HIV/STI SURVEILLANCE REPORT 2018

It's a matter of public health

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

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SUMMARY

It's a matter of Public Health

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

The Chicago Department of Public Health (CDPH) believes that all Chicagoans should have the opportunity to be sexually healthy. However, we recognize that specific population groups, such as residents of certain community areas and individuals of specific races, ethnicities and sexual and gender identities, do not have an equitable chance at achieving sexual health. Through vital partnerships with communities, researchers, healthcare providers and public and private organizations, we remain committed to creating opportunities so every person in our city can attain full sexual health.

The annual CDPH HIV/STI Surveillance Report presents cases of HIV, AIDS, chlamydia, gonorrhea, syphilis and congenital syphilis. Similar to other large urban areas, Chicago has higher disease morbidity than suburban and rural areas. This report provides HIV and STI data useful for service providers, community organizations, program planners, policy makers and the general public.

This year's report specifically highlights disease trends in individuals aged 50+ years and individuals aged 13-24 years. In sections three and four of the report, we present data focused on these populations in hopes of calling attention to the need to provide quality healthcare and supportive services to older persons living with HIV and our city's adolescents.

DATA SUMMARY

HIV CARE CONTINUUM

- In 2017, 82% of those newly diagnosed with HIV in Chicago were linked to HIV medical care within one month of HIV diagnosis. By 12 months after diagnosis, 92% of individuals newly diagnosed had been linked to medical care.
- Among all people living with HIV (PLWH) in Chicago, 63% accessed care in 2017 and 36% were retained in medical care.
- 48% of PLWH in Chicago achieved viral suppression in 2017.

HIV

- There was a total of 752 new HIV diagnoses among Chicago residents in 2017, the fewest since 1990, corresponding to a rate of 27.9 per 100,000 population. A total of 23,835 individuals were diagnosed through 2016 and were living with HIV in 2017, corresponding to a rate of 883.2 per 100,000 population.
- There were 5.1 times as many new HIV diagnoses among men than women.
- In 2017, individuals aged 20-29 years old were the most frequently diagnosed population group, representing 38% of all new HIV diagnoses.
- Non-Hispanic (NH) Blacks were the most frequently diagnosed population, representing 54.8% of new HIV diagnoses, 64% of AIDS diagnoses and 55.2% of late diagnoses.
- Compared with other HIV transmission groups, there were 3.9 times more new HIV diagnoses among men who have sex with men (MSM) than those reporting heterosexual transmission and 19.3 times more new HIV diagnoses than those reporting transmission associated with injection drug use (IDU).

- In 2017, the highest rates of new HIV infection diagnoses were seen in individuals residing in Uptown, Chatham and Washington Park. The highest rates of PLWH were observed in Uptown, Edgewater, Rogers Park and South Shore.

CHLAMYDIA, GONORRHEA, PRIMARY & SECONDARY (P&S) SYPHILIS AND CONGENITAL SYPHILIS

- There were a total of 30,292 chlamydia cases, 11,730 gonorrhea cases and 788 P&S syphilis cases reported to CDPH in 2017. The number of chlamydia cases is the highest reported to date. The number of gonorrhea cases is the highest since 2009. The number of P&S syphilis cases has generally plateaued in the past three years.
- There were 1.5 times as many reported chlamydia cases among women than men, 1.9 times as many reported gonorrhea cases among men than women and 13.3 times are many reported P&S syphilis cases among men than women. The largest proportion of P&S syphilis cases (74.9%) were among MSM.
- In 2017, individuals aged 20-29 years old were the most frequently diagnosed group for chlamydia, gonorrhea and P&S syphilis.
- NH Blacks were the most frequently diagnosed population among all reportable sexually transmitted infections (STIs), representing 41.41% of reported chlamydia cases, 47.8% of reported gonorrhea cases and 34% of reported P&S syphilis cases.
- In 2017, community areas with the highest rates of chlamydia and gonorrhea included areas considered to have high economic hardship.
- There were 11 reported cases of congenital syphilis in 2017 in Chicago, the lowest reported number in the past five years.
- NH Black mothers accounted for over 90% of the reported congenital syphilis cases in 2017.

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Chicago Department of Public Health. HIV/STI Surveillance Report 2017. Chicago, IL: City of Chicago, December 2018.

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SECTION ONE
HIV & STIs IN CHICAGO, 2017

It's a matter of Public Health

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

HIV

HIV CONTINUUM OF CARE, CHICAGO, 2017

The HIV continuum of care is an important tool for monitoring progress and identifying opportunities for HIV prevention, care and treatment interventions. Since ensuring people living with HIV (PLWH) are engaged in care is critical to both individual and population level health, the continuum was developed to depict two paths: (1) the percentages of newly diagnosed individuals linked to HIV medical care over the course of one year; and (2) the percentages of PLWH at specific levels of care engagement and viral suppression.

In 2017, 82% of those diagnosed with HIV were linked to HIV medical care within one month of HIV diagnosis. By 12 months after diagnosis, 92% of newly diagnosed persons had been linked to medical care. For individuals diagnosed with HIV through 2016 and living with HIV in 2017, 63% had accessed medical care (having at least one medical visit in 2017), 36% were considered to be retained in care (having at least two medical visits in 2017) and 55% had a viral load test in the past 12 months. Reaching viral suppression for individuals living with HIV is essential to a high-quality and healthy life and to reducing the likelihood HIV will be transmitted to others. For individuals diagnosed with HIV through 2016 and living with HIV in 2017, only 48% were considered to be virally suppressed (< 200 copies/mL), indicating an opportunity to strengthen HIV prevention, care and treatment interventions. The data represented in the continuum highlight Chicago's continuing efforts to ensure that those newly diagnosed are rapidly linked to medical care and the need for increased attention on services that assist individuals living with HIV to stay in care and initiate and sustain treatment to obtain viral suppression (Figure 1.1).

HIV IN CHICAGO

In 2017, a total of 752 individuals were newly diagnosed with HIV in Chicago, and 337 individuals were newly diagnosed with AIDS (Stage 3 HIV infection) (Table 1.1). This is the second year that reported cases of newly diagnosed HIV and AIDS have been significantly lower than the previous year. Caution should be taken when comparing years as provider and laboratory reporting may be incomplete. It is not uncommon for corrections to reporting issues to take several years. These case counts correspond to rates of 27.9 per 100,000 population and 12.5 per 100,000 population, respectively (Table 1.1). Of those newly diagnosed in 2017, a total of 156 individuals were considered to have a late/concurrent diagnosis, indicating that those individuals were diagnosed with HIV and subsequently AIDS within the 12-month period (Table 1.2). This represents a reduction of 18.8% from 2016, but still signals an opportunity to improve early diagnosis of HIV among people living in Chicago.

There was a total of 23,835 individuals who had been diagnosed with HIV through 2016 and living with HIV in 2017 (Table 1.1). This case count corresponds to a rate of 883.2 per 100,000 population (Table 1.1). Of those living with HIV in 2016, a total of 12,262 individuals were living with AIDS (Table 1.3).

HIV BY CHICAGO COMMUNITY AREA

In 2017, the rates of reported cases of HIV ranged from 0 to 88.7 per 100,000 population throughout Chicago (Figure 1.2). The three community areas with the highest average HIV infection diagnosis

rates in 2017 were Uptown (88.7 per 100,000), Chatham (83.8 per 100,000) and Washington Park (76.8 per 100,000) (Figure 1.2; Appendix Table A.1). Of these three community areas, one (Washington Park) is considered an area of high economic hardship (Figure 1.2).

In 2016, the rates of people living with HIV/AIDS ranged from 26.1 to 2,116.7 per 100,000 population throughout Chicago (Figure 1.3). The four community areas with the highest prevalence rates were Uptown (2,116.6 per 100,000), Edgewater (2,006.3 per 100,000), Rogers Park (1,645.7 per 100,000) and South Shore (1,408.6 per 100,000) (Figure 1.3; Appendix Table A.2). None of these community areas are considered areas of high economic hardship (Figure 1.3).

HIV BY GENDER

In 2017, there were 5.1 times as many new HIV diagnoses among men than women, with 628 cases reported among males and 124 cases reported among females (Table 1.1). The largest number of late diagnoses occurred among males when compared to females (Table 1.2), with males accounting for 77.9% of late diagnoses. New diagnoses among transgender individuals accounted for < 3.0% of the total 2017 new HIV diagnoses (Table 1.2).

In 2016, there were 4.2 times as many men living with HIV than women (19,020 males and 4,565 females) (Table 1.3). HIV prevalence among transgender individuals accounted for < 2% of the total Chicago prevalence (Table 1.3).

HIV BY RACE/ETHNICITY

In 2017, Non-Hispanic (NH) Blacks were the most frequently diagnosed population, representing 54.8% of new HIV diagnoses, 64.0% of AIDS diagnoses and 55.2% of late diagnoses (Table 1.2). When compared to the next two populations with the largest number of individuals newly diagnosed, there were 2.6 times as many new HIV diagnoses among NH Blacks than among Hispanics and 2.8 times as many new HIV diagnoses than among NH Whites (Table 1.2).

In 2016, NH Blacks accounted for just over half (50.2%) of those individuals living with HIV in Chicago (Table 1.3). When compared with the next two populations with the largest number of People Living with HIV, there were 2.1 times more NH Blacks living with HIV than NH Whites living with HIV and 2.5 times more NH Blacks living with HIV than Hispanics living with HIV (Table 1.3).

HIV BY TRANSMISSION GROUP

In 2017, men who have sex with men (MSM) accounted for the majority (74.6%) of new HIV diagnoses in Chicago (Table 1.2). Compared with other HIV transmission groups, there were 3.9 times more new HIV diagnoses among MSM than those reporting heterosexual contact transmission (HET) and 19.1 times more new HIV diagnoses than those reporting injection drug use (IDU) transmission (Table 1.2).

In 2016, MSM represented 63.0% of individuals living with HIV in Chicago (Table 1.3). In comparison to other HIV transmission groups, there were 3.5 times as many MSM living with HIV than HET and 5.3 times as many MSM living with HIV than IDU (Table 1.3).

HIV BY AGE

In 2017, individuals aged 20-29 years old were the most frequently diagnosed age group, representing 38.0% of all new HIV diagnosis (Table 1.2). Individuals 30-39 years of age had the largest percentage of late diagnoses, accounting for 31.2% (Table 1.2). If the 20-29 age group were combined with the 30-39 age group, individuals 20-39 years old represent nearly two-thirds (65.0%) of all new HIV diagnoses in 2017 (Table 1.2).

In 2016, individuals aged 40-59 years old accounted for over half (53.7%) of those individuals living with HIV in Chicago (Table 1.3). Individuals aged 20-29 years old (who accounted for the largest number of new diagnoses) only represented 12.0% of those living with HIV (Table 1.3).

CHLAMYDIA

CHLAMYDIA IN CHICAGO

Chlamydia, a sexually transmitted bacterial infection caused by *Chlamydia trachomatis*, is the most common notifiable disease in the United States and Chicago. According to the CDC 2017 STD Surveillance Report, chlamydia is one the most prevalent STIs and has comprised the largest proportion of all STIs reported to CDC since 1944. In 2017, a total of 30,292 chlamydia cases were reported in Chicago (Table 1.1). This case count corresponds to a rate of 1,122.4 per 100,000 population and is the highest reported case count in the city to date (Table 1.1; Figure 2.2).

CHLAMYDIA BY CHICAGO COMMUNITY AREA

In 2017, the rates of reported cases of chlamydia ranged from 169.8 to 2,979.5 per 100,000 population throughout Chicago (Figure 1.4). The three community areas with the highest average chlamydia case rates in 2017 were North Lawndale (2,979.5 per 100,000), West Garfield Park (2,688.7 per 100,000) and Riverdale (2,684.4 per 100,000) (Figure 1.4; Appendix Table A.3). All three of these community areas are considered areas with high economic hardship (Figure 1.4).

CHLAMYDIA BY BIRTH SEX

In 2017, there were 1.5 times as many reported chlamydia cases among women than men, with 18,199 cases reported among females and 12,031 cases reported among males (Table 1.4). This disparity between the sexes is consistent with previous years and likely reflects a larger number of females screened for this infection. It is also likely that many of the sex partners of women with chlamydia were not screened and did not receive a diagnosis, hence they were not reported as having chlamydia infections.

CHLAMYDIA BY RACE/ETHNICITY

In 2017, NH Blacks were the most frequently diagnosed population, representing 41.1% of reported chlamydia cases in Chicago (Table 1.4). When compared to the next two populations with the largest number of reported cases, there were 2.8 times as many chlamydia cases among NH Blacks than among Hispanics and 4.6 times as many than among NH Whites (Table 1.4).

CHLAMYDIA BY AGE

In 2017, individuals aged 20-29 years old were the most frequently diagnosed age group, representing 54.2% of all reported chlamydia cases (Table 1.4). If this group were combined with those aged 13-19 years old, then individuals 13-29 years of age would represent 79.1% of all reported chlamydia cases in 2017 (Table 1.4).

CHLAMYDIA + HIV CO-INFECTION

In 2017, a total of 1,099 reported chlamydia cases were co-infected with HIV (Table 1.5). The majority of co-infected individuals were male (93.0%), NH Black (37.5%), aged 20-29 years (36.1%) and were MSM (62.5%) (Table 1.5).

GONORRHEA

GONORRHEA IN CHICAGO

Gonorrhea is the second most commonly reported notifiable disease in the United States and Chicago. Gonorrhea is a sexually transmitted bacterial infection caused by *Neisseria gonorrhoeae*. According to the CDC 2017 STD Surveillance Report, gonorrhea infections are a major cause of pelvic inflammatory disease (PID) in the United States, and certain strains of the bacteria have developed resistance to many of the antimicrobials used for treatment. In 2017, a total of 11,730 gonorrhea cases were reported in Chicago (Table 1.1). This case count corresponds to a rate of 434.6 per 100,000 population (Table 1.1).

GONORRHEA BY CHICAGO COMMUNITY AREA

In 2017, the rates of reported cases of gonorrhea ranged from 0 to 1,211.3 per 100,000 population throughout Chicago (Figure 1.5). The three community areas with the highest average gonorrhea case rates in 2017 were North Lawndale (1,211.3 per 100,000), West Garfield Park (1,172.2 per 100,000) and Englewood (1,050.4 per 100,000) (Figure 1.5; Appendix Table A.4). All three of these community areas are considered areas with high economic hardship (Figure 1.5).

GONORRHEA BY BIRTH SEX

In 2017, there were 1.9 times as many reported gonorrhea cases among men than women, with 7,707 cases reported among males and 3,977 cases reported among females (Table 1.4). This disparity between the sexes may be reflective of either increased transmission or increased case ascertainment (e.g., through increased extra-genital screening) among men.

GONORRHEA BY RACE/ETHNICITY

In 2017, NH Blacks were the most frequently diagnosed population, representing 47.8% of reported gonorrhea cases in Chicago (Table 1.4). When compared to the next two populations with the largest number of reported cases, there were 4.9 times as many gonorrhea cases among NH Blacks than among Hispanics and 3.9 times as many than among NH Whites (Table 1.4).

GONORRHEA BY AGE

Similar to reported cases of chlamydia, gonorrhea cases in Chicago are concentrated among adolescents and young adults. In 2017, individuals aged 20-29 years old were the most frequently diagnosed age group, representing 50.5% of all reported gonorrhea cases (Table 1.4). If this group were combined with those aged 13-19 years old, then individuals 13-29 years of age would represent 70.4% of all reported gonorrhea cases in 2017 (Table 1.4).

GONORRHEA + HIV CO-INFECTION

In 2017, a total of 1,202 reported gonorrhea cases were co-infected with HIV (Table 1.5). The majority of co-infected individuals were male (96.2%), NH Black (44.3%), aged 20-29 years (42.3%) and were MSM (64.1%) (Table 1.5).

PRIMARY & SECONDARY (P&S) SYPHILIS

P&S SYPHILIS IN CHICAGO

Syphilis is a sexually transmitted bacterial infection caused by *Treponema pallidum* and results in a genital ulcerative disease that, if left untreated, can result in significant medical complications and facilitate the transmission and acquisition of HIV infection (CDC STD Surveillance Report, 2017). Primary and secondary (P&S) syphilis are the most infectious stages of the infection that reflect symptomatic disease and are used as indicators of new infection. In 2017, a total of 788 P&S syphilis cases were reported in Chicago (Table 1.1). This case count corresponds to a rate of 29.2 per 100,000 population (Table 1.1).

P&S SYPHILIS BY CHICAGO COMMUNITY AREA

In 2017, the rates of reported cases of P&S syphilis ranged from 0 to 145.5 per 100,000 population throughout Chicago (Figure 1.6). The two community areas with the highest average P&S syphilis case rates in 2017 were Uptown (145.5 per 100,000) and Edgewater (138.0 per 100,000) (Figure 1.6; Appendix Table A.5). Neither of these community areas is considered an area of high economic hardship (Figure 1.6).

P&S SYPHILIS BY BIRTH SEX

In 2017, there were 13.3 times as many reported syphilis cases among men than women, with 733 cases reported among males and 55 cases reported among females (Table 1.4). This disparity between the sexes may be reflective of either increased transmission among MSM or increased diagnostic screening among men, especially MSM. Since 2011, gender of sex partner was added to the Illinois National Electronic Disease Surveillance System (INEDSS), which allows providers to report this information to the health department to assess trends of syphilis cases among MSM.

P&S SYPHILIS BY RACE/ETHNICITY

Like other reportable STIs in 2017, NH Blacks were the most frequently diagnosed population, representing 34% of reported P&S syphilis cases in Chicago (Table 1.4). When compared to the next

two populations with the largest number of reported cases, there were 2.0 times as many P&S syphilis cases among NH Blacks than among Hispanics and 1.2 times as many than among NH Whites (Table 1.4).

P&S SYPHILIS BY TRANSMISSION GROUP

According to the 2017 CDC STD Surveillance Report, MSM accounted for the majority of reported P&S syphilis cases in 2017 in the United States. Similarly in Chicago, the largest proportions of P&S syphilis cases (74.9%) were among MSM, while men who have sex with females represented only 4.7% of the cases (Table 1.4). Notably, 13.5% of male syphilis cases were reported among males whose sexual orientation was unknown, which, if known, could potentially increase the number of MSM cases.

P&S SYPHILIS BY AGE

In 2017, individuals aged 20-29 years old were the most frequently diagnosed age group, representing 38.1% of all reported syphilis cases (Table 1.4). However, unlike cases reported for chlamydia and gonorrhea, older age groups made up the majority of reported P&S syphilis cases. Thus, individuals aged 20-39 represented 69.1% of all reported P&S syphilis cases in 2017 (Table 1.4).

P&S SYPHILIS + HIV CO-INFECTION

In 2017, a total of 342 reported P&S syphilis cases were co-infected with HIV (Table 1.5). The majority of co-infected individuals were male (97.4%), NH Black (37.4%), aged 30-39 years (31.6%) and were MSM (68.9%) (Table 1.5).

CONGENITAL SYPHILIS

CONGENITAL SYPHILIS IN CHICAGO

If an early syphilis infection is left untreated in a pregnant woman, it can lead to congenital syphilis which can cause infection of the fetus and increase the risk for stillbirth or death of the infant. According to the 2017 CDC STD Surveillance Report, after decreasing from 2008-2012, there has been a national increase in congenital syphilis from 2012-2017. In 2017, there were 11 congenital syphilis cases reported in Chicago, the lowest number of cases in the past five years (Table 1.6). In 2017, CDPH re-launched a campaign to bring awareness to this disease. (https://www.healthychicagobabies.org/congenital-syphilis/)

CONGENITAL SYPHILIS BY CHICAGO COMMUNITY AREA

From 2013-2017, the average annual rates of reported cases of congenital syphilis ranged from 0 to 492.6 per 100,000 live births throughout Chicago (Figure 1.7). The Chicago community areas with the highest average congenital syphilis case rates from 2013-2017 were Fuller Park, East Garfield Park, North Lawndale, West Englewood, Englewood and Roseland. Four of these six community areas are considered areas of high economic hardship (Figure 1.7).

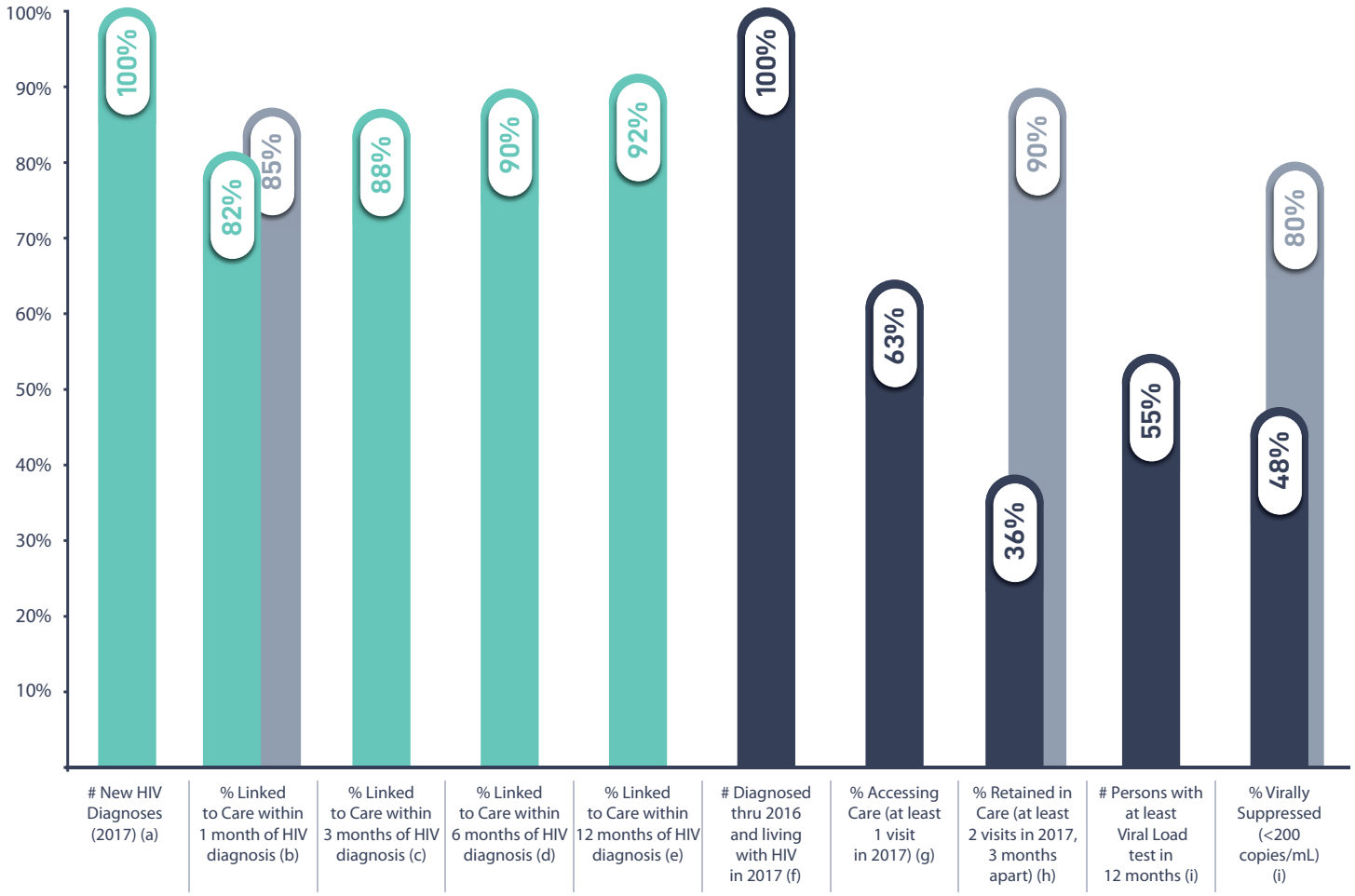
CONGENITAL SYPHILIS BY RACE/ETHNICITY

NH Blacks accounted for 91.0% of all reported congenital syphilis cases in 2017 in Chicago and have consistently accounted for the majority of these cases for the past five years (Table 1.6). When compared to the next population with the largest number of reported cases, there were 10 times as many congenital syphilis cases among NH Blacks than among Hispanics (Table 1.6). In 2017, there were no reported cases of congenital syphilis among NH Whites for the first time in the past five years (Table 1.6).

CONGENITAL SYPHILIS BY MATERNAL AGE

In 2017, mothers aged 20-29 accounted for 73.0% of the congenital syphilis cases in Chicago (Table 1.6). This age group has accounted for the majority of congenital syphilis cases for the past five years. However within this age cohort, the majority of cases from 2013-2015 occurred among women aged 20-24, while recently (2016-2017), the majority of cases occurred among women aged 25-29 (Table 1.6). The median maternal age for congenital syphilis cases in 2017 was 25 years old, a decrease from the median age of 27 years in 2016 (Table 1. 6).

Figure 1.1: HIV Continuum of Care Among Cases 13 Years and Older, Chicago, 2017 (as of 10/26/2018)



(a) Number of persons ≥ 13 years of age at diagnosis and diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(b) Percent of persons ≥ 13 years of age linked to care (at least one CD4, VL, or HIV-1 genotype test) within 1 month of HIV diagnosis among those diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(c) Percent of persons ≥ 13 years of age linked to care (at least one CD4, VL, or HIV-1 genotype test) within 3 months of HIV diagnosis among those diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(d) Percent of persons ≥ 13 years of age linked to care (at least one CD4, VL, or HIV-1 genotype test) within 6 months of HIV diagnosis among those diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(e) Percent of persons ≥ 13 years of age linked to care (at least one CD4, VL, or HIV-1 genotype test) within 12 months of HIV diagnosis among those diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(f) Number of persons ≥ 13 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, Care1 and VL1 Tables.
(g) Percent of persons ≥ 13 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017 who received at least one medical care visit (at least one CD4 or VL) between January 2017 and December 2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, Care1 Table.
(h) Percent of persons ≥ 13 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017 who received at least two medical care visits (at least one CD4 or VL at each), 3 months apart, between January 2017 and December 2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, Care1 Table.
(i) Percent of persons ≥ 13 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017 who received at least one VL test in the past 12 months. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, VL1 Table.
(j) Percent of persons ≥ 13 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017 whose most recent viral load test result was < 200 copies/mL. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, VL1 Table.
Note: Grey bars represent the National HIV/AIDS Strategy (NHAS) indicators for 2020.

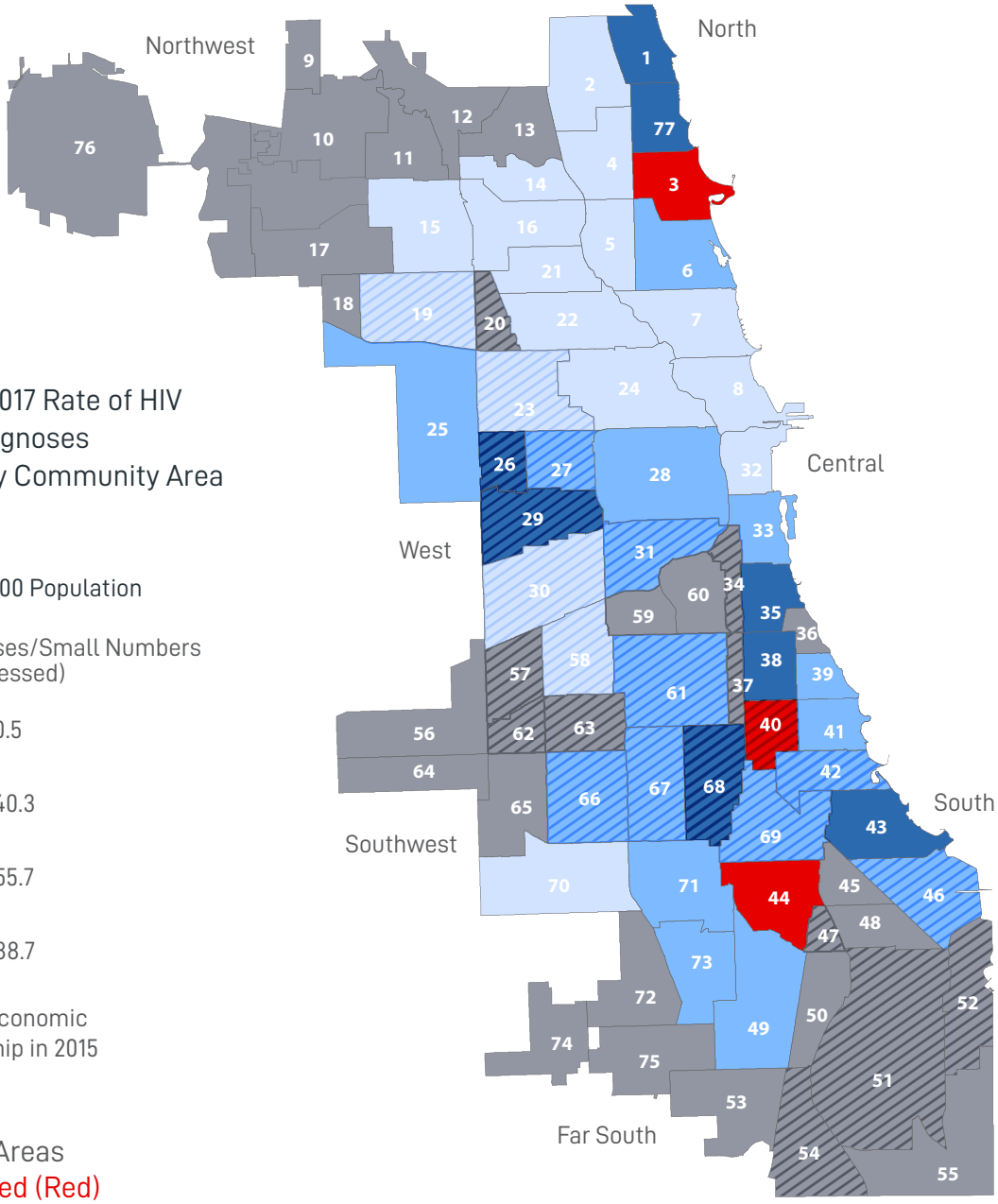


Figure 1.2 - 2017 Rate of HIV Infection Diagnoses in Chicago by Community Area

Community Areas Most Impacted (Red)

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Linconl Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Monteclare
19. Berlmont Cragin
20. Hermosa
21. Avondale
22. Logan Square
23. Humbolt Park
24. West Town
25. Austin
26. West Garfield Park
27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower Wst Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Brighton Park
59. Mckinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Greater Grand Crossing
70. Ashburn
71. Ausburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. Ohare
77. Edgewater

Data source: CDPH, Enchanced HIV/AIDS Reporting System (as of 10/29/2018), City of Chicago GIS Shapeflies, and U.S Census. This map represents 86% (645/752) of total new HIV Infection diagnoses. The economic hardship Index utilities multiple indicators to measure economic conditions of Chicago Community Areas. High hardship index scores indicate worse economic conditions.

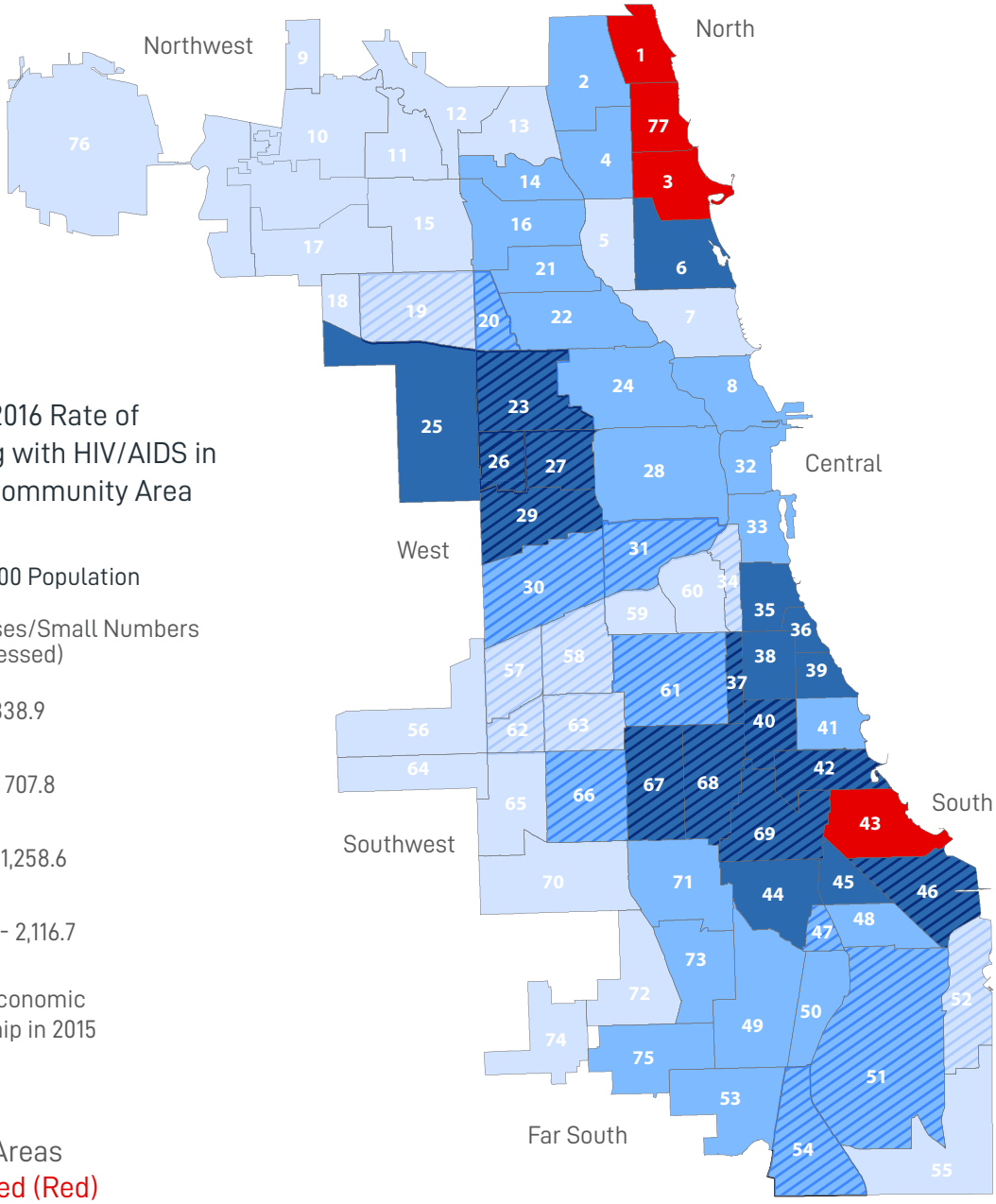


Figure 1.3 - 2016 Rate of People Living with HIV/AIDS in Chicago by Community Area

Cases per 100,000 Population

- No Cases/Small Numbers (suppressed)
- 26.2 - 338.9
- 339.0 - 707.8
- 707.9 - 1,258.6
- 1,258.7 - 2,116.7
- High Economic Hardship in 2015

Community Areas Most Impacted (Red)

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Linconl Park
8. Near North Side
9. Edison Park
10. Norwood Park
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13. North Park
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15. Portage Park
16. Irving Park
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24. West Town
25. Austin
26. West Garfield Park
27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower Wst Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Brighton Park
59. Mckinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Greater Grand Crossing
70. Ashburn
71. Ausburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. Ohare
77. Edgewater

Data source: CDPH, Enhanced HIV/AIDS Reporting System (as of 09/26/18), City of Chicago GIS Shapefiles, and U.S Census. This map represent 68% (16,270/23,880) of people living with HIV/AIDS. The economic hardship index utilizes multiple indicators to measure economic condition if Chicago Community Areas. High hardship index scores indicate worse economic conditions.

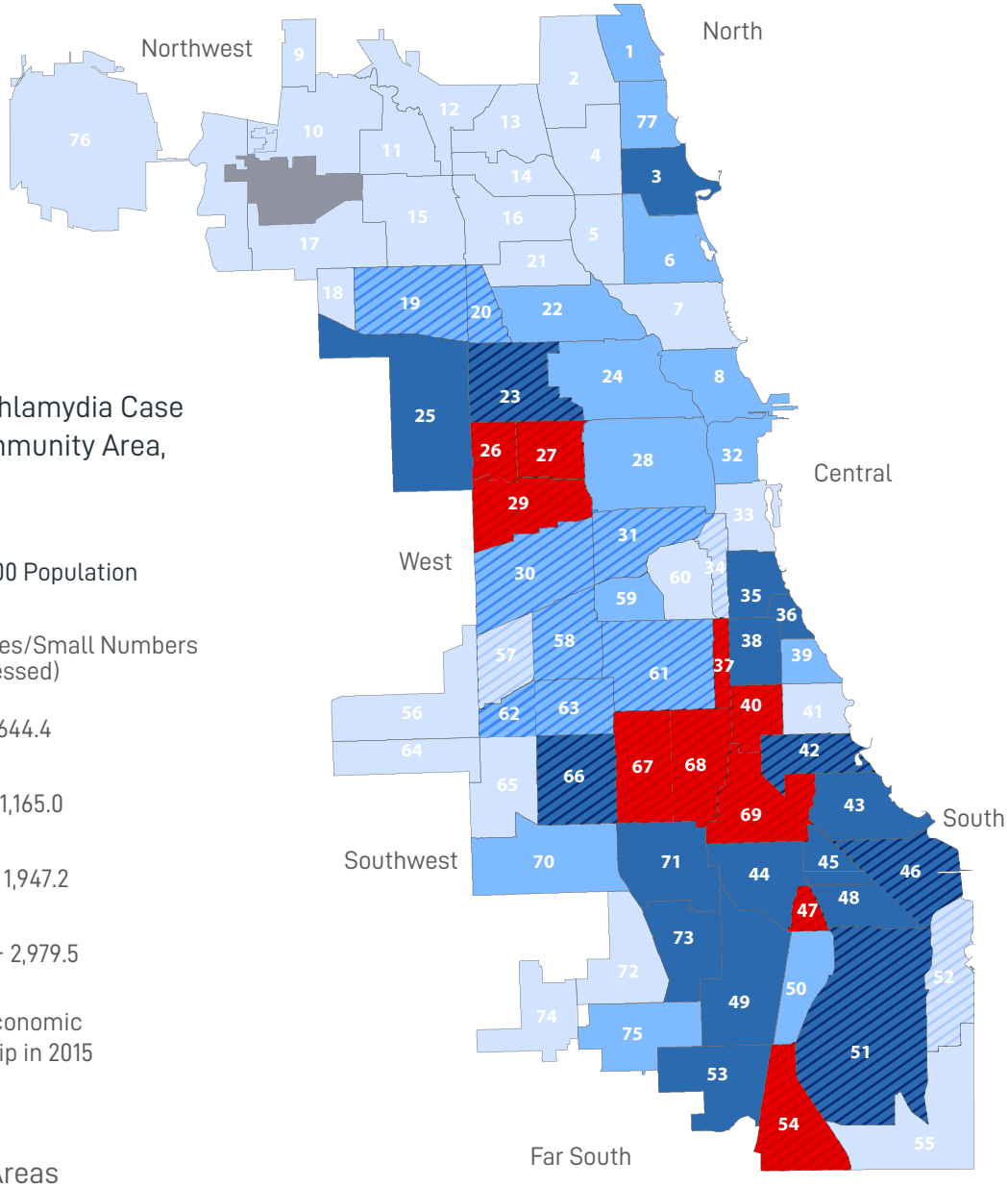

Figure 1.4 - Chlamydia Case Rates by Community Area, Chicago, 2017

Cases per 100,000 Population

- No Cases/Small Numbers (suppressed)
- 169.8 - 644.4
- 644.5 - 1,165.0
- 1,165.1 - 1,947.2
- 1,947.3 - 2,979.5
- High Economic Hardship in 2015

Community Areas Most Impacted (Red)

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Linconl Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Monteclare
19. Berlmont Cragin
20. Hermosa
21. Avondale
22. Logan Square
23. Humbolt Park
24. West Town
25. Austin
26. West Garfield Park
27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower Wst Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Brinhton Park
59. Mckinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Greater Grand Crossing
70. Ashburn
71. Ausburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. Ohare
77. Edgewater

Data source: Illinois National Electronic Disease Surveillance System (6/2018), City of Chicago GiS Shaperflies and U.S Census. This map represents 93% (28,158/30,292) of total Chlamydia cases. The economic hardship index utilizes multiple indicators to measure economic conditions of Chicago Community Areas. High hardship index score indicate worse economic conditions.

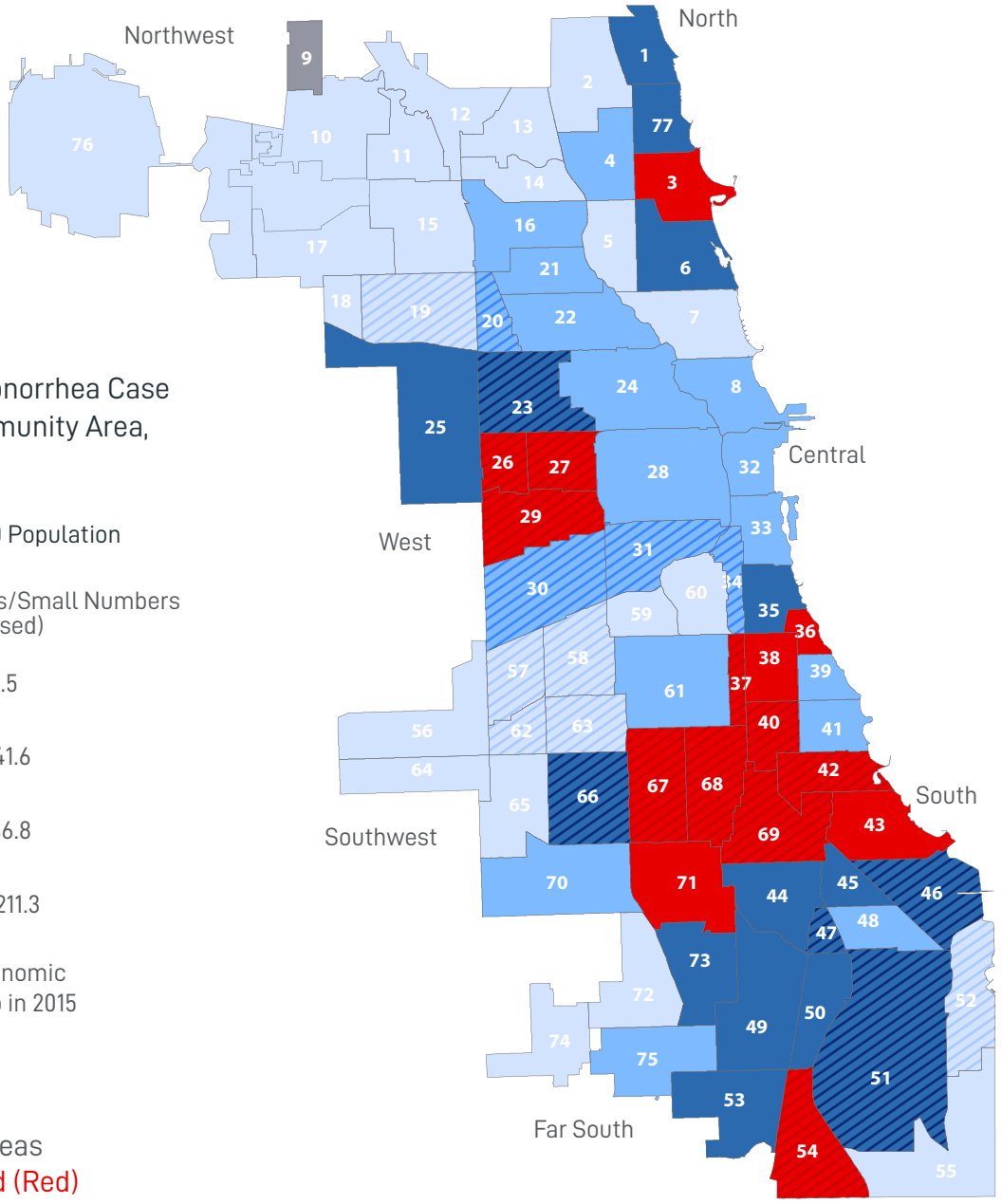

Figure 1.5 - Gonorrhea Case Rates by Community Area, Chicago, 2017

Cases per 100,000 Population

- No Cases/Small Numbers (suppressed)
- 51.9 - 166.5
- 166.6 - 441.6
- 441.7 - 746.8
- 746.9 - 1,211.3
- High Economic Hardship in 2015

Community Areas
Most Impacted (Red)

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Linconl Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Monteclare
19. Berlmont Cragin
20. Hermosa
21. Avondale
22. Logan Square
23. Humbolt Park
24. West Town
25. Austin
26. West Garfield Park
27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower Wst Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Brighton Park
59. Mckinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Greater Grand Crossing
70. Ashburn
71. Ausburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. Ohare
77. Edgewater

Data source: Illinois National Electronic Disease Surveilliance System (6/2018), City of Chicago GiS Shaperflies and U.S Census. This map represents 93% (28,158/30,292) of total Chlamydia cases. The economic hardship index utilizes multiple indicators to measure economic conditions of Chicago Community Areas. High hardship index score indicate worse economic conditions.

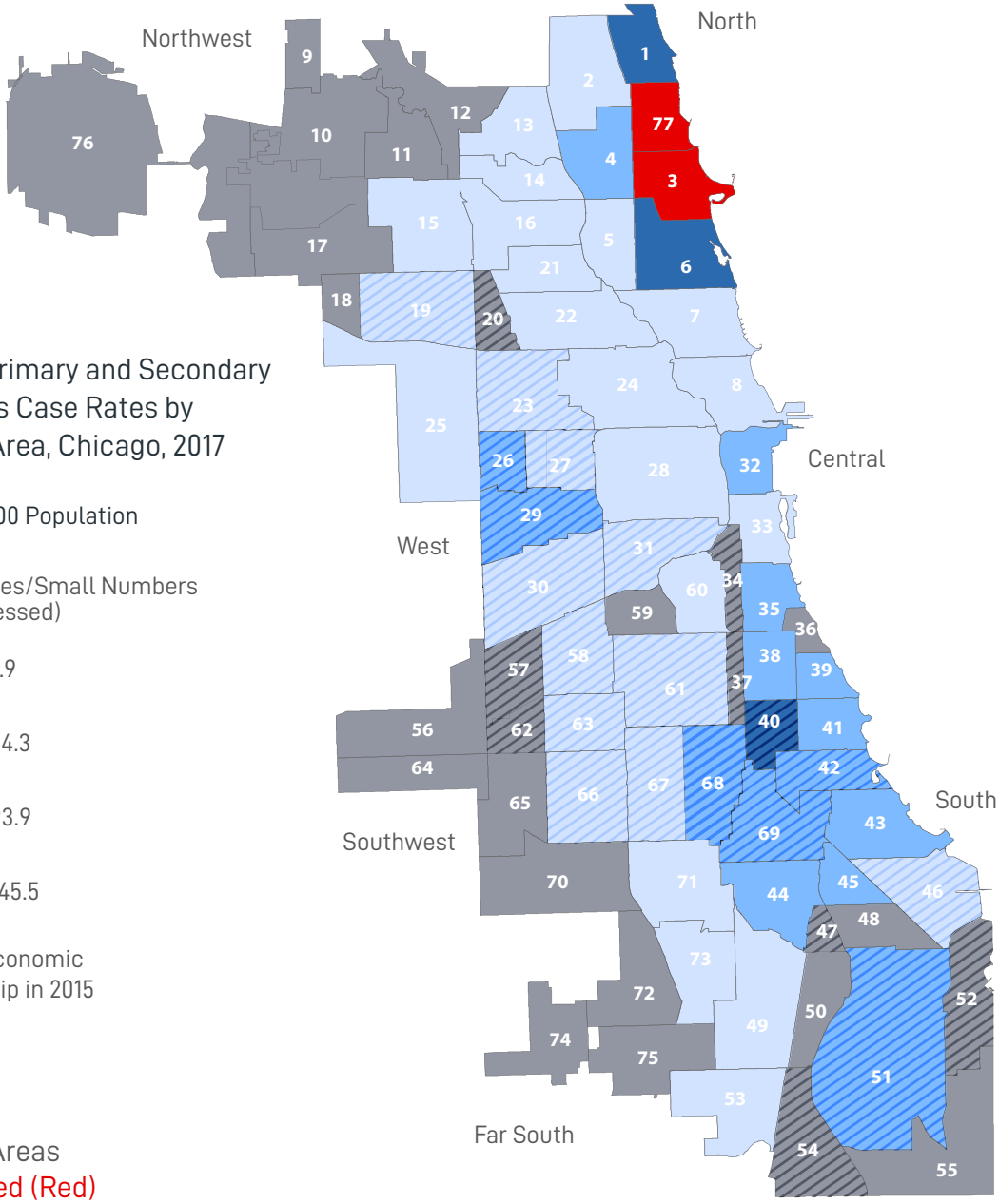

Figure 1.6 - Primary and Secondary (P&S) Syphilis Case Rates by Community Area, Chicago, 2017

Cases per 100,000 Population

- No Cases/Small Numbers (suppressed)
- 9.4 - 27.9
- 28.0 - 54.3
- 54.4 - 93.9
- 94.0 - 145.5
- High Economic Hardship in 2015

Community Areas Most Impacted (Red)

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Linconl Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Monteclare
19. Berlmont Cragin
20. Hermosa
21. Avondale
22. Logan Square
23. Humbolt Park
24. West Town
25. Austin
26. West Garfield Park
27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower Wst Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Brighton Park
59. Mckinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Greater Grand Crossing
70. Ashburn
71. Ausburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. Ohare
77. Edgewater

Data source: STD Management Information Systems,, City of Chicago GIS Shapeflies, and U.S Census. This map represents 97% (766/788) of total Primary and Secondary Syphilis Cases. The economic hardship Index utilities multiple indicators to measure economic conditions of Chicago Community Areas. High hardship index scores indicate worse economic conditions.

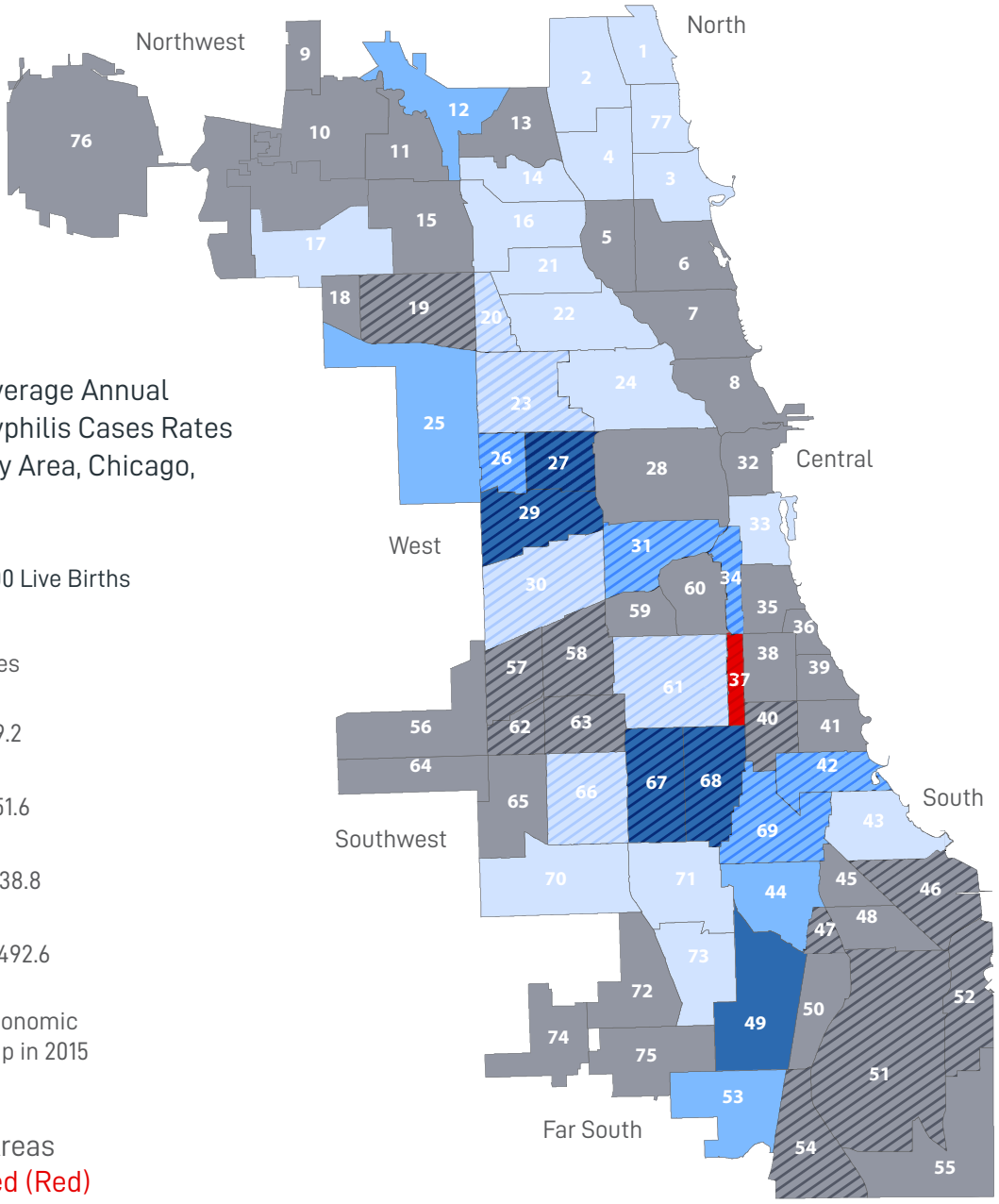

Figure 1.7 - Average Annual Congenital Syphilis Cases Rates by Community Area, Chicago, 2013-2017

Cases per 100,000 Live Births

- No Cases
- 13.4 - 69.2
- 69.3 - 151.6
- 151.7 - 238.8
- 238.9 - 492.6
- High Economic Hardship in 2015

Community Areas Most Impacted (Red)

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Linconl Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Monteclare
19. Berlmont Cragin
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25. Austin
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27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower Wst Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Brighton Park
59. Mckinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Greater Grand Crossing
70. Ashburn
71. Ausburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. Ohare
77. Edgewater

Data source: STD Management Information Systems, City of Chicago GIS Shapeflies. Note: Rates per 100,000 were calculated using 2012–2016 live births as the denominator. The economic hardship Index utilities multiple indicators to measure economic conditions of Chicago Community Areas. High hardship index scores indicate worse economic conditions.

Table 1.1: HIV Prevalence Case Rates by Race/Ethnicity and Birth Sex, Chicago and United States

Demographic Characteristics	Diagnosed/Reported Cases, 2017 ¥										HIV Prevalence, 2016 †			
	HIV Infection§		AIDS		Gonorrhea		Chlamydia		Syphilis€		HIV Prevalence, 2016†		United States**	
Race/ Ethnicity	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*
Black, non-Hispanic	412	46.0	214	23.9	5,606	626.2	12,446	1,390.2	268	29.9	11,956	1,335.4	413,587	1,026.6
White, non-Hispanic	146	17.1	38	4.5	1,414	165.6	2,675	313.3	230	26.9	5,719	669.7	302,283	152.8
Hispanic	158	20.7	62	8.1	1,143	149.6	4,379	573.2	132	17.3	4,684	613.1	214,839	372.1
Asian/PI, non-Hispanic	23	15.5	7	4.7	114	76.7	349	234.8	19	12.8	280	188.3	14,472	91.4
AI/AN, non-Hispanic	< 5		< 5		15	503.7	33	1,108.1	< 5	33.6	23	772.3	2,959	124.0
Other, non-Hispanic	11	16.2	15	22.0	74	108.8	270	396.8	63	92.6	1,173	1,724.0	42,410	628.4
Unknown	0	-	0	-	3,364	-	10,140	-	75	-	0	-		
Sex^														
Male	628	48.1	260	19.9	7,707	590.1	12,031	921.2	733	56.1	19,198	1,470.0	754,218	570.1
Female	124	8.9	77	5.5	3,977	285.5	18,199	1,306.6	55	3.9	4,637	332.9	235,004	169.9
Unknown	0		0		46		62		0		0	-		
Chicagoβ	**752**	**27.9**	**337**	**12.5**	**11,730**	**434.6**	**30,292**	**1,122.4**	**788**	**29.2**	**23,835**	**883.2**	**-**	**-**
United States‡ **	**38,281**	**11.8**	**17,604**	**5.4**	**555,608**	**171.9**	**1,708,569**	**528.8**	**30,644**	**9.5**	**-**	**-**	**991,447**	**306.6**

¥ 2017 Diagnoses for HIV and AIDS; 2017 Reported Cases for STIs; 2016 HIV Prevalence. † Prevalence rate per 100,000 population. § HIV infection diagnosis and prevalence represents people with HIV at any stage of disease through 9/30/18. βTotals of newly diagnosed HIV and AIDS may be lower due to incomplete laboratory reporting. * Rate per 100,000 population using 2010 U.S. Census Bureau Population figures. € Primary and secondary syphilis (symptomatic and infectious stages) only. Unknown Race/Ethnicity not reported. ** Centers for Disease Control and Prevention. HIV Surveillance Report, 2017; vol. 29. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published November 2018, pp. 17, 19, and 29-30. Published November 2018. ‡ Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2017. Atlanta: U.S. Department of Health and Human Services; 2018. ^ Counts based on birth sex.

Table 1.2: HIV and AIDS Infections and Late Diagnosis by Selected Demographic Characteristics, Chicago, 2017. (as of 10/26/2018)

Demographic Characteristics	HIV*		AIDS*		Late Diagnosis‡	
	No.	%	No.	%	No.	%
Gender**						
Male	613	81.5%	255	75.7%	120	77.9%
Female	117	15.6%	77	22.8%	32	20.8%
Transgender: MtF	15	2.0%	< 5	1.5%	< 5	<1%
Transgender: FtM	7	< 1%	0	0.0%	0	0.0%
Race/Ethnicity^						
Black, non-Hispanic	412	54.8%	214	64.0%	85	55.2%
White, non-Hispanic	146	19.4%	38	11.3%	21	13.6%
Hispanic	158	21.0%	62	18.4%	38	24.7%
Asian/PI, non-Hispanic	23	3.1%	7	2.1%	6	3.9%
AI/AN, non-Hispanic	< 5	< 1%	< 5	< 1%	< 5	< 1%
Multiple, non-Hispanic	11	1.5%	15	4.5%	< 5	< 1%
Unknown	0	0.0%	0	0.0%	0	0.0%
Transmission Group						
Male Sex w/Male	561	74.6%	205	61.0%	100	64.9%
Injection Drug Use	29	3.9%	38	11.3%	12	7.8%
MSM and IDU§	15	2.0%	12	3.6%	< 5	< 1%
Heterosexual	143	19.0%	75	22.3%	40	26.0%
Other¶	< 5	< 1%	7	2.1%	< 5	< 1%
Age Category†						
Less than 13	< 5	< 1%	< 5	< 1%	< 5	< 1%
13-19	57	7.6%	7	2.1%	6	3.9%
20-29	286	38.0%	69	20.7%	31	20.1%
20-24	130	17.3%	29	8.7%	14	9.1%
25-29	156	20.7%	40	12.0%	17	11.0%
30-39	203	27.0%	92	27.6%	48	31.2%
40-49	99	13.2%	74	22.2%	33	21.4%
50-59	74	9.8%	57	17.1%	22	14.3%
60+	29	3.9%	36	10.8%	14	9.1%
Total€	752		337		156	

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. *HIV infection diagnoses represents people newly diagnosed with HIV, at any stage of disease through 10/26/2018. AIDS represents all newly diagnosed as AIDS, or stage 3 HIV, through 10/26/2018.** Current gender identity or gender with which a person identifies. Because total diagnoses were calculated using current gender, independently of values using birth sex, total diagnoses may differ slightly across tables. ^ Multiple, non-Hispanic indicates more than one race identified. § Men who have sex with men and inject drugs. ¶ Includes perinatal transmission, blood transfusion, hemophilia, and no indicated risk (NIR). † Age at time of diagnosis. ‡ Late diagnosis represents those diagnosed with stage 3 HIV (AIDS) within 1 year of being diagnosed with HIV. €Total case count may be lower due to incomplete provider and laboratory reporting.

Table 1.3: People Living with HIV Infection (PLWH) and AIDS (PLWA) in 2016, by Selected Demographic Characteristics, Chicago (as of 9/26/2018)

Demographic Characteristics	HIV* No.	HIV* %	AIDS¥ No.	AIDS¥ %
Gender**				
Male	19,020	79.8%	9,821	80.1%
Female	4,565	19.2%	2,330	19.0%
Transgender: MtF	180	< 1%	74	< 1%
Transgender: FtM	69	< 1%	36	< 1%
Additional Gender	< 5	< 1%	< 5	< 1%
Race/Ethnicity^				
Black, non-Hispanic	11,956	50.2%	6,387	52.1%
White, non-Hispanic	5,719	24.0%	2,553	20.8%
Hispanic	4,684	19.7%	2,544	20.7%
Asian/PI, non-Hispanic	280	1.2%	127	1.0%
AI/AN, non-Hispanic	23	< 1%	9	< 1%
Multiple, non-Hispanic	1,173	4.9%	642	5.2%
Unknown	0	0.0%	0	0.0%
Transmission Group				
Male Sex w/Male	15,026	63.0%	7,128	58.1%
Injection Drug Use	2,855	12.0%	1,873	15.3%
MSM and IDU§	1,287	5.4%	853	7.0%
Heterosexual	4,294	18.0%	2,230	18.2%
Other¶	373	1.6%	178	1.5%
Age Category†				
Less than 13	71	< 1%	10	< 1%
13-19	181	< 1%	25	< 1%
20-29	2,851	12.0%	777	6.3%
20-24	919	3.9%	231	1.9%
25-29	1,932	8.1%	546	4.5%
30-39	4,281	18.0%	1,712	14.0%
40-49	5,840	24.5%	3,038	24.8%
50-59	6,958	29.2%	4,250	34.7%
60+	3,653	15.3%	2,450	20.0%
Total	23,835		12,262	

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. * HIV prevalence represents people diagnosed with HIV through 2016 and living with HIV in 2017. ¥ AIDS represents people diagnosed with AIDS through 2016 and living with AIDS in 2017. ** Current gender identity or gender with which a person identifies. Because total diagnoses were calculated using current gender, independently of values using birth sex, total diagnoses may differ slightly across tables. ^ Multiple, non-Hispanic indicates more than one race identified. § Men who have sex with men and inject drugs.¶ Includes perinatal transmission, blood transfusion, hemophilia, and NIR. † Current age as of 2016.

Table 1.4: Reported Cases of Chlamydia, Gonorrhea, Primary and Seconary (P&S) Syphilis by Selected Demographic Characteristics, Chicago, 2017

Demographic Characteristics	Chlamydia		Gonorrhea		P&S Syphilis	
	No.	%	No.	%	No.	%
Birth Sex¥						
Male	12,031	39.8%	7,707	66.0%	733	93.0%
Female	18,199	60.2%	3,977	34.0%	55	7.0%
Race/Ethnicity						
Black, non-Hispanic	12,446	41.1%	5,606	47.8%	268	34.0%
White, non-Hispanic	2,675	8.8%	1,414	12.1%	230	29.2%
Hispanic	4,379	14.5%	1,143	9.7%	132	16.8%
Asian/PI, non-Hispanic	349	1.2%	114	< 1%	19	2.4%
AI/AN, non-Hispanic	33	< 1%	15	< 1%	< 5	< 1%
Multiple, non-Hispanic	270	< 1%	74	< 1%	63	8.0%
Unknown	10,140	33.5%	3,364	28.7%	75	9.5%
Transmission Group‡						
Male sex w/Male	-	-	-	-	590	74.9%
Heterosexual Males	-	-	–	–	37	4.7%
Females	-	-	-	-	55	7.0%
Male unknown	-	-	-	-	106	13.5%
Age Category†						
Less than 13	43	< 1%	8	< 1%	0	0.0%
13-19	7,550	24.9%	2,331	19.9%	22	2.8%
20-29	16,410	54.2%	5,927	50.5%	300	38.1%
20-24	10,206	33.7%	3,250	27.7%	114	14.5%
25-29	6,204	20.5%	2,677	22.8%	186	23.6%
30-39	4,435	14.6%	2,228	19.0%	244	31.0%
40-49	1,263	4.2%	779	6.6%	120	15.2%
50-59	463	1.5%	349	3.0%	88	11.2%
60+	128	< 1%	108	< 1%	14	1.8%
Total**	30,292		11,730		788	

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. ¥ Does not include unknown. ‡ Transmission Group represents the sex of sexual partner of syphilis cases. Data are not collected for chlamydia and gonorrhea. † Age a time of diagnosis. ** Includes cases with unknown sex.

Table 1.5: Co-Infection Between HIV Infection Diagnoses & Reported Cases of Chlamydia, Gonorrhea, Primary & Secondary (P&S) Syphilis by Selected Demographic Characteristics, Chicago, 2017€

Demographic Characteristics	HIV + Chlamydia No.	HIV + Chlamydia %	HIV + Gonorrhea No.	HIV + Gonorrhea %	HIV + P&S Syphilis No.	HIV + P&S Syphilis %
Gender**						
Male	1,022	93.0%	1,156	96.2%	333	97.4%
Female	74	6.7%	43	3.6%	9	2.6%
Unknown	< 5	< 1%	< 5	< 1%	0	0.0%
Race/Ethnicity^						
Black, non-Hispanic	412	37.5%	532	44.3%	128	37.4%
White, non-Hispanic	249	22.7%	243	20.2%	81	23.7%
Hispanic	186	16.9%	166	13.8%	76	22.2%
Asian/PI, non-Hispanic	16	1.5%	7	< 1%	7	2.0%
AI/AN, non-Hispanic	0	< 1%	< 5	< 1%	0	0.0%
Other/Multiple, non-Hispanic	8	< 1%	9	< 1%	39	11.4%
Unknown	228	20.7%	243	20.2%	11	3.2%
Transmission Group ¥						
Male Sex w/Male	687	62.5%	771	64.1%	235	68.9%
Injection Drug Use	6	< 1%	6	< 1%	6	1.8%
MSM and IDU§	36	3.3%	44	3.7%	17	5.0%
Heterosexual	30	2.7%	26	2.2%	< 5	< 1%
Other¶	66	6.0%	63	5.2%	21	6.2%
Missing	274	24.9%	292	24.3%	60	17.3%
Age Category†						
13-19	35	3.2%	30	2.5%	10	2.9%
20-29	397	36.1%	509	42.3%	101	29.5%
20-24	161	14.6%	201	16.7%	45	13.2%
25-29	236	21.5%	308	25.6%	56	16.4%
30-39	352	32.0%	400	33.3%	108	31.6%
40-49	196	17.8%	165	13.7%	69	20.2%
50-59	94	8.6%	78	6.5%	48	14.0%
60+	25	2.3%	20	1.7%	6	1.8%
Total	**1,099**		**1,202**		**342**	

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable.HIV+Chlamydia, HIV+Gonorrhea and HIV+Syphilis diagnoses represents people living with HIV and also diagnosed with the respective STI during 2017. € Data Source: Illinois Department of Public Health (IDPH) as of 10/12/2018. ** Current gender identity or gender with which a person identifies. Because total diagnoses were calculated using current gender, independently of values using birth sex, total diagnoses may differ slightly across tables . ^ Multiple, non-Hispanic indicates more than one race identified. AI/AN refers to American Indian/Alaskan Native. ¥ Transmission Group data based on HIV surveillance data as of 10/26/2018.§ Men who have sex with men and inject drugs. ¶ Includes perinatal transmission, blood transfusion, hemophilia, and NIR. † Age at time of STI diagnosis.

Table 1.6: Congenital Syphilis Cases by Selected Demographic Characteristics, Chicago, 2013-2017

	Year of Report									
	2013		2014		2015		2016		2017	
Demographic Characteristics	No.	%	No.	%	No.	%	No.	%	No.	%
Case Clasification										
Presumptive Cases	13	87.0%	18	90.0%	24	100.0%	12	100%	10	91%
Stillborns	< 5	13.0%	< 5	10.0%	0	0.0%	0	0.0%	< 5	9.0%
Race/Ethnicity										
Black, non-Hispanic	9	60.0%	13	65.0%	18	75.0%	9	75.0%	10	91.0%
White, non-Hispanic	< 5	13.3%	< 5	5.0%	< 5	4.2%	< 5	8.3%	0	0.0%
Hispanic	< 5	20.0%	< 5	5.0%	5	20.8%	< 5	8.3%	< 5	9.0%
Asian/PI, non-Hispanic	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AI/AN, non-Hispanic	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Other/Unknown	< 5	6.7%	5	25.0%	0	0.0%	< 5	8.3%	0	0.0%
Maternal Age Category†										
Less than 13	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
13-19	< 5	20.0%	0	0.0%	< 5	8.3%	0	0.0%	0	0.0%
20-29	10	66.7%	15	75.0%	19	79.2%	8	67.0%	8	73.0%
20-24	7	46.7%	9	45.0%	12	50.0%	< 5	25.0%	< 5	27.0%
25-29	< 5	20.0%	6	30.0%	7	29.2%	5	42.0%	5	45.0%
30-39	< 5	13.3%	5	25.0%	< 5	8.3%	< 5	33.0%	< 5	27.0%
40+	0	0.0%	0	0.0%	< 5	4.2%	0	0.0%	0	0.0%
Median Age	22		26		23		27		25	
Total	**15**		**20**		**24**		**12**		**11**	

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. † Age at time of diagnosis.

SECTION TWO

TRENDS IN HIV AND STIs

IN CHICAGO, 2013–2017

It's a matter of Public Health

HEALTHY CHICAGO

CHICAGO DEPARTMENT OF PUBLIC HEALTH

Trends in People Living With and Diagnosed With HIV Infection in Chicago

As medical advances have been made allowing people living with HIV (PLWH) to live longer, healthier lives, there has been an annual increase in the number of total PLWH in Chicago from 1990-2016. In 2016, 23,835 PLWH resided in Chicago, 4.4 times the number of PLWH in Chicago in 1990 (Figure 2.1).

The number of newly diagnosed cases reported to CDPH in 2017 was below 900 for the second year in a row with 752 cases, while the average number of reported cases for the years 2013-2015 is 939 cases per year (Figure 2.1). Caution should be taken when interpreting the drop-in cases over the last two years, as this may be representative of issues with laboratory and provider reporting.

The proportion of newly diagnosed HIV infections and cases among males and females has remained relatively consistent from 2013-2017, with a majority of cases occurring among men (Table 2.1). Comparing 2016 newly diagnosed HIV cases with 2017 newly diagnosed HIV cases, all age groups had a percent decrease in newly diagnosed HIV infections (Table 2.2). Comparing 2013 reported AIDS cases with 2017 reported AIDS cases, there was also a decrease in the number of AIDS cases among all age groups (Table 2.2).

From 2013-2017, the largest proportion of HIV infection diagnoses occurred among NH Blacks (Table 2.3), with 412 cases, accounting for 54.8% of all reported 2017 cases. Over the five year span, the percent of cases among the racial/ethnic categories has remained relatively stable.

Trends in the Number of Reported STIs in Chicago

The CDC has reported increasing rates of chlamydia and gonorrhea nationwide. Chicago has seen similar trends in recent years.

CHLAMYDIA: The number of chlamydia cases reported in 2017 is the highest since 1997 (30,292 cases) (Figure 2.2). While there has been a steady increase in the proportion of reported chlamydia cases in males from 2013-2017, women continue to have the highest number of cases, with 1.5 times as many reported chlamydia cases in women than men in 2017 (Table 2.1).

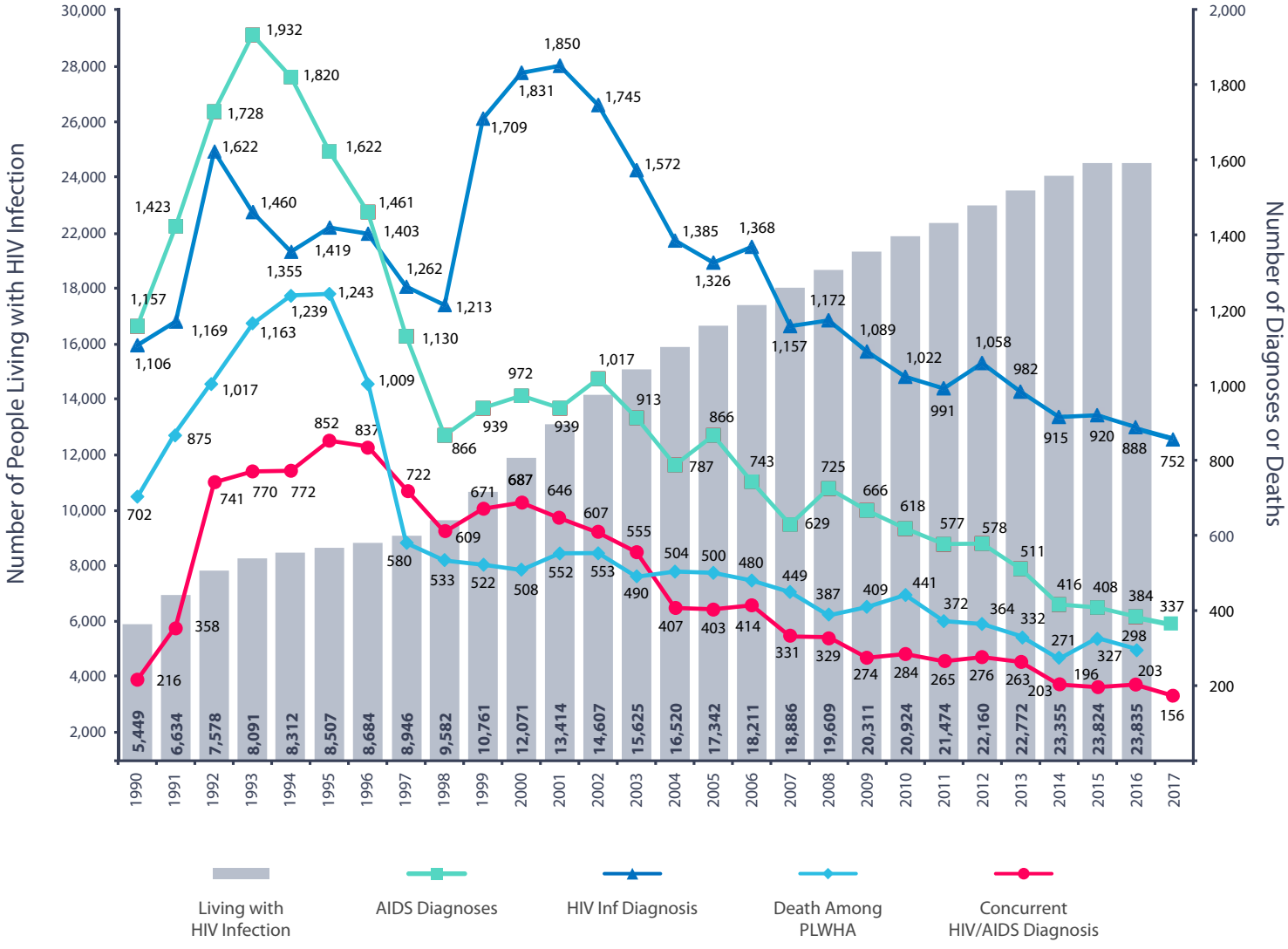
GONORRHEA: The number of gonorrhea cases reported in 2017 is the highest since 2009 (11,730 cases) (Figure 2.2). Targeted STI screening among MSM may have contributed to the overall increase in the number of reported gonorrhea cases among males in 2017, compared to previous years. Between 2015 and 2017, total number of cases increased by 33.5%, from 8,786 to 11,730 (Table 2.1).

PRIMARY & SECONDARY SYPHILIS: In 2017, the number of P&S syphilis decreased by 3% from 813 cases in 2016 to 788 cases in 2017 (Table 2.1). Similar to chlamydia and gonorrhea, there was an overall increase in the number of P&S syphilis cases from 2013 to 2016 with approximately 90% of cases occurring in men annually (Table 2.1).

STIs BY AGE: Similar to previous years, individuals aged ≤ 29 years made up a majority (54.2%) of reported chlamydia cases in 2017. While this is also true for the reported number of gonorrhea cases between 2013-2017, it is worth noting that the proportion of gonorrhea cases among persons 13-19 years of age decreased (from 31.9% in 2013 to 19.9% in 2017) while the proportion of cases among older adults 30-49 years of age increased (from 17.1% in 2013 to 25.6% in 2017) during the same time period (Table 2.2). This increase in reported gonorrhea cases among an older age group may be a result of increased screening efforts (Table 2.2).

STIs BY RACE/ETHNICITY: Similar to HIV/AIDS trends over the last five years, the highest proportion of chlamydia, gonorrhea and P&S syphilis cases were among NH Blacks (Table 2.3). Hispanics accounted for the second highest proportion of chlamydia cases annually between 2013 and 2017, while NH Whites accounted for the second highest proportion of gonorrhea and P&S syphilis (Table 2.3).

Figure 2.1: People Living with HIV Infection (PLWH), People Diagnosed with HIV Infection, People Diagnosed with AIDS, Concurrent HIV/AIDS Diagnoses and Deaths Among PLWH, Chicago, 1990-2017 (as of 10/26/2018)



Notes on Surveillance Reporting:
1983 = AIDS case reporting begins
1995 = Effective drug therapy against HIV becomes available
1999 = Code-based HIV reporting begins
2006 = Name-based HIV reporting begins
2012 = All CD4 and viral load labs become reportable; FDA approves Pre-exposure Prophylaxis (PrEP) use

Figure 2.2: Number of Reported Sexually Transmitted Infections, Chicago, 1997-2017

Table 2.1: HIV/STI by Year of Diagnosis and Sex* Chicago, 2013-2017

Year of Diagnosis	2013		2014		2015		2016		2017		% Change 2016 to 2017
	No.	%	No.	%	No.	%	No.	%	No.	%	%
HIV Infection Diagnosis											
Male	814	82.9%	760	83.1%	766	83.6%	714	80.4%	613	81.5%	-14.1%
Female	156	15.9%	131	14.3%	133	14.5%	157	17.7%	117	15.6%	-25.5%
Transgender: MtF	8	< 1%	17	1.9%	17	1.9%	14	1.6%	15	2.0%	7.1%
Transgender: FtM	< 5	< 1%	7	< 1%	< 5	< 1%	< 5	< 1%	7	< 1%	-
Total	**982**		**915**		**916**		**888**		**752**		**-15.3%**
AIDS Cases											
Male	411	80.4%	313	75.2%	330	80.9%	308	80.2%	255	75.7%	-17.2%
Female	89	17.4%	96	23.1%	69	16.9%	70	18.2%	77	22.8%	10.0%
Transgender: MtF	7	1.4%	< 5	< 1%	6	1.1%	< 5	1.1%	< 5	< 1%	-
Transgender: FtM	< 5	< 1%	< 5	1.0%	< 5	< 1%	< 5	< 1%	0	0.0%	-
Total	**511**		**416**		**408**		**384**		**337**		**-12.2%**
Chlamydia Cases¥											
Male	7,520	30.2%	9,073	33.3%	10,299	35.6%	11,279	37.9%	12,031	39.8%	6.7%
Female	17,396	69.8%	18,201	66.7%	18,635	64.4%	18,464	62.1%	18,199	60.2%	-1.4%
Total	**24,916**		**27,274**		**28,934**		**29,743**		**30,292**		**1.8%**
Gonorrhea Cases¥											
Male	4,286	51.1%	4,709	56.8%	5,173	59.1%	6,900	63.8%	7,707	66.0%	11.7%
Female	4,107	48.9%	3,582	43.2%	3,583	40.9%	3,920	36.2%	3,977	34.0%	1.5%
Total	**8,393**		**8,291**		**8,756**		**10,820**		**11,730**		**8.4%**
P&S Syphilis Cases¥											
Male	567	91.2%	581	90.4%	700	92.3%	764	94.0%	733	93.0%	-4.1%
Female	55	8.8%	62	9.6%	58	7.7%	49	6.0%	55	7.0%	12.2%
Total	**622**		**643**		**758**		**813**		**788**		**-3.1%**

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. *For HIV and AIDS cases, current gender identity or gender with which a person identifies. Because total diagnoses were calculated using current gender, independently of values using birth sex, total diagnoses may differ slightly across tables . HIV and AIDS cases as of 10/26/2018. ¥ For STI cases, reported sex at birth. Includes cases with unknown sex.

Table 2.2: HIV/STI Cases by Year of Diagnosis and Age Group, Chicago, 2013-2017

Year of Diagnosis	2013		2014		2015		2016		2017		% Change 2016 to 2017
	No.	%	No.	%	No.	%	No.	%	No.	%	%
HIV Infection Diagnosis											
Less than 13	7	< 1%	5	< 1%	< 5	< 1%	< 5	< 1%	< 5	< 1%	-
13-19	56	5.7%	58	6.3%	58	6.3%	66	7.4%	57	7.6%	-15.8%
20-29	399	40.6%	381	41.6%	402	43.7%	356	40.1%	286	38.0%	-24.5%
20-24	240	24.4%	188	20.5%	204	22.2%	149	16.8%	130	17.3%	-14.6%
25-29	159	16.2%	193	21.1%	198	21.5%	207	23.3%	156	20.7%	-32.7%
30-39	226	23.0%	201	22.0%	225	24.5%	214	24.1%	203	27.0%	-5.4%
40-49	152	15.5%	150	16.4%	116	12.6%	117	13.2%	99	13.2%	-18.2%
50+	142	14.5%	120	13.1%	125	13.6%	132	14.9%	103	13.7%	-28.2%
Total	**982**		**915**		**920**		**888**		**752**		**-18.1%**
AIDS Cases											
Less than 13	0	0.0%	< 5	< 1%	0	0.0%	< 5	< 1%	< 5	< 1%	-
13-19	12	2.3%	8	1.9%	< 5	< 1%	8	2.1%	7	2.1%	-12.5%
20-29	128	25.0%	81	19.5%	99	24.3%	107	27.9%	66	19.6%	-38.3%
20-24	65	12.7%	32	7.7%	34	8.3%	44	11.5%	29	8.6%	-34.1%
25-29	63	12.3%	49	11.8%	65	15.9%	63	16.4%	40	11.9%	-36.5%
30-39	140	27.4%	110	26.4%	97	23.8%	91	23.7%	92	27.3%	1.1%
40-49	116	22.7%	107	25.7%	93	22.8%	69	18.0%	74	22.0%	7.2%
50+	115	22.5%	107	25.7%	118	28.9%	108	28.1%	93	27.6%	-13.9%
Total	**511**		**416**		**408**		**384**		**337**		**-12.2%**
Chlamydia Cases											
Less than 13	49	< 1%	28	< 1%	26	< 1%	37	< 1%	43	< 1%	16.2%
13-19	8,545	34.2%	8,427	30.8%	8,036	27.7%	7,867	26.4%	7,550	24.9%	-4.0%
20-29	12,783	51.2%	14,497	53.1%	15,833	54.6%	16,137	54.2%	16,410	54.2%	1.7%
20-24	8,898	35.7%	9,789	35.8%	10,229	35.3%	10,033	33.7%	10,206	33.7%	1.7%
25-29	3,885	15.6%	4,708	17.2%	5,604	19.3%	6,104	20.5%	6,204	20.5%	1.6%
30-39	2,594	10.4%	3,144	11.5%	3,689	12.7%	4,078	13.7%	4,435	14.6%	8.8%
40-49	748	3.0%	845	3.1%	1,013	3.5%	1,135	3.8%	1,263	4.2%	11.3%
50+	238	1.0%	379	1.4%	421	1.5%	522	1.8%	591	2.0%	13.2%
Total	**24,957**		**27,320**		**29,018**		**29,776**		**30,292**		**1.7%**
Gonorrhea Cases											
Less than 13	16	< 1%	6	< 1%	8	< 1%	16	< 1%	8	< 1%	-50.0%
13-19	2,682	31.9%	2,162	26.0%	2,165	24.6%	2,315	21.4%	2,331	19.9%	< 1%
20-29	4,099	48.8%	4,273	51.4%	4,529	51.5%	5,483	50.6%	5,927	50.5%	8.1%
20-24	2,780	33.1%	2,798	33.7%	2,740	31.2%	3,117	28.8%	3,250	27.7%	4.3%
25-29	1,319	15.7%	1,475	17.8%	1,789	20.4%	2,366	21.8%	2,677	22.8%	13.1%
30-39	1,017	12.1%	1,196	14.4%	1,413	16.1%	1,952	18.0%	2,228	19.0%	14.1%
40-49	422	5.0%	458	5.5%	438	5.0%	682	6.3%	779	6.6%	14.2%
50+	165	2.0%	211	2.5%	233	2.7%	388	3.6%	457	4.0%	17.8%
Total	**8,401**		**8,306**		**8,786**		**10,836**		**11,730**		**8.3%**
P&S Syphilis Cases											
Less than 13	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	-
13-19	27	4.3%	26	4.0%	23	3.0%	27	3.3%	22	2.8%	-18.5%
20-29	249	39.7%	257	40.0%	305	40.2%	291	35.8%	300	38.1%	3.1%
20-24	134	21.4%	114	17.7%	137	18.1%	101	12.4%	114	14.5%	12.9%
25-29	115	18.3%	143	22.2%	168	22.2%	190	23.4%	186	23.6%	-2.1%
30-39	175	27.9%	175	27.2%	199	26.3%	263	32.3%	244	31.0%	-7.2%
40-49	108	17.2%	113	17.6%	132	17.4%	141	17.3%	120	15.1%	-14.9%
50+	68	10.8%	72	11.2%	99	13.1%	91	11.2%	102	13.0%	12.1%
Total	**627**		**643**		**758**		**813**		**788**		**-3.1%**

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. HIV and AIDS cases as of 10/26/2018 . ¥ For STI cases, reported sex at birth. Includes cases with unknown sex.

Table 2.3: HIV/STI Cases by Year of Diagnosis and Race/Ethnicity, Chicago, 2013-2017

Year of Diagnosis	2013		2014		2015		2016		2017		% Change 2016 to 2017
	No.	%	No.	%	No.	%	No.	%	No.	%	%
HIV Infection Diagnosis											
Black, non-Hispanic	526	53.6%	482	52.7%	486	52.8%	511	57.5%	412	54.8%	-19.4%
White, non-Hispanic	191	19.5%	177	19.3%	172	18.7%	132	14.9%	146	19.4%	10.6%
Hispanic	206	21.0%	214	23.4%	202	22.0%	194	21.8%	158	21.0%	-18.6%
Asian/PI, non-Hispanic	16	1.6%	17	1.9%	24	2.6%	26	2.9%	23	3.1%	-11.5%
AI/AN*, non-Hispanic	0	0.0%	0	0.0%	< 5	< 1%	< 5	< 1%	< 5	< 1%	-
Other, non-Hispanic	43	4.4%	25	2.7%	34	3.7%	22	2.5%	11	1.5%	-50.0%
Total	**982**		**915**		**920**		**888**		**752**		**-15.3%**
AIDS Cases											
Black, non-Hispanic	298	58.3%	240	57.7%	223	54.7%	217	56.5%	214	63.5%	-1.4%
White, non-Hispanic	82	16.0%	58	13.9%	64	15.7%	58	15.1%	38	11.3%	-34.5%
Hispanic	94	18.4%	91	21.9%	93	22.8%	82	21.4%	62	18.4%	-24.4%
Asian/PI, non-Hispanic	< 5	< 1%	5	1.2%	7	1.7%	7	1.8%	7	2.1%	0.0%
AI/AN*, non-Hispanic	0	0.0%	0	0.0%	< 5	< 1%	< 5	< 1%	< 5	< 1%	-
Other, non-Hispanic	33	6.5%	22	5.3%	20	4.9%	19	4.9%	15	4.5%	-21.1%
Total	**511**		**416**		**408**		**384**		**337**		**-12.2%**
Chlamydia Cases											
Black, non-Hispanic	13,184	52.8%	12,858	47.1%	13,786	47.5%	12,003	40.3%	12,446	41.1%	3.7%
White, non-Hispanic	1,222	4.9%	1,516	5.5%	2,106	7.3%	2,346	7.9%	2,675	8.8%	14.0%
Hispanic	2,906	11.6%	3,298	12.1%	3,785	13.0%	3,970	13.3%	4,379	14.5%	10.3%
Asian/PI, non-Hispanic	159	< 1%	172	< 1%	264	< 1%	295	1.0%	349	1.2%	18.3%
AI/AN*, non-Hispanic	11	0.0%	20	< 1%	30	< 1%	34	< 1%	33	< 1%	-2.9%
Other, non-Hispanic	273	1.1%	311	1.1%	254	< 1%	268	< 1%	270	< 1%	< 1%
Unknown	7,202	28.9%	9,145	33.5%	8,793	30.3%	10,860	36.5%	10,140	33.5%	-6.6%
Total	**24,957**		**27,320**		**29,018**		**29,776**		**30,292**		**1.7%**
Gonorrhea Cases											
Black, non-Hispanic	5,357	63.8%	4,200	50.6%	4,812	54.8%	4,798	44.3%	5,606	47.8%	16.8%
White, non-Hispanic	465	5.5%	680	8.2%	948	10.8%	1,283	11.8%	1,414	12.1%	10.2%
Hispanic	424	5.0%	495	6.0%	639	7.3%	921	8.5%	1,143	9.7%	24.1%
Asian/PI, non-Hispanic	26	< 1%	25	< 1%	67	< 1%	85	< 1%	114	< 1%	34.1%
AI/AN*, non-Hispanic	9	< 1%	6	< 1%	12	< 1%	14	< 1%	15	< 1%	7.1%
Other, non-Hispanic	62	< 1%	62	< 1%	73	< 1%	85	< 1%	74	< 1%	-12.9%
Unknown	2,058	24.5%	2,838	34.2%	2,235	25.4%	3,650	33.7%	3,364	28.7%	-7.8%
Total	**8,401**		**8,306**		**8,786**		**10,836**		**11,730**		**8.3%**
P&S Syphilis Cases											
Black, non-Hispanic	291	46.7%	280	43.5%	330	43.5%	294	36.2%	268	34.0%	-8.8%
White, non-Hispanic	169	27.1%	191	29.7%	251	33.1%	253	31.1%	230	29.2%	-9.1%
Hispanic	104	16.7%	103	16.0%	147	19.4%	173	21.3%	132	16.8%	-23.7%
Asian/PI, non-Hispanic	21	3.4%	10	1.6%	11	1.5%	29	3.6%	19	2.4%	-34.5%
AI/AN*, non-Hispanic	0	0.0%	< 5	< 1%	< 5	< 1%	< 5	< 1%	< 5	< 1%	-
Other, non-Hispanic	38	6.1%	56	8.7%	15	2.0%	62	7.6%	63	8.0%	1.6%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	75	9.5%	-
Total	**623**		**643**		**758**		**813**		**787**		**-3.2%**

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. HIV and AIDS cases as of 10/26/2018 . *AI/AN refers to American Indian/ Alaskan Native

SECTION THREE

HIV & STIs AMONG OLDER ADULTS IN CHICAGO

It's a matter of Public Health

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

HIV

According to the CDC 2016 HIV Surveillance Report, people aged 50 and older accounted for 17% of the new HIV diagnoses in 2016 in the United States. Nearly half the People Living with HIV in 2015 were aged 50 and older.

In Chicago, 103 cases of HIV infection were diagnosed among individuals over the age of 50 in 2017, accounting for 13.7% of all new HIV infection diagnoses (Table 3.1). The majority of cases were among males (74.7%), NH Blacks (66.7%) and MSM (53.5%) (Table 3.1). Between 2013 and 2016, new diagnoses remained relatively stable for this age group (Table 3.1). In 2017, there was a notable decrease in the number of new HIV diagnoses in this population, from 142 cases diagnosed in 2013 to 103 cases diagnosed in 2017 (Table 3.1). This follows similar trends in other age groups. The highest average annual rate of HIV diagnoses among those aged 50 and older from 2013-2017 was observed in Edgewater (11.7 per 100,000 population) (Figure 3.1; Appendix Table A.6).

In 2016, 17,311 people aged 50 and older were living with HIV in Chicago, accounting for 72.6% of all individuals living with HIV in the city (Table 3.2). The majority of these individuals were male (82.1%), NH Black (48.1%) and MSM (56.4%) (Table 3.2). Between 2012 and 2016, the number of individuals 50 years and older living with HIV has steadily increased, with a 2.9% increase between 2015 and 2016 (Table 3.2). The largest increases between 2015 and 2016 was observed in the 60-64 year old age group (7.3%) and the 65+ year old age group (9.0%) (Table 3.2). From 2012-2016, the highest average annual rate of individuals 50 and older living with HIV was observed in Uptown (850.9 per 100,000 population), Edgewater (834.0 per 100,000 population) and Rogers Park (637.6 per 100,000 population) (Figure 3.2; Appendix Table A.7).

In 2017, 87% of those diagnosed with HIV aged 50 and older were linked to HIV medical care within one month of HIV diagnosis. By six months after diagnosis, 93% had been linked to medical care (Figure 3.3). For individuals 50 and older who were diagnosed with HIV through 2016 and living with HIV in 2017, 61% had accessed medical care (having at least one medical visit in 2017), 37% were considered to be retained in care (having at least two medical visits in 2017) and 53% had a viral load test in the past 12 months (Figure 3.3). For this group, only 48% were considered to be virally suppressed (< 200 copies/mL), indicating an opportunity to strengthen programs and services for the older adult population (Figure 3.3).

Health systems and healthcare providers should actively partner with this population to ensure HIV medical care competently addresses the physical, behavioral and sexual health needs of this population.

STIs

Consistent with national data, STI infection rates among individuals 50 and older in Chicago are increasing. In 2017, 591 cases of chlamydia, 457 cases of gonorrhea and 102 cases of P&S syphilis among those 50 years and older were reported to CDPH. Between 2013 and 2017 in Chicago, the total number of cases diagnosed in this population dramatically increased across all reportable STI in this

population, with a 148% increase in chlamydia cases, 179% increase in gonorrhea cases and a 62% increase in P&S syphilis cases (Table 3.3; Table 3.4; Table 3.5).

As shown in Table 3.3, the proportion of chlamydia cases in 2017 among those 50 years and older was highest among males (72.4%) and among NH Blacks (20.8%), followed by NH Whites (16.8%). Similar to chlamydia, gonorrhea cases in 2017 in this population were highest among males (85.6%) and NH Blacks (32.2%), followed by NH Whites (18.8%) (Table 3.4). For P&S syphilis, there were 19.5 times as many P&S syphilis cases in 2017 among men in this population than women (95.1% vs. 4.9%), consistent with previous years and reflective of the overall epidemiology of P&S syphilis in Chicago (Table 3.5). Unlike chlamydia and gonorrhea, NH Whites aged 50 and older represented the largest share of new P&S syphilis cases in 2017 (46.1%), followed by NH Blacks (20.6%).

Given the steady upward trend in STIs in Chicago among older adults, healthcare providers are encouraged to talk with their patients 50 years and older about sexual health and wellness.

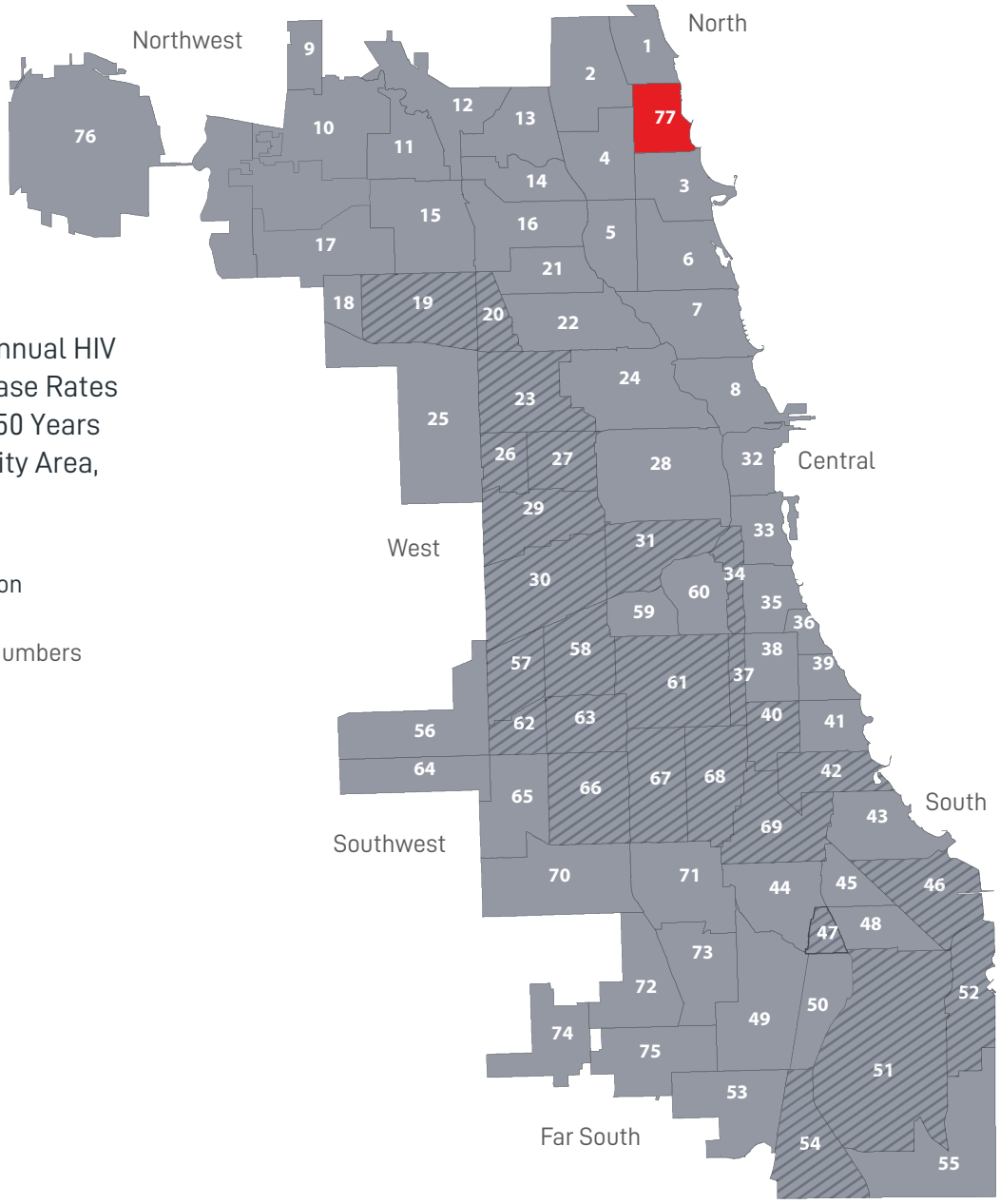


Figure 3.1 - Average Annual HIV Infection Diagnoses Case Rates Among Persons Aged 50 Years and Older by Community Area, Chicago, 2013-2017

Cases per 100,000 Population

No Cases/Small Numbers (suppressed)

11.7

High Economic Hardship in 2015

Community Areas Most Impacted (Red)

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Linconl Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Monteclare
19. Berlmont Cragin
20. Hermosa
21. Avondale
22. Logan Square
23. Humbolt Park
24. West Town
25. Austin
26. West Garfield Park
27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower Wst Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Bringhton Park
59. Mckinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Greater Grand Crossing
70. Ashburn
71. Ausburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. Ohare
77. Edgewater

Data source: CDPH, Enchanced HIV/AIDS Reporting System (as of 10/29/18), City of Chicago GIS Shapefiles, and U.S Census. The economic hardship Index utilities multiple indicators to measure economic conditions of Chicago Community Areas. High hardship index scores indicate worse economic conditions.

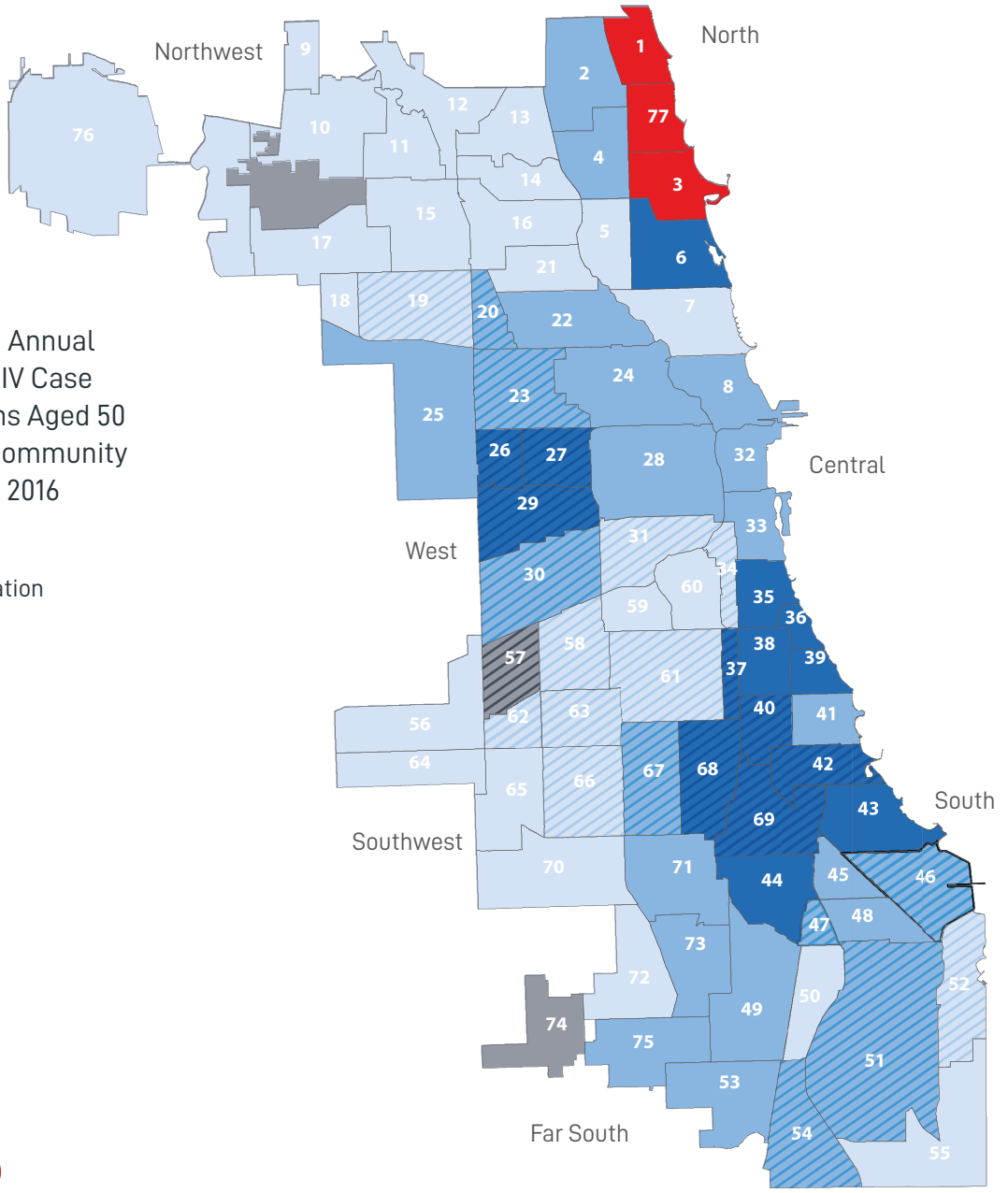


Figure 3.2 - Average Annual People Living With HIV Case Rates Among Persons Aged 50 Years and Older by Community Area, Chicago, 2012 - 2016

Cases per 100,000 Population

- No Cases
- 32.0 - 146.7
- 146.8 - 273.9
- 274.0 - 508.0
- 508.1 - 850.9
- High Economic Hardship in 2015

Community Areas Most Impacted (Red)

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Linconl Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Monteclare
19. Berlmont Cragin
20. Hermosa
21. Avondale
22. Logan Square
23. Humbolt Park
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26. West Garfield Park
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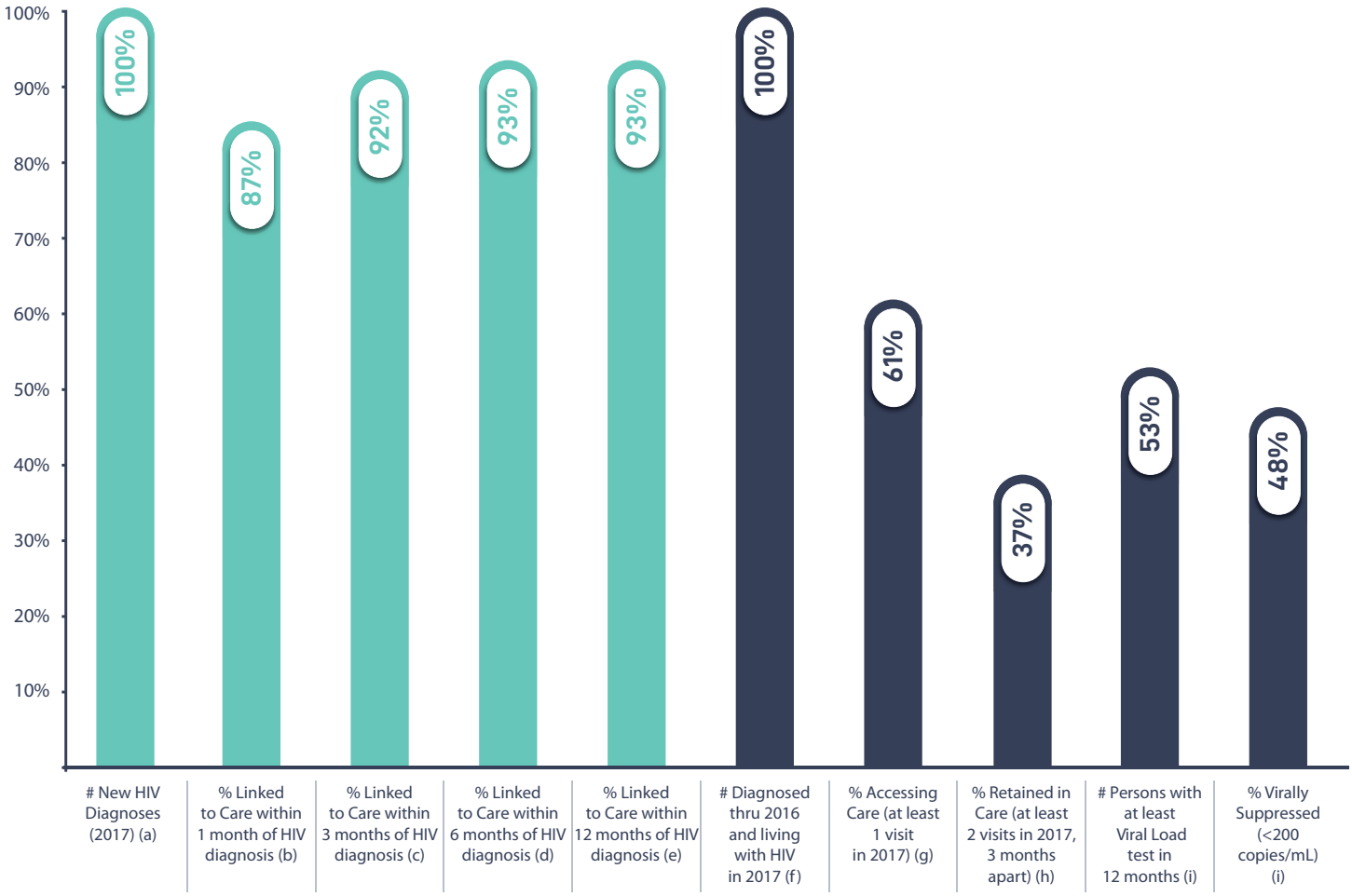
30. South Lawndale
31. Lower Wst Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Bringhton Park
59. Mckinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Greater Grand Crossing
70. Ashburn
71. Ausburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. Ohare
77. Edgewater

Data source: CDPH, Enchanced HIV/AIDS Reporting System (as of 09/26/18), City of Chicago GIS Shapefiles, and U.S Census. The economic hardship Index utilities multiple indicators to measure economic conditions of Chicago Community Areas. High hardship index scores indicate worse economic conditions.

Figure 3.3: HIV Continuum of Care Among Cases 50 Years and Older, Chicago, 2017 (as of 10/26/18)



(a) Number of persons ≥ 50 years of age at diagnosis and diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(b) Percent of persons ≥ 50 years of age linked to care (at least one CD4, VL, or HIV-1 genotype test) within 1 month of HIV diagnosis among those diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(c) Percent of persons ≥ 50 years of age linked to care (at least one CD4, VL, or HIV-1 genotype test) within 3 months of HIV diagnosis among those diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(d) Percent of persons ≥ 50 years of age linked to care (at least one CD4, VL, or HIV-1 genotype test) within 6 months of HIV diagnosis among those diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(e) Percent of persons ≥ 50 years of age linked to care (at least one CD4, VL, or HIV-1 genotype test) within 12 months of HIV diagnosis among those diagnosed with HIV infection between 1/1/2017 and 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 10/26/2018). NHAS output, Link1 Table.
(f) Number of persons ≥ 50 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, Care1 and VL1 Tables.
(g) Percent of persons ≥ 50 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017 who received at least one medical care visit (at least one CD4 or VL) between January 2017 and December 2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, Care1 Table.
(h) Percent of persons ≥ 50 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017 who received at least two medical care visits (at least one CD4 or VL at each), 3 months apart, between January 2017 and December 2017. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, Care1 Table.
(i) Percent of persons ≥ 50 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017 who received at least one VL test in the past 12 months. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, VL1 Table.
(j) Percent of persons ≥ 50 years of age on 12/31/2016 diagnosed with HIV through 12/31/2016 and living with HIV on 12/31/2017 whose most recent viral load test result was < 200 copies/mL. Source: Chicago enhanced HIV/AIDS reporting system (eHARS) (as of 9/26/2018). NHAS output, VL1 Table.

Table 3.1: Reported Cases of HIV Infection Diagnoses Among Adults 50 Years and Older, Chicago, 2013-2017

Demographic Characteristics	2013		2014		2015		2016		2017		% Change 2016 to 2017
	No.	%	No.	%	No.	%	No.	%	No.	%	%
Sex*											
Male	104	73.2%	88	73.3%	97	77.6%	97	73.5%	74	74.7%	-23.7%
Female	38	26.8%	32	26.7%	28	22.4%	34	25.8%	29	29.3%	-14.7%
Transgender: MtF	0	0.0%	0	0.0%	0	0.0%	< 5	< 1%	0	0.0%	-100.0%
Transgender: FtM	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%
Additional Gender	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%
Race/Ethnicity											
Black, non-Hispanic	86	60.6%	67	55.8%	65	52.0%	63	47.7%	66	66.7%	4.8%
White, non-Hispanic	25	17.6%	28	23.3%	34	27.2%	31	23.5%	20	20.2%	-35.5%
Hispanic	21	14.8%	21	17.5%	19	15.2%	25	18.9%	12	12.1%	-52.0%
Asian/PI, non-Hispanic	< 5	2.8%	< 5	1.7%	< 5	2.4%	8	6.1%	< 5	2.0%	-75.0%
AI/AN, non-Hispanic	0	0.0%	0	0.0%	0	0.0%	< 5	< 1%	0	0.0%	-100.0%
Multiple, non-Hispanic	6	4.2%	< 5	1.7%	< 5	3.2%	< 5	3.0%	< 5	3.0%	-25.0%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%
Transmission Category											
MSM	80	56.3%	68	56.7%	75	60.0%	69	52.3%	53	53.5%	-23.2%
IDU	14	9.9%	16	13.3%	16	12.8%	23	17.4%	16	16.2%	-30.4%
MSM/IDU	< 5	2.1%	< 5	2.5%	6	4.8%	< 5	< 1%	< 5	1.0%	0.0%
Heterosexual	45	31.7%	32	26.7%	29	23.2%	39	29.5%	33	33.3%	-15.4%
Other	< 5	< 1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%
Age											
50-54	69	48.6%	56	46.7%	61	48.8%	53	40.2%	46	46.5%	-13.2%
55-59	41	28.9%	34	28.3%	34	27.2%	42	31.8%	28	28.3%	-33.3%
60-64	17	12.0%	17	14.2%	17	13.6%	21	15.9%	13	13.1%	-38.1%
65+	15	10.6%	13	10.8%	13	10.4%	16	12.1%	16	16.2%	0.0%
Total	**142**		**120**		**125**		**132**		**103**		**-22.0%**

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. *For HIV and AIDS cases, current gender identity or gender with which a person identifies. Because total diagnoses were calculated using current gender, independently of values using birth sex, total diagnoses may differ slightly across tables . HIV and AIDS cases as of 09/26/2018. For STI cases, reported sex at birth.

Table 3.2: Reported Cases of People Living with HIV/AIDS (PLWH) Among Adults 50 Years and Older, Chicago, 2012-2016

Demographic Characteristics	2012		2013		2014		2015		2016		% Change 2015-2016
	No.	%	No.	%	No.	%	No.	%	No.	%	%
Sex*											
Male	11,174	81.5%	12,057	81.7%	13,030	81.9%	13,776	81.9%	14,218	82.1%	3.2%
Female	2,473	18.0%	2,641	17.9%	2,819	17.7%	2,993	17.8%	3,029	17.5%	1.2%
Transgender: MtF	25	< 1%	27	< 1%	29	< 1%	27	< 1%	28	< 1%	3.7%
Transgender:FtM	32	< 1%	30	< 1%	31	< 1%	29	< 1%	34	< 1%	17.2%
Additional Gender	< 5	< 1%	< 5	< 1%	< 5	< 1%	< 5	< 1%	< 5	< 1%	-50.0%
Race/Ethnicity											
Black, non-Hispanic	6,979	50.9%	7,453	50.5%	7,884	49.5%	8,235	48.9%	8,323	48.1%	1.1%
White, non-Hispanic	3,724	27.2%	4,071	27.6%	4,496	28.3%	4,790	28.5%	4,987	28.8%	4.1%
Hispanic	2,170	15.8%	2,352	15.9%	2,567	16.1%	2,784	16.5%	2,963	17.1%	6.4%
Asian/PI, non-Hispanic	80	< 1%	89	< 1%	109	< 1%	120	< 1%	137	< 1%	14.2%
AI/AN, non-Hispanic	11	< 1%	14	< 1%	17	< 1%	17	< 1%	19	< 1%	11.8%
Multiple, non-Hispanic	742	5.4%	780	5.3%	840	5.3%	883	5.2%	882	5.1%	< 1%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%
Transmission Category											
MSM	6,977	50.9%	7,750	52.5%	8,587	54.0%	9,272	55.1%	9,769	56.4%	5.4%
IDU	3,563	26.0%	3,621	24.5%	3,667	23.0%	3,669	21.8%	3,522	20.3%	-4.0%
MSM/IDU	1,011	7.4%	1,073	7.3%	1,138	7.2%	1,185	7.0%	1,208	7.0%	1.9%
Heterosexual	2,077	15.2%	2,241	15.2%	2,449	15.4%	2,631	15.6%	2,746	15.9%	4.4%
Other	78	< 1%	75	< 1%	72	< 1%	72	< 1%	66	< 1%	-8.3%
Age											
50-54	5,634	41.1%	5,872	39.8%	6,159	38.7%	6,298	37.4%	6,158	35.6%	-2.2%
55-59	4,122	30.1%	4,442	30.1%	4,719	29.7%	4,885	29.0%	5,050	29.2%	3.4%
60-64	2,253	16.4%	2,497	16.9%	2,778	17.5%	3,080	18.3%	3,306	19.1%	7.3%
65+	1,697	12.4%	1,948	13.2%	2,257	14.2%	2,566	15.2%	2,797	16.2%	9.0%
Total	**13,706**		**14,759**		**15,913**		**16,829**		**17,311**		**2.9%**

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. *For HIV and AIDS cases, current gender identity or gender with which a person identifies. Because total diagnoses were calculated using current gender, independently of values using birth sex, total diagnoses may differ slightly across tables. HIV and AIDS cases as of 09/26/2018.

Table 3.3: Reported Cases of Chlamydia Among Adults 50 Years and Older, Chicago, 2013-2017

Demographic Characteristics	2013		2014		2015		2016		2017		% Change 2016-2017
	No.	%	No.	%	No.	%	No.	%	No.	%	%
Birth Sex											
Male	130	54.0%	241	63.6%	278	66.0%	349	66.9%	428	72.4%	22.6%
Female	106	44.5%	136	35.9%	142	33.7%	172	33.0%	157	26.6%	-8.7%
Unknown	< 5	< 1%	< 5	< 1%	< 5	< 1%	< 5	< 1%	6	1.0%	500.0%
Race/Ethnicity											
Black, non-Hispanic	87	36.6%	112	29.6%	101	24.0%	122	23.4%	123	20.8%	< 1%
White, non-Hispanic	20	8.4%	56	14.8%	74	17.6%	92	17.6%	99	16.8%	7.6%
Hispanic	18	7.6%	32	8.4%	44	10.5%	39	7.5%	77	13.0%	97.4%
Asian/PI, non-Hispanic	< 5	< 1%	< 5	< 1%	< 5	< 1%	5	1.0%	5	< 1%	< 1%
AI/AN, non-Hispanic	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%
Other	< 5	< 1%	< 5	< 1%	5	1.2%	< 5	< 1%	< 5	< 1%	-25.0%
Unknown	110	46.2%	175	46.2%	195	46.3%	260	49.8%	284	48.1%	9.2%
HIV Infection											
50-54	121	50.8%	220	58.0%	235	55.8%	275	52.7%	306	51.8%	11.3%
55-59	72	30.3%	110	29.0%	105	24.9%	140	26.8%	157	26.6%	12.1%
60-64	22	9.2%	34	9.0%	49	11.6%	54	10.3%	80	13.5%	48.1%
65+	23	9.7%	15	4.0%	32	7.6%	53	10.2%	48	8.1%	-9.4%
Total	**238**		**379**		**421**		**522**		**591**		**13.2%**

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable.

Table 3.4: Reported Cases of Gonorrhea Among Adults 50 Years and Older, Chicago, 2013-2017

Demographic Characteristics	2013		2014		2015		2016		2017		% Change 2016-2017
	No.	%	No.	%	No.	%	No.	%	No.	%	%
Birth Sex											
Male	143	86.7%	185	87.7%	207	88.8%	356	91.8%	391	85.6%	9.8%
Female	22	13.3%	25	11.8%	23	9.9%	32	8.2%	60	13.1%	87.5%
Unknown	0	0.0%	< 5	< 1%	< 5	1.3%	0	0.0%	6	1.3%	-
Race/Ethnicity											
Black, non-Hispanic	67	40.6%	54	25.6%	55	23.6%	96	24.7%	147	32.2%	53.1%
White, non-Hispanic	23	13.9%	41	19.4%	77	33.0%	96	24.7%	86	18.8%	-10.4%
Hispanic	6	3.6%	13	6.2%	20	8.6%	23	5.9%	36	7.9%	56.5%
Asian/PI, non-Hispanic	0	0.0%	< 5	< 1%	< 5	< 1%	< 5	< 1%	< 5	< 1%	300.0%
AI/AN, non-Hispanic	0	0.0%	< 5	1.4%	0	0.0%	0	0.0%	0	0.0%	0.0%
Other	< 5	1.2%	< 5	< 1%	< 5	< 1%	< 5	1.0%	< 5	< 1%	-75.0%
Unknown	67	40.6%	98	46.4%	79	33.9%	168	43.3%	183	40.0%	8.9%
Age											
50-54	100	60.6%	125	59.2%	147	63.1%	202	52.1%	225	49.2%	11.4%
55-59	45	27.3%	50	23.7%	47	20.2%	102	26.3%	124	27.1%	21.6%
60-64	12	7.3%	17	8.1%	28	12.0%	40	10.3%	54	11.8%	35.0%
65+	8	4.8%	19	9.0%	11	4.7%	44	11.3%	54	11.8%	22.7%
Total	**165**		**211**		**233**		**388**		**457**		**17.8%**

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable.

Table 3.5: Reported Cases of Primary & Secondary (P&S) Syphilis Among Adults 50 Years and Older, Chicago, 2013-2017

Demographic Characteristics	2013		2014		2015		2016		2017		% Change 2016-2017
	No.	%	No.	%	No.	%	No.	%	No.	%	%
Birth Sex											
Male	61	96.8%	70	97.2%	95	96.0%	90	98.9%	97	95.1%	7.8%
Female	< 5	3.2%	< 5	2.8%	< 5	4.0%	< 5	1.1%	5	4.9%	400.0%
Race/Ethnicity											
Black, non-Hispanic	24	38.1%	18	25.0%	29	29.3%	20	22.0%	21	20.6%	5.0%
White, non-Hispanic	31	49.2%	38	52.8%	52	52.5%	49	53.8%	47	46.1%	-4.1%
Hispanic	6	9.5%	11	15.3%	13	13.1%	16	17.6%	15	14.7%	-6.3%
Asian/PI, non-Hispanic	0	0.0%	< 5	1.4%	< 5	1.0%	< 5	3.3%	0	0.0%	-100.0%
AI/AN, non-Hispanic	0	0.0%	< 5	1.4%	0	0.0%	0	0.0%	0	0.0%	0.0%
Other	0	0.0%	< 5	2.8%	< 5	2.0%	< 5	2.2%	12	11.8%	500.0%
Unknown	< 5	3.2%	< 5	1.4%	< 5	2.0%	< 5	1.1%	7	6.9%	600.0%
Age											
50-54	33	52.4%	40	55.6%	59	59.6%	45	49.5%	55	53.9%	22.2%
55-59	16	25.4%	21	29.2%	25	25.3%	32	35.2%	33	32.4%	3.1%
60-64	9	14.3%	6	8.3%	7	7.1%	12	13.2%	6	5.9%	-50.0%
65+	5	7.9%	5	6.9%	8	8.1%	< 5	2.2%	8	7.8%	300.0%
Total	**63**		**72**		**99**		**91**		**102**		**12.1%**

Note: Groups may not total 100% due to rounding. Use caution when interpreting data based on less than 20 events; rate/percent is unreliable.

SECTION FOUR : SPOTLIGHT

ADOLESCENT HEALTH AND THE CHICAGO HEALTHY ADOLESCENTS AND TEENS (CHAT) PROGRAM

It's a matter of Public Health

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

Spotlight: Adolescent Health

Chicago Healthy Adolescents and Teens (CHAT) Program

Sexual and reproductive health of adolescents is a serious public health concern. Over half of all reported cases of STIs occur in adolescents (age 13-24) at both the national level and at the city-wide level in Chicago. Specifically, in 2017, 47.6% of gonorrhea cases and 58.6% of chlamydia cases were reported in adolescents. Adolescents are at higher risk for STIs due to a variety of factors including biological, behavioral, cultural concerns and barriers to accessing care. The barriers to access include cost, privacy concerns and transportation. Due to many of these barriers, there is often a lag between the time an adolescent makes their sexual debut and there first interaction with sexual health services. According to the Guttmacher Institute, the average teen waits 14 months after becoming sexually active to make their first family planning visit (Finer and Zabin, 1998).

Young people in Chicago are legally able to obtain many sexual and reproductive healthcare services without parental notification or consent, though many may be unaware of these rights. Under Illinois law, youth aged 12 years and older may self-consent to a variety of confidential health care services, including STI and HIV testing and treatment, contraception and services related to substance use and mental health (with some limitations). CDPH seeks to address these barriers and knowledge gaps through an innovative, place-based approach to providing sexual health education and healthcare services to young people.

The Chicago Healthy Adolescents and Teens (CHAT) Program is a collaboration led by CDPH with the Chicago Public Schools Office of Student Health and Wellness (CPS) and Planned Parenthood of Illinois (PPIL). CHAT provides sexual health education and STI screening to young people aged 13-24 years across the City. This effort began in 2009 as a pilot partnership between CDPH and CPS in Chicago high schools, then known as the STI Project.

In 2015, this collaboration grew to include a partnership with a medical provider partner, and PPIL was brought on board via a competitive bid process. Also in 2015, CDPH was awarded a rigorous evaluation grant to evaluate the impact of this program on youth health knowledge and behavior. This grant included a planning year to refine the intervention. During this year, through a youth-informed, user-experience design process, the STI Project was re-branded as the CHAT Program. Additionally, the educational presentation was re-designed, expanded to include education on contraception and the website chataboutit.org was

created. This website was created based on direct feedback from youth for a trusted, local resource beyond the annual workshop model of the CHAT Program. The website was launched in partnership with CPS and is aligned with the CPS Sexual Health Education curriculum.

The CHAT Program now provides services in CPS District-run and charter high schools, City Colleges of Chicago and youth-serving community-based organizations at no cost. CHAT includes onsite sexual health education, optional and confidential chlamydia and gonorrhea screening, one-on-one meetings with a health educator and linkage to care services. These services are provided by PPIL as a delegate agency (subcontractor) of CDPH. Young people who screen positive through this program are offered no-cost treatment at any of PPIL's seven health centers in the City. Those who wish to receive treatment elsewhere are referred to a school-based health center, mobile health unit or other community health care providers.

Table 4.1: CHAT Program Summary Statistics School Years 2016-2018

	SY 2015-2016	SY 2016-2017	SY 2017-2018
# of Schools	42	38	41
# Educated	14,408	12,195	12,863
# Tested	8,162	6,372	6,332

Comparing CHAT students to other adolescents

CHAT students that received the program between 2015 and 2018 were compared to other high school aged adolescents (age 13-20) that also sought PPIL health services within the same timeframe by comparing data collected from electronic health records.

Compared to other adolescents, students who received CHAT:

- Were younger at age of first service
  - 84% of CHAT participants were under 18 at the age of first service compared to only 25% of other adolescents who visited a health center.
- More likely to be male
  - 54% of CHAT participants were male compared to only 7% of other adolescents who visited a health center.

Table 4.2: Sex and Age Comparison of CHAT Participants vs. Other High School Aged Adolescents

	CHAT Participants		Other Adolescents	
Sex	**Number**	**Percent**	**Number**	**Percent**
Female	8,573	46.16%	12,960	93.47%
Male	9,998	53.83%	901	6.50%
Undifferentiated or NA	< 5	< 1%	< 5	< 1%
Age at First Service				
13	24	< 1%	57	< 1%
14	2,717	14.63%	169	1.22%
15	4,633	24.95%	529	3.82%
16	4,283	23.06%	1,024	7.39%
17	4,012	21.60%	1,707	12.31%
Cumulative Under 18	**15,669**	**84.37%**	**3,486**	**25.15%**
18	2,182	11.75%	2,918	21.05%
19	515	2.77%	3,633	26.20%
20	206	1.11%	3,828	27.61%
Cumulative 18 and Over	**2,903**	**15.63%**	**10,379**	**74.86%**

This comparison may indicate that CHAT participants are choosing to receive sexual health services earlier in their sexual debut. CHAT aims increase access to care and hopes, that by being connected with the health care system sooner after becoming sexually active, young people are better informed of their STI status and begin the lifelong responsibility of taking control of their sexual and overall health.

Additionally, more males are receiving services from PPIL via the CHAT Program than other adolescents who choose to visit a health center. This is notable as there is no expectation of a male equivalent to the annual well-woman or pelvic exam. Females are urged to seek gynecological services upon becoming sexually active, but without this equivalent preventative health care visit, males may not seek sexual health services until they are exhibiting symptoms or have an emergent need to do so (i.e. they have been informed of and are concerned about a potential STI exposure). The CHAT Program helps to overcome this issue by linking all sexes and genders to sexual health services. This intervention presents sexual health education, including information on STIs and contraception, to youth in a mixed-gender setting and offering confidential mass STI screening.

The CHAT program gives thousands of students in Chicago access to STI testing and treatment every year by directly addressing many of the barriers adolescents face while accessing these services.

Establishing an Evidence Base for CHAT

In 2015, the CDPH was awarded a five-year, $5 million rigorous evaluation grant from the U.S. Department of Health and Human Services to evaluate the impact of the CHAT Program on youth health knowledge and behavior. CDPH partnered with the National Opinion Research Center (NORC) at the University of Chicago as its evaluation partner in this study.

NORC is conducting this study among ninth grade students in 30 high schools in Chicago in areas of the city with high STI and teen birth rates. All ninth grade students at the sampled schools were eligible for inclusion in the study.

NORC used a cluster-level, quasi-experimental design in which 15 schools participated in the intervention and 15 participated in the comparison condition. There were two cohorts: cohort 1 included 16 schools (eight in each condition), and cohort 2 included 14 schools (seven in each condition).

For each cohort, NORC identified a stratified, systematic random sample of schools among the CHAT program (intervention) schools that have been implementing the intervention for one or more school years. Schools in the sample frame are divided into strata and independently drawn by characteristics such as grades served, total school population, freshman population, racial composition, percent low income and school type (District-run or charter).

NORC identified a group of potential comparison schools using cluster analysis of student population measures: free and reduced lunch percentage, race/ethnicity make-up and proximity/neighborhood location as matching variables. CPS and CDPH assisted NORC with qualitatively confirming comparison schools similar to the program schools after the quantitative selection occurred. Critically, there were no meaningful differences in gender, race/ethnicity or contraceptive use at last sexual encounter in baseline equivalence analyses.

Data collection included a baseline survey for both intervention and comparison schools. The goal was to complete baseline data collections no more than two weeks prior to the intervention in intervention schools and use in-person, paper-and-pencil surveys administered by NORC field staff. Data collection processes (modes and collectors) were the same for the intervention and comparison schools. Follow up surveys will be conducted at six and 15 months.

Data collection is ongoing, but early promising results indicate CHAT's positive impact on access to health care and increases in health knowledge

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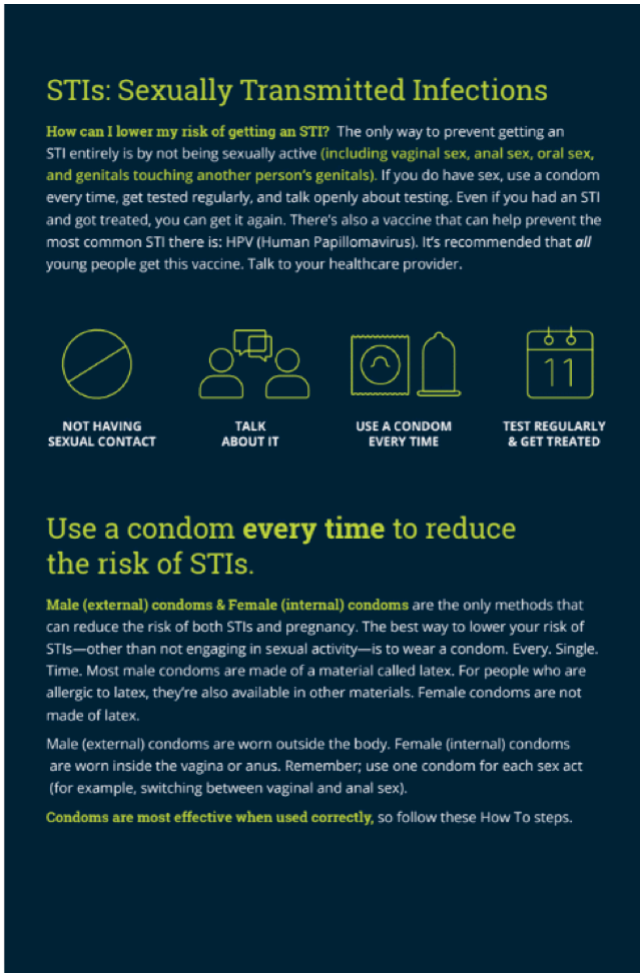
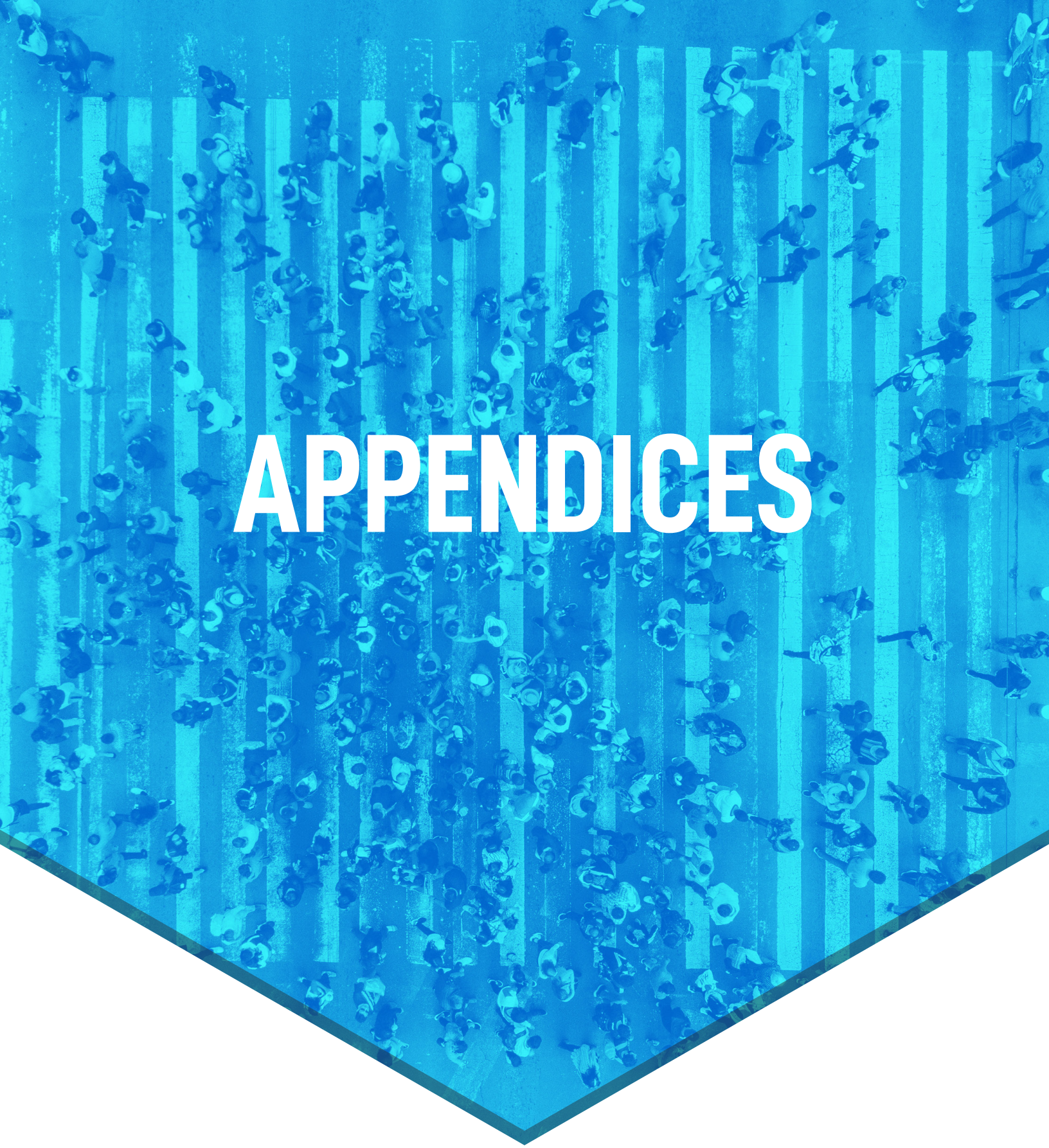
Table 4.3: Summary Statistics of Key Measures for Youth Completing 15 Month Follow-Up

Measures	Intervention %	Comparison %	Intervention versus comparison *p*-value for Chi-Square Test
Ever been pregnant or gotten someone pregnant[1]	2.8	11.7	0.009**
Ever tested for STI	15.87	11.21	0.013**
Know that I can see a doctor/nurse about birth control, STIs, or pregnancy without parents' permission if more than 12 years old	75.71	51.84	<.0001**
Sample size	567	767	

Table notes: Group differences were measured using chi-square test for all variables. **Significant at p =.05
[1] Sample size was limited to the students who reported have ever had vaginal sex (N = 153 for intervention and N = 141 for Comparison)

References:
Finer LB, Zabin LS. Does the timing of the first family planning visit still matter? Fam Plann Perspect. 1998;30(1):30-33, 42.





APPENDICES

It's a matter of Public Health

HEALTHY CHICAGO
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Appendix A: Technical Notes - General

As the HIV epidemic and HIV reporting systems change, new opportunities arise to better describe the epidemic. Thus, in keeping with these changes we have a made a number of modifications to STI/HIV Chicago. A description of the changes and other technical notes follow.

Diagnoses data are presented through 2017. While STI data are final, AIDS and HIV data for 2017 are still provisional.

HIV/AIDS

When interpreting data in this report, keep in mind that the eHARS database is updated continuously to reflect the most current and complete information on people infected and newly diagnosed with HIV or AIDS; data in this report were up-to-date as a of 10/26/2018. Prevalent population number may be from data sets frozen on 9/26/18 as those data did not show any difference between September and October sets. Reporting delays are important when interpreting trends in case numbers and rates over time and, especially, the most recent year of diagnosis. Report delay is defined as the interval between the date an HIV or AIDS case is diagnosed and the date the case is reported to the health department. Within three years, the total number of HIV diagnoses reported are relatively stable (fluctuating < 10 cases) and the data are no longer considered provisional. In order to provide the most complete data as possible, we will be presenting trend data through 2017. Additional cases continue to be reported in subsequent years and new cases are identified through laboratory reporting and registry matches. Thus, the numbers of cases diagnosed for each year are subject to change as new information is received from any of the reporting sources.

The "HIV Infection Diagnosis" data presented in this issue include three categories of diagnoses: (1) a diagnosis of HIV infection, (2) a diagnosis of HIV infection with a later diagnosis of AIDS, and (3) concurrent diagnoses of HIV infection and AIDS [defined as receiving an AIDS diagnosis within 12 months of an HIV diagnosis. Data from the HIV reporting system should be interpreted with caution. HIV surveillance reports may not be representative of all persons infected with HIV because not all infected persons have been tested. The guidelines for cell suppression used in this report try to balance data accessibility with confidentiality and confidence in the stability of the estimates published. Rates and percentages based on 20 or fewer cases can vary widely just by random chance even when there is no meaningful statistical difference between measurements. Thus, the number and rate for categories with less than five are suppressed.

For surveillance purposes, HIV and AIDS cases are counted only once in a hierarchy of modes of transmission. Persons with more than one reported mode of transmission are classified in the transmission mode first in the hierarchy. The exception is men who have sex with men and also inject drugs, which has its own category. Persons whose transmission mode is classified as male-to-male sexual contact (MSM) include men who report sexual contact with other men and men who report sexual contact with both men and women. Persons whose mode of transmission is classified as heterosexual contact are persons who report specific heterosexual contact with a person with, or at increased risk for, HIV infection (e.g., an injection drug user).

Because many cases of HIV infection and AIDS are initially reported without a defined mode of transmission, we use multiple imputation to assign a mode of transmission for these cases. Multiple imputation is a statistical approach in which each missing mode of transmission is replaced with a set of plausible values that represent the uncertainty about the true, but missing, value. The plausible values are analyzed by using standard procedures, and the results from these analyses are then combined to produce the final results. Multiple imputation is used by the Centers for Disease Control and Prevention (CDC) in their national HIV Surveillance Report.

GONORRHEA

Gonorrhea is one of three sexually transmitted infections (STI) that local providers are required to report to CDPH per 77 Illinois Administrative Code 693 (Control of Sexually Transmissible Infections Code). Gonorrhea is a bacterial STI caused by *Neisseria gonorrhoeae*; infection varies in course, severity and symptoms among males and females (Heymann, 2004). Co-infection with chlamydia can occur. Left untreated, disease sequelae can include pelvic inflammatory disease (PID), ectopic pregnancy and infertility. *Neisseria gonorrhoeae* has progressively developed resistance to each of the antibiotics used for treatment of gonorrhea. Most recently, declining susceptibility to cefixime resulted in a change in the CDC treatment guidelines, so that dual therapy with ceftriaxone and either azithromycin or doxycycline is now a CDC recommended treatment regimen for gonorrhea.

CHLAMYDIA

Chlamydia trachomatis infection is the most commonly reported notifiable disease and is one of three sexually transmitted infections (STI) that local providers are required to report to CDPH per 77 Illinois Administrative Code 693 (Control of Sexually Transmissible Infections Code). Chlamydial infections in women are usually asymptomatic. However, these can result in pelvic inflammatory disease (PID), which is a major cause of infertility, ectopic pregnancy and chronic pelvic pain. In addition, pregnant women infected with chlamydia can pass the infection to their infants during delivery, potentially resulting in neonatal ophthalmia and pneumonia. Because of the large burden of disease and risks associated with infection, the CDC recommends that all sexually active women younger than age 26 receive annual chlamydia screening.

SYPHILIS

Syphilis is one of three sexually transmitted infections that local providers are required to report to CDPH per 77 Illinois Administrative Code 693 (Control of Sexually Transmissible Infections Code). Syphilis is caused by a bacterial STI called *Treponema pallidum*. Syphilis, a genital ulcerative disease, causes significant complications if untreated and facilitates the transmission of HIV infection. Syphilis is characterized by stages: primary (can have a lesion known as a chancre, usually occurring three weeks post exposure), secondary (symptoms include rash and fatigue), early latent (less than one year post exposure) and late latent (greater than one year post exposure). Primary and secondary syphilis are the most infectious and symptomatic stages. Periods of latency vary and may lead to increased morbidity and, potentially, mortality.

A probable case of congenital syphilis is defined as: "A condition affecting an infant whose mother had untreated or inadequately treated syphilis at delivery, regardless of signs in the infant, or an infant or child who has a reactive treponemal test for syphilis and any one of the following:

Any evidence of congenital syphilis on physical examination
Any evidence of congenital syphilis on radiographs of long bones
A reactive cerebrospinal fluid (CSF) venereal disease research laboratory (VDRL)
An elevated CSF cell count or protein (without other cause)
A reactive fluorescent treponemal antibody absorbed - 19S-IgM antibody test or
Igm enzyme-linked immunosorbent assay" (CDC 1997)

A syphilitic stillbirth is defined as: "A fetal death that occurs after a 20-week gestation or in which the fetus weighs >500g and the mother had untreated or inadequately treated syphilis at delivery" (CDC 1997)

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Table A.1: 2017 HIV Infection* Diagnosis Rates by Community Area, Chicago (as of 10/29/18)

	Community Area	Average HIV Infections†	Rate
1	Rogers Park	30	54.6
2	West Ridge	13	18.1
3	Uptown	50	88.7
4	Lincoln Square	8	20.3
5	North Center	5	15.7
6	Lake View	38	40.3
7	Lincoln Park	6	9.4
8	Near North Side	11	13.7
9	Edison Park	0	0.0
10	Norwood Park	0	0.0
11	Jefferson Park	< 5	< 5
12	Forest Glen	0	0.0
13	North Park	0	0.0
14	Albany Park	7	13.6
15	Portage Park	8	12.5
16	Irving Park	10	18.7
17	Dunning	< 5	< 5
18	Montclare	0	0.0
19	Belmont Cragin	11	14.0
20	Hermosa	< 5	< 5
21	Avondale	7	17.8
22	Logan Square	6	8.2
23	Humboldt Park	11	19.5
24	West Town	9	11.1
25	Austin	26	26.4
26	West Garfield Park	10	55.6
27	East Garfield Park	6	29.2
28	Near West Side	15	27.3
29	North Lawndale	20	55.7
30	South Lawndale	9	11.4
31	Lower West Side	9	25.2
32	Loop	6	20.5
33	Near South Side	6	28.1
34	Armour Square	< 5	< 5
35	Douglas	9	49.3
36	Oakland	< 5	< 5
37	Fuller Park	< 5	< 5
38	Grand Boulevard	10	45.6
39	Kenwood	6	33.6
40	Washington Park	9	76.8
41	Hyde Park	6	23.4
42	Woodlawn	7	26.9
43	South Shore	26	52.2
44	Chatham	26	83.8
45	Avalon Park	< 5	< 5
46	South Chicago	12	38.5
47	Burnside	< 5	< 5
48	Calumet Heights	< 5	< 5
49	Roseland	14	31.4
50	Pullman	< 5	< 5
51	South Deering	< 5	< 5
52	East Side	< 5	< 5
53	West Pullman	< 5	< 5
54	Riverdale	0	0.0
55	Hegewisch	0	0.0
56	Garfield Ridge	< 5	< 5
57	Archer Heights	0	0.0
58	Brighton Park	6	13.2
59	McKinley Park	< 5	< 5
60	Bridgeport	< 5	< 5
61	New City	13	29.3
62	West Elsdon	< 5	< 5
63	Gage Park	< 5	< 5
64	Clearing	0	0.0
65	West Lawn	< 5	< 5
66	Chicago Lawn	14	25.2
67	West Englewood	12	33.8
68	Englewood	13	42.4
69	Gr. Grand Crossing	11	33.7
70	Ashburn	6	14.6
71	Auburn Gresham	15	30.8
72	Beverly	0	0.0
73	Washington Heights	10	37.7
74	Mount Greenwood	0	0.0
75	Morgan Park	< 5	< 5
76	O'Hare	0	0.0
77	Edgewater	29	51.3
	Unknown CA	107	--
	Chicago Total¶	**752**	**27.9**

Note: Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. §Rate per 100,000 population using 2010 U.S. Census Bureau population figures. ¶Includes all persons with unknown/undetermined community area. *HIV infection diagnoses represents newly diagnosed with HIV in a given year, at any stage of the disease through 10/29/18.

Table A.2: People Living with HIV Infection (PLWH) in 2016 by Community Area, Chicago (as of 09/26/2018)

	Community Area	Prevalent Cases	Rate
1	Rogers Park	905	1,645.7
2	West Ridge	293	407.3
3	Uptown	1,193	2,116.7
4	Lincoln Square	192	486.2
5	North Center	108	338.9
6	Lake View	914	968.5
7	Lincoln Park	155	241.7
8	Near North Side	298	370.3
9	Edison Park	8	71.5
10	Norwood Park	32	86.4
11	Jefferson Park	36	141.5
12	Forest Glen	25	135.1
13	North Park	41	228.7
14	Albany Park	213	413.3
15	Portage Park	148	230.8
16	Irving Park	199	372.9
17	Dunning	63	150.2
18	Montclare	30	223.4
19	Belmont Cragin	248	314.9
20	Hermosa	102	407.8
21	Avondale	166	422.8
22	Logan Square	314	426.7
23	Humboldt Park	413	733.3
24	West Town	347	426.1
25	Austin	720	730.9
26	West Garfield Park	174	966.6
27	East Garfield Park	231	1,123.2
28	Near West Side	365	665.1
29	North Lawndale	335	932.8
30	South Lawndale	495	624.3
31	Lower West Side	143	399.8
32	Loop	123	420.0
33	Near South Side	112	523.6
34	Armour Square	36	268.8
35	Douglas	171	937.6
36	Oakland	58	980.1
37	Fuller Park	21	730.2
38	Grand Boulevard	276	1,258.6
39	Kenwood	154	863.2
40	Washington Park	130	1,109.5
41	Hyde Park	146	568.5
42	Woodlawn	253	973.7
43	South Shore	701	1,408.6
44	Chatham	300	966.9
45	Avalon Park	84	824.7
46	South Chicago	275	881.5
47	Burnside	20	685.9
48	Calumet Heights	84	608.2
49	Roseland	282	632.0
50	Pullman	45	614.3
51	South Deering	86	569.2
52	East Side	34	147.6
53	West Pullman	198	667.8
54	Riverdale	29	447.4
55	Hegewisch	11	116.7
56	Garfield Ridge	56	162.3
57	Archer Heights	17	126.9
58	Brighton Park	122	268.9
59	McKinley Park	42	269.0
60	Bridgeport	73	228.3
61	New City	187	421.4
62	West Elsdon	31	171.2
63	Gage Park	89	223.1
64	Clearing	31	134.0
65	West Lawn	54	161.9
66	Chicago Lawn	275	494.4
67	West Englewood	264	743.6
68	Englewood	274	893.8
69	Gr. Grand Crossing	350	1,073.6
70	Ashburn	108	262.9
71	Auburn Gresham	345	707.8
72	Beverly	41	204.7
73	Washington Heights	134	505.8
74	Mount Greenwood	5	26.2
75	Morgan Park	104	461.3
76	O'Hare	17	133.3
77	Edgewater	1,134	2,006.3
	Unknown CA	7,547	--
	Chicago Total¶	**23,835**	**884.2**

Note: Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. †All persons diagnosed with HIV, from the beginning of the epidemic through 12/31/2015 and living through 12/31/2016 as of 09/26/2018. §Rate per 100,000 population using 2010 U.S. Census Bureau population figures. ¶Includes all persons with unknown/undetermined community area.

Table A.3: Chlamydia Case Rates by Community Area, Chicago, 2017

	Community Area	Chalmydia Cases	Rate
1	Rogers Park	576	1,047.4
2	West Ridge	297	412.8
3	Uptown	790	1,401.7
4	Lincoln Square	178	450.7
5	North Center	92	288.7
6	Lake View	949	1,005.6
7	Lincoln Park	374	583.3
8	Near North Side	568	705.7
9	Edison Park	19	169.8
10	Norwood Park	79	213.4
11	Jefferson Park	85	334.0
12	Forest Glen	38	205.3
13	North Park	75	418.3
14	Albany Park	278	539.4
15	Portage Park	243	379.0
16	Irving Park	302	566.0
17	Dunning	152	362.5
18	Montclare	75	558.6
19	Belmont Cragin	568	721.3
20	Hermosa	220	879.6
21	Avondale	253	644.4
22	Logan Square	508	690.3
23	Humboldt Park	819	1,454.1
24	West Town	627	770.0
25	Austin	1,807	1,834.3
26	West Garfield Park	484	2,688.7
27	East Garfield Park	461	2,241.5
28	Near West Side	620	1,129.7
29	North Lawndale	1,070	2,979.5
30	South Lawndale	764	963.6
31	Lower West Side	335	936.6
32	Loop	227	775.2
33	Near South Side	130	607.8
34	Armour Square	76	567.5
35	Douglas	255	1,398.2
36	Oakland	104	1,757.4
37	Fuller Park	61	2,121.0
38	Grand Boulevard	427	1,947.2
39	Kenwood	179	1,003.3
40	Washington Park	313	2,671.3
41	Hyde Park	128	498.4
42	Woodlawn	459	1,766.5
43	South Shore	885	1,778.3
44	Chatham	598	1,927.3
45	Avalon Park	134	1,315.7
46	South Chicago	513	1,644.3
47	Burnside	65	2,229.1
48	Calumet Heights	179	1,296.0
49	Roseland	714	1,600.2
50	Pullman	80	1,092.2
51	South Deering	208	1,376.7
52	East Side	140	607.6
53	West Pullman	498	1,679.5
54	Riverdale	174	2,684.4
55	Hegewisch	55	583.5
56	Garfield Ridge	177	512.9
57	Archer Heights	75	560.0
58	Brighton Park	392	864.0
59	McKinley Park	110	704.6
60	Bridgeport	149	466.0
61	New City	517	1,165.0
62	West Elsdon	129	712.4
63	Gage Park	360	902.4
64	Clearing	99	427.8
65	West Lawn	210	629.6
66	Chicago Lawn	833	1,497.4
67	West Englewood	758	2,134.9
68	Englewood	650	2,120.4
69	Gr. Grand Crossing	702	2,153.2
70	Ashburn	373	908.0
71	Auburn Gresham	891	1,828.0
72	Beverly	94	469.2
73	Washington Heights	407	1,536.3
74	Mount Greenwood	47	246.2
75	Morgan Park	238	1,055.7
76	O'Hare	28	219.5
77	Edgewater	611	1,081.0
	Unknown CA	2,134	--
	Chicago Total¶	**30,292**	**1,123.8**

Note: Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. §Rate per 100,000 population using 2010 U.S. Census Bureau population figures. ¶Includes all persons with unknown/undetermined community area.

Table A.4: Gonorrhea Case Rates by Community Area, Chicago, 2017

	Community Area	Gonorrhea Cases	Rate
1	Rogers Park	297	540.1
2	West Ridge	101	140.4
3	Uptown	574	1,018.4
4	Lincoln Square	76	192.4
5	North Center	31	97.3
6	Lake View	535	566.9
7	Lincoln Park	91	141.9
8	Near North Side	161	200.0
9	Edison Park	< 5	< 5
10	Norwood Park	21	56.7
11	Jefferson Park	16	62.9
12	Forest Glen	10	54.0
13	North Park	16	89.2
14	Albany Park	75	145.5
15	Portage Park	70	109.2
16	Irving Park	103	193.0
17	Dunning	31	73.9
18	Montclare	14	104.3
19	Belmont Cragin	103	130.8
20	Hermosa	54	215.9
21	Avondale	86	219.0
22	Logan Square	158	214.7
23	Humboldt Park	315	559.3
24	West Town	188	230.9
25	Austin	682	692.3
26	West Garfield Park	211	1,172.2
27	East Garfield Park	201	977.3
28	Near West Side	225	410.0
29	North Lawndale	435	1,211.3
30	South Lawndale	162	204.3
31	Lower West Side	87	243.2
32	Loop	83	283.4
33	Near South Side	48	224.4
34	Armour Square	26	194.2
35	Douglas	96	526.4
36	Oakland	54	912.5
37	Fuller Park	25	869.3
38	Grand Boulevard	180	820.8
39	Kenwood	68	381.1
40	Washington Park	119	1,015.6
41	Hyde Park	75	292.0
42	Woodlawn	216	831.3
43	South Shore	428	860.0
44	Chatham	225	725.2
45	Avalon Park	52	510.6
46	South Chicago	233	746.8
47	Burnside	19	651.6
48	Calumet Heights	61	441.6
49	Roseland	294	658.9
50	Pullman	44	600.7
51	South Deering	93	615.5
52	East Side	21	91.1
53	West Pullman	209	704.9
54	Riverdale	66	1,018.2
55	Hegewisch	9	95.5
56	Garfield Ridge	39	113.0
57	Archer Heights	10	74.7
58	Brighton Park	66	145.5
59	McKinley Park	26	166.5
60	Bridgeport	41	128.2
61	New City	160	360.5
62	West Elsdon	20	110.4
63	Gage Park	59	147.9
64	Clearing	12	51.9
65	West Lawn	40	119.9
66	Chicago Lawn	309	555.5
67	West Englewood	322	906.9
68	Englewood	322	1,050.4
69	Gr. Grand Crossing	294	901.8
70	Ashburn	107	260.5
71	Auburn Gresham	405	830.9
72	Beverly	24	119.8
73	Washington Heights	177	668.1
74	Mount Greenwood	11	57.6
75	Morgan Park	75	332.7
76	O'Hare	10	78.4
77	Edgewater	400	707.7
	Unknown CA	924	--
	Chicago Total¶	**11,730**	**435.2**

Note: Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. §Rate per 100,000 population using 2010 U.S. Census Bureau population figures. ¶Includes all persons with unknown/undetermined community area.

Table A.5: Primary and Secondary (P&S) Syphilis Case Rates by Community Area, Chicago, 2017

	Community Area	P&S Syphilis Cases	Rate
1	Rogers Park	37	67.3
2	West Ridge	15	20.9
3	Uptown	82	145.5
4	Lincoln Square	14	35.4
5	North Center	8	25.1
6	Lake View	71	75.2
7	Lincoln Park	11	17.2
8	Near North Side	19	23.6
9	Edison Park	< 5	< 5
10	Norwood Park	< 5	< 5
11	Jefferson Park	< 5	< 5
12	Forest Glen	0	0.0
13	North Park	5	27.9
14	Albany Park	10	19.4
15	Portage Park	6	9.4
16	Irving Park	8	15.0
17	Dunning	< 5	< 5
18	Montclare	< 5	< 5
19	Belmont Cragin	9	11.4
20	Hermosa	< 5	< 5
21	Avondale	8	20.4
22	Logan Square	14	19.0
23	Humboldt Park	7	12.4
24	West Town	17	20.9
25	Austin	21	21.3
26	West Garfield Park	9	50.0
27	East Garfield Park	5	24.3
28	Near West Side	10	18.2
29	North Lawndale	11	30.6
30	South Lawndale	15	18.9
31	Lower West Side	6	16.8
32	Loop	10	34.1
33	Near South Side	5	23.4
34	Armour Square	0	0.0
35	Douglas	8	43.9
36	Oakland	< 5	< 5
37	Fuller Park	0	0.0
38	Grand Boulevard	11	50.2
39	Kenwood	7	39.2
40	Washington Park	11	93.9
41	Hyde Park	8	31.2
42	Woodlawn	10	38.5
43	South Shore	27	54.3
44	Chatham	13	41.9
45	Avalon Park	5	49.1
46	South Chicago	6	19.2
47	Burnside	< 5	< 5
48	Calumet Heights	< 5	< 5
49	Roseland	11	24.7
50	Pullman	< 5	< 5
51	South Deering	5	33.1
52	East Side	< 5	< 5
53	West Pullman	7	23.6
54	Riverdale	0	0.0
55	Hegewisch	0	0.0
56	Garfield Ridge	< 5	< 5
57	Archer Heights	< 5	< 5
58	Brighton Park	5	11
59	McKinley Park	< 5	< 5
60	Bridgeport	5	15.6
61	New City	10	22.5
62	West Elsdon	0	0
63	Gage Park	5	12.5
64	Clearing	< 5	< 5
65	West Lawn	< 5	< 5
66	Chicago Lawn	15	27.0
67	West Englewood	6	16.9
68	Englewood	11	35.9
69	Gr. Grand Crossing	13	39.9
70	Ashburn	< 5	< 5
71	Auburn Gresham	9	18.5
72	Beverly	< 5	< 5
73	Washington Heights	5	18.9
74	Mount Greenwood	0	0.0
75	Morgan Park	< 5	< 5
76	O'Hare	0	0
77	Edgewater	78	138
	Unknown CA	22	– –
	Chicago Total¶	**788**	**29.2**

Note: Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. §Rate per 100,000 population using 2010 U.S. Census Bureau population figures. ¶Includes all persons with unknown/undetermined community area.

Table A.6: Average Annual HIV Infection Diagnoses Case Rates among Persons Aged 50 Years and Older by Community Area, Chicago, 2013-2017 (as of 09/26/18)

	Community Area	Average HIV Infections*	Average HIV Infection Rate§
1	Rogers Park	5	9.5
2	West Ridge	< 5	< 5
3	Uptown	5	8.9
4	Lincoln Square	< 5	< 5
5	North Center	0	0.0
6	Lake View	5	< 5
7	Lincoln Park	< 5	< 5
8	Near North Side	< 5	< 5
9	Edison Park	0	0.0
10	Norwood Park	0	0.0
11	Jefferson Park	< 5	< 5
12	Forest Glen	0	0.0
13	North Park	0	0.0
14	Albany Park	< 5	< 5
15	Portage Park	< 5	< 5
16	Irving Park	< 5	< 5
17	Dunning	< 5	< 5
18	Montclare	0	0.0
19	Belmont Cragin	< 5	< 5
20	Hermosa	< 5	< 5
21	Avondale	< 5	< 5
22	Logan Square	< 5	< 5
23	Humboldt Park	< 5	< 5
24	West Town	< 5	< 5
25	Austin	< 5	< 5
26	West Garfield Park	< 5	< 5
27	East Garfield Park	< 5	< 5
28	Near West Side	< 5	< 5
29	North Lawndale	< 5	< 5
30	South Lawndale	< 5	< 5
31	Lower West Side	< 5	< 5
32	Loop	< 5	< 5
33	Near South Side	< 5	< 5
34	Armour Square	< 5	< 5
35	Douglas	< 5	< 5
36	Oakland	0	0.0
37	Fuller Park	0	0.0
38	Grand Boulevard	< 5	< 5
39	Kenwood	< 5	< 5
40	Washington Park	0	0.0
41	Hyde Park	< 5	< 5
42	Woodlawn	< 5	< 5
43	South Shore	< 5	< 5
44	Chatham	< 5	< 5
45	Avalon Park	< 5	< 5
46	South Chicago	< 5	< 5
47	Burnside	0	0.0
48	Calumet Heights	< 5	< 5
49	Roseland	< 5	< 5
50	Pullman	< 5	< 5
51	South Deering	< 5	< 5
52	East Side	0	0.0
53	West Pullman	< 5	< 5
54	Riverdale	0	0.0
55	Hegewisch	0	0.0
56	Garfield Ridge	< 5	< 5
57	Archer Heights	0	0.0
58	Brighton Park	< 5	< 5
59	McKinley Park	0	0.0
60	Bridgeport	< 5	< 5
61	New City	< 5	< 5
62	West Elsdon	< 5	< 5
63	Gage Park	0	0.0
64	Clearing	0	0.0
65	West Lawn	0	0.0
66	Chicago Lawn	< 5	< 5
67	West Englewood	< 5	< 5
68	Englewood	< 5	< 5
69	Gr. Grand Crossing	< 5	< 5
70	Ashburn	< 5	< 5
71	Auburn Gresham	< 5	< 5
72	Beverly	0	0.0
73	Washington Heights	0	0.0
74	Mount Greenwood	0	0.0
75	Morgan Park	0	0.0
76	O'Hare	0	0.0
77	Edgewater	7	11.7
	Unknown CA	13	--
	Chicago Total¶	**124**	**4.6**

Note: Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. §Rate per 100,000 population using 2010 U.S. Census Bureau population figures. ¶Includes all persons with unknown/undetermined community area. *HIV infection diagnoses represents newly diagnosed with HIV in a given year, at any stage of the disease through 09/26/18.

Table A.7: Average Annual People Living with HIV Case Rates Among Persons Aged 50 Years and Older by Community Area, Chicago, 2012 - 2016 (as of 09/26/2018)

	Community Area	Prevalent Cases†	Prevalence Rate§
1	Rogers Park	351	637.6
2	West Ridge	122	169.3
3	Uptown	480	850.9
4	Lincoln Square	63	159.5
5	North Center	37	114.9
6	Lake View	384	406.5
7	Lincoln Park	85	132.3
8	Near North Side	149	185.6
9	Edison Park	5	46.5
10	Norwood Park	15	40.0
11	Jefferson Park	17	66.8
12	Forest Glen	14	74.6
13	North Park	15	84.8
14	Albany Park	76	146.7
15	Portage Park	50	78.6
16	Irving Park	74	139.4
17	Dunning	26	62.5
18	Montclare	13	99.8
19	Belmont Cragin	88	111.8
20	Hermosa	40	159.9
21	Avondale	53	134.0
22	Logan Square	120	162.5
23	Humboldt Park	138	245.4
24	West Town	147	180.8
25	Austin	225	228.4
26	West Garfield Park	64	355.5
27	East Garfield Park	90	439.5
28	Near West Side	147	268.6
29	North Lawndale	128	355.9
30	South Lawndale	197	248.0
31	Lower West Side	39	110.2
32	Loop	53	180.3
33	Near South Side	51	237.5
34	Armour Square	12	91.1
35	Douglas	67	369.6
36	Oakland	22	368.4
37	Fuller Park	10	347.7
38	Grand Boulevard	111	508.0
39	Kenwood	55	308.3
40	Washington Park	41	348.2
41	Hyde Park	56	218.8
42	Woodlawn	93	359.5
43	South Shore	236	474.2
44	Chatham	103	332.0
45	Avalon Park	25	249.4
46	South Chicago	84	268.0
47	Burnside	8	267.5
48	Calumet Heights	35	252.0
49	Roseland	111	249.7
50	Pullman	10	133.8
51	South Deering	30	198.6
52	East Side	11	47.7
53	West Pullman	81	273.9
54	Riverdale	10	160.4
55	Hegewisch	6	63.7
56	Garfield Ridge	26	74.2
57	Archer Heights	< 5	< 5
58	Brighton Park	26	57.7
59	McKinley Park	14	91.0
60	Bridgeport	21	66.9
61	New City	55	124.4
62	West Elsdon	7	36.4
63	Gage Park	23	57.2
64	Clearing	7	32.0
65	West Lawn	13	39.0
66	Chicago Lawn	60	107.5
67	West Englewood	85	240.5
68	Englewood	94	306.6
69	Gr. Grand Crossing	123	376.1
70	Ashburn	35	85.2
71	Auburn Gresham	108	222.4
72	Beverly	19	93.8
73	Washington Heights	49	186.5
74	Mount Greenwood	< 5	< 5
75	Morgan Park	44	193.4
76	O'Hare	8	64.3
77	Edgewater	471	834.0
	Unknown CA	3,418	--
	Chicago Total¶	**9,487**	**351.9**

Note: Use caution when interpreting data based on less than 20 events; rate/percent is unreliable. †All persons diagnosed with HIV, from the beginning of the epidemic through 12/31/2015 and living through 12/31/2016 as of 09/26/2018. §Rate per 100,000 population using 2010 U.S. Census Bureau population figures. ¶Includes all persons with unknown/undetermined community area.

Appendix B: Geocoding Methodology and Limitations

INEDSS - ADDRESS VALIDATION

On March 24, 2012, INEDSS Release 10.2 was deployed. This release included address validation within INEDSS and geocoded data. Before case information is submitted to the Illinois Department of Public Health (IDPH) for counting, addresses are verified to ensure the accuracy and standardization of the data. Addresses that are verified in INEDSS will be assigned latitude and longitude coordinates. For addresses not validated, INEDSS geocodes the data using the zip code centroid, followed by the city and then the country.

Twice a month, IDPH submits an updated morbidity file to the Chicago Department of Public Health (CDPH) via MOVEit File Transfer, a secured application for exchanging confidential files and data between servers and organizations. This file does not include the geocoded address field. Once CDPH receives the electronic file, it is prepared for submission to the City of Chicago GIS FTP server for validation and geocoding.

GEOCODING INEDSS MORBIDITY FILE

Before the INEDSS data file is submitted to the City of Chicago GIS FTP site, the street address is rounded (e.g. 8634 to 8600) in order to preserve confidentiality. A new data file is created containing only the rounded street address and a record identifier (state case number). This file is converted from Microsoft Excel to a common delimited (.csv) file, and submitted to the City of Chicago GIS FTP server for processing.

The files submitted are assigned a name that does not associate it with a person, case, health condition or CDPH. Once the geographic identifiers (e.g., community area number, zip code, ward and 2010 census tract) are selected, the file is submitted. After the geocoder has received the request, an email is sent notifying the user that the geocoding process has commenced. When the geocoding job is completed, the results (output) file is downloaded to a secure server that meets HIPPA security requirements. Lastly, the original (input) file that was submitted and the results (output) file are both deleted from the FTP folders.

Addresses that are not geocoded in the output file are cleaned using the Geocoder website by identifying the correct street components. All apartment components (e.g., FL, BSMT, Apt #1) are also removed from the address field. The file is resubmitted to the GIS FTP server for validation and geocoding. To increase the number of geocoded addresses, the match standard code can be changed from medium (default) to low to obtain nearest matches.

REASONS WHY ADDRESSES FAIL TO MATCH

A. Addresses may be missing street segments or in the wrong format (AVE, ST., King Dr. instead of Dr. Martin Luther King Drive).
B. Address may incorporate typographical errors that result in erroneous street names or local street names that are different that those officially recorded by the government.
C. Addresses may end at jurisdictional boundaries.

LIMITATIONS IN DETERMINING GEOGRAPHIC PATTERS IN RATES OF HEALTH-RELATED EVENTS

- Unable to determine if the geographical variation in the incidence rates across years is due to a true change in the progression of the disease or an artifact of the address validation process in INEDSS.
- Inflation of the rates due to increase in the proportion of exact or nearest matched addresses.

Appendix C: List of Acronyms

AI/AN = American Indian/Alaskan Native

AIDS = Acquired Immunodeficiency Syndrome

CDC = Centers for Disease Control and Prevention

CDPH = Chicago Department of Public Health

CHAT = Chicago Healthy Adolescents and Teens Program

CPS = Chicago Public Schools

eHARS = Enhanced HIV/AIDS Reporting System

FtM = Female to Male Transgender

HIV = Human Immunodeficiency Virus

IDPH = Illinois Department of Public Health

IDU = Injection Drug Use/Injection Drug User

MtF = Male to Female Transgender

MSM = Men who have sex with men

MSM/IDU = Men with a history of injection drug use who have sex with men

NIR = No identified risk

NH = Non-Hispanic

PI = Pacific Islander

PLWHA = People Living with HIV/AIDS

PPIL = Planned Parenthood of Illinois

PrEP = HIV Pre-exposure Prophylaxis

P&S = Primary and Secondary Syphilis

STI = Sexually Transmitted Infection

Appendix D: Technical Notes – Hardship Index

CHICAGO COMMUNITY AREA ECONOMIC HARDSHIP INDEX

- The economic hardship index (EHI), developed by Richard P. Nathan and Charles F. Adams Jr in 1975, is used to provide a complete, multidimensional measure of neighborhood socioeconomic conditions of inequality across the City of Chicago.
- The EHI is a composite of six indicators:
  - Crowded housing (percentage occupied by housing units with more than one person per room)
  - Poverty (percentage of persons living below the federal poverty level)
  - Unemployment (percentage of persons over the age of 16 years who are unemployed)
  - Education (percentage of persons over the age of 25 years without a high school education
  - Dependency (percentage of the population under 18 or over 64 years of age)
  - Per capita income level
- The EHI score is a median of the six indicators that are standardized on a scale of 0 to 100, with a higher score representing a greater level of economic hardship or burden.
- The U.S. Census Bureau's American Community Survey estimates are used to calculate index values at the census tract levels. To calculate index values at the Chicago Community Area boundaries, the census tract data are aggregated using the Geographic Information Systems (GIS) software.

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2. Shih, M., Dumke, K.A., Goran, M.I., and Simon, P.A. (2012). The association between community-level economic hardship and childhood obesity prevalence in Los Angeles. Pediatric Obesity, Volume 8(6): 411-417. Retrieved from: http://corc.usc.edu/pdf/The%20association%20between%20community-level%20economic%20hardship%20and%20childhood%20obesity%20prevalence%20in%20Los%20Angeles.pdf

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