

Annual Epidemiology & Surveillance Report

Hepatitis

Surveillance Data Through December 2015



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





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Executive Summary

The Annual Epidemiology and Surveillance Report for the District of Columbia shows the District continues to make progress on addressing the epidemics of HIV, Sexually Transmitted Diseases (STDs), Hepatitis, and Tuberculosis (TB). The Department of Health (DOH) reports that the number of new HIV cases decreased for the eighth consecutive year. The District also made some encouraging inroads with STDs and maintained its goal of eliminating TB. The District increased its diagnoses of persons with hepatitis C, which improves the chances that residents will be able to access new treatment to cure the disease.

Last year, Mayor Bowser announced that the DOH in a public-private partnership with the DC Appleseed Center and Washington AIDS Partnership would develop a plan to achieve a goal of reducing new HIV diagnoses in half by the year 2020. To reach and surpass that goal, the DOH aims to provide more timely data on the state of the epidemic. The DOH was successful in accelerating its processing and analysis of data to provide in this report the most up to date statistics on the state of the epidemic through the year 2015.

While this report presents promising direction, the District maintains significant rates of HIV, STDs, hepatitis and TB. Health disparities also remain a significant feature of the epidemics in the District. In particular, blacks are disproportionately impacted by HIV, chlamydia, and gonorrhea; black gay or bisexual men and black women have the highest rates of new HIV diagnoses; and adolescents and young people have a higher burden of chlamydia and gonorrhea than adults.

New In this Report

Persons with HIV Currently Living in DC: For the District to deploy strategies to improve health outcomes for persons living with HIV along the care continuum – maintaining treatment and achieving viral load suppression – and to measure their effectiveness, the District requires the actual number and demographics of persons currently living in DC. Previously, DOH used the cumulative number of all persons diagnosed in the District. In this year's report, DOH analyzed case and lab test reports to calculate the number of persons with HIV with a current address in the District. This number will represent a truer prevalence rate of HIV.

Transgender Persons: In the *Interim HIV/AIDS Surveillance Report* released in January 2016, the DOH reported new HIV cases among transgender persons. This report will provide reports of HIV, STDs, and hepatitis among transgender persons.

HIV transmission: DOH continues its change in the categorization of HIV transmission included in the Interim HIV/AIDS Surveillance Report of known behavioral transmissions by general sexual contact and/or Injection Drug Use (IDU) categories. This approach affirms inclusivity across gender and types of sexual intercourse, acknowledging the diversity in gender identity among District residents. DOH hopes this data reporting will reduce stigmatization on sexual contact and prevent the misclassification of transgender cases. The report will continue the Centers for Disease Control and Prevention (CDC) defined sexual modes of transmission for men and women. For transgender persons, it will utilize general sexual contact and IDU modes of transmission categories.

Epidemiological Summary

Key points in this surveillance update of the District epidemics in the year 2015 include:

- 13,391 current residents of the District of Columbia or 2.0% of the population are living with HIV. The estimated prevalence rate of 2% exceeds the World Health Organization definition of 1% as a generalized epidemic.
- The number of newly diagnosed HIV cases in the District decreased to 371 cases in 2015, a decline of 48% from 720 cases in 2011 and 72% from 1,333 cases in 2007.
- There were no babies born with HIV in 2015. There have been no babies born with HIV in the District since 2012.
- The number of newly diagnosed HIV cases attributable to injection drug use decreased by 95% from 149 cases in 2007, prior to the scale up of DC's needle exchange program, to 8 cases in 2015.
- Blacks and Hispanics with HIV exceed 1% of their respective populations, with blacks disproportionately impacted at 3.2%.
- Men who have sex with men and heterosexual contact are the two leading transmission modes reported among newly diagnosed and identified HIV cases.
- The majority of persons diagnosed with HIV at stage 3 initially improved significantly to stages 1 or 2 within 12 months.
- There were reports of 7,702 cases of chlamydia, 2,577 cases of gonorrhea and 108 cases of primary and secondary syphilis reported in 2015.
- There was a 50% decrease in gonorrhea cases among persons ages 15 to 19 years old from 873 cases in 2011 to 437 in 2015.
- There was a 49% decrease in syphilis cases from 211 in 2011 to 108 in 2015.
- There are 18,009 persons diagnosed and reported with hepatitis C.
- There was a 40% decrease in new TB cases from 55 in 2011 to 33 in 2015.

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, maintained on treatment and sustained 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 2010-2014:

- 80% of persons linked to care within 3 months of diagnosis.
- 73% of persons in medical care.
- 57% of persons with viral load suppression.
- Among Ryan White clients, 90% retained in care, 90% prescribed treatment and 79% 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 162,225 HIV tests in 2015.
- Distributed more than 7.5 million male and female condoms in 2015.
- Removed 738,544 needles from the street in 2015 through the DC needle exchange programs.
- Provided free STD testing for 5,162 youth ages 15 to 19 years old through the school based STD screening and community screening programs in 2015.
- Provided HIV medical care and support services to 9,782 persons through the Ryan White Program.

Section 1. HIV Cases Living in DC

In understanding the scale of HIV within the District, previous reports focused only on data concerning the cumulative number of known living individuals diagnosed with HIV that were residents of the District at the time of diagnosis. As presented in Figure 1, this number currently stands at 17,056. While accounting for new HIV diagnoses among current District residents and reported deaths among those previously diagnosed, this number does not take into consideration the residential migration of HIV positive individuals in and out of the District over time (Figure 1). As opposed to focusing on residence at the time of diagnosis, the current report transitions to the use of residence at last lab in an attempt to more accurately assess the number of individuals diagnosed with HIV living within the District (Figure 1). This modified methodology not only provides a better foundation for understanding the extent of HIV within the District, but also an improved baseline from which to evaluate the population coverage of HIV prevention and care activities.





New Approach to Assessing HIV Burden

Figure 1 provides a schematic for understanding the assumptions and population dynamics underlying the estimation of the number of individuals diagnosed with HIV currently living within the District. Of the 17,056 individuals diagnosed with HIV while a District resident, approximately 34% (n=5,787) were presumed to have moved outside of the jurisdiction prior to the end of 2015, as evidenced by a non-District residential address on their last reported laboratory report or the lack of any reported laboratory information for more than 5 years. In addition to the impact of this residential out-migration on the number of persons with HIV in the District, laboratory data was also utilized to conversely assess the number of individuals diagnosed with HIV while a

resident of other jurisdictions that have moved into the District over time. In examining the last documented residential address on individual laboratory reports, 2,122 individuals initially diagnosed with HIV outside of the jurisdiction were identified as currently living in the District. As indicated in Figure 1, after adjusting the initial count of all living HIV cases for the migration of individuals in and out of the jurisdiction over time, an estimated 13,391 individuals diagnosed with HIV were presumed to be living in the District at the end of 2015. Detailed characteristics of HIV positive individuals based on residential migration status since diagnosis are included in appendix tables B1 and B2. HAHSTA intends to further refine this estimation as improved data sharing processes are implemented with surrounding jurisdictions and additional information sources are ascertained for assessing the completeness and accuracy of residential address information.

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, 2015 there were 13,391 residents of the District of Columbia living with HIV; this number accounts for approximately 2.0% 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 4.2% of residents whose current age is 40 to 49 years and 5.3% 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 2015, 3.2% of black residents were living with HIV, with the highest burden of disease among black men (4.6%). Approximately 1.3% of Hispanic residents and 0.9% of white residents were living with HIV. Please refer to appendix tables B3 and B4 for additional information regarding HIV cases living in the District and alive as of December 31, 2015.



Figure 2. Newly Diagnosed HIV Cases, Deaths, and HIV Cases Living in DC by Year District of Columbia, 2011-2015

*Information concerning death in 2013-2015 is limited to the District of Columbia vital records only. The number of deaths documented 2013-2015 may increase as information from other sources (i.e. NDI and SSDMF) become available.

- At the end of 2015, there were 13,391 HIV cases that were living in DC, accounting for 2.0% of DC residents.
- There has been a 48.5% decrease in the number of HIV cases diagnosed and reported from 2011 to 2015.

 Table 1. HIV Cases Living in the District and Alive as of December 2015: Rates per 100,000 by Gender Identity,

 Race/Ethnicity, and Current Age

Race/Ethnicity,	, and Current Age					
	Total Living HIV Case	es, 2015	Estimated DC Population ⁺ , 2015		Rate per 100,000	
Gender Identity	Ν	%	N	%		
Male	9,617	71.8	312,600	47.4	3,076.5	
Female	3,514	26.2	346,293	52.6	1,014.7	
Transgender l	260	1.9	N/A	N/A	N/A	
Total	13,391	100	658,893	100%	2,032.3	
Race/Ethnicity						
White	2,117	15.8	236,176	35.8	896.4	
Black	10,040	75.0	312,575	47.4	3,212.0	
Hispanic	885	6.6	68,355	10.4	1,294.7	
Other*	349	2.6	41,787	6.3	835.2	
Total	13,391	100	658,893	100	2,032.3	
Male						
White	2,052	21.3	117,859	37.7	1,741.1	
Black	6,524	67.8	141,947	45.4	4,596.1	
Hispanic	751	7.8	35,063	11.2	2,141.9	
Other*	290	3.0	17,731	5.7	1,635.6	
Total	9,617	100	312,600	100	3,076.5	
Female						
White	53	1.5	118,317	34.2	44.8	
Black	3,298	93.9	170,628	49.3	1,932.9	
Hispanic	114	3.2	33,292	9.6	342.4	
Other*	49	1.4	24,056	6.9	203.7	
Total	3,514	100	346,293	100	1,014.75	
Transgender t						
White	12	4.6	N/A	N/A	N/A	
Black	218	83.8	N/A	N/A	N/A	
Hispanic	20	7.7	N/A	N/A	N/A	
Other*	10	3.8	N/A	N/A	N/A	
Total	260	100	N/A	N/A	N/A	
Current Age						
<13	24	0.2	89,506	13.6	26.8	
13-19	72	0.5	47,831	7.3	150.5	
20-24	385	2.9	58,531	8.9	657.8	
25-29	943	7.0	77,886	11.8	1,210.7	
30-39	2,553	19.1	122,831	18.6	2,078.5	
40-49	3,303	24.7	79,577	12.1	4,150.7	
50-59	3,987	29.8	75,614	11.5	5,272.8	
≥60	2,121	15.8	107,117	16.3	1,980.1	
Missing	3	0.0	N/A	N/A	N/A	
Total	13,391	100	658,893	100	2,032.35	

+Source: 2014 US Census Estimates

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

Population data on Transgender individuals are not collected by the US Census, therefore prevalence rates are not able to be calculated.

• Men accounted for less than half (47.4%) of District residents, but almost three-quarters (71.8%) of HIV cases living in DC. Although blacks accounted for just under half (47.4%) of District residents, they account

for three quarters (75.0%) of all HIV cases living in DC.

- Among women, black women accounted for the majority (93.9%) of living HIV cases.
- Majority of Transgender cases were Black (83.8%).
- District residents between 40 and 49 years of age and 50 and 59 years of age have the highest rates of HIV at 4,150.7 and 5,272.8 cases per 100,000 persons, respectively.

Figure 3. Proportion of HIV Cases Living with HIV in DC, by Current Age, District of Columbia, 2015



• Residents aged between 40 to 49 and 50 to 59 had the highest burden of HIV in the District at 4.2% and 5.3%, respectively. DC residents under the age of 13 had the lowest HIV prevalence at the end of 2015.

Figure 4. Proportion of Residents Diagnosed and Living with HIV by Race/Ethnicity, District of Columbia, 2015



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

• HIV prevalence by race/ethnicity is at or above the 1% epidemic threshold for blacks and Hispanics.

• At the end of 2015, an estimated 3.2% of black residents in the District were diagnosed and living with HIV, followed by 1.3% of Hispanics and 0.9% of whites.





- At the end of 2015, black and Hispanic men had the highest HIV prevalence in the District, with HIV prevalence among black men more than twice that of Hispanic men.
- The lowest prevalence of HIV are among white women (0.04%) and Hispanic women (0.2%); these prevalences are below the generalized epidemic rate of 1%.
- The highest rate of HIV among women was among black women, in which HIV prevalence was nearly 9 times greater than for Hispanic females and nearly 50 times greater than white women.

Figure 6. Proportion of Cases Living in DC, by Race/Ethnicity, Gender Identity and Mode of Transmission, District of Columbia, 2015 (N=13,391)



- Approximately one-quarter (26%) of HIV cases living in the District 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 (13%).
- Black transgender persons accounted for 2% of all cases living in DC.

Map 1. Number of HIV Cases Living in the District, by Census Tract, District of Columbia, 2015, N=13,391*



- Census tract information was available for 93.0% of HIV cases living in DC at the end of 2015.
- Though cases reside all throughout the city, the census tracts with the highest number of HIV cases were observed in Wards 5, 7 and 8.
- Though not included in this map, at the end of 2015 there were 59 cases whose address was listed as the DC jail and 92 cases were listed as homeless.

Map 2. Rate of HIV Cases Living in the District per 100,000persons, by Census Tract and Ward, District of Columbia, 2015*



- Census tract information was available for 93.0% of HIV cases living in DC at the end of 2015.
- Census tracts with the highest rates of HIV were observed in Wards 5, 6, 7 and 8.
- Though not included in this map, at the end of 2015 there were 59 cases whose address was listed as the DC jail and 92 cases were listed as homeless.

Section 2. Newly Diagnosed HIV Cases

There were 2,690 HIV cases diagnosed and reported among residents of the District between 2011 and 2015. The number of newly diagnosed HIV cases declined each year, from 720 cases in 2011 to 371 cases in 2015; this represents a 48% decline in the number of diagnosed cases. Nearly three-quarters of these cases (74.0%) were men, approximately three-quarters (73.8%) were black, and about two-thirds (60.0%) were between 25 and 49 years of age. The leading mode of transmission among newly diagnosed cases was sexual contact (72.7%). Mode of transmission was not identified in 21.9% of newly diagnosed HIV cases. Please refer to appendix tables B5, B6 and B7 for additional data regarding newly diagnosed HIV cases.



Figure 7. Newly Diagnosed HIV Cases by Year of Diagnosis and Gender Identity

- Although the number of newly diagnosed cases has declined from 2011 to 2015, the proportion of cases by gender identity has remained relatively constant.
- Men in the District continue to be disproportionately affected by HIV; men represent 47% of the District's population, but over 70% of new HIV diagnoses.

District of Columbia, 2011-2015



Figure 8. Newly Diagnosed HIV Cases by Year of Diagnosis and Race/Ethnicity District of Columbia, 2011-2015

**Other: perinatal transmission, hemophilia, blood transfusion, and occupational exposure (healthcare workers

• The number of newly diagnosed HIV cases among blacks declined 49.3% between 2011 and 2015 and among whites decreased 63.5%. Blacks still represent the majority of HIV cases diagnosed in the District. While the proportion of new cases among blacks remained constant (74.3% in 2011 and 73.0% in 2015), the proportion of new cases among whites declined slightly (14.4% in 2011 and 10.2% in 2013).

Figure 9. Newly Diagnosed HIV Cases by Year of Diagnosis and Age at Diagnosis District of Columbia, 2011-2015



- Between 2011 and 2015, the majority of new HIV cases were diagnosed at ages of 30 and older (63.8%).
- The proportion of cases diagnosed at age 0 to 29 increased between 2011 and 2015. In 2011, 33.1% of HIV cases were diagnosed at age 0-29 compared 38.5% in 2015.
- There was a 52.7% decrease in the number of cases diagnosed at age 30 and older from 2011 to 2015.

Figure 10. Newly Diagnosed HIV Cases by Year of Diagnosis and Mode of Transmission, District of Columbia, 2011-2015



- Sexual contact was the leading mode of transmission among newly diagnosed HIV cases from 2011 to 2015 (72.7%).
- A decline of 54.4% was seen in the number of HIV cases diagnosed by sexual contact, between 2011 (540 cases) and 2015 (246 cases).
- Injecting drug use had the largest decline of newly diagnosed cases from 2011 to 2015 at 73.3%. 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 (21.9%). HAHSTA has made a priority of reducing the number of cases where mode of transmission is unknown. HAHSTA will implement a new protocol with a short form for initial reporting of new diagnoses, form new staff teams based on medical provider and ward, and a priority and enhance education of providers on fulfilling reporting of risk factors.
- See appendix **table B6** for additional breakdown by mode of transmission.



Figure 11. Proportion of Newly Diagnosed HIV Cases by Race/Ethnicity, Gender Identity and Mode of Transmission, District of Columbia, 2011-2015 (N=2,690)

- Figure 11 represents newly diagnosed HIV cases in the District of Columbia (n=2,690) by gender identity, race/ethnicity, and mode of transmission.
- The largest proportion of HIV was among black MSM and MSM/IDU (25%). Black women with heterosexual contact as mode of transmission represent the second largest group (15%) of persons newly diagnosed with HIV in the District.
- Black men with all other modes of transmission or a risk not identified represent the third largest group (12%).

Map 3. Rate of Newly Diagnosed HIV Cases in the District per 100,000 persons, by Census Tract and Ward, District of Columbia, 2011-2015, N=2,690*



- Census tract information was available for 92.5% of new diagnosed HIV cases from 2011-2015.
- Though cases were diagnosed all throughout the city, census tracts with the highest rate of new HIV diagnosis include Wards 5, 6 and 7.
- Though not included in this map, at the end of 2015 there were 59 cases whose address was listed as the DC jail and 31 cases were listed as homeless.

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 have been no babies born with HIV in the District of Columbia since 2012.

Table 2. Perinatal HIV Cases by	Year of Birth, District of	Columbia, 2011-2015
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	Year of Birth				
	2011	2012	2013	2014	2015
Number of perinatal cases born	0	3	0	0	0

- **Table 2** depicts the number of perinatal cases with a date of birth between 2011 and 2015. 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 2015.

There were 24 perinatal HIV cases living in the District of Columbia and alive as of December, 2015. Over half (54.2%) of these cases were young women, the majority (91.7%) were black, and three-quarters (75.0%) were 5 to 19 years of age.

Table 3. Perinatal HIV Cases Living in the District and Alive as of December, 2015

Perinatal HIV Cases					
Sex	Ν	%			
Male	10	41.7			
Female	13	54.2			
Transgender	1	4.2			
Total	24	100			
Race/Ethnicity					
White	1	4.2			
Black	22	91.7			
Hispanic	1	4.2			
Other*	0	0			
Total	24	100			
Current Age					
< 1	0	0			
1 to 2	2	8.3			
3 to 4	4	16.7			
5 to 9	6	25.0			
10-19	12	50.0			
Total	24	100			

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

Table 4. Newly Diagnosed Perinatal HIV Cases by Year of DiagnosisDistrict of Columbia, 2011-2015

Year of HIV Diagnosis						
	2011	2012	2013	2014	2015	
Number of perinatal						
cases diagnosed	3	6	1	0	0	

- There were 10 perinatal HIV cases diagnosed in the District between 2011 and 2015 (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 DiagnosisDistrict of Columbia, 2011-2015

Age at HIV diagnosis	Ν		%
< 1 year		3	30.0
1 to 2 years		0	0
3 to 4 years		0	0
5 to 15 years		7	70.0
Total		10	100

- **Table 5** shows the age at which perinatal cases were diagnosed with HIV. Seven of the 10 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 trends in stage 3 infection among HIV positive individuals diagnosed within the District. As outlined in Tables B8 and B9, 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 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 infection diagnoses among District residents.

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/ μ L and 500 cells/ μ L
	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

Table 6. Stages of HIV Infection

Summary

There were 1,531 stage 3 (AIDS) cases diagnosed among residents of the District between 2011 and 2015. The number of newly stage 3 cases declined 57% from 418 cases in 2011 to 181 cases in 2015. More than two-thirds of these cases (69.1%) were among men, the majority (80.5%) was black, and nearly one-half (49.2%) were between 30 and 49 years of age at stage 3 diagnosis. The leading mode of transmission among newly diagnosed cases was sexual contact (69.6%). In 19% of cases the mode of transmission was not identified.

Although subsequent changes in an individual's HIV disease stage may have occurred since their last reported laboratory information, stage 3 HIV disease is not a static state and many individuals experience improvements in clinical health status after an initial Stage 3 disease diagnosis.

Table 7. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis, District of Columbia, 2011-2015

Year of Stage 3 (AIDS) Diagnosis					
	2011	2012	2013	2014	2015
Number of HIV Cases Diagnosed with Stage 3 Disease for the First Time	418	410	301	221	181
Concurrent stage 3 diagnosis*	210	167	142	97	72
Non-concurrent stage 3 diagnosis	208	243	159	124	109

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

- Of the 1,531 HIV positive individuals newly diagnosed with stage 3 disease in the District between 2011 and 2015, 44.9% 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 2011 and 2015, the number of newly diagnosed stage 3 infections (AIDS) within the District declined 56.7% (418 cases vs. 181 cases, respectively). The documented decline in the number of newly diagnosed stage 3 infections was evident for both concurrent and non-concurrent stage 3 cases.

HIV Infection Stage at Initial HIV Disease Diagnosis¹

Figure 12. HIV Infection Stage at Diagnosis and at 12 Month Follow-up among Newly Diagnosed Cases, District of Columbia, 2011-2015



¹ Initial stage of HIV infection based on initial CD4 and/or HIV related opportunistic infection information after initial HIV diagnosis.
² Follow-up stage of HIV infection based on CD4 and/or HIV related opportunistic infection information 12 months after initial HIV diagnosis date

- Infection stage at HIV diagnosis and at 12 months following diagnosis is summarized in Figure 12. This data provides evidence of both positive and negative disease progression 1 year after initial HIV diagnosis. Such information offers another metric by which to assess the effectiveness of the District in meeting the needs of those living with HIV.
- Among the 3,199 HIV cases diagnosed between 2010 and 2014, at diagnosis, 31% of cases were at stage 1 HIV disease, 39% were at stage 2 and 22% were at stage 3 HIV disease (AIDS).
- Of the individuals at stage 3 infection at diagnosis, after one year of follow-up, 15% transitioned to stage 1 HIV disease, 43% to stage 2 and 25% remained at stage 3 HIV disease.
- 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, 5% and 1% respectively, based on the assessment of initial CD4 and opportunistic infection information ascertained at least 1 year after HIV diagnosis.

Figure 13. Stage of Disease at First Lab in DC and in 2015 among Cases Presumed Living in DC, District of Columbia



- Figure 13 portrays the stage of HIV disease among all living cases in DC at first lab drawn in Washington DC and in 2015. The denominator for each is persons diagnosed with HIV and presumed living in DC with a CD4 count reported to HAHSTA. Reductions in the proportion of individuals found in Stage 3 (AIDS) indicate improvements in earlier testing and identification of HIV cases before health deterioration. The explanation for the large percentage of unknown in 2015 is attributable to persons who have moved out of the District and who have an indication of not in care.
- The data shows an 80% reduction in Stage 3 disease among HIV cases living in DC.



Figure 14. Stage of Disease at First Lab in DC by Gender Identity and Race/Ethnicity, District of Columbia

- Stage of HIV disease at first lab in Washington DC, by gender identity and race/ethnicity, among HIV cases presumed living in DC in 2015 is illustrated in Figure 14.
- White transgender persons had the highest proportion of stage 3 disease (AIDS) at 50% at their first CD4 count in DC, followed by black men and Hispanic women (41%) and black women and Hispanic men (33%).

Section 5. HIV Incidence

HIV Incidence Estimate and the National HIV/AIDS Strategy and Mayor's 90-90-90-50 by 2020 Plan

The National HIV/AIDS Strategy updated to 2020 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 National Strategy goals and the Mayor's goal of reducing new infections by 50% by 2020. The District of Columbia Department of Health remains committed to reducing new infections of HIV in DC.

Understanding the HIV Incidence Estimate

The 2016 HIV incidence estimate provides an estimated number of new infections of HIV occurring each year among DC residents during the five year span from 2010-2014. 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. Recently a transition was made from BED to the Avidity assay. Specimen collected for cases diagnosed in 2013 or prior were tested using BED. Those diagnosed in 2014 and later were tested with the Avidity assay. 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/Avidity 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.

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 2010 to 2014. The estimated rate of new infections in the District in 2010 exceeded the national rate at 116.2 estimated cases/ 100,000 compared with 27.5 estimated cases/ 100,000 respectively. By the end of 2014, the highest proportion of new infections were found among men (81.1%), blacks (69.3%), individuals age 30-49 (37.5%), and sexual contact (61.7%).

Figure 15. Estimated Number of Newly Infected HIV Cases by Year

900 800 **Estimated Number of Newly Infected Cases** 700 600 500 400 613 (CI: 417-810) 300 550 488 531 (CI: 333-767) 390 (CI: 323-652) 200 (CI: 302-759) (CI: 255-525) 100 0 2010 2011 2012 2013 2014 Year of Diagnosis

District of Columbia, 2010-2014

- Figure 15 represents the overall estimated new infections of HIV in DC during the five year period from • 2010 to 2014.
- 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 8 . Estimated Rate of New HIV Infections by Sex, Race/Ethnicity, and Age at Diagnosis.	
District of Columbia, 2010-2014 ⁺	

	2010	2011	2012	2013	2014
	Estimated Rate				
	per 100,000				
	(95% CI)				
Sex					
Male	173.6	146.0	115.5	148.6	148.2
Male	(112.0-235.2)	(75.4-216.6)	(71.7-159.4)	(77.3-219.8)	(93.2-203.1)
Female	62.7	50.4	28.5	43.0	
remate	(31.4-94.0)	(16.9-84.0)	(9.6-47.5)	(11.7-74.4)	
Transgender					
Hansgehaer					
Total	116.2	101.4	70.5	94.3	85.6
	(79.0-153.3)	(61.5-141.3)	(46.1-94.9)	(53.6-134.9)	(56.7-114.6)
Race/Ethnicity					
Black	171.0	162.5	122.1	154.7	128.1
	(106.3-235.7)	(88.0-236.9)	(70.4-173.7)	(82.6-226.8)	(77.3-179.0)
Other	64.4	45.8	42.4	41.4	49.0
	(31.0-97.7)	(17.5-74.1)	(15.1-69.7)	(12.1-70.6)	(21.2-76.8)
Total	116.2	101.4	70.5	94.3	85.6
	(79.0-153.3)	(61.5-141.3)	(46.1-94.9)	(53.6-134.9)	(56.7-114.6)
Age					
13-29	87.5	85.8	76.0	76.9	
	(42.1-132.9)	(31.4-140.1)	(34.6-117.5)	(23.7-130.1)	
30-49	149.5	118.6	70.5	108.8	81.3
	(87.2-211.7)	(54.7-182.6)	(34.4-106.7)	(45.6-172.0)	(36.6-126.2)
>=50	51.4	46.5	31.1		
	(15.1-87.7)	(5.4-87.7)	(6.3-55.9)		
Total	116.2	101.4	70.5	94.3	85.6
	(79.0-153.3)	(61.5-141.3)	(46.1-94.9)	(53.6-134.9)	(56.7-114.6)

+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, White, 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 nearly three times that among women from 2010 to 2012
- The estimated rate of new infections decreased by 26.6% among all other racial/ethnic groups, but increased by 11.4% among blacks
- Among people age 30-49, the estimated rate of new infections increased by 17.3%

Section 6. 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 2011 to 2015, the District received 34,536 reports of chlamydia infection, a 4.8% increase in the number of reported cases between 2009 and 2013 (32,964 cases). Among the reported cases approximately two-thirds were women (63.7%), nearly half were black (44.5%), and two-thirds (65.6%) 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 (42.6%). Please refer to appendix table B11 for more information on chlamydia infections reported between 2011 and 2015 in the District.

From 2011 to 2015, the District received 12,364 reports of gonorrhea infection, a 1.7% decrease in the number of reported cases between 2009 and 2013 (12,578 cases). Unlike chlamydia, majority of diagnoses were among men compared to women at 58.9% and 40.4%, respectively. Approximately half of reported cases were among blacks (44.8%) and more than half (54.2%) 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 (42.8%). Please refer to appendix table B12 for more information on gonorrhea infections reported between 2011 and 2013 in the District.

From 2011 to 2015, the District received 798 reports of primary and secondary syphilis infection, also known as infectious syphilis, a 2.0% increase in the number of reported cases between 2009 and 2013 (782 cases). Unlike chlamydia and gonorrhea, which predominantly affected youth and young adults less than 25 years of age, more than half (61.7%) of primary and secondary syphilis cases were 30 years of age or older. Slightly more than half (52.8%) of reported primary and secondary syphilis cases were among blacks and almost all cases (92.4%) were reported among men. While previously the higher number of primary and secondary syphilis cases were reported among persons living in Wards 1 and 2, the distribution of cases has shifted to include Wards, 5, 6, 7 and 8. Please refer to appendix table B13 for more information on primary and secondary syphilis infections reported between 2011 and 2015 in the District.



Figure 16. Reported Chlamydia, Gonorrhea and Syphilis (Primary & Secondary) Cases by Year of Diagnosis, District of Columbia, 2011-2015

- The number of reported chlamydia and gonorrhea cases has remained steady between 2011 and 2015, with a decrease in 2014.
- Reported syphilis cases have steadily decreased in the five-year period.

Figure 17. Reported Number of Chlamydia Cases by Year of Report and Gender Identity, District of Columbia, 2011-2015



- Women accounted for nearly two-thirds (63.7%) of all chlamydia diagnoses in the five-year period.
- In 2015, there was an increase in the number of chlamydia cases among men.





- From 2011-2015, majority of diagnosed chlamydia cases were among 20-24 year olds.
- In 2011 and 2012, over a third of reported chlamydia cases were among 15-19 year olds (39.4% and 35.3%, respectively), followed by cases aged 20-24 (31.4% and 33.8%, respectively).
- From 2013 to 2015, 20-24 year olds had the highest proportion of cases (34.2%, 36.5% and 33.4%, respectively). Reported cases among people aged 25 and older increased nearly two-thirds over the five-year period.

Figure 19. Reported Number of Chlamydia Cases by Year of Report and Race/Ethnicity, District of Columbia, 2011-2015



- Nearly half (44.5%) of all chlamydia cases reported from 2011 to 2015 were black.
- Despite the fact that a majority (90.2%) of reported chlamydia cases with a known race/ethnicity are black, the high overall percentage of chlamydia cases with an unknown race/ethnicity (50.7%) prevents a valid assessment of the racial/ethnic differences in the occurrence of chlamydia infections within D.C.

Map 4. Number of Reported Chlamydia Cases, by Census Tract and Ward, District of Columbia, 2011-2015, N=34,536*



- Census tract information was available for 90.7% of reported chlamydia cases from 2011-2015.
- Though reported cases reside all throughout the city, census tracts with the highest number of reported chlamydia cases observed in Wards 2, 5, 7 and 8.



Figure 20. Reported Number of Gonorrhea Cases by Year of Report and Sex, District of Columbia, 2011-2015

- Men were more likely to be diagnosed with gonorrhea in the five-year period, 58.9% of gonorrhea cases were reported among men, compared to 40.4% of women.
- Men had a 21.2% increase in gonorrhea diagnosis from 2011-2015, compared to 34.0% decrease among women.

Figure 21. Reported Number of Gonorrhea Cases by Year of Report and Age at Diagnosis, District of Columbia, 2011-2015



• In 2011, 32.6% of reported gonorrhea cases were among 15 to 19 year olds, followed by 20-24 year olds
(30.4%). Starting in 2012, 20-24 year olds had the largest proportion of gonorrhea cases reported.

- There was a 50% decrease in new gonorrhea cases among ages 15-19 year olds from 2011 to 2015.
- Reported cases among 25-29 year olds increased 43.6% in the-five year period and there was a 66.7% increase in reports among people aged 30-39.
- Gonorrhea reports among people ages 40 and older increase by nearly a quarter (29.4%).

Figure 22. Reported Number of Gonorrhea Cases by Year of Report and Race/Ehtnicity, District of Columbia, 2011-2015



- Nearly half (44.8%) of gonorrhea cases reported between 2011 and 2015 were among Blacks.
- Despite the fact that a majority (86.9%) of reported gonorrhea cases with a known race/ethnicity are black, the high overall percentage of gonorrhea cases with an unknown race/ethnicity (48.5%) prevents a valid assessment of the racial/ethnic differences in the occurrence of gonorrhea infections within D.C.

Map 5. Number of Newly Reported Gonorrhea Cases, by Census Tract, District of Columbia, 2011-2015, N=12,364*



- Census tract information was available for 91.3% of reported gonorrhea cases from 2011-2015.
- Though reported cases reside all throughout the city, census tracts with the highest number of reported gonorrhea cases observed in Wards 5, 7 and 8.

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 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.

Congenital syphilis is a disease where a mother with syphilis transmits the infection to her baby during pregnancy. Congenital syphilis is curable; however, untreated infection can lead to delays in development, seizures, rash, anemia, damage to bones, eyes and brain.

Table 9. Number of Diagnosed Congenital Syphilis Cases, District of Columbia, 2011-2015

	2011	2012	2013	2014	2015
Number of cases	2	1	5	1	2

There were 11 cases of congenital syphilis diagnosed from 2011 to 2015, of which all were black, 54.5% were male and all were diagnosed at birth. The Department of Health investigated these cases and found that the mothers were not consistently in prenatal care. In December 2015, the Department sent a letter to primary care, pediatric, and obstetric providers recommending routine serologic syphilis screening for all pregnant women early in pregnancy given high prevalence of syphilis in the District.

Figure 23. Reported Number of Syphilis Cases by Year of Report and Stage, District of Columbia, 2011-2015



- There was a 49% decrease in new syphilis cases from 2011 to 2015.
- Between 2011 and 2015, secondary syphilis represented over 75.1% of infectious syphilis cases diagnosed each year.

Figure 24. Reported Number of Syphilis Cases by Year of Report and Gender Identity,





• Of the syphilis diagnoses among men, nearly 90% of the cases in 2015 reported having had sex with a man in the past 12 months.

Figure 25. Reported Number of Syphilis Cases by Year of Report and Age at Diagnosis, District of Columbia, 2011-2015



At the time of this report publication, there was not sufficient data to report race and ethnicity of syphilis cases.



Map 6. Number of Newly Reported Syphilis Cases, by Census Tract, District of Columbia, 2011-2015, N=798*

- Census tract information was available for 95.2% of reported syphilis cases from 2011-2015.
- Previously, reported cases were concentrated in Wards 1 and 2, but have now shifted to include Wards 5, 7 and 8.

Section 7. 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 2011 and 2015. 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 2011); however, some information is presented concerning both newly reported and previously diagnosed chronic hepatitis C cases tested between 2011 and 2015 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 25% to 50% of children less than 5 years of age who acquire hepatitis B virus from their mothers remain chronically infected. By contrast, 94% to 98% 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 2011-2015^{1,2}

	N	%
Gender		
Female	695	32.5
Male	1,199	56.0
Transgender	0	0.0
Unknown	247	11.5
Total	2,141	100.0
Race/Ethnicity		
Black	288	13.5
White	41	1.9
Hispanic/Latino	10	0.5
Asian/Pacific Islander	36	1.7
American Indian	0	0.0
Other/Unknown	1,766	82.5
Total	2,141	100.0
Age Group		
0 - 12	12	0.6
13 - 19	29	1.4
20 - 29	268	12.5
30 - 39	509	23.8
40 - 49	503	23.5
50 - 59	443	20.7
60 +	374	17.5
Unknown	3	0.1
Total	2,141	100.0
Diagnosis Year		
2011	466	21.8
2012	358	16.7
2013	426	19.9
2014	471	22.0
2015	420	19.6
Total	2,141	100.0

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

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

- Between 2011 and 2015, 2,141 individuals in the District were newly reported with chronic hepatitis B infections.
- Incidence of chronic hepatitis B has remained relatively constant between 2011 and 2015.
- Despite the fact that a majority (76.8%) 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 (82.5%) prevents a valid assessment of the racial/ethnic differences in the occurrence of chronic hepatitis B infections within the District.



Figure 26. Newly Reported Chronic Hepatitis B Cases by Age at Diagnosis and Gender Identity, District of Columbia 2011-2015

- Men accounted for approximately 56.0% of newly reported chronic hepatitis B cases from 2011 through 2015 overall; however, women comprise a larger percent (47% vs. 42%) of cases reported among those under 30 years of age.
- Individuals 30 to 39 years of age represent the largest age group among those newly reported with chronic hepatitis B from 2011 through 2015 (23.8%), followed closely by individuals 40 to 49 years of age (23.5%).

Map 7. Number of Newly Reported Chronic Hepatitis B, by Census Tract and Ward, District of Columbia, 2011-2015, N=2,141*



- Census tract information was available for 62.1% of reported hepatitis B cases from 2011-2015.
- Though reported cases reside all throughout the city, census tracts with the highest number of reported hepatitis B cases include wards 1, 2, 4 and 5.

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.

Table 11. All Positive Chronic Hepatitis C Cases by Gender Identity, Race/Ethnicity, Age at Diagnosis, Case Classification, and Diagnosis Type, District of Columbia 2011-2015¹

	N	%
Gender		
Female	5,544	30.8
Male	10,817	60.1
Transgender	2	0.0
Unknown	1,646	9.1
Total	18,009	100.0
Race/Ethnicity		
Black	5,595	31.1
White	330	1.8
Hispanic/Latino	65	0.4
Asian/Pacific Islander	42	0.2
American Indian	1	0.0
Other/Unknown	11,976	66.5
Total	18,009	100.0
Age Group		
0 - 12	56	0.3
13 - 19	61	0.3
20 - 29	601	3.3
30 - 39	1,252	7.0
40 - 49	4,667	25.9
50 - 59	7,553	41.9
60 +	3,785	21.0
Unknown	34	0.2
Total	18,009	100.0
Diagnosis Type ¹		
Newly Reported	9,232	51.3
Previously Reported	8,777	48.7
Total	18,009	100.0
Case Classification		
Confirmed	10,985	61.0
Probable	3,914	21.7
Suspect	3,110	17.3
Total	18,009	100.0

¹All chronic hepatitis C cases" is inclusive of newly reported cases testing positive for the first time between 2011 and 2015, as well as previously reported cases with both a positive result between 2011 and 2015 and \geq 1 positive laboratory report for chronic hepatitis C prior to 2011.

- As indicated in **table 11**, 18,009 residents had a positive laboratory report for chronic hepatitis C in DC between 2011 and 2015; 61% of whom met the criteria outlined by the CDC for being a confirmed case.
- While this number provides some insight to the magnitude of chronic hepatitis C in the District, it should not be used as a prevalence estimate given the exclusion of previously diagnosed individuals without subsequent testing during the specified timeframe.

Table 12. Newly Reported Chronic Hepatitis C Cases by Gender Identity, Race/Ethnicity, Age at Diagnosis, and Year of Diagnosis, District of Columbia 2011-2015¹

	N	%
Gender		
Female	2,488	27.0
Male	5,113	55.4
Transgender	0	0.0
Unknown	1,631	17.7
Total	9,232	100.0
Race/Ethnicity		
Black	1,293	14.0
White	172	1.9
Hispanic/Latino	18	0.2
Asian/Pacific Islander	7	0.1
American Indian	0	0.0
Other/Unknown	7,742	83.9
Total	9,232	100.0
Age Group		
0 - 12	33	0.4
13 - 19	38	0.4
20 - 29	469	5.1
30 - 39	645	7.0
40 - 49	1,197	13.0
50 - 59	3,819	41.4
60 +	3,004	32.5
Unknown	27	0.3
Total	9,232	100.0
Diagnosis Year ¹		
2011	1,980	21.5
2012	1,445	15.7
2013	1,606	17.4
2014	1,991	21.6
2015	2,210	23.9
Total	9.232	100.0

¹Diagnosis year based on date of first reported chronic hepatitis C positive laboratory report based on CDC case definition guidance.

- There were 9,232 newly reported confirmed, probable, or suspect cases of chronic hepatitis C among DC residents between 2011 and 2015. A decline in annual number of newly reported cases was observed between 2011 and 2012; however, there has been a 53% increase in the number of new diagnoses from 2012 to 2015. This may be due to the increase in the amount of screening and the availability of the HCV rapid test.
- While the majority of newly reported chronic hepatitis C cases with a known race/ethnicity are black (87%), the high overall percentage of chronic hepatitis C cases with an unknown race/ethnicity (84%) prevents a valid assessment of racial/ethnic differences in the occurrence of chronic hepatitis C infections within DC.
- The number of newly reported chronic hepatitis C cases has been steadily increasing from 2012 to 2015 among individuals over 60 years of age, surpassing those 50 to 59 years as the highest proportion of new cases in 2015 (41% vs. 34%).

• Men accounted for the overall majority of newly reported chronic hepatitis C cases between 2011 and 2015 (55%). While this trend remains consistent across older age categories, the proportion of cases between men and women become closer in younger age groups.





• Nearly all newly reported chronic hepatitis C cases were diagnosed among persons 40 years of age or older between 2011 and 2015 (87%), with the largest percentage of newly reported diagnoses among persons 50 to 59 years of age (41%).

Map 8. Number of Newly Reported Chronic Hepatitis C Cases, by Census Tract and Ward, District of Columbia, 2011-2015, N=9,232*



- Census tract information was available for 57.9% of reported hepatitis C cases from 2011-2015.
- Though reported cases reside all throughout the city, census tracts with the highest number of reported hepatitis C cases include Wards 5, 7 and 8.

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 2011-2015^{1,2,3}

	N	%
Gender		
Female	94	29.2
Male	224	69.6
Transgender	0	0.0
Unknown	4	1.2
Total	322	100.0
Race/Ethnicity		
Black	37	11.5
White	10	3.1
Hispanic/Latino	4	1.2
Asian/Pacific Islander	1	0.3
American Indian	0	0.0
Other/Unknown	270	83.9
Total	322	100.0
Age Group		
0 - 12	5	1.6
13 - 19	9	2.8
20 - 29	30	9.3
30 - 39	53	16.5
40 - 49	57	17.7
50 - 59	77	23.9
60 +	91	28.3
Total	322	100.0
Diagnosis Year		
2011	143	44.4
2012	40	12.4
2013	72	22.4
2014	32	9.9
2015	35	10.9
Total	322	100.0

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

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

- There were 322 cases of acute hepatitis A reported in DC from 2011 to 2015.
- Despite the fact that the majority of reported acute hepatitis A cases with a known race/ethnicity are within the black population (71%), the high overall percentage of acute hepatitis A cases an unknown race/ethnicity (84%) prevents a valid assessment of racial/ethnic differences in the occurrence of acute hepatitis A infections within the District.

Figure 28. Newly Reported Acute Hepatitis A Cases by Age at Diagnosis & Gender Identity, District of Columbia 2011-2015



- Overall, men accounted for 70% of acute hepatitis A cases reported from 2011 to 2015.
- The number of acute hepatitis A cases reported between 2011 and 2015 increased with age in both men and women.

Section 8. 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 2011 to 2015. 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. Between 2011 and 2015 there were a total of 194; 55 cases were diagnosed in 2011 and 33 cases diagnosed in 2015, representing a 40% decrease (Table 14). Please refer to appendix table B14 for more information on TB cases reported between 2011 and 2015 in the District.

The District had a TB case rate of 4.9 per 100,000 compared to the national average of 3.0 per 100,000. However, the District continues to make progress under the definition of TB elimination, which is a decrease in case rate of 0.2 per 100,000 annually.

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. There was one case of MDR-TB reported in 2011 and one case 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

	2	2011		2012		2013		2014		2015	
	Ν	Rate									
District Total	55	8.9	37	5.9	37	5.9	32	5.0	33	4.9	



Figure 29. Reported Cases of Tuberculosis by Year of Report and Disease State, District of Columbia, 2011-2015

- There was a decline in the proportion of pulmonary TB cases between 2011 and 2015.
- Overall, the proportion of extra pulmonary cases has increased in the 5-year period; 25.5% in 2011 to 27.8% in 2015. In 2013, extra pulmonary TB cases accounted for 37.0% of all TB cases. 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 2011 and 2015.

Figure 30. Reported Cases of Tuberculosis by Year of Report and Gender Identity, District of Columbia, 2011-2015



• Overall, 54.6% of reported TB cases were among men in the 5-year period. Historically, TB is more prevalent among men; however the male to female ratio has shifted in recent years.



Figure 31. Reported Cases of Tuberculosis by Year of Report and Age at Diagnosis, District of Columbia, 2011-2015

• Approximately 67.0% of cases reported between 2011 and 2015 were between the ages of 25 and 64.

Figure 32. Reported Cases of Tuberculosis by Year of Report and Race/Ethnicity, District of Columbia, 2011-2015



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

• Nearly three-quarters of all TB cases reported each year were black.



Figure 33. 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. Overall, foreign-born cases reported represented 56.7% of TB cases between 2011 and 2015.
- The national rate of TB cases among foreign-born persons is 15.1 per 100,000 and 1.2 per 100,000 among US-born. The District rates are 18.4 per 100,000 among foreign-born persons and 2.6 per 100,000 among US born.

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, 2015.

Understanding HIV Surveillance

The District of Columbia Municipal Code (22 DCMR 206) mandates reporting of all HIV and stage 3 (AIDS) diagnoses to the DC DOH. An HIV diagnosis or case refers to a person who has tested positive for HIV infection. A stage 3 (AIDS) case refers to a person who had a diagnosis of HIV infection and later had a diagnosis of stage 3 HIV disease (AIDS), or a person diagnosed with HIV and stage 3 disease (AIDS) at the same time. Stage 3 disease (AIDS) is defined by a CD4+ T-cell count less than 200 cells/µL or a stage 3 defining opportunistic infection; both of these are signs of immune system failure. Only confirmed reports of HIV and stage 3 disease 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 stage 3 disease 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 stage 3 disease (AIDS); person who were diagnosed with HIV infection and stage 3 disease at the same time; and persons who were diagnosed with HIV infection and later received a stage 3 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 2,690 newly diagnosed HIV cases reported between 2011 and 2015. However, the total number of persons diagnosed with HIV who were residents of the District and alive decreased by 48 cases in 2013 compared to last year's report. HIV cases presumed living in the District at the end of 2015 were added to the 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.

Year of HIV Diagnosis	Potential Duplicate Cases Identified	Cases S ¹	Assigned to Another tate/Jurisdiction
		N	%
2010	1,390	841	60.5
2011	1,123	686	61.1
2012	1,120	762	68.0
2013	807	607	75.2
2014	321	96	29.9
2015	175	43	24.6

3. In previous reports, the prevalence of HIV in the District was calculated by dividing the number of cases who were DC residents at diagnosis and alive by the total population of the District in the calendar year. HIV cases who were not DC residents at diagnosis but were currently living in DC were not included in the prevalence calculation. Starting in this report, HAHSTA has included all HIV cases who are living in DC, regardless of where they were diagnosed in the prevalence calculation to fully reflect the current HIV epidemic in Washington, DC.



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, 2015 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 2015 US Census data estimates. The table depicts the percent change between the 2010 Census and 2015 Census estimates. There was 8.9% increase in the total number of persons living in the District.

	DC Population ⁺ 2010	Estimated DC Population ^{$++$} , 2015	Percent Change
	Ν	N	%
Sex			
Male	285,786	312,600	9.4
Female	319,126	346,293	8.5
Total	604,912	658,893	8.9
Race/Ethnicity			
White	211,121	236,176	11.9
Black	303,731	312,575	2.9
Hispanic	55,266	68,355	23.7
Other*	34,794	41,787	20.4
Total	604,912	658,893	8.9
Current Age			
<13	73,919	89,506	21.1
13-19	50,090	47,831	-4.5
20-29	134,520	136,417	1.4
30-39	98,546	122,831	24.6
40-49	76,478	79,577	4.1
50-59	72,098	75,614	4.9
≥60	99,261	107,117	7.9
Total	604,912	658,893	8.9
+Source: 2010 US Census			
++Source: 2015 US Census	Estimates		
*Other race includes mixe	d race individuals, Asians, A	laska Natives, America	in Indians, Native
Hawaijan 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 23.7% and the number of those classified as other race increased by 20.4%. The percent change among blacks was negligible at 2.9%. In addition, the population between 0 and 12 years of age increased by 21.1%, while the population between 13 and 19 years of age decreased by 4.5%. It is also important to note that the population between 30 and 39 years of age increased by 24.6%.

Understanding the HIV Incidence Estimate

The 2015 HIV incidence estimate provides an estimated number of new infections of HIV occurring each year among DC residents during the five year span from 2010-2014. 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 2015, only 79 (1.0%) cases of reported chlamydia had "unknown" sex but 5,837 (75.8%) 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.

Appendix B. Supplementary Tables and Figures

Table B1. People Living with HIV in the District of Columbia as of December 31, 2015, by Gender Identity, Current Age, Race/Ethnicity and Mode of Transmission

	Total HIV Cases who were		DC Resident	DC Residents at HIV		In-migrants: Diagnosed		ng in DC	Out-migrants diagnosed		
	DC Residents at	: Diagnosis	Diagnosis, s	till in DC	out of jurisdie	ction, now	diagnosed v	with HIV	in DC but now living out		
						in DC		(total)		of jurisdiction	
			N	%	N	%	N	%	N	%	
Gender Identity											
Male	12,327	72.3%	7,854	69.7%	1,763	83.1%	9,617	71.8%	4,473	77.3%	
Female	4,450	26.1%	3,183	28.2%	331	15.6%	3,514	26.2%	1,267	21.9%	
Transgender	279	1.6%	232	2.1%	28	1.3%	260	1.9%	47	0.8%	
Total	17,056	100%	11,269	100%	2,122	100%	13,391	100%	5,787	100%	
Current Age											
<13	26	0.2%	16	0.1%	8	0.4%	24	0.2%	10	0.2%	
13-19	74	0.4%	64	0.6%	8	0.4%	72	0.5%	10	0.2%	
20-24	360	2.1%	309	2.7%	76	3.6%	385	2.9%	51	0.9%	
25-29	949	5.6%	16	6.4%	227	10.7%	943	7.0%	233	4.0%	
30-39	2,857	16.8%	2,026	18.0%	527	24.8%	2,553	19.1%	831	14.4%	
40-49	4,271	25.0%	2,745	24.4%	558	26.3%	3,303	24.7%	1,526	26.4%	
50-59	5,442	31.9%	3,473	30.8%	514	24.2%	3,987	29.8%	1,969	34.0%	
60+	3,077	18.0%	1,920	17.0%	201	9.5%	2,121	15.8%	1,157	20.0%	
Missing	-	0.0%	-	0.0%	3	0.1%	3	0.0%	-	0.0%	
Total	17,056	100%	11,269	100%	2,122	100%	13,391	100%	5,787	100%	
Race/Ethnicity											
White	2,847	16.7%	1,629	14.5%	488	23.0%	2,117	15.8%	1,218	21.0%	
Black	1,266	7.4%	8,666	76.9%	1,371	64.6%	10,040	75.0%	4,000	69.1%	
Hispanic	1,120	6.6%	708	6.3%	178	8.4%	885	6.6%	412	7.1%	
Other*	423	2.5%	266	2.4%	85	4.0%	349	2.6%	157	2.7%	
Total	17,056	100%	11,269	100%	2,122	100%	13,391	100%	5,787	100%	
Mode of Transmission											
Sexual contact	12,003	70.4%	7,918	70.3%	1,599	75.4%	9,517	71.1%	4,085	70.6%	
IDU	2,145	12.6%	1,377	12.2%	123	5.8%	1,499	11.2%	768	13.3%	
Sexual contact/IDU	563	3.3%	343	3.0%	101	4.8%	444	3.3%	220	3.8%	
Other**	195	1.1%	130	1.2%	20	0.9%	149	1.1%	65	1.1%	
RNI	2,150	12.6%	1,501	13.3%	279	13.1%	1,782	13.3%	649	11.2%	
Total	17,056	100%	11,269	100%	2.122	100%	13,391	100%	5,787	100%	

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

	Total HIV Cases who were DC Residents at Diagnosis		DC Residen Diagnosis, s	DC Residents at HIV Diagnosis, still in DC		In-migrants: Diagnosed out of jurisdiction, now in DC		People living in DC diagnosed with HIV (total)		Out-migrants diagnosed in DC but now living out of jurisdiction	
			N	%	Ν	%	Ν	%	N	%	
Male											
MSM	7,161	58.1%	4,476	53.5%	1,197	61.2%	5,671	54.9%	2,685	58.9%	
IDU	1,243	10.1%	759	9.1%	79	4.0%	838	8.1%	484	10.6%	
MSM/IDU	547	4.4%	329	3.9%	98	5.0%	427	4.1%	218	4.8%	
Heterosexual contact	1,837	14.9%	1,239	14.8%	186	9.5%	1,425	13.8%	598	13.1%	
Other**	84	0.7%	51	0.6%	8	0.4%	59	0.6%	33	0.7%	
RNI	1,455	11.8%	1,000	11.9%	195	10.0%	1,197	11.6%	455	10.0%	
Total	12,327	100%	7,854	100%	1,763	100%	9,617	100%	4,473	100%	
Female											
IDU	887	19.9%	603	18.1%	44	12.1%	646	17.5%	284	21.7%	
Heterosexual contact	2,819	63.3%	2,052	61.7%	194	53.3%	2,248	60.9%	767	58.5%	
Other**	104	2.3%	74	2.2%	12	3.3%	85	2.3%	30	2.3%	
RNI	640	14.4%	454	13.7%	81	22.3%	535	14.5%	186	14.2%	
Total	4,450	26.1%	3,183	28.2%	331	15.6%	3,514	26.2%	1,267	21.9%	
Transgender											
Sexual contact	186	66.7%	151	60.9%	22	71.0%	173	62.0%	35	74.5%	
IDU	15	5.4%	15	6.0%	-	0.0%	15	5.4%	-	0.0%	
Sexual contact/IDU	16	5.7%	14	5.6%	3	9.7%	17	6.1%	2	4.3%	
Other**	7	2.5%	5	2.0%	-	0.0%	5	1.8%	2	4.3%	
RNI	55	19.7%	47	19.0%	3	9.7%	50	17.9%	8	17.0%	
Total	279	1.6%	232	2.1%	28	1.3%	260	1.9%	47	0.8%	

Table B2. People Living with HIV in the District of Columbia as of December 31, 2015, by Gender Identity and Mode of Transmission

	White		Black	-	Hispan	ic	Ot	ther*	Total	
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex										
Male	2,052	96.9	6,524	65.0	751	84.9	290	83.1	9,617	71.8
Female	53	2.5	3,298	32.8	114	12.9	49	14.0	3,514	26.2
Transgender	12	0.6	218	2.2	20	2.3	10	2.9	260	1.9
Total	2,117	100.0	10,040	100.0	885	100.0	349	100.0	13,391	100.0
Mode of Transmission										
Sexual contact	1,814	85.7	6,729	67.0	736	83.2	238	68.2	9,517	71.1
IDU	26	1.2	1,402	14.0	42	4.7	27	7.7	1,499	11.2
Sexual contact/IDU	72	3.4	337	3.4	19	2.1	16	4.6	44	0.3
Risk not identified	202	9.5	1,430	14.2	84	9.5	33	9.5	1,782	13.3
Other**	1	0.0	142	1.4	4	0.5	2	0.6	149	1.1
Total	2,117	100.0	10,040	100.0	885	100.0	349	100.0	13,391	100.0
Male										
MSM	1,727	84.2	3,214	49.3	547	72.8	183	63.1	5,671	59.0
IDU	20	1.0	778	11.9	22	2.9	18	6.2	838	8.7
MSM/IDU	72	3.5	321	4.9	18	2.4	16	5.5	427	4.4
Heterosexual contact	44	2.1	1,268	19.4	92	12.3	21	7.2	1,425	14.8
Risk not identified	189	9.2	886	13.6	71	9.5	51	17.6	1,197	12.4
Other**	0	0.0	57	0.9	1	0.1	1	0.3	59	0.6
Subtotal	2,052	100.0	6,524	100.0	751	100.0	290	100.0	9,617	100.0
Female										
IDU	7	13.2	610	18.5	20	17.5	9	18.4	646	18.4
Heterosexual contact	33	62.3	2,108	63.9	80	70.2	27	55.1	2,248	64.0
Risk not identified	12	22.6	500	15.2	11	9.6	12	24.5	535	15.2
Other**	1	1.9	80	2.4	3	2.6	1	2.0	85	2.4
Subtotal	53	100.0	3,298	100.0	114	100.0	49	100.0	3,514	100.0
Transgender										
Sexual contact	10	83.3	139	63.8	17	85.0	7	70.0	173	66.5
IDU	1	8.3	14	6.4	0	0.0	0	0.0	15	5.8
Sexual contact/IDU	0	0.0	16	7.3	1	5.0	0	0.0	17	6.5
Risk not identified	1	8.3	44	20.2	2	10.0	3	30.0	50	19.2
Other**	0	0.0	5	2.3	0	0.0	0	0.0	5	1.9
Subtotal	12	100.0	218	100.0	20	100.0	10	100.0	260	100.0

Table B3. HIV Cases Living in the District of Columbia by Race/Ethnicity, Sex, and Mode of Transmission, District of Columbia, 2015

	Whit	White			Hispan	Hispanic Other*			Total	Total	
	Ν	%	N	%	N	%	Ν	%	N	%	
Current Age											
<13	1	0.0	22	0.2	1	0.1	0	0.0	24	0.2	
13-19	0	0.0	66	0.7	4	0.5	2	0.6	72	0.5	
20-24	16	0.8	335	3.3	23	2.6	11	3.2	385	2.9	
25-29	80	3.8	746	7.4	89	10.1	28	8.0	943	7.0	
30-39	373	17.6	1,864	18.6	247	27.9	69	19.8	2,553	19.1	
40-49	585	27.6	2,370	23.6	251	28.4	97	27.8	3,303	24.7	
50-59	698	33.0	3,007	30.0	185	20.9	97	27.8	3,987	29.8	
≥6U Missing	363	17.1	1,628	16.2	85	9.6	45	12.9	2,121	15.8	
Total	⊥ 2 117	0.0	∠ 10.040	0.0	0	0.0	240	0.0	3 12 201	100.0	
Male	2,117	100.0	10,040	100.0	605	100.0	545	100.0	15,591	100.0	
<13	0	0	10	0.2	0	0	0	0	10	0.1	
13-19	0	0	27	0.4	3	0.4	1	0.4	31	0.3	
20-24	16	0.8	227	3.5	19	2.5	9	3.1	271	2.8	
25-29	74	3.6	560	8.6	80	10.7	23	7.9	737	7.6	
30-39	357	17.4	1,219	18.7	206	27.4	61	21.0	1843	19.1	
40-49	570	27.8	1,428	21.9	216	28.8	81	27.9	2295	23.9	
50-59	680	33.1	1,965	30.1	161	21.4	81	27.9	2887	30.0	
≥60	354	17.2	1,087	16.7	66	8.8	34	11.8	1541	16.0	
Missing	1	0.1	1	0.0	0	0.0	0	0.0	2	0.2	
Subtotal	2,052	100.0	6,524	100	751	100.0	290	100.0	9,617	100.0	
Female											
<13	1	1.9	11	0.3	1	0.9	0	0.0	13	0.3	
13-19	0	0.0	34	1.0	0	0.0	1	2.0	35	1.0	
20-24	0	0.0	97	2.9	2	1.8	1	2.0	100	2.9	
25-29	6	11.3	166	5.0	/	6.1	4	8.2	183	5.2	
30-39	14	26.4	598	18.1	31	27.2	4	8.2	647	18.4	
40-49	12	22.0	007	20.9	30	20.3	14	28.0	943	20.8	
>60	8	15.1	513	15.6	19	16.7	14	20.0	551	15.7	
Subtotal	53	100.0	3.298	100.0	114	100.0	49	100.0	3.514	100.0	
Transgender		20010	0,230	20010		20010		10010	0,021	20010	
<13	0	0	1	0.5	0	0	0	0	1	0.4	
13-19	0	0	5	2.3	1	5	0	0	6	2.3	
20-24	0	0	11	5.1	2	10	1	10	14	5.4	
25-29	0	0	20	9.2	2	10	1	10	23	8.9	
30-39	2	16.7	47	21.6	10	50	4	40	63	24.2	
40-49	3	25	55	25.2	5	25	2	20	65	25.0	
50-59	6	50	50	22.9	0	0	2	20	58	22.3	
≥60	1	8.3	28	12.8	0	0	0	0	29	11.1	

Table B4. HIV Cases Living in the District of Columbia by Race/Ethnicity, Gender Identity and Current Age, District of Columbia, 2015

Missing	0	0	1	0.5	0	0	0	0	1	0.4
Subtotal	12	100.0	218	100.0	20	100.0	10	100.0	260	100.0

Table B5. Newly Diagnosed HIV Cases by Year of Diagnosis, Gender Identity, Race/Ethnicity, Mode of Transmission, and Age at Diagnosis, District of Columbia, 2011-2015

	2011		2	2012		013	2	014	2015		Total	
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex												
Male	521	72.4	469	71.6	382	73.5	334	78.8	278	74.9	1,984	73.8
Female	181	25.1	169	25.8	124	23.8	75	17.7	81	21.8	630	23.4
Transgender	18	2.5	17	2.6	14	2.7	15	3.5	12	3.2	76	2.8
Total	720	100.0	655	100.0	520	100.0	424	100.0	371	100.0	2,690	100.0
Race/Ethnicity												
White	104	14.4	94	14.4	83	16.0	68	16.0	38	10.2	387	14.4
Black	535	74.3	479	73.1	379	72.9	302	71.2	271	73.0	1,966	73.1
Hispanic	54	7.5	51	7.8	44	8.5	36	8.5	52	14.0	237	8.8
Other*	27	3.8	31	4.7	14	2.7	18	4.2	10	2.7	100	3.7
Total	720	100.0	655	100.0	520	100.0	424	100.0	371	100.0	2,690	100.0
Mode of Transmission												
Sexual contact	540	75.0	516	78.8	405	77.9	249	58.7	246	66.3	1,956	72.7
IDU	30	4.2	20	3.1	19	3.7	11	2.6	8	2.2	88	3.3
Sexual contact/IDU	17	2.4	11	1.7	11	2.1	6	1.4	3	0.8	48	1.8
Risk not identified	130	18.1	102	15.6	84	16.2	158	37.3	114	30.7	588	21.9
Other**	3	0.4	6	0.9	1	0.2	0	0.0	0	0.0	10	0.4
Total	720	100.0	655	100.0	520	100.0	424	100.0	371	100.0	2,690	100.0
Age at Diagnosis												
<13	2	0.3	6	0.9	0	0.0	0	0.0	0	0.0	8	0.3
13-19	28	3.9	32	4.9	19	3.7	16	3.8	15	4.0	110	4.1
20-24	109	15.1	109	16.6	79	15.2	66	15.6	54	14.6	417	15.5
25-29	99	13.8	93	14.2	99	19.0	74	17.5	74	19.9	439	16.3
30-39	148	20.6	153	23.4	128	24.6	109	25.7	111	29.9	649	24.1
40-49	168	23.3	126	19.2	103	19.8	76	17.9	52	14.0	525	19.5
50-59	123	17.1	90	13.7	63	12.1	56	13.2	44	11.9	376	14.0
≥60	43	6.0	46	7.0	29	5.6	27	6.4	21	5.7	166	6.2
Total	720	100.0	655	100.0	520	100.0	424	100.0	371	100.0	2,690	100.0

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

Table B6. Newly Diagnosed HIV Cases by Year of Diagnosis, Gender Identity, and Mode of Transmission, District of Columbia, 2011-2015

	2011		201	2012		2013		.4	2015		Total	
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Male												
MSM	285	54.7	298	63.5	241	63.1	166	49.7	156	56.1	1146	57.8
IDU	24	4.6	13	2.8	11	2.9	3	0.9	5	1.8	56	2.8
MSM/IDU	17	3.3	10	2.1	11	2.9	6	1.8	3	1.1	47	2.4
Heterosexual contact	102	19.6	73	15.6	61	16.0	44	13.2	35	12.6	315	15.9
Risk not identified	91	17.5	72	15.4	58	15.2	115	34.4	79	28.4	415	20.9
Other**	2	0.4	3	0.6	-	0.0	0	0.0	0	0.0	5	0.3
Subtotal	521	100.0	469	100.0	382	100.0	334	100.0	278	100.0	1,984	100.0
Female												
IDU	6	3.3	7	4.1	8	6.5	8	10.7	3	3.7	32	5.1
Heterosexual contact	138	76.2	133	78.7	91	73.4	31	41.3	45	55.6	438	69.5
Risk not identified	36	19.9	26	15.4	24	19.4	36	48.0	33	40.7	155	24.6
Other**	1	0.6	3	1.8	1	0.8	0	0.0	0	0.0	5	0.8
Subtotal	181	100.0	169	100.0	724	100.0	75	100.0	81	100.0	630	100.0
Transgender												
Sexual contact	15	83.3	12	70.6	12	85.7	8	53.3	10	83.3	57	75.0
IDU	-	0.0	-	0.0	0	0.0	0	0.0	-	0.0	0	0.0
Sexual contact/IDU	-	0.0	1	5.9	-	0.0	0	0.0	-	0.0	1	1.3
Risk not identified	3	16.7	4	23.5	2	14.3	7	46.7	2	16.7	18	23.7
Other**	-	0.0	-	0.0	-	0.0	0	0.0	-	0.0	0	0.0
Subtotal	18	100.0	17	100.0	14	100.0	14	100.0	12	100.0	76	100.0

	2011	2011		2012		2013		2014		.5	Total	
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Male												
<13	2	0.4	3	0.6	0	0.0	0	0.0	0	0.0	5	0.3
13-19	18	3.5	20	4.3	14	3.7	12	3.6	11	7.9	75	3.8
20-24	75	14.4	86	18.3	59	15.4	58	17.4	44	31.7	322	16.2
25-29	73	14.0	74	15.8	81	21.2	54	16.2	63	45.3	345	17.4
30-39	106	20.3	110	23.5	98	25.7	84	25.1	87	62.6	485	24.4
40-49	126	24.2	90	19.2	74	19.4	63	18.9	30	21.6	383	19.3
50-59	90	17.3	57	12.2	40	10.5	44	13.2	29	20.9	260	13.1
≥60	31	6.0	29	6.2	16	4.2	19	5.7	14	10.1	109	5.5
Subtotal	521	100.0	469	100.0	382	100.0	334	100.0	278	100.0	1,984	100.0
Female												
<13	0	0.0	3	1.8	0	0.0	0	0.0	0	0.0	3	0.5
13-19	10	0.1	10	5.9	4	3.2	3	4.0	3	3.7	30	4.8
20-24	30	0.2	21	12.4	15	12.1	5	6.7	7	8.6	78	12.4
25-29	18	0.1	12	7.1	17	13.7	14	18.7	7	8.6	68	10.8
30-39	39	0.2	38	22.5	26	21.0	20	26.7	21	25.9	144	22.9
40-49	39	0.2	36	21.3	28	22.6	13	17.3	21	25.9	137	21.7
50-59	33	0.2	32	18.9	21	16.9	12	16.0	15	18.5	113	17.9
≥60	12	0.1	17	10.1	13	10.5	8	10.7	7	8.6	57	9.0
Subtotal	181	100.0	169	100.0	124	100.0	75	100.0	81	100.0	630	100.0
Transgender												
<13	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13-19	0	0.0	2	11.8	1	7.1	1	6.7	1	8.3	5	6.6
20-24	4	22.2	2	11.8	5	35.7	3	20.0	3	25.0	17	22.4
25-29	8	44.4	7	41.2	1	7.1	6	40.0	4	33.3	26	34.2
30-39	3	16.7	5	29.4	4	28.6	5	33.3	3	25.0	20	26.3
40-49	3	16.7	0	0.0	1	7.1	0	0.0	1	8.3	5	6.6
50-59	0	0.0	1	5.9	2	14.3	0	0.0	0	0.0	3	3.9
≥60	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Subtotal	18	100.0	17	100.0	14	100.0	15	100.0	12	100.0	76	100.0

 Table B7. Newly Diagnosed HIV Cases by Year of Diagnosis, Gender Identity, and Age at Diagnosis, District of Columbia, 2011-2015

Table B8. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis, Gender Identity, Race/Ethnicity, Age at Diagnosis, and Mode of Transmission, District of Columbia, 2011-2015

	2011		2012		20)13	20	014	2	015	Total	
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Sex												
Male	313	74.9	269	65.6	199	66.1	156	70.6	121	66.9	1,058	69.1
Female	98	23.4	132	32.2	95	31.6	61	27.6	53	29.3	439	28.7
Transgender	7	1.7	9	2.2	7	2.3	4	1.8	7	4.4	34	2.2
Total	418	100.0	410	100.0	301	100.0	221	100.0	181	100.0	1,531	100.0
Race/Ethnicity												
White	56	13.4	28	6.8	33	11.0	28	12.7	12	6.6	157	10.3
Black	330	78.9	335	81.7	245	81.4	171	77.4	151	83.4	1,232	80.5
Hispanic	26	6.2	27	6.6	18	6.0	14	6.3	15	8.3	100	6.5
Other*	6	1.4	20	4.9	5	1.7	8	3.6	3	1.7	42	2.7
Total	418	100.0	410	100.0	301	100.0	221	100.0	181	100.0	1,531	100.0
Mode of Transmis	ssion											
Sexual contact	294	70.3	285	69.5	220	73.1	142	64.3	125	69.1	1,066	69.6
IDU	32	7.7	36	8.8	24	8.0	19	8.6	7	3.9	118	7.7
Sexual												
contact/IDU	11	2.6	14	3.4	7	2.3	1	0.5	4	2.2	37	2.4
Risk not												
identified	77	18.4	71	17.3	41	13.6	54	24.4	42	23.2	285	18.6
Other**	4	1.0	4	1.0	9	3.0	5	2.3	3	1.7	25	1.6
Total	418	100.0	410	100.0	301	100.0	221	100.0	181	100.0	1,531	100.0
Age at Diagnosis												
<13	1	0.2	1	0.2	1	0.3	3	1.4	0	0.0	6	0.4
13-19	9	2.2	6	1.5	7	2.3	3	1.4	3	1.7	28	1.8
20-24	27	6.5	24	5.9	27	9.0	7	3.2	10	5.5	95	6.2
25-29	56	13.4	43	10.5	45	15.0	27	12.2	34	13.3	195	12.7
30-39	98	23.4	106	25.9	64	21.3	50	22.6	64	35.4	382	25.0
40-49	123	29.4	98	23.9	66	21.9	54	24.4	30	16.6	371	24.2
50-59	76	18.2	91	22.2	58	19.3	52	23.5	29	16.0	306	20.0
≥60	28	6.7	41	10.0	33	11.0	25	11.3	21	11.6	148	9.7
Total	418	100.0	410	100.0	301	100.0	221	100.0	181	100.0	1.531	100.0

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

Table B9. Newly Diagnosed Stage 3 (AIDS) Cases by Year of Diagnosis, Gender Identity, and Mode of TransmissionDistrict of Columbia, 2011-2015

	2011		2012	2012		3	2	014	2015		Total	
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Male												
MSM	163	52.1	126	46.8	108	54.3	82	52.6	57	47.1	536	50.7
IDU	22	7.0	23	8.6	13	6.5	9	5.8	5	4.1	72	6.8
MSM/IDU	11	3.5	13	4.8	9	4.5	1	0.6	4	3.3	36	3.4
Heterosexual contact	64	20.4	60	22.3	46	23.1	27	17.3	21	17.4	218	20.6
Risk not identified	51	16.3	46	17.1	25	12.6	36	23.1	32	26.4	190	18.0
Other**	2	0.6	1	0.4	-	0.0	1	0.6	2	1.7	6	0.6
Subtotal	313	100.0	269	100.0	199	100.0	156	100.0	121	100.0	1,058	100.0
Female												
IDU	10	10.2	13	9.8	10	10.5	10	16.4	2	3.8	45	10.3
Heterosexual contact	63	64.3	94	71.2	61	64.2	32	52.5	43	81.1	293	66.7
Risk not identified	23	23.5	22	16.7	15	15.8	16	26.2	7	13.2	83	18.9
Other**	2	2.0	3	2.3	9	9.5	3	4.9	1	1.9	18	4.1
Subtotal	98	100.0	132	100.0	95	100.0	61	100.0	53	100.0	439	100.0
Transgender												
Sexual contact	4	57.1	5	55.6	5	71.4	1	25.0	4	57.1	19	55.9
IDU	-	0.0	-	0.0	1	14.3	-	0.0	-	0.0	1	2.9
Sexual contact/IDU	-	0.0	1	11.1	-	0.0	-	0.0	-	0.0	1	2.9
Risk not identified	3	42.9	3	33.3	1	14.3	2	50.0	3	42.9	12	35.3
Other**	-	0.0	-	0.0	-	0.0	1	25.0	-	0.0	1	2.9
Subtotal	7	100.0	9	100.0	7	100.0	4	100.0	7	100.0	34	100.0

Table B10. Estimated Number of New HIV Infections by Gender Identity, Race/Ethnicity, Age at Diagnosis, and Mode of Transmission, District of Columbia, 2010-2014[†]

	2010	2011	2012	2013	2014
	Estimate (%)				
	(95% CI)				
Sex					
Male	429 (70.0)	371 (67.4)	299 (76.7)	392 (73.8)	396 (81.1)
Iviale	(277-581)	(192-550)	(186-413)	(204-580)	(249-543)
Female	176 (28.7)	145 (26.4)	84 (21.5)	129 (24.3)	
- Cindic	(88-264)	(49-242)	(28-140)	(35-222)	
Transgender					
—	613	550	390	531	488
lotal	(417-810)	(333-767)	(255-525)	(302-759)	(323-652)
Race/Ethnicity					
Black	439(71.6)	420 (76.4)	282 (72.3)	406 (76.5)	338 (69.3)
	(273-605)	(228-613)	(167-398)	(217-596)	(204-472)
Other*	175 (28.5)	130 (23.6)	108 (27.7)	124 (23.3)	150 (30.7)
•	(84-265)	(50-210)	(45-170)	(36-212)	(65-234)
	613	550	390	531	488
Total	(417-810)	(333-767)	(255-525)	(302-759)	(323-652)
Age					
13-29	161 (26.3)	158 (28.7)	141 (36.1)	142 (26.7)	
13 25	(77-244)	(58-259)	(64-217)	(44-241)	
30-49	261 (42.6)	217 (39.4)	134 (34.4)	215 (40.5)	183 (37.5)
	(152-369)	(100-335)	(65-203)	(90-340)	(90-276)
>=50	87 (14.2)	81 (14.7)	55 (1.3)		
	(26-149)	(9-135)	(11-99)		
	613	550	390	531	488
Total	(417-810)	(333-767)	(255-525)	(302-759)	(323-652)
Transmission Category					
Sexual Contact	483 (78.8)	436 (79.3)	336 (86.1)	407 (76.6)	301 (61.7)
	(317-648)	(254-618)	(215-457)	(221-592)	(180-422)
Other**	131 (21.4)	114 (20.7)	54 (13.8)		186 (38.1)
	(57-204)	(27-201)	(6-101)		(92-280)
	613	550	390	531	488
lotal	(417-810)	(333-767)	(255-525)	(302-759)	(323-652)

†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 B11. Number, Percent, and Rate per 100,000 persons of Chlamydia Cases by Year of Diagnosis, Sex, Race/Ethnicity, Age, and Ward, District of Columbia, 2011-2015

	2011		2012		20	2013		014	2015			Total
	Ν	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000	Ν	Rate per 100,000	N	Rate per 100,000	5 Years Total	5 Years Average Rate per 100,000
Gender Identity												
Female	4,589	1,405.8	4,560	1,366.4	4,196	1,233.4	4,073	1,176.2	4,527	1,307.3	21,945	1,297.8
Male	2,363	805.9	2466	822.8	2,466	805.2	1,958	626.4	3,082	985.9	12,335	809.3
Transgender	1	N/A	6	N/A	3	N/A	8	N/A	13	N/A	32	N/A
Unknown	3	N/A	36	N/A	29	N/A	78	N/A	79	N/A	224	N/A
Total	6,956	1,122.6	7,068	1,115.8	6,694	1,035.5	6,117	928.4	7,701	1,168.8	34,536	1,074.2
Race/Ethnicity												
Black	4,464	1,465.4	4,102	1,337.1	3,234	1,043.7	1,888	604.0	1,634	522.8	15,322	994.6
White	185	84.5	203	89.9	216	93.4	96	40.6	115	48.7	815	71.4
Hispanic	155	259.9	147	234.3	103	157.1	76	111.2	77	112.6	558	175.0
Other	73	200.7	67	176.3	73	183.7	31	74.2	39	93.3	283	145.6
Unknown	2,079	N/A	2,548	N/A	3,068	N/A	4,026	N/A	5,837	N/A	17,558	N/A
Total	6,956	1122.6	7,067	1,115.7	6,694	1,035.5	6,117	928.4	7,702	1,168.9	34,536	1,074.2
Age Group												
0-14	165	188.0	150	163.1	136	141.3	142	142.4	138	138.3	731	154.6
15-19	2,737	6,964.2	2494	6,430.7	2,050	5,406.3	1,726	4,591.8	1,952	5,193.0	10,959	5,717.2
20-24	2,181	3,562.5	2387	4,000.3	2,290	3,878.5	2,230	3,809.9	2,569	4,389.1	11,657	3,928.1
25-29	938	1,260.8	959	1,248.5	1,020	1,308.3	1,007	1,292.9	1,513	1,942.6	5,437	1,410.6
30-39	628	598.2	709	638.5	809	688.5	665	541.4	1,018	828.8	3,829	659.1
>=40	298	117.9	361	140.6	376	144.4	311	118.6	464	176.9	1,810	139.7
Unknown	9	N/A	7	N/A	13	N/A	36	N/A	48	N/A	113	N/A
Total	6,956	1122.6	7,067	1,115.7	6,694	1,035.5	6,117	928.4	7,702	1,168.9	34,536	1,074.2
Ward												
Ward 1	584	774.0	548	722.8	491	620.4	501	613.7	734	899.1	2,858	726.0
Ward 2	175	227.8	229	304.6	312	415.0	891	1,091.4	1,227	1,503.0	2,834	708.4
Ward 3	81	104.7	94	116.7	143	177.5	135	165.4	161	197.2	614	152.3
Ward 4	510	669.2	506	658.4	480	606.7	441	540.2	562	688.4	2,499	632.6
Ward 5	993	1,332.4	975	1,291.9	818	1,031.0	752	921.2	896	1,097.5	4,434	1,134.8
Ward 6	635	832.4	644	814.0	595	709.8	590	722.7	687	841.5	3,151	784.1
Ward 7	1,510	2,195.8	1,368	2,010.7	1,256	1,909.5	1,054	1,291.1	1,302	1,594.9	6,490	1,800.4
Ward 8	1,826	2,663.8	1,833	2,443.7	1,585	2,073.4	1,353	1,657.3	1,604	1,964.8	8,201	2,160.6
Unknown	36	N/A	82	N/A	932	N/A	381	N/A	511	N/A	237	N/A
Detention Center	606	N/A	788	N/A	82	N/A	19	N/A	18	N/A	3,218	N/A
Total	6,956	1122.6	7,067	1,115.7	6,694	1,035.5	6,117	928.4	7,702	1,168.9	34,536	1,074.2
Table B12. Number, Percent, and Rate per 100,000 persons of Gonorrhea Cases by Year of Diagnosis, Sex, Race/Ethnicity, Age, and Ward, District of Columbia, 2011-2015

	2011		2012		20	2013		2014		2015		Total	
	Ν	Rate per 100,000	5 Years Total	5 Years Average Rate per 100,000									
Gender Identity													
Female	1,266	387.8	1,027	307.7	1,014	298.1	852	246.0	835	241.1	4,994	296.2	
Male	1,413	481.9	1,400	467.1	1,548	455.0	1,205	348.0	1,712	494.4	7,278	449.3	
Transgender	1	N/A	9	N/A	8	N/A	26	N/A	7	N/A	27	N/A	
Unknown	2	N/A	4	N/A	2	N/A	10	N/A	23	N/A	67	N/A	
Total	2,682	432.8	2,440	385.2	2,572	397.9	2,093	317.7	2,577	391.1	12,364	384.9	
Race/Ethnicity													
Black	1,743	572.2	1,429	465.8	1,275	411.5	572	183.0	518	165.7	5,537	359.6	
White	118	53.9	125	55.3	153	66.2	98	41.5	56	23.7	550	48.1	
Hispanic	33	55.3	32	51.0	39	59.5	34	49.7	29	42.4	167	51.6	
Other	37	101.7	27	71.0	30	75.5	15	35.9	9	21.5	118	61.1	
Unknown	751	N/A	827	N/A	1,075	N/A	1,374	N/A	1,965	N/A	5,992	N/A	
Total	2,682	432.8	2440	385.2	2,572	397.9	2,093	317.7	2,577	391.1	12,364	384.9	
Age Group													
0-14	52	59.23	49	53.28	38	39.48	42	42.11	41	41.10	222	47.0	
15-19	873	2,221.32	675	1,740.45	566	1,492.66	470	1,250.37	437	1,162.57	3,021	1573.5	
20-24	814	1,329.61	748	1,253.56	807	1,366.78	619	1,057.56	695	1,187.40	3,683	1239.0	
25-29	411	552.46	385	501.23	452	579.75	396	508.44	590	757.52	2,234	579.9	
30-39	303	288.62	357	321.51	415	353.18	334	271.92	505	411.13	1,914	329.3	
>=40	228	90.21	224	87.24	290	111.36	219	83.49	295	112.46	1,256	97.0	
Unknown	1	NA	2	N/A	4	N/A	13	N/A	14	N/A	34	N/A	
Total	2,682	432.8	2440	385.2	2572	397.9	2093	317.7	2577	391.1	12,364	384.9	
Ward													
Ward 1	202	267.7	216	284.9	234	295.7	193	236.4	306	374.8	1,151	291.9	
Ward 2	105	136.7	126	167.6	200	266.0	316	417.0	418	551.6	1,165	307.8	
Ward 3	26	33.6	24	29.8	23	28.6	40	48.3	40	48.3	153	3/./	
Ward 4	151	198.1	141	183.5	151	190.9	106	128.7	123	149.3	6/2	1/0.1	
Ward 5	368	493.8	352	466.4	300	3/8.1	246	306.3	293	364.8	1,559	401.9	
Ward 6	268	351.3	244	308.4	251	299.4	223	2/1.6	2/1	330.1	1,257	312.2	
Ward 7	613	891.4	458	6/3.2	461	/00.9	356	508.1	429	612.3	2,317	6/7.2	
ward 8	/02	1024.1	609	811.9	640	837.2	488	620.2	540	686.3	2,979	/95.9	
Detention Center	5	N/A	6	N/A	6	N/A	3	N/A	12	N/A	32	N/A	
UNKNOWN	242	N/A	264	N/A	306	N/A	122	N/A	145	N/A	1,079	N/A	
Total	2,682	432.8	2440	385.2	2572	397.9	2093	31/./	2577	391.1	12,364	384.9	

Table B13. Number and Rate per 100,000 persons of Primary and Secondary Syphilis Cases by Year of Diagnosis, Gender Identity, Race/Ethnicity, Age, and Ward, District of Columbia, 2011-2015

	2011		2012		2013		2014		2015		Total	
	Ν	Rate per 100,000	Ν	Rate per 100,000	Ν	Rate per 100,000	Ν	Rate per 100,000	Ν	Rate per 100,000	5 Years Total	5 years Rate per 100,000
Туре												
Primary	45	7.3	42	6.6	46	7.1	37	5.6	26	3.9	196	30.6
Secondary	166	26.8	138	21.8	126	19.5	90	13.7	82	12.4	602	94.2
Total	211	34.1	180	28.4	172	26.6	127	19.3	108	16.4	798	24.9
Gender Identity												
Female	8	2.5	6	1.8	21	6.2	7	2.0	4	1.2	46	13.6
Male	202	68.9	173	57.7	151	49.3	115	36.8	99	31.7	740	244.4
Unknown	0	N/A	0	N/A	0	N/A	1	N/A	0	N/A	1	N/A
Transgender	1	N/A	1	N/A	0	N/A	5	N/A	5	N/A	11	N/A
Total	211.0	34.1	180.0	28.4	172	26.6	128	19.4	108.0	16.4	798	25.0
Race/Ethnicity												
Black	137	45.0	95	31.0	113	36.5	59	19.0	37	11.9	441	143.4
White	52	23.7	63	27.9	37	16.0	28	12.1	20	8.6	200	88.4
Hispanic	15	25.2	11	17.5	5	8.0	4	6.4	5	8.0	46	65.0
Other	1	2.7	7	18.4	4	10.1	1	2.5	2	5.0	20	38.8
Unknown	6	NA	4	NA	13	NA	35	NA	44	NA	112	NA
Total	211	34.1	180	28.4	172	26.6	127	19.3	108	16.4	819	24.9
Age Group												
0-14	0	0.0	0	0.00	1	1.14	1	1.1	0	0.0	2	2.3
15-19	12	30.5	7	17.81	3	7.63	6	15.3	4	10.2	32	81.4
20-24	38	62.1	34	55.54	28	45.74	17	27.8	17	27.8	134	218.9
25-29	39	52.4	31	41.67	24	32.26	18	24.2	26	34.9	138	185.5
30-39	54	51.4	57	54.30	50	47.63	33	31.4	28	26.7	222	211.5
>=40	68	26.9	51	20.18	66	26.11	52	20.6	33	13.1	270	106.8
Total	211	34.1	180	28.4	172	26.6	127	19.3	108	16.4	798	24.9
Ward												
Ward 1	25	33.1	23	30.3	13	16.4	19	23.3	17	20.8	97	124.0
Ward 2	31	40.4	30	39.9	23	30.6	11	14.5	16	21.1	111	146.5
Ward 3	5	6.5	4	5.0	3	3.7	4	4.8	5	6.0	21	26.0
Ward 4	13	17.1	12	15.6	16	20.2	18	21.9	6	7.3	65	82.0
Ward 5	32	42.9	20	26.5	30	37.8	20	24.9	19	23.7	121	155.8
Ward 6	25	32.8	31	39.2	16	19.1	16	19.5	13	15.8	101	126.4
Ward 7	38	55.3	21	30.9	37	56.3	20	28.5	13	18.6	129	189.5
Ward 8	32	46.7	19	25.3	23	30.1	14	17.8	15	19.1	103	139.0
Ward DC	2	N/A	0	N/A	0	N/A	0	N/A	0	N/A	2	N/A
Ward Unknown	8	N/A	20	N/A	11	N/A	5	N/A	4	N/A	48	N/A
Total	211	34.1	180	28.4	17 <u>2</u>	26.6	127	19. <u>3</u>	108	16.4	5 <u>95</u>	24.9

Table B14. Reported Tuberculosis Cases by Selected Characteristics, District of Columbia, 2011-2015

	2011		2012		2013		2014		2015		Total	
	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate
District Total	55	8.9	37	5.9	37	5.7	32	5.0	33	4.9	194	N/A
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
US Born vs. Foreign Born												
Foreign Born	30) 55.5	20	54.1	25	67.6	17	53.1	18	54.5	110	56.7
US Born	25	45.4	17	45.9	12	32.4	15	46.9	15	45.5	84	43.3
Total	55	100.0	37	100.0	37	100.0	32	100.0	33	100.0	194	100.0
Disease Site												
Pulmonary	37	67.2	20	54.1	23	62.2	22	68.8	18	54.5	120	61.9
Extra Pulmonary	14	25.5	11	29.7	10	37	8	25.0	11	33.3	54	27.8
Both	4	7.3	6	16.2	4	10.8	2	6.3	4	12.1	20	10.3
Total	55	100.0	37	100.0	37	100.0	32	100.0	33	100.0	194	100.0
Sex												
Males	33	60.0	17	45.9	25	67.6	16	50.0	15	45.5	106	54.6
Females	22	40.0	20	54.1	12	32.4	16	50.0	18	54.5	88	45.3
lotal	55	100.0	37	100.0	37	100.0	32	100.0	33	100.0	194	100.0
Age	1	1 0	1	2 7	2	0 1	0	0.0	2	6.1	7	2.6
< j 5 - 1/l	1	. 1.0	1	2.7	5	0.1	0	0.0	2	0.1	2	5.0 1.0
15 - 24	c	, 16.4	4	10.8	3	8.1	2	6.3	3	9.1	21	10.8
25 44	17	20.0	15	10.0	17	16	16	5.5 FO	12	26.4	21	20.7
25 - 44 45 - 64	19	20.9	15	40.0 20.7	11	40 2/1 2	010	20 20 1	12	20.4 12.2	52	59.7 27 2
	10) 18.2	5	13 5	4	10.8	5	15.6	10	30.3	24	17.5
Total	10	100.0	27	100.0	27	100.0	27	100.0	20	100.0	34 104	100.0
Race/Ethnicity	J .	100.0	57	100.0	57	100.0	52	100.0	55	100.0	194	100.0
White	1	1.8	0	0.0	3	8.1	1	3.1	4	12.1	9	4.6
Black	38	69.1	31	83.8	28	75.7	27	84.4	21	63.6	145	74.7
Hispanic	8	14.5	4	10.8	3	8.1	3	9.4	4	12.1	22	11.3
Other*	8	14.5	2	5.4	3	8.1	1	3.1	4	12.1	18	9.3
Total	55	100.0	37	100.0	37	100.0	32	100.0	33	100.0	194	100.0
Homeless w/in past year												
Total	3	5.5	2	5.4	1	2.7	1	3.1	0		7	3.6
Alcohol/Substance Use												
Total	8	3 14.5	5	13.5	1	2.7	3	9.3	7	21.2	24	12.4
HIV Co-infection												
Total	9	16.4	8	21.6	6	16.2	3	9.3	4	12.1	30	15.5

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