and secondary syphilis cases diagnosed in 2010. Rates of chlamydia and gonorrhea were highest in Ward 8 at 1,770.6 cases per 100,000 population and 739.6 cases per 100,000 population, respectively. Primary and secondary syphilis rates, however, were highest among persons living in Wards 1 and 2.

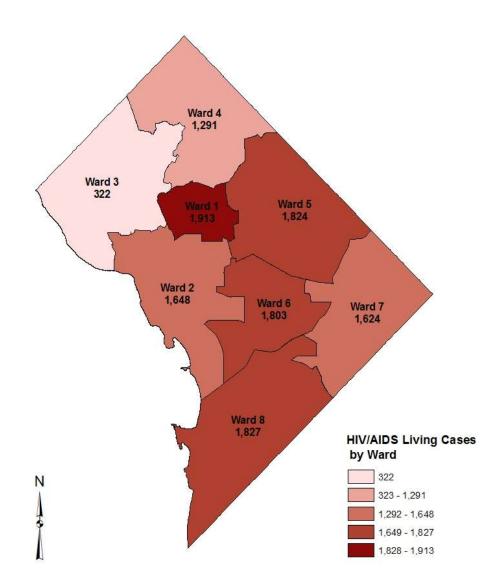
Ward information was available for almost all (93.7%) of the tuberculosis cases diagnosed between 2006 and 2010. Ward 1 had the highest number of tuberculosis cases diagnosed at 53 cases.

#### Map 1. Proportion of Adults and Adolescents Living with HIV by Ward, District of Columbia, 2010



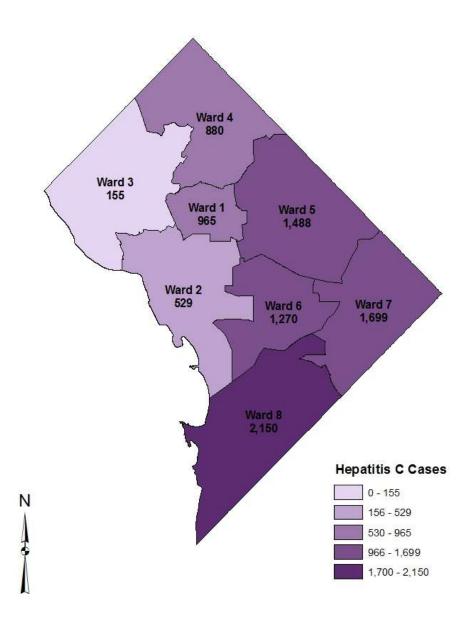
- Residence at diagnosis and ward information was available for 93.7% of living HIV cases.
- At the end of 2010, the highest rate of persons living with HIV was Ward 8 (3.1%) and the lowest rate of persons living with HIV was Ward 3 (0.5%).

Map 2. Number of Adults and Adolescents Living with HIV by Ward, District of Columbia, 2010



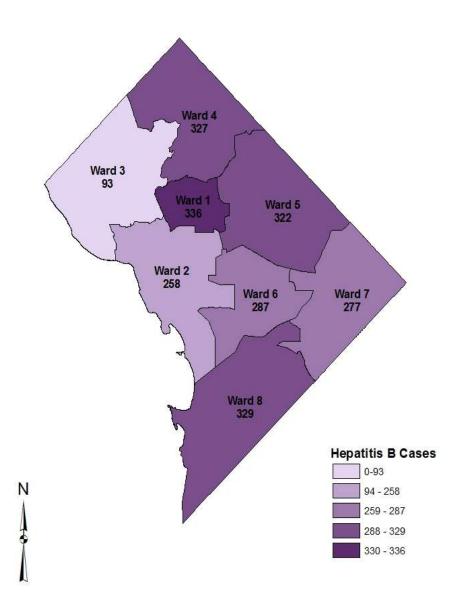
- At the end of 2010, the highest number of persons living with HIV was reported in Ward 1 (n=1,913).
- The lowest number of persons living with HIV was reported in Ward 3 (n=322).
- In addition, 371 persons living with HIV were homeless at diagnosis and 931 persons living with HIV were diagnosed in jail.

Map 3. Number of Chronic Hepatitis C Cases by Ward, District of Columbia, 2006-2010



- Address and ward information was available for 79.3% of chronic hepatitis C cases.
- Ward 8 had the greatest number of chronic hepatitis C cases diagnosed between 2006 and 2010 (n=2150).
- Ward 3 had the lowest number chronic hepatitis C cases diagnosed between 2006 and 2010 (n=155).
- In addition, 760 chronic hepatitis C cases were diagnosed in jail and 586 chronic hepatitis C cases were homeless at diagnosis between 2006 and 2010.

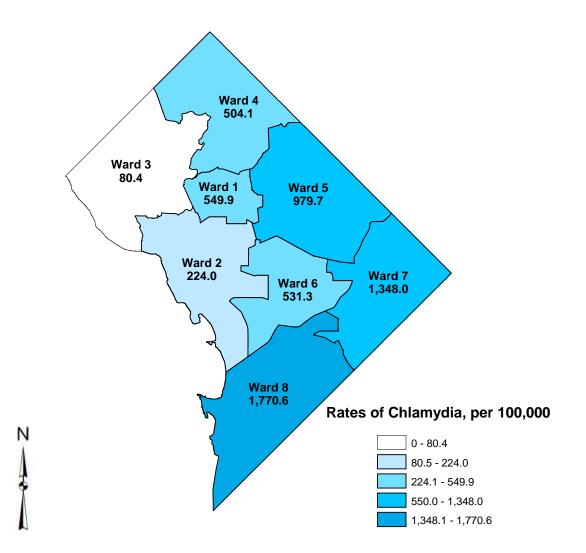
Map 4. Number of Chronic Hepatitis B Cases by Ward, District of Columbia, 2006-2010



- Address and ward information was available for 76.6% of chronic hepatitis B cases.
- Ward 1 had the greatest number of chronic hepatitis B cases diagnosed between 2006 and 2010 (n=336).
- Ward 3 had the lowest number chronic hepatitis B cases diagnosed between 2006 and 2010 (n=93).
- In addition, 94 chronic hepatitis B cases were diagnosed in jail and 68 chronic hepatitis B cases were homeless at diagnosis between 2006 and 2010.

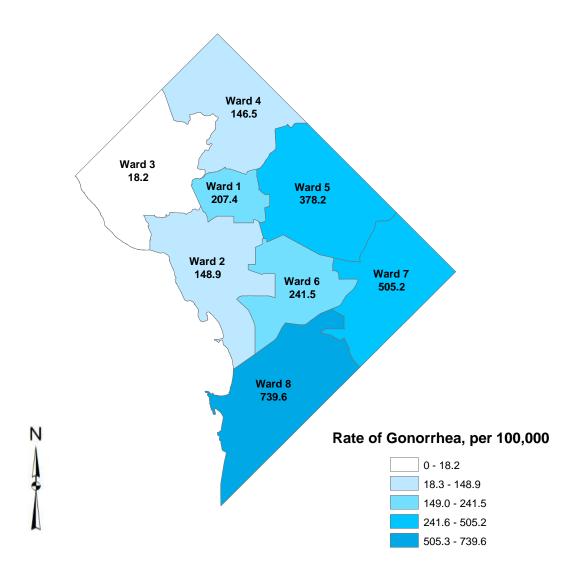
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Map 5. Chlamydia Rates per 100,000 population by Ward, District of Columbia, 2006-2010



- Ward information was available for 76.7% of chlamydia cases.
- The highest rate for chlamydia cases was reported in Ward 8 (1,770.6 cases per 100,000 population) in 2010.
- The lowest rate for chlamydia cases was reported in Ward 3 (80.4 cases per 100,000 population) in 2010.

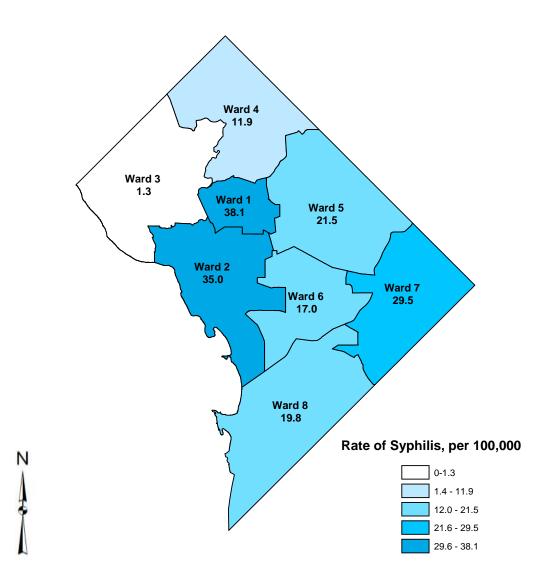
Map 6. Gonorrhea Rate per 100,000 population by Ward, District of Columbia, 2010



- Ward information was available for 83.2% of the gonorrhea cases diagnosed in 2010.
- In 2010, the highest rate of gonorrhea cases was reported in Ward 8 (739.6 cases per 100,000 population).
- In 2010, the lowest rate of gonorrhea cases was reported in Ward 3 (18.2 cases per 100,000 population).

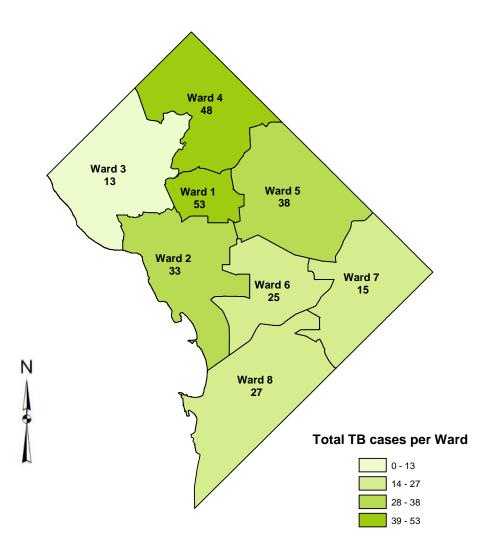
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Map 7. Primary and Secondary Syphilis Rates per 100,000 population by Ward, District of Columbia, 2010



- Ward information was available for 100% of syphilis cases diagnosed in 2010.
- In 2010, the highest rates of primary and secondary syphilis were in Ward 1 (38.1 cases per 100,000 population) and Ward 2 (35.0 cases per 100,000 population).
- In 2010, the lowest rate of primary and secondary syphilis was in Ward 3 (1.3 cases per 100,000 population).

Map 8. Number of Reported Cases of Tuberculosis by Ward, District of Columbia, 2006-2010



- Ward information was available for 93.7% of the tuberculosis cases diagnosed between 2006 and 2010.
- Over the five years, Ward 1 had the most reported cases (53), followed closely by Ward 4 with 48 cases.
- Ward 3 had the least number of cases (13), followed closely by Ward 7 (15).

# Section XI. Definitions

## **Definitions for HIV**

**Acquired Immunodeficiency Syndrome (AIDS):** A disease of the body's immune system caused by the human immunodeficiency virus (HIV). AIDS is characterized by the death of CD4 cells (an important part of the body's immune system), which leaves the body vulnerable to life-threatening conditions, including infections and cancers.

**Active Reporting:** State and local health department surveillance staff collect information by contacting health care practitioners, and reviewing medical records in hospitals, clinics, and doctor's offices.

**Adjustments:** Statistical calculations that allow the comparison of different groups (when the difference may affect what you are studying) as though they are alike. Differences in populations or subgroups make it difficult to make comparisons; adjustments remove the influence of a specific factor (for example, age, sex, race, or disease status) from the analysis.

**Aggregated data:** Information, usually summary statistics that may be compiled from personal information, that is grouped or presented together to prevent the identification of individuals.

**AIDS-defining illness:** Any of a list of illnesses included that, when occurring in an HIV -infected person, leads to a diagnosis of AIDS, the most serious stage of HIV infection. AIDS is also diagnosed if an HIV -infected person has a CD4 count below 200 cells/mm3, whether or not that person has an AIDS defining condition. The United States Centers for Disease Control and Prevention (CDC) published a list of 26 AIDS defining conditions in 1993, including candidiasis, cytomegalovirus disease, Kaposi's sarcoma, mycobacterium avium complex, pneumocystis carinii pneumonia, recurrent pneumonia, progressive multifocal leukoencephalopathy, pulmonary tuberculosis, invasive cervical cancer, and wasting syndrome.

**Analysis data, datasets, or database:** A dataset created by removing personal data (for example, names, addresses, ZIP codes, and telephone numbers) so the record or records cannot be linked to an individual, but still allows the remaining data to be analyzed.

**Antiretroviral therapy:** Treatment with drugs that inhibit the ability of retroviruses (such as HIV) to multiply in the body. The antiretroviral therapy recommended for HIV infection is referred to as highly active antiretroviral therapy (HAART), which uses a combination of medications to attack HIV at different points in its life cycle.

**Average:** The sum of a set of data divided by the number of cases.

**Case:** In epidemiology, a countable instance in the population or study group of a particular disease, health disorder, or condition under investigation, such as HIV infection (for example, an HIV case) or AIDS (for example, an AIDS case). A case may be an individual with the particular disease.

**CD4 Cell:** Also known as helper T cell or CD4 lymphocyte. A type of infection-fighting white blood cell that carries the CD4 protein receptor on its surface. CD4 cells coordinate the immune response, signaling other cells in the immune system to perform their special functions. The number of CD4 cells in a sample of blood is an indicator of the health of the immune system. HIV infects and kills CD4 cells, leading to a weakened immune system.

**CD4 Cell Count:** A measurement of the number of CD4 cells in a sample of blood. The CD4 count is one of the most useful indicators of the health of the immune system and the progression of HIV/AIDS. A CD4 cell count is used by health care providers to determine when to begin, interrupt, or halt anti-HIV therapy; when to give preventative treatment for opportunistic infections; and to measure response to treatment. A normal CD4 cell count is between

500 and 1,400 cells/mm3, but an individual's CD4 count can vary. In HIV-infected individuals, a CD4 count at or below 200 cells/mm3 is considered an AIDS-defining condition.

**Census:** The enumeration of an entire population, usually with details being recorded on residence, age, sex, occupation, ethnic group, marital status, birth history, and relationship to head of household.

**Centers for Disease Control and Prevention (CDC):** An agency of the United States Department of Health and Human Services that is charged with protecting the health and safety of citizens at home and abroad.

**Code-based Reporting**: HIV case reporting under the code-based era occurred from January 2001 through November 16, 2006 in the District of Columbia. The unique identifier code consists of a combination of the letters and number of letters in the last name, social security number, sex, and date of birth.

**Core Surveillance:** The primary source of population-based data on persons living with HIV/AIDS. Includes the number of annual cases of HIV diagnosed; the prevalence of persons living with HIV infection; and HIV-related (including AIDS) morbidity and mortality in adults, adolescents, and children; perinatal exposure to HIV and HIV infection; access to care in HIV-infected populations; and changes in trends of HIV transmission.

**Cumulative cases:** The total number of cases of a disease reported or diagnosed during a specified time. Cumulative cases can include cases in people who have died.

**Cumulative incidence rate:** The total number of persons who experience the onset of a disease during a specified period of time among all people at risk for the disease. A cumulative incidence rate is calculated by dividing cumulative incidence for a specified period by the population in which cases occurred during that period. A multiplier is used to convert the resulting fraction to a number over a common denominator (often 100,000).

**Data cleaning:** A standard practice commonly employed to improve the usability, quality, integrity, completeness, and accuracy of information collected in a database system.

**Demographic information:** The "person" characteristics – age, sex, race, and occupation – of descriptive epidemiology used to characterize the populations at risk.

**Denominator:** The lower portion of a fraction used to calculate a rate or ratio. In a rate, the denominator is usually the population (or population experience, as in person-years, etc.) at risk.

**Epidemic:** A disease that has spread rapidly through a segment of the human population in a given geographic area.

**Epidemiologic follow-up:** The investigative process for obtaining additional information on a reported HIV/AIDS case.

**Epidemiologic profile:** See HIV/AIDS epidemiologic profile.

**Epidemiology:** The branch of medical science that studies the occurrence, distribution, and control of disease, injury, or health in human populations, and the application of this study to the prevention and control of health problems.

**Estimate:** In situations in which precise data are not available, an estimate may be made on the basis of available data and an understanding of how the data may be generalized to larger populations. In some instances, national or state data may be statistically adjusted to estimate local conditions. Good estimates are accompanied by statistical estimates of error (a confidence interval), which describe the limitations of the estimate.

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**Exposure:** Contact with an infectious agent or other substance, or possession of a characteristic that is suspected to influence the risk of developing a particular disease.

**Graph:** A way to show quantitative data visually, using a system of coordinates.

**Hemophilia:** An inherited disorder of the blood clotting process that causes excessive and sometimes spontaneous bleeding; requires numerous transfusions of clotting factors, some of which, if required precautions have not been taken, may be contaminated by the HIV virus.

**Highly Active Antiretroviral Therapy (HAART):** The name given to treatment regimens that aggressively suppress HIV replication and progression of HIV disease. The usual HAART regimen combines three or more anti-HIV drugs.

HIV: See "Human Immunodeficiency Virus".

**HIV epidemiologic profile:** A document that describes the HIV/AIDS epidemic in various populations in defined geographic areas, and identifies characteristics of the general population, HIV -infected populations, and non-infected (and untested) persons whose behavior places them at risk for HIV infection. It consists of information gathered to describe the effect of HIV/AIDS on an area in terms of socio-demographic, geographic, behavioral, and clinical characteristics. The epidemiologic profile serves as the scientific basis from which HIV prevention and care needs are identified and prioritized for a jurisdiction.

**HIV diagnosis date:** The earliest date at which HIV infection was diagnosed from either a positive confirmatory laboratory test result or, in the absence of laboratory documentation, a documented physician diagnosis date.

HIV disease: Any signs, symptoms, or other adverse health effects of HIV.

**HIV positive:** A test result that indicates that antibody to the virus is found in the blood. This test does not predict whether the person will become ill with AIDS; however, it may indicate that one is contagious and capable of passing the virus on to others.

**HIV surveillance:** The systematic collection, analysis, interpretation, dissemination, and evaluation of populationbased information about persons with a diagnosis of HIV infection and persons with a diagnosis of AIDS. HIV/AIDS surveillance programs monitor the HIV/AIDS epidemic, and provide factual information that is critical to planning, setting priorities for, and funding HIV prevention, care, and treatment.

**Human Immunodeficiency Virus (HIV):** The virus that causes the Acquired Immunodeficiency Syndrome (AIDS). HIV is in the retrovirus family, and two types have been identified: HIV-1 and HIV-2. HIV-1 is responsible for most HIV infections throughout the world, while HIV-2 is found primarily in West Africa. Individuals with HIV in their system are referred to as HIV infected.

**Incidence:** The number of new cases of a disease in a defined population during a specific period of time, often one year, which can be used to measure disease frequency. It is important to understand the difference between HIV incidence and reported HIV diagnoses. The number of new HIV diagnoses does not necessarily reflect trends in HIV incidence (that is, new infections) because some individuals will have been infected recently while others will have been infected sometime in the past. Further, because the results of anonymous tests are not reported, not all diagnoses of HIV infection are included in HIV/AIDS surveillance data. Therefore, surveillance data do not represent incident cases.

**Incidence Rate:** The frequency of new cases of a disease that occur per unit of population during a defined period of time – such as the rate of new cases per 100,000 population in the District of Columbia.

**Incidence Surveillance:** Provides estimates of the number of newly-acquired HIV infections. Includes the collection and testing of diagnostic blood specimens from newly reported HIV infections; calculation of population-based estimates of HIV incidence using HIV testing information; and monitoring HIV strains for resistance to anti-retroviral drugs.

**Infection:** The establishment of an infectious micro-organism, such as bacteria, fungi, protozoa, or viruses, in the body. The term is also used to refer to disease caused by an infectious micro-organism.

Injection drug users: Individuals who have ever used needles to inject illicit drugs.

**Interpretation:** The explanation of the meaning of the data. For example, interpreting a trend in the number of HIV cases diagnosed during a five-year period enables a planning group to assess whether the number of cases has increased or decreased.

**Intrapartum:** The time period spanning labor and delivery.

**Mode of transmission:** The means by which HIV is transmitted from one individual to another. It describes how an individual may have been exposed to HIV, such as injecting drug use, male-to-male sexual contact, or heterosexual sexual contact.

**Mortality:** The total number of persons who have died of a particular disease. Usually expressed as a rate, mortality (total number of deaths over the total population) measures the effect of the disease on the population as a whole.

**Mother-to-Child Transmission:** The passage of HIV from an HIV -infected mother to her infant. The infant may become infected while in the womb, during labor and delivery, or through breastfeeding.

**Name-based Reporting:** The District of Columbia transitioned from code-based to name-based HIV reporting in November 2006. Confidential name-based reporting is done through laboratory reports; however, cases are also identified through reporters such as medical providers, hospitals, clinics and community based organizations that provide HIV testing and treatment.

**Neonatal:** The time period from birth through the first four weeks after birth.

**Numerator:** The upper portion of a fraction.

**Passive reporting:** Health care practitioners, hospitals, clinics, and laboratories report cases of HIV/AIDS to state and local health departments.

**Pediatric HIV/AIDS:** The medical specialty concerned with the development, care, and treatment of children living with living HIV/AIDS from birth through adolescence.

**Percentage:** A proportion of the whole, expressed as parts per 100.

**Perinatal:** The time period spanning shortly before and after birth.

**Perinatal transmission:** The passage of HIV from an HIV-infected mother to her infant. The infant may become infected while in the womb, during labor and delivery, or through breastfeeding.

**Population:** The total number of inhabitants of a given area or country. In sampling, the population may refer to the units from which the sample is drawn, not necessarily the total population of people.

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**Prevalence:** The total number of people in a population affected with a particular disease or condition at a given time. Prevalence can be thought of as a snapshot of all existing cases of a disease or condition at a specified time.

**Prevalence rate:** The total or cumulative number of cases of a disease per unit of population during a defined period of time, such as the rate of AIDS cases per 100,000 population diagnosed through December 31, 2006, in the District of Columbia or the EMA.

**Proportion:** A portion of the complete population or data set, usually expressed as a fraction or percentage of the population or data set.

**Provider:** Any source of HIV/AIDS surveillance information, such as physician, nurse, dentist, pharmacist, or other professional provider of health care or a hospital, health maintenance organization, pharmacy, laboratory, STD clinic, TB clinic, or other health care facility that forwards data into the surveillance system.

**Public health uses of surveillance data:** The principal public health uses of HIV/AIDS surveillance data at state and federal levels is for epidemiologic monitoring of trends in disease incidence and outcomes. This includes collection of data and evaluation of the collection system, as well as the reporting of aggregate trends in incidence and prevalence by demographic, geographic, and behavioral risk characteristics to assist the formulation of public health policy and direct intervention programs.

**Range:** The difference between the largest and smallest values in a data set.

**Rate:** A measure of the frequency of an event or a disease compared with the number or persons at risk for the event or disease.

**Ratio:** A way of showing the relative size of two numbers. The first number is divided by the second number to derive the ratio. The ratio may be expressed as a fraction, for example, 2/3, or the two numbers may be separated by a colon, for example, 2:3.

**Reliability:** Refers to the consistency and dependability of a data-collection instrument or measure. For example, if you repeat a blood test three (3) times on the same specimen and the results are the same each time, the test is said to be reliable.

**Reporting delay:** The time between a diagnosis of HIV infection or AIDS and the receipt of the report by the health department.

**Risk:** The probability that an event will occur; for example, that an individual will become ill or die within a stated period of time or age.

**Risk factor:** An aspect of personal behavior or lifestyle, an environmental exposure, or an inborn or inherited characteristic that is associated with an increased occurrence of disease or other health-related event or condition.

**Risk Not Identified (RNI):** Cases in which epidemiologic follow-up has been conducted and sources of data have been reviewed, which may include an interview with the provider, but no mode of exposure has been identified. Any case that continues to have no reported risk for twelve (12) or more months after the report date is considered RNI.

**Sex:** The biological state of maleness or femaleness determined at birth, as opposed to "sex," which is a psychosocial construct.

**Sociodemographic factors:** Background information about a population of interest; for example, age, sex, race, educational status, income, and geographic location. These factors are often thought of as explanatory because they help to make sense of the results of analyses.

**Socioeconomic status:** A measure of social and economic factors that helps to describe a person's standing in society (for example, income level, relationship to the national poverty line, educational achievement, neighborhood of residence, home ownership).

Statistics: The collection, analysis, interpretation, and presentation of quantitative (numerical) data.

**STD:** See sexually transmitted disease.

Stratification: A technique for dividing data into homogenous groups (strata).

**Surveillance (public health surveillance):** The continuous, systematic collection, analysis, interpretation, dissemination, and evaluation of population-based health information for purposes of disease prevention and control.

Surveillance data: Statistics generated from disease surveillance in either paper or electronic format.

**Surveillance information:** Details collected on an individual or individuals for completing routine or special surveillance investigations. Examples of HIV/AIDS surveillance information are the HIV/AIDS report forms, ancillary notes about risk investigations and related questionnaires, notes about suspect cases, laboratory reports, line lists, discharge summaries, death certificates, and drug data stores.

**Table:** A set of data arranged in rows and columns.

**Trend:** A long-term movement or change in frequency, usually upward or downward; may be presented as a line graph.

**Variable:** Any characteristic or attribute that can be measured.

**Virus:** A microscopic organism that requires a host cell to make more copies of itself. Examples of human diseases caused by virus infections are AIDS, measles, mumps, polio, influenza, and the common cold.

**Vital statistics:** Systematically tabulated information about births, marriages, divorces, and deaths, based on registration of these events.

**Year of diagnosis:** The year in which a diagnosis of HIV infection or AIDS was made.

**Year of report:** The year in which a person with a diagnosis of HIV infection or AIDS was reported to the health department.

### **Definitions for Opportunistic Infections**

**Cancer**: Burkitt's Lymphoma, Cervical cancer, Immunoblastic lymphoma, Kaposi's sarcoma, Primary lymphoma of the brain

Fungal: Candidiasis of the esophagus, Candidiasis of the lungs, Coccidioidomycosis, Cryptococcosis, Histoplasmosis

**Low CD4 only**<sup>†</sup>: AIDS diagnosis based on CD4 count below 200 cells/ul

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**Other diagnoses**: Dementia, Progressive multifocal leukoencephalitis

Other infections: Recurrent pneumonia, Salmonella septicemia

Parasitic: Cryptosporidiosis, Isosporiasis, Toxoplasmosis of brain

PCP: Pneumocystis carinii pneumonia

**TB/Mycobacteria**: Atypical mycobacteria diagnosed, *Mycobacterium avium* complex, *Mycobacterium tuberculosis*, Pulmonary tuberculosis

Viral: Chronic mucocutaneous herpes, Cytomegalovirus disease, Cytomegalovirus retinitis

Wasting: Wasting syndrome

<sup>†</sup>This is an AIDS defining diagnosis (not opportunistic infection)

### **Definitions for Hepatitis**

**Hepatitis** - means inflammation of the liver. Diseases, medications and toxins, as well as bacterial and viral infections are among the causes of hepatitis. The word 'hepatitis' is also used to describe a family of viral infections. The most common types of viral hepatitis seen in the US are hepatitis A, B and C and are described below.

**Hepatitis A** - an acute liver disease caused by the hepatitis A virus (HAV), lasting from a few weeks to several months. It does not lead to chronic infection.

**Hepatitis B** - a liver disease caused by the hepatitis B virus (HBV). It ranges in severity from a mild illness, lasting a few weeks (acute), to a serious long-term (chronic) illness that can lead to liver disease or liver cancer.

**Hepatitis C** - a liver disease caused by the hepatitis C virus (HCV). HCV infection sometimes results in an acute illness, but most often becomes a chronic condition that can lead to cirrhosis of the liver and liver cancer.

**Cirrhosis** - the replacement of liver tissue by fibrosis, scar tissue and regenerative nodules. Cirrhosis is most commonly caused by alcoholism, hepatitis B and C, and fatty liver disease but has many other possible causes. Some cases are of unknown causes.

**Fibrosis** - the presence of excessive collagen in an organ or tissue.

**Neoplasm** - an abnormal mass of tissue due to an abnormal growth of cells.

Acute viral hepatitis - hepatitis infection lasting less than six months, i.e. Hepatitis A.

Chronic hepatitis - hepatitis infection usually lasting longer than six months, i.e. Hepatitis B or C.

**Liver function tests (LFTs)** - tests that help detect, evaluate and monitor liver disease or damage. LFTs generally refer to a group of blood tests that measure certain enzymes or proteins in your blood. Higher or lower than normal levels can indicate liver problems. Some common liver function tests include alanine transaminase (ALT), aspartate transaminase (AST), albumin, total protein, and bilirubin.

**Alanine transaminase (ALT)** - an enzyme found mainly in liver cells, ALT helps your body metabolize protein. Normally, ALT levels in the blood are low. When the liver is damaged, ALT is released in the bloodstream and levels increase.

**Aspartate transaminase (AST)** - the enzyme AST plays a role in the metabolism of alanine, an amino acid. AST is found in high concentrations in liver cells. An increase in AST levels may indicate liver damage or disease.

**Albumin and total protein -** levels of albumin — a protein made by the liver — and total protein indicate how well your liver is making proteins that your body needs to fight infections and perform other functions. Lower than normal levels may indicate liver damage or disease.

**Bilirubin** - bilirubin results from the breakdown of red blood cells. Normally, bilirubin passes through the liver and is excreted in your stool. Elevated levels of bilirubin, or jaundice, may indicate liver damage or disease.

## **Definitions for Sexually Transmitted Diseases**

**Chlamydia** - is a common sexually transmitted disease (STD) caused by the bacterium, chlamydia trachomatis, which can damage a woman's reproductive organs.

Cervical swab - The specimen collection method for C. trachomatis and N. gonorrhoeae in women for NAATs.

**Gonorrhea** - is a sexually transmitted disease caused by Neisseria gonorrhoeae, a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract, including the cervix, uterus, and fallopian tubes in women, and in the urethra in both women and men. The bacterium can also grow in the mouth, throat, eyes, and anus.

**Sexually Transmitted Disease (STD):** Any infection spread from person to person as a result of sexual contact. Because of the word "disease", usually pertains to symptomatic infections.

**Sexually Transmitted Infection:** Any infection spread from person to person as a result of sexual contact. The word "infection" can be asymptomatic; for example chlamydia is known as the "silent" infection.

**Syphilis** - is a sexually transmitted disease caused by the bacterium Treponema pallidum.

**Primary syphilis** - The primary stage of syphilis is usually marked by the appearance of a single sore (called a chancre), but there may be multiple sores. The time between infection with syphilis and the start of the first symptom can range from 10 to 90 days. The chancre appears at the spot where syphilis entered the body. The chancre lasts 3 to 6 weeks, and it heals without treatment. However, if adequate treatment is not administered, the infection progresses to the secondary stage.

**Secondary syphilis** - Skin rash and mucous membrane lesions characterize the secondary stage. This stage typically starts with the development of a rash on one or more areas of the body. The rash usually does not cause itching. Rashes associated with secondary syphilis can appear as the chancre is healing or several weeks after the chancre has healed. The signs and symptoms of secondary syphilis will resolve with or without treatment, but without treatment, the infection will progress to the latent and possibly late stages of disease.

**Latent syphilis** - The latent (hidden) stage of syphilis begins when primary and secondary symptoms disappear. Without treatment, the infected person will continue to have syphilis even though there are no signs or symptoms; infection remains in the body. This latent stage can last for years.

**Tertiary syphilis:** The fourth and final stage of syphilis. Signs and symptoms of the late stage of syphilis include difficulty coordinating muscle movements, paralysis, numbness, gradual blindness, and dementia. This damage

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may be serious enough to cause death. Both neurosyphilis (brain) and cardiosyphilis (heart) are forms of tertiary syphilis.

**Nucleic Acid Amplification Tests (NAATs)** - a laboratory method traditionally used to confirm chlamydia trachomatis and Neisseria gonorrhoeae, it can achieve greater sensitivity than traditional culture methods by exponentially replicating the nucleic acid of these organisms.

Urethral swab - The specimen collection method for C. trachomatis and N. gonorrhoeae in men for NAATs.

**Infertility Prevention Project** - CDC, in collaboration with the Office of Population Affairs (OPA) of the Department of Health and Human Services (HHS), supports a national Infertility Prevention Program (IPP) that funds chlamydia screening and treatment services for low-income, sexually active women attending family planning, STD, and other women's healthcare clinics. IPP has been active in monitoring and reporting chlamydia incidence in women in the United States since 1988.

**Rapid Plasma Reagin (RPR)** - is a screening test for syphilis. It looks for antibodies that are present in the blood of people who have the disease.

### **Definitions for Tuberculosis**

**Active TB disease** - an illness in which TB bacteria are multiplying and attacking a part of the body, usually the lungs. The symptoms of active TB disease include weakness, weight loss, fever, no appetite, chills, and sweating at night. Other symptoms of active TB disease depend on where in the body the bacteria are growing. If active TB disease is in the lungs (pulmonary TB), the symptoms may include a bad cough, pain in the chest, and coughing up blood. A person with active TB disease may be infectious and spread TB bacteria to others.

**Culture** - a test to see whether there are TB bacteria in your phlegm or other body fluids. This test can take 2 to 4 weeks in most laboratories.

**Directly Observed Therapy (DOT)** – Standard of care recommended by the Centers for Disease Control (CDC) to treat tuberculosis. In directly observed therapy, a trained health care worker observes the patient taking his/her TB medication.

**Extensively drug-resistant TB (XDR TB)** - XDR TB is a rare type of TB disease that is resistant to nearly all medicines used to treat TB.

**Extrapulmonary TB** - active TB disease in any part of the body other than the lungs (for example, the kidney, spine, brain, or lymph nodes).

**Isoniazid (INH)** - a medicine used to prevent active TB disease in people who have latent TB infection. INH is also one of the four medicines often used to treat active TB disease.

**Latent TB infection** - a condition in which TB bacteria are alive but inactive in the body. People with latent TB infection have no symptoms, don't feel sick, can't spread TB to others, and usually have a positive skin test reaction. But they may develop active TB disease if they do not receive treatment for latent TB infection.

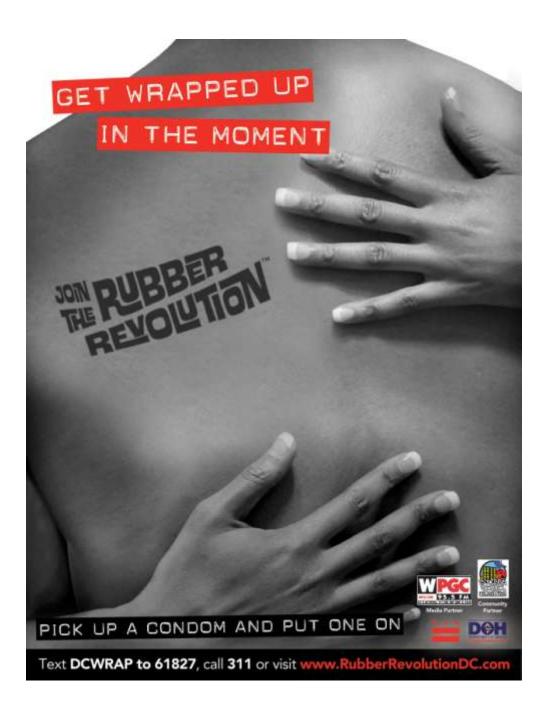
**Multidrug-resistant TB (MDR TB)** -active TB disease caused by bacteria resistant to two or more of the most important medicines: INH and RIF.

Mycobacterium tuberculosis - bacteria that cause latent TB infection and active TB disease.

**Pulmonary TB** - active TB disease that occurs in the lungs, usually producing a cough that lasts 3 weeks or longer. Most active TB disease is pulmonary.

Rifampin (RIF) - one of the four medicines often used to treat active TB disease. It is considered a first-line drug.

**Smear** - a test to see whether there are TB bacteria in your phlegm. To do this test, lab workers smear the phlegm on a glass slide, stain the slide with a special stain, and look for any TB bacteria on the slide. This test usually takes 1 day to get the results.



## **Appendix**

 Table 1. Living HIV Cases among Adults and Adolescents by Race/Ethnicity and Mode of Transmission, District of Columbia, 2010

Table 2. Living HIV Cases among Adults and Adolescents, by Race/Ethnicity, Age at Diagnosis and Current Age, Districtof Columbia, 2010

 Table 3. Newly Diagnosed HIV Cases by Sex, Race/Ethnicity, Mode of Transmission, and Age, District of Columbia, 2006-2010

 Table 4. Newly Diagnosed HIV (not AIDS) Cases by Year of Diagnosis, Sex, Mode of Transmission, Age at Diagnosis and Race/Ethnicity, District of Columbia, 2006-2010

Table 5. Newly Diagnosed AIDS Cases among Adults and Adolescents by Year of Diagnosis, Sex, Race/Ethnicity, Age andMode of Transmission, District of Columbia, 2006-2010

 Table 6. Adults and Adolescents Living with AIDS by Sex, Race/Ethnicity, and Mode of Transmission, District of

 Columbia, 2010

Table 7. Adults and Adolescents Living with AIDS by Race/Ethnicity, Age at Diagnosis, and Current Age, District ofColumbia, 2010

Table 8. HIV Deaths Among Adults and Adolescents by Year of Death, Sex, Race/Ethnicity, Mode of Transmission, andAge at Death, District of Columbia, 2006-2010

Table 9. HIV Deaths among Adults and Adolescents by Race/Ethnicity, Sex, Mode of Transmission, and Age at Death,District of Columbia, 2006-2010

Figure 1. Proportion of Persons Surviving, by Years after AIDS Diagnosis and Race/Ethnicity, District of Columbia, 2000-2010

Figure 2. Proportion of Persons Surviving by Months after AIDS Diagnosis, District of Columbia, 2000-2010

Table 10. Number and Percentage of Chlamydia Cases by Year of Diagnosis, Sex, Race, Ethnicity, Age at Diagnosis, andWard Number, District of Columbia, 2006-2010

Table 11. Number and Percentage of Gonorrhea Cases by Year of Diagnosis, Sex, Race, Ethnicity, Age at Diagnosis, andWard Number, District of Columbia, 2006-2010

Table 12. Number and Rate per 100,000 Population of Chlamydia Cases by Year of Diagnosis, Sex, Race, Ethnicity, Age atDiagnosis and Ward, District of Columbia, 2006-2010

 Table 13.
 Number and Rate per 100,000 Population of Gonorrhea Cases by Year of Diagnosis, Sex, Race, Ethnicity, Age at Diagnosis, and Ward, District of Columbia, 2006-2010

Table 14. Number and Percentage of Primary and Secondary Syphilis Cases by Year of Diagnosis, Sex, Race, Ethnicity,Age at Diagnosis and Ward, District of Columbia, 2006-2010

Table 15. Number and Rate per 100,000 Population of Primary and Secondary Syphilis Cases by Year of Diagnosis, Sex,Race, Ethnicity, Age at Diagnosis, and Ward, District of Columbia, 2006-2010

Table 16. Reported Tuberculosis Rate per 100,000 population, District of Columbia, 2006-2010

Table 17. Reported Tuberculosis Cases by Selected Characteristics, District of Columbia, 2006-2010

# Table 1. Living HIV Cases among Adults and Adolescents by Race/Ethnicity and Mode of Transmission,District of Columbia, 2010

	White			Black		Hispanic		Other*		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex										
Male	2,285	95.6	7,210	66.1	703	84.4	267	79.7	10,465	72.3
Female	105	4.4	3,697	33.9	130	15.6	68	20.3	4,000	27.7
Total	2,390	100.0	10,907	100.0	833	100.0	335	100.0	14,465	100.0
Mode of Transmission	_									
MSM	1,935	81.0	3,299	30.2	451	54.1	168	50.1	5,853	40.5
IDU	58	2.4	2,043	18.7	56	6.7	31	9.3	2,188	15.1
MSM/IDU	71	3.0	380	3.5	24	2.9	10	3.0	485	3.4
Heterosexual contact	114	4.8	3,672	33.7	199	23.9	63	18.8	4,048	28.0
RNI/Unknown	209	8.7	1,495	13.7	101	12.1	63	18.8	1,868	12.9
Other**	3	0.1	18	0.2	<3		0	0.0	23	0.2
Total	2,390	100.0	10,907	100.0	833	100.0	335	100.0	14,465	100.0
Male			_							
MSM	1,935	84.7	3,299	45.8	451	64.2	168	62.9	5,853	55.9
IDU	30	1.3	1,186	16.4	37	5.3	16	6.0	1,269	12.1
MSM/IDU	71	3.1	380	5.3	24	3.4	10	3.7	485	4.6
Heterosexual contact	55	2.4	1,413	19.6	108	15.4	21	7.9	1,597	15.3
RNI/Unknown	191	8.4	922	12.8	81	11.5	52	19.5	1,246	11.9
Other**	3	0.1	10	0.1	<3		0	0.0	15	0.1
Subtotal	2,285	100.0	7,210	100.0	703	100.0	267	100.0	10,465	100.0
Female										
IDU	28	26.7	857	23.2	19	14.6	15	22.1	919	23.0
Heterosexual contact	59	56.2	2,259	61.1	91	70.0	42	61.8	2,451	61.3
RNI/Unknown	18	17.1	573	15.5	20	15.4	11	16.2	622	15.6
Other**	0	0.0	8	0.2	0	0.0	0	0.0	8	0.2
Subtotal	105	100.0	3,697	100.0	130	100.0	68	100.0	4,000	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race \*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission.

		White		Black		Hispanic		Other*		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Age at Diagnosis										
13-19	21	0.9	407	3.7	24	2.9	15	4.5	467	3.2
20-29	533	22.3	2,627	24.1	268	32.2	69	20.6	3,497	24.2
30-39	965	40.4	3,568	32.7	293	35.2	125	37.3	4,951	34.2
40-49	622	26.0	2,933	26.9	166	19.9	95	28.4	3,816	26.4
50-59	216	9.0	1,103	10.1	68	8.2	22	6.6	1,409	9.7
≥60	33	1.4	269	2.5	14	1.7	9	2.7	325	2.2
Total	2,390	100.0	10,907	100.0	833	100.0	335	100.0	14,465	100.0
Current Age										
13-19	0	0.0	51	0.5	0	0.0	<3		53	0.4
20-29	106	4.4	1,052	9.6	83	10.0	30	9.0	1,271	8.8
30-39	401	16.8	1,961	18.0	223	26.8	71	21.2	2,656	18.4
40-49	900	37.7	3,702	33.9	305	36.6	126	37.6	5,033	34.8
50-59	697	29.2	3,030	27.8	149	17.9	75	22.4	3,951	27.3
≥60	286	12.0	1,111	10.2	73	8.8	31	9.3	1,501	10.4
Total	2,390	100.0	10,907	100.0	833	100.0	335	100.0	14,465	100.0

Table 2. Living HIV Cases among Adults and Adolescents, by Race/Ethnicity, Age at Diagnosis and CurrentAge, District of Columbia, 2010

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race

# Table 3. Newly Diagnosed HIV Cases by Sex, Race/Ethnicity, Mode of Transmission, and Age, District ofColumbia, 2006-2010

		2006		2007		2008		2009		2010		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex												
Male	789	71.5	946	71.0	808	70.3	597	70.1	598	71.6	3,738	70.9
Female	314	28.5	386	29.0	341	29.7	256	29.9	237	28.4	1,534	29.1
Total	1,103	100.0	1,332	100.0	1,149	100.0	853	100.0	835	100.0	5,272	100.0
Race/Ethnicity												
White	171	15.5	186	14.0	147	12.8	108	12.7	109	13.1	721	13.7
Black	857	77.7	1,030	77.3	898	78.1	678	79.5	648	77.6	4,111	78.0
Hispanic	50	4.5	75	5.6	69	6.0	48	5.6	56	6.7	298	5.6
Other*	25	2.3	41	3.1	35	3.1	19	2.2	22	2.6	142	2.7
Total	1,103	100.0	1,332	100.0	1,149	100.0	853	100.0	835	100.0	5,272	100.0
Mode of Transm	ission											
MSM	407	36.9	527	39.6	413	35.9	290	34.0	305	36.5	1,942	36.8
IDU	146	13.2	150	11.3	113	9.8	61	7.2	42	5.0	512	9.7
MSM/IDU	33	3.0	32	2.4	32	2.8	12	1.4	15	1.8	124	2.4
Heterosexual contact	368	33.4	420	31.5	328	28.5	277	32.4	278	33.3	1,671	31.7
Risk Not Identified	149	13.5	202	15.2	263	22.9	213	25.0	195	23.4	1,022	19.4
Other**	0	0.0	<3		0	0.0	0	0.0	0	0.0	<3	
Total	1,103	100.0	1,332	100.0	1,149	100.0	853	100.0	835	100.0	5,272	100.0
Age at Diagnosis	\$											
13-19	26	2.4	40	3.0	39	3.4	32	3.8	26	3.1	163	3.1
20-29	202	18.3	292	21.9	258	22.4	185	21.7	246	29.5	1,183	22.4
30-39	315	28.6	329	24.7	280	24.4	204	23.9	198	23.7	1,326	25.1
40-49	350	31.7	389	29.2	325	28.3	248	29.1	197	23.6	1,509	28.6
50-59	166	15.0	211	15.9	190	16.5	137	16.0	124	14.8	828	15.7
≥60	44	4.0	71	5.3	57	5.0	47	5.5	44	5.3	263	5.0
Total	1,103	100.0	1,332	100.0	1,149	100.0	853	100.0	835	100.0	5,272	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race \*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission.

# Table 4. Newly Diagnosed HIV (not AIDS) Cases by Year of Diagnosis, Sex, Mode of Transmission, Age atDiagnosis and Race/Ethnicity, District of Columbia, 2006-2010

		2006		2007		2008		2009		2010		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex												
Males	408	73.0	573	71.7	546	71.0	409	71.1	443	71.8	2,379	71.7
Females	151	27.0	226	28.3	223	29.0	166	28.9	174	28.2	940	28.3
Total	559	100.0	799	100.0	769	100.0	575	100.0	617	100.0	3,319	100.0
Race/ Ethnicity												
White	127	22.7	142	17.8	118	15.3	85	14.8	88	14.3	560	16.9
Black	394	70.5	580	72.6	578	75.2	445	77.4	473	76.7	2,470	74.4
Hispanic	21	3.8	48	6.0	50	6.5	32	5.6	40	6.5	191	5.8
Other*	17	3.0	29	3.6	23	3.0	13	2.3	16	2.6	98	3.0
Total	559	100.0	799	100.0	769	100.0	575	100.0	617	100.0	3,319	100.0
Mode of Transmiss	ion											
MSM	235	42.0	345	43.2	302	39.3	215	37.4	245	39.7	1,342	40.4
IDU	66	11.8	78	9.8	70	9.1	44	7.7	32	5.2	290	8.7
MSM/IDU	12	2.1	17	2.1	22	2.9	9	1.6	12	1.9	72	2.2
Heterosexual contact	168	30.1	256	32.0	211	27.4	184	32.0	207	33.5	1,026	30.9
RNI	78	14.0	103	12.9	164	21.3	123	21.4	121	19.6	589	17.7
Total	559	100.0	799	100.0	769	100.0	575	100.0	617	100.0	3,319	100.0
Age at Diagnosis												
13-19	19	3.4	26	3.3	25	3.3	27	4.7	20	3.2	117	3.5
20-29	118	21.1	196	24.5	197	25.6	142	24.7	197	31.9	850	25.6
30-39	180	32.2	196	24.5	186	24.2	132	23.0	146	23.7	840	25.3
40-49	152	27.2	229	28.7	208	27.0	162	28.2	143	23.2	894	26.9
50-59	73	13.1	118	14.8	117	15.2	87	15.1	82	13.3	477	14.4
≥60	17	3.0	34	4.3	36	4.7	25	4.3	29	4.7	141	4.2
Total *Other race includes	559	100.0	799	100.0	769	100.0	575	100.0	617	100.0	3,319	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race

# Table 5. Newly Diagnosed AIDS Cases among Adults and Adolescents by Year of Diagnosis, Sex,Race/Ethnicity, Age and Mode of Transmission, District of Columbia, 2006-2010

		2006		2007		2008		2009		2010		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex												
Males	477	68.1	458	67.3	370	68.9	339	66.6	322	67.5	1,966	67.7
Females	223	31.9	223	32.7	167	31.1	170	33.4	155	32.5	938	32.3
Total	700	100.0	681	100.0	537	100.0	509	100.0	477	100.0	2,904	100.0
Race/Ethnicity												
White	64	9.1	54	7.9	59	11.0	49	9.6	39	8.2	265	9.1
Black	598	85.4	576	84.6	437	81.4	419	82.3	402	84.3	2,432	83.7
Hispanic	29	4.1	37	5.4	22	4.1	25	4.9	25	5.2	138	4.8
Other*	9	1.3	14	2.1	19	3.5	16	3.1	11	2.3	69	2.4
Total	700	100.0	681	100.0	537	100.0	509	100.0	477	100.0	2,904	100.0
Age at Diagnosis												
13-19	20	2.9	18	2.6	19	3.5	16	3.1	17	3.6	90	3.1
20-29	129	18.4	128	18.8	105	19.6	107	21.0	114	23.9	583	20.1
30-39	193	27.6	197	28.9	151	28.1	136	26.7	123	25.8	800	27.5
40-49	228	32.6	216	31.7	146	27.2	149	29.3	125	26.2	864	29.8
50-59	103	14.7	88	12.9	85	15.8	76	14.9	73	15.3	425	14.6
≥60	27	3.9	34	5.0	31	5.8	25	4.9	25	5.2	142	4.9
Total	700	100.0	681	100.0	537	100.0	509	100.0	477	100.0	2,904	100.0
Mode of Transmission												
MSM	217	31.0	233	34.2	162	30.2	151	29.7	142	29.8	905	31.2
IDU	136	19.4	124	18.2	70	13.0	43	8.4	39	8.2	412	14.2
MSM/IDU Heterosexual	33	4.7	29	4.3	19	3.5	9	1.8	10	2.1	100	3.4
contact	240	34.3	196	28.8	171	31.8	168	33.0	166	34.8	941	32.4
RNI	73	10.4	98	14.4	114	21.2	138	27.1	120	25.2	543	18.7
Other**	<3		<3		<3		0	0.0	0	0.0	3	0.1
Total	700	100.0	681	100.0	537	100.0	509	100.0	477	100.0	2,904	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race \*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission.

# Table 5. Newly Diagnosed AIDS Cases among Adults and Adolescents by Year of Diagnosis, Sex,Race/Ethnicity, Age and Mode of Transmission, District of Columbia, 2006-2010 - continued

		2006		2007		2008		2009		2010		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Male												
MSM	217	45.5	233	50.9	162	43.8	151	44.5	142	44.1	905	46.0
IDU	69	14.5	66	14.4	40	10.8	25	7.4	20	6.2	220	11.2
MSM/IDU	33	6.9	29	6.3	19	5.1	9	2.7	10	3.1	100	5.1
Heterosexual contact	103	21.6	67	14.6	75	20.3	68	20.1	71	22.0	384	19.5
RNI	55	11.5	62	13.5	73	19.7	86	25.4	79	24.5	355	18.1
Other**	0	0.0	<3		<3		0	0.0	0	0.0	<3	
Subtotal	477	100.0	458	100.0	370	100.0	339	100.0	322	100.0	1,966	100.0
Female												
IDU	67	30.0	58	26.0	30	18.0	18	10.6	19	12.3	192	20.5
Heterosexual contact	137	61.4	129	57.8	96	57.5	100	58.8	95	61.3	557	59.4
Risk not identified	18	8.1	36	16.1	41	24.6	52	30.6	41	26.5	188	20.0
Other **	<3		0	0.0	0	0.0	0	0.0	0	0.0	<3	
Subtotal	223	100.0	223	100.0	167	100.0	170	100.0	155	100.0	938	100.0

\*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission.

# Table 6. Adults and Adolescents Living with AIDS by Sex, Race/Ethnicity, and Mode of Transmission,District of Columbia, 2010

		White		Black		Hispanic		Other*		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex										
Males	1,121	94.5	4,629	68.1	420	84.0	114	78.1	6,284	72.9
Females	65	5.5	2,164	31.9	80	16.0	32	21.9	2,341	27.1
Total	1,186	100.0	6,793	100.0	500	100.0	146	100.0	8,625	100
Mode of Transmission										
MSM	958	80.8	2,091	30.8	249	49.8	70	47.9	3,368	39.0
IDU	39	3.3	1,507	22.2	39	7.8	15	10.3	1,600	18.6
MSM/IDU	49	4.1	277	4.1	18	3.6	5	3.4	349	4.0
Heterosexual contact	62	5.2	2,149	31.6	140	28.0	35	24	2,386	27.7
RNI	75	6.3	753	11.1	52	10.4	21	14.4	901	10.4
Other**	3	0.3	16	0.2	<3		0	0.0	21	0.2
Total	1,186	100.0	6,793	100.0	500	100.0	146	100.0	8,625	100
Males										
MSM	958	85.5	2,091	45.2	249	59.3	70	61.4	3,368	53.6
IDU	19	1.7	879	19.0	27	6.4	7	6.1	932	14.8
MSM/IDU	49	4.4	277	6.0	18	4.3	5	4.4	349	5.6
Heterosexual contact	25	2.2	889	19.2	80	19.0	13	11.4	1,007	16.0
RNI	67	6.0	483	10.4	44	10.5	19	16.7	613	9.8
Other**	3	0.2	10	0.2	<3		0	0.0	15	0.2
Subtotal	1,121	100.0	4,629	100.0	420	100.0	114	100.0	6,284	100.0
Females										
IDU	20	30.8	628	29.0	12	15.0	8	25.0	668	28.5
Heterosexual contact	37	56.9	1,260	58.2	60	75.0	22	68.8	1,379	58.9
RNI	8	12.3	270	12.5	8	10.0	<3		288	12.3
Other**	0	0.0	6	0.3	0	0.0	0	0.0	6	0.3
Subtotal	65	100.0	2,164	100.0	80	100.0	32	100.0	2,341	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race \*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission.

# Table 7. Adults and Adolescents Living with AIDS by Race/Ethnicity, Age at Diagnosis, and Current Age,District of Columbia, 2010

		White Blac				Hispanic		Other*		Total
	N	%	N	%	Ν	%	Ν	%	N	%
Age at Diagnosis										
13-19	15	1.3	209	3.1	14	2.8	5	3.4	243	2.8
20-29	301	25.4	1,552	22.8	160	32.0	30	20.5	2,043	23.7
30-39	516	43.5	2,426	35.7	167	33.4	49	33.6	3,158	36.6
40-49	270	22.8	1,872	27.6	109	21.8	43	29.5	2,294	26.6
50-59	76	6.4	587	8.6	42	8.4	14	9.6	719	8.3
≥60	8	0.7	147	2.2	8	1.6	5	3.4	168	1.9
Total	1,186	100.0	6,793	100.0	500	100.0	146	100.0	8,625	100.0
Current Age										
13-19	0	0.0	12	0.2	0	0.0	<3		13	0.2
20-29	21	1.8	344	5.1	34	6.8	7	4.8	406	4.7
30-39	136	11.5	1,047	15.4	115	23.0	23	15.8	1,321	15.3
40-49	445	37.5	2,464	36.3	187	37.4	56	38.4	3,152	36.5
50-59	401	33.8	2,143	31.5	112	22.4	39	26.7	2,695	31.2
≥60	183	15.4	783	11.5	52	10.4	20	13.7	1,038	12.0
Total	1,186	100.0	6,793	100.0	500	100.0	146	100.0	8,625	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race

# Table 8. HIV Deaths Among Adults and Adolescents by Year of Death, Sex, Race/Ethnicity, Mode ofTransmission, and Age at Death, District of Columbia, 2006-2010

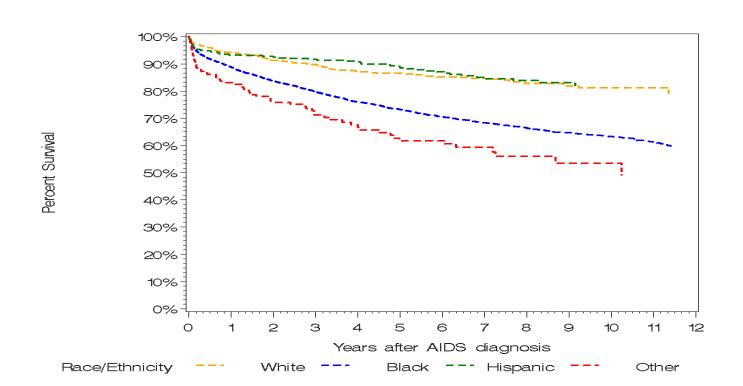
		2006		2007		2008		2009		2010		Total
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex												
Male	250	62.7	277	65.5	227	66.2	202	70.1	127	61.4	1,083	65.2
Female	149	37.3	146	34.5	116	33.8	86	29.9	80	38.6	577	34.8
Total	399	100.0	423	100.0	343	100.0	288	100.0	207	100.0	1,660	100.0
Race/Ethnicity												
White	20	5.0	27	6.4	21	6.1	22	7.6	17	8.2	107	6.4
Black	351	88.0	366	86.5	306	89.2	258	89.6	185	89.4	1,466	88.3
Hispanic	12	3.0	17	4.0	12	3.5	4	1.4	<3	1.0	47	2.8
Other*	16	4.0	13	3.1	4	1.2	4	1.4	3	1.4	40	2.4
Total	399	100.0	423	100.0	343	100.0	288	100.0	207	100.0	1,660	100.0
Mode of Transmissi												
MSM	91	22.8	95	22.5	66	19.2	66	22.9	47	22.7	365	22.0
IDU	123	30.8	128	30.3	130	37.9	87	30.2	58	28.0	526	31.7
MSM/IDU	15	3.8	24	5.7	23	6.7	14	4.9	6	2.9	82	4.9
Heterosexual contact	120	30.1	114	27.0	78	22.7	62	21.5	57	27.5	431	26.0
Risk not identified	47	11.8	54	12.8	43	12.5	59	20.5	39	18.8	242	14.6
Other**	3	0.8	8	1.9	3	0.9	0	0.0	0	0.0	14	0.8
Total	399	100.0	423	100.0	343	100.0	288	100.0	207	100.0	1,660	100.0
Age at Death												
13-19	<3		4	0.9	<3		0	0.0	0	0.0	7	0.4
20-29	20	5.0	17	4.0	12	3.5	13	4.5	7	3.4	69	4.2
30-39	73	18.3	66	15.6	36	10.5	29	10.1	18	8.7	222	13.4
40-49	146	36.6	144	34.0	119	34.7	86	29.9	51	24.6	546	32.9
50-59	103	25.8	126	29.8	121	35.3	114	39.6	91	44.0	555	33.4
≥60	56	14.0	66	15.6	53	15.5	46	16.0	40	19.3	261	15.7
Total	399	100.0	423	100.0	343	100.0	288	100.0	207	100.0	1,660	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race \*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission.

# Table 9. HIV Deaths among Adults and Adolescents by Race/Ethnicity, Sex, Mode of Transmission, and Ageat Death, District of Columbia, 2006-2010

	White			Black		Hispanic		Other*		Total
	Ν	%	Ν	%	Ν	. %	Ν	%	Ν	%
Sex										
Male	101	94.4	923	63.0	30	63.8	29	72.5	1,083	65.2
Female	6	5.6	543	37.0	17	36.2	11	27.5	577	34.8
Total	107	100.0	1,466	100.0	47	100.0	40	100.0	1,660	100.0
Mode of Transmission										
MSM	68	63.6	264	18.0	15	31.9	18	45.0	365	22.0
IDU	10	9.3	498	34.0	10	21.3	8	20.0	526	31.7
MSM/IDU	3	2.8	76	5.2	0	0.0	3	7.5	82	4.9
Heterosexual contact	6	5.6	405	27.6	14	29.8	6	15.0	431	26.0
Risk not identified	19	17.8	210	14.3	8	17.0	5	12.5	242	14.6
Other**	<3		13	0.9	0	0.0	0	0.0	14	0.8
Total	107	100.0	1,466	100.0	47	100.0	40	100.0	1,660	100.0
Age at Death										
13-19	0	0.0	7	0.5	0	0.0	0	0.0	7	0.4
20-29	<3		64	4.4	<3		<3		69	4.2
30-39	14	13.1	198	13.5	7	14.9	3	7.5	222	13.4
40-49	38	35.5	481	32.8	11	23.4	16	40.0	546	32.9
50-59	36	33.6	489	33.4	13	27.7	17	42.5	555	33.4
≥60	18	16.8	227	15.5	14	29.8	<3		261	15.7
Total	107	100.0	1,466	100.0	47	100.0	40	100.0	1,660	100.0

\*Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown race \*\*Other mode of transmission includes hemophilia, blood transfusion, occupational exposure (health care workers) and perinatal transmission. The following figures are Kaplan-Meier curves, which describe the survival of persons with AIDS by race/ethnicity and years after an initial AIDS diagnosis. Survival is defined as the estimated proportion of persons surviving a given length of time after diagnosis. Each trend line represents this proportion for each race/ethnicity starting at year 0 (100% alive at initial AIDS diagnosis) and follows them through a 12 year period.



# **Figure 1.** Proportion of Persons Surviving, by Years after AIDS Diagnosis and Race/Ethnicity, District of Columbia, 2000-2010

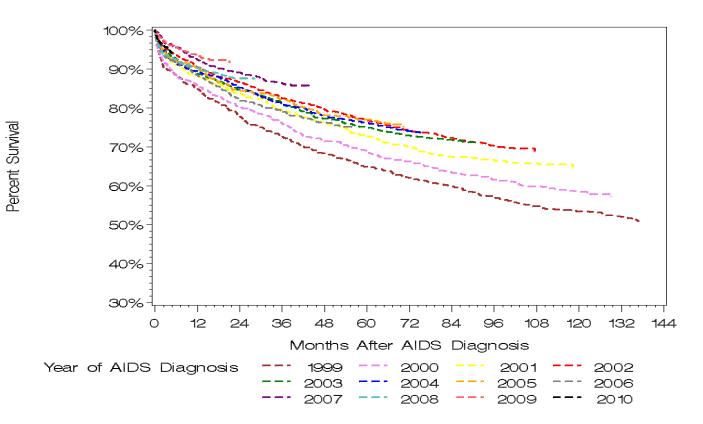


Figure 2. Proportion of Persons Surviving by Months after AIDS Diagnosis, District of Columbia, 2000-2010

# Table 10. Number and Percentage of Chlamydia Cases by Year of Diagnosis, Sex, Race, Ethnicity, Age atDiagnosis, and Ward Number, District of Columbia, 2006-2010

N         %         N			2006		2007		2008		2009		2010		Total
Female         2,508         74.6         3,974         65.8         4,425         64.1         4,158         63.3         3,786         67.7         18,851         67.1           Male         817         24.3         2,045         33.8         2,432         35.3         2,398         36.5         1,787         32.0         9,479         32.4           Unknown         35         1.0         23         0.4         42         0.6         12         0.2         19         0.3         131         0.5           Total         3.360         100.0         6.042         100.0         6.568         100.0         5.592         100.0         28,461         100.0           Race         1.748         52.0         3,452         57.1         4,172         60.5         4,418         67.3         3,647         65.2         17,437         61.3           Asian         13         0.4         22.0         126         1.8         162         2.5         167         3.0         4119         0.4         2.4         0.4         406         1.4         0.4         1.0         1.4         1.4         1.4         1.4         1.4         1.4         1.4		N	%	N	%	N	%	N	%	N	%	N	%
Mele         817         24.3         2.045         33.8         2.432         35.3         2.386         36.5         1.787         32.0         9.479         32.4           Unknown         35         1.0         23         0.4         42         0.6         12         0.2         19         0.3         131         0.5           Total         3.360         100.0         6.693         100.0         6.568         100.0         28.461         100.0           Rec													
Unknown         35         1.0         23         0.4         42         0.6         12         0.2         19         0.3         131         0.5           Total         3.360         100.0         6.042         100.0         6.899         100.0         6.568         100.0         5.592         100.0         28.461         100.0           Race </td <td></td>													
Total         3,360         100.0         6,042         100.0         6,593         100.0         5,592         100.0         28,461         100.0           Rade         1,748         52.0         3,452         57.1         4,172         60.5         4,418         67.3         3,647         65.2         17,437         61.3           White         105         3.1         123         2.0         126         1.8         162         2.5         167         3.0         683         2.4           Asian         1.3         0.4         2.0         4.4         0.6         24         0.4         27         0.5         138         0.5           Other         7.4         2.2         108         1.8         85         1.2         115         1.8         24         0.4         406         1.4           Unknown         1,400         41.7         2.314         38.3         2.438         35.3         1.822         27.7         1.704         30.5         9.678         34.0           Ispanic         1.792         53.3         3.412         56.5         3.983         57.7         4.358         66.4         3.551         63.5         17,096													
Race         Image: Control of the state of the sta													
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Total	3,360	100.0	6,042	100.0	6,899	100.0	6,568	100.0	5,592	100.0	28,461	100.0
White         105         3.1         123         2.0         126         1.8         162         2.5         167         3.0         683         2.4           Asian         13         0.4         22         0.4         34         0.5         27         0.4         23         0.4         119         0.4           AyAN         20         0.6         23         0.4         44         0.6         24         0.4         23         0.4         119         0.4           Uher         74         2.2         108         1.8         85         1.2         115         1.8         24         0.4         406         1.4           Unknown         1,400         41.7         2,314         38.3         2,438         35.3         1,822         27.7         1,704         30.5         9,678         34.0           Total         3,360         100.0         6,899         100.0         6,568         100.0         5,592         100.0         28,461         100.0           Ethnicity													
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													
Al/AN         20         0.6         23         0.4         44         0.6         24         0.4         27         0.5         138         0.5           Other         74         2.2         108         1.8         85         1.2         115         1.8         24         0.4         406         1.4           Unknown         1,400         41.7         2,314         38.3         2,438         35.3         1,822         27.7         1,704         30.5         9,678         34.0           Total         3,360         100.0         6,042         100.0         6,899         100.0         6,568         100.0         5,592         100.0         28,461         100.0           Ethnicity           145.3         3,412         56.5         3,983         57.7         4,358         66.4         3,551         63.5         17,096         59.5           Unknown         1,453         43.2         2,439         40.4         2,694         39.0         2,018         31.3         1,905         34.1         10,549         37.6           Total         3,360         100.0         6,899         100.0         6,568         100.0         5,5	White								2.5		3.0	683	2.4
Other         74         2.2         108         1.8         85         1.2         115         1.8         24         0.4         406         1.4           Unknown         1,400         41.7         2,314         38.3         2,438         35.3         1,822         27.7         1,704         30.5         9,678         34.0           Total         3,360         100.0         6,042         100.0         6,899         100.0         6,568         100.0         5,592         100.0         28,461         100.0           Ethnicity         115         3.4         191         3.2         2.22         3.2         152         2.3         166         2.4         816         2.9           Non-Hispanic         1,792         53.3         3,412         56.5         3,983         57.7         4,358         66.4         3,551         63.5         17,096         59.5           Unknown         1,453         43.2         2,434         40.4         2,084         39.0         2,016         39.7         2,351         42.0         11,109         38.9           0         1.4         74         2.2         115         19         152         2.2         1	Asian	13	0.4	22	0.4	34	0.5	27	0.4	23	0.4	119	0.4
Unknown         1,400         41.7         2,314         38.3         2,438         35.3         1,822         27.7         1,704         30.5         9,678         34.0           Total         3,360         100.0         6,042         100.0         6,899         100.0         6,568         100.0         5,592         100.0         28,461         100.0           Ethnicity         Hispanic         115         3.4         191         3.2         222         3.2         152         2.3         136         2.4         816         2.9           Non-Hispanic         1,792         53.3         3,412         56.5         3,983         57.7         4,358         66.4         3,551         63.5         17,096         59.5           Unknown         1,453         43.2         2,439         40.4         2,694         39.0         2,610         31.3         1,905         34.1         10,549         37.6           Total         3,360         100.0         6,042         100.0         6,588         100.0         5,592         100.0         28,461         100.0           O 14         74         2.2         115         1.9         152         2.2         13.6	AI/AN	20	0.6	23	0.4	44	0.6	24	0.4	27	0.5	138	0.5
Total         3,360         100.0         6,042         100.0         6,899         100.0         6,568         100.0         5,592         100.0         28,461         100.0           Ethnicity         Hispanic         1.15         3.4         191         3.2         222         3.2         152         2.3         136         2.4         816         2.9           Non-Hispanic         1.792         53.3         3,412         56.5         3,983         57.7         4,358         66.4         3,551         63.5         17,096         59.5           Unknown         1,453         43.2         2,439         40.4         2,694         39.0         2,058         31.3         1,905         34.1         10,549         37.6           Total         3,360         100.0         6,042         100.0         6,568         100.0         5,592         100.0         28,461         100.0           Age Group         0         -14         74         2.2         115         1.9         152         2.2         136         2.1         104         1.9         581         2.0           15.19         1,239         36.9         2,215         36.7         2,694         <	Other	74	2.2	108	1.8	85	1.2	115	1.8	24	0.4	406	1.4
Ethnicity         Hispanic         115         3.4         191         3.2         222         3.2         152         2.3         136         2.4         816         2.9           Non-Hispanic         1,792         53.3         3,412         56.5         3,983         57.7         4,358         66.4         3,551         63.5         17,096         59.5           Unknown         1,453         43.2         2,439         40.4         2,694         39.0         2,058         31.3         1,905         34.1         10,549         37.6           Total         3,360         100.0         6,042         100.0         6,899         100.0         6,568         100.0         5,592         100.0         28,461         100.0           Age Group	Unknown	1,400	41.7	2,314	38.3	2,438	35.3	1,822	27.7	1,704	30.5	9,678	34.0
Ethnicity         Hispanic         115         3.4         191         3.2         222         3.2         152         2.3         136         2.4         816         2.9           Non-Hispanic         1,792         53.3         3,412         56.5         3,983         57.7         4,358         66.4         3,551         63.5         17,096         59.5           Unknown         1,453         43.2         2,439         40.4         2,694         39.0         2,058         31.3         1,905         34.1         10,549         37.6           Total         3,360         100.0         6,042         100.0         6,899         100.0         6,568         100.0         5,592         100.0         28,461         100.0           Age Group	Total	3,360	100.0	6,042	100.0	6,899	100.0	6,568	100.0	5,592	100.0	28,461	100.0
Hispanic         115         3.4         191         3.2         222         3.2         152         2.3         136         2.4         816         2.9           Non-Hispanic         1.792         53.3         3.412         56.5         3.983         57.7         4.358         66.4         3.551         63.5         17.096         59.5           Unknown         1.453         43.2         2.439         40.4         2.694         39.0         2.058         31.3         1.905         34.1         10.549         37.6           Total         3.360         100.0         6.042         100.0         6.589         100.0         5.592         100.0         28.461         100.0           Age Group         0         1.4         74         2.2         115         1.9         152         2.2         136         2.1         104         1.9         581         2.0           15:19         1.239         36.9         2.215         36.7         2.694         39.0         2.610         39.1         1.650         29.5         8.551         30.2           25-29         465         13.8         865         14.3         1.007         14.6         878	Ethnicity												
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		115	3.4	191	3.2	222	3.2	152	2.3	136	2.4	816	2.9
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Non-Hispanic	1,792	53.3	3,412	56.5	3,983	57.7	4,358	66.4	3,551	63.5	17,096	59.5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$													
Age Group0 - 14742.21151.91522.21362.11041.95812.015-191,23936.92.21536.72.69439.02.61039.72.35142.011,10938.920-241,04131.01.89531.41.98528.81.98030.11.65029.58,55130.225-2946513.886514.31,00714.687813.471212.73.92713.830-3935010.464110.669310.065810.04958.92.83710.0≥401915.73115.13685.33064.72805.01.4565.2Total3.360100.06.042100.06.899100.06.568100.05.592100.028.461100.0By Ward3169.45429.04536.64226.44197.52.1527.8Ward 13169.45429.04536.64226.44197.52.1527.8Ward 21574.72283.82363.42393.61793.21.0393.7Ward 3441.3681.1741.1661.0621.13141.1Ward 42066.13876.4358 <td></td> <td>,</td> <td></td>												,	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				,								,	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 - 14	74	2.2	115	1.9	152	2.2	136	2.1	104	1.9	581	2.0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15-19	1,239	36.9	2,215	36.7	2,694	39.0	2,610	39.7	2,351	42.0	11,109	38.9
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	20-24	1,041	31.0	1,895	31.4	1,985	28.8	1,980	30.1	1,650	29.5	8,551	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	25-29		13.8										
≥40         191         5.7         311         5.1         368         5.3         306         4.7         280         5.0         1,456         5.2           Total         3,360         100.0         6,042         100.0         6,899         100.0         6,568         100.0         5,592         100.0         28,461         100.0           By Ward         316         9.4         542         9.0         453         6.6         422         6.4         419         7.5         2,152         7.8           Ward 1         316         9.4         542         9.0         453         6.6         422         6.4         419         7.5         2,152         7.8           Ward 2         157         4.7         228         3.8         236         3.4         239         3.6         179         3.2         1,039         3.7           Ward 3         44         1.3         68         1.1         74         1.1         66         1.0         62         1.1         314         1.1           Ward 4         206         6.1         387         6.4         358         5.2         412         6.3         382         6.8			10.4	641				658	10.0				
Total3,360100.06,042100.06,899100.06,568100.05,592100.028,461100.0By Ward3169.45429.04536.64226.44197.52,1527.8Ward 21574.72283.82363.42393.61793.21,0393.7Ward 3441.3681.1741.1661.0621.13141.1Ward 42066.13876.43585.24126.33826.81,7456.2Ward 53309.868311.384612.378712.072813.03,37411.7Ward 62427.24387.24526.64446.84077.31,9837.0Ward 746313.893715.51,06415.41,03115.795817.14,45315.5Ward 850315.01,08417.91,24518.01,37420.91,25222.45,45818.9Detention Center1404.24597.66389.25979.11823.32,0166.7Unknown95928.51,21620.11,53322.21,19618.21,02318.35,92721.5	≥40			311	5.1	368		306		280		,	5.2
By Ward         Ward 1         316         9.4         542         9.0         453         6.6         422         6.4         419         7.5         2,152         7.8           Ward 2         157         4.7         228         3.8         236         3.4         239         3.6         179         3.2         1,039         3.7           Ward 3         44         1.3         68         1.1         74         1.1         66         1.0         62         1.1         314         1.1           Ward 4         206         6.1         387         6.4         358         5.2         412         6.3         382         6.8         1,745         6.2           Ward 5         330         9.8         683         11.3         846         12.3         787         12.0         728         13.0         3,374         11.7           Ward 6         242         7.2         438         7.2         452         6.6         444         6.8         407         7.3         1,983         7.0           Ward 6         242         7.2         438         7.2         452         6.6         444         6.8         407         7.3 </td <td></td>													
Ward 13169.45429.04536.64226.44197.52,1527.8Ward 21574.72283.82363.42393.61793.21,0393.7Ward 3441.3681.1741.1661.0621.13141.1Ward 42066.13876.43585.24126.33826.81,7456.2Ward 53309.868311.384612.378712.072813.03,37411.7Ward 62427.24387.24526.64446.84077.31,9837.0Ward 746313.893715.51,06415.41,03115.795817.14,45315.5Ward 850315.01,08417.91,24518.01,37420.91,25222.45,45818.9Detention Center1404.24597.66389.25979.11823.32,0166.7Unknown95928.51,21620.11,53322.21,19618.21,02318.35,92721.5		,						,		,			
Ward 21574.72283.82363.42393.61793.21,0393.7Ward 3441.3681.1741.1661.0621.13141.1Ward 42066.13876.43585.24126.33826.81,7456.2Ward 53309.868311.384612.378712.072813.03,37411.7Ward 62427.24387.24526.64446.84077.31,9837.0Ward 746313.893715.51,06415.41,03115.795817.14,45315.5Ward 850315.01,08417.91,24518.01,37420.91,25222.45,45818.9Detention Center1404.24597.66389.25979.11823.32,0166.7Unknown95928.51,21620.11,53322.21,19618.21,02318.35,92721.5		316	9.4	542	9.0	453	6.6	422	6.4	419	7.5	2,152	7.8
Ward 3441.3681.1741.1661.0621.13141.1Ward 42066.13876.43585.24126.33826.81,7456.2Ward 53309.868311.384612.378712.072813.03,37411.7Ward 62427.24387.24526.64446.84077.31,9837.0Ward 746313.893715.51,06415.41,03115.795817.14,45315.5Ward 850315.01,08417.91,24518.01,37420.91,25222.45,45818.9Detention Center1404.24597.66389.25979.11823.32,0166.7Unknown95928.51,21620.11,53322.21,19618.21,02318.35,92721.5			4.7	228		236		239	3.6	179			
Ward 42066.13876.43585.24126.33826.81,7456.2Ward 53309.868311.384612.378712.072813.03,37411.7Ward 62427.24387.24526.64446.84077.31,9837.0Ward 746313.893715.51,06415.41,03115.795817.14,45315.5Ward 850315.01,08417.91,24518.01,37420.91,25222.45,45818.9Detention Center1404.24597.66389.25979.11823.32,0166.7Unknown95928.51,21620.11,53322.21,19618.21,02318.35,92721.5				68									
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Ward 850315.01,08417.91,24518.01,37420.91,25222.45,45818.9Detention Center1404.24597.66389.25979.11823.32,0166.7Unknown95928.51,21620.11,53322.21,19618.21,02318.35,92721.5													
Detention Center1404.24597.66389.25979.11823.32,0166.7Unknown95928.51,21620.11,53322.21,19618.21,02318.35,92721.5						,						•	
Center         140         4.2         459         7.6         638         9.2         597         9.1         182         3.3         2,016         6.7           Unknown         959         28.5         1,216         20.1         1,533         22.2         1,196         18.2         1,023         18.3         5,927         21.5						,						•	
Unknown 959 28.5 1,216 20.1 1,533 22.2 1,196 18.2 1,023 18.3 5,927 21.5		140	4.2	459	7.6	638	9.2	597	9.1	182	3.3	2,016	6.7
		959	28.5	1,216	20.1	1.533	22.2	1,196	18.2	1.023	18.3	5.927	21.5
								,				,	

\*Detention center includes the District Jail and the Youth Detention Center

# Table 11. Number and Percentage of Gonorrhea Cases by Year of Diagnosis, Sex, Race, Ethnicity, Age atDiagnosis, and Ward Number, District of Columbia, 2006-2010

Gender.         N         R         R </th <th></th> <th>N</th> <th>2006 %</th> <th>N</th> <th>2007 %</th> <th>N</th> <th>2008 %</th> <th>N</th> <th>2009 %</th> <th>N</th> <th>2010 %</th> <th>N</th> <th>Total %</th>		N	2006 %	N	2007 %	N	2008 %	N	2009 %	N	2010 %	N	Total %
Female         806         42.9         1.077         45.4         1.257         47.5         1.233         48.0         1.073         51.0         5.4.6         47.7           Male         1.067         56.9         1.287         54.2         1.375         52.0         1.327         51.7         1.028         48.9         6.084         52.7           Ional         1.877         1000         2.375         1000         2.366         1000         2.567         10000         2.104         1000         11.659         10000           Race	Condor	N	%	N	%	N	%	N	%	N	%	N	%
Male         1,067         56.9         1,287         54.2         1,375         52.0         1,327         51.7         1,028         48.9         6,084         52.7           Unknown         4         0.2         11         0.5         14         0.5         7         0.03         3         0.1         39         0.3           Total         1.377         1000         2.375         1000         2.164         1000         1.1569         1000           Race		806	12.0	1 077	45.4	1 257	47 5	1 0 2 2	10 0	1 072	<b>51 O</b>	5 4 4 6	47.0
Unknown         4         0.2         11         0.5         14         0.5         7         0.3         3         0.1         39         0.3           Total         1,877         1000         2,375         100.0         2,666         100.0         2,104         100.0         11,569         100.0           Black         1,378         73.4         1,600         67.4         1,785         67.5         1,940         75.6         1,437         68.3         8,140         70.4           Mite         97         5.2         112         4.7         90         3.4         118         4.6         120         5.7         5.37         4.7           Asian         10         0.5         10         0.4         14         0.5         0         0.0         13         0.6         53         0.5           Al/AN         16         0.9         10         0.4         14         0.5         0         0.13         0.6         53         0.5           Other         351         19         23         10.0         2,375         100.0         2,366         100.0         2,104         100.0         113,59         100.0         114,59				,	-							,	
Total         1,877         100.0         2,375         100.0         2,666         100.0         2,104         100.0         11,569         100.0           Race         Black         1,378         73.4         1,600         67.4         1,785         67.5         1,940         75.6         1,437         68.3         8,140         70.4           White         97         5.2         112         4.7         90         3.4         118         4.6         120         5.7         537         4.7           Asian         10         0.5         10         0.4         14         0.5         0.0         13         0.6         53         0.5           Other         35         1.9         23         1.0         32         1.2         38         1.5         4         0.2         132         1.1           Unknown         341         18.2         651         711         2.9         52         2.48         2.652         2.9         100.0         2.166         100.0         2.104         100.0         11.569         100.0         11.569         100.0         11.569         100.0         11.569         100.0         11.569         100.0         1													
Race         Jara         1,378         73.4         1,600         67.4         1,785         67.5         1,940         75.6         1,437         68.3         8,140         70.4           Black         1,378         73.5         112         4.7         90         3.4         118         4.6         120         5.7         537         4.7           Asian         10         0.5         10         0.4         14         0.5         13         0.5         8         0.4         55         0.5           Al/AN         16         0.9         10         0.4         14         0.5         0.0         0.13         0.6         53         0.5           Other         35         1.9         2.3         1.0         32         1.2         38         1.5         4         0.2         132         1.1           Unknown         341         18.2         620         2.61         711         2.69         458         178         722         2.48         2.652         2.29         100.0         2.104         100.0         11.569         100.0           Don-Hispanic         1.440         76.7         1.639         69.0         1.782 <td></td>													
Black         1.378         73.4         1.600         67.4         1.785         67.5         1.940         75.6         1.437         68.3         8.140         70.4           White         97         5.2         112         4.7         90         3.4         118         4.6         120         5.7         537         4.7           Asian         10         0.5         10         0.4         14         0.5         13         0.5         8         0.4         55         0.5           Al/AN         16         0.9         10         0.4         144         0.5         0         0.0         13         0.6         53         0.5           Other         35         1.9         2.3         10.0         2.646         100.0         2.164         100.0         1.1569         100.0           Ethnicity		1,011	100.0	2,315	100.0	2,040	100.0	2,301	100.0	2,104	100.0	11,303	100.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		1 378	73.4	1 600	67.4	1 785	67 5	1 940	75.6	1 / 37	68.3	8 140	70.4
Asian         10         0.5         10         0.4         14         0.5         13         0.5         8         0.4         55         0.5           Al/AN         16         0.9         10         0.4         14         0.5         0         0.0         13         0.6         53         0.5           Other         35         1.9         23         1.0         32         1.2         38         1.5         4         0.2         132         1.1           Unknown         341         18.2         620         26.1         711         26.9         458         17.8         522         24.8         2,652         22.9           Total         1,877         100.0         2,375         100.0         2,646         100.0         2,104         100.0         11,569         100.0           Ethnicity				,				,		,		,	
Al/AN         16         0.9         10         0.4         14         0.5         0         0.0         13         0.6         53         0.5           Other         35         1.9         23         1.0         32         1.2         38         1.5         4         0.2         132         1.1           Unknown         341         18.2         620         26.1         711         26.9         458         17.8         522         24.8         2,652         2.9           Total         1.877         100.0         2.375         100.0         2,646         100.0         2,567         100.0         2,104         100.0         11,569         100.0           Ethination         41         2.2         51         2.2         52         2.0         53         2.1         45         2.1         242         2.1           Non-Hispanic         1.440         76.7         1.685         28.8         812         30.7         536         20.9         554         26.3         2.983         25.6           Total         1.877         100.0         2.375         100.0         2.646         100.0         2.367         10.0         2.183													
Other         35         1.9         23         1.0         32         1.2         38         1.5         4         0.2         132         1.1           Unknown         341         18.2         620         26.1         711         26.9         458         17.8         522         24.8         2,652         22.9           Total         1.877         100.0         2,375         100.0         2,664         100.0         2,167         100.0         2,104         100.0         2,164         100.0         2,104         100.0         11,569         100.0           Ethnicity         -         -         1.635         60.0         1,782         67.4         1.978         77.1         1,505         71.5         8,344         72.3           Unknown         396         21.1         685         28.8         812         30.7         536         20.9         554         26.3         2,983         25.6           Total         1,877         100.0         2,375         100.0         2,646         100.0         2,567         100.0         2,104         100.0         11,569         100.0           1314         28         1.5         314         1.4<													
Unknown         341         18.2         620         26.1         711         26.9         458         17.8         522         24.8         2,652         22.9           Total         1.877         100.0         2.375         100.0         2.646         100.0         2.567         100.0         2.104         100.0         11,569         100.0           Ethnicity              1.505         71.5         8.344         72.3           Unknown         396         21.1         685         28.8         812         30.7         536         20.9         554         26.3         2.983         25.6           Total         1.877         100.0         2.375         100.0         2.646         100.0         2.567         100.0         2.104         100.0         11.569         100.0           Age group             2.2         37         1.4         38         1.8         194         1.7           15.19         495         26.4         638         26.9         880         33.3         871         33.9         743         35.3         3.627         31.1 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>													
Total         1.877         100.0         2.375         100.0         2.646         100.0         2.567         100.0         2.104         100.0         11.569         100.0           Ethnicity         Hispanic         4.1         2.2         51         2.2         52         2.0         53         2.1         45         2.1         242         2.1           Non-Hispanic         1.440         76.7         1.639         69.0         1.782         67.4         1.978         77.1         1.505         71.5         8.344         72.3           Unknown         396         21.1         685         28.8         812         30.7         536         20.9         554         26.3         2.983         25.6           Total         1.877         100.0         2.375         100.0         2.646         100.0         2.567         100.0         2.104         100.0         11.569         100.0           Age group         0         12         3         0.2         6         0.3         3         0.1         4         0.2         <3										-			
Ethnicity           Hispanic         41         2.2         51         2.2         52         2.0         53         2.1         45         2.1         242         2.1           Non-Hispanic         1.440         76.7         1.639         69.0         1.782         67.4         1.978         77.1         1.505         71.5         8.344         72.3           Juknown         396         21.1         685         28.8         812         30.7         536         20.9         554         26.3         2.983         25.66           Total         1.877         100.0         2.375         100.0         2.646         100.0         2.567         100.0         2.104         100.0         11.569         100.0           Age group         0         12         3         0.2         6         0.3         3         1.4         38         1.8         194         1.7           15-19         495         2.6.4         638         2.6.9         880         33.3         871         33.9         743         35.3         3.627         31.1           20-24         512         2.7.3         693         2.9.2         712         2.6.9<										-			
Hispanic         41         2.2         51         2.2         52         2.0         53         2.1         45         2.1         242         2.1           Non-Hispanic         1.440         76.7         1.639         69.0         1.782         67.4         1.978         77.1         1.505         71.5         8.344         72.3           Unknown         396         21.1         685         28.8         812         30.7         536         20.9         554         26.3         2.983         25.6           Total         1.877         100.0         2.375         100.0         2.464         100.0         2.164         100.0         11.569         100.0           Age group         -         -         18         0.2         1.5         34         1.4         57         2.2         37         1.4         38         1.8         194         1.7           15-19         495         26.4         638         26.9         880         33.3         871         33.9         743         35.3         3.627         31.1           20-24         512         27.3         693         29.2         712         26.9         732         28.5 <td></td> <td>1,011</td> <td>100.0</td> <td>2,313</td> <td>100.0</td> <td>2,040</td> <td>100.0</td> <td>2,301</td> <td>100.0</td> <td>2,104</td> <td>100.0</td> <td>11,000</td> <td>100.0</td>		1,011	100.0	2,313	100.0	2,040	100.0	2,301	100.0	2,104	100.0	11,000	100.0
Non-Hispanic         1,440         76.7         1,639         69.0         1,782         67.4         1,978         77.1         1,505         71.5         8,344         72.3           Unknown         396         21.1         685         28.8         812         30.7         536         20.9         554         26.3         2,983         25.6           Total         1,877         100.0         2,375         100.0         2,646         100.0         2,104         100.0         11,569         100.0           Age group         -         -         18         0.2         -         3         -         18         0.2           0-12         3         0.2         6         0.3         3         0.1         4         0.2         <3		41	22	51	22	52	20	53	21	45	21	242	21
Unknown         396         21.1         685         28.8         812         30.7         536         20.9         554         26.3         2,983         25.6           Total         1,877         100.0         2,375         100.0         2,646         100.0         2,167         100.0         2,104         100.0         11,569         100.0           Age group         0.12         3         0.2         6         0.3         3         0.1         4         0.2         <3         -         18         194         1.7           13-14         28         1.5         34         1.4         57         2.2         37         1.4         38         1.8         194         1.7           15-19         495         26.4         638         26.9         880         33.3         871         33.9         743         35.3         3,627         31.1           20-24         512         27.3         693         29.2         712         26.9         732         28.5         600         28.5         3,249         28.1           25-29         299         15.9         368         15.5         370         14.0         38         28.4<													
Total         1.877         100.0         2.375         100.0         2.646         100.0         2.567         100.0         2.104         100.0         11,569         100.0           Age group         0         12         3         0.2         6         0.3         3         0.1         4         0.2         <3													
Age group         0         12         3         0.2         6         0.3         3         0.1         4         0.2         <3         -         18         0.2           13-14         28         1.5         34         1.4         57         2.2         37         1.4         38         1.8         194         1.7           15-19         495         26.4         638         26.9         880         33.3         871         33.9         743         35.3         3.627         31.1           20-24         512         27.3         693         29.2         712         26.9         732         28.5         600         28.5         3.249         28.1           25-29         299         15.9         368         15.5         364         13.8         328         12.8         244         11.6         1.629         14.2           ≥40         216         11.5         267         11.2         260         9.8         230         9.0         167         7.9         1.140         9.9           Total         1.877         100.0         2.375         100.0         2.567         100.0         2.104         11.569 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>,</td><td></td></t<>												,	
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$		3	0.2	6	0.3	3	0.1	4	0.2	<3		18	0.2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13-14	28	1.5	34	1.4	57	2.2	37	1.4	38	1.8	194	1.7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15-19	495	26.4	638	26.9	880	33.3	871	33.9	743	35.3	3,627	31.1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	20-24	512	27.3	693	29.2	712	26.9	732	28.5	600	28.5	3,249	28.1
≥4021611.526711.22609.82309.01677.91,1409.9Total1,877100.02,375100.02,646100.02,567100.02,104100.011,569100.0Ward 11457.71867.82027.61766.91587.58677.5Ward 21186.31185.01254.71305.11195.76105.3Ward 3130.7210.9190.7210.81440.7880.8Ward 41085.81215.11375.21505.81115.36275.4Ward 525813.830312.834813.230812.028113.41,49813.0Ward 61668.82008.42218.41987.71858.89708.4Ward 725713.736015.240915.543717.035917.11,82215.7Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.4306<	25-29	299	15.9	368	15.5	370	14.0	365	14.2	310	14.7	1,712	14.9
Total1,877100.02,375100.02,646100.02,567100.02,104100.011,569100.0Ward11457.71867.82027.61766.91587.58677.5Ward 21186.31185.01254.71305.11195.76105.3Ward 3130.7210.9190.7210.8140.7880.8Ward 41085.81215.11375.21505.81115.36275.4Ward 525813.830312.834813.230812.028113.41,49813.0Ward 61668.82008.42218.41987.71858.89708.4Ward 725713.736015.240915.543717.035917.11,82215.7Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4	30-39		17.3	369	15.5	364	13.8	328	12.8	244	11.6	1,629	14.2
Ward         Ward 1         145         7.7         186         7.8         202         7.6         176         6.9         158         7.5         867         7.5           Ward 2         118         6.3         118         5.0         125         4.7         130         5.1         119         5.7         610         5.3           Ward 3         13         0.7         21         0.9         19         0.7         21         0.8         14         0.7         88         0.8           Ward 4         108         5.8         121         5.1         137         5.2         150         5.8         111         5.3         627         5.4           Ward 5         258         13.8         303         12.8         348         13.2         308         12.0         281         13.4         1,498         13.0           Ward 6         166         8.8         200         8.4         221         8.4         198         7.7         185         8.8         970         8.4           Ward 7         257         13.7         360         15.2         409         15.5         437         17.0         359         17.1	≥40	216	11.5	267	11.2	260	9.8	230	9.0	167	7.9	1,140	9.9
Ward 11457.71867.82027.61766.91587.58677.5Ward 21186.31185.01254.71305.11195.76105.3Ward 3130.7210.9190.7210.8140.7880.8Ward 41085.81215.11375.21505.81115.36275.4Ward 525813.830312.834813.230812.028113.41,49813.0Ward 61668.82008.42218.41987.71858.89708.4Ward 725713.736015.240915.543717.035917.11,82215.7Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4	Total	1,877	100.0	2,375	100.0	2,646	100.0	2,567	100.0	2,104	100.0	11,569	100.0
Ward 2       118       6.3       118       5.0       125       4.7       130       5.1       119       5.7       610       5.3         Ward 3       13       0.7       21       0.9       19       0.7       21       0.8       14       0.7       88       0.8         Ward 4       108       5.8       121       5.1       137       5.2       150       5.8       111       5.3       627       5.4         Ward 5       258       13.8       303       12.8       348       13.2       308       12.0       281       13.4       1,498       13.0         Ward 6       166       8.8       200       8.4       221       8.4       198       7.7       185       8.8       970       8.4         Ward 7       257       13.7       360       15.2       409       15.5       437       17.0       359       17.1       1,822       15.7         Ward 8       365       19.5       496       20.9       554       20.9       597       23.3       523       24.9       2,535       21.9         Detention Center       67       3.6       115       4.8       163 <td></td>													
Ward 3130.7210.9190.7210.8140.7880.8Ward 41085.81215.11375.21505.81115.36275.4Ward 525813.830312.834813.230812.028113.41,49813.0Ward 61668.82008.42218.41987.71858.89708.4Ward 725713.736015.240915.543717.035917.11,82215.7Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4													
Ward 41085.81215.11375.21505.81115.36275.4Ward 525813.830312.834813.230812.028113.41,49813.0Ward 61668.82008.42218.41987.71858.89708.4Ward 725713.736015.240915.543717.035917.11,82215.7Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4	Ward 2	118	6.3	118	5.0	125	4.7	130	5.1	119	5.7	610	5.3
Ward 525813.830312.834813.230812.028113.41,49813.0Ward 61668.82008.42218.41987.71858.89708.4Ward 725713.736015.240915.543717.035917.11,82215.7Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4													
Ward 61668.82008.42218.41987.71858.89708.4Ward 725713.736015.240915.543717.035917.11,82215.7Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4	Ward 4		5.8	121		137	5.2	150	5.8		5.3	627	5.4
Ward 725713.736015.240915.543717.035917.11,82215.7Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4	Ward 5							308	12.0				
Ward 836519.549620.955420.959723.352324.92,53521.9Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4	Ward 6		8.8	200	8.4	221		198	7.7		8.8	970	8.4
Detention Center673.61154.81636.21556.0482.35484.6Unknown38020.245519.246817.739515.430614.52,00417.4	Ward 7	257	13.7	360	15.2	409	15.5	437	17.0		17.1	1,822	15.7
Center         67         3.6         115         4.8         163         6.2         155         6.0         48         2.3         548         4.6           Unknown         380         20.2         455         19.2         468         17.7         395         15.4         306         14.5         2,004         17.4	Ward 8	365	19.5	496	20.9	554	20.9	597	23.3	523	24.9	2,535	21.9
Unknown 380 20.2 455 19.2 468 17.7 395 15.4 306 14.5 2,004 17.4		67	3.6	115	4.8	163	6.2	155	6.0	48	2.3	548	4.6
		380	20.2	455	19.2	468	17.7	395	15.4	306	14.5	2,004	17.4
												· ·	

\*Detention center includes the District Jail and the Youth Detention Center

	20	006	20	207	2	008	2	009	20	010	To	tal
	Ν	Rate	N	Rate								
Gender												
Female	2,508	955.1	3,974	1,502.9	4,425	1,659.9	4,158	1,539.4	3,786	1,192.4	18,851	1,369.9
Male	817	357.8	2,045	888.6	2,432	1,046.5	2,398	1,018.4	1,787	628.7	9,479	788.0
Unknown	35	37.0	23	24.7	42	45.2	12	12.8	19	0.0	131	23.9
Total	3,360	573.9	6,042	1,027.8	6,899	1,165.7	6,568	1,095.3	5,592	929.3	28,461	958.4
Race												
Black	1,748	659.5	3,452	1,311.1	4,172	1,591.1	4,418	1,662.9	3,647	1,195.2	17,437	1,284.0
White	105	52.3	123	59.9	126	60.0	162	76.1	167	72.1	683	64.1
Asian	13	78.4	22	128.7	34	192.7	27	151.0	23	107.7	119	131.7
AI/AN	20	1,046.0	23	1,175.9	44	2,196.7	24	1,182.6	27	1,298.7	138	1,380.0
Other	74	1,197.2	108	1,703.7	85	1,285.0	115	1,715.8	24	57.6	406	1,191.9
Total	3,360	573.9	6,042	1,027.8	6,899	1,165.7	6,568	1,095.3	5,592	929.3	28,461	958.4
Ethnicity												
Hispanic	115	298.3	191	491.5	222	551.6	152	372.8	136	248.4	816	392.5
Non-	1,792	396.1	3,412	748.7	3,983	868.2	4,358	937.6	3,551	649.2	17,096	720.0
Hispanic	1,152	590.1	3,412	740.7	5,505	000.2	4,558	957.0	3,331		17,030	120.0
Unknown	1,453	1,537.4	2,439	2,614.0	2,694	2,901.7	2,058	2,187.7	1,905	0.0	10,549	1,848.2
Total	3,360	573.9	6,042	1,027.8	6,899	1,165.7	6,568	1,095.3	5,592	929.3	28,461	958.4
Age Group												
0-14	74	78.3	115	123.3	152	163.7	136	328.8	104	124.1	581	163.6
15-19	1,239	3,115.4	2,215	5,479.2	2,694	6,598.3	2,610	6,309.1	2,351	5,889.4	11,109	5,478.3
20-24	1,041	1,954.5	1,895	3,585.1	1,985	3,681.8	1,980	3,624.6	1,650	2,573.7	8,551	3,083.9
25-29	465	825.7	865	1,473.3	1,007	1,663.2	878	1,431.2	712	1,022.3	3,927	1,283.2
30-39	350	379.0	641	689.8	693	748.3	658	701.2	495	505.0	2,837	604.6
≥40	191	76.6	311	124.6	368	146.6	306	120.3	280	113.7	1,456	116.4
Total	3,360	573.9	6,042	1,027.8	6,899	1,165.7	6,568	1,095.3	5,592	929.3	28,461	958.4
By Ward										- 10 0		
Ward 1	316	415.2	542	709.2	453	588.8	422	541.3	419	549.9	2,152	560.9
Ward 2	157	223.5	228	323.2	236	332.3	239	332.1	179	224.0	1,039	287.0
Ward 3	44	57.8	68	89.0	74	96.2	66	84.7	62	80.4	314	81.6
Ward 4	206	270.7	387	506.4	358	465.3	412	528.5	382	504.1	1,745	455.0
Ward 5	330	469.7	683	968.2	846	1,191.2	787	1,093.7	728	979.7	3,374	940.5
Ward 6	242	344.5	438	620.9	452	636.4	444	617.0	407	531.3	1,983	550.0
Ward 7	463	659.1	937	1,328.3	1,064	1,498.2	1,031	1,432.8	958	1,348.0	4,453	1,253.3
Ward 8	503	716.0	1,084	1,536.6	1,245	1,753.0	1,374	1,909.4	1,252	1,770.6	5,458	1,537.1
Total	3,360	573.9	6,042	1,027.8	6,899	1,165.7	6,568	1,095.3	5,592	929.3	28,461	958.4

Table 12. Number and Rate per 100,000 Population of Chlamydia Cases by Year of Diagnosis, Sex, Race,Ethnicity, Age at Diagnosis and Ward, District of Columbia, 2006-2010

	20	006	20	07	2008		20	009	20	10	Total	
	Ν	Rate	Ν	Rate								
Gender												
Female	806	306.9	1,077	407.3	1,257	471.5	1,233	456.5	1,073	338.0	5,446	396.0
Male	1,067	467.3	1,287	559.2	1,375	591.6	1,327	563.5	1,028	361.7	6,084	508.7
Unknown	4	4.2	11	11.8	14	15.1	7	7.4	3	0.0	39	7.7
Total	1,877	320.6	2,375	404.0	2,646	447.1	2,567	428.1	2,104	349.7	11,569	389.9
Race												
AI/AN	16	836.8	10	511.3	14	699.0	0	0.0	13	625.3	53	534.5
Asian	10	60.3	10	58.5	14	79.3	13	72.7	8	37.5	55	61.7
Black	1,378	519.9	1,600	607.7	1,785	680.7	1,940	730.2	1,437	540.9	8,140	615.9
Other	35	566.7	23	362.8	32	483.8	38	567.0	4	9.6	132	398.0
White	97	48.3	112	54.5	90	42.9	118	55.5	120	51.8	537	50.6
Total	1,877	320.6	2,375	404.0	2,646	447.1	2,567	428.1	2,104	349.7	11,569	389.9
Ethnicity												
Hispanic	41	106.4	51	131.2	52	129.2	53	130.0	45	82.2	242	115.8
Non-	1,440	318.3	1,639	359.7	1,782	388.5	1,978	425.6	1,505	275.2	8,344	353.4
Hispanic												
Unknown	396	419.0	685	734.2	812	874.6	536	569.8	554	0.0	2,983	519.5
Total	1,877	320.6	2,375	404.0	2,646	447.1	2,567	428.1	2,104	349.7	11,569	389.9
Age Group												
0-14	31	32.8	40	42.9	60	64.6	41	43.6	40	47.7	212	46.3
15-19	495	1,244.7	638	1,578.2	880	2,155.3	871	2,105.5	743	1,861.3	3,627	1,789.0
20-24	512	961.3	693	1,311.1	712	1,320.6	732	1,340.0	600	935.9	3,249	1,173.8
25-29	299	531.0	368	626.8	370	611.1	365	595.0	310	445.1	1,712	561.8
30-39	324	350.8	369	397.1	364	393.0	328	349.5	244	248.9	1,629	347.9
≥40	216	86.7	267	107.0	260	103.6	230	90.4	167	67.8	1,140	91.1
Total	1,877	320.6	2,375	404.0	2,646	447.1	2,567	428.1	2,104	349.7	11,569	389.9
By Ward	4 4 5	100 5	100	0.40.4	000	000.0	470	005.0	450	0074	0.07	005.0
Ward 1	145	190.5	186	243.4	202	262.6	176	225.8	158	207.4	867	225.9
Ward 2	118	168.0	118	167.3	125	176.0	130	180.7	119	148.9	610	168.2
Ward 3	13	17.1	21	27.5	19	24.7	21	26.9	14	18.2	88	22.9
Ward 4	108	141.9	121	158.3	137	178.1	150	192.4	111	146.5	627	163.4
Ward 5	258	367.3	303	429.5	348	490.0	308	428.0	281	378.2	1,498	418.6
Ward 6	166	236.3	200	283.5	221	311.2	198	275.2	185	241.5	970	269.5
Ward 7	257	365.8	360	510.3	409	575.9	437	607.3	359	505.2	1,822	512.9
Ward 8	365	519.6	496	703.1	554	780.1	597	829.6	523	739.6	2,535	714.4
Total	1,877	320.6	2,375	404.0	2,646	447.1	2,567	428.1	2,104	349.7	11,569	389.9

# Table 13.Number and Rate per 100,000 Population of Gonorrhea Cases by Year of Diagnosis, Sex, Race,Ethnicity, Age at Diagnosis, and Ward, District of Columbia, 2006-2010

# Table 14. Number and Percentage of Primary and Secondary Syphilis Cases by Year of Diagnosis, Sex, Race,Ethnicity, Age at Diagnosis and Ward, District of Columbia, 2006-2010

	2006		2007		20	08	20	2009		2010		al
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Туре												
Primary	16	13.7	44	24.7	33	22.8	30	18.5	27	20.2	150	20.0
Secondary	101	86.3	133	75.1	112	77.2	132	81.5	107	79.9	585	80.0
Total	117	100.0	177	100.0	145	100.0	162	100.0	134	100.0	735	100.0
Gender												
Female	5	4.3	5	2.8	5	3.5	10	6.2	<3		27	3.6
Male	112	95.7	172	97.2	140	96.6	152	93.8	132	98.5	708	96.4
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	117	100.0	177	100.0	145	100.0	162	100.0	134	100.0	735	100.0
Race												
Black	60	51.3	100	56.5	88	60.7	90	55.6	71	53.0	409	55.4
White	53	45.3	62	35.0	45	31.0	49	30.3	47	35.1	256	35.3
Asian	<3		4	2.3	<3		3	1.9	6	4.5	16	2.2
AI/AN	<3		0	0.0	0	0.0	0	0.0	0	0.0	<3	
Other	0	0.0	8	4.5	7	4.8	9	5.6	9	6.7	33	4.3
Unknown	<3		3	1.7	4	2.8	11	6.8	<3		20	2.6
Total	117	100.0	177	100.0	145	100.0	162	100.0	134	100.0	735	100.0
Ethnicity												
Hispanic	6	5.1	19	10.7	13	9.0	16	9.9	11	8.2	65	8.6
Non-Hispanic	111	94.9	154	87.0	128	88.3	138	85.2	121	90.3	652	89.1
Unknown	0	0.0	4	2.3	4	2.8	8	4.9	<3		18	2.3
Total	117	100.0	177	100.0	145	100.0	162	100.0	134	100.0	735	100.0
Age Group		<b>F</b> 4		4.0		4.0	10	0.0		F 0	07	<b>F</b> 4
15-19	6	5.1	7	4.0	7	4.8	10	6.2	7	5.2	37	5.1
20-24	14	12.0	20	11.3	22	15.2	25	15.4	20	14.9	101	13.8
25-29	17	14.5	29	16.4	18	12.4	30	18.5	24	17.9	118	16.0
30-39	35	29.9	58	32.8	46	31.7	49	30.6	37	27.6	225	30.5
≥40 Totol	45	38.5	63	35.6	52	35.9	48	29.6	46	34.3	254	34.8
Total	117	100.0	177	100.0	145	100.0	162	100.0	134	100.0	735	100.0
By Ward Ward 1	25	21.4	28	15.8	28	19.3	34	21.0	29	21.6	144	19.8
Ward 2	25 20	21.4 17.1	28 47	26.6	28 28	19.3	34 31	21.0 19.1	29 28	21.6	154	20.6
		5.1	47		28 4	2.8					154	20.6
Ward 3	6 3	2.6	3 17	1.7 9.6	4 13	2.8 9.0	0 10	0.0 6.2	<3 9	6.7	52	3.2 6.8
Ward 4 Ward 5	3 18	2.6 15.4	25	9.6 14.1	20	9.0 13.8	23	6.2 14.2	9 16	6.7 11.9	52 102	13.9
Ward 6	18	15.4	25 24	14.1	20	13.8	23 18	14.2	13	9.7	94	13.9
Ward 7	18	15.4 11.1	24 18	13.6	21 14	14.5 9.7	18	7.4	21	9.7 15.7	94 78	12.8
Ward 8	13	5.1	10	8.5	14	9.7	23	14.2	14	10.5	78	
Correctional		5.1	13			9.0		14.2		10.5		9.4
Facilities	<3		0	0.00	<3		<3		0	0.0	3	0.4
Unknown	7	6.0	0	0.00	3	2.1	10	6.2	3	2.2	23	3.3
Total	117	6.0 100.0	177	100.0	3 145	2.⊥ 100.0	162	6.∠ 100.0	3 134	2.2 100.0	23 735	3.3 100.0
Total		100.0		100.0	145	100.0	102	100.0	134	100.0	135	100.0

# Table 15. Number and Rate per 100,000 Population of Primary and Secondary Syphilis Cases by Year ofDiagnosis, Sex, Race, Ethnicity, Age at Diagnosis, and Ward, District of Columbia, 2006-2010

	200		20		20		20		202		Tot	
_	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Туре												
Primary	16	2.7	44	7.5	33	5.6	30	5.0	27	4.5	150	5.1
Secondary	101	17.3	133	22.6	112	18.9	132	22.0	107	17.8	585	19.7
Total	117	20.0	177	30.1	145	24.5	162	27.0	134	22.3	735	24.8
Gender	_	1.0	_	4.0		1.0	4.0	0.7	10		07	0.0
Female	5	1.9	5	1.9	5	1.9	10	3.7	<3		27	2.0
Male	112	49.1	172	74.7	140	60.2	152	64.6	132	46.4	708	59.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	117	20.0	177	30.1	145	24.5	162	27.0	134	22.3	735	24.8
Race	<u> </u>	00.0	100	20.0	00	22.0	00	22.0	74	02.2	400	20.2
Black	60	22.6	100	38.0	88	33.6	90	33.9	71	23.3	409	30.3
White	53	26.4	62	30.2	45	21.4	49	23.0	47	20.3	256	24.3
Asian	<3		4	23.4	<3		3	16.8	6	28.1	16	17.2
AI/AN	<3 0		0 8	0.0 126.2	0	0.0	0	0.0	0 9	0.0	<3	
Other		0.0			-	105.8	9	134.3		21.6	33	77.6
Total	117	20.0	177	30.1	145	24.5	162	27.0	134	22.3	735	24.8
Ethnicity	6	15.6	19	48.9	13	32.3	16	39.2	11	20.1	65	31.2
Hispanic Non-Hispanic	111	24.5	154	33.8	128	27.9	138	29.7	121	20.1	652	27.6
		24.5		4.3	4	4.3		29.7 8.5	<3		18	3.4
Unknown Total	0 117	20.0	4 177	4.5	4 145	4.3 24.5	8 162	8.5 27.0	134	 22.3	735	3.4 24.8
Age Group		20.0	<u> </u>	30.1	145	24.5	102	21.0	134	22.3	735	24.0
15-19	6	15.1	7	17.3	7	17.1	10	24.2	7	17.5	37	18.3
20-24	14	26.3	20	37.8	22	40.8	25	45.8	20	31.2	101	36.4
25-29	17	30.2	29	49.4	18	29.7	30	48.9	24	34.5	118	38.5
30-39	35	37.9	58	62.4	46	49.7	49	52.2	37	37.7	225	48.0
≥40	45	18.1	63	25.2	52	20.7	48	18.9	46	18.7	254	20.3
Total	117	20.0	177	30.1	145	24.5	162	27.0	134	22.3	735	24.8
By Ward												
Ward 1	25	32.8	28	36.6	28	36.4	34	43.6	29	38.1	144	37.5
Ward 2	20	28.5	47	66.6	28	39.4	31	43.1	28	35.0	154	42.5
Ward 3	6	7.9	3	3.9	4	5.2	0	0.0	<3		14	3.7
Ward 4	3	3.9	17	22.2	13	16.9	10	12.8	9	11.9	52	13.6
Ward 5	18	25.6	25	35.4	20	28.4	23	32.0	16	21.5	102	28.6
Ward 6	18	25.6	24	34.0	21	29.8	18	25.0	13	17.0	94	26.3
Ward 7	13	18.5	18	25.5	14	19.7	12	16.7	21	29.5	78	22.0
Ward 8	6	8.5	15	21.3	13	18.3	23	32.0	14	19.8	71	20.0
Total	109	20.0	177	30.1	141	24.5	151	27.0	131	22.3	709	24.8

### Table 16. Reported Tuberculosis Rate per 100,000 population, District of Columbia, 2006-2010

		2006		2007		2008		2009		2010		Total
	Ν	Rate										
District Total	72	12.3	59	10.0	54	9.1	72	12.3	59	10.0	54	9.1

### Table 17. Reported Tuberculosis Cases by Selected Characteristics, District of Columbia, 2006-2010

		2006		2007		2008		2009		2010		Total
	N	%	N	%	N	%	N	%	N	%	N	%
Disease Site												
Pulmonary	58	80.6	47	79.7	39	72.2	32	78.0	28	65.1	218	81.0
Extra Pulmonary	12	16.7	11	18.6	15	27.8	9	22.0	14	32.5	60	22.3
Both	<3		<3		<3		<3		<3		4	1.5
Total	72	100.0	59	100.0	54	100.0	41	100.0	43	100.0	269	100.0
Sex					<u> </u>				• •			
Males	49	68.1	40	67.8	34	63.0	17	41.5	21	48.8	161	59.9
Females	23	31.9	19	32.2	20	37.0	24	58.5	22	51.2	108	40.1
Total	72	100.0	59	100.0	54	100.0	41	100.0	43	100.0	269	100.0
Age	_											
<5	<3		<3		<3		<3		<3		7	2.6
5 - 14	4	5.6	<3		<3		<3		<3		6	2.2
15-24	<3		3	5.1	9	16.7	4	9.8	<3		20	7.4
25 - 44	30	41.7	19	32.2	16	29.6	14	34.1	18	41.9	97	36.1
45 - 64	23	31.9	24	40.7	21	38.9	14	24.1	12	27.9	94	34.9
≥65	12	16.7	11	18.6	5	9.3	8	19.5	9	20.9	45	16.7
Total	72	100.0	59	100.0	54	100.0	41	100.0	43	100.0	269	100.0
Race/Ethnicity	-		-									
Asian	4	5.6	4	6.8	3	5.6	3	7.3	<3		15	5.6
Black non- Hispanic	57	79.2	39	66.1	41	75.9	26	63.4	28	65.1	191	71.0
Black Hispanic	<3		<3		<3		<3		<3		<3	
Native Hawaiian/Pl	<3		<3		<3		<3		<3		<3	
White non- Hispanic	3	4.2	<3		<3		5	12.2	7	18.6	15	5.6
White Hispanic	8	11.1	15	25.4	9	16.7	7	17.1	4	9.3	43	16.0
Multiple Races	<3		<3		<3		<3		<3		<3	
Total	72	100.0	59	100.0	54	100.0	41	100.0	43	100.0	269	100.0
US Born vs. Foreign	Born											
Foreign Born	33	45.8	30	50.8	30	55.6	19	46.3	27	62.7	139	51.7
US Born-Black	36	50	26	44.1	23	42.6	16	39	14	26.4	115	42.7
US Born-All Other Races	3	4.2	3	5.1	<3		6	14.6	2	9.3	15	5.6
Unknown	<3		<3		<3		<3		<3		<3	
Total	72	100.0	59	100.0	54	100.0	41	100.0	43	100.0	269	100.0
Homeless w/in past												
Total	7	9.7	4	6.8	5	9.3	<3		4	9.3	22	8.2
Alcohol/Substance	Use											
Total	5	6.9	15	25.4	4	7.4	14	34.1	7	16.3	45	16.7

# **NOTES:**

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