STI/HIV Screening for Adolescent Patients in Primary Care

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Objectives

- Review STI statistics in Chicago and other Illinois Counties
- Summarize universal HIV and STI screening guidelines
- Describe current STI treatments
- Understand Neisseria Gonorrhoea-increasing antibiotic resistance
- Discuss expedited Partner Therapy (EPT) in Illinois
- Explain the law regarding Confidential Health Care of minors in Illinois

Eliminating Race Base Medicine AAP statement

- AAP guideline
- May 2022
- Race and Racism in Medicine
- "race is a historically derived social construct that has no place as a biologic proxy.
- AAP is "dismantling race-based medicine by acknowledging the impact that differential lived experiences have on individual and population health outcomes through a race-conscious health equity lens." Dr. Wright

Chlamydia by Chicago Community Area

In 2020, the rates of reported cases of chlamydia ranged from 115.2 to 2,398.2 per 100,000 population throughout the city of Chicago (Figure 1.7). The top three community areas with the highest average chlamydia case rates in 2020 were Washington Park (2,398.2 per 100,000) North Lawndale (2,378.0 per 100,000), and West Garfield Park (2,255.4 per 100,000) (Figure 1.7; Appendix Table A3).

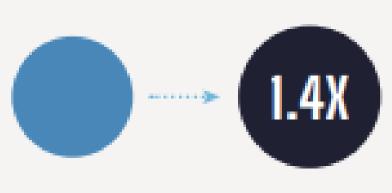
s in the US have surg

Gonorrhea by Chicago Community Area



In 2020, the rates of reported cases of gonorrhea ranged from 37.8 to 1,425.3 per 100,000 population throughout the city of Chicago (Figure 1.8). The top three community areas with the highest average gonorrhea case rates in 2020 were Washington Park (1,425.3 per 100,000), Gr. Grand Crossing (1,414.0 per 100,000), and West Garfield Park (1,394.4 per 100,000) (Figure 1.8; Appendix Table A4).

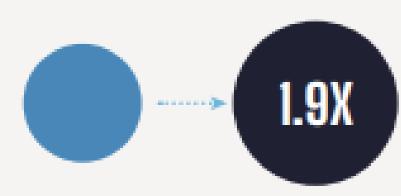




as many reported chlamydia cases in women than men

14,658 cases reported among females vs.

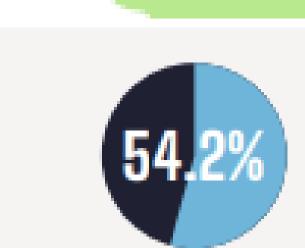
10,523 in males 26 M nev



as many reported gonorrhea cases in males than females 8,771 cases reported among males vs.

> 4,536 in females

Chlamydia by Sex



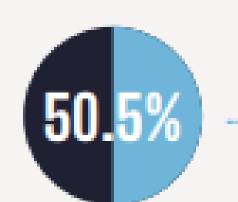
of all reported chlamydia cases were 20-29 years old 77.3%

if this group expanded to include 30 years and younger) 18

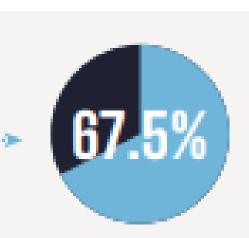
ive an STI

Gonorrhea by Sex





of all reported ghonorrhea cases were 20-29 years old



if this group expanded to include those aged 13-19

Gonorrhea by Age

Similar to reported cases of chlamydia, gonorrhea cases in Chicago continued to be the highest among adolescents and young adults. In 2020, individuals aged 20-29 years old were the most frequently diagnosed age group, representing over half of all reported gonorrhea cases (Table 1.4). If this group were expanded to include those aged 13 to 19 years old, the expanded group (13 to 29 years) would represent 67.5% of all reported gonorrhea cases in 2020 (Table 1.4).

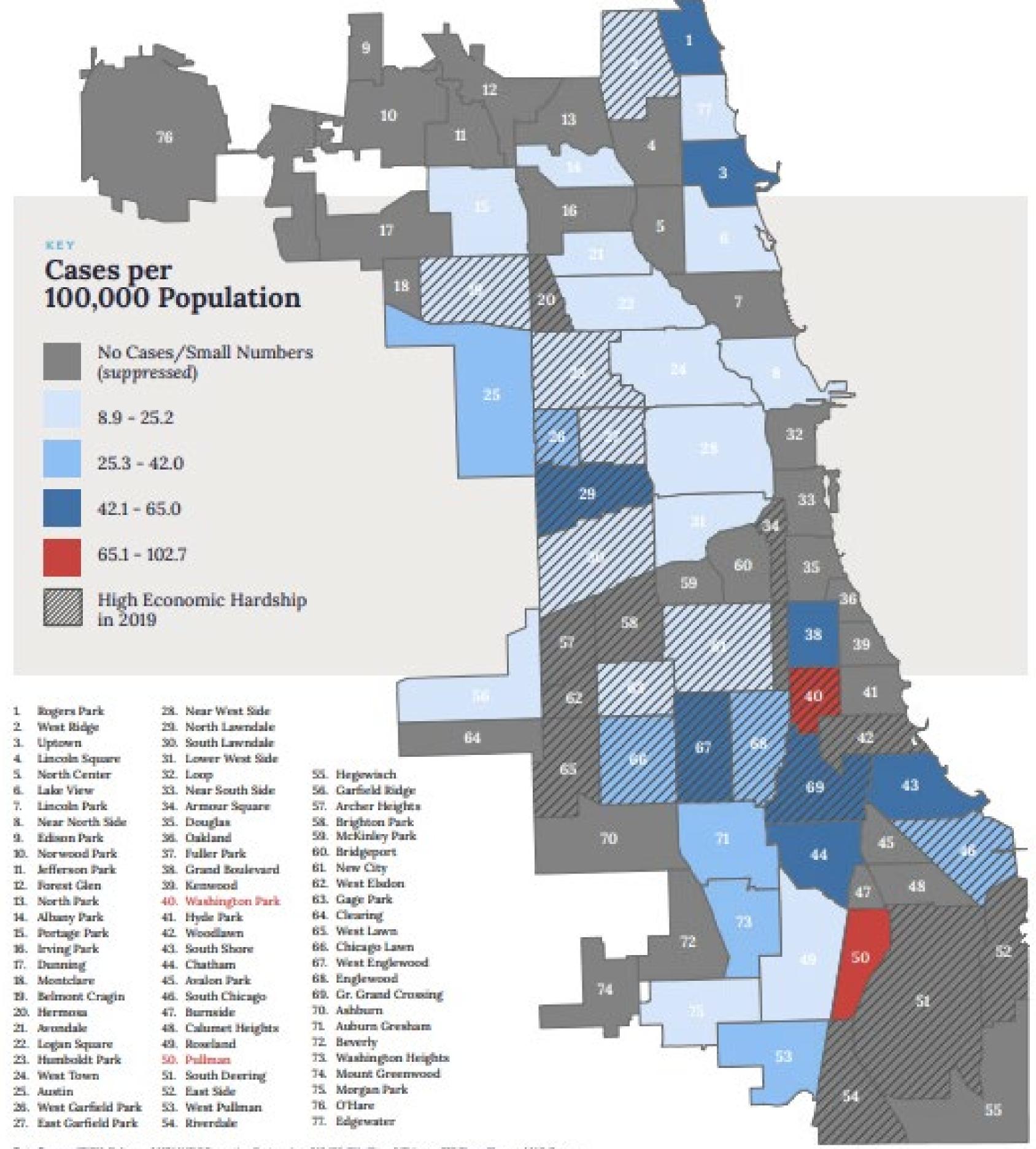
Chlamydia by Age

In 2020, a majority (54.2%) of all reported chlamydia cases were among individuals 20 – 29 years old. If this group were expanded to include all individuals 30 years and younger, the group would represent 77.3% of all reported chlamydia cases (Table 1.4).

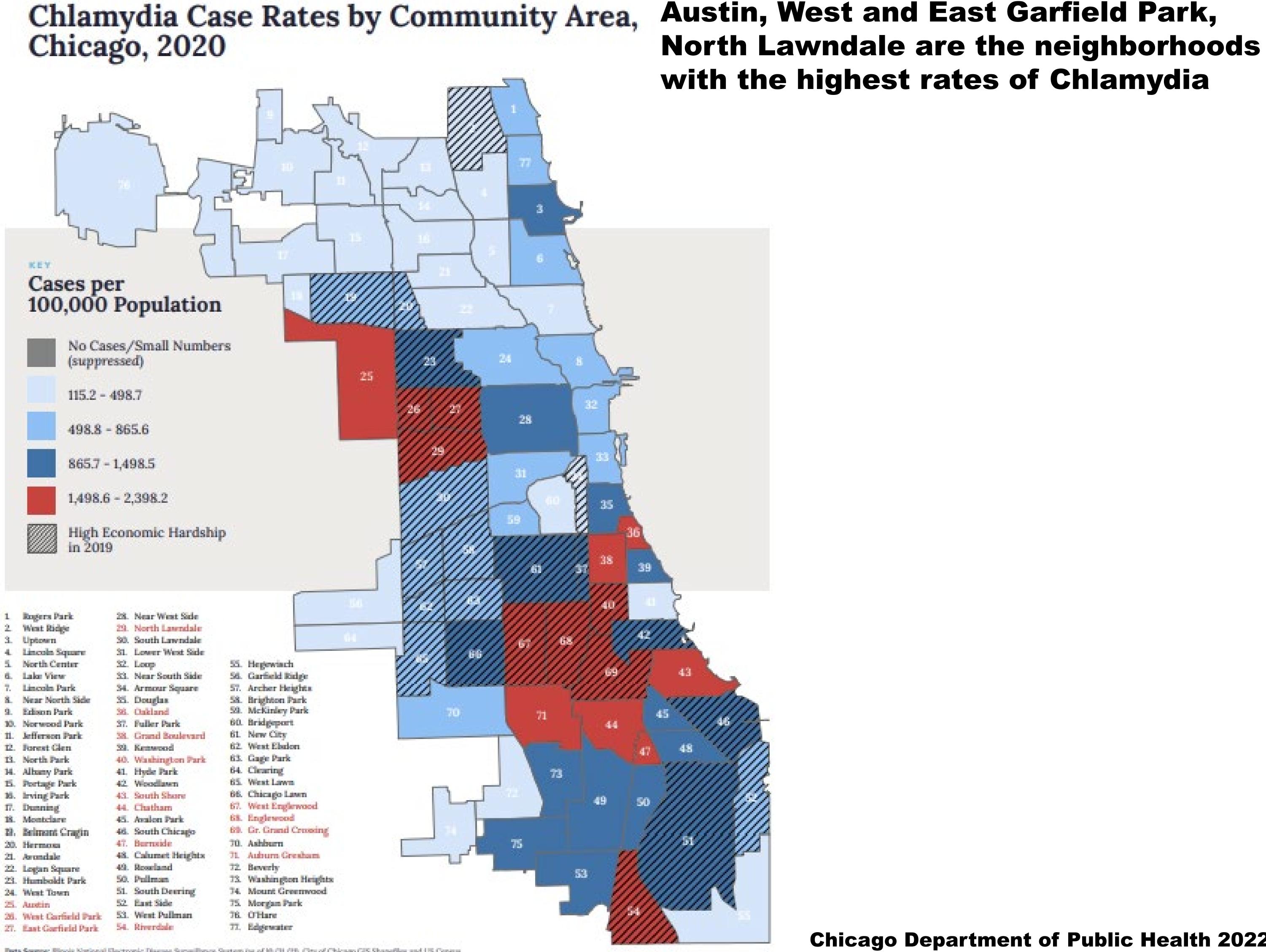
Chicago Department of Public Health 2022 and CDC

FIGURE 1.5

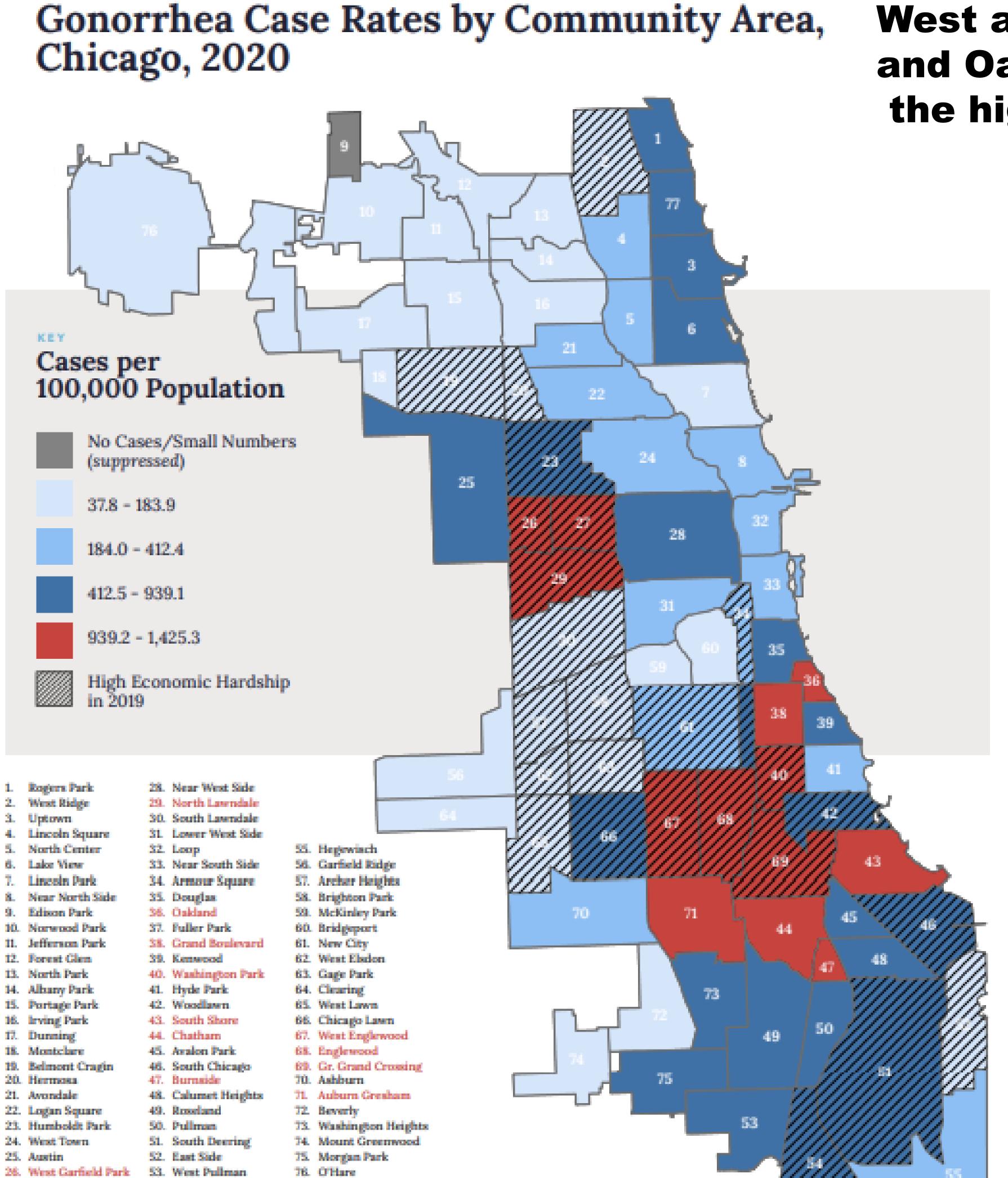
Rate of HIV Infection Diagnoses by Community Area, Chicago, 2020



Washington and Pullman are the neighborhoods with highest rates of HIV infection



Chicago Department of Public Health 2022



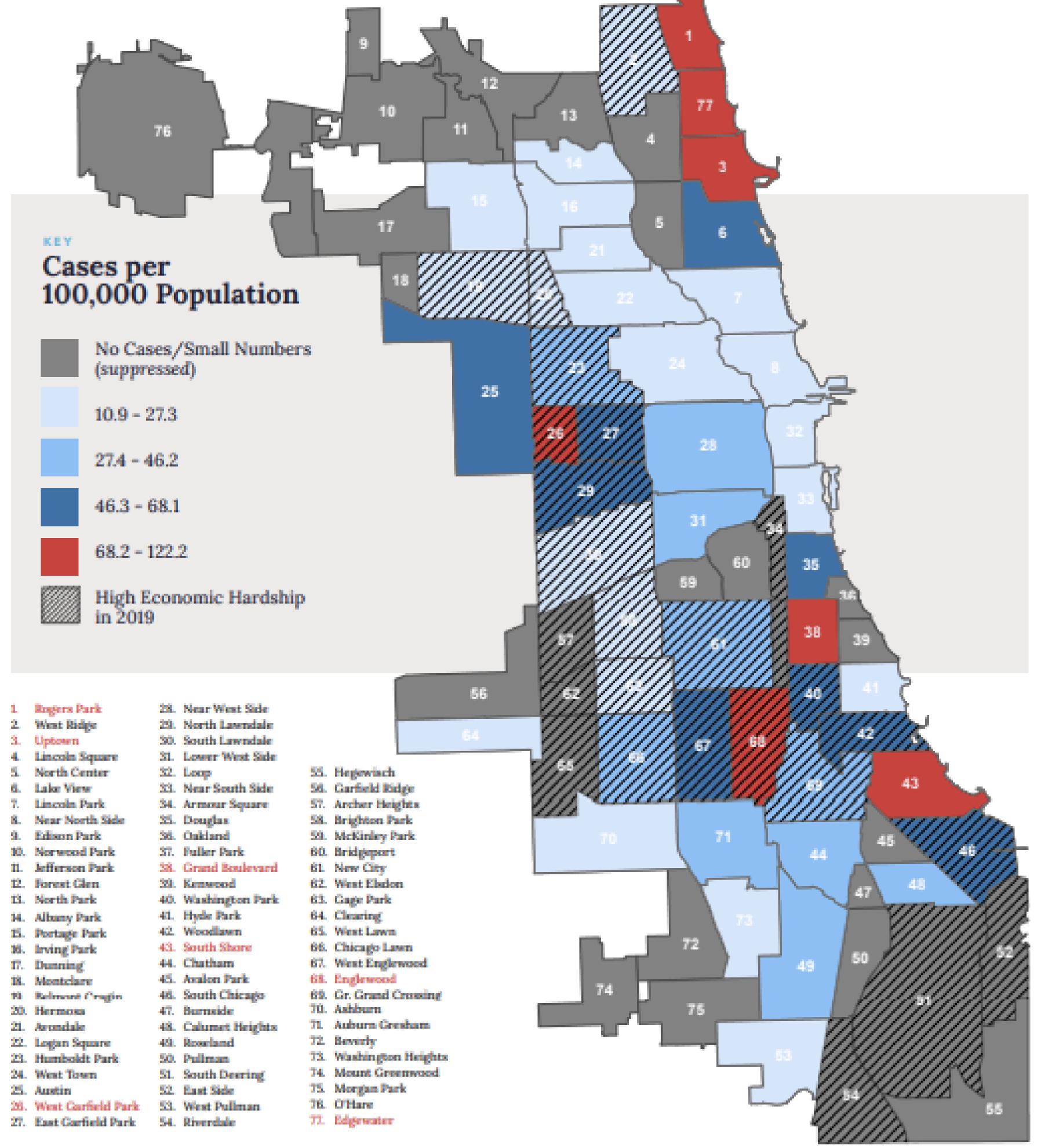
West and East Garfield, North Lawndale and Oakland are the neighborhoods with the highest rates of Gonorrhea infection

77. Edgewater

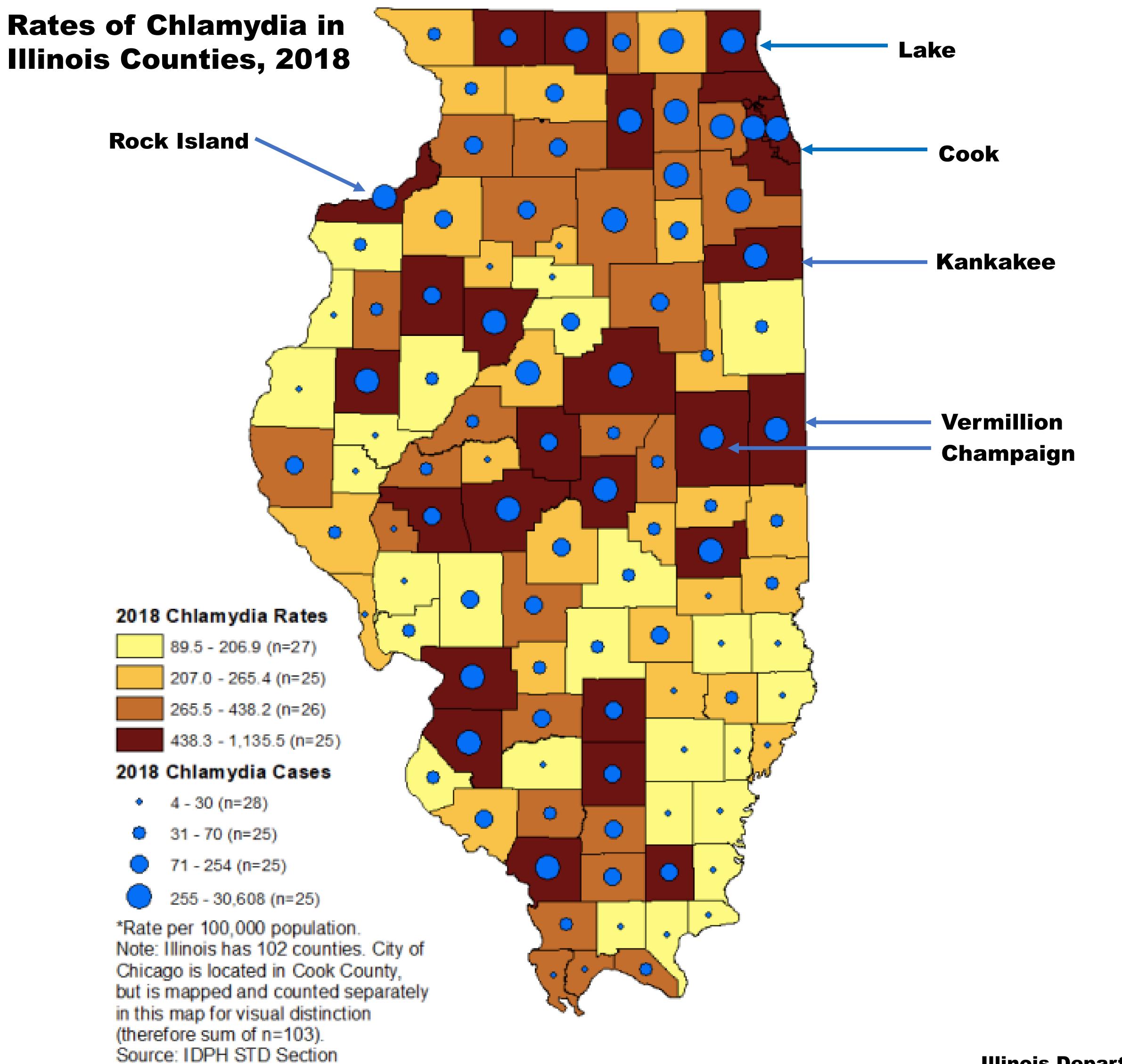
54. Riverdale

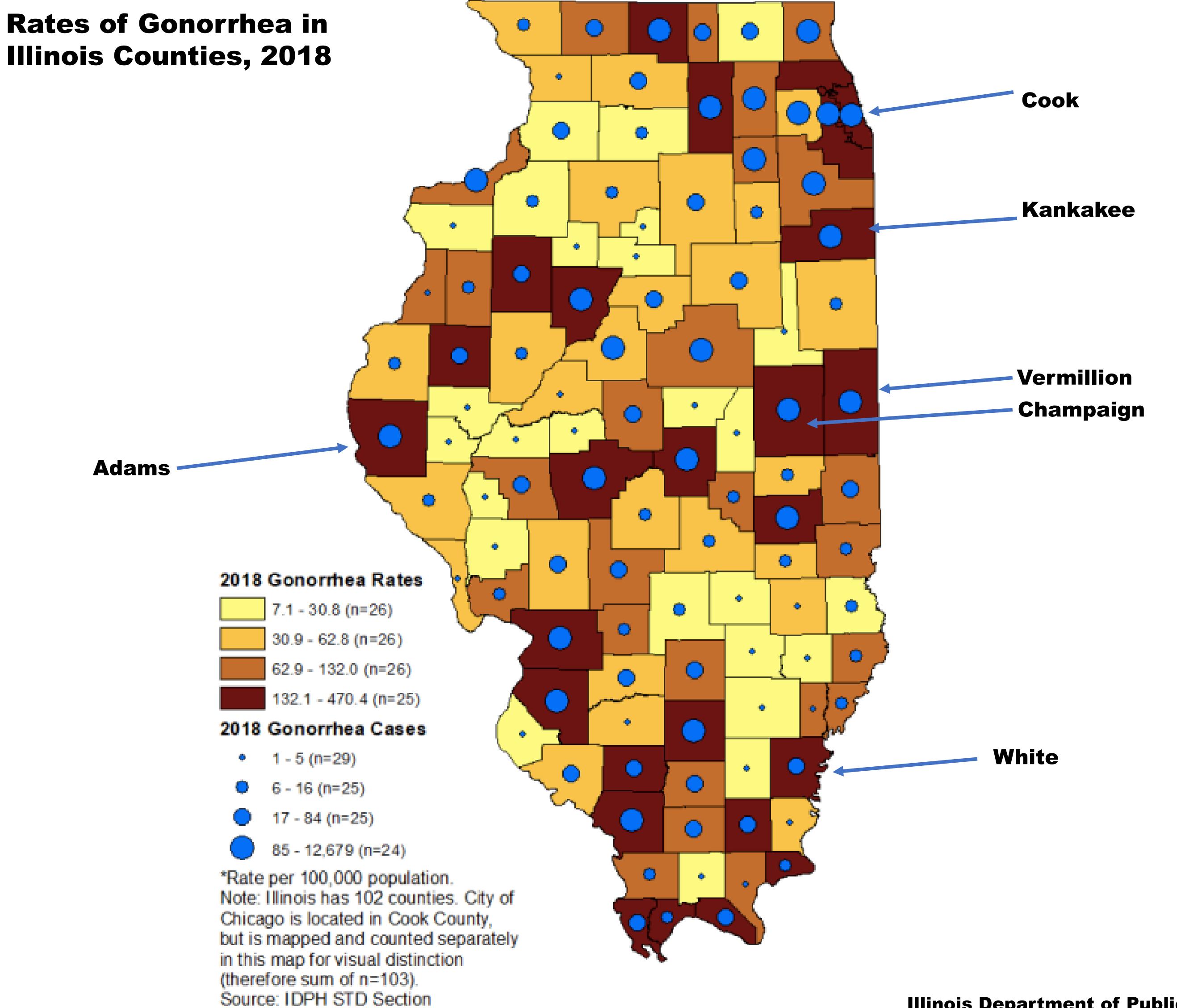
27. East Garfield Park

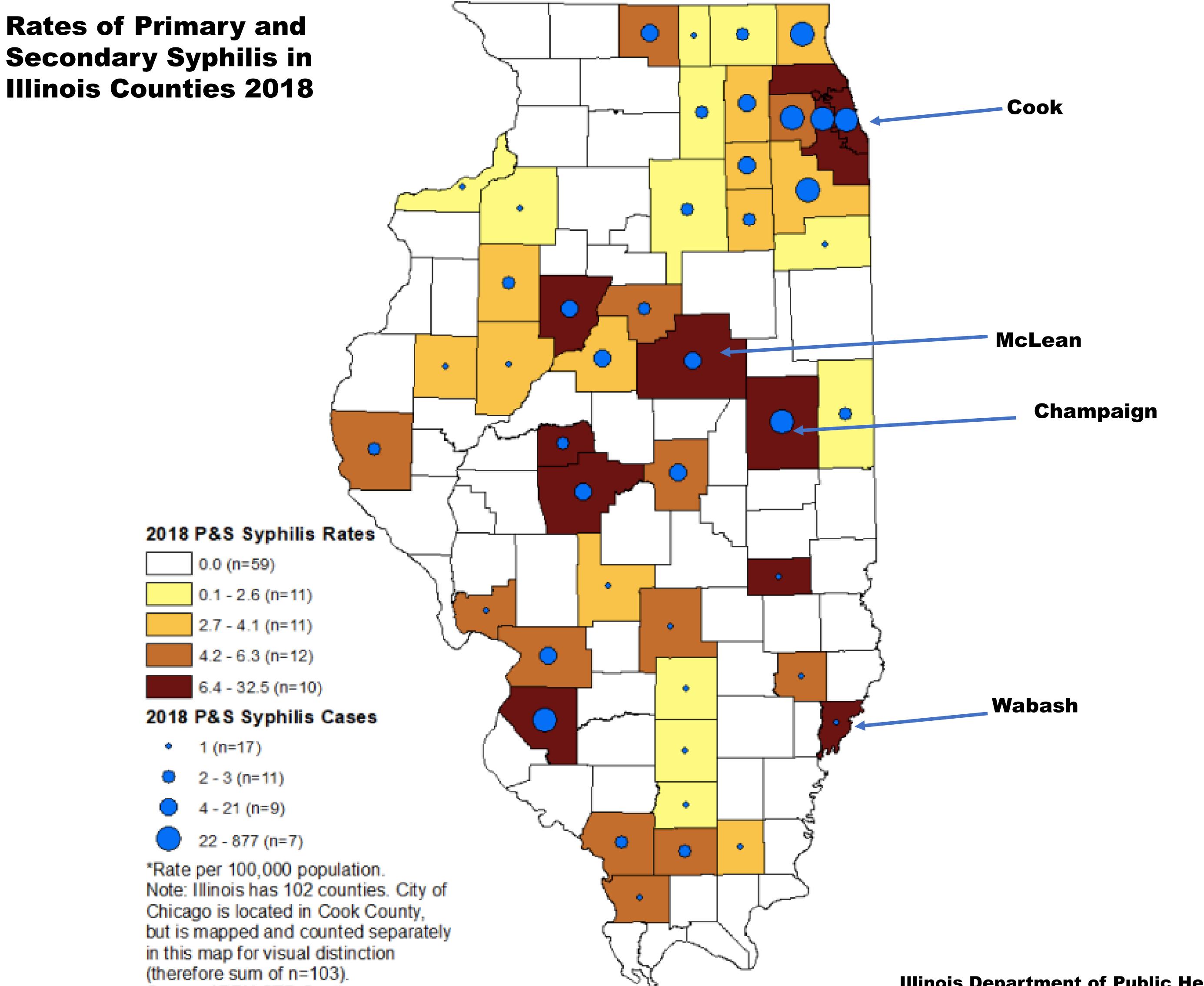
Primary and Secondary (P&S) Syphilis Case Rates by Community Area, Chicago, 2020



Rogers Park, Uptown, West Garfield, Grand Boulevard are the neighborhoods with the highest rates of Syphilis







Reported Cases of Chlamydia, Gonorrhea, Primary and Secondary (P&S) Syphilis by Selected Demographic Characteristics, Chicago, 2020

	Chlamydia		Gonorrhea		P&S Syphilis	
Demographic Characteristics	No.	%	No.	%	No.	%
RACE/ETHNICITY^						
Black, non-Hispanic	12,766	50.6%	8,089	60.7%	459	49.9%
White, non-Hispanic	2,491	9.9%	1,624	12.2%	196	21.3%
Hispanic	4,501	17.8%	1,468	11.0%	170	18.5%
Asian/PI, non-Hispanic	364	1.4%	143	1.196	13	1.4%
AI/AN, non-Hispanic	25	<1%	12	<196	-	
Other, non-Hispanic	421	1.7%	220	1.7%	7	<196
Unknown	4,651	18.4%	1,766	13.3%	74	8.1%
BIRTH SEX						
Female	14,658	58.1%	4,536	34.0%	137	14.9%
Male	10,523	41.7%	8,771	65.8%	782	85.1%
Unknown	38	<1%	15	<196	-	
TRANSMISSION GROUP!						
Male sex w/Male					544	59.2%
Heterosexual Males					102	11.1%
Females					137	14.9%
Male unknown					136	14.8%
AGE GROUP!						
Less than 13	15	<1%	9	-197		
13-19	5,812	23.0%	2,273	17.196	30	3.3%
20-29	13,676	54.2%	6,724	50.5%	329	35.8%
20-24	7,982	31.7%	3,403	25.5%	127	13.8%
25-29	5,694	22.6%	3,321	24.9%	202	22.0%
30-39	4,104	16.3%	3,026	22.7%	309	33.6%
40-49	1,076	4.3%	816	6.1%	139	15.1%
50+	536	2.1%	474	3.6%	112	12.2%
TOTAL**	25,219		13,322		919	

STI Rates by Gender

times as many new HIV diagnoses in men than women

12.9X

times more new HIV diagnoses among MSM than those reporting heterosexual contact transmission

as many Chlamydia cases in women than men

as many Gonorrhea cases in men than women

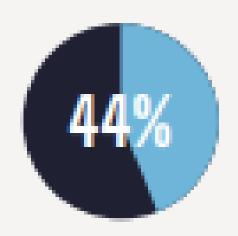
5.7X

as many P&S Syphilis cases in men than women

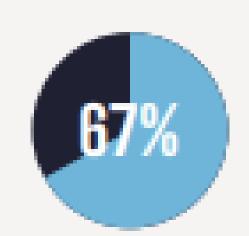
HIV by Chicago Community Area

In 2020, the top three community areas with the highest average HIV infection diagnosis rates were Pullman (102.7 per 100,000), Washington Park (96.9 per 100,000), and Uptown (65.0 per 100,000) (Figure 1.5, Appendix Table A1). The top three community areas with the highest number of new HIV infection diagnoses were Uptown (n=38), Austin (n=30) and South Shore (n=26) (Appendix Table A1).

Similar, to previous years, in 2020, the top three community areas with the highest HIV prevalence rates were Edgewater (2,150.1 per 100,000), Uptown (2,095.0 per 100,000), and Rogers Park (1,649.3 100,000) (Figure 1.6; Appendix Table A2).



newly reported HIV cases were among individuals 20-29 years old



of people living with HIV were aged 40 years and older





HIV by Gender

In 2020, there were 6.6 times as many new HIV diagnoses in men than women (Table 1.2), and 4.5 times as many men living with HIV than women (Table 1.3).



HIV by Age

In 2020, the largest percentage (44%) of newly reported HIV cases were among individuals 20 to 29 years old (Table 1.2). And, individuals aged 40 years and older accounted for 67% of people living with HIV in 2020 (Table 1.3).

Chicago Department of Public Health 2022

CDC 5 Ps to Sexual History







Practices



Past History of STIs



Protection from STIs



Pregnancy Plans



Plus
Trauma/Violence
Support for SOGI
Concerns/Problems
Distress/Satisfaction

US Centers for Disease Control and Prevention (CDC) 5 Ps and the sixth P (plus). Infographic showing the categories of sexual history topics clinicians should cover during a sexual health interview. SOGI ¼ sexual orientation/gender identity; STI ¼ sexually transmitted infections. Adapted with permission from the CDC.

5 Ps: Partners

Dialogue with patient

Are you currently having sex of any kind-oral, vaginal, or anal with anyone?

If no, have you ever had sex of any kind with another person?

How many partners have you had?

How many partners have you had in 2 months? 12 months?

What are the gender of your sex partner(s)

What gender to you identify with? What are your pronouns?

5 Ps: Practices

Dialogue with patient

What kind of sexual contact do you have or have you had?

Penis in the vagina? Penis in the anus? Oral sex (mouth on penis, vagina or anus)?

Do you meet your partners online or through apps?

Have you or any of your partners used drugs? How often do you or your partner(s) use drugs?

Have you exchanged sex for your needs (money, housing)?

Has anyone every forced you to do something sexually you do not want to do?

5 Ps: Protection from STIs

Dialogue with patient

Do you and your partner(s) discuss STI prevention?

Do you and your partner use anything to prevent STIs?

What do you use?

How often do you use (condoms)? Sometimes? Almost all the time? All the time? Never?

5 Ps: Past History of STIs

Dialogue with patient

Have you ever been tested for STIs and HIV?

Have you ever been diagnosed with an STI in the past?

When? What? Did you get treatment?

Do you know if your current or former partner(s) have been diagnosed or treated for an STI?

Do you know your partner(s) HIV status?

5 Ps: Pregnancy Plans

Dialogue with patient

Do you have any children?

Do you think you would like to have more?

Have you ever been pregnant?

Are you or your partner using contraception or practicing any form of birth control?

Would you like to talk about ways to prevent pregnancy?

Comparison of STI Screening Recommendations

STI	USPSTF	CDC	AAFP	AAP	ACOG
Chlamydia	Screen sexually active ♀ ≤ 24 years of age and older if at increased risk	Annual Screen for all sexually active ♀ ≤ 25 years and older if at increased risk	Screen all sexually active $9 \le 24$ years and older if at increased risk	Annual screen for all sexually active ♀ ≤ 25 years for women and older who are at risk	Annual screen for all $9 \le 24$ years, and older if increased risk
Gonorrhea	Screen sexually active ♀ ≤ 24 years and older if at increased risk	Screen ♀ ≤ 24 years+, MSM screen annually, and if at increased risk	Screen all sexually active ♀ ≥ 24 years and older if at increased risk	Annual screen for all sexually active ♀ ≤ 25 years of age, MSM and older who are at risk	Annual screen all ♀ ≤ 24 years and older if at increased risk
HIV	Universally screen all 15-65 years of age, others at increased risk	Universally screen all 13-64 years of age, others at increased risk	Universally screen all 15-65 years of age, others at increased risk	Universally screen 15+ years for all adolescents, others at risk	Universally screen \$\text{2 13-64 years of}\$ age, others at increased risk
Syphilis	Screen adolescents and adults at increased risk	Screen if pregnant, MSM and/or partner(s) tested positive for syphilis	Screen adolescents and adults at increased risk	Screen adolescents at increased risk: MSM	Screen all pregnant $\mathfrak P$ at first prenatal visit
Hepatitis C	Screen all adults 18 -79 years of age and those at risk	Screen all adults at 18 years of age and pregnant \mathcal{P} at each pregnancy	Screen all adults at least once 18-79 years of age and those at risk	Screen 18 years + at least once/screen all infants born to infected mothers	Screen all pregnant 9 during each pregnancy

Risk Factors for Chlamydial and Gonococcal Infections

TABLE 1

Risk Factors for Chlamydial and Gonococcal Infections

Age < 25 years

Current sexually transmitted infection*

Engaging in transactional sex*

Having a new sex partner

Having a sex partner with a current sexually transmitted infection

Having a sex partner with other current partners Having multiple sex partners

Inconsistent condom use

Personal history of a sexually transmitted infection*

Substance use (risk factor for men who have sex with men)*

Information from reference 2.

^{*-}Risk factors for gonococcal infections only.

^{*-}Risk factors for gonococcal infections only.

Chlamydia and Gonorrhea Tests

- Nucleic acid amplification tests (NAAT) the most sensitive tests for detecting *C. Trachomatis* and *N. gonorrhoeae*
- Optimal specimen: first catch urine in men and vaginal swab in women
- Vaginal swab specimens can be collected by a clinician or patient
- First catch urine specimen is acceptable in women but might detect up to 10% fewer infections vs vaginal/endocervical swab specimens
- NAAT can be used to test at extragenital sites-rectal, oropharyngeal

Treatment of Chlamydia Trachomatis (CT)

Recommended Regimen	Alternative Regimens	
Doxycycline 100 mg po BID x 7 d	Azithromycin 1 gram po x 1	
	Levofloxacin 500 mg po daily X7 d	
Persons with CT should abstain from sexual activity for 7 days after single dose Abx or completion of 7 day course		

The patient should return for repeat testing 3-12 months

Treatment of Gonorrhea (GC)- Cervix, Urethra, Rectum-uncomplicated

Recommended Regimen	Alternate Regimen*
Ceftriaxone 500 mg MM in a single dose (<150 kg) Ceftriaxone 1000 mg MM x 1 (>150 kg)	Cefixime 800 mg po in a single dose
If Chlamydia status has not been excluded also treat for Chlamydia with	Gentamycin 240 mg MM plus Azithromycin 2 gram oral
Doxycycline 100 mg po bid x 7 days Azithromycin 1 gram x 1 (during pregnancy)	

Persons with GC should abstain from sexual activity for 7 days after single dose antibiotics medication for gonococcal infection should be provided on-site and directly observed to ensure adherence to treatment *2012, CDC no longer recommends the routine use of orally-administered cefixime for the treatment of gonorrhea in the United States

The patient should return for repeat testing in 3-12 months

Treatment of Gonorrhea (GC)-Pharynx

Recommended Regimen

Ceftriaxone 500 mg MM in a single dose (<150 kg)
Ceftriaxone 1000 mg MM x 1 (>150 kg)

If Chlamydia co infection is identified or suspected during pharyngeal GC testing also treat with:

Doxycycline 100 mg po bid x 7 days

Azithromycin 1 gram x 1 (during pregnancy)

Per the CDC: No reliable alternative treatments are available for pharyngeal gonorrhea *Any person with pharyngeal gonorrhea should return 7–14 days after initial treatment for a test of cure by using either culture or NAAT; however, testing at 7 days might result in an increased likelihood of false-positive tests.

Treatment of Pelvic Inflammatory Disease (PID)

Recommended Regimen	Alternate Regimen*
Ceftriaxone 500 mg PM in a single dose (<150 kg) Plus Doxycycline 100 mg po 2 times a day x 10 days With Metronidazole 500 mg po 2 times a day x 10	Cefoxitin 2 g TM x 1 and Probenecid 1 gram po administer concurrently Plus Doxycyline 100 mg po 2 times a day 10 days With Metronidazole 500 mg po 2 times a day x 10 days
days	Gentamycin 240 mg TM plus Azithromycin 2 gram oral

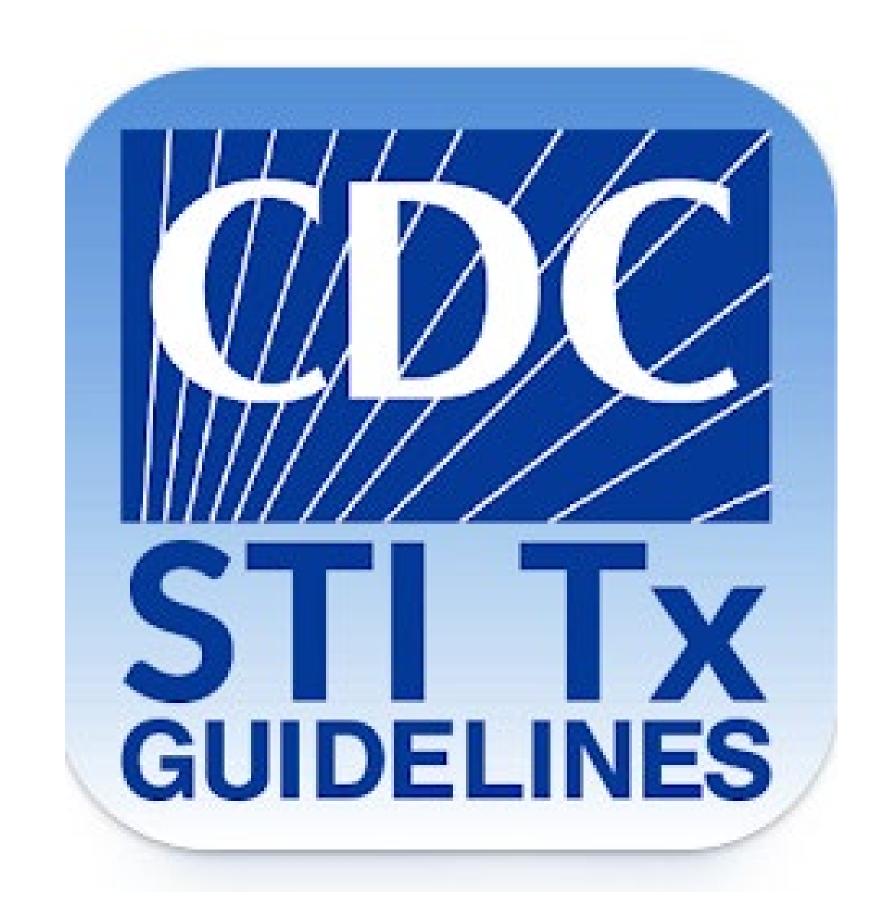
Treatment of Primary or Secondary Syphilis

Recommended Regimen	Penicillin Allergy
Benzathine Penicillin 2.4 million units TM x 1	Doxycycline 100 mg po 2 times a day x 14 days
	Tetracycline 500 mg 4 times a day x 14 days

Clinical and serologic (titers) evaluation at 6 and 12 months after treatment. More frequently if concerns for poor follow up.

Titers should be compared to the titer at the start of treatment

CDC STI Treatment Guidelines



Download it free today on iOS or Android.



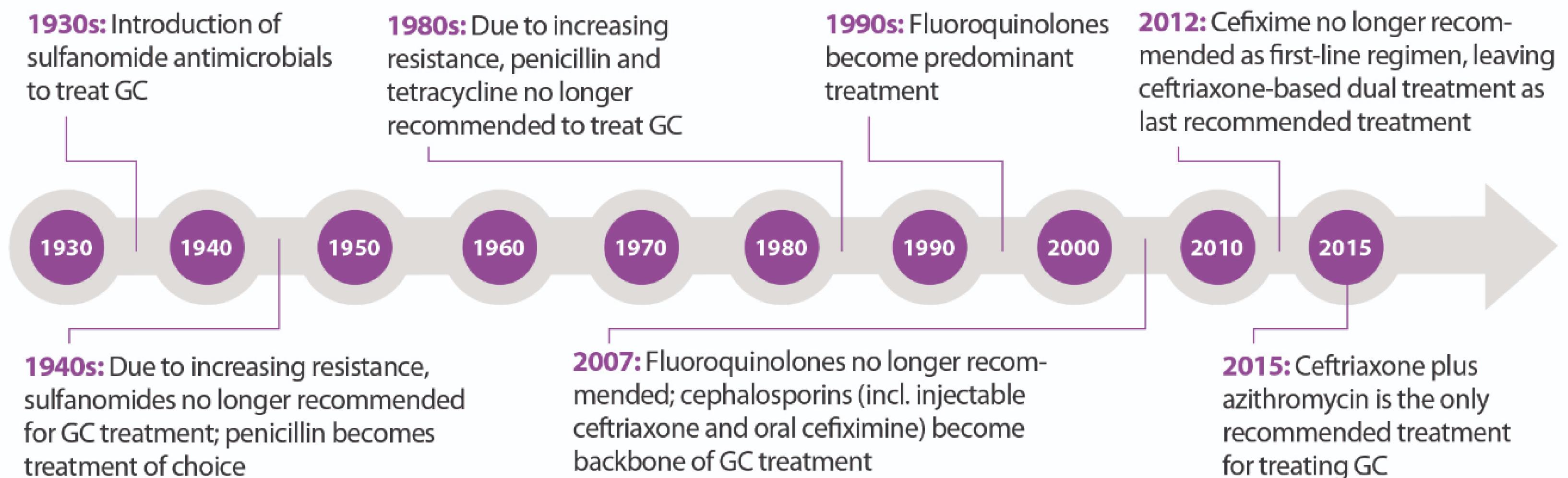




- offers quick and easy access to streamlined STI prevention, diagnosis, and treatment recommendations.
- The user-friendly interface includes more clinical care guidance, sexual history resources, patient materials, and other features to assist with patient management.

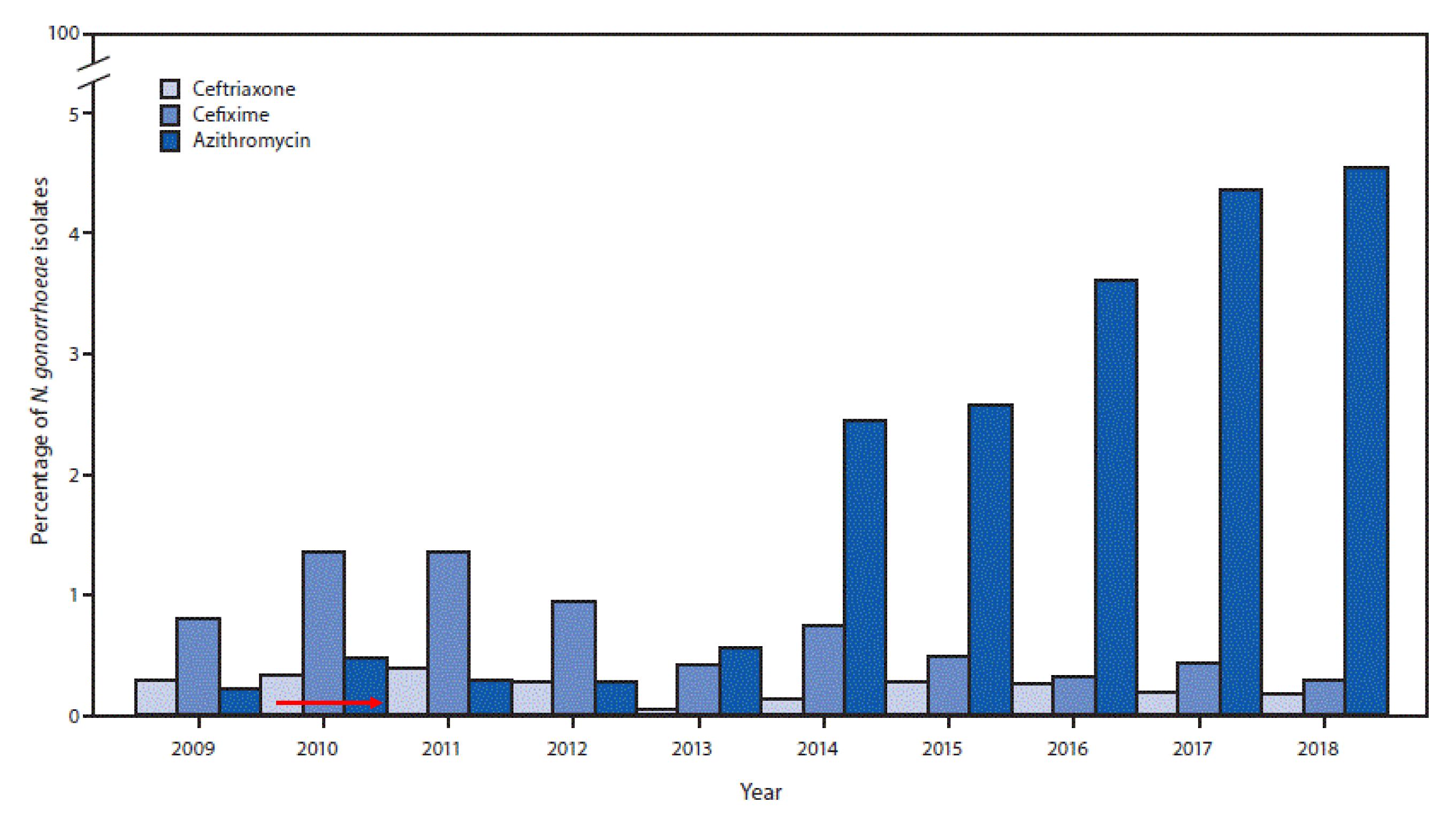
Antibiotic Resistant Gonorrhea





Center for Disease Control and Prevention

FIGURE. Percentage of *Neisseria gonorrhoeae* isolates with elevated minimum inhibitory concentrations (MICs)* to ceftriaxone, cefixime, and azithromycin — Gonococcal Isolate Surveillance Project, United States, 2009–2018



Source: CDC. Sexually Transmitted Disease Surveillance 2018. https://www.cdc.gov/std/stats18/default.htm.

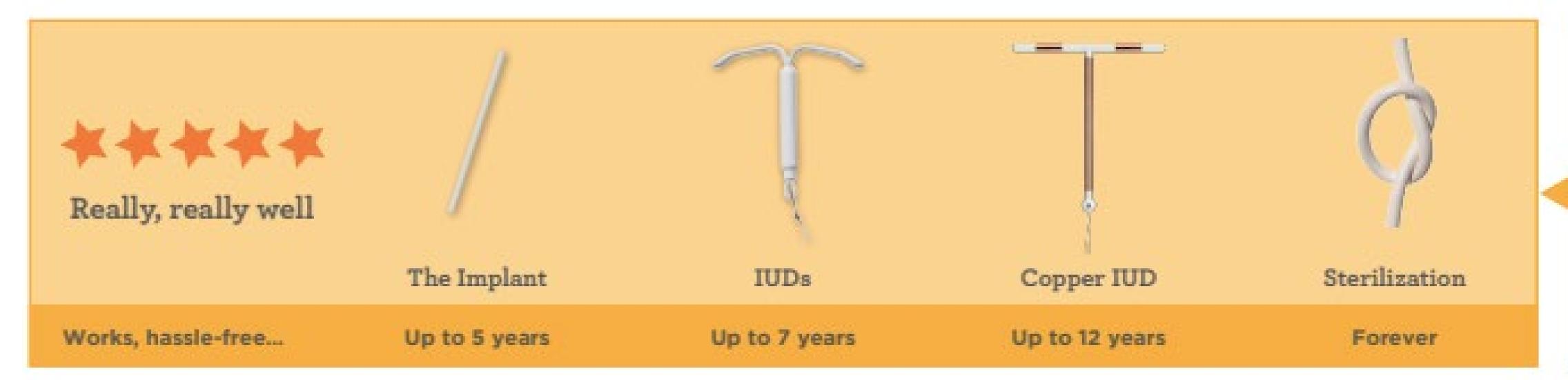
^{*} Elevated MIC = ceftriaxone $\ge 0.125 \,\mu\text{g/mL}$; cefixime $\ge 0.25 \,\mu\text{g/mL}$; azithromycin $\ge 2.0 \,\mu\text{g/mL}$.

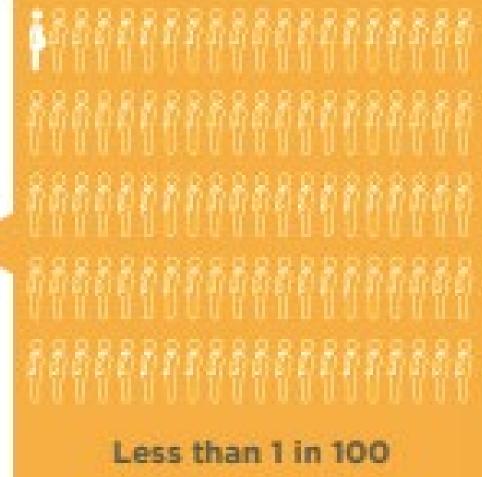
Test of Cure vs Repeat Test

Test-of-Cure	Repeat Testing
All PG patients, 3-4 weeks after completion of therapy	3-12 months after treatment for $\cap{+}$ and $\cap{-}$
Symptoms persist	
Therapeutic adherence is in question	
Pharyngeal gonorrhea test-of- cure needed 7-14 days after initial treatment	

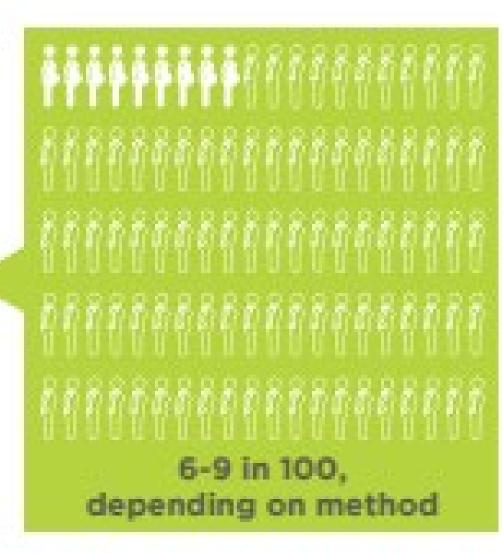
HOW WELL DOES BIRTH CONTROL WORK?

What is your chance of getting pregnant?

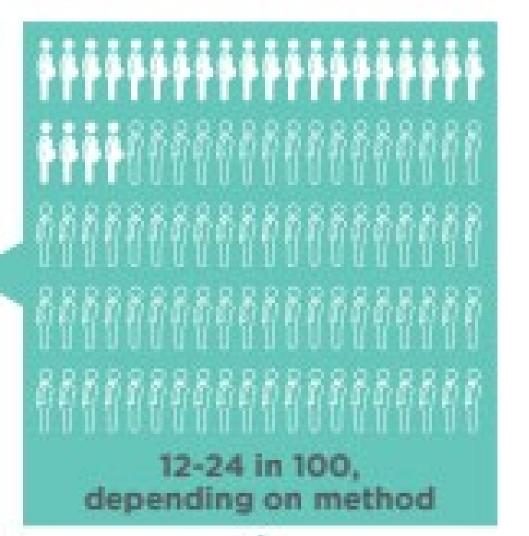




















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FYI, without birth control, over 90 in 100 young people get pregnant in a year.

Expedited Partner Therapy

- EPT is the clinical practice of treating the sex partner(s) of heterosexual/patient(s) diagnosed with cervical/urethral <a href="https://example.com/chiea/chiea/patient/specifical/pati
- Written Rx or actual medication given to patient to take to the partner
- The partner does not need to be examined by the health care provider
- Rx should include "EPT"
- Legal in IL since 2010
- The law protects prescribing clinicians from civil and professional liability, except for willful and wanton misconduct.



WHY USE EPT?

- It works!
- It is considered the standard of care and is endorsed by Center for Disease Control and prevention (CDC) and other Professional Organizations like the AMA, American Bar Association, AAP
- It is proven to reduce re-infection rates and possible health complications due to untreated STIs
- It is an effective tool to combat the rising STI rates
- It is a useful option to facilitate partner treatment
- It is an effective option for partners who are unlikely to seek treatment, however clinical evaluation is still preferred
- It allows the patient to deliver either prescription or medications along with an informational fact sheet to their partner(s)

Recommended EPT for Gonorrhea and Chlamydia

Gonorrhea	Chlamydia
Cefixime 800 mg po x 1	Doxycycline 100 mg po Zx/day x 7 days
if Chlamydia has not been excluded Cefixime 800 mg po x 1 PLUS	Azithromycin 1 gram po x 1
Doxycycline 100 mg po $Zx day x 7 days$ OR	
Azithromycin 1 gram po x 1	
It is recommended that any patient diag be re-tested in 3 months to evaluate for	

Patients and Partners should not engage in sex for 7 days following EPT Allergic reactions may occur, but they are rare

- •Provide informational fact sheets to be given to the partner by the patient. Encourage patient's partner be evaluated
 - Written Materials for Infected Person's Partner(s)

Treatment Fact Sheet for Sex Partners of Persons with Chlamydia and Gonorrhea | En Español

Treatment Fact Sheet for Sex Partners of Persons with Chlamydia | En Español

Treatment Fact Sheet for Sex Partners of Persons with Gonorrhea | En Español

What is the law in Illinois?

A Guide to Illinois Law Affecting Minor's Access to Confidential Health Care		
A Minor	Is a person under the age of 18	
Informed Consent	If minor is legally married, a parent, pregnant, or if Health Care Worker (HCW) believes the minor understands the benefits/risks of services	
Contraceptives and Pregnancy Testing	HCW may provide without parental consent 12 years +	
Emergency Contraception (EC)	Plan B One-Step and generics are available OTC without consent or a Rx. Other versions may require a Rx ≥16 years+; no consent is required at the pharmacy	
Sexually Transmitted Infections	Minors ≥ 12 years may consent to confidential testing, treatment and counseling and vaccination against STIs.	
HIV	Minors ≥ 12 years may consent to testing, treatment and counseling for HIV	
Abortion Services	Pregnant minor may consent; Since June 1, 2022, the Parental Notice of Abortion Act is no longer a law; an adult family member no longer needs to be notified about the abortion	

Questions?