

Acknowledgments

This report was compiled through the combined efforts of many individuals in the District of Columbia Department of Health's HIV/AIDS, Hepatitis, STD, and Tuberculosis Administration, with major contribution from the Milken Institute School of Public Health at George Washington University. This report would not have been possible without the hard work, dedication, and contribution of health care providers, community groups, researchers, and members of the community.

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Executive Summary

The Annual Epidemiology and Surveillance Report for the District of Columbia confirms the District maintains serious epidemics of HIV, Sexually Transmitted Diseases (STDs), Hepatitis, and Tuberculosis (TB). The Department of Health (DOH) has multi-year evidence the District is making progress with combatting HIV. The number of newly reported HIV cases has decreased by over a third (40%), there is an increase in the proportion of persons linked to HIV care following diagnosis, and an increase in persons moving from stage 3 HIV disease (AIDS) to stage 1 and 2 (HIV only). However, the District still has much more to accomplish towards achieving its goals of diagnosing all persons infected with HIV, retaining people in care, and increasing the proportion of persons with sustained viral load suppression.

Health disparities remain a significant feature of the epidemics in the District. In particular, blacks are disproportionately impacted by HIV, chlamydia, and gonorrhea, and adolescents have a higher burden of chlamydia and gonorrhea than older adults. Gay and bisexual men continue to have high rates of syphilis.

New In this Report

Stage of HIV disease: The DOH has closely measured the stage of HIV disease based on CD4 counts and observed how a person's health status changes over time. In the past the DOH recorded AIDS diagnoses; primarily determined by CD4 T-cell counts below 200 cells / μ l and/or the person is diagnosed with an opportunistic infection. However, this is not a static condition, as people can improve their immune system through treatment. This measure replaces a reporting on new AIDS diagnoses and provides a more accurate assessment of improving the health status of persons living with HIV in the District.

Epidemiological Summary

Key points in this surveillance update of the District epidemics in the year 2013 include:

- 16,423 residents of the District of Columbia or 2.5% of the population are living with HIV. An estimated prevalence of 2.5% exceeds the World Health Organization definition of 1% as a generalized epidemic.
- Blacks, Hispanics, and whites with HIV exceed 1% of their respective populations, with blacks disproportionately impacted at 3.9%.
- Men who have sex with men and heterosexual contact are the two leading transmission modes reported among newly diagnosed and identified HIV cases.
- The number of newly diagnosed HIV cases in the District decreased to 553 cases in 2013, a decline of 40% from 916 cases in 2009.
- There was a 87% decrease in the number of newly diagnosed HIV cases attributable to injection drug use. In 2007, prior to the scale up of DC's needle exchange program there were 149 cases compared to 19 in 2013.
- There were no babies born with HIV in 2013 in the District.
- The majority of persons diagnosed at stage 3 initially improved significantly to stages 1 or 2 within 12 months.

- There were reports of 6,647 cases of chlamydia, 2,626 cases of gonorrhea and 154 cases of primary and secondary syphilis reported in 2013.
- There were reports of 2,241 cases of hepatitis B and 8,933 cases of hepatitis C newly diagnosed between 2009 and 2013.
- 37 new cases of TB were reported in 2013.

HIV Care Continuum

In addition to the annual report, DOH prepares a supplemental report on HIV Care Dynamics. This supplement tracks the District's efforts to improve the care continuum for persons living with HIV to sustain their health from diagnosis to linkage and retention in care. The goals of the care continuum are for all persons with HIV to be diagnosed, connected into medical care and achieve viral load suppression. Viral suppression ensures a strong immune system and healthier outcomes for persons living with HIV. Here are several highlights covering the years 2009-2013:

- 80% of persons linked to care within 3 months of diagnosis.
- 62% of persons retained in care.
- 47% of persons with viral suppression.
- Among Ryan White clients, 89% retained in care and 63% virally suppressed.

Scaling Up Success

The District Government and its community partners continue to scale up programs to reduce the impact of HIV, STDs, hepatitis and TB on residents of Washington, DC. These successes are the most recent achievements by the District.

- Publicly supported 163,522 HIV tests in 2014, a slight decrease from the 177,600 in 2013 yet nearly four times the 43,000 tests performed in 2007.
- Distributed more than 6.1 million male and female condoms in 2014, a 10-fold increase from 2007.
- Removed 696,000 needles from the street in 2014, an increase from 647,838 in 2013, through the DC needle exchange programs.
- Provided free STD testing for 3,825 youth ages 15 to 19 years old through the school based STD screening and community screening programs in 2014.
- Provided HIV medical care to more than 3,000 persons through the Ryan White Care act Program.

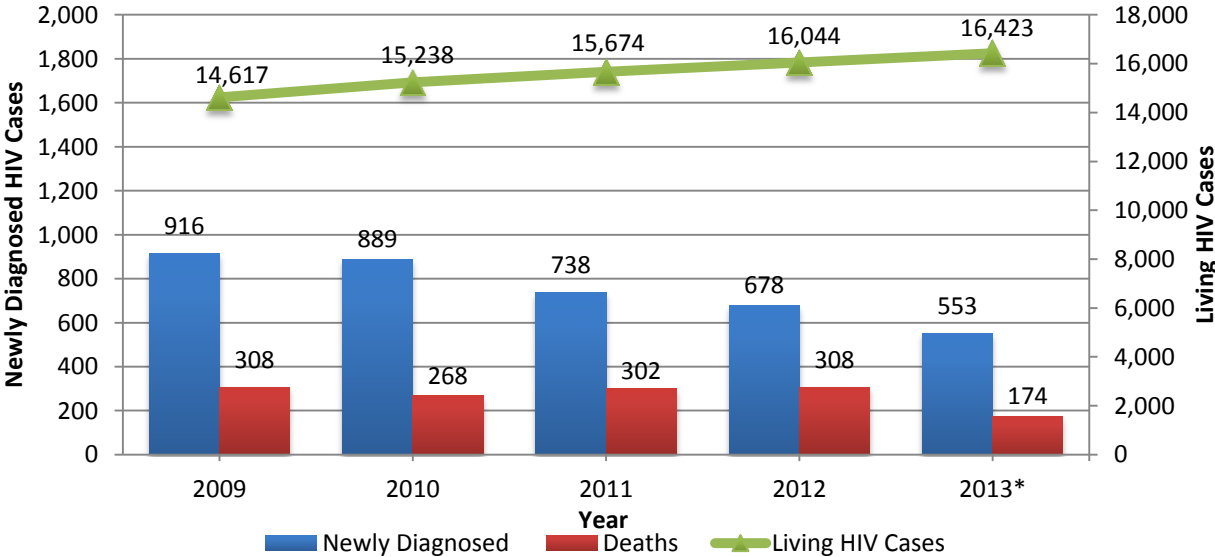
Section 1. Diagnosed and Living HIV Cases

Summary

The World Health Organization defines generalized HIV epidemics as those in which the prevalence of HIV is greater than 1% in the overall population. As of December 31, 2013 there were 16,423 residents of the District of Columbia living with HIV; this number accounts for approximately 2.5% of the population and is indicative of a continued generalized epidemic.

District residents aged 40 years and over continue to be disproportionately impacted by HIV. Approximately 6.0% of residents whose current age is 40 to 49 years and 6.7% of residents aged 50 to 59 years are living with HIV. Blacks still account for the majority of people living with HIV in the District. At the end of 2013, 3.9% of black residents were living with HIV, with the highest burden of disease among black males (5.8%). Approximately 1.6% of Hispanic residents and 1.2% of white residents were living with HIV. Please refer to appendix tables B1 and B2 for additional information regarding HIV cases diagnosed in the District and alive as of December 31, 2013.

Figure 1. Newly Diagnosed HIV Cases, Deaths, and Living HIV Cases by Year District of Columbia, 2009-2013



* Information concerning death in 2013 is limited to District of Columbia vital records only. The number of deaths documented in 2013 may increase as information from other sources (i.e., NDI and SSDMF) becomes available.

- At the end of 2013, there were 16,423 residents that were diagnosed in the District and living with HIV, accounting for 2.5% of all DC residents.
- There has been a 39.6% decrease in the number of HIV cases diagnosed and reported from 2009 to 2013.

Table 1. HIV Cases Diagnosed in the District and Alive as of December, 2013: Rates by Sex, Race/Ethnicity, and Current Age

Sex	Total Living HIV Cases, 2013		Estimated DC Population†, 2013		Rate per 100,000
	N	%	N	%	
Male	12,008	73.1	306,250	47.4	3,921.0
Female	4,415	26.9	340,199	52.6	1,297.8
Total	16,423	100.0	646,449	100.0	2,540.5
Race/Ethnicity					
White	2,764	16.8	231,281	35.8	1,195.1
Black	12,238	74.5	309,869	47.9	3,949.4
Hispanic	1,040	6.4	65,560	10.1	1,586.3
Other*	381	2.3	39,739	6.1	958.8
Total	16,423	100.0	646,449	100.0	2,540.5
Male					
White	2,648	22.1	115,172	37.6	2,299.2
Black	8,157	67.9	140,518	45.9	5,805.0
Hispanic	886	7.4	33,613	11.0	2,635.9
Other*	317	2.6	16,947	5.5	1,870.5
Total	12,008	100.0	306,250	100.0	3,921.0
Female					
White	116	2.6	116,109	34.1	99.9
Black	4,081	92.4	169,351	49.8	2,409.8
Hispanic	154	3.5	31,947	9.4	482.0
Other*	64	1.5	22,792	6.7	280.8
Total	4,415	100.0	340,199	100.0	1,297.8
Current Age					
<13	37	0.2	86,101	13.3	43.0
13-19	95	0.6	47,555	7.4	199.8
20-29	1,435	8.7	135,898	21.0	1,055.9
30-39	2,774	16.9	116,906	18.1	2,372.8
40-49	4,787	29.1	79,710	12.3	6,005.5
50-59	5,003	30.5	74,792	11.6	6,689.2
≥60	2,292	14.0	105,487	16.3	2,172.8
Total	16,423	100.0	646,449	100.0	2,540.5

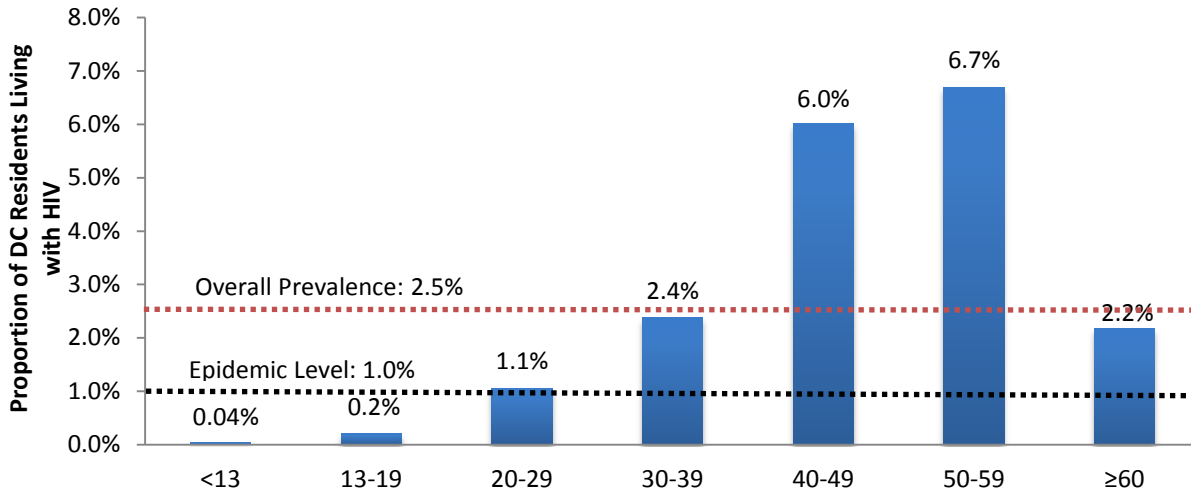
†Source: 2013 US Census Estimates

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

- District residents between 40 and 49 years of age and 50 and 59 years of age have the highest rates of HIV at 6,005.5 and 6,689.2 cases per 100,000 persons, respectively.
- Men accounted for less than half (47.4%) of District residents, but almost three-quarters (73.1%) of living cases.

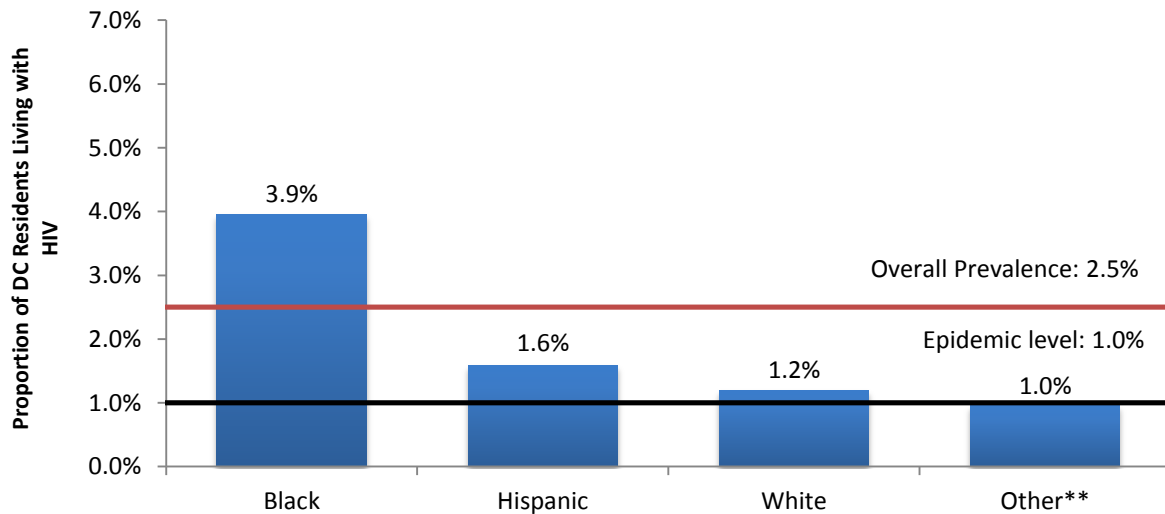
- Although blacks accounted for just under half (47.9%) of District residents, they account for about three quarters (74.5%) of all cases living with HIV.
- Among District women, black women accounted for the majority (92.4%) of living HIV cases.

Figure 2. Proportion of Residents Diagnosed and Living with HIV by Current Age District of Columbia, 2013



- Residents aged between 40 to 49 and 50 to 59 had the highest burden of HIV in the District at 6.0% and 6.7%, respectively.
- DC residents under the age of 13 had the lowest HIV prevalence at the end of 2013.

Figure 3. Proportion of Residents Diagnosed and Living with HIV by Race/Ethnicity, District of Columbia, 2013

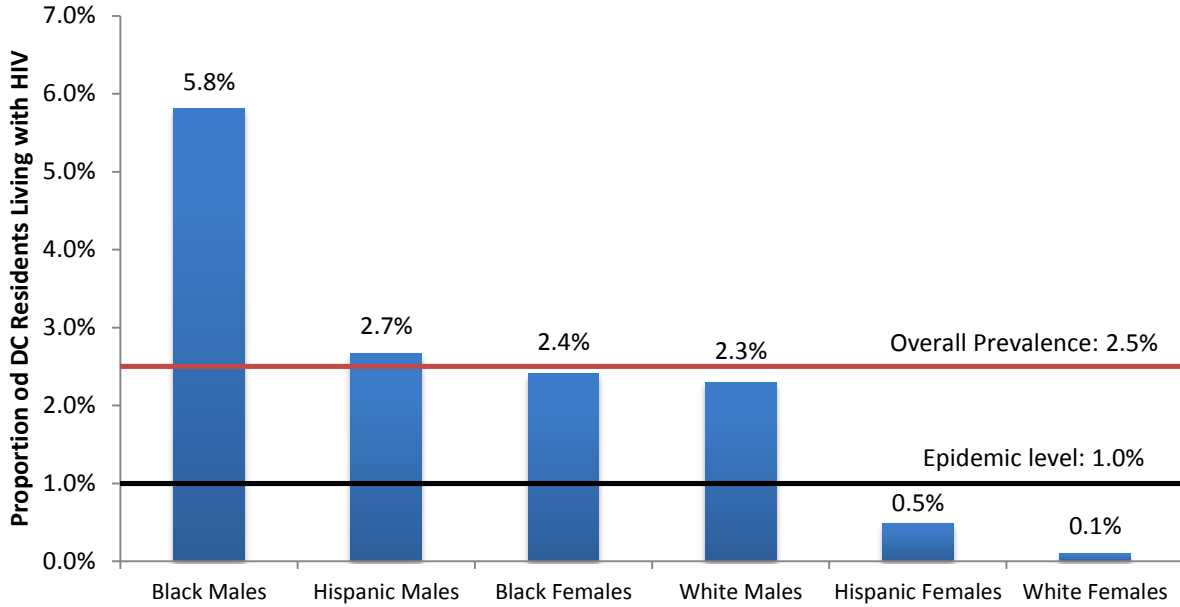


**Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown

- HIV prevalence is at or above the 1% epidemic threshold across each of the racial/ethnic categories presented in Figure 3.

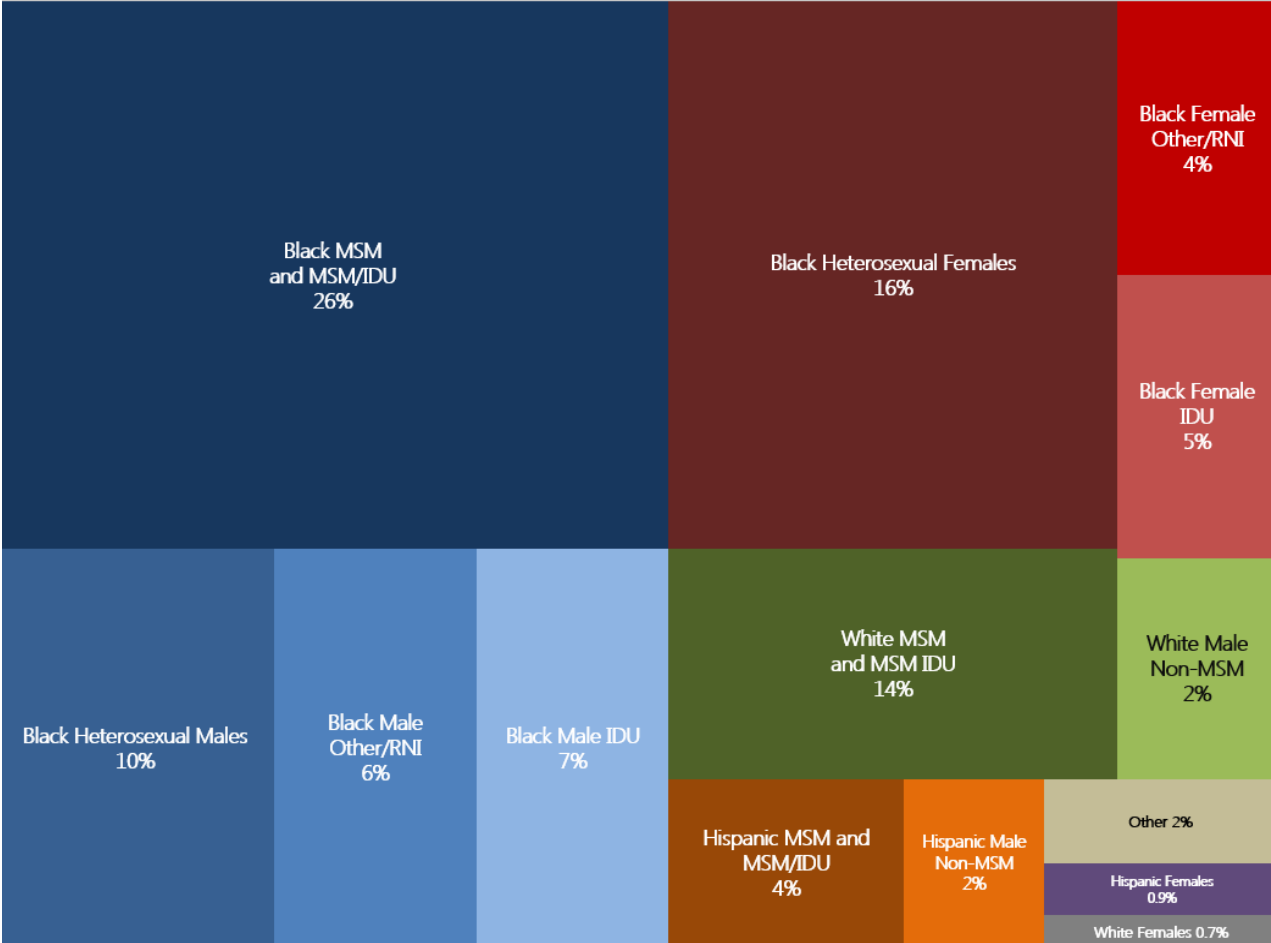
- At the end of 2013, an estimated 3.9% of black residents in the District were diagnosed and living with HIV, followed by 1.6% of Hispanics and 1.2% of whites.

Figure 4. Proportion of Residents Diagnosed and Living with HIV by Race/Ethnicity and Sex District of Columbia, 2013



- At the end of 2013, black and Hispanic men had the highest HIV prevalence in the District, where HIV prevalence among black men was more than twice that of Hispanic men.
- The lowest prevalence of HIV is observed among white women (0.1%) and Hispanic women (0.5%); these rates are below the generalized epidemic rate of 1%.
- The highest rate of HIV among women was among black women, where HIV prevalence was nearly 5 times greater than for Hispanic women and nearly 25 times greater than white women.

Figure 5. Proportion of Living Cases of HIV Diagnosed in DC, by Race/Ethnicity, Sex and Mode of Transmission, District of Columbia, 2013 (N=16,423)



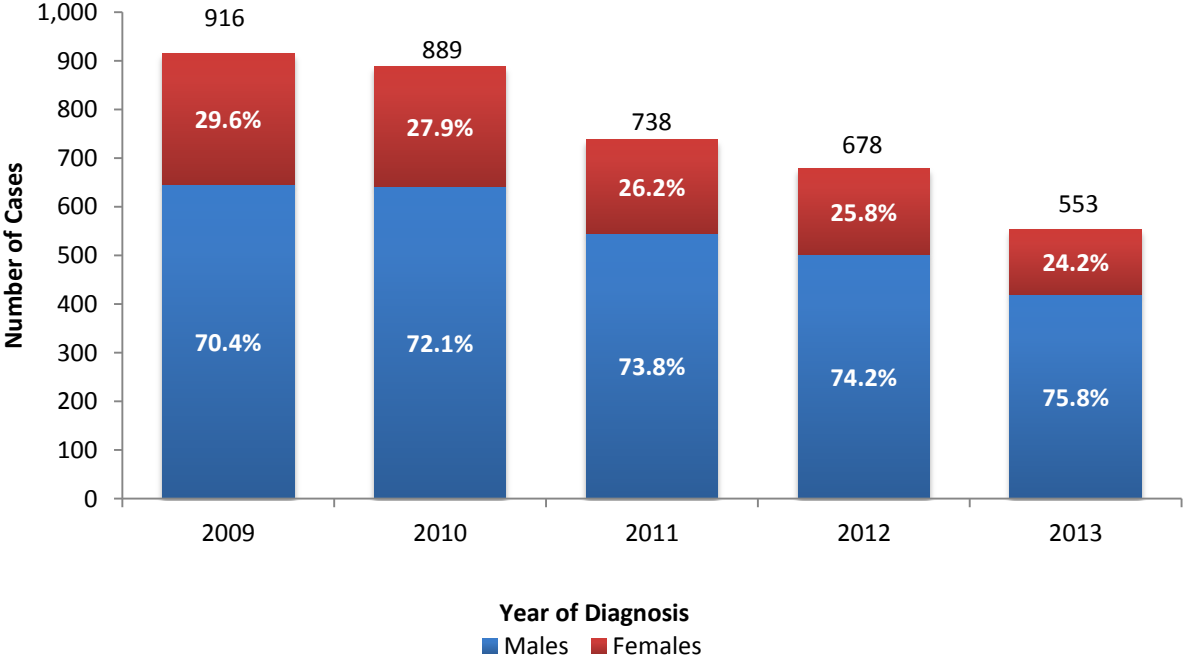
*MSM: includes men who have sex with men;
 IDU: injection drug use;
 RNI: risk not identified;
 Other: perinatal transmission, hemophilia, blood transfusion, and occupational exposure (healthcare workers); Non-MSM: All modes of transmission excluding MSM and MSM/IDU.
 Hispanic Male non-MSM: Heterosexual, IDU, RNI and other modes of transmission
 Black Female Other: RNI and other modes of transmission
 Black Male Other: RNI and other modes of transmission
 Hispanic Female: All modes of transmission
 White Female: All modes of transmission
 Other: All persons of other race with all modes of transmission

- Approximately one-quarter (26%) of persons diagnosed with HIV in the District and alive as of December, 2013 were black MSM and MSM/IDU.
- Black women who reported heterosexual contact as mode of transmission represent the second largest group (16%), while white MSM and MSM/IDU represent the third largest group (14%).

Section 2. Newly Diagnosed HIV Cases

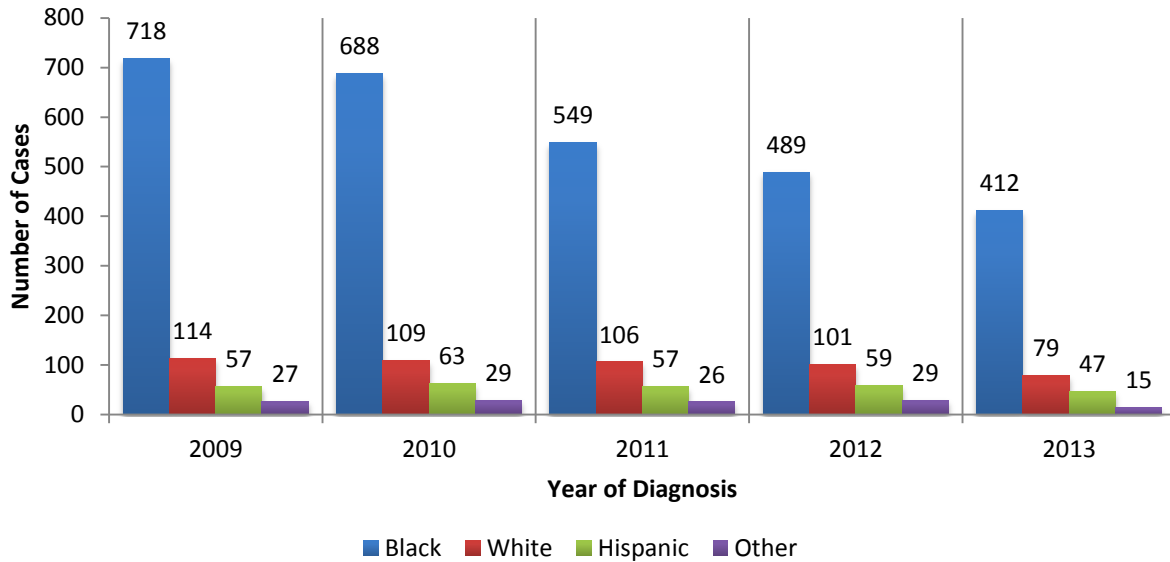
There were 3,774 HIV cases diagnosed and reported among residents of the District between 2009 and 2013. The number of newly diagnosed HIV cases declined each year, from 916 cases in 2009 to 553 cases in 2013; this represents a 40% decline in the number of diagnosed cases. More than two-thirds of these cases (73.0%) were men, approximately three-quarters (75.7%) were black, and about one-half (51.7%) were between 20 and 39 years of age. The leading mode of transmission among newly diagnosed cases was men who had sex with men (MSM) sexual contact (40.7%), followed by heterosexual contact (32.8%). Mode of transmission was not identified in 19.4% of newly diagnosed HIV cases. Please refer to appendix table B3 for additional data regarding newly diagnosed HIV cases.

Figure 6. Newly Diagnosed HIV Cases by Year of Diagnosis and Sex, District of Columbia, 2009-2013



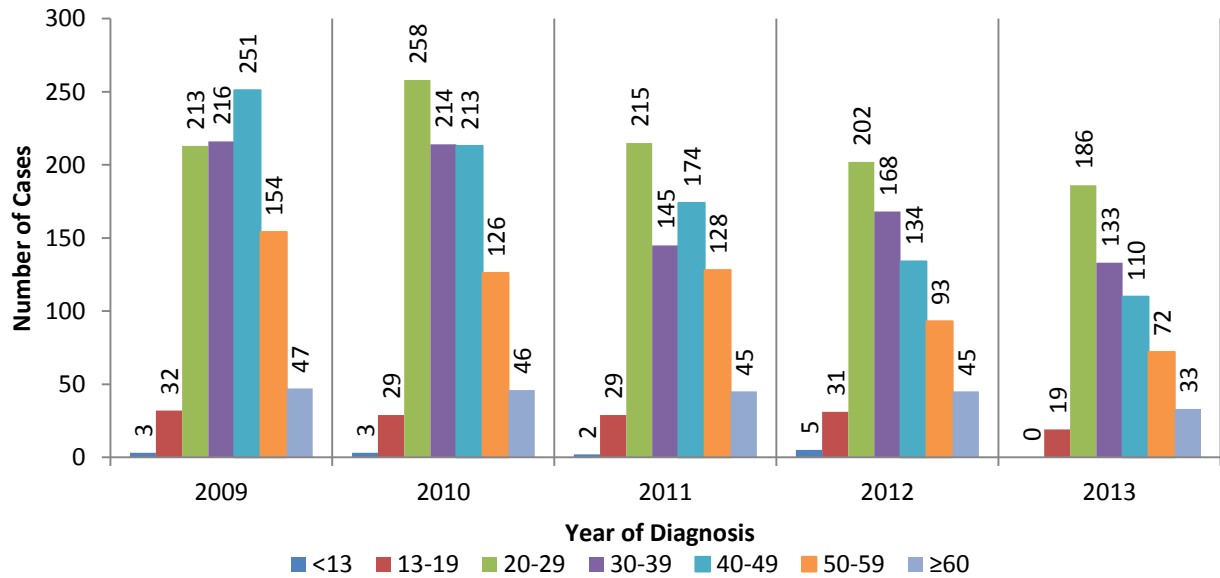
- Although the number of newly diagnosed cases has declined from 2009 to 2013, the proportion of cases by sex has remained constant.
- Men in the District continue to be disproportionately affected by HIV; men represent 47% of the District’s population, but over 70% of HIV diagnoses.

Figure 7. Newly Diagnosed HIV Cases by Year of Diagnosis and Race/Ethnicity, District of Columbia, 2009-2013



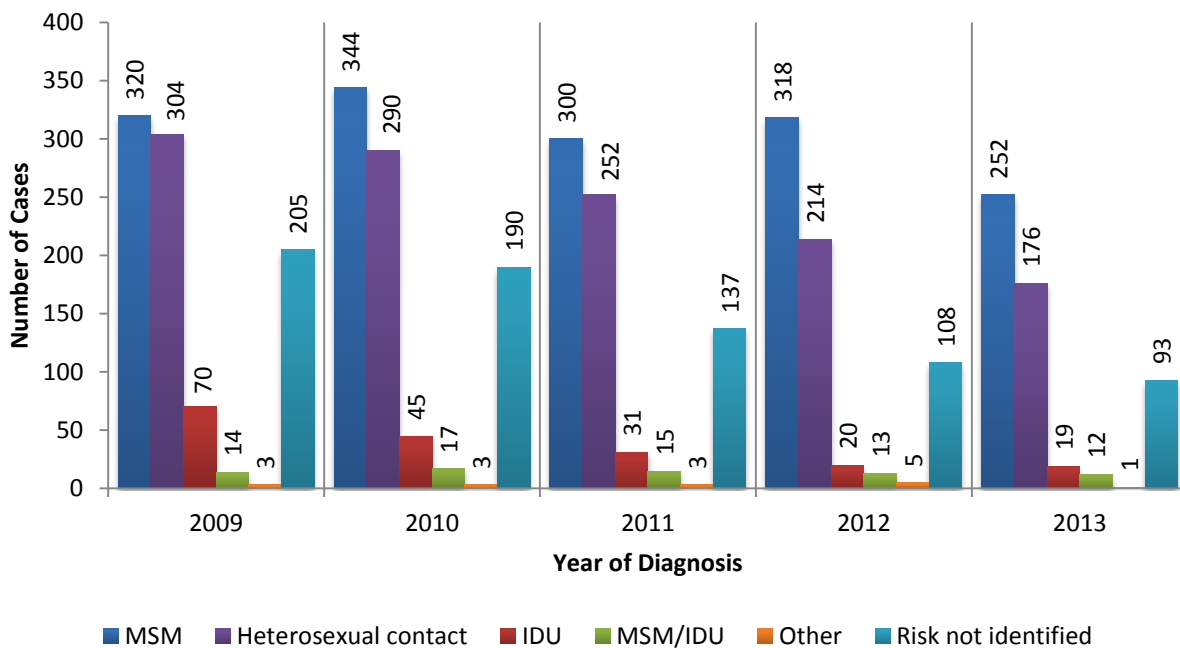
- The number of newly diagnosed HIV cases among blacks declined 43% between 2009 and 2013 and among whites decreased 30%. Blacks still represent the majority of HIV cases diagnosed in the District (78% in 2009 and 75% in 2013), while whites represent 13.5% of cases diagnosed (12.5% in 2009 and 14% in 2013).
- Although the overall number of newly diagnosed HIV cases declined, the racial distribution has remained relatively stable.

Figure 8. Newly Diagnosed HIV Cases by Year of Diagnosis and Age at Diagnosis, District of Columbia, 2009-2013



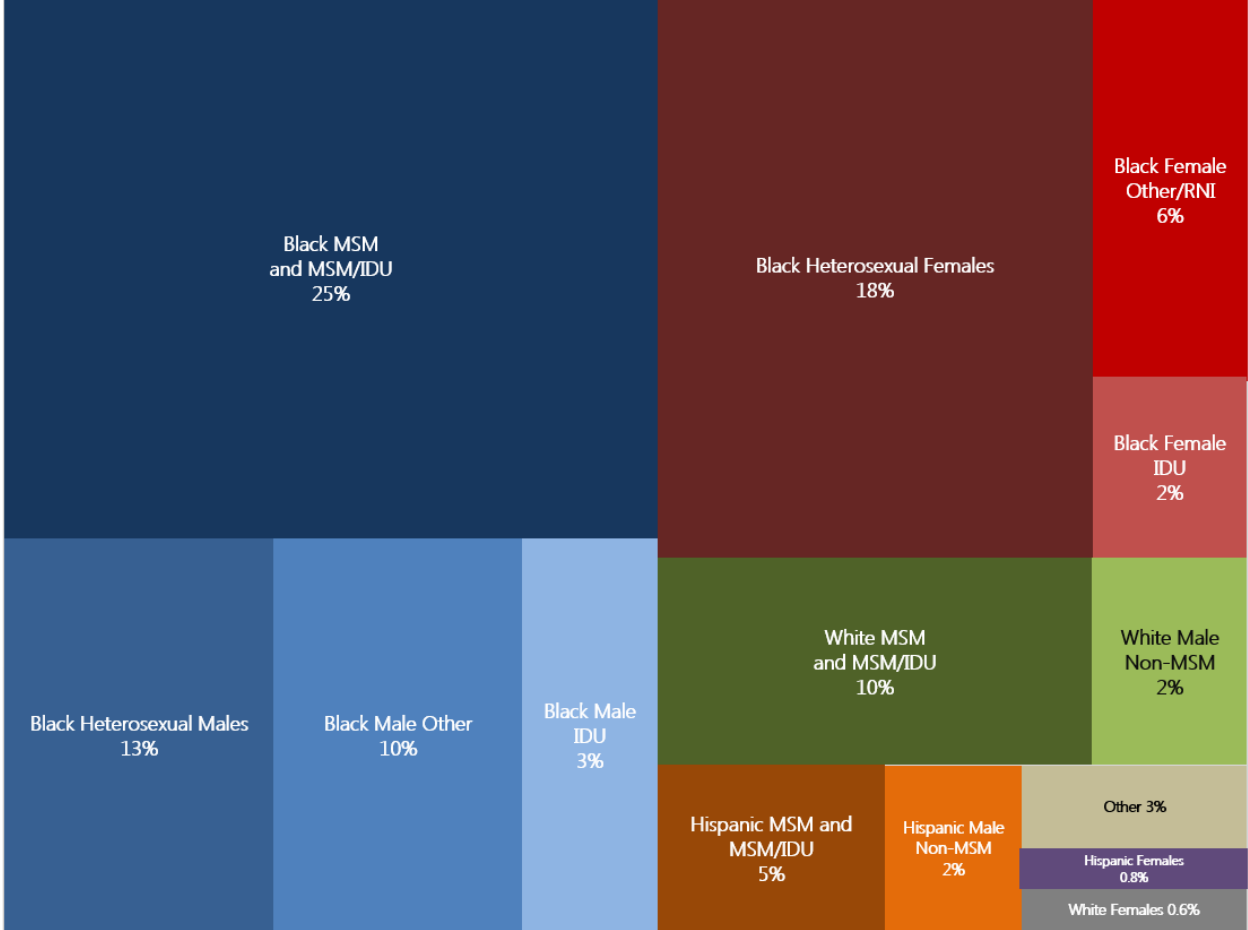
- Between 2009 and 2013, the majority of new HIV cases were diagnosed between the ages of 20-29 (28.5%), followed by cases aged 40-49 (23.4%) and aged 30-39 (23.2%).
- Though the number of newly diagnosed HIV cases 20 to 29 years of age declined 13% between 2009 and 2013, this age group has emerged as the leading group newly diagnosed with HIV by age.
- The number of newly diagnosed HIV cases 30 to 49 years of age declined 48% between 2009 and 2013.

Figure 9. Newly Diagnosed HIV Cases by Year of Diagnosis and Mode of Transmission, District of Columbia, 2009-2013



- MSM was the leading mode of transmission among newly diagnosed HIV cases from 2009 to 2013 (40.7%), followed by heterosexual contact (32.8%).
- A decline of 21% was seen in the number of HIV cases diagnosed among MSM between 2009 (320 cases) and 2013 (252 cases).
- There was a decline of 42% in the number of HIV cases diagnosed among persons with heterosexual contact as mode of transmission between 2009 (304 cases) and 2013 (176 cases).
- Injection drug use had the largest decline of newly diagnosed cases from 2009 to 2013 at 73%. The District’s needle exchange services were expanded during this time period.
- The proportion of cases where mode of transmission is unknown, or not reported due to incomplete health care provider case reports, remains large (19.4%).

Figure 10. Proportion of Newly Diagnosed HIV Cases by Race/Ethnicity, Sex and Mode of Transmission, District of Columbia, 2009-2013 (N=3,774)



MSM: includes men who have sex with men;
 IDU: injection drug use; RNI: risk not identified;
 Other: perinatal transmission, hemophilia, blood transfusion, and occupational exposure (healthcare workers);
 Non-MSM: All modes of transmission excluding MSM and MSM/IDU.
 Hispanic Male non-MSM: Heterosexual, IDU, RNI and other modes of transmission
 Black Female Other: RNI and other modes of transmission
 Black Male Other: RNI and other modes of transmission
 Hispanic Female: All modes of transmission
 White Female: All modes of transmission
 Other: All persons of other race with all modes of transmission

- Figure 10 represents newly diagnosed HIV cases in the District of Columbia (n=3,774) by sex, race/ethnicity, and mode of transmission.
- The largest burden of HIV was among black MSM and MSM/IDU (25%).
- Black women with heterosexual contact as mode of transmission represent the second largest group (18%) of persons newly diagnosed with HIV in the District.
- Black men with heterosexual contact and all other modes of transmission represent the third largest group (13%).

Section 3. Perinatal HIV Cases

Perinatal HIV cases are defined as those in which transmission occurs during pregnancy, labor and delivery, or breastfeeding. Since the introduction of recommendations to provide anti-retrovirals to women during pregnancy, during 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 those who receive recommended treatment during pregnancy, at labor and delivery, and newborn period are as low as 1%.

There were 178 perinatal HIV cases diagnosed in the District of Columbia and alive as of December, 2013. Over half (56.7%) of these cases were female, the majority (95.5%) were black, and nearly half (43.3%) were diagnosed at less than 1 year of age. As of December 2013, the majority (87.0%) were 10 years of age and older.

Table 2. Perinatal HIV Cases Diagnosed in the District and Alive as of December, 2013

Perinatal HIV Cases		
Sex	N	%
Male	77	43.3
Female	101	56.7
Total	178	100.0
Race/Ethnicity		
White	0	0
Black	170	95.5
Hispanic	6	3.4
Other*	2	1.1
Total	178	100.0
Age at Diagnosis		
< 1 year	77	43.3
1 to 2 years	47	26.4
3 to 4 years	13	7.3
5 to 15 years	41	22.5
Total	178	100.0
Current Age		
< 1	0	0
1 to 2	3	1.7
3 to 4	2	1.1
5 to 9	18	10.1
10-19	73	41.0
20 to 29	79	44.3
30+	3	1.7
Total	178	100.0

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

Table 3. Perinatal HIV cases by Year of Birth, District of Columbia, 2009-2013

	Year of Birth				
	2009	2010	2011	2012	2013
Number of perinatal cases born	1	1	0	3	0

- Table 3 depicts the number of perinatal cases with a date of birth between 2009 and 2013. Not all HIV diagnoses are confirmed at the time of birth as noted in the tables below.
- Currently, there are no confirmed cases among children born in 2013.

Table 4. Newly Diagnosed Perinatal HIV Cases by Year of Diagnosis
District of Columbia, 2009-2013

	Year of HIV Diagnosis				
	2009	2010	2011	2012	2013
Number of perinatal cases diagnosed	2	3	3	5	2

- There were 15 perinatal HIV cases diagnosed in the District between 2009 and 2013 (Table 4). Confirming HIV perinatal cases can take up to 18 months, therefore case totals should be interpreted with caution.
- These numbers have been updated from previous reports and may change in subsequent reports.

Table 5. Newly Diagnosed Perinatal HIV Cases by Age at Diagnosis
District of Columbia, 2009-2013

Age at HIV diagnosis	N	%
< 1 year	5	33.3
1 to 2 years	0	0.0
3 to 4 years	1	6.7
5 to 15 years	9	60.0
Total	15	100.0

- Table 5 shows the age at which perinatal cases were diagnosed with HIV. Ten of the 15 perinatal HIV cases were diagnosed when older than one year of age.
- As stated above, confirming a perinatal case can take 18 months, therefore HAHSTA may not close an investigation until a child is almost two years of age.
- For children born in another country, HAHSTA must use the date of diagnosis by medical providers for surveillance purposes.

Section 4. Stage of HIV Disease

This section provides a summary of patterns in stage 3 (AIDS) infection among HIV positive individuals diagnosed within the District. As outlined in Table 6, current CDC guidelines provide a classification system for assessing the severity of HIV disease based on CD4 cell counts and the presence of specific HIV-related conditions. Stage 3 (AIDS) infection signifies that an HIV positive individual has a compromised immune system (i.e., CD4<200 cells/μL and/or an HIV-related opportunistic infection), thereby increasing their susceptibility to adverse health conditions and symptoms associated with infection. As opposed to the traditional HIV disease dichotomy of HIV-only cases and HIV positive cases with AIDS, the HIV infection staging system provides the opportunity to reclassify individual health status dependent on clinical indicators at a given point in time. This flexibility in classifying HIV disease progression is reflective of current advances in HIV treatment contributing to improvements in disease management and prognoses. The subsequent tables and graphs provide an overview concerning trends in initial stage 3 (AIDS) infection diagnoses among District residents; patterns in disease stage around the time of initial HIV diagnosis; and comparisons in individual disease stage at different points in time since HIV diagnosis.

Table 6. Stages of HIV Infection

Measure	Definition
Stage 1	CD4 T-cell count of more than 500 cells/μL CD4 T-cell percent of more than 29%
Stage 2	CD4 T-cell count of between 200 cells/μL and 500 cells/μL CD4 T-cell percent of between 14% and 29%
Stage 3 (AIDS)	CD4 T-cell count of less than 200 cells/μL CD4 T-cell percent of less than 14% Previously diagnosed AIDS-related conditions
No Info	CD4 test result is unknown

Summary

There were 2,153 stage 3 HIV disease (AIDS) cases diagnosed among residents of the District between 2009 and 2013. The number of stage 3 cases declined each year, from 549 cases in 2009 to 296 cases in 2013; this represents a 46% decline in the number of diagnosed cases. More than two-thirds of these cases (69.8%) were among men, the majority (81.3%) were black, and over one-half (51.3%) were between 30 and 49 years of age at stage 3 diagnosis. The leading modes of transmission among newly diagnosed cases were heterosexual contact (34.3%) and men who had sex with men (MSM) (33.0%). In 21% of cases the mode of transmission was not identified. Please refer to appendix tables **B4** and **B5** for additional data regarding newly diagnosed stage 3 HIV disease cases.

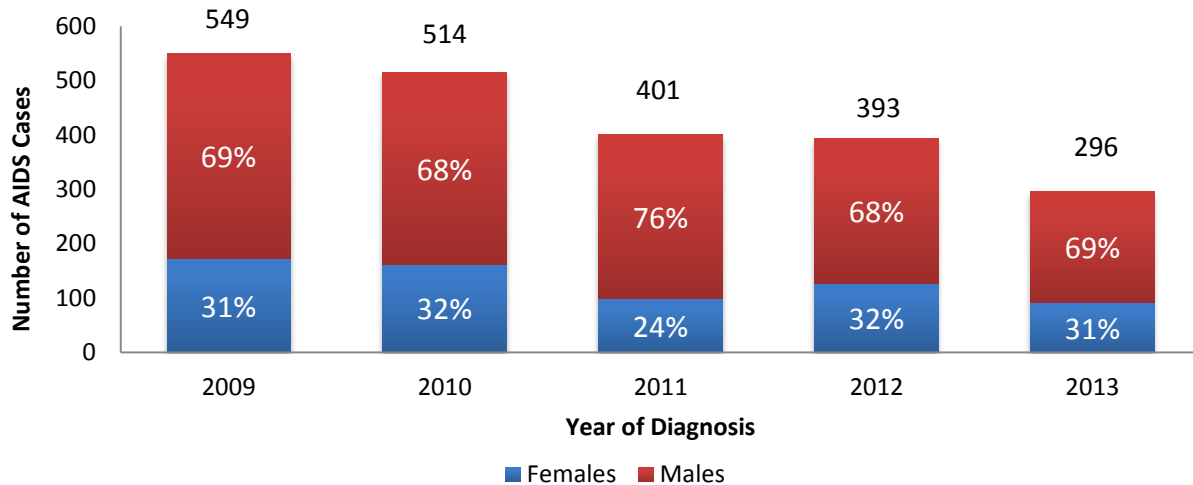
Table 7. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis
District of Columbia 2009-2013

Year of Initial Stage 3 (AIDS) Diagnosis		2009	2010	2011	2012	2013
Number of HIV Cases Diagnosed with Stage 3 Disease (AIDS) for the First Time		549	514	401	393	296
Concurrent stage 3 diagnosis*		203	199	167	132	121
Non-concurrent stage 3 diagnosis		346	315	234	261	175

*Concurrent diagnosis is described as a stage 3 diagnosis within 30 days of an initial HIV diagnosis.

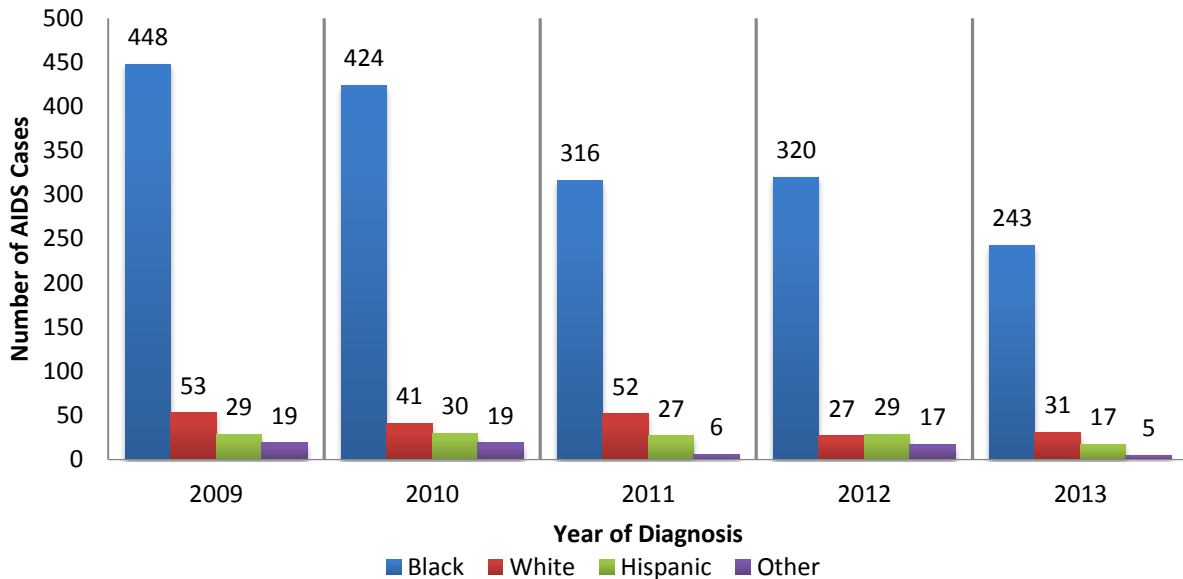
- Of the 2,153 HIV positive individuals newly diagnosed with stage 3 (AIDS) disease in the District between 2009 and 2013, 38% were diagnosed with stage 3 disease within 1 month of receiving an initial HIV positive test result (i.e., concurrent diagnoses), potentially indicating delays in testing and/or the receipt of appropriate care services.
- Between 2009 and 2013, the number of newly diagnosed stage 3 infections (AIDS) within the District declined 46% (549 cases vs. 296 cases, respectively). The documented decline in the number of newly diagnosed stage 3 infections (AIDS) was evident for both concurrent and non-concurrent stage 3 cases.

Figure 11. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis and Sex, District of Columbia, 2009-2013



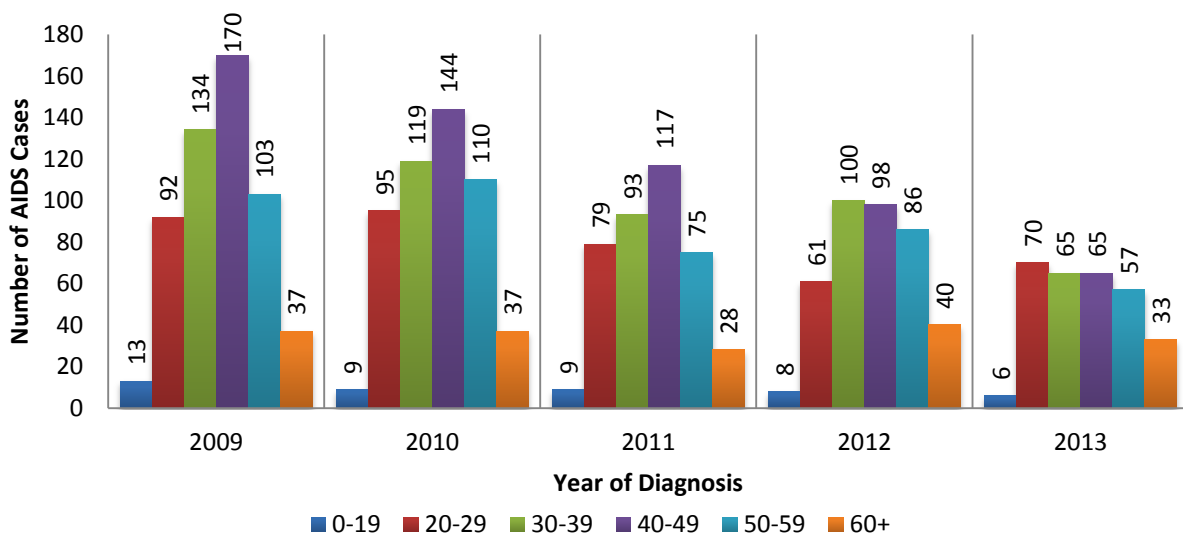
- Overall 69.8% of stage 3 (AIDS) cases diagnosed between 2009 and 2013 in the District were among men; this is similar to the proportion of men diagnosed with HIV in the District.
- Between 2009 and 2010, the proportion of newly diagnosed cases among men were relatively stable (69% to 68%).
- In 2011, the proportion of newly diagnosed cases among men increased to 76%, but declined back to 69% in 2013.

Figure 12. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis and Race/Ethnicity, District of Columbia, 2009-2013



- There was a 46% decrease in the number of newly diagnosed stage 3 (AIDS) cases among blacks between 2009 and 2013 and a 41.5% decrease among whites.
- Among Hispanics, there was a 41% decrease in the number of newly diagnosed stage 3 (AIDS) cases from 2009 to 2013.
- By race/ethnicity and sex, newly diagnosed Black men had the highest proportion of stage 3 disease (23.6%), followed Black women (22.5%) and Hispanic females (22.6%) (Figure not shown).

Figure 13. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis and Age at Diagnosis, District of Columbia, 2009-2013

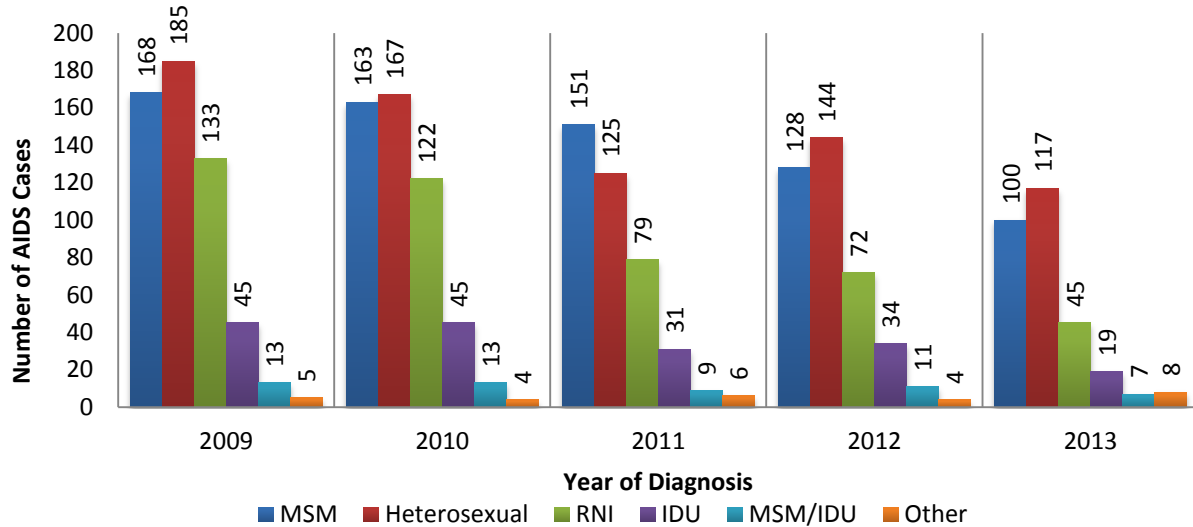


- Overall, individuals aged 40-49 had the highest proportion of newly diagnosed stage 3

(AIDS) cases between 2009 and 2013 (27.6%), followed by those aged 30-39 (23.7%) and those aged 50-59 (20.0%).

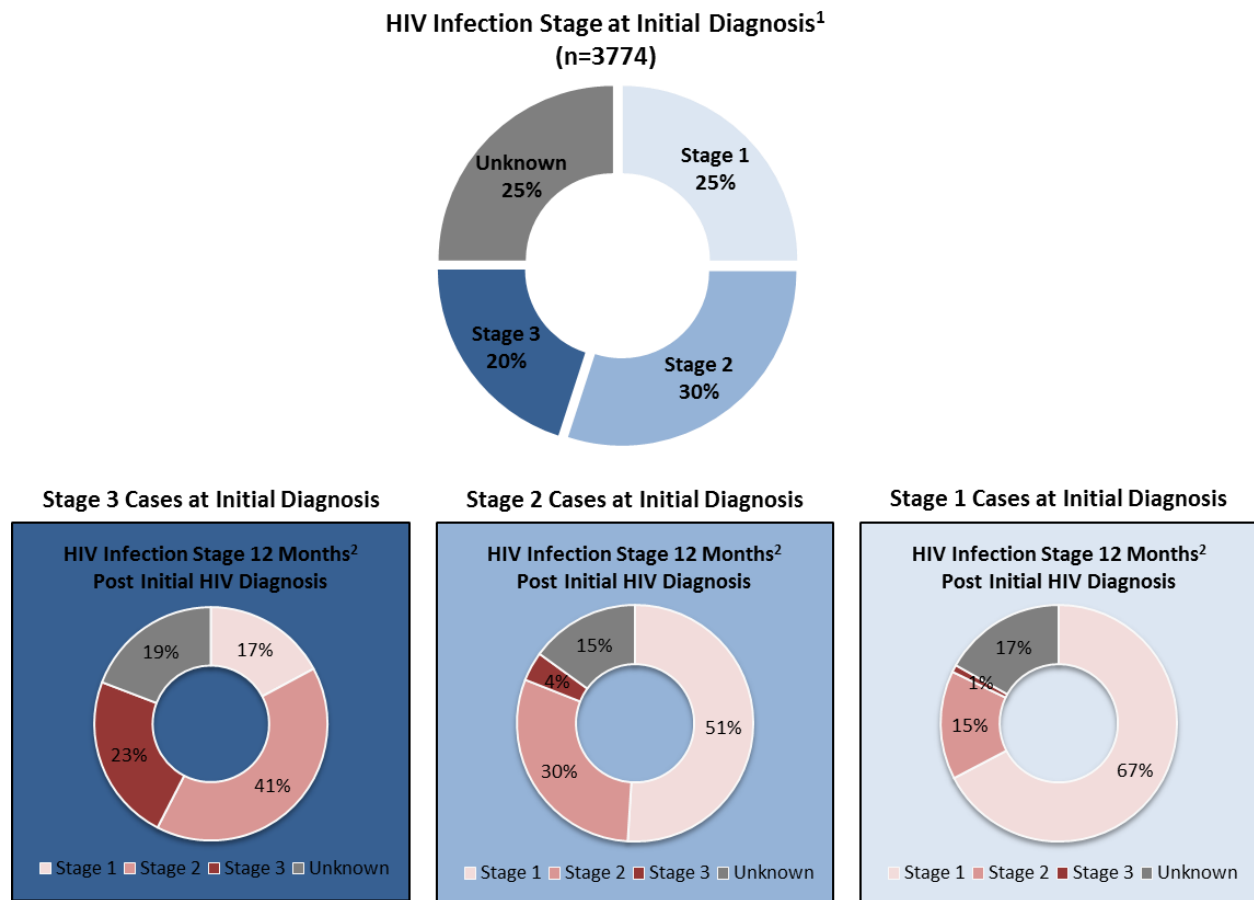
- The number of stage 3 cases diagnosed between 2009 and 2013 declined 46% among those 20 years of age and older (2009: 536 cases; 2013: 290 cases).
- Among children and adolescents (0-19 years old), the number of newly diagnosed stage (AIDS) cases is consistently low, but is still of public health concern.

Figure 14. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis and Mode of Transmission, District of Columbia, 2009-2013



- Unlike newly diagnosed stage 1 and 2 HIV cases in the District, heterosexual contact is the leading mode of transmission among newly diagnosed stage 3 (AIDS) cases between 2009 and 2013 (34%).
- The number of newly diagnosed stage 3 (AIDS) cases in which mode of transmission is not known (RNI) remains high due to incomplete reports, which makes it difficult to assess the burden of AIDS on specific modes of transmission.
- The number of cases diagnosed among intravenous drug users has decreased significantly, a 58% drop, compared to other transmissions types.

Figure 15. HIV Infection Stage at Diagnosis¹ and at 12-Month Follow-Up among Newly Diagnosed HIV Cases, District of Columbia 2009-2013



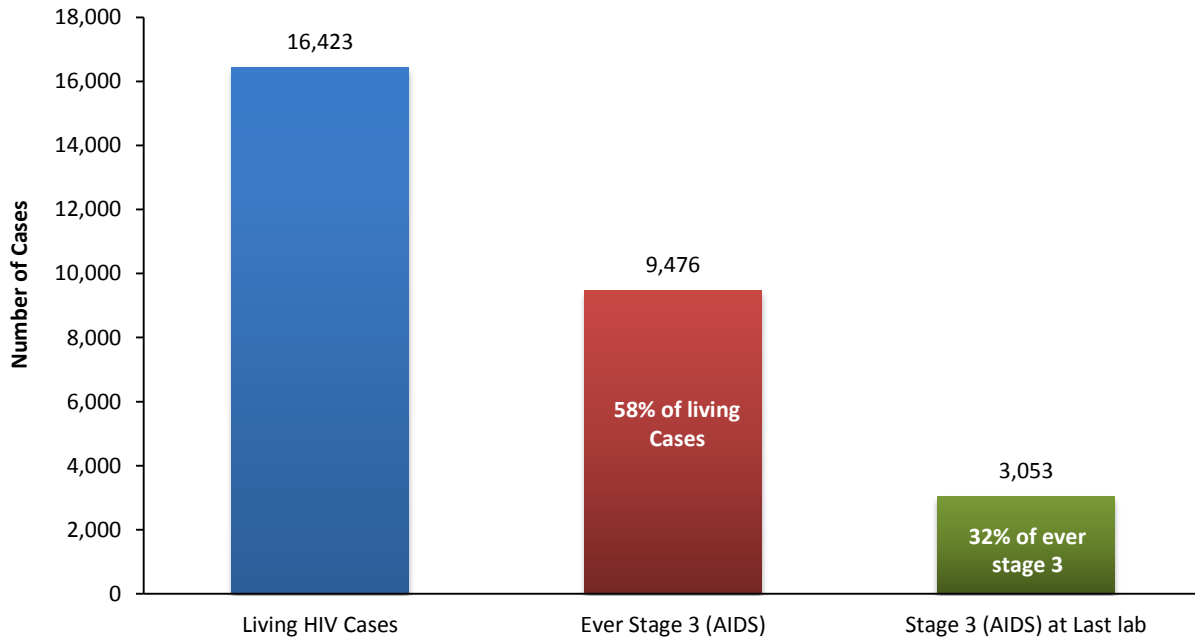
¹ Initial stage of HIV infection based on initial CD4 and/or HIV-related opportunistic infection information ascertained < 3 months after initial HIV diagnosis .

² Follow-up stage of HIV infection based on initial CD4 and/or HIV-related opportunistic infection information ascertained ≥ 12 months after initial HIV diagnosis .

- Stage of infection at HIV diagnosis and at 12 months following diagnosis are summarized in Figure 15. Although the clinical information needed to assess initial HIV infection stage is missing for substantial number (25%) of individuals newly diagnosed with HIV in the District from 2009 to 2013, available data provide some evidence of both positive and negative disease progression around 1 year after initial HIV diagnosis. Such information provides another metric by which to assess the effectiveness of the District in meeting the needs of those living with HIV.
- Among the 3,774 HIV cases diagnosed between 2009 and 2013, at diagnosis, 25% of cases were at stage 1 HIV disease, 30% were at stage 2 and 20% were at stage 3 HIV disease (AIDS).
- Of the individuals at stage 3 infection at diagnosis, after one year of follow-up, 17% transitioned to stage 1 HIV disease, 41% to stage 2 and 23% remained at stage 3 HIV disease.
- Over half (51%) of individuals with Stage 2 infection at the time of initial HIV diagnosis had evidence of transitioning to Stage 1 infection.

- Among individuals with Stage 2 or Stage 1 infection at the time of HIV diagnosis, only a small percentage had evidence of transitioning to Stage 3 (AIDS) infection, 4% and 1% respectively, based on the assessment of initial CD4 and opportunistic infection information ascertained at least 1 year after HIV diagnosis.

Figure 16. Number of Stage 3 Disease (AIDS) Diagnoses among Currently Living HIV Cases
District of Columbia, 2013



- Of the 16,423 living HIV cases diagnosed in the District, 58% have meet the clinical criteria for having Stage 3 disease (AIDS) at some point in time since there initial HIV diagnosis.
- Among HIV positive individuals who were ever diagnosed at Stage 3 disease (AIDS), only 32% were documented to have Stage 3 disease (AIDS) based on the last CD4-related laboratory information received by the health department.
- Although subsequent changes in an individual's HIV disease stage may have occurred since their last reported laboratory information, Figure 16 provides evidence that Stage 3 HIV disease is not a static state and that many individuals experience improvements in clinical health status after an initial Stage 3 disease diagnosis. Future analyses will focus on better elucidating fluctuations in disease stage among HIV positive individuals over time.

Section 5. HIV Mortality

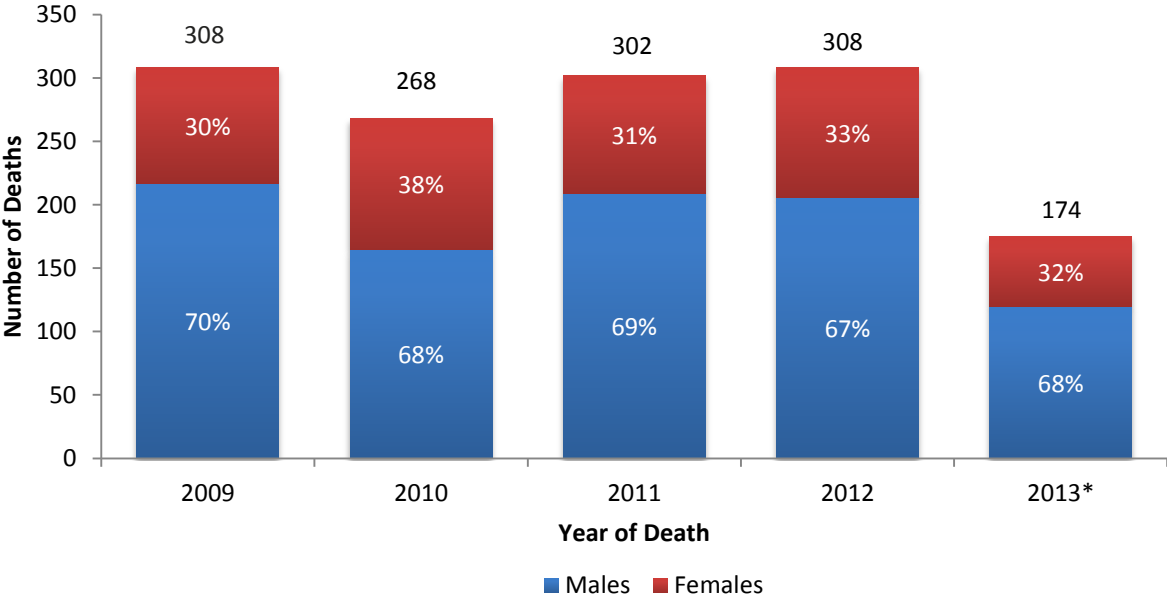
Between 2009 and 2013, there were 1,360 deaths among persons with HIV in the District of Columbia. Approximately two-thirds (66.4%) of deaths occurred among men and 86.0% of deaths were among blacks. Over two-thirds (37.3%) of deaths occurred in people 50 to 59 years old and approximately one-quarter (25.4%) were among people 40 to 49 years of age; the average age at death among people diagnosed with HIV increased from 50 years old in 2009 to 54 in 2013. By mode of transmission, the largest proportion of deaths was among those with transmission attributed to IDU and heterosexual contact (26.8% each), followed by MSM (22.4%). Among total deaths, 36% of the deaths were HIV related.

Table 8. Number of Deaths among HIV Cases by Year of Death
District of Columbia, 2009-2013

	Year of Death				
	2009	2010	2011	2012	2013*
HIV related deaths	109	117	109	105	52
Non-HIV related deaths	199	151	193	203	122
Total Number of Deaths	308	268	302	308	174

* Information concerning deaths in 2013 is limited to District of Columbia vital records only. The number of deaths documented in 2013 may increase as information from other sources (i.e., NDI and SSDMF) becomes available.

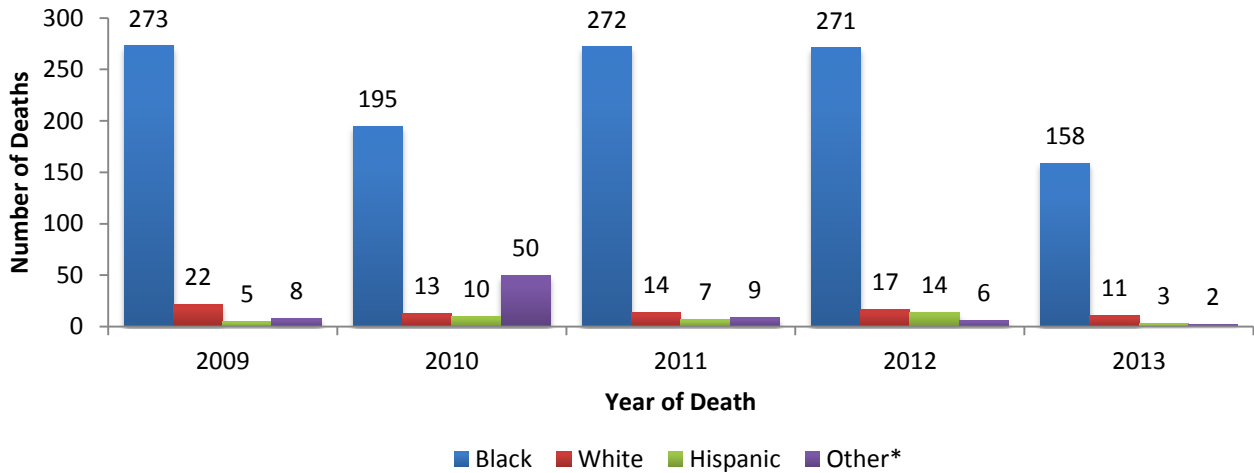
Figure 17. Deaths among HIV Cases by Year of Death and Sex,
District of Columbia, 2009-2013



* Information concerning death in 2013 is limited to District of Columbia vital records only. The number of deaths documented in 2013 may increase as information from other sources (i.e., NDI and SSDMF) becomes available.

- Approximately two-thirds (67.4%) of deaths during this five year time period were among men, while the proportion of new HIV diagnoses among men was 73.0% during the same time period.
- The ratio of deaths comparing men and women has not changed between 2009 and 2013.

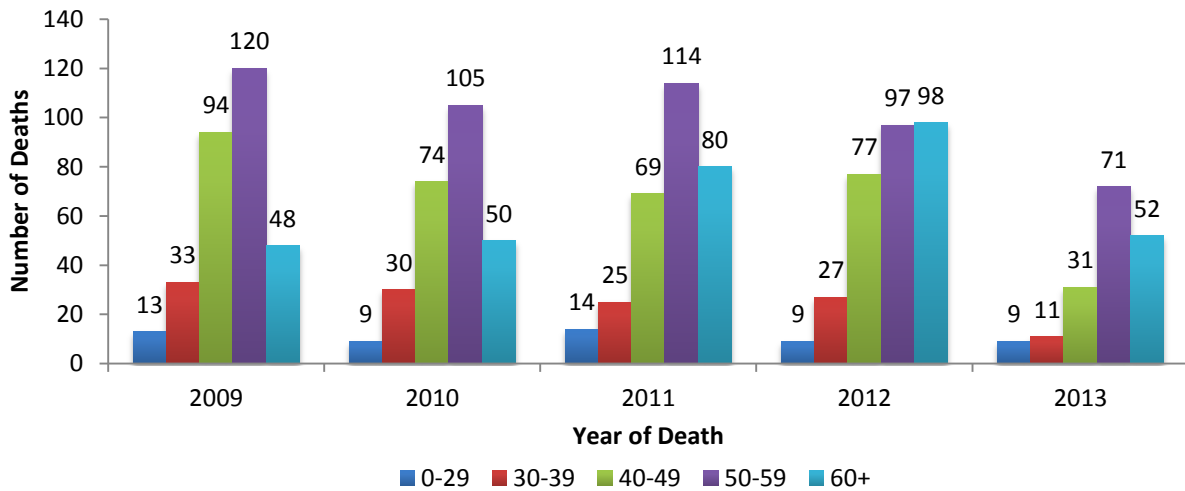
Figure 18. Deaths among HIV Cases by Year of Death and Race/Ethnicity**
District of Columbia, 2009-2013



* Other race includes mixed race individuals, Asians, Alaska Natives, American Indians, Native Hawaiian, Pacific Islanders, and unknown
 ** Information concerning death in 2013 is limited to District of Columbia vital records only. The number of deaths documented in 2013 may increase as information from other sources (i.e., NDI and SSDMF) becomes available.

- The number of deaths among HIV cases in all race groups remained relatively stable between from 2009 to 2012. Additional data is required to assess the stability of 2013 declines.

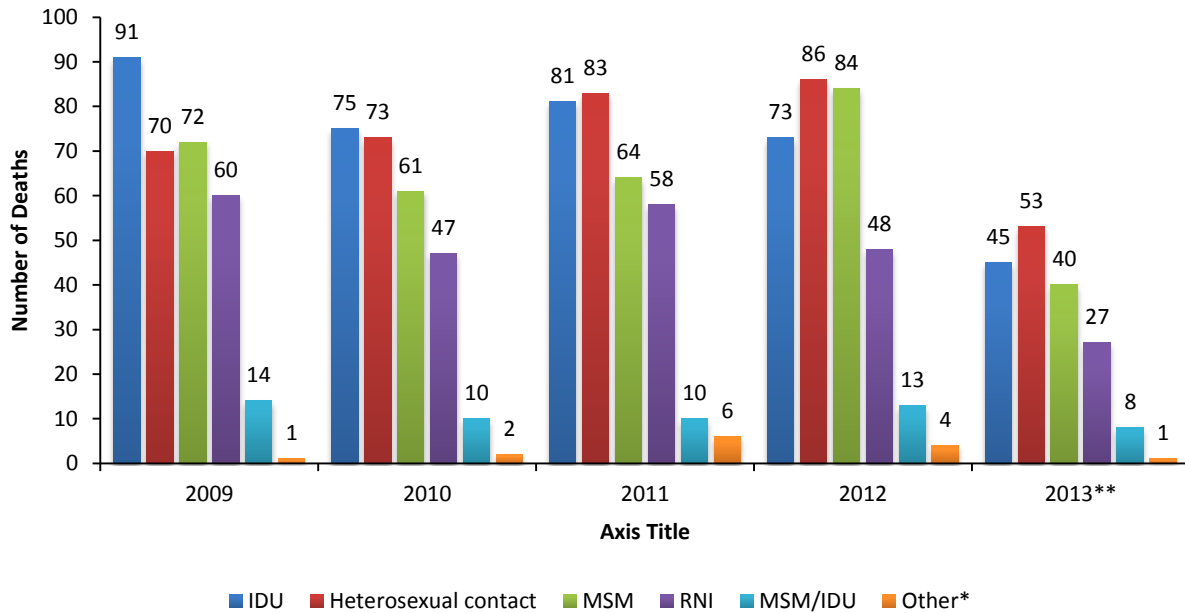
Figure 19. Deaths among HIV Cases by Year and Age at Death**
District of Columbia, 2009-2013



** Information concerning death in 2013 is limited to District of Columbia vital records only. The number of deaths documented in 2013 may increase as information from other sources (i.e., NDI and SSDMF) becomes available.

- The age at death has increased; median age at death in 2008 was 51 years while the median age at death in 2013 was 56 years.
- Between 2009 and 2013, the greatest number of deaths occurred among those 50 to 59 years of age.
- Between 2011 and 2012 there was a substantial increase in the number of deaths among 60 to 69 year olds.

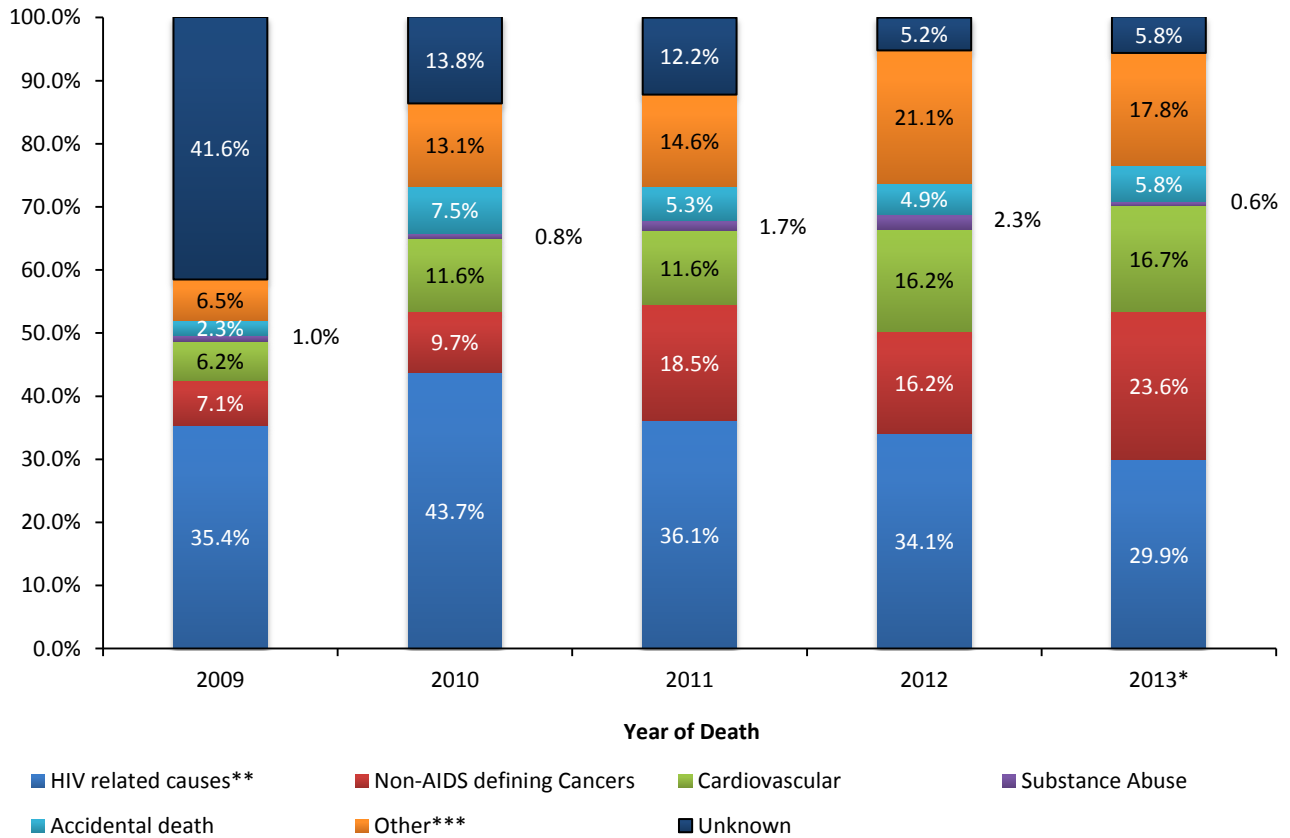
Figure 20. Deaths among HIV Cases Year and Mode of Transmission
District of Columbia, 2009-2013



*Other mode of transmission includes perinatal transmission, hemophilia, blood transfusion, and occupational exposure (healthcare workers).
** Information concerning death in 2013 is limited to District of Columbia vital records only. The number of deaths documented in 2013 may increase as information from other sources (i.e., NDI and SSDMF) becomes available.

- The largest decrease in number of deaths by mode of transmission was among cases reported as IDU. Deaths among IDU decreased by 20% between 2009 and 2012.
- While some slight fluctuation in the distribution of deaths by mode of transmission is observed over time, such differences should be interpreted cautiously given that the percentage of cases with risks not identified (RNI) ranges from 15% to 19% across years.

Figure 21. Cause of Deaths among Persons with HIV Cases by Year of Death
District of Columbia, 2009-2013



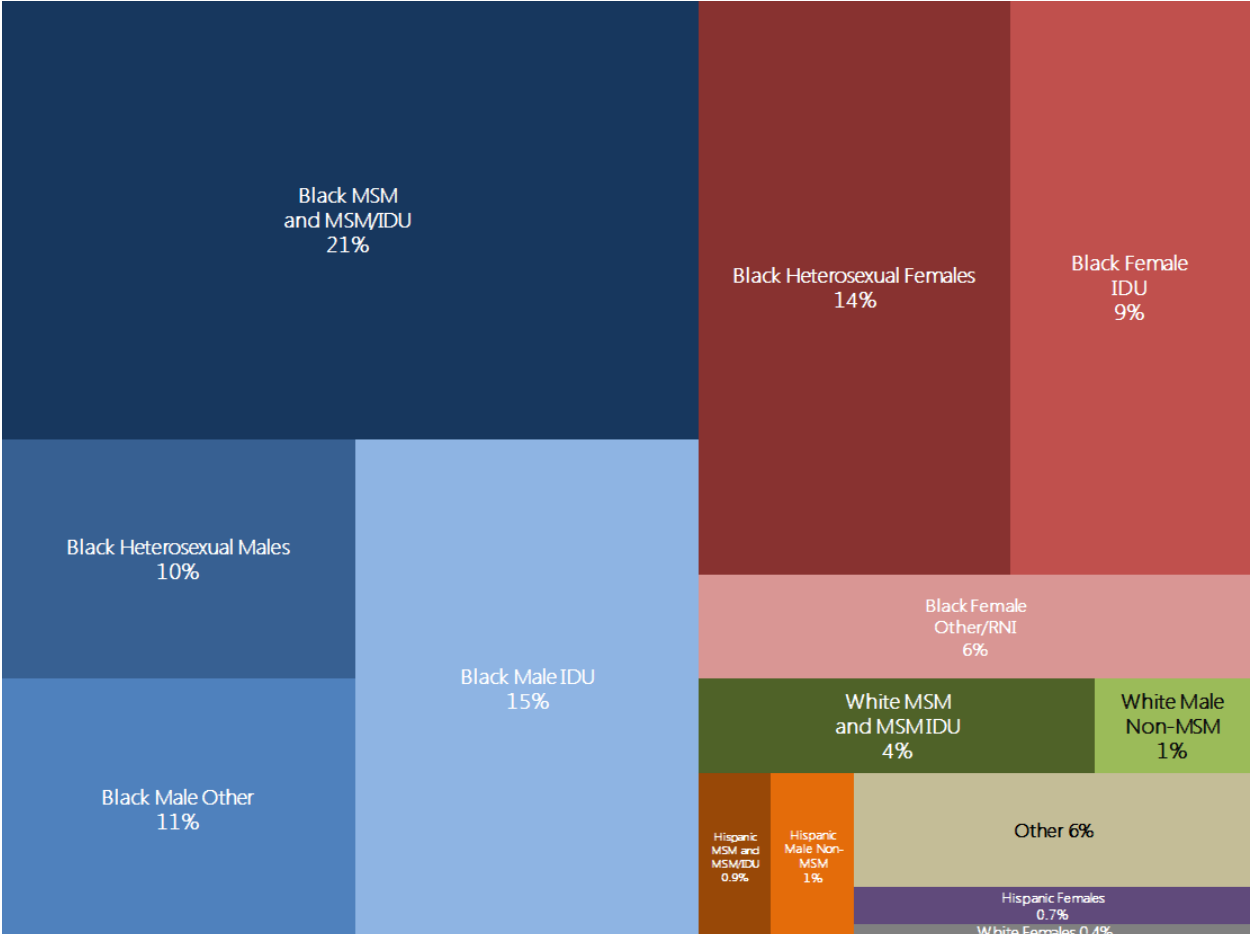
* Information concerning death in 2013 is limited to District of Columbia vital records only. The number of deaths documented in 2013 may increase as information from other sources (i.e., NDI and SSDMF) becomes available.

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

*** Other causes of death include suicide, pneumonia, COPD, and diabetes, etc.

- In the five-year period, 36% of deaths among persons diagnosed with HIV in the District were due to HIV-related causes such as opportunistic infections and AIDS-defining cancers between 2009 and 2013.
- There was a 52.3% decrease in the number of HIV-related causes of death among HIV cases, with an 86.4% increase in the non-AIDS defining malignancies among deaths between 2009 and 2013.
- The underlying cause of death was unknown for 16.8% of deaths between this 5-year period. Cases who died in 2009 had the highest proportion of unknown cause of death (41.6%) but the percentage unknown decreased dramatically between 2010 and 2013.

Figure 22. Proportion of All Deaths among HIV Cases by Race/Ethnicity, Sex and Mode of Transmission, District of Columbia, 2009-2013 (N=1,361)



MSM: includes men who have sex with men;
 IDU: injection drug use; RNI: risk not identified;
 Other: perinatal transmission, hemophilia, blood transfusion, and occupational exposure (healthcare workers);
 Non-MSM: All modes of transmission excluding MSM and MSM/IDU.
 Hispanic Male non-MSM: Heterosexual, IDU, RNI and other modes of transmission
 Black Female Other: RNI and other modes of transmission
 Black Male Other: RNI and other modes of transmission
 Hispanic Female: All modes of transmission
 White Female: All modes of transmission
 Other: All persons of other race with all modes of transmission

- Figure 22 represents deaths that occurred among persons diagnosed with HIV in the District of Columbia between 2009 and 2013 (n=1,361) by sex, race/ethnicity, and mode of transmission.
- Over 50% of deaths among persons with HIV were among black men, of which 21% were MSM and MSM/IDU and 15% were among black men who inject drugs.

Section 6. HIV Incidence Estimate

HIV Incidence Estimate and the National HIV/AIDS Strategy

The National HIV/AIDS Strategy emphasizes the need for organizations to work together to strive towards completing three main goals: 1) reduce the number of people who become infected with HIV; 2) increase access to care and improve health outcomes for people living with HIV; and 3) reduce HIV-related health disparities. Conducting the incidence estimate allows the DC Department of Health to evaluate progress toward achieving the objective of reducing the number of new infections by 25% by 2015. The District of Columbia Department of Health remains committed to reducing new infections of HIV in DC.

Understanding the HIV Incidence Estimate

The 2014 HIV incidence estimate provides an estimated number of new infections of HIV occurring each year among DC residents during the five year span from 2009-2013. The estimate takes into consideration the probability of being newly infected within the entire population at risk, thus including cases that are not yet diagnosed. For this reason, the incidence estimate should not be compared with the annual new diagnoses reported in the Annual Epidemiology and Surveillance Report. The objective of reducing new infections tackles the leading edge of the epidemic by reducing transmissions as well as determining where and among whom new infections are occurring. This insight can inform prevention strategies and allow for more effective resource allocation to best address the HIV epidemic in DC.

Methodology of the HIV Incidence Estimate

The Serologic Testing Algorithm for Recent HIV Seroconversion (STARHS) method is used to estimate HIV incidence. STARHS is a two test methodology which uses the enzyme-linked immunoassay (EIA) to determine if an individual is HIV-positive and then utilizes the BED HIV-1 capture enzyme immunoassay (BED) to classify blood samples from those newly diagnosed individuals as either recent (less than 5 months) or long-standing infections. Eligible samples for STARHS must be collected within 90 days of diagnosis of HIV and are transported to the New York State STARHS Lab for testing directly from participating laboratories. The incidence estimate uses statistical imputation to estimate the number of newly infected individuals in DC based on the number of recent classifications. This statistical algorithm also relies on the testing and antiretroviral use history information collected from new diagnoses through the adult case report form for its imputation. For cases where this information was missing, a stratified extrapolation approach was used to impute the missing information.

Limitations and Assumptions of the Incidence Estimate

- **Repeat Testing:**

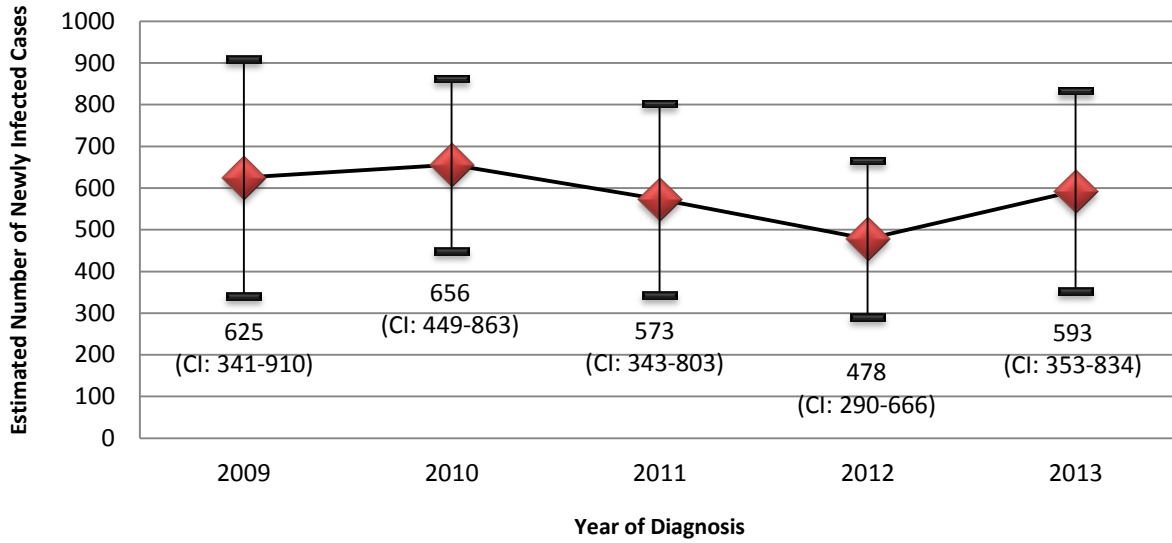
People who test more than once a year can overestimate the incidence of HIV because their likelihood of being BED recent will inflate the average probability. This limitation is inherent as it is the recommendation that some risk categories test more frequently than others.

- Delayed Reporting:**
The incidence estimates are subject to variation by year since they are based on reported surveillance data. Fluctuations in timing of data reported to the DC DOH may affect data availability at the time of reporting. The statistical imputation of the estimate adjusts for reporting delays using historic data to estimate current timeliness.
- Reporting Completeness:**
The completeness of STARHS results are limited by laboratory participation. Currently, laboratories representing approximately 90% of identified cases participate in the HIV Incidence Surveillance Program.
- Changes in Surveillance Procedures Over Time:**
Although instituted in 2007, systematic collection of laboratory data began in 2009; thus, data collected prior to 2009 are not as complete or reliable as data collected since 2009.
- Missing Data:**
Incidence testing can only be assessed among persons with reported laboratory data and testing and antiretroviral use history data. Proportions of the diagnosed population may not have these data, but as diagnosed cases in the District, are included in the report. For these cases it is assumed that the information is missing at random and, statistical imputation was used to estimate the missing information.
- Insufficient Quantities:**
Some sub-groups do not contain sufficient quantities, thus reducing the reliability of the estimate for those particular sub-groups. Due to this limitation, sub-groups with insufficient quantities are deemed unreliable and will not have values reported.

Overview of Incidence Estimate

The estimated rate of new infections of HIV in the District remains stable from 2009 to 2013. The estimated rate of new infections in the District in 2010 exceeded the national rate at 123.6 estimated cases/ 100,000 compared with 27.5 estimated cases/ 100,000 respectively. By the end of 2013, the highest proportion of new infections were found among men (65.9%), blacks (73.2%), individuals age 13-29 (47.6%), and men who have sex with men (49.9%).

Figure 23. Estimated Number of Newly Infected HIV Cases by Year
District of Columbia, 2009-2013



- Figure 23 represents the overall estimated new infections of HIV in DC during the five year period from 2009 to 2013. Since the number of new infections of HIV is an estimate, the 95% confidence interval shows the range within which the estimate may lie after adjusting for variability in sampling and timing of testing.
- During the five year period, the estimated number of new infections remained relatively stable.

Table 9. Estimated Rate of New HIV Infections by Sex, Race/Ethnicity, and Age at Diagnosis
District of Columbia, 2009-2013^{†*}

	2009 Estimated Rate per 100,000 (95% CI)	2010 Estimated Rate per 100,000 (95% CI)	2011 Estimated Rate per 100,000 (95% CI)	2012 Estimated Rate per 100,000 (95% CI)	2013 Estimated Rate per 100,000 (95% CI)
Sex					
Male	153.0 (87.1-219.3)	171.6 (101.9-241.3)	160.1 (84.8-235.4)	144.1 (78.3-210.0)	148.9 (80.7-217.1)
Female	94.1 (16.0-172.1)	81.4 (34.0-129.2)	58.0 (12.5-103.4)	36.1 (6.7-79.3)	68.2 (13.1-122.9)
Total	121.6 (66.3-177.0)	123.6 (84.6-162.6)	105.8 (63.3-148.2)	86.7 (52.6-120.8)	105.8 (63.0-148.8)
Race/ Ethnicity					
White	-- --	-- --	-- --	-- --	-- --
Black	169.7 (71.5-267.9)	182.5 (114.0-250.6)	156.4 (84.8-227.6)	127.1 (71.3-183.4)	165.6 (86.6-244.5)
Other*	-- --	-- --	-- --	-- --	-- --
Total	121.6 (66.3-177.0)	123.6 (84.6-162.6)	105.8 (63.3-148.2)	86.7 (52.6-120.8)	105.8 (63.0-148.8)
Age					
13-29	122.3 (46.3-199.0)	155.1 (87.0-223.1)	137.8 (65.7-210.0)	126.5 (62.4-190.1)	153.7 (71.4-236.6)
30-49	186.1 (91.1-280.6)	153.9 (87.5-219.8)	122.9 (53.5-192.3)	93.7 (41.1-145.9)	116.5 (46.8-186.1)
>=50	-- --	-- --	53.9 (4.6-103.2)	-- --	-- --
Total	121.6 (66.3-177.0)	123.6 (84.6-162.6)	105.8 (63.3-148.2)	86.7 (52.6-120.8)	105.8 (63.0-148.8)

[†]strata with insufficient quantities will not have values reported

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

‡ The estimated rate of new infection is unavailable for mode of transmission because population estimates are not available.

- The estimated rate of new infections among men is approximately twice that among women from 2009 to 2013, though not statistically significant.
- Estimated new HIV infection rate has increased 26% among ages 13-29 and decreased 37.4% among ages 30-49 between 2009 and 2011 leading to a shift in the highest estimated rate of new infections by age from 30-49 in 2009 to 13-29 in 2013.

Section 7. 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.

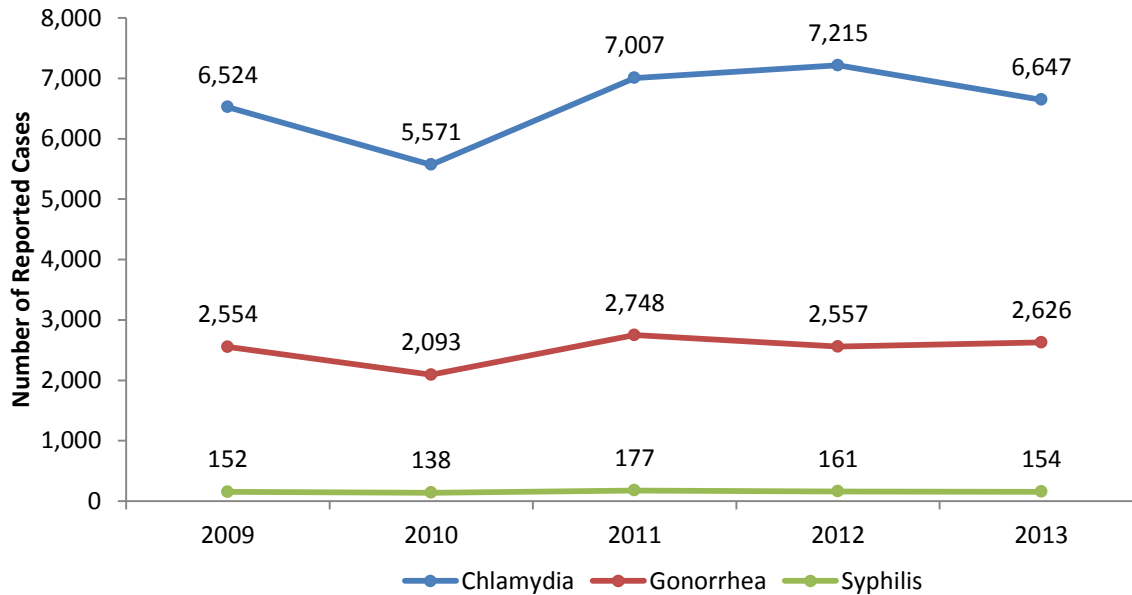
Summary

From 2009 to 2013, the District received 32,964 reports of chlamydia infection, a 0.4% increase in the number of reported cases between 2008 and 2012 (32,836 cases). Among the reported cases, approximately two-thirds were women (64.4%) and were black (61.9%), and more than two-thirds (69.1%) were between 15 and 24 years of age. Geographically, the greatest number of chlamydia cases was reported among persons living in Wards 7 and 8 (38.2%). Please refer to appendix table B9 for more information on chlamydia infections reported between 2009 and 2013 in the District.

From 2009 to 2013, the District received 12,578 reports of gonorrhea infection, a 1% increase in the number of reported cases between 2008 and 2012 (12,451 cases). Unlike chlamydia, the sex of reported cases was divided almost equally between men and women at 44.8% and 55.1%, respectively. Approximately two-thirds of reported cases were among blacks (65.4%) and more than half (59.8%) were between 15 and 24 years of age. The greatest number of gonorrhea cases was also reported among persons living in Wards 7 and 8 (39.1%). Please refer to appendix table B10 for more information on gonorrhea infections reported between 2008 and 2012 in the District.

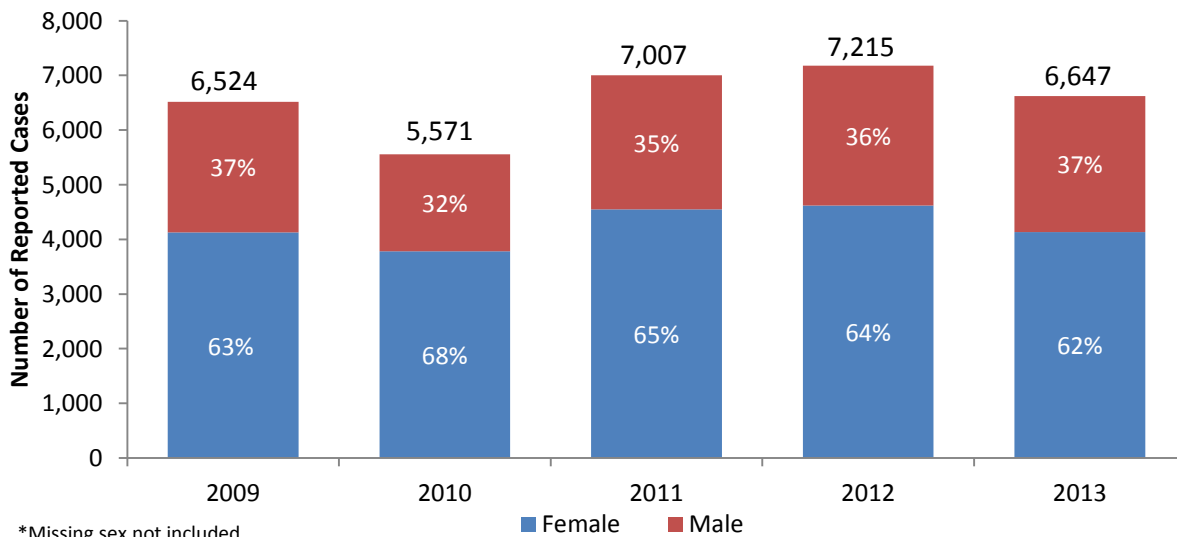
From 2009 to 2013, the District received 782 reports of primary and secondary syphilis infection, also known as infectious syphilis, a 0.4% increase in the number of reported cases between 2008 and 2012 (779 cases). Unlike chlamydia and gonorrhea, which predominantly affected youth and young adults less than 25 years of age, almost two-thirds (62.2%) of primary and secondary syphilis cases were 30 years of age or older. Slightly more than half (58.5%) of reported primary and secondary syphilis cases were among blacks and almost all cases (94.6%) were reported among men. In contrast to chlamydia and gonorrhea, the greatest number of primary and secondary syphilis cases were reported among persons living in Wards 1 and 2 (33.5%). Please refer to appendix table B11 for more information on primary and secondary syphilis infections reported between 2009 and 2013 in the District.

Figure 24. Reported Chlamydia, Gonorrhea and Syphilis (Primary & Secondary) Cases by Year of Report, District of Columbia, 2009-2013



- Due to more sensitive 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 reported chlamydia and gonorrhea cases gradually increased between 2009 and 2013.
- Chlamydia is often considered the “silent disease,” meaning infections may not have any symptoms and are usually detected during screening. That is, the “more you look for it” (i.e. screen for it) the “more you will find it.”

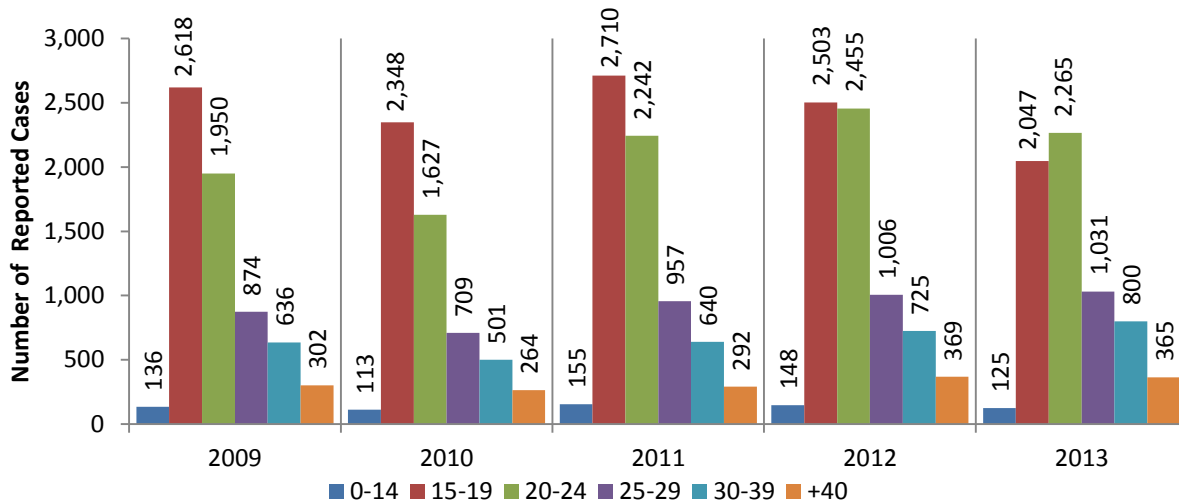
Figure 25. Reported Number of Chlamydia Cases by Year of Report and Sex, District of Columbia, 2009-2013



*Missing sex not included

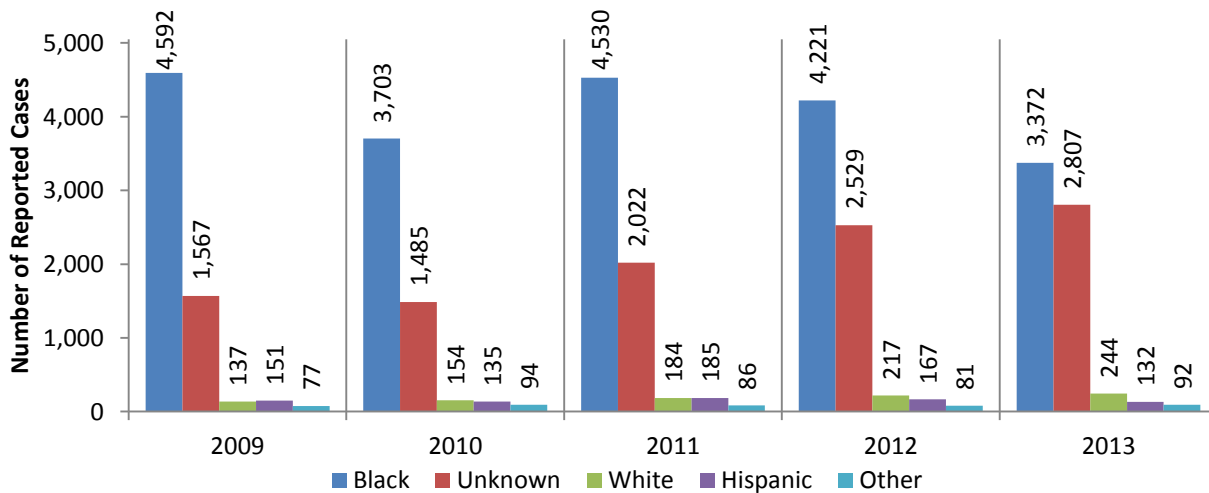
- Undetected and untreated chlamydial infection may lead to infertility and pelvic inflammatory disease. Therefore, CDC guidelines and most chlamydia screening programs target women of childbearing age.
- This is in large part why the percentage of chlamydia cases reported among women was higher than among men, ranging from a low of 63% (2009) to a high of 68% (2010).

Figure 26. Reported Number of Chlamydia Cases by Year of Report and Age at Diagnosis, District of Columbia, 2009-2013



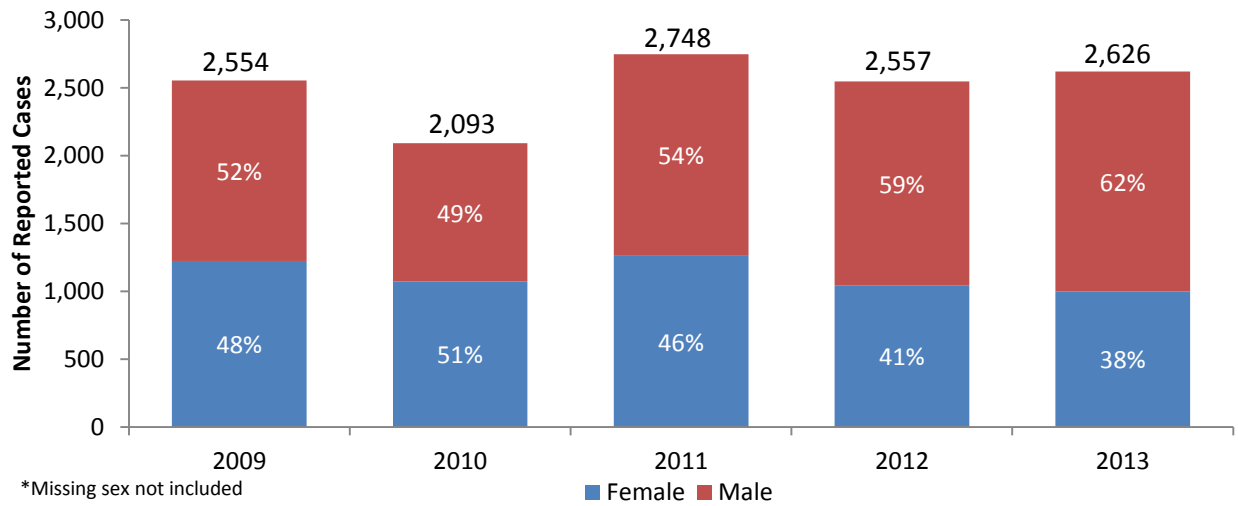
- From 2009-2013, majority of diagnosed chlamydia cases were diagnosed among 15-19 year olds.
- In 2009, 40.1% of reported chlamydia cases were among this age group, followed by cases aged 20-24 (29.9%). In 2013, 20-24 year olds had the highest proportion of cases at 34.0%, and the proportion of cases among 15-19 year olds decreased to 30.8%.

Figure 27. Reported Number of Chlamydia Cases by Year of Report and Race, District of Columbia, 2009-2013



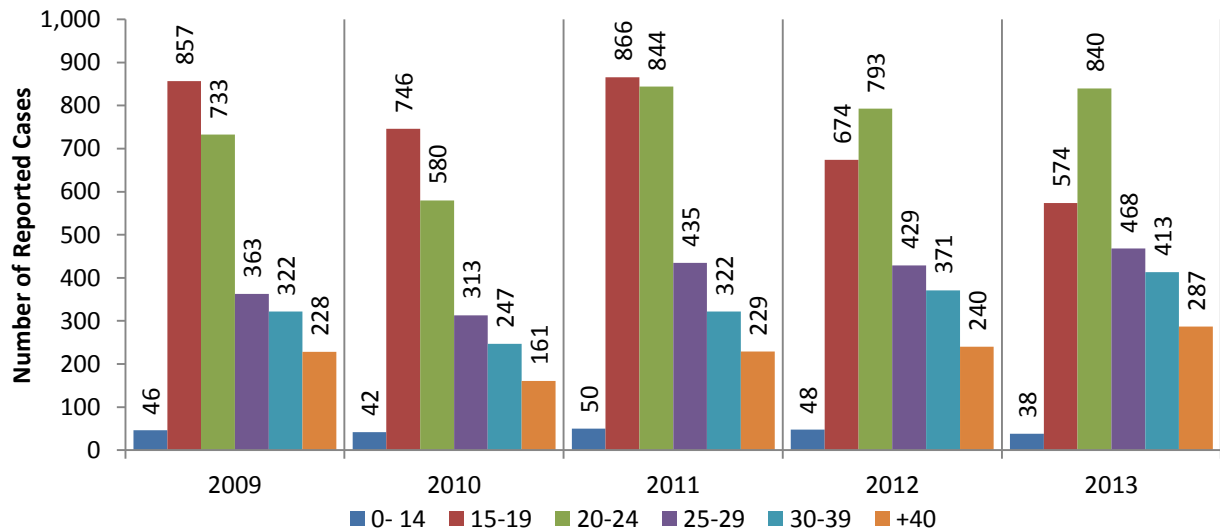
- Among chlamydia cases with known race, the proportion of black cases remained consistently high from 2009 to 2013.

Figure 28. Reported Number of Gonorrhea Cases by Year of Report and Sex, District of Columbia, 2009-2013



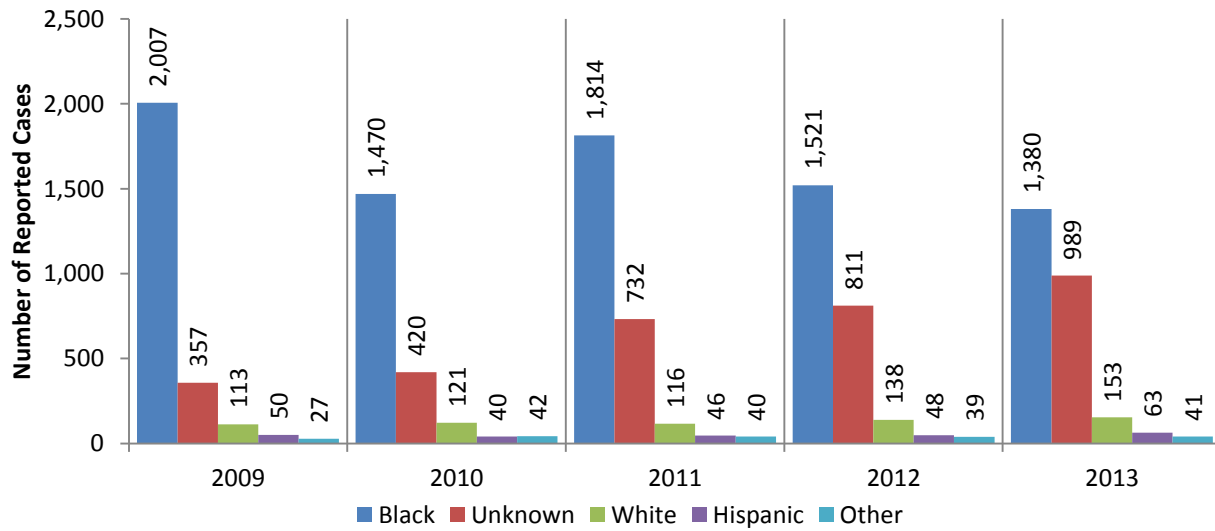
- From 2009-2013, the proportion of gonorrhea cases has shifted to more men than women.

Figure 29. Reported Number of Gonorrhea Cases by Year of Report and Age at Diagnosis, District of Columbia, 2009-2013



- In 2009, 33.6% of reported gonorrhea cases were among 15 to 19 year olds, followed by 20-24 year olds (28.7%).
- In 2012 and 2013, 20-24 year olds had the largest proportion of gonorrhea cases reported (31.0% and 32.0%, respectively).

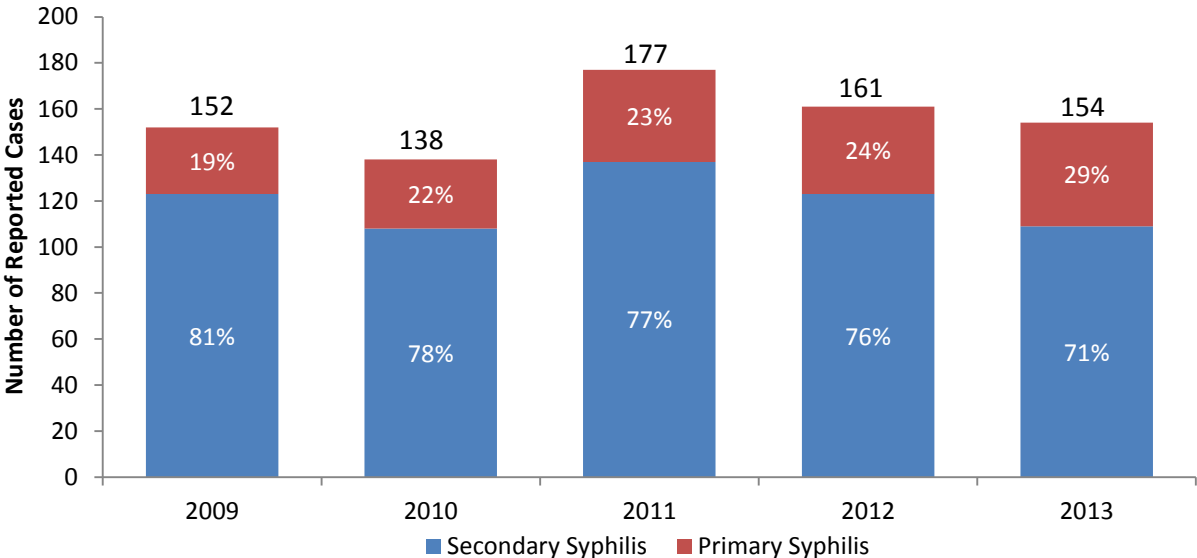
Figure 30. Reported Number of Gonorrhea Cases by Year of Report and Race, District of Columbia, 2009-2013



- More than two-thirds of gonorrhea cases reported between 2009 and 2013 were among blacks. Among diagnosed cases with known race, the proportion reported among blacks ranged from 78.6% in 2009 and 52.6% in 2013.

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. The chancre tends to be painless and thus often goes unnoticed, which results in people not seeking medical care. Secondary syphilis is characterized by rashes that can appear anywhere on the body, but typically involve the hands and feet, which prompts people to seek care. Other secondary syphilis symptoms can 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 31. Reported Number of Syphilis Cases by Year of Report, District of Columbia, 2009-2013



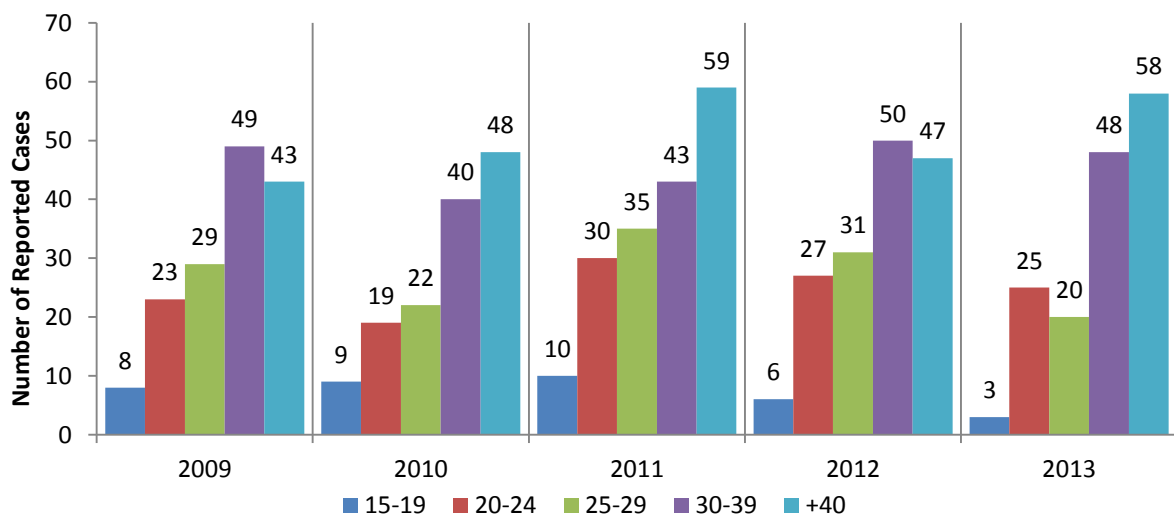
- Between 2009 and 2013 secondary syphilis represented over 70% of infectious syphilis cases diagnosed each year.

Figure 32. Reported Number of Syphilis Cases by Year of Report and Sex, District of Columbia, 2009-2013



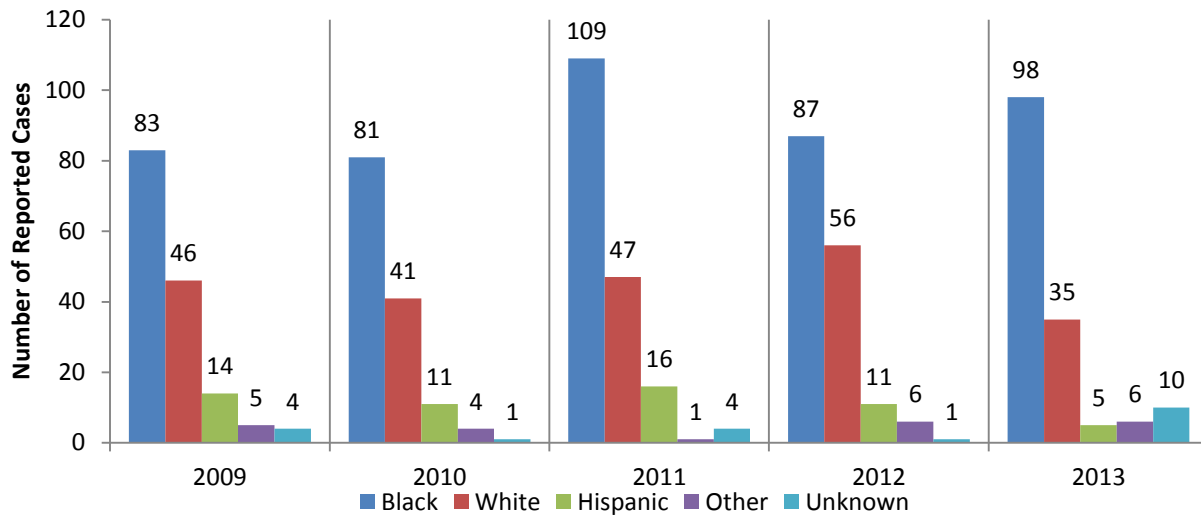
- In 2013, the proportion of men reported with infectious syphilis was 87% and the proportion of women reported with infectious syphilis was 13%.
- The consistently high proportion of cases among men from 2009 to 2013 suggests that the primary mode of transmission driving the emergence of primary and secondary syphilis in Washington, DC may be men who have sex with men (MSM).

Figure 33. Reported Number of Syphilis Cases by Year of Report and Age at Diagnosis, District of Columbia, 2009-2013



- The largest number of primary and secondary syphilis cases was reported among those 30 years of age and older.
- In 2009, 60.5% of infectious syphilis cases were reported among people age 30 and older, while in 2013, this percentage was 68.9%.

Figure 34. Reported Number of Syphilis Cases by Year of Report and Race, District of Columbia, 2009-2013



- From 2009 to 2013, blacks represented 58.5% of all reported cases of infectious syphilis. This is lower than what is reported for chlamydia (64.4%) and gonorrhea (68.6%).
- Whites accounted for 28.8% of all syphilis cases from 2009 to 2013, with the highest proportion of cases reported in 2012 at 34.8%.

Section 8. Viral Hepatitis

Hepatitis is a medical condition characterized by an inflammation of the liver. Often times initially occurring with few or no symptoms, many individuals remain unaware of their infection status until more chronic sequelae of hepatitis develop, including cirrhosis and liver cancer. Hepatitis A, hepatitis B, and hepatitis C viral infections are the most common causes of hepatitis in the United States.

Under District of Columbia Municipal Regulations (DCMR), laboratories and health care providers are required to report positive hepatitis test results to the Department of Health. These test results are maintained in a registry as a means of monitoring and assessing infection patterns among District residents. Based on reported laboratory and clinical information, the Centers for Disease Control and Prevention (CDC) define hepatitis cases as either confirmed or probable. Locally, confirmed chronic hepatitis B or C cases include a complete series of labs. A probable case of chronic hepatitis B or C is a combination of reported lab results that are an incomplete series and don't include all results necessary to confirm a diagnosis. We have also chosen to include all suspect cases of chronic hepatitis C, which is defined as a single positive lab result indicative of possible chronic infection. For this report, unless otherwise noted, "Chronic Hepatitis B" refers to confirmed or probable cases; "Chronic Hepatitis C" refers to a confirmed, probable, or suspect cases; and "Acute Hepatitis A" refers to a laboratory confirmed case.

The data presented in the current section are limited to individuals with one or more reported positive hepatitis test results between 2009 and 2013. The majority of the subsequent tables and graphs focus solely on newly reported hepatitis cases (i.e., individuals without laboratory evidence of hepatitis diagnosis prior to 2009); however, some information is presented concerning both newly reported and previously diagnosed chronic hepatitis C cases tested between 2009 and 2013 in order to better characterize the magnitude of the epidemic. When interpreting the information presented, consideration should be given to the fact that individuals infected with hepatitis who have not been tested are not represented in the current analysis. Additionally, individuals' diagnosis dates are based on the earliest date for which a positive laboratory test result was reported and are not necessarily indicative of the date on which an individual became infected.

Chronic Hepatitis B

Hepatitis B virus is transmitted through contact with bodily fluids from an infected person; fluids include 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 it becomes chronic.

According to the CDC, among persons exposed to hepatitis B virus, the risk for chronic infection varies according to age at infection and is greatest among young children. Approximately 90% of infants and 30% to 50% of children less than 5 years of age who acquire hepatitis B virus from their mothers remain chronically infected. By contrast, approximately 95% of adults recover completely from acute infection and do not develop chronic disease.

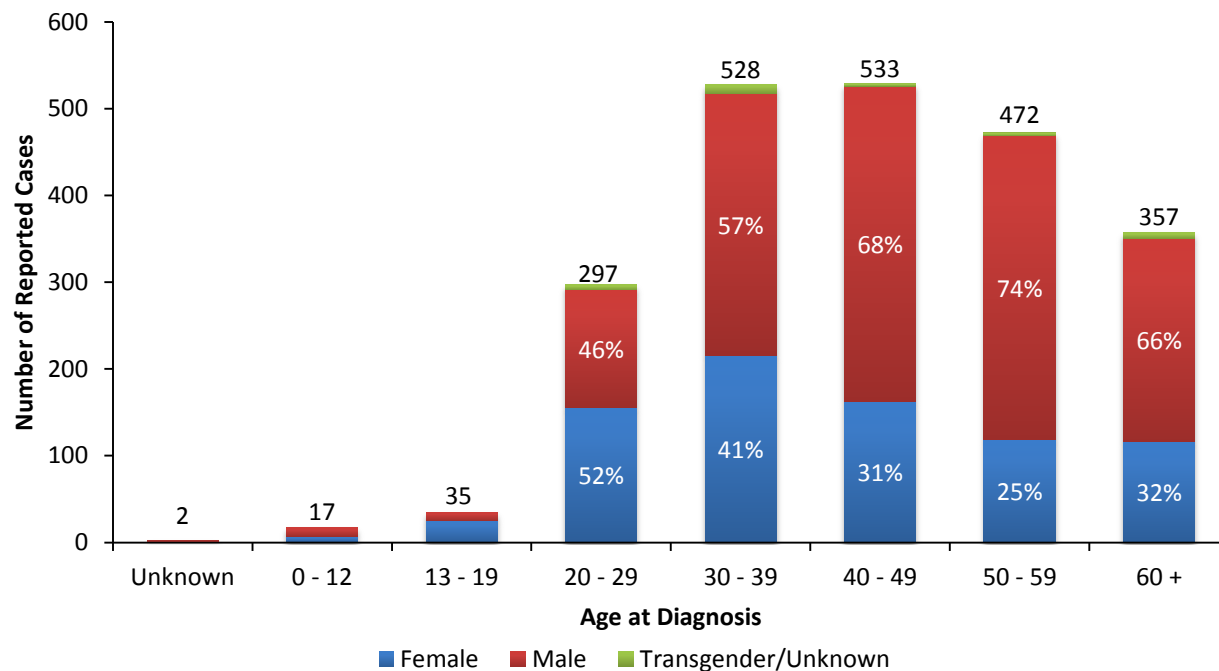
Table 10. Newly Reported Chronic Hepatitis B Cases by Gender, Race/Ethnicity, Age at Diagnosis, and Year of Diagnosis, District of Columbia 2009-2013^{1,2}

	N	%
Gender		
Female	802	35.8
Male	1,405	62.7
Transgender/Unknown	34	1.5
Total	2,241	100.0
Race/Ethnicity		
Black	460	20.5
White	67	3.0
Hispanic/Latino	18	0.8
Asian/Pacific Islander	60	2.7
American Indian	1	0.04
Other/Unknown	1,635	73.0
Total	2,241	100.00
Age Group		
0 - 12	18	0.8
13 - 19	35	1.6
20 - 29	297	13.3
30 - 39	528	23.6
40 - 49	533	23.8
50 - 59	472	21.1
60+	357	15.9
Unknown	1	0.04
Total	2,241	100.00
Diagnosis Year		
2009	490	21.9
2010	539	24.1
2011	463	20.7
2012	350	15.6
2013	399	17.8
Total	2,241	100.0

¹ Cases with a reported residential address outside of the District of Columbia at the time of diagnosis are excluded from analysis.

² Numbers may differ from previous publications due to additional record matching and/or data cleaning efforts.

Figure 35. Newly Reported Chronic Hepatitis B Cases by Age at Diagnosis & Gender, District of Columbia 2009-2013



- Between 2009 and 2013, 2,241 individuals in the District were newly reported with chronic hepatitis B infections.
- After a decline in newly reported chronic hepatitis B cases among District residents in 2011 and 2012, incidence has increased in 2013. However, the increase in reported cases may be attributable to an increase in testing and not an increase in the true population incidence.
- Despite the fact that a majority (75.9%) of reported chronic hepatitis B cases with a known race/ethnicity are black, the high overall percentage of chronic hepatitis B cases with an unknown race/ethnicity (73.0%) prevents a valid assessment of the racial/ethnic differences in the occurrence of chronic hepatitis B infections within the District.
- Men accounted for approximately 62.7% of newly reported chronic hepatitis B cases from 2009 through 2013 overall; however, women comprise the majority (53.6% vs. 44.7% for men) of cases reported among those under 30 years of age, which can be attributed to prenatal screening.

Chronic Hepatitis C

Hepatitis C is transmitted through blood; 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, through needle sticks, and from pregnant women to their children. However, these modes occur less frequently than through contaminated injection drug equipment.

The majority of Hepatitis C infections occurred among persons prior to 1965 primarily due to blood transfusions, when the blood supply was not screened for the virus. The US Centers for Disease

Prevention and Control (CDC) issued a new recommendation that all persons born between 1945 and 1965 (known as “Baby Boomers”) should be tested for Hepatitis C. The CDC also recommends persons with a history of injection drug use should be screened.

Table 11. All Positive Chronic Hepatitis C Cases by Gender, Race/Ethnicity, Age at Diagnosis, Case Classification, and Diagnosis Type, District of Columbia, 2009-2013^{1,2,3}

	N	%
Gender		
Female	5,455	33.1
Male	10,928	66.4
Transgender/Unknown	86	0.5
Total	16,469	100.00
Race/Ethnicity		
Black	5,655	34.3
White	345	2.1
Hispanic/Latino	67	0.4
Asian/Pacific Islander	57	0.3
American Indian	2	0.01
Other	10,346	62.8
Total	16,469	100.00
Age Group		
0 - 12	51	0.3
13 - 19	61	0.4
20 - 29	458	2.8
30 - 39	1,027	6.2
40 - 49	4,771	29.0
50 - 59	7,262	44.1
60+	2,827	17.2
Unknown	12	0.1
Total	16,469	100.00
Diagnosis Type²		
Newly Reported	8,933	54.3
Previously Reported	7,536	45.7
Total	16,469	100.00
Case Classification³		
Confirmed	12,835	77.9
Probable	167	1.0
Suspect	3,467	21.1
Total	16,469	100.00

¹ Cases with a reported residential address outside of the District of Columbia at the time of testing are excluded from analysis.

² “All chronic hepatitis C cases” is inclusive of newly reported cases testing positive for the first time between 2009 and 2013, as well as previously reported cases with both a positive result between 2009 and 2013 and ≥1 positive laboratory report for chronic hepatitis C prior to 2009.

³ Case classification based on CDC guidance

- As indicated in the previous tables, 16,469 residents had a positive laboratory report for chronic hepatitis C in DC between 2009 and 2013. While this number provides some insight concerning the magnitude of chronic hepatitis C within the District, it should not be interpreted as a prevalence estimate given the exclusion of previously diagnosed individuals without subsequent testing during the specified timeframe, as well as the exclusion of infected individuals who remain undiagnosed.

Table 12. Newly Reported Chronic Hepatitis C Cases by Gender, Race/Ethnicity, Age at Diagnosis, and Year of Diagnosis, District of Columbia 2009-2013^{1,2,3}

	N	%
Gender		
Female	2,806	31.4
Male	6,044	67.7
Transgender/Unknown	83	0.9
Total	8,933	100.00
Race/Ethnicity		
Black	1,844	20.7
White	214	2.4
Hispanic/Latino	35	0.4
Asian/Pacific Islander	13	0.2
American Indian	1	0.01
Other/Unknown	6,826	74.4
Total	8,933	100.00
Age Group		
0 – 12	34	0.4
13 – 19	39	0.4
20 – 29	364	4.1
30 – 39	538	6.0
40 – 49	1,569	17.6
50 – 59	4,141	46.4
60+	2,237	25.0
Unknown Age	11	0.1
Total	8,933	100.00
Diagnosis Year³		
2009	1,964	22.0
2010	2,002	22.4
2011	2,002	22.4
2012	1,445	16.2
2013	1,520	17.0
Total	8,933	100.00

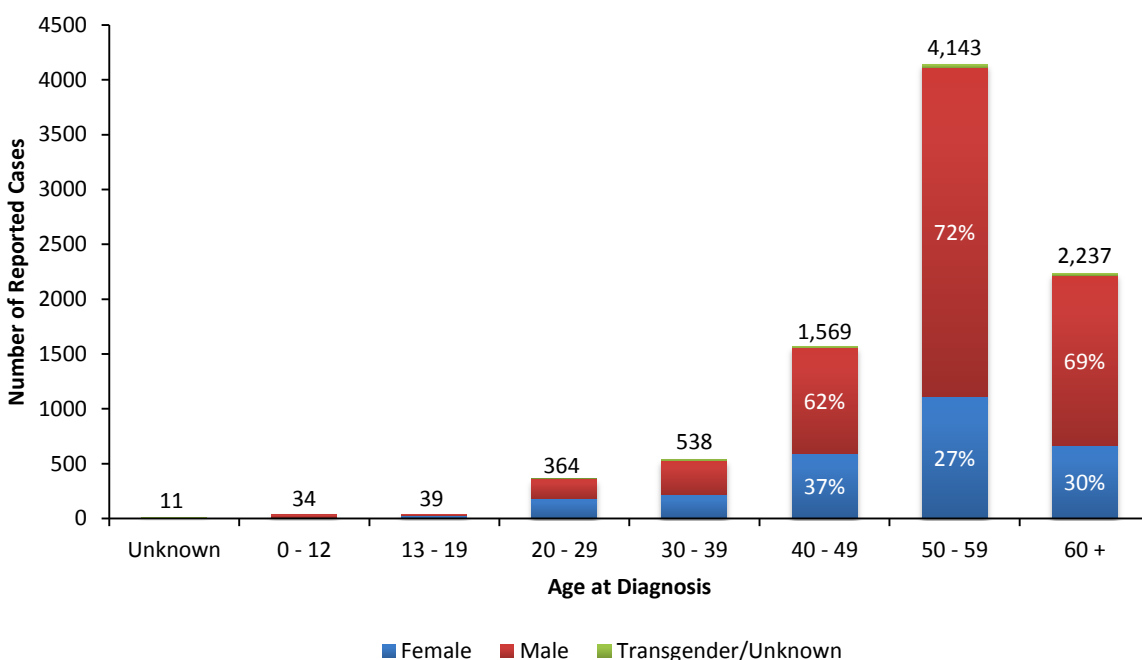
¹ Cases with a reported residential address outside of the District of Columbia at the time of diagnosis are excluded from analysis.

² Numbers may differ from previous publications due to additional record matching and/or data cleaning efforts.

³ Diagnosis year based on date of first reported chronic hepatitis C positive laboratory report based on CDC case definition guidance.

- There were 8,933 newly reported confirmed, probable, or suspect cases of chronic hepatitis C among DC residents between 2009 and 2013. A steep decline in annual number of newly reported cases was observed between 2011 and 2012; however that number is again rising in 2013.
- While the majority of newly reported chronic hepatitis C cases with a known race/ethnicity are black (87.5%), the high overall percentage of chronic hepatitis C cases with an unknown race/ethnicity (76.4%) prevents a valid assessment of racial/ethnic differences in the occurrence of chronic hepatitis C infections within DC.

Figure 36. Newly Reported Chronic Hepatitis C Cases by Age at Diagnosis & Gender, District of Columbia 2009-2013



- Nearly all newly reported chronic hepatitis C cases were diagnosed among persons 40 years of age or older between 2009 and 2013 (89.0%), with the largest percentage of newly reported diagnoses among persons 50 to 59 years of age (46.4%).
- The total number of newly reported cases of chronic hepatitis C from 2009 to 2013 among those 50 to 59 years of age (n=4,143) was almost twice that observed in any other age group.
- Male accounted for the overall majority of newly reported chronic hepatitis C cases between 2009 and 2013 (67.7%). While this trend remains consistent across older age categories, women comprise the majority of cases documented among those 13 - 29 years of age during the same timeframe.

Acute Hepatitis A

Hepatitis A infection is an acute or newly occurring liver disease that 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 improve without treatment. Once exposed to hepatitis A either by vaccination or natural infection, a person develops lifelong antibodies that will protect against the virus if 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.

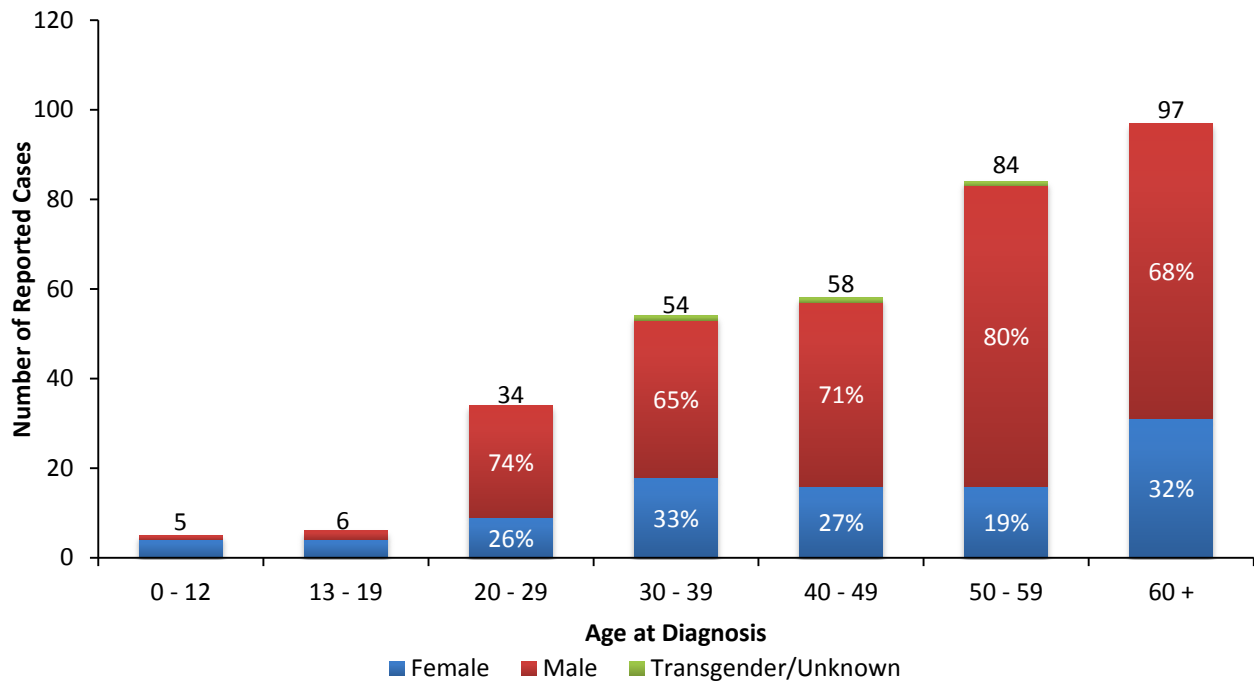
Table 13. Newly Reported Acute Hepatitis A Cases by Gender, Race/Ethnicity, Age at Diagnosis, and Year of Diagnosis, District of Columbia 2009-2013^{1,2}

	N	%
Gender		
Female	98	29.0
Male	237	70.1
Unknown/Transgender	3	0.9
Total	338	100.0
Race/Ethnicity		
Black	49	14.5
White	13	3.9
Hispanic/Latino	3	0.9
Asian/Pacific Islander	3	0.9
American Indian	1	0.3
Unknown/Other	269	79.6
Total	338	100.0
Age Group		
0 - 12	5	1.5
13 - 19	6	1.8
20 - 29	34	10.1
30 - 39	54	16.0
40 - 49	58	17.2
50 - 59	84	24.9
60+	97	28.7
Total	338	100.0
Diagnosis Year³		
2009	50	14.8
2010	34	10.1
2011	142	42.0
2012	40	11.8
2013	72	21.3
Total	338	100.0

¹ Cases with a reported residential address outside of the District of Columbia at the time of diagnosis are excluded from analysis.

² Numbers may differ from previous publications due to additional record matching and/or data cleaning efforts.

Figure 37. Newly Reported Acute Hepatitis A Cases by Age at Diagnosis & Sex, District of Columbia 2009-2013



- There were 338 cases of acute hepatitis A reported in DC from 2009 to 2013.
- Despite the fact that the majority of reported acute hepatitis A cases with a known race/ethnicity are within the black population (71.0%), the high overall percentage of acute hepatitis A cases an unknown race/ethnicity (79.6%) prevents a valid assessment of racial/ethnic differences in the occurrence of acute hepatitis A infections within the District.
- Overall, males accounted for 70% of acute hepatitis A cases reported from 2009 to 2013.

Section 9. Tuberculosis

Tuberculosis (TB) is caused by the bacteria *Mycobacterium tuberculosis*. TB is a disease that is spread from person to person through the air; infection 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. Bacteria are put into the air when a person with active TB of the lungs coughs, sneezes, laughs, or sings.

TB skin or blood tests help identify persons who have been infected. Most people who are infected with the TB bacteria have what is known as latent TB infection (LTBI). Some people with LTBI will progress to active TB disease but it may take 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.

This section describes TB surveillance data reported in the District from 2009 to 2013. Cases reported in the figures represent cases of active TB disease and not LTBI; LTBI is not a reportable condition in the District.

Summary

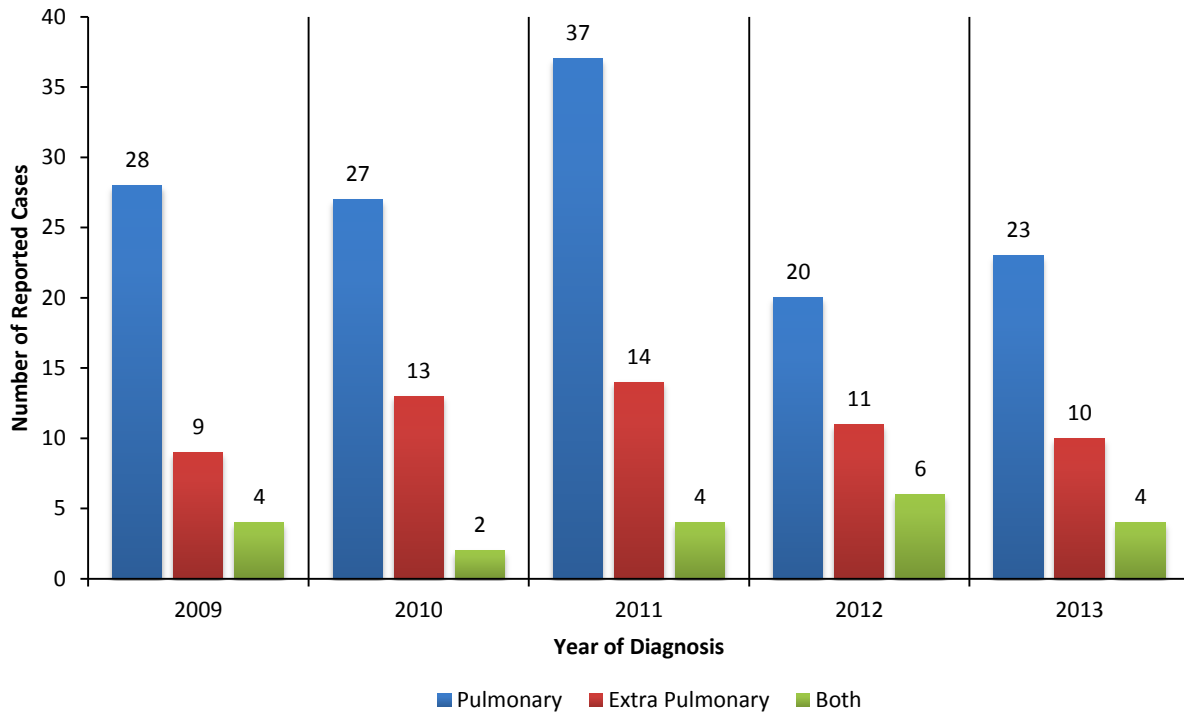
After a spike in the number of cases reported in 2006, the District has experienced considerable success reducing the number of TB cases and consequently the TB case rate among District residents. In 2013, 37 cases of TB were reported (Table 12). Please refer to appendix table B12 for more information on TB cases reported between 2009 and 2013 in the District.

All positive TB cultures are tested for susceptibility to the medications 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 infrequent in the District. Two cases of MDR-TB were reported in 2006 and one case of MDR-TB was reported in 2010. No cases of MDR-TB were reported in 2013. HAHSTA attributes the 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 include education and evaluation.

Table 14. Reported Tuberculosis Rate per 100,000 persons, District of Columbia 2009-2013

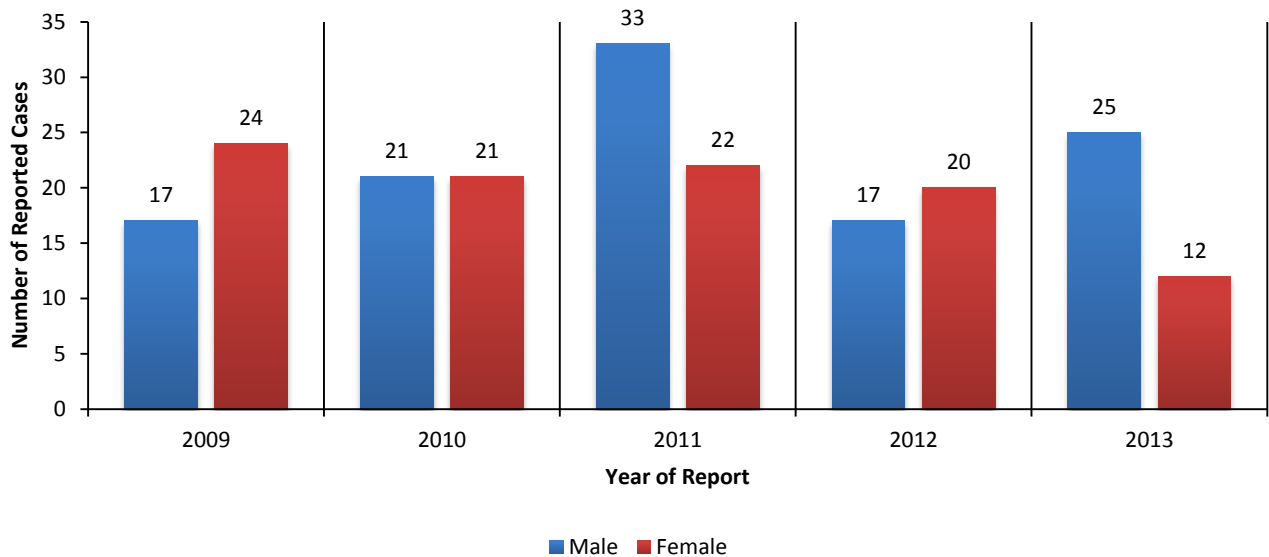
	2009		2010		2011		2012		2013	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
District Total	41	7.7	42	7.2	55	8.9	37	5.9	37	5.9

Figure 38. Reported Cases of Tuberculosis by Year of Report and Disease State, District of Columbia, 2009-2013



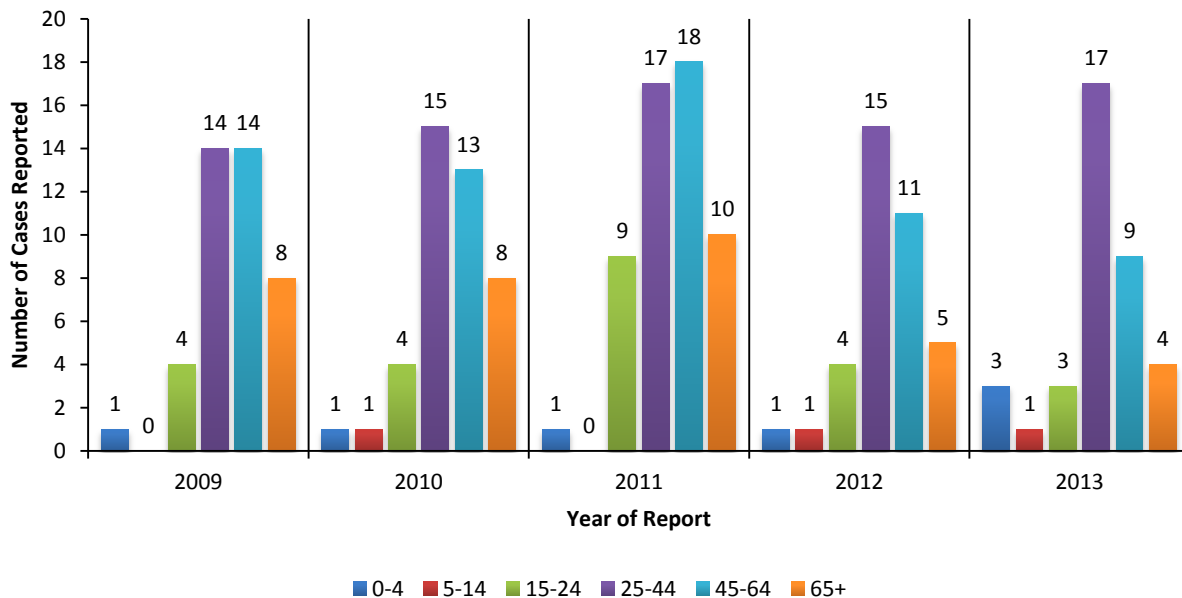
- There was a decline in the proportion of pulmonary TB cases between 2009 and 2013.
- Overall, the proportion of extra pulmonary cases has increased in the 5-year period; 21.9% in 2009 to 37.0% in 2013. Extra pulmonary TB, by definition, occurs in parts of the body other than the lungs or respiratory system and is not considered infectious.
- Occasionally, persons may be infected with TB in multiple parts of the body. Over the report, a total 20 people were infected with both pulmonary and extra pulmonary TB between 2009 and 2013.

Figure 39. Reported Cases of Tuberculosis by Year of Report and Sex, District of Columbia, 2009-2013



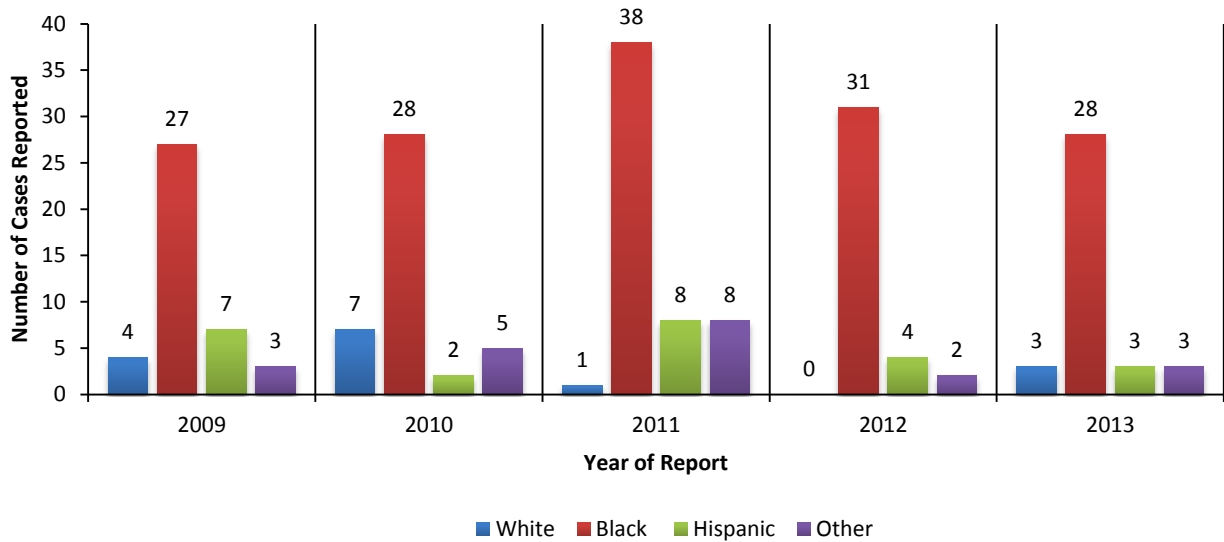
- Overall, 53.3% of reported TB cases were among men and 46.7% among women.
- Though historically TB is more prevalent among men, the District has approached a closer ratio which may be related to a greater proportion TB cases among foreign-born persons.

Figure 40. Reported Cases of Tuberculosis by Year of Report and Age at Diagnosis, District of Columbia, 2009-2013



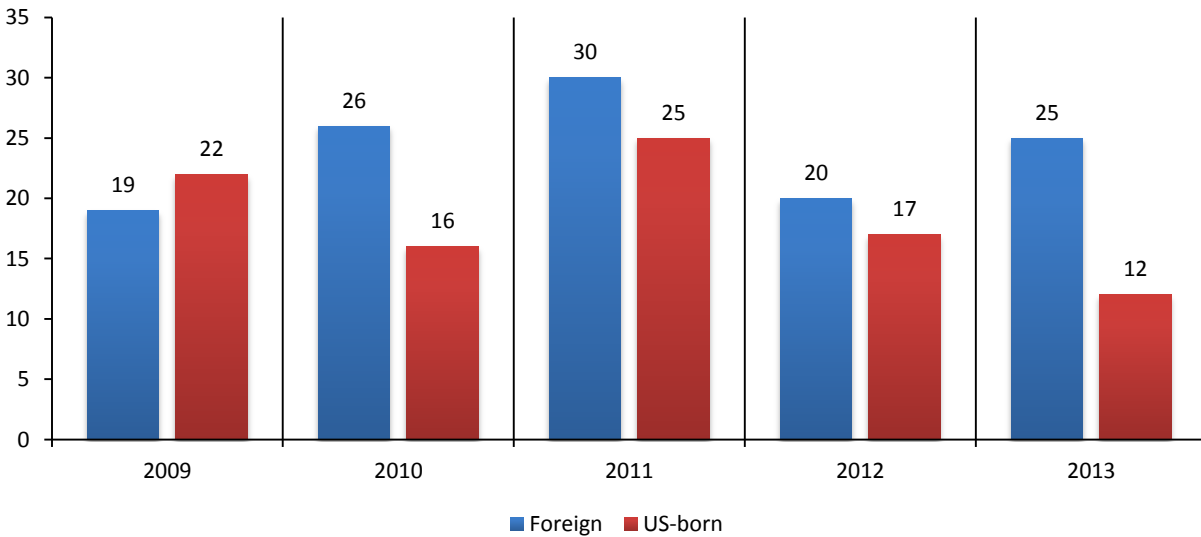
- Approximately 68% of cases reported between 2008 and 2012 were between the ages of 25 and 64.

Figure 41. Reported Cases of Tuberculosis by Year of Report and Race/Ethnicity, District of Columbia, 2009-2013



- More than two-thirds of all TB cases reported each year were black.

Figure 42. Reported Cases of Tuberculosis by Year of Report and Place of Birth, District of Columbia, 2009-2013



- The proportion of cases reported among foreign-born person remains high in the District. Foreign-born cases reported represented 46.4% of cases in 2009 and 67.6% of cases in 2013. This is similar to national data.

Section 10. Geographic Distribution of Disease

This section contains a portrait of the geographic distribution of HIV disease, sexually transmitted diseases (STDs) and viral hepatitis cases in the District with maps and specific data points. The District is divided into several types of geopolitical areas, including wards and census tracts. Census tracts are small subdivisions of an entity and are updated after each census is performed. The District is divided into eight wards and 179 census tracts. Ward and census tract 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 and census tract of residence is not collected and is reported separately from the maps as “jail” and “homeless” cases respectively. The availability of ward and census tract data varies by disease; however, where these data were not available, the cases were not included in the maps. It is also important to note that the ward or census tract 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 and census tracts 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

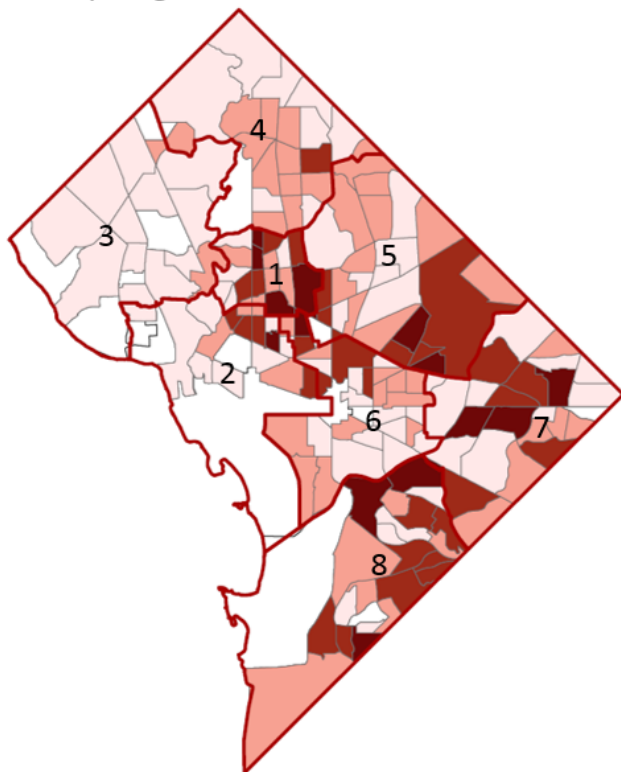
The number of persons newly diagnosed with HIV disease in 2009 and 2013 were calculated for each ward and census tract in the District of Columbia. Previously, new HIV cases were mapped only by ward at the time of diagnosis. With the inclusion of census tract information at diagnosis for cases at these two points in time, an improved illustration of the distribution of cases is observed. In both 2009 and 2013, the majority of HIV cases were diagnosed in ward 8 and the least in ward 3. Overall, there was a decrease in the number of newly diagnosed and reported cases, as well as a shift on the location of diagnosis by ward.

Address information was available for more than three quarters of chlamydia and gonorrhea cases and for nearly all primary and secondary syphilis cases diagnosed in 2009 and 2013. The number of newly reported cases of chlamydia and gonorrhea were highest in Wards 5, 7 and 8. Newly reported cases of primary and secondary syphilis, however were highest among person living in Wards 1 and 2.

More than 90% of chronic hepatitis B and C cases diagnosed in 2009 and 2013 had ward and census tract 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.

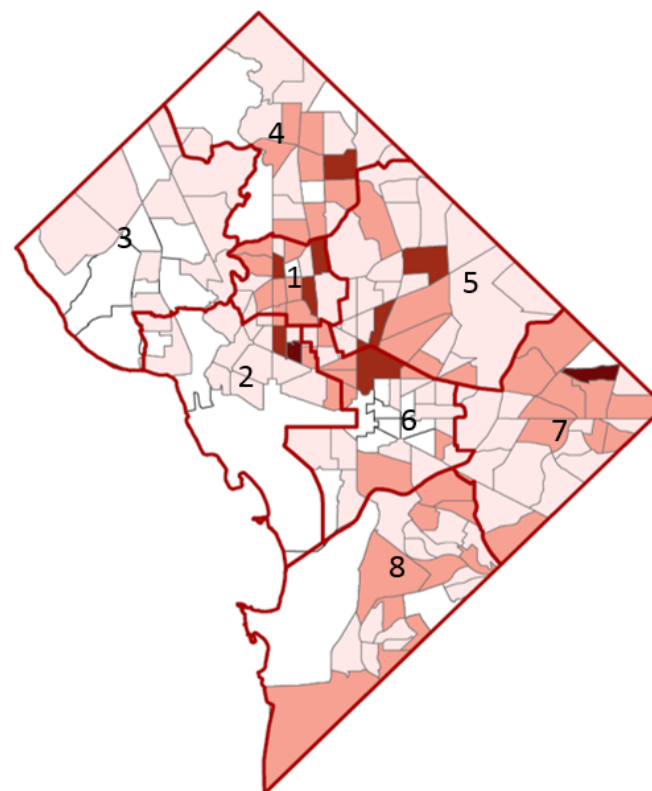
Map 1. Number Newly Diagnosed HIV Cases by Census Tract and Ward, District of Columbia 2009 and 2013

Newly Diagnosed Cases, 2009*†, N=916

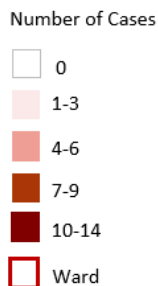


*134 cases had a missing address or an address that did not geocode and were not included on this map
 † Though not included on this map, 40 cases were diagnosed in jail and 9 cases were homeless at the time of diagnosis

Newly Diagnosed Cases, 2013**‡, N=553



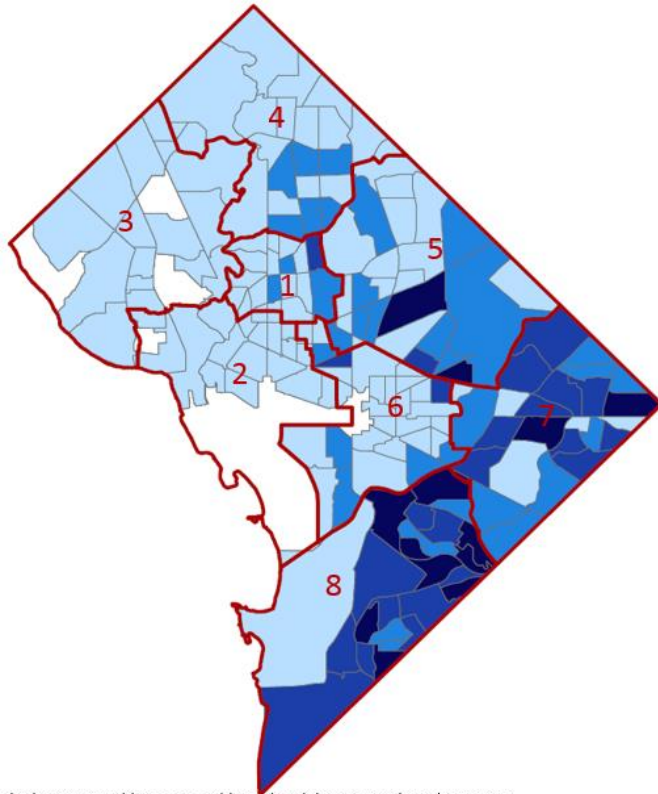
**67 cases had a missing address or an address that did not geocode and were not included on this map
 ‡ Though not included on this map, 6 cases were diagnosed in jail and 5 cases were homeless at the time of diagnosis



- In both 2009 and 2013, the highest number of newly diagnosed HIV cases were found in Wards 1, 5, 7 and 8.
- Though these wards continue to have high numbers of newly diagnosed cases in these two points in time, diagnoses by census tract shows that there is a shift in the number of cases in all wards.

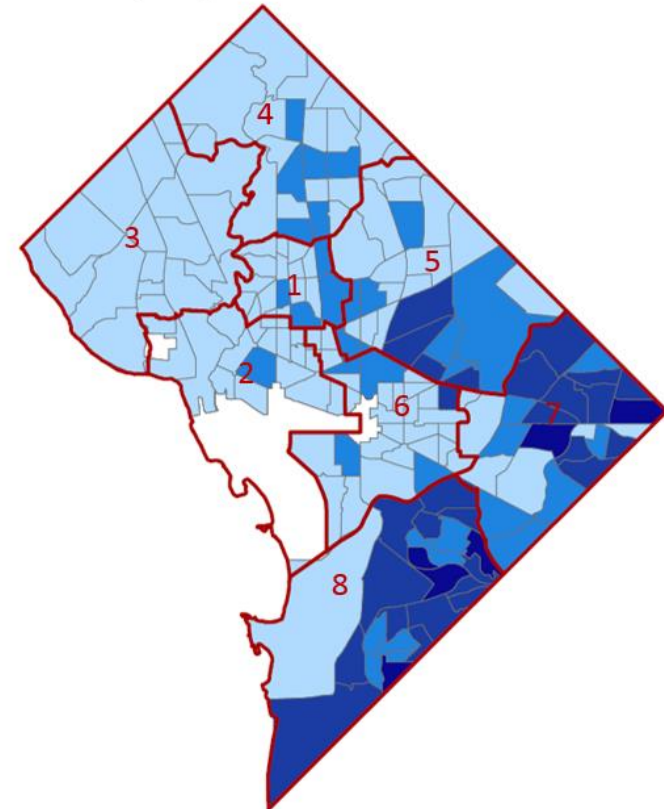
Map 2. Newly Reported Cases of Chlamydia by Census Tract and Ward, District of Columbia 2009 and 2013

Newly Diagnosed Cases, 2009*, N=6,524



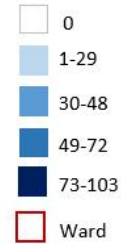
*22.1% of cases had a missing address or an address that did not geocode and were not included on this map

Newly Diagnosed Cases, 2013**, N=6,647



**23.5% of cases had a missing address or an address that did not geocode and were not included on this map

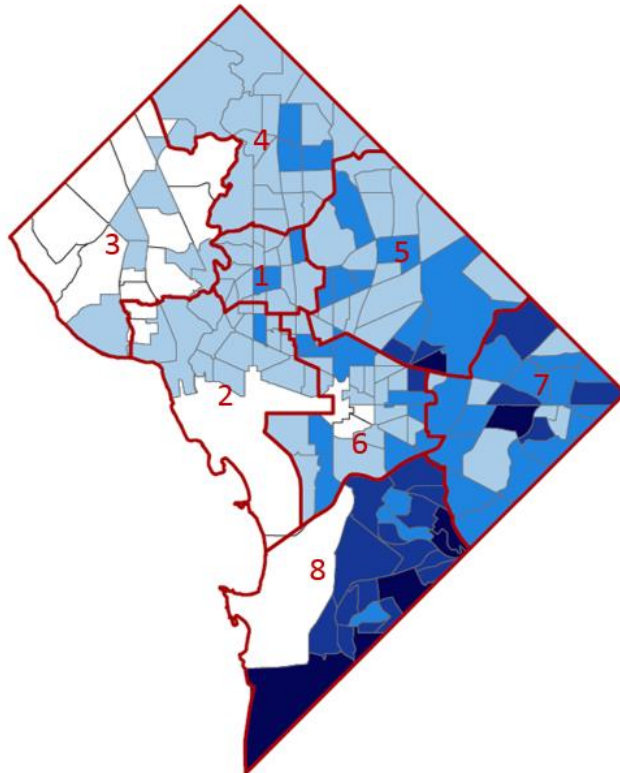
Number of Cases



- In both 2009 and 2013, the highest number of cases of chlamydia were found in Wards 5, 7 and 8.
- Between 2009 and 2013, the highest rates of chlamydia were reported in Ward 8 (1,908.6 cases per 100,000 persons) and Ward 7 (1,649.9 cases per 100,000 persons).
- By census tract, there is no major change in the area of newly reported cases of disease.

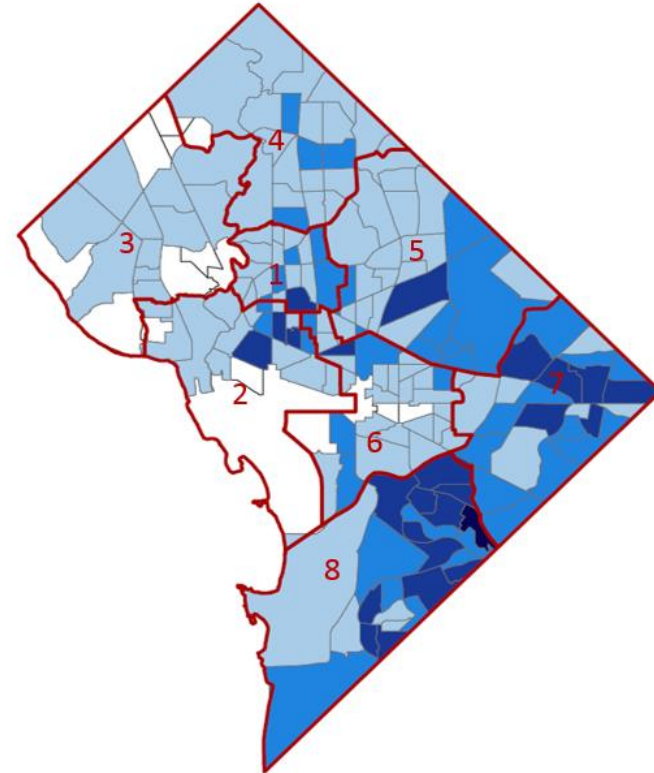
Map 3. Newly Reported Cases of Gonorrhea by Census Tract and Ward, District of Columbia 2009 and 2013

Newly Diagnosed Cases, 2009*, N=2,554



*14.4% of cases had a missing address or an address that did not geocode and were not included on this map

Newly Diagnosed Cases, 2013**, N=2,626

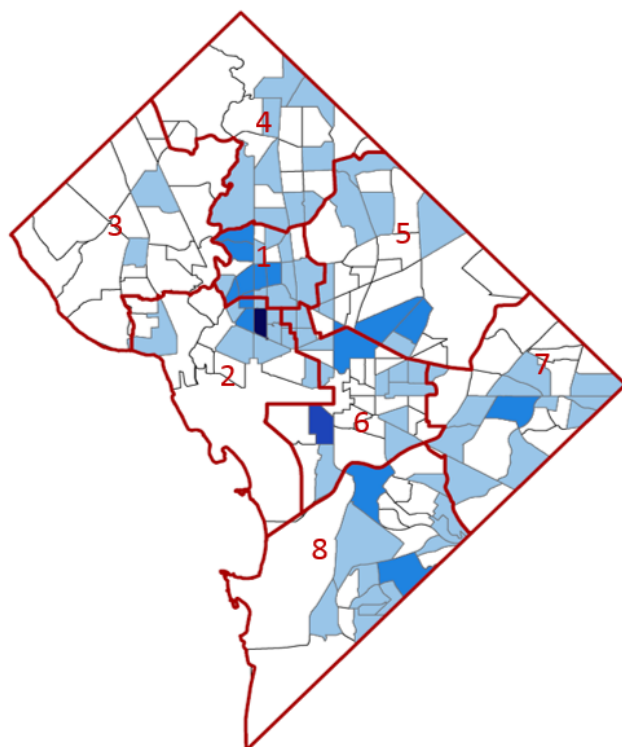


**14.0% of cases had a missing address or an address that did not geocode and were not included on this map

- In both 2009 and 2013, the highest number of cases of gonorrhea were found in Wards 5, 7 and 8.
- Between 2009 and 2013, the highest rates of gonorrhea were reported in Ward 8 (754.6 cases per 100,000 persons) and Ward 7 (627.9 cases per 100,000 persons).
- The number of newly reported cases of gonorrhea increased in 2013, and by census tract, there were higher numbers of cases reported in wards 1, 2 and 3.

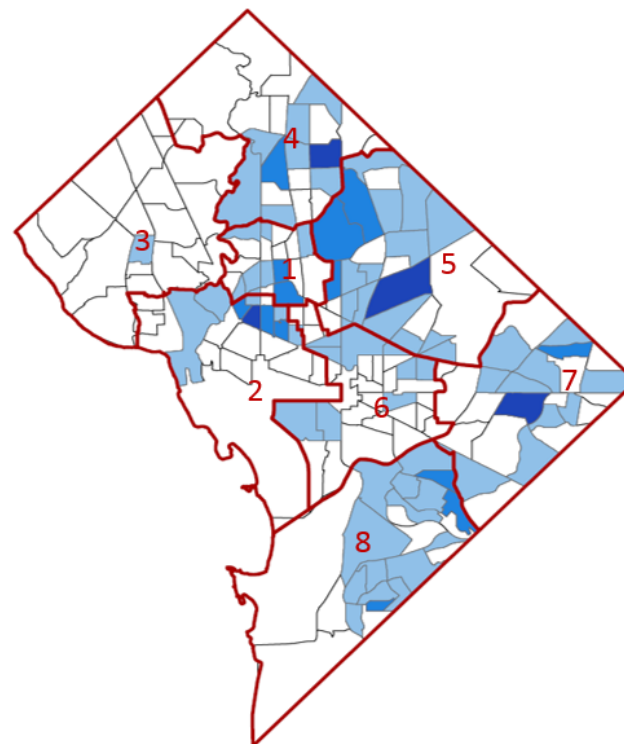
Map 4. Newly Reported Cases of Syphilis, by Census Tract and Ward, District of Columbia 2009 and 2013

Newly Diagnosed Cases, 2009*, N=152



*1.4% of cases had a missing address or an address that did not geocode and were not included on this map

Newly Diagnosed Cases, 2013**, N=154

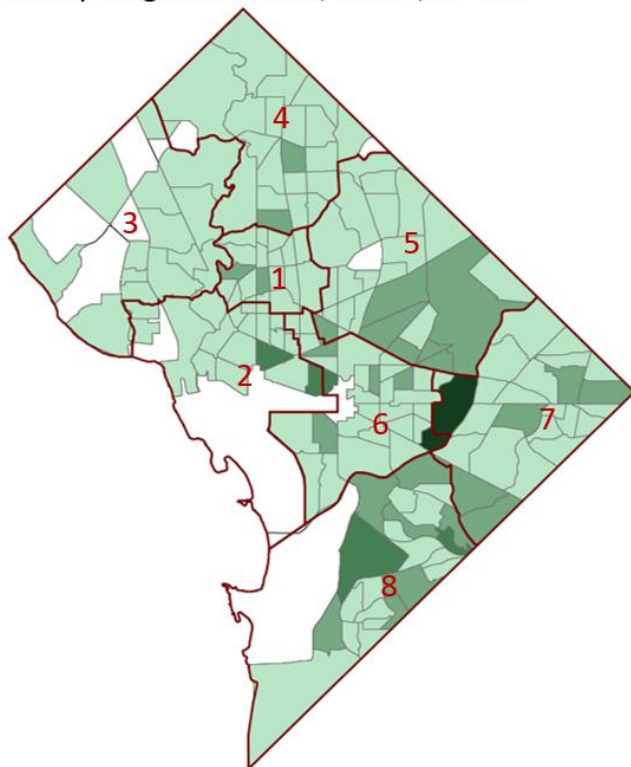


**7.2% of cases had a missing address or an address that did not geocode and were not included on this map

- Unlike chlamydia and gonorrhea, the highest number of newly reported primary and secondary syphilis cases were found in Wards 1 and 2 in 2009 and Wards 2 and 5 in 2013.
- Though the number of newly reported cases remained steady by ward, diagnoses by census tract showed that there was a shift in location in all wards.

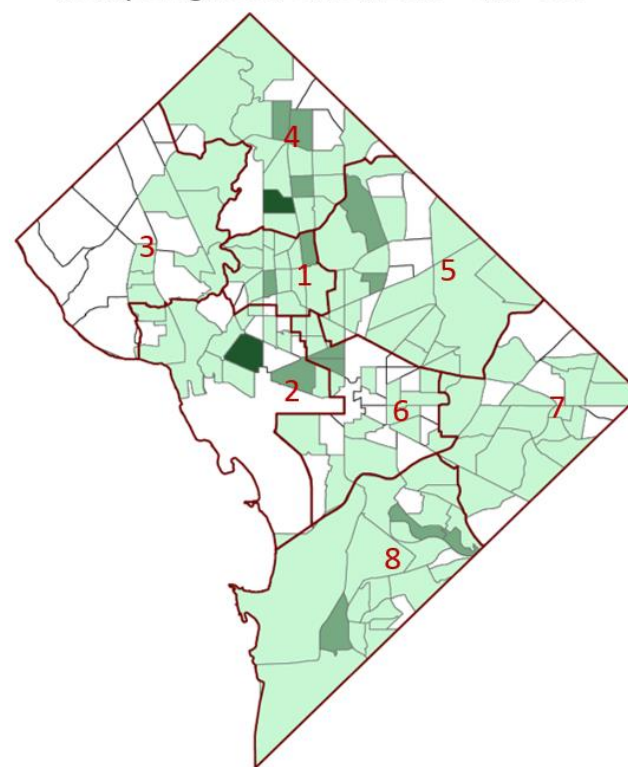
Map 5. Newly Reported Chronic Cases of Hepatitis B, by Census Tract and Ward, District of Columbia 2009 and 2013

Newly Diagnosed Cases, 2009*, N=490



*6.4% of cases had a missing address or an address that did not geocode and were not included on this map

Newly Diagnosed Cases, 2013**, N= 399

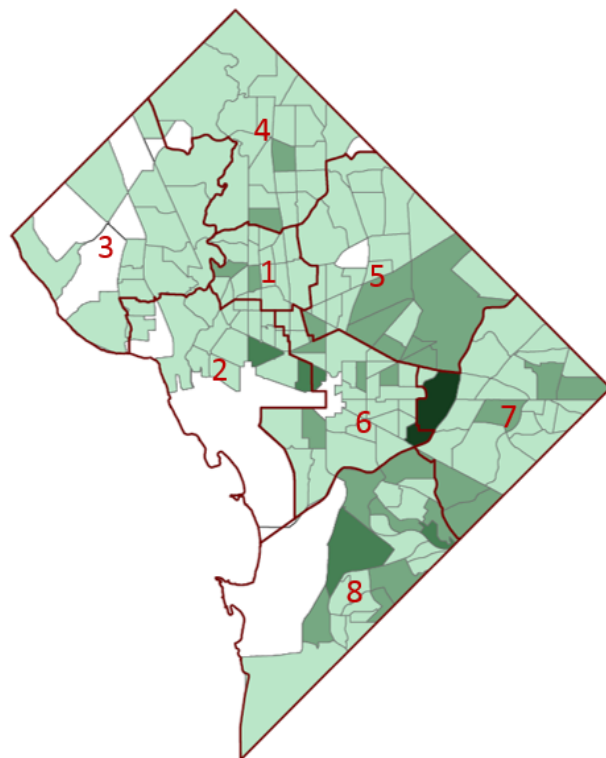


**3.1% of cases had a missing address or an address that did not geocode and were not included on this map

- Among newly reported hepatitis B cases in both 2009 and 2013, the largest number of newly reported cases were from Wards 4, 5, 7 and 8.
- Though there was a decrease in the number of newly reported cases from 2009 to 2013, by census tract there is a shift in the number of diagnoses in all Wards, where census tracts in Wards 2 and 4 had the largest increases in newly reported cases, and Wards 5, 7 and 8 had decreases in newly reported hepatitis B cases.
- Though the number of newly diagnosed cases remained steady by ward, diagnoses by census tract showed that there was a shift in location in all wards.

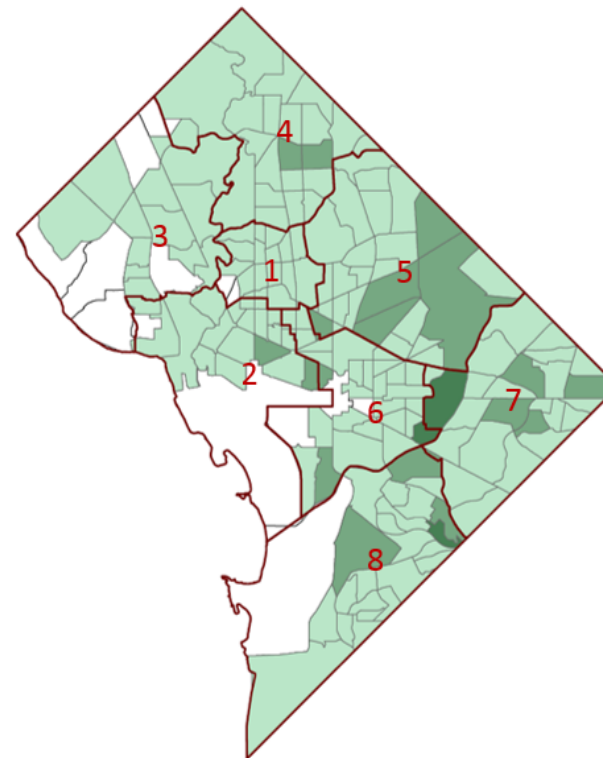
Map 6. Newly Reported Chronic Cases of Hepatitis C, by Census Tract and Ward, District of Columbia 2009 and 2013

Newly Diagnosed Cases, 2009*, N=1,964



*5.8% of cases had a missing address or an address that did not geocode and were not included on this map

Newly Diagnosed Cases, 2013**, N=1,520



**3.4% of cases had a missing address or an address that did not geocode and were not included on this map

- Among newly reported chronic hepatitis C cases in both 2009 and 2013, the largest number of newly reported cases were from Wards 7 and 8.
- Though there was a decrease in the number of newly reported cases from 2009 to 2013, by census tract there were not any major shifts in the number of newly reported chronic hepatitis C cases.

Appendix A. Understanding Surveillance Data

In order to understand surveillance data it is important to be familiar with some key terms. Newly diagnosed, or new diagnoses, are persons diagnosed with a disease in a given time period; a diagnosis could be a positive test result, or could be determined by a clinician. A diagnosis does not always occur at exactly the same time as someone is infected or gets sick; sometimes it is months or years before someone is diagnosed. 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'. Incident cases, or new infections, are not always diagnosed right away. Thus, the number of new diagnoses does not necessarily reflect trends in incidence (that is, new infections). At the time of diagnosis, some individuals will have been infected recently while others will have been infected sometime in the past.

Prevalence is the total number of people in a population with a particular disease or condition at a given time point. Prevalence can be thought of as a snapshot of all existing cases of a disease or condition at a specified time - for instance the percentage of persons living with HIV among all persons living in the District as of December 31, 2013.

Throughout this report, HAHSTA provides information about new diagnoses and prevalent cases of HIV, viral hepatitis, and tuberculosis. HAHSTA does not currently include incidence estimates since exact time of infection cannot be known for all cases. HAHSTA is currently funded by the Centers for Disease Control and Prevention (CDC) to examine HIV incidence and will release incidence estimates in the future.

Understanding HIV Surveillance

The District of Columbia Municipal Code (22 DCMR 206) mandates reporting of all HIV and AIDS diagnoses to the DC DOH. An HIV diagnosis or case refers to a person who has tested positive for HIV infection. An AIDS case refers to a person who had a diagnosis of HIV infection and later had a diagnosis of AIDS, or a person diagnosed with HIV and AIDS at the same time. AIDS is defined by a CD4+ T-cell count less than 200 cells/ μ L or an AIDS defining opportunistic infection; both of these are signs of immune system failure. Only confirmed reports of HIV and AIDS cases are accepted; anonymous test results 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 entered into the federally issued enhanced HIV/AIDS Reporting System (eHARS) and de-identified case information is shared with CDC monthly. CDC uses these data to prepare national surveillance reports.

Please note that the term 'HIV' encompasses all persons living with HIV infection regardless of their stage of disease (including persons diagnosed with HIV infection who have not progressed to AIDS; person who were diagnosed with HIV infection and AIDS at the same time; and persons who were diagnosed with HIV infection and later received an AIDS diagnosis). This is consistent with the Centers for Disease Control and Prevention HIV surveillance categorization and reports.

Understanding the District of Columbia HIV Prevalence Estimate

There were 3,774 newly diagnosed HIV cases reported between 2009 and 2013. However, the total number of persons living with HIV in the District increased by 351 cases compared to last year's report. Reasons for this change in these data include the following:

1. Completeness of vital status data continues to improve. HAHSTA matched HIV cases with Social Security Death files, as well as the National Death Index, to determine the vital status of persons diagnosed with HIV in the District. While HAHSTA routinely receives information regarding District of Columbia residents who have died, national death matches provide information about persons diagnosed in the District who moved outside the District. Executing matches reduces case counts, resulting in a more accurate prevalence estimate of persons living with HIV in the District.
2. CDC routinely notifies HAHSTA if an HIV case reported in DC 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 person's name, date of birth, and sex at birth; CDC does not have access to names, so matches must be determined through this process. Each case is investigated to determine if both states/jurisdictions are reporting on the same individual. If such a determination is made, the state with the earliest report date counts the case as diagnosed with HIV in their jurisdiction. The summary table on the previous page shows the number of times newly diagnosed cases were identified as a possible duplicate report and the number and proportion of possible duplicates that were assigned to another state or jurisdiction.
3. In previous reports, the prevalence of HIV in the District was calculated by dividing the number of adults and adolescents diagnosed and living with HIV (that is, persons 13 years of age and older at the time of HIV diagnosis) by the population of the District that was 13 years of age and older in the calendar year. Pediatric cases, or persons less than 13 years of age at HIV diagnosis, were not included in the prevalence calculation. Starting in the 2012 Annual Report, HAHSTA included pediatric cases in the prevalence calculation in this year's report to fully reflect the HIV epidemic in Washington, DC.

$$\text{Prevalence Calculation: } \frac{16,423 \text{ persons living with HIV as of December, 2013}}{646,449 \text{ persons living in the District, 2013}} = 2.5\%$$

Persons diagnosed at 13 years of age or younger are living longer lives due to advances in HIV care and treatment; the median age among pediatric cases living as of December 31, 2013 was 19 years. Addition of this age group decreases the calculated prevalence of HIV because the denominator, or total population of the District, increased by including those between 0 and 12 years of age and the prevalence of disease in this age group is low.

4. The District of Columbia's population is changing as evidenced by the 2010 US Census and 2013 US Census data estimates. The table on the previous page depicts the percent change between the 2010 Census and 2013 Census estimates. There was 6.9% increase in the total number of persons living in the District.

	DC Population 2010	Estimated DC Population*, 2013	Percent Change
	N	N	%
Sex			
Male	285,786	306,250	7.2
Female	319,126	340,199	6.6
Total	604,912	646,449	6.9
Race/Ethnicity			
White	211,121	231,281	9.5
Black	303,731	309,869	2.0
Hispanic	55,266	65,560	18.6
Other*	34,794	39,739	14.2
Total	604,912	646,449	4.5
Current Age			
<13	73,919	86,101	16.5
13-19	50,090	47,555	-5.1
20-29	134,520	135,898	1.0
30-39	98,546	116,906	18.6
40-49	76,478	79,710	4.2
50-59	72,098	74,792	3.7
≥60	99,261	105,487	6.3
Total	604,912	646,449	6.9

+Source: 2010 US Census

++Source: 2012 US Census Estimates

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

The composition of District residents also changed by race/ethnicity, and age. The number of Hispanics living in the District increased by 18.6% and the number of those classified as other race increased by 14.2%. The percent change among blacks was negligible at 2.0%. In addition, the population between 0 and 12 years of age increased by 16.5%, while the population between 13 and 19 years of age decreased by 5.1%. It is also important to note that the population between 30 and 39 years of age increased by 18.6%.

Understanding the HIV Incidence Estimate

The 2014 HIV incidence estimate provides an estimated number of new infections of HIV occurring each year among DC residents during the five year span from 2009-2013. The estimate takes into consideration the probability of being newly infected within the entire population at risk, thus including cases that are not yet diagnosed. For this reason, the incidence estimate should not be compared with the annual new diagnoses reported in the Annual Epidemiology and Surveillance Report. The objective of reducing new infections tackles the leading edge of the epidemic by reducing transmissions as well as determining where and among whom new infections are occurring. This insight can inform prevention strategies and allow for more effective resource allocation to best address the HIV epidemic in DC.

Understanding Sexually Transmitted Disease (STD) Surveillance

Currently, chlamydia, gonorrhea, and syphilis are the only STDs for which surveillance data are 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 department of health.

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 2013, only 25 (0.4%) cases of reported chlamydia had "unknown" sex but 2,807 (42.2%) cases had "unknown" race.

Data on race and ethnicity are reported separately and 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, reported totals by demographic factors such as race and ethnicity represent estimates and should be interpreted with caution.

In addition, unlike HIV surveillance, STD surveillance is based on incident (new) infections. Some individuals may be diagnosed multiple times with the same STD, or with different types of STDs at the same 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.

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, and medical institutions such as hospitals, and laboratories. Hepatitis cases are primarily reported to the DOH by laboratory reports, however, they are also identified through reports from health care providers, hospitals, clinics and reports from other health departments. In some instances, the DOH requires additional information to classify a case, therefore hepatitis program investigators contact providers and patients to obtain more complete information. 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 includes basic demographic data, diagnosis and event/illness onset dates, when available. 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 include a complete series of labs. A probable case of chronic hepatitis B or C is a combination of reported lab results that are an incomplete series and don’t include all results necessary to confirm a diagnosis. A suspect case of chronic hepatitis C includes 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 to 30% of initial reports of persons with suspicious clinical or laboratory findings will be verified as TB by laboratory confirmation or clinical case definition. Receiving initial reports allows HAHSTA to begin immediate medical and epidemiological follow-up on suspect cases; this is done to interrupt potential disease transmission while the person waits for final results, which could take as long as eight weeks.

Understanding Geographic Mapping

The District is divided into eight geopolitical areas called “wards.” Availability of ward data varies by disease. Where these data were not available, cases were excluded in the maps. When calculating rates by ward, the base population used is the District population from the 2013 US Census. Ward of residence represents where the person resided at the time of diagnosis, not necessarily location of infection.

Appendix B. Supplementary Tables and Figures

Table B1. HIV Cases Diagnosed in the District of Columbia and Living by Race/Ethnicity, Sex, and Mode of Transmission, District of Columbia, 2013

	White		Black		Hispanic		Other*		Total	
	N	%	N	%	N	%	N	%	N	%
Sex										
Male	2,648	95.8	8,157	66.7	886	85.2	317	83.2	12,008	73.1
Female	116	4.2	4,081	33.3	154	14.8	64	16.8	4,415	26.9
Total	2,764	100.0	12,238	100.0	1,040	100.0	381	100.0	16,423	100.0
Mode of Transmission										
MSM	2,236	80.9	3,892	31.8	613	58.9	197	51.7	6,938	42.2
IDU	67	2.4	1,995	16.3	58	5.6	34	8.9	2,154	13.1
MSM/IDU	88	3.2	408	3.3	31	3.0	17	4.5	544	3.3
Heterosexual contact	124	4.5	4,208	34.4	231	22.2	66	17.3	4,629	28.2
Risk not identified	245	8.9	1,554	12.7	99	9.5	65	17.1	1,963	12.0
Other**	4	0.1	181	1.5	8	0.8	2	0.5	195	1.2
Total	2,764	100.0	12,238	100.0	1,040	100.0	381	100.0	16,423	100.0
Male										
MSM	2,236	84.4	3,892	47.7	613	69.2	197	62.1	6,938	57.8
IDU	39	1.5	1,174	14.4	38	4.3	18	5.7	1,269	10.6
MSM/IDU	88	3.3	408	5.0	31	3.5	17	5.4	544	4.5
Heterosexual contact	57	2.2	1,616	19.8	118	13.3	27	8.5	1,818	15.1
Risk not identified	225	8.5	988	12.1	82	9.3	57	18.0	1,352	11.3
Other**	3	0.1	79	1.0	4	0.5	1	0.3	317	2.6
Subtotal	2,648	100.0	8,157	100.0	886	100.0	317	100.0	12,008	100.0
Female										
IDU	28	24.1	821	20.1	20	13.0	16	25.0	885	20.0
Heterosexual contact	67	57.8	2,592	63.5	113	73.4	39	60.9	2,811	63.7
Risk not identified	20	17.2	566	13.9	17	11.0	8	12.5	611	13.8

Other**	1	0.9	102	2.5	4	2.6	1	1.6	108	2.4
Subtotal	116	100.0	4,081	100.0	154	100.0	64	100.0	4,415	100.0

Table B2. HIV Cases Diagnosed in the District of Columbia and Living by Race/Ethnicity, Age at Diagnosis, and Current Age, District of Columbia, 2013

	White		Black		Hispanic		Other*		Total	
	N	%	N	%	N	%	N	%	N	%
Age at Diagnosis										
<13	1	0.0	170	1.4	6	0.6	2	0.5	179	1.1
13-19	25	0.9	495	4.0	26	2.5	13	3.4	559	3.4
20-29	642	23.2	3,136	25.6	352	33.8	81	21.3	4,211	25.6
30-39	1,096	39.7	3,824	31.2	357	34.3	129	33.9	5,406	32.9
40-49	707	25.6	3,097	25.3	199	19.1	104	27.3	4,107	25.0
50-59	247	8.9	1,204	9.8	82	7.9	39	10.2	1,572	9.6
≥60	46	1.7	312	2.5	18	1.7	13	3.4	389	2.4
Total	2,764	100.0	12,238	100.0	1,040	100.0	381	100.0	16,423	100.0
Current Age										
<13	0	0.0	36	0.3	1	0.1	0	0.0	37	0.2
13-19	0	0.0	92	0.8	2	0.2	1	0.3	95	0.6
20-29	96	3.5	1,203	9.8	104	10.0	32	8.4	1,435	8.7
30-39	414	15.0	2,042	16.7	253	24.3	65	17.1	2,774	16.9
40-49	867	31.4	3,441	28.1	358	34.4	121	31.8	4,787	29.1
50-59	928	33.6	3,749	30.6	216	20.8	110	28.9	5,003	30.5
≥60	459	16.6	1,675	13.7	106	10.2	52	13.6	2,292	14.0
Total	2,764	100.0	12,238	100.0	1,040	100.0	381	100.0	16,423	100.0

Table B3. Newly Diagnosed HIV Cases by Year of Diagnosis, Sex, Race/Ethnicity, Mode of Transmission, and Age at

Diagnosis, District of Columbia, 2009-2013

	2009		2010		2011		2012		2013		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Sex												
Males	645	70.4	641	72.1	545	73.9	503	74.2	419	75.8	2,753	73
Females	271	29.6	248	27.9	193	26.1	175	25.8	134	24.2	1,020	27
Total	916	100.0	889	100.0	738	100.0	678	100.0	553	100.0	3,774	100.0
Race/Ethnicity												
White	114	12.5	109	12.3	106	14.4	101	14.9	79	14.3	509	13.5
Black	718	78.4	688	77.4	549	74.4	489	72.1	412	74.5	2,856	75.7
Hispanic	57	6.2	63	7.1	57	7.7	59	8.7	47	8.5	283	7.5
Other	27	3	29	3.3	26	3.5	29	4.3	15	2.7	126	3.34
Total	916	100.0	889	100.0	738	100.0	678	100.0	553	100.0	3,774	100.0
Mode of Transmission												
MSM	320	34.9	344	38.7	300	40.7	318	46.9	252	45.6	1,534	40.7
IDU	70	7.6	45	5.1	31	4.2	20	3	19	3.4	185	4.9
MSM/IDU	14	1.5	17	1.9	15	2	13	1.9	12	2.2	71	1.9
Heterosexual Contact	304	33.2	290	32.6	252	34.2	214	31.6	176	31.8	1,236	32.8
Risk Not Identified	205	22.4	190	21.4	137	18.6	108	15.9	93	16.8	733	19.4
Other**	3	0.3	3	0.3	3	0.4	5	0.7	1	0.2	15	0.4
Total	916	100.0	889	100.0	738	100.0	678	100.0	553	100.0	3,774	100.0
Age at Diagnosis												
<13	3	0.3	3	0.3	2	0.3	5	0.7	0	0	0	0.3
13-19	32	3.5	29	3.3	29	3.9	31	4.6	19	3.4	140	3.7
20-29	213	23.3	258	29	215	29.1	202	29.8	186	33.6	1,074	28.46
30-39	216	23.6	214	24.1	145	19.7	168	24.8	133	24.1	876	23.2
40-49	251	27.4	213	24	174	23.6	134	19.8	110	19.9	882	23.4

50-59	154	16.8	126	14.2	128	17.3	93	13.7	72	13	573	15.2
60+	47	5.1	46	5.1	45	6.1	45	6.7	33	6	216	5.7
Total	916	100.0	889	100.0	738	100.0	678	100.0	553	100.0	3,774	100.0

Table B4. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis, Sex, Race/Ethnicity, Age at Diagnosis, and Mode of Transmission, District of Columbia, 2009-2013

	2009		2010		2011		2012		2013		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Sex												
Males	377	68.7	352	68.5	303	75.6	266	67.7	205	69.3	1,503	69.8
Females	172	31.3	162	31.5	98	24.4	127	32.3	91	30.7	650	30.2
Total	549	100.0	514	100.0	401	100.0	393	100.0	296	100.0	2,153	100.0
Race/Ethnicity												
1 White	53	9.7	41	8	52	13	27	6.9	31	10.5	204	9.5
2 Black	448	81.6	424	82.5	316	78.8	320	81.4	243	82.1	1,751	81.3
3 Hispanic	29	5.3	30	5.8	27	6.7	29	7.4	17	5.7	132	6.1
4 Other*	19	3.5	19	3.7	6	1.5	17	4.3	5	1.7	66	3.1
Total	549	100.0	514	100.0	401	100.0	393	100.0	296	100.0	2,153	100.0
Age at Diagnosis												
<13	2	0.4	1	0.2	2	0.5	2	0.5	2	0.7	9	0.4
13-19	11	2	8	1.6	7	1.8	6	1.5	4	1.4	36	1.7
20-29	92	16.8	95	18.5	79	19.7	61	15.5	70	23.7	397	18.4
30-39	134	24.4	119	23.1	93	23.2	100	25.5	65	22	511	23.7
40-49	170	30.1	144	28	117	29.2	98	29.9	65	22	594	27.6
50-59	103	18.8	110	21.4	75	18.7	86	21.9	57	19.3	431	20
60+	37	6.7	37	7.2	28	7	40	10.2	33	11.2	175	8.1
Total	549	100.0	514	100.0	401	100.0	393	100.0	296	100.0	2,153	100.0
Mode of Transmission												

MSM	168	30.6	163	31.7	151	37.7	128	32.6	100	33.8	710	33
IDU	45	8.2	45	8.8	31	7.7	34	8.7	19	6.4	174	8.1
MSM/IDU	13	2.4	13	2.5	9	2.2	11	2.8	7	2.4	53	2.5
Heterosexual contact	185	33.7	167	32.5	125	31.2	144	36.6	117	39.5	738	34.3
Risk not identified	133	24.2	122	23.7	79	19.7	72	18.3	45	15.2	451	21
Other**	5	0.9	4	0.8	6	1.5	4	1	8	2.7	27	1.25
Total	549	100.0	514	100.0	401	100.0	393	100.0	296	100.0	2,153	100.0

Table B5. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis, Sex, and Mode of Transmission, District of Columbia, 2009-2013

	2009		2010		2011		2012		2013		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Male												
MSM	168	30.6	163	31.7	151	37.7	128	32.6	100	33.8	710	33
IDU	29	5.3	19	3.7	22	5.5	21	5.3	11	3.7	102	4.7
MSM/IDU	13	2.4	13	2.5	9	2.2	11	2.8	7	2.4	53	2.5
Heterosexual contact	81	14.7	72	14	62	15.5	59	15	56	19	330	15.3
Risk not identified	84	15.3	81	15.8	56	14	46	11.7	30	10.1	297	13.8
Other*	2	0.4	4	0.8	3	0.7	1	0.3	1	0.3	11	0.5
Subtotal	377	68.7	352	68.5	303	75.6	266	67.7	205	69.3	1503	69.8
Female												
IDU	16	2.9	26	5.1	9	2.2	13	3.3	8	2.7	72	3.3
Heterosexual contact	104	19.9	95	18.5	63	15.7	85	21.6	61	20.6	408	19
Risk not identified	49	8.9	41	8	23	5.7	26	6.6	15	5.1	154	7.2

Other*	3	0.5	0	0	3	0.7	3	0.8	7	2.4	16	0.7
Subtotal	172	31.3	162	31.5	98	24.4	127	32.3	91	30.7	650	30.2

Table B6. Deaths among Persons with HIV by Year of Death, Sex, Race/Ethnicity, Mode of Transmission and Age at Death, District of Columbia, 2009-2013

	2009		2010		2011		2012		2013		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Sex												
Male	217	70.5	165	61.6	209	69.2	206	66.9	119	68.4	916	67.4
Female	91	29.5	103	38.4	93	30.8	102	33.1	55	31.6	444	32.6
Total	308	100.0	268	100.0	302	100.0	308	100.0	174	100.0	1,360	100.0
Race/Ethnicity												
White	22	7.1	13	4.9	14	4.6	17	5.5	11	6.3	77	5.7
Black	273	88.6	195	72.8	272	90.1	271	88.0	158	90.8	1,169	86.0
Hispanic	5	1.6	10	3.7	7	2.3	14	4.5	3	1.7	39	2.9
Other*	8	2.6	50	18.7	9	3.0	6	1.9	2	1.1	75	5.5
Total	308	100.0	268	100.0	302	100.0	308	100.0	174	100.0	1,360	100.0
Mode of Transmission												
MSM	72	23.4	61	22.8	64	21.2	84	27.3	40	23.0	321	23.6
IDU	91	29.5	75	28.0	81	26.8	73	23.7	45	25.9	365	26.8
MSM/IDU	14	4.5	10	3.7	10	3.3	13	4.2	8	4.6	55	4.0
Heterosexual contact	70	22.7	73	27.2	83	27.5	86	27.9	53	30.5	365	26.8
Risk not identified	60	19.5	47	17.5	58	19.2	48	15.6	27	15.5	240	17.6
Other**	1	0.3	2	0.7	6	2.0	4	1.3	1	0.6	14	1.0
Total	308	100.0	268	100.0	302	100.0	308	100.0	174	100.0	1,360	100.0
Age at Death												
<13	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13-19	0	0.0	1	0.4	0	0.0	1	0.3	0	0.0	2	0.1
20-29	13	4.2	8	3.0	14	4.6	8	2.6	9	5.2	52	3.8
30-39	33	10.7	30	11.2	25	8.3	27	8.8	11	6.3	126	9.3

40-49	94	30.5	74	27.6	69	22.8	77	25.0	31	17.8	345	25.4
50-59	120	39.0	105	39.2	114	37.7	97	31.5	71	40.8	507	37.3
≥60	48	15.6	50	18.7	80	26.5	98	31.8	52	29.9	328	24.1
Total	308	100.0	268	100.0	302	100.0	308	100.0	174	100.0	1,360	100.0

Table B7. Deaths among Persons with HIV by Race/Ethnicity, Sex, Mode of Transmission and Age at Death, District of Columbia, 2009-2013

	White		Black		Hispanic		Other*		Total		
	N	%	N	%	N	%	N	%	N	%	
Sex											
Male	71	92.2	772	66.0	29	74.4	44	58.7	916	67.4	
Female	6	7.8	397	34.0	10	25.6	31	41.3	444	32.6	
Total	77	100.0	1,169	100.0	39	100.0	75	100.0	1,360	100.0	
Mode of Transmission											
MSM	56	72.7	232	19.8	11	28.2	22	29.3	321	23.6	
IDU	2	2.6	334	28.6	11	28.2	18	24.0	365	26.8	
MSM/IDU	1	1.3	52	4.4	1	2.6	1	1.3	55	4.0	
Heterosexual contact	6	7.8	330	28.2	9	23.1	20	26.7	365	26.8	
Risk not identified	12	15.6	209	17.9	5	12.8	14	18.7	240	17.6	
Other**	-	0.0	12	1.0	2	5.1	0	0.0	14	1.0	
Total	77	100.0	1,169	100.0	39	100.0	75	100.0	1,360	100.0	
Age at Death											
<13	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	
13-19	0	0.0	2	0.7	0	0.0	0	0.0	2	0.1	
20-29	2	2.6	47	17.5	3	1.0	0	0.0	52	3.8	
30-39	8	10.4	105	39.2	7	2.3	6	1.9	126	9.3	
40-49	22	28.6	286	106.7	12	4.0	25	8.1	345	25.4	
50-59	21	27.3	447	166.8	9	3.0	30	9.7	507	37.3	
≥60	24	31.2	282	105.2	8	2.6	14	4.5	328	24.1	
Total	77	100.0	1,169	100.0	39	100.0	75	100.0	1,360	100.0	

Table B8. Estimated Number of New HIV Infections by Sex, Race/Ethnicity, Age at Diagnosis, and Mode of Transmission, District of Columbia, 2009-2013[†]

	2009 Estimate (%) (95% CI)	2010 Estimate (%) (95% CI)	2011 Estimate (%) (95% CI)	2012 Estimate (%) (95% CI)	2013 Estimate (%) (95% CI)
Sex					
Male	367 (58.7%) (290-526)	426 (64.9%) (253-599)	406 (70.9%) (215-597)	372 (77.8%) (202-542)	391 (65.9%) (212-570)
Female	258 (41.3%) (44-472)	230 (35.1%) (96-365)	167 (29.1%) (36-298)	106 (22.2%) (25-187)	203 (34.2%) (39-366)
Total	625 (341-910)	656 (449-863)	573 (343-803)	478 (290-666)	593 (353-834)
Race/Ethnicity					
White	-- --	-- --	-- --	-- --	-- --
Black	451 (72.2%) (190-712)	469 (71.5%) (293-664)	404 (70.5%) (219-588)	330 (69.0%) (185-476)	434 (73.2%) (227-641)
Other*	-- --	-- --	-- --	-- --	-- --
Total	625 (341-910)	656 (449-863)	573 (343-803)	478 (290-666)	593 (353-834)
Age					
13-29	201 (32.2%) (76-327)	285 (43.4%) (160-410)	254 (44.3%) (121-387)	233 (48.7%) (115-350)	282 (47.6%) (131-434)
30-49	327 (52.3%) (160-493)	271 (41.3%) (154-387)	225 (39.3%) (98-352)	178 (37.2%) (78-277)	229 (38.6%) (92-366)
>=50	-- --	100 (15.2%) (31-169)	-- --	-- --	-- --
Total	625 (341-910)	656 (449-863)	573 (343-803)	478 (290-666)	593 (353-834)
Transmission Category					

MSM	--	280 (42.7%)	267 (46.6%)	274 (57.3%)	296 (49.9%)
	--	(151-410)	(123-410)	(144-404)	(154-437)
Heterosexual Contact	229 (36.6%)	225 (34.3%)	182 (31.8%)	131 (27.4%)	171 (28.8%)
	(49-409)	(107-342)	(59-306)	(45-216)	(34-307)
Other**	--	--	--	--	--
	--	--	--	--	--
Risk Not Identified	--	104 (15.9%)	--	--	--
	--	(34-174)	--	--	--
Total	625	656	573	478	593
	(341-910)	(449-863)	(343-803)	(290-666)	(353-834)

†strata with insufficient quantities will not have values reported

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

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

Table B9. Number, Percent, and Rate per 100,000 persons of Chlamydia Cases by Year of Diagnosis, Sex, Race/Ethnicity, Age, and Ward, District of Columbia, 2009-2013

	2009			2010			2011			2012			2013			5 Years Total	%
	N	%	Rate per 100,000	N	%	Rate per 100,000	N	%	Rate per 100,000	N	%	Rate per 100,000	N	%	Rate per 100,000		
Gender																	
Female	4,127	63.3	1,306.4	3,783	67.9	1,185.2	4,552	65.0	1,394.5	4,619	64.0	1,384.0	4,134	62.2	1,215.2	21,215	64.4
Male	2,390	36.6	841.3	1,774	31.8	620.4	2,452	35.0	836.3	2,559	35.5	853.9	2,488	37.4	812.4	11,663	35.4
Unknown	7	0.1		14	0.3		3	0.0		37	0.5		25	0.4		86	0.3
Total	6,524	100.0	1,087.4	5,571	100.0	920.6	7,007	100.0	1,130.8	7,215	100.0	1,139.0	6,647	100.0	1,028.2	32,964	100.0
Race																	
Black	4,592	70.4	1,455.5	3,703	66.5	1,224.2	4,530	64.6	1,487.1	4,221	58.5	1,375.9	3,372	50.7	1,088.2	20,418	61.9
White	137	2.1	68.1	154	2.8	72.7	184	2.6	84.0	217	3.0	96.1	244	3.7	105.5	936	2.8
Hispanic	151	2.3	280.3	135	2.4	241.8	185	2.6	310.2	167	2.3	266.2	132	2.0	201.3	770	2.3
Other	77	1.2	262.2	94	1.7	269.7	86	1.2	236.4	81	1.1	213.1	92	1.4	231.5	430	1.3
Unknown	1,567	24.0		1,485	26.7		2,022	28.9		2,529	35.1		2,807	42.2		10,410	31.6
Total	6,524	100.0	1,087.4	5,571	100.0	920.6	7,007	100.0	1,130.8	7,215	100.0	1,139.0	6,647	100.0	1,028.2	32,964	100.0
Age Group																	
0-14	136	2.1	140.2	113	2.0	133.8	155	2.2	176.7	148	2.1	160.9	125	1.9	130.1	677	2.1
15-19	2,618	40.1	6,328.0	2,348	42.1	5,903.7	2,710	38.7	6,932.2	2,503	34.7	6,504.0	2,047	30.8	5,448.2	12,226	37.1
20-24	1,950	29.9	3,864.0	1,627	29.2	2,565.1	2,242	32.0	3,662.7	2,455	34.0	4,118.4	2,265	34.1	3,852.0	10,539	32.0
25-29	874	13.4	1,427.4	709	12.7	1,005.2	957	13.7	1,291.5	1,006	13.9	1,319.7	1,031	15.5	1,337.3	4,577	13.9
30-39	636	9.7	657.7	501	9.0	504.0	640	9.1	610.5	725	10.0	654.8	800	12.0	684.3	3,302	10.0
>=40	302	4.6	119.3	264	4.7	106.6	292	4.2	115.6	369	5.1	143.9	365	5.5	140.4	1,592	4.8
Unknown	8	0.1		9	0.2		11	0.2		9	0.1		14	0.2	2.3	51	0.2

Total	6,524	100.0	1,087.4	5,571	100.0	920.6	7,007	100.0	1,130.8	7,215	100.0	1,139.0	6,647	100.0	1,028.2	32,964	100.0
By Ward\$																	
Ward 1	447	6.9	627.8	418	7.5	548.6	593	8.5	785.9	522	7.2	688.5	327	4.9	413.2	2,307	7.0
Ward 2	254	3.9	368.9	178	3.2	222.7	229	3.3	298.1	275	3.8	365.8	194	2.9	258.0	1,130	3.4
Ward 3	71	1.1	92.6	66	1.2	85.5	75	1.1	97.0	82	1.1	101.8	61	0.9	75.7	355	1.1
Ward 4	435	6.7	565.5	379	6.8	500.2	464	6.6	608.9	456	6.3	593.4	268	4.0	338.8	2,002	6.1
Ward 5	832	12.8	1,114.2	739	13.3	994.5	951	13.6	1,276.0	920	12.8	1,219.0	529	8.0	666.7	3,970	12.0
Ward 6	487	7.5	651.2	402	7.2	541.0	536	7.6	702.6	510	7.1	644.6	279	4.2	332.9	2,214	6.7
Ward 7	1,134	17.4	1,555.2	983	17.6	1,383.2	1,423	20.3	2,069.3	1,222	16.9	1,796.1	951	14.3	1,445.8	5,713	17.3
Ward 8	1,473	22.6	2,034.7	1,285	23.1	1,817.2	1,664	23.7	2,427.5	1,568	21.7	2,090.4	897	13.5	1,173.4	6,887	20.9
Unknown	833	12.8		962	17.3		1,046	14.9		1,653	22.9		3,132	47.1		7,626	23.1
Detention		8.6			2.9			0.4					9	0.1			2.3
Center	558			160			26			7	0.1					760	
Total	6,524	100.0	1,087.4	5,571	100.0	920.6	7,007	100.0	1,130.8	7,215	100.0	1,139.0	6,647	100.0	1,028.2	32,964	100.0

Table B10. Number, Percent, and Rate per 100,000 persons of Gonorrhea Cases by Year of Diagnosis, Sex, Race/Ethnicity, Age, and Ward, District of Columbia, 2009-2013

	2009		2010		2011		2012		2013		5 Years Total	5 Years Average Rate per 100,000
	N	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000		
Gender												
Female	1,224	387.5	1,072	335.9	1,262	386.6	1,045	313.1	999	293.7	5,602	343.3
Male	1,330	468.2	1,019	356.4	1,485	506.5	1,502	501.2	1,621	529.3	6,957	472.3
Unknown	0		2		1		10		6		19	-
Total	2,554	425.7	2,093	345.9	2,748	443.5	2,557	403.7	2,626	414.6	12,578	406.7
RACE												
Black	2,007	636.1	1,470	486.0	1,814	595.5	1,521	495.8	1,380	445.3	8,192	531.7
White	113	56.2	121	57.1	116	54.7	138	61.1	153	67.7	641	59.4
Hispanic	50	92.8	40	71.6	46	82.4	48	76.5	63	100.4	247	84.8
Other	27	91.9	42	120.5	40	114.8	39	102.6	41	107.9	189	107.5
Unknown	357		420		732		811		989		3,309	
Total	2,554	425.7	2,093	345.9	2,748	443.5	2,557	403.7	2,626	414.6	12,578	406.7
Age Group												
0-14	46	47.4	42	49.7	50	52.0	48	52.2	38	39.5	224	48.2
15-19	857	2,071.4	746	1,875.7	866	2,304.9	674	1,751.4	574	1,527.7	3,717	1,906.2
20-24	733	1,452.5	580	914.4	844	1,435.4	793	1,330.3	840	1,428.6	3,790	1,312.2
25-29	363	592.8	313	443.8	435	564.2	429	562.8	468	607.0	2,008	554.1
30-39	322	333.0	247	248.5	322	275.4	371	335.1	413	353.3	1,675	309.0
>=40	228	90.1	161	65.0	229	88.1	240	93.6	287	110.4	1,145	89.4
Unknown	5		4		2		2		6		19	
Total	2,554	425.7	2,093	345.9	2,748	443.5	2,557	403.7	2,626	414.6	12,578	406.7
By Ward												
Ward 1	186	261.2	160	210.0	206	273.0	220	290.2	172	217.3	944	250.3
Ward 2	141	204.8	122	152.7	120	156.2	149	198.2	140	186.2	672	179.6

Ward 3	22	28.7	14	18.1	23	29.7	18	22.3	14	17.4	91	23.3
Ward 4	158	205.4	107	141.2	136	178.5	127	165.3	95	120.1	623	162.1
Ward 5	332	444.6	263	353.9	346	464.3	323	428.0	200	252.1	1,464	388.6
Ward 6	213	284.8	183	246.3	224	293.6	187	236.4	122	145.5	929	241.3
Ward 7	488	669.2	388	546.0	553	804.2	400	587.9	350	532.1	2,179	627.9
Ward 8	646	892.4	534	755.2	658	959.9	528	703.9	353	461.8	2,719	754.6
Detention Center	136		44		15		11		8		214	
Unknown	232		278		467		594		1,172		2,743	
Total	2,554	425.7	2,093	345.9	2,748	443.5	2,557	403.7	2626	414.6	12,578	406.7

Table B11. Number, Percent, and Rate per 100,000 persons of Primary and Secondary Syphilis Cases by Year of Diagnosis, Sex, Race/Ethnicity, Age, and Ward, District of Columbia, 2009-2013

	2009		2010		2011		2012		2013		Total	
	N	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000	5 Years Total	5 years average Rate per 100,000
Type												
Primary	29	4.8	30	5.0	40	6.5	38	6.0	45	7.0	182	5.8
Secondary	123	20.5	108	17.8	137	22.1	123	19.4	109	16.9	600	19.3
Total	152	25.3	138	22.8	177	28.6	161	25.4	154	23.8	782	25.2
Gender												
Female	7	2.2	3	0.9	7	2.1	5	1.5	20	5.9	42	2.5
Male	145	51.0	135	47.2	170	58.0	156	52.1	134	43.8	740	50.4
Total	152	25.3	138	22.8	177	28.6	161	25.4	154	23.8	782	25.2
Race												
Black	83	26.3	81	26.8	109	35.8	87	28.4	98	31.6	458	29.8
White	46	22.9	41	19.3	47	21.5	56	24.8	35	15.1	225	20.7

Hispanic	14	26.0	11	19.7	16	26.8	11	17.5	5	7.6	57	19.5
Other	5	17.0	4	11.5	1	2.7	6	15.8	6	15.1	22	12.4
Unknown	4		1		4		1		10		20	
Total	152	25.3	138	22.8	177	28.6	161	25.4	154	23.8	782	25.2
Age Group												
15-19	8	19.3	9	22.6	10	25.6	6	15.6	3	8.0	36	18.2
20-24	23	45.6	19	30.0	30	49.0	27	45.3	25	42.5	124	42.5
25-29	29	47.4	22	31.2	35	47.2	31	40.7	20	25.9	137	38.5
30-39	49	50.7	40	40.2	43	41.0	50	45.2	48	41.1	230	43.6
>=40	43	17.0	48	19.4	59	23.4	47	18.3	58	22.3	255	20.1
Total	152	25.3	138	22.8	177	28.6	161	25.4	154	23.8	782	25.2
By Ward*												
Ward 1	35	49.2	29	38.1	25	33.1	18	23.7	11	13.9	118	31.6
Ward 2	31	45.0	23	28.8	27	35.1	39	51.9	22	29.3	142	38.0
Ward 3	3	3.9	0	0.0	5	6.5	4	5.0	2	2.5	14	3.6
Ward 4	10	13.0	9	11.9	15	19.7	9	11.7	16	20.2	59	15.3
Ward 5	16	21.4	20	26.9	22	29.5	19	25.2	26	32.8	103	27.2
Ward 6	19	25.4	14	18.8	16	21.0	29	36.7	10	11.9	88	22.8
Ward 7	14	19.2	21	29.5	36	52.3	17	25.0	18	27.4	106	30.7
Ward 8	22	30.4	16	22.6	23	33.6	11	14.7	20	26.2	92	25.5
Detention Center	0		0		0		0		0		0	
Ward Unknown	2		6		8		15		29		60	
Total	152	25.3	138	22.8	177	28.6	161	25.4	154	23.8	782	25.2

Table B12. Reported Tuberculosis Cases by Selected Characteristics, District of Columbia, 2009-2013

	2009		2010		2011		2012		2013		Total	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
District Total	41	7.7	42	7.2	55	8.9	37	5.9	37	5.7	212	N/A
	N	%	N	%	N	%	N	%	N	%	N	%
US Born vs. Foreign Born												
Foreign Born	19	46.4	26	61.9	30	55.5	20	54.1	25	67.6	120	56.6
US Born-Black	16	39	16	38.1	23	41.8	15	40.5	10	27	80	37.7
US Born- All Other Races												
	6	14.6	0	0	2	3.6	2	5.4	2	5.4	12	5.7
Total	41	100.0	42	100.0	55	100.0	37	100.0	37	100.0	212	100.0
Disease Site												
Pulmonary	28	68.3	27	64.3	37	67.2	20	54.1	23	62.2	135	63.7
Extra Pulmonary	9	21.9	13	30.9	14	25.5	11	29.7	10	37	57	26.9
Both	4	9.8	2	4.8	4	7.3	6	16.2	4	10.8	20	9.4
Total	41	100.0	42	100.0	55	100.0	37	100.0	37	100.0	212	100.0
Sex												
Males	17	41.5	21	50.0	33	60.0	17	45.9	25	67.6	113	53.3
Females	24	58.5	21	50.0	22	40.0	20	54.1	12	32.4	99	46.7
Total	41	100.0	42	100.0	55	100.0	37	100.0	37	100.0	212	100.0
Age												
<5	1	2.4	1	2.4	1	1.8	1	2.7	3	8.1	7	3.3
5 - 14	0		1	2.4	0		1	2.7	1	2.7	3	1.4
15 - 24	4	9.8	4	9.5	9	16.4	4	10.8	3	8.1	24	11.3
25 - 44	14	34.1	15	41.9	17	30.9	15	40.6	17	46	78	36.8
45 - 64	14	34.1	13	27.9	18	32.7	11	29.7	9	24.3	65	30.7
≥65	8	19.5	8	20.9	10	18.2	5	13.5	4	10.8	35	16.5
Total	41	100.0	42	100.0	55	100.0	37	100.0	37	100.0	212	100.0
Race/Ethnicity												

Black	27	65.8	28	66.7	38	69.1	31	83.8	28	75.7	152	71.7
White	4	9.8	7	16.7	1	1.8	0		3	8.1	15	7.1
Hispanic	7	17.1	2	4.8	8	14.5	4	10.8	3	8.1	24	11.3
Other	3	7.3	5	11.9	8	14.5	2	5.4	3	8.1	21	9.9
Total	41	100.0	42	100.0	55	100.0	37	100.0	37	100.0	212	100.0
Homeless w/in past year												
Total	2	4.9	4	9.5	3	5.5	2	5.4	1	2.7	30	14.2
Alcohol/Substance Use												
Total	14	34.1	7	16.7	8	14.5	5	13.5	1	2.7	35	16.5
HIV Co-infection												
Total	10	24.4	1	2.4	9	16.4	8	21.6	6	16.2	34	16.1