



National and State Perspectives of Sexual Health

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Chief Medical Officer and State Epidemiologist

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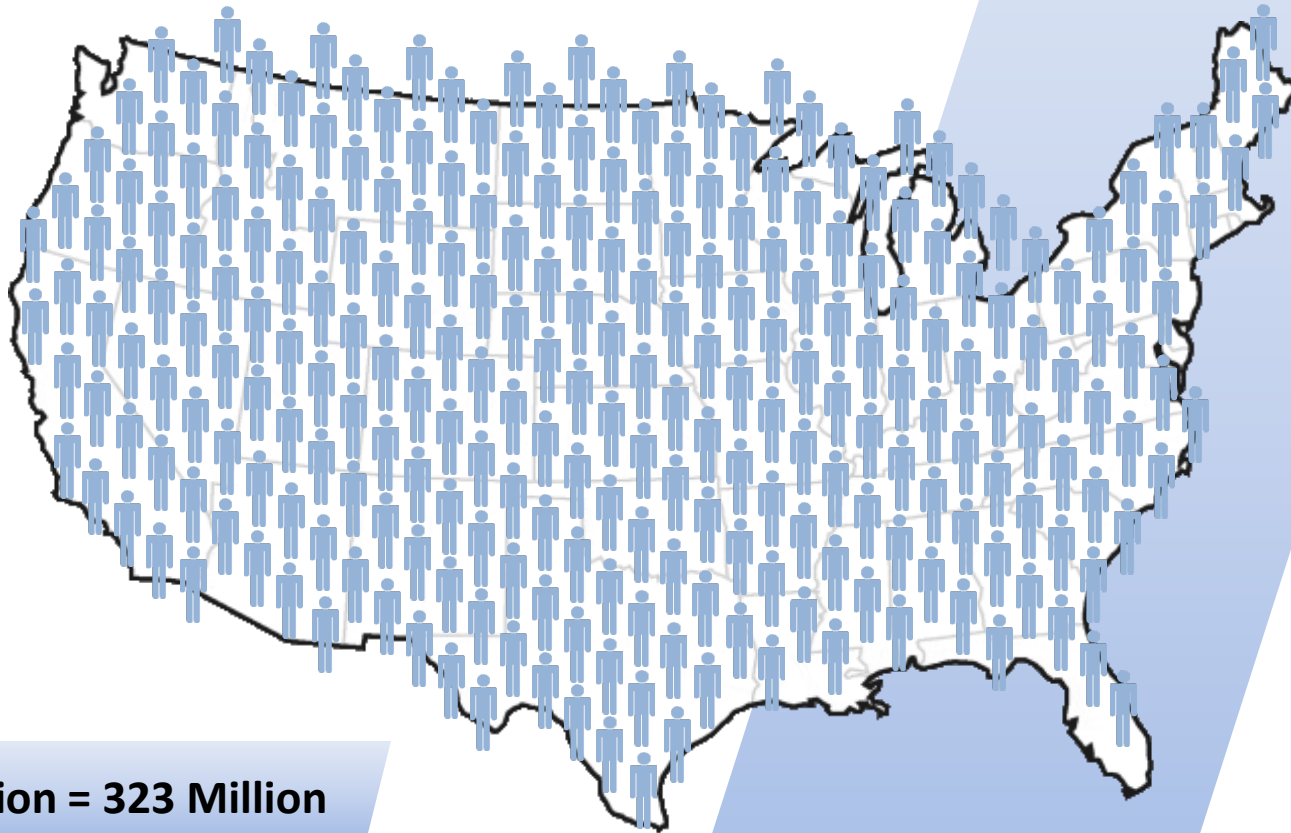
Objectives

By the end of this presentation, you will be able to:

- Recall the current STI trends seen at the national or state level.
- Recognize the target populations disproportionately affected by STIs.
- Recall current STI surveillance and prevention initiatives.

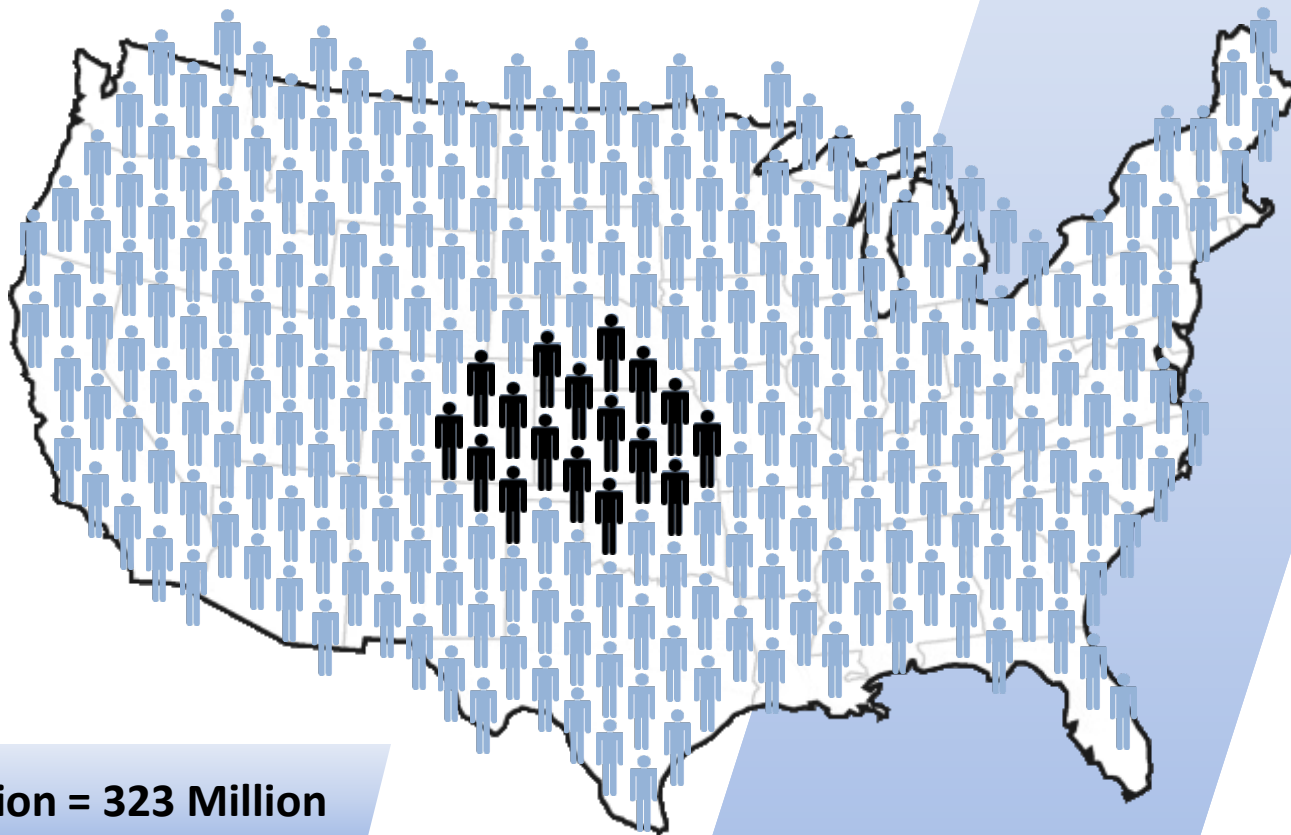
NATIONAL STI TRENDS

National STI Statistics



U.S. Population = 323 Million

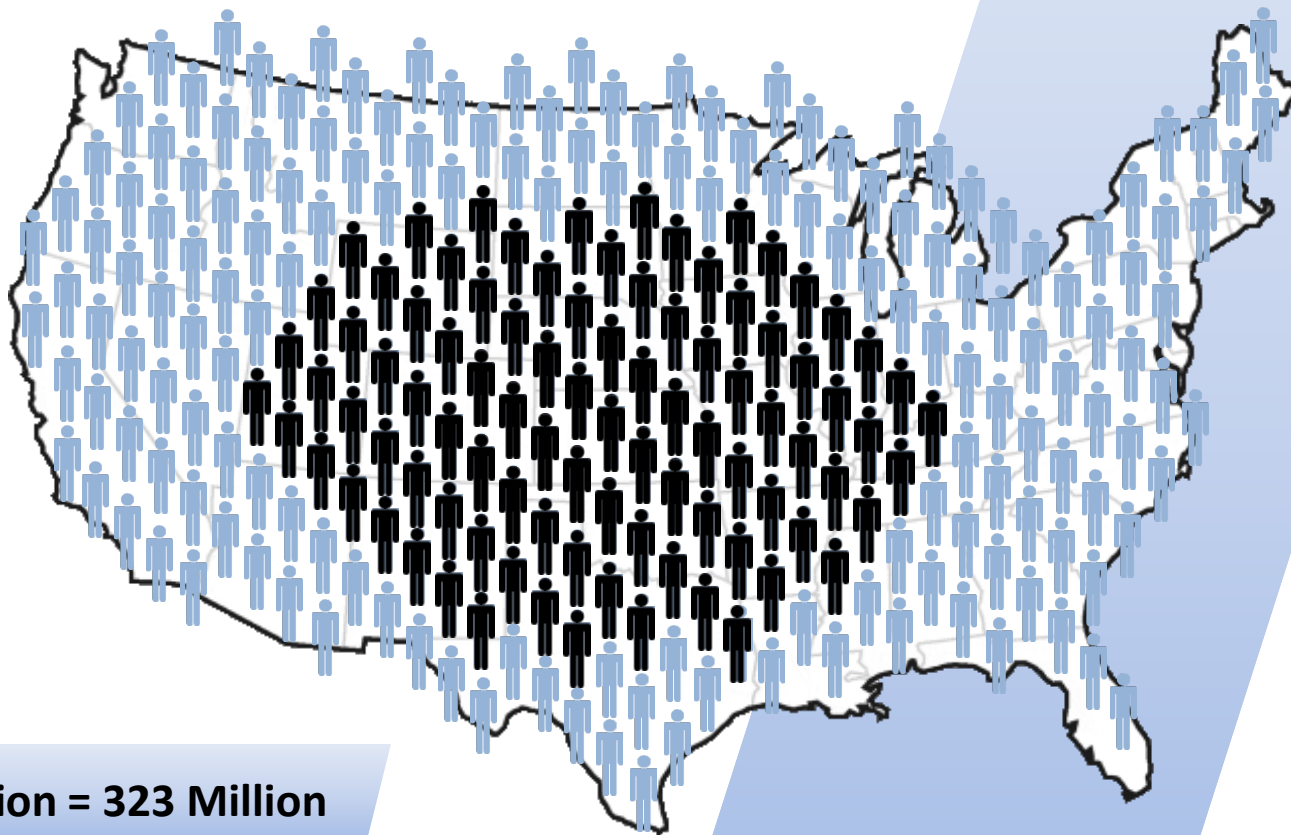
National STI Statistics



U.S. Population = 323 Million

New STI Infections = 20 Million

National STI Statistics

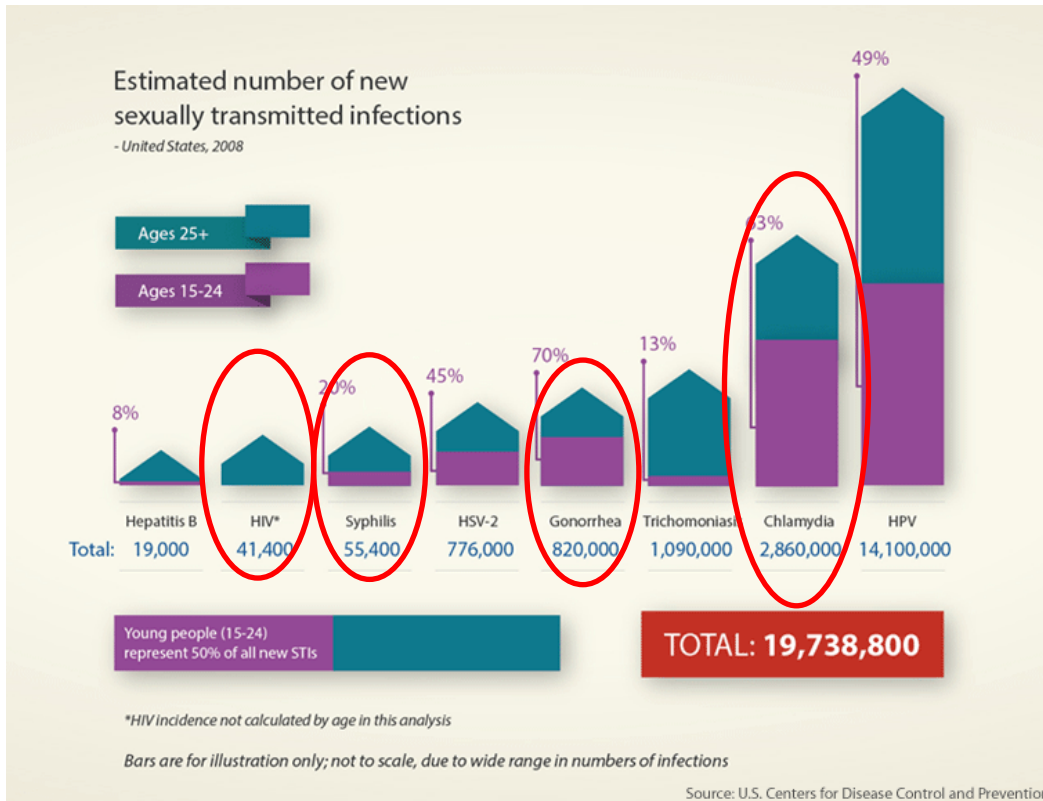


U.S. Population = 323 Million

New STI Infections = 20 Million

STI Prevalence = 110 Million

What are the reportable STIs in Illinois?

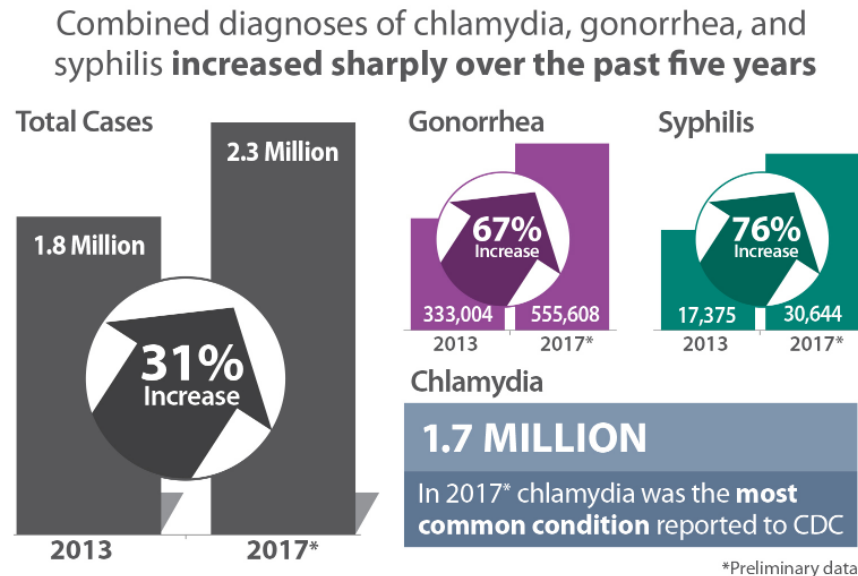


- Chlamydia
- Gonorrhea
- Syphilis
- HIV
- Chancroid (rare)

Steep and Sustained Incr in STIs

In 2017, nearly 2.3 million cases of chlamydia, gonorrhea, and syphilis (P&S) were diagnosed in the U.S.

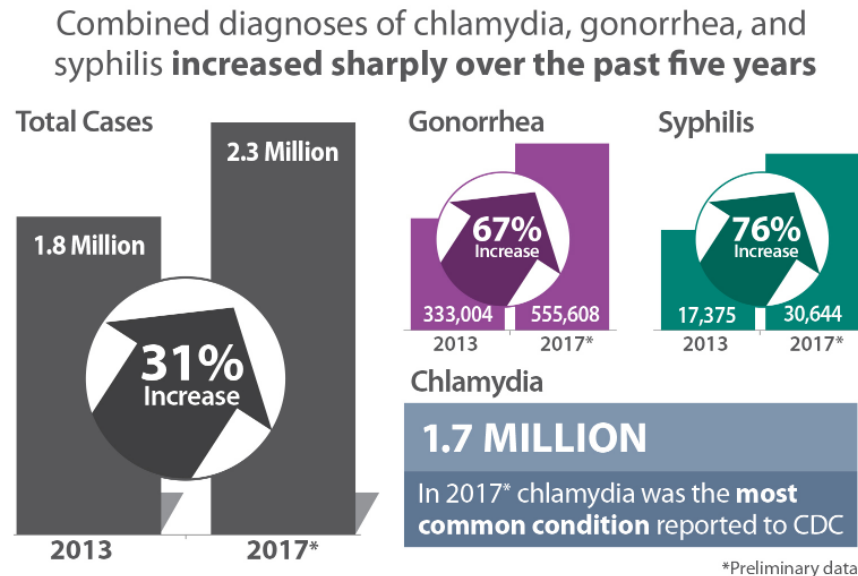
- CT most common condition reported to CDC. **>1.7 million cases** diagnosed in 2017 (4th year in a row; ↑6% from 2016), with 45% among 15-to-24-year-old females.



Steep and Sustained Incr in STIs

In 2017, nearly 2.3 million cases of chlamydia, gonorrhea, and syphilis (P&S) were diagnosed in the U.S.

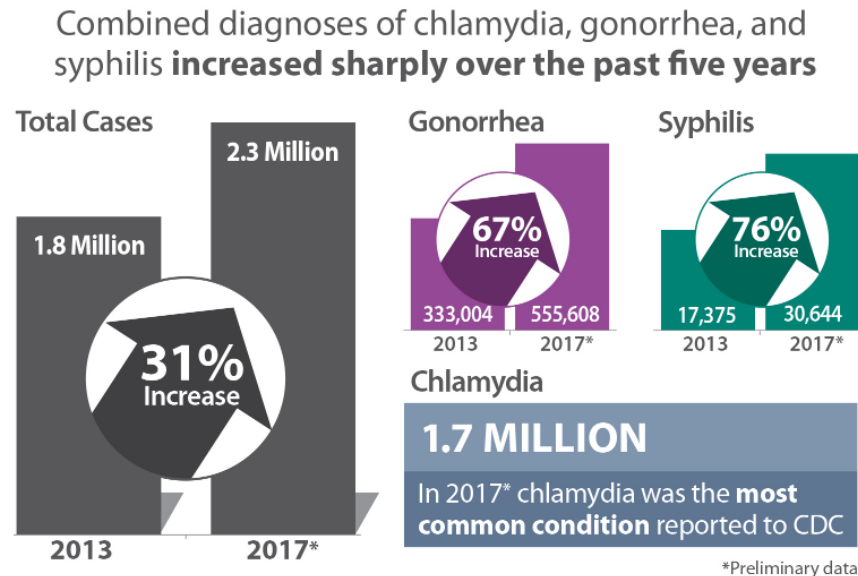
- GC diagnoses **↑67%** overall (since 2013) and nearly doubled among men. Incr in diagnoses among women (speed of incr) has been alarming and going for 3rd year in a row.



Steep and Sustained Incr in STIs

In 2017, nearly 2.3 million cases of chlamydia, gonorrhea, and syphilis (P&S) were diagnosed in the U.S.

- P&S syphilis diagnoses **↑76%** (since 2013). MSM made up almost 70% of cases where gender of sex partner is known in 2017.





Provider Reporting

Reporting of STIs in Illinois are driven by primarily the following entities: Private physician offices, hospitals, and community health centers

- Chlamydia:
 - PMD 36%, Hospital 22%, CHC 20%
- Gonorrhea:
 - Hospital 33%, PMD 26%, CHC 22%
- Syphilis:
 - PMD 47%, Hospital 14%, STD clinic 14%



Threat to Multiple Populations

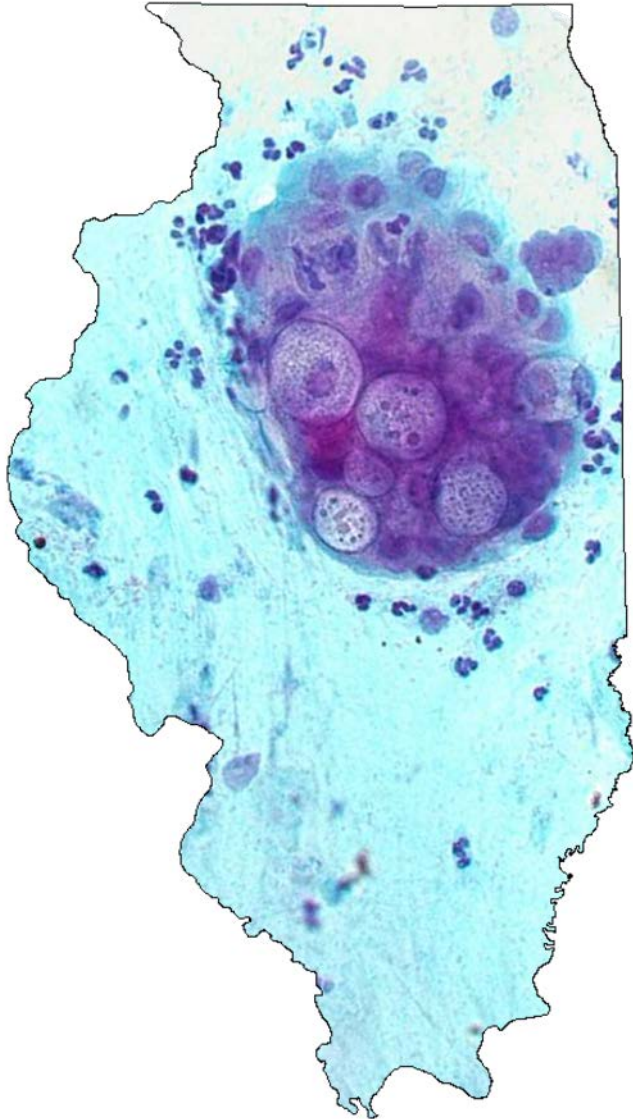
Chlamydia, gonorrhea, and syphilis are curable with antibiotics, yet most cases go undiagnosed and untreated. Leads to severe adverse health effects (i.e., infertility, ectopic pregnancy, stillbirths in infants, incr HIV risk).

STI increases may be due to factors such as

- socioeconomic factors (poverty, stigma, discrimination)
- drug use
- technology (anonymous/hook up apps)
- improved sensitive/specific STI laboratory tests
- active screening of asymptomatic clients at risk
- true increase in disease incidence in communities

ILLINOIS STI TRENDS

Illinois STD Statistics: Chlamydia

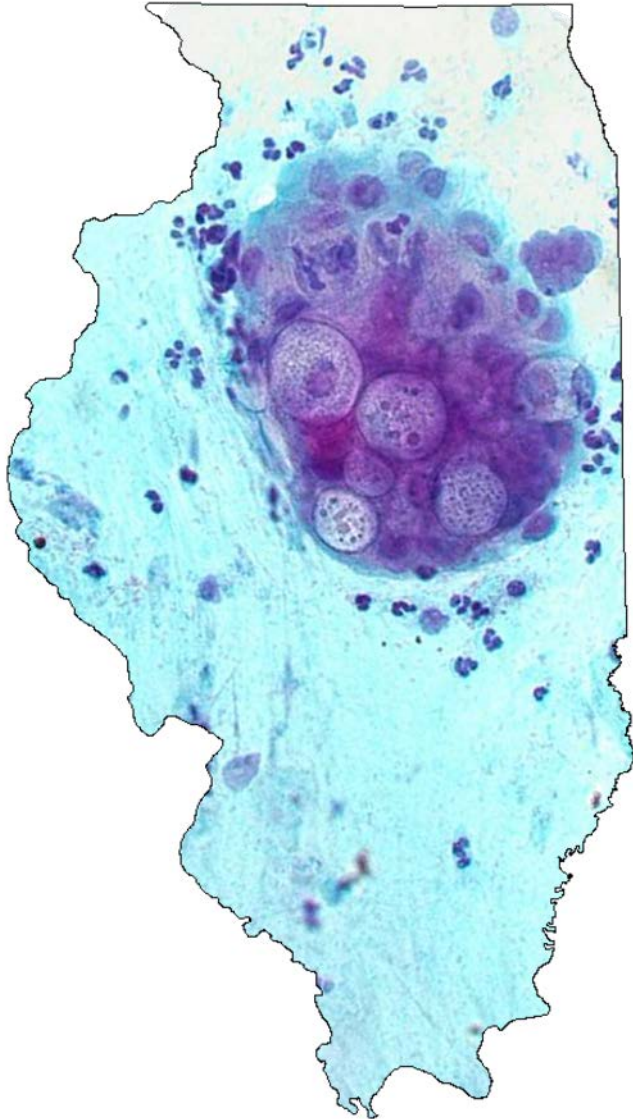


2017 CDC National Chlamydia Data

State of Illinois:

- Ranked **10th** in chlamydia infections by rate per 100,000 population (10th in 2016)

Illinois STD Statistics: Chlamydia



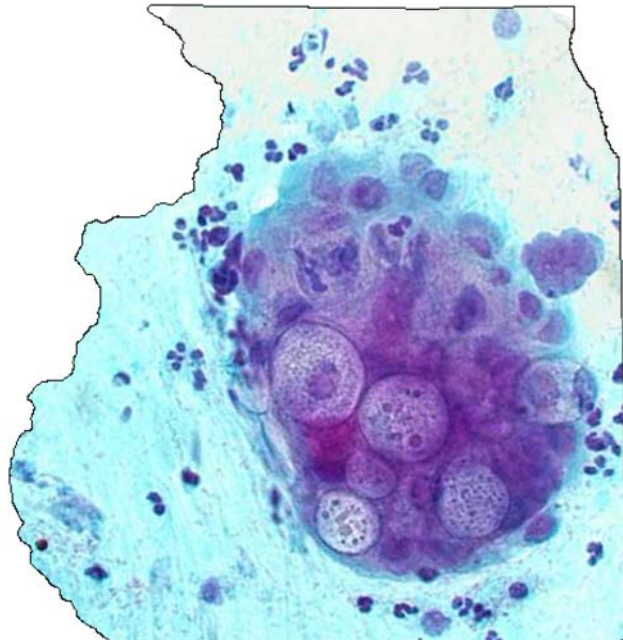
2017 CDC National Chlamydia Data

State of Illinois:

- Ranked **10th** in chlamydia infections by rate per 100,000 population (10th in 2016)

Where does Cook County rank out of the 3,140 counties in the nation in the # of reported cases??

Illinois STD Statistics: Chlamydia



2017 CDC National Chlamydia Data

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Where does Cook County rank out of the 3,140 counties in the nation in the # of reported cases??

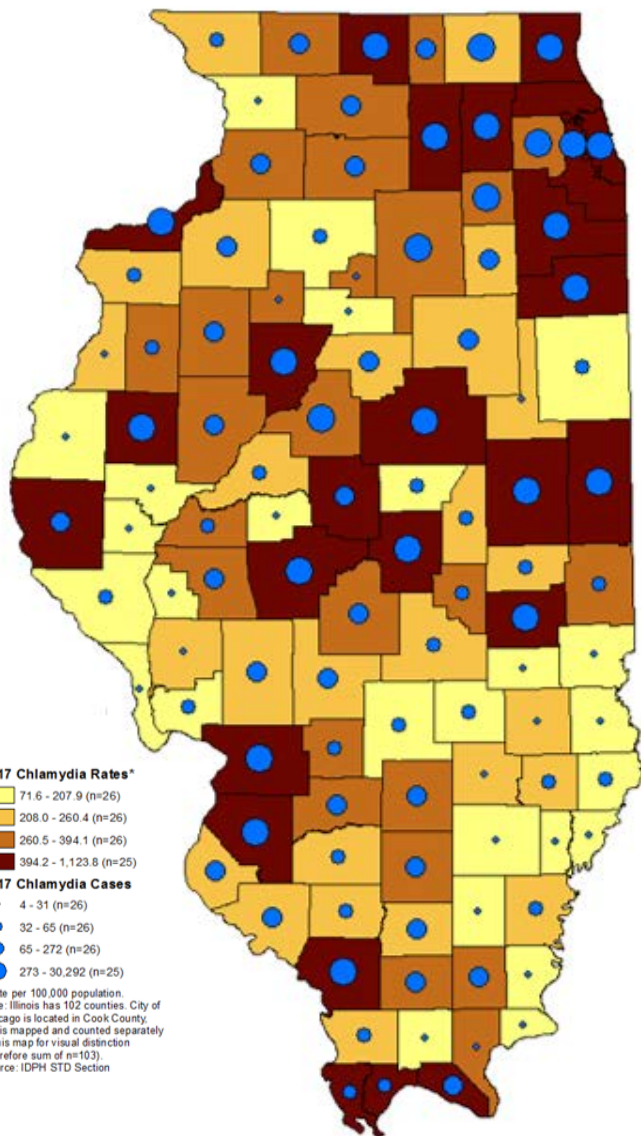
Rank*	County/Independent City	Cases	Rate per 100,000 Population
1	Los Angeles County, CA	64,302	634.3
2	Cook County, IL	42,422	815.3
3	Harris County, TX	27,556	600.4
4	Maricopa County, AZ	25,336	597.1
5	Kings County, NY	21,137	803.9

#2



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Illinois STD Statistics: Chlamydia



2017 CDC National Chlamydia Data

State of Illinois:

- Ranked **10th** in chlamydia infections by rate per 100,000 population (10th in 2016)

Cook County:

- Ranked **2nd** among all U.S. counties for total cases of chlamydia

2017 Illinois Chlamydia Data

State of Illinois:

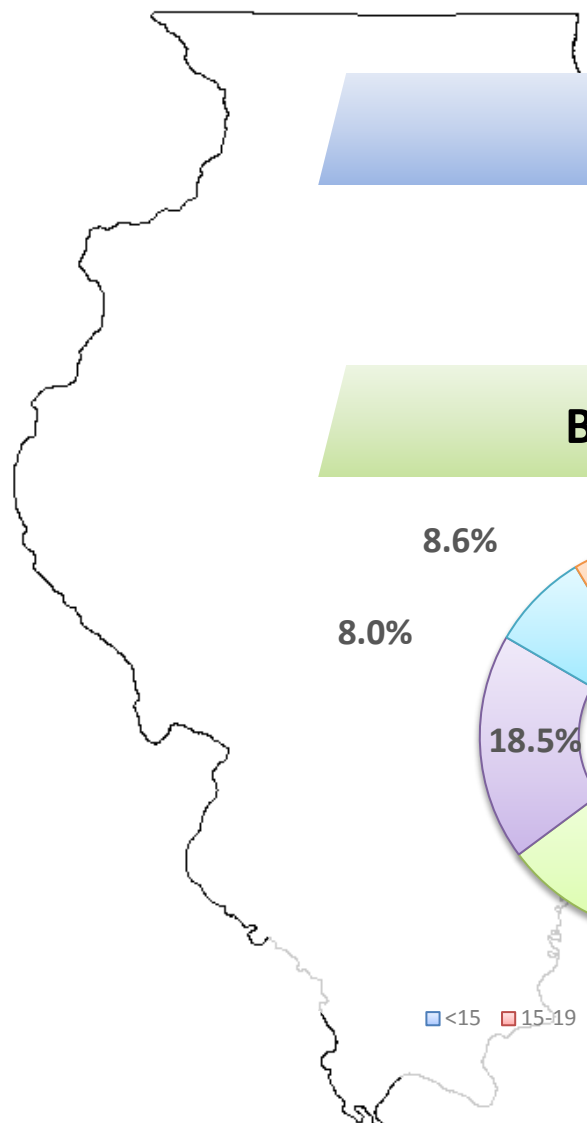
- **75,518 total cases**
- 5% increase from 2016
- 28% increase from 2008

Chicago:

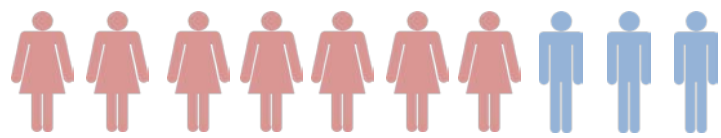
- **30,292 total cases**
- Reported **40%** of all IL cases.



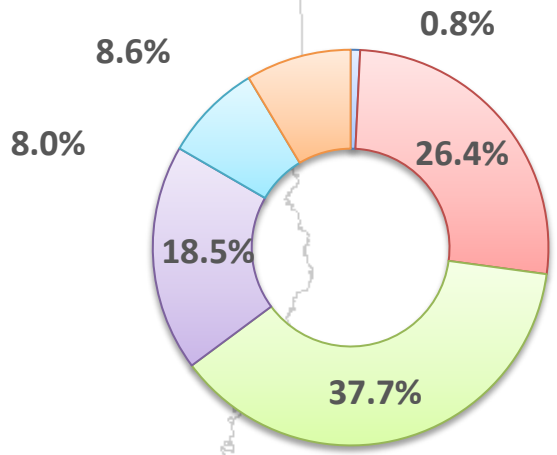
Illinois STD Statistics: Chlamydia (2017)



By Sex

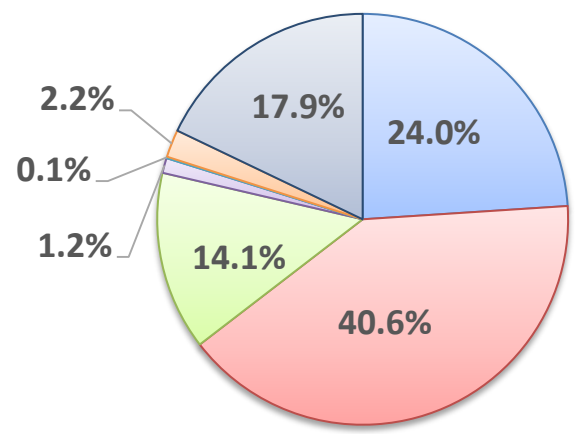


By Age Group



■ <15 ■ 15-19 ■ 20-24 ■ 25-29 ■ 30-34 ■ 35+

By Race/Hispanic Ethnicity



■ White - NH ■ Black - NH ■ Hispanic ■ Asian/PI - NH
■ AI/AN - NH ■ Other - NH ■ Unknown

Illinois STD Statistics: Gonorrhea

2017 CDC National Gonorrhea Data

State of Illinois:

- Ranked **17th** in gonorrhea infections by rate per 100,000 population (15th in 2016)



Illinois STD Statistics: Gonorrhea

2017 CDC National Gonorrhea Data

State of Illinois:

- Ranked **17th** in gonorrhea infections by rate per 100,000 population (15th in 2016)

Where does Cook County rank out of the 3,140 counties in the nation in the # of reported cases??




Illinois STD Statistics: Gonorrhea

2017 CDC National Gonorrhea Data

State of Illinois:

- Ranked **17th** in gonorrhea infections by rate per 100,000 population (15th in 2016)

Where does Cook County rank out of the 3,140 counties in the nation in the # of reported cases??



Rank*	County/Independent City	Cases	Rate per 100,000 Population
1	Los Angeles County, CA	26,103	257.5
#2	Cook County, IL	14,920	286.7
3	Maricopa County, AZ	8,907	209.9
4	Harris County, TX	8,826	192.3
5	New York County, NY	7,845	477.3

Illinois STD Statistics: Gonorrhea

2017 CDC National Gonorrhea Data

State of Illinois:

- Ranked **17th** in gonorrhea infections by rate per 100,000 population (15th in 2016)

Cook County:

- Ranked **2nd** among all U.S. counties for total cases of gonorrhea

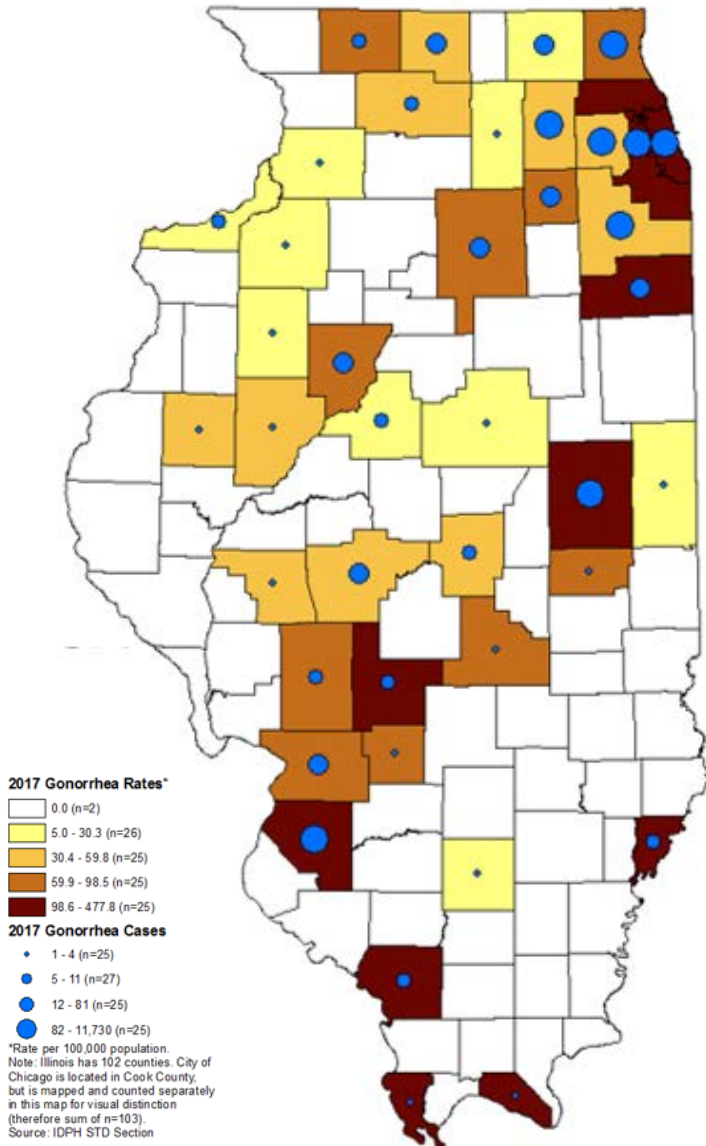
2017 Illinois Gonorrhea Data

State of Illinois:

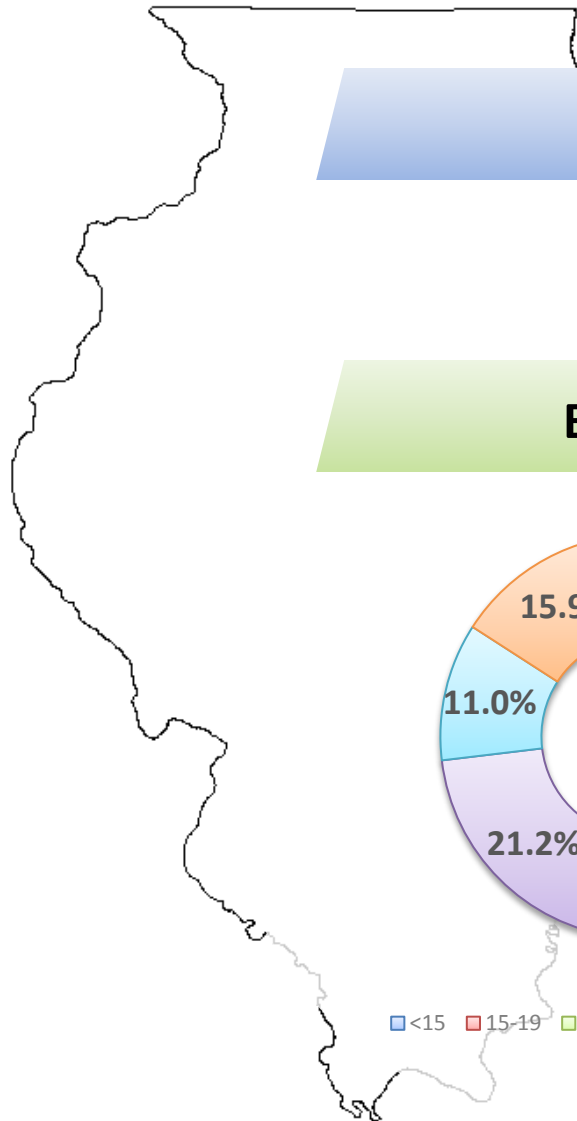
- **23,859 total cases**
- **13%** increase from 2016
- 15% increase from 2008

Chicago:

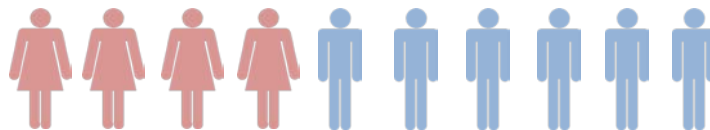
- **11,730 total cases**
- Reported **49%** of all IL cases.



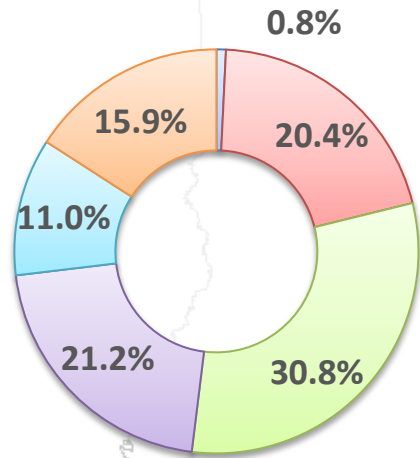
Illinois STD Statistics: Gonorrhea (2017)



By Sex

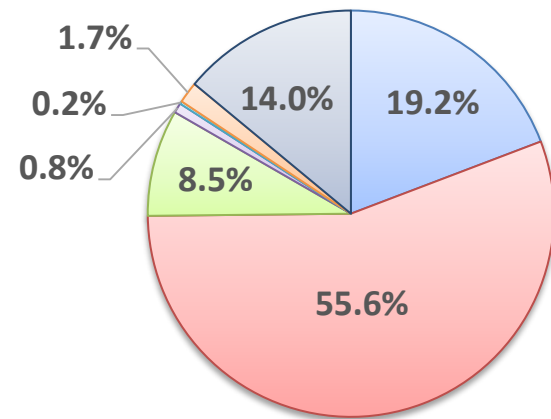


By Age Group



■ <15 ■ 15-19 ■ 20-24 ■ 25-29 ■ 30-34 ■ 35+

By Race/Hispanic Ethnicity



■ White - NH ■ Black - NH ■ Hispanic ■ Asian/PI - NH
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Illinois STD Statistics: P&S Syphilis

2017 CDC National Primary & Secondary Syphilis Data

State of Illinois:

- Ranked **10th** in P&S syphilis infections by rate per 100,000 population (10th in 2016)



Illinois STD Statistics: P&S Syphilis

2017 CDC National Primary & Secondary Syphilis Data

State of Illinois:

- Ranked **10th** in P&S syphilis infections by rate per 100,000 population (10th in 2016)

Where does Cook County rank out of the 3,140 counties in the nation in the # of reported cases??



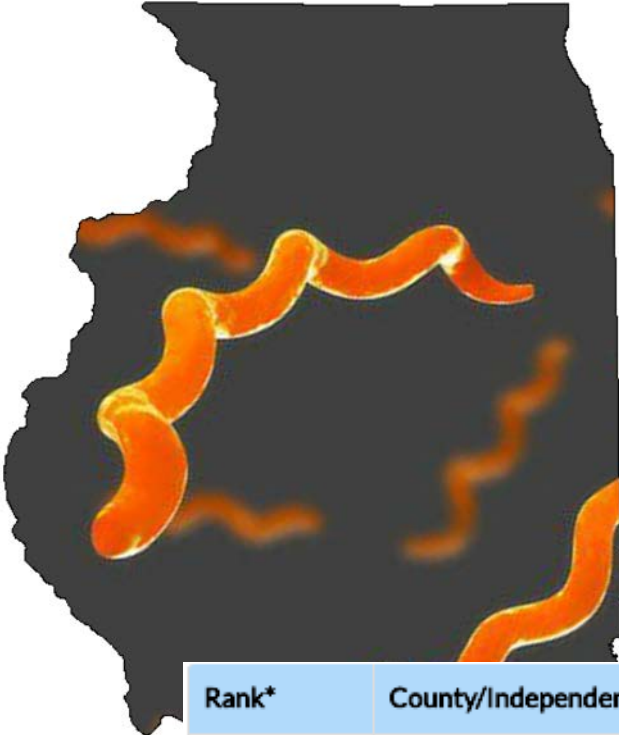
Illinois STD Statistics: P&S Syphilis

2017 CDC National Primary & Secondary Syphilis Data

State of Illinois:

- Ranked **10th** in P&S syphilis infections by rate per 100,000 population (10th in 2016)

Where does Cook County rank out of the 3,140 counties in the nation in the # of reported cases??



Rank*	County/Independent City	Cases	Rate per 100,000 Population
1	Los Angeles County, CA	1,996	19.7
#2	Cook County, IL	980	18.8
3	Maricopa County, AZ	730	17.2
4	New York County, NY	596	36.3
5	San Diego County, CA	585	17.6

Illinois STD Statistics: P&S Syphilis

2017 CDC National Primary & Secondary Syphilis Data

State of Illinois:

- Ranked **10th** in P&S syphilis infections by rate per 100,000 population (10th in 2016)

Cook County:

- Ranked **2nd** among all U.S. counties for total cases of P&S syphilis

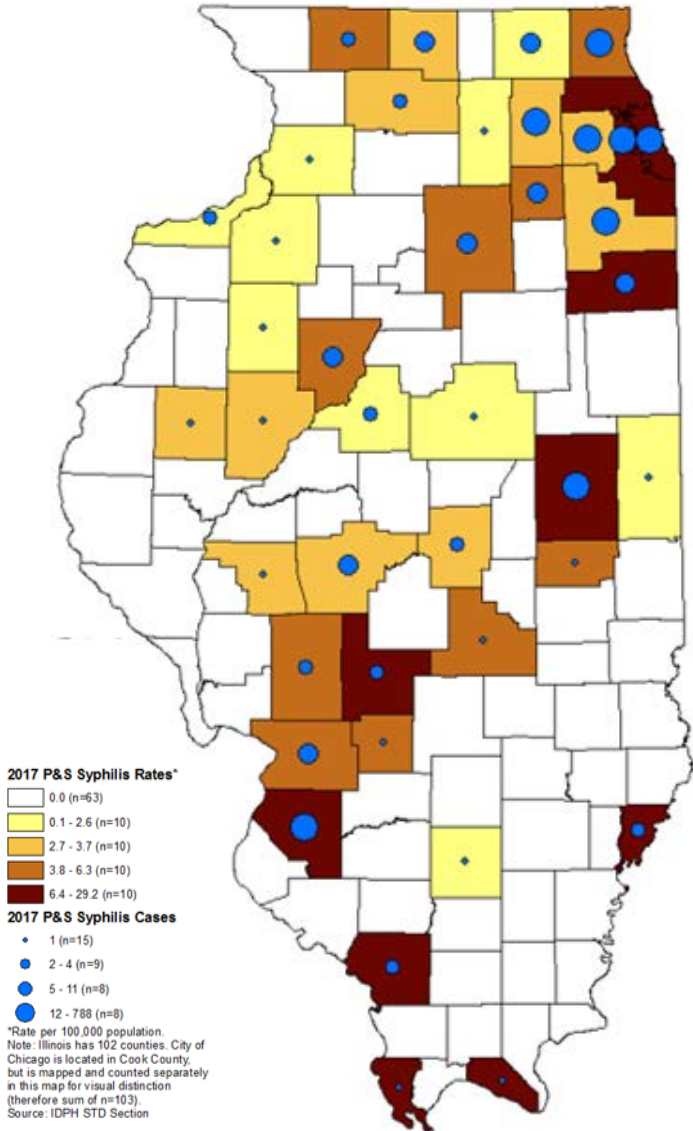
2017 Illinois Primary & Secondary Syphilis Data

State of Illinois:

- **1,225 total cases**
- -3% decrease from 2016
- **121%** increase from 2008

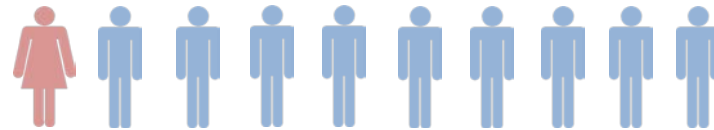
Chicago

- **788 total cases**
- Reported **64%** of all IL cases.

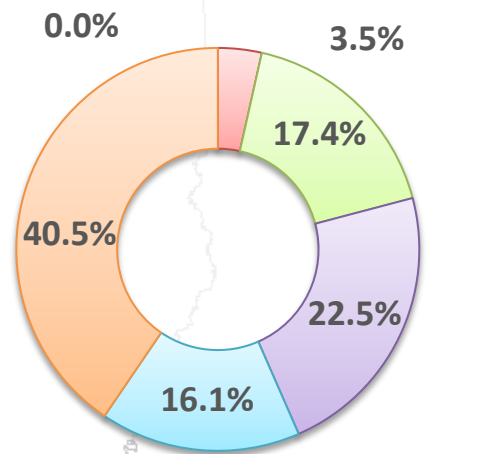


Illinois STD Statistics: P&S Syphilis (2017)

By Sex

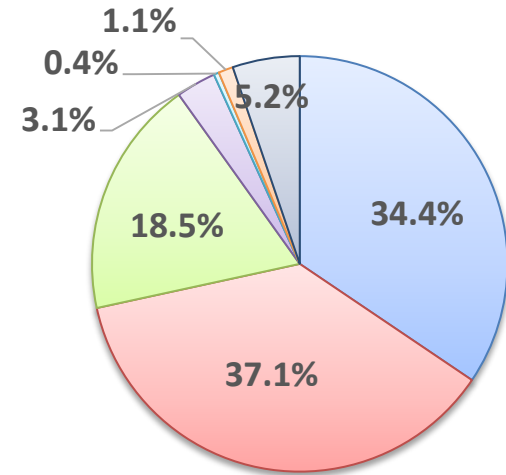


By Age Group



■ <15
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By Race/Ethnicity

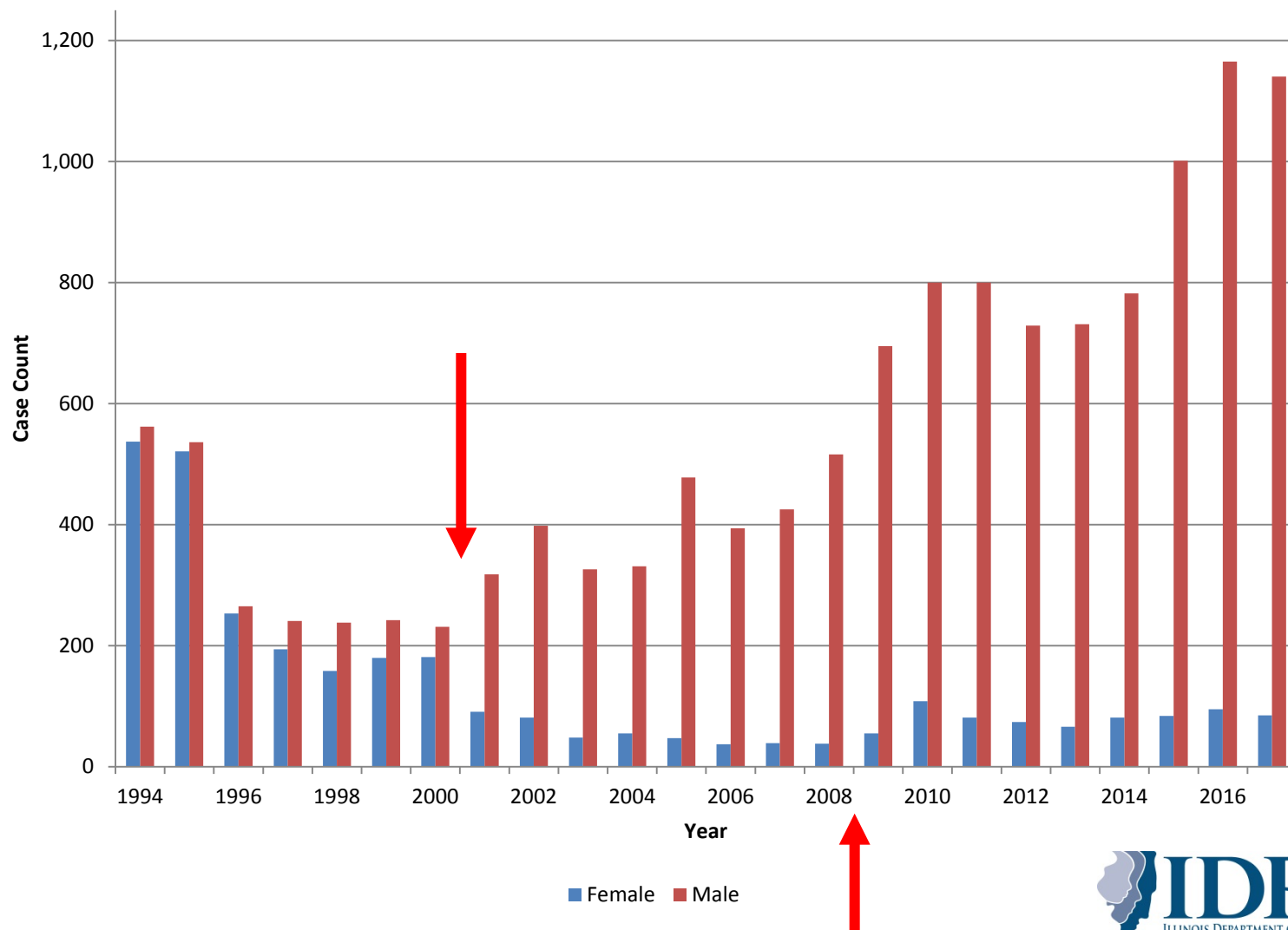


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 ■ Unknown



Change in Population: Change in Perspectives

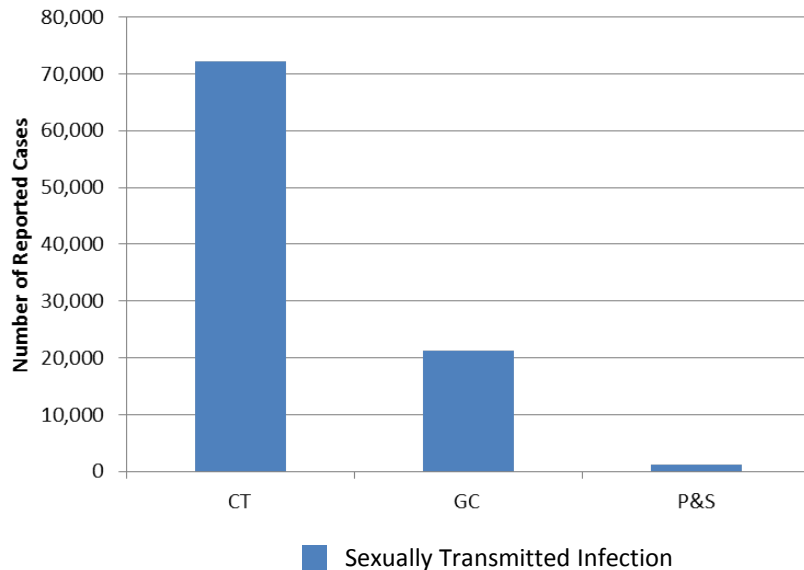
Illinois Reported Primary and Secondary Syphilis Cases by Sex, 1994-2017



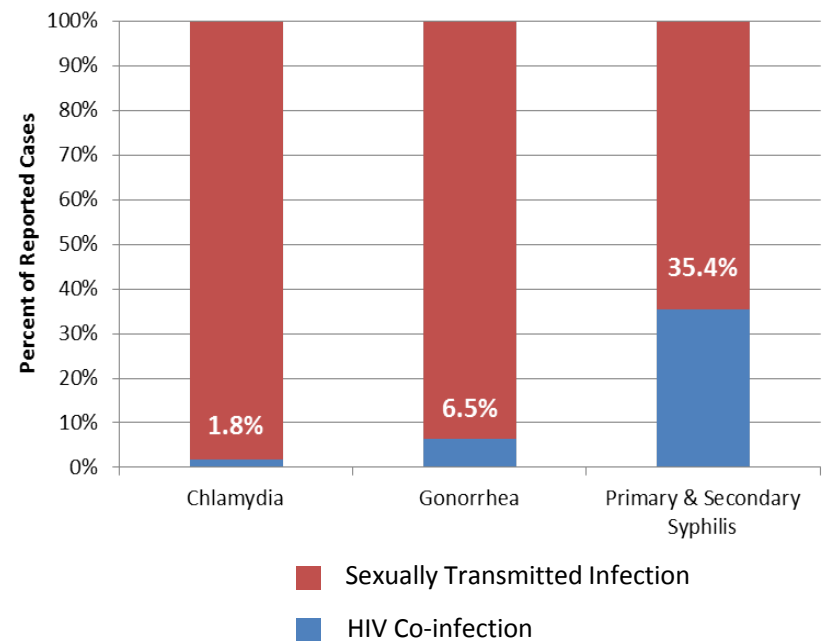
STD-HIV Co-infection

- Ulcerative infections, like syphilis, provides higher risk for acquiring HIV infections

STD Cases Reported (Illinois - 2016)



STD - HIV Co-Infection (Illinois - 2016)



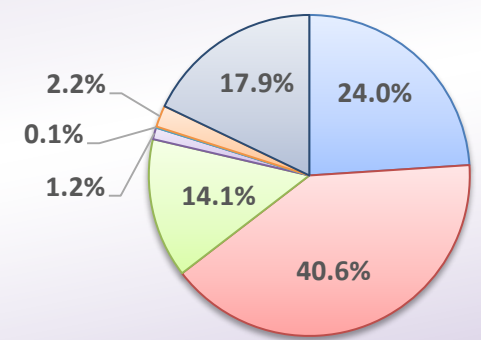
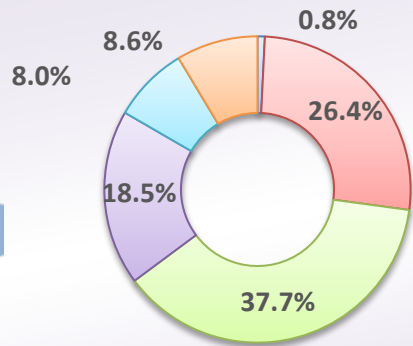
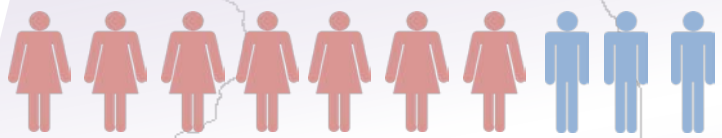


By Sex

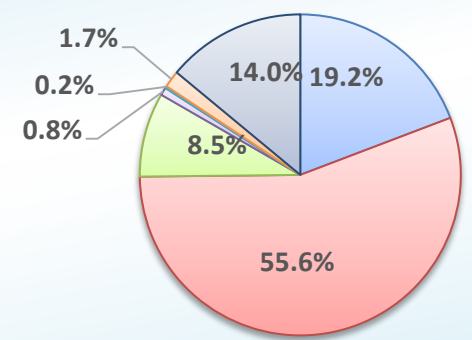
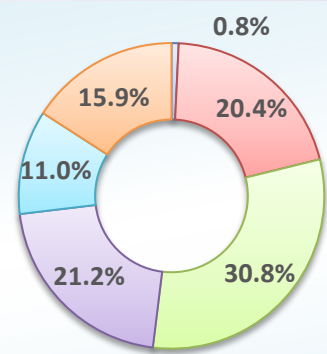
By Age Group

By Race/Ethnicity

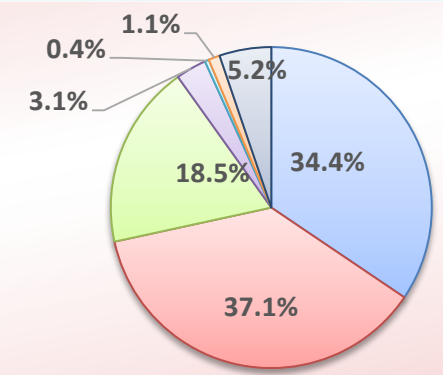
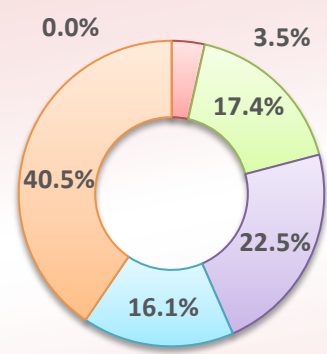
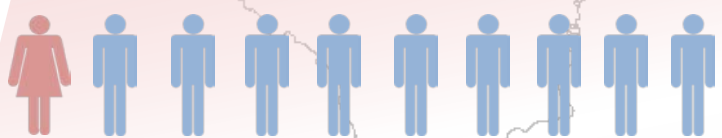
Chlamydia



Gonorrhea



P&S Syphilis



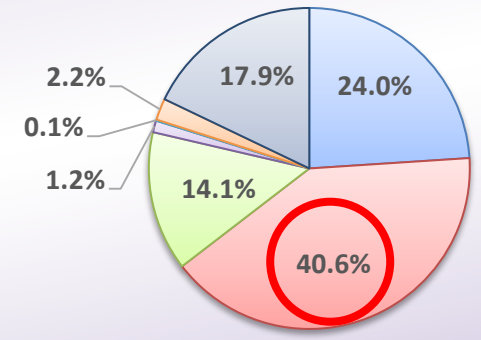
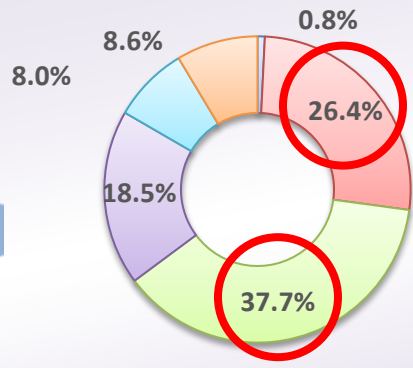
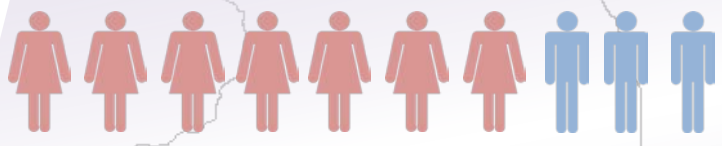


By Sex

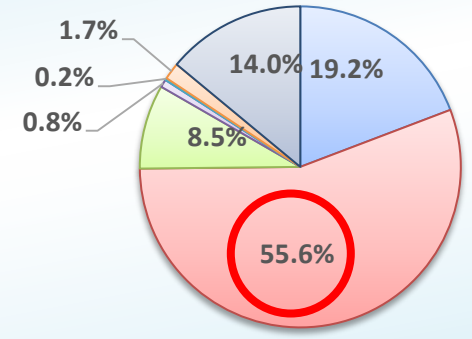
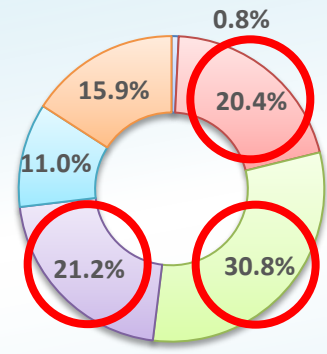
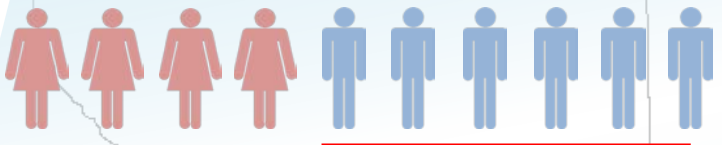
By Age Group

By Race/Ethnicity

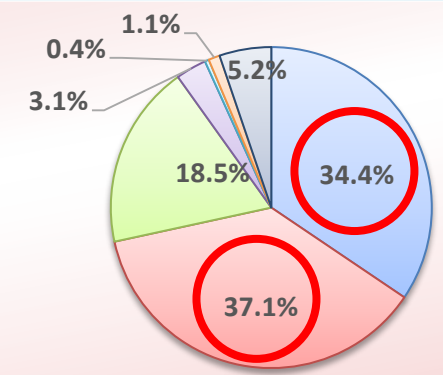
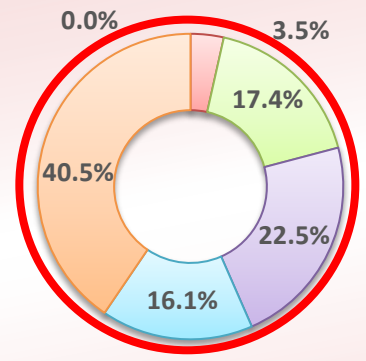
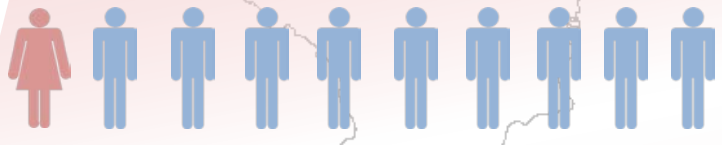
Chlamydia



Gonorrhea



P&S Syphilis



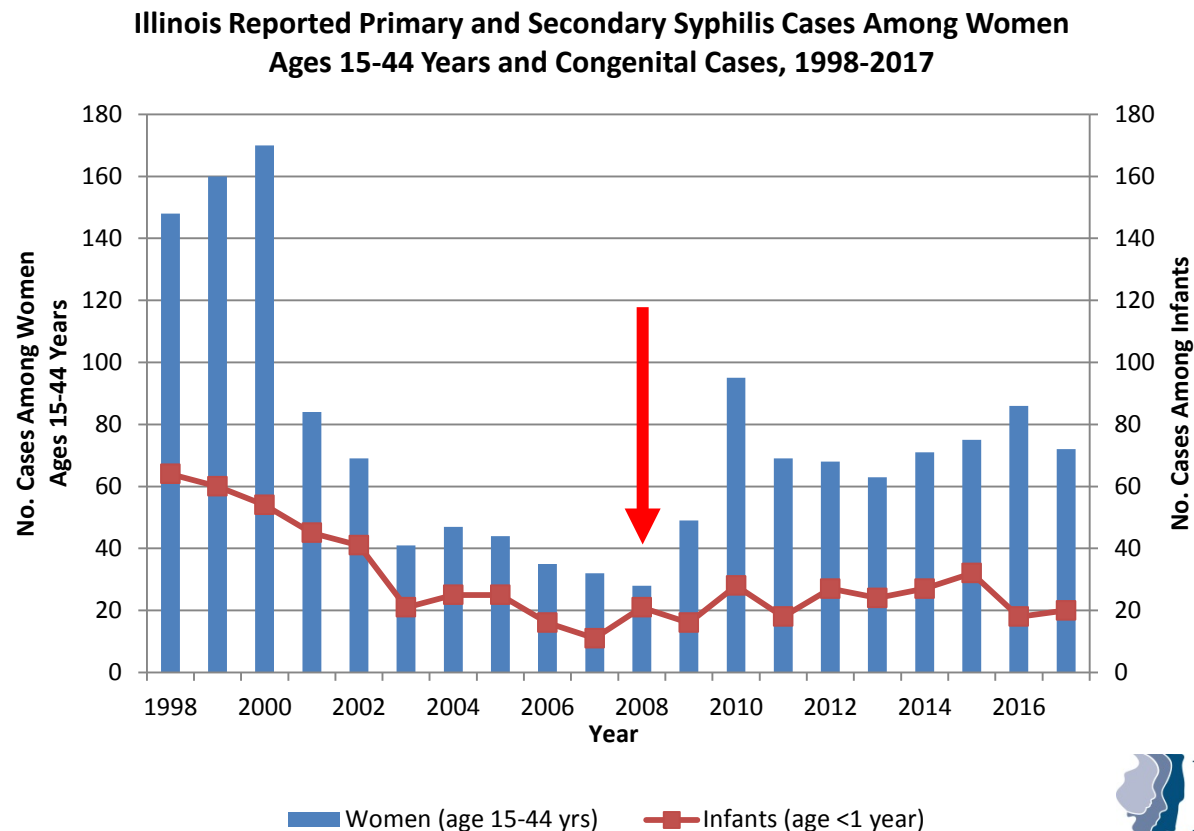


Increase in Syphilis Among Women

- In addition to increasing rates of men, rates among females have also steadily increased. Giving rise to congenital syphilis cases among newborns.
 - In 2017, there were 918 cases of congenital syphilis reported in the U.S.
 - Almost **2x** of 2013 reported cases.
 - **The most cases reported in one year since 1997.**
 - 37 states reported at least one case.

Increase in Syphilis Among Women

- In Illinois, steadily increase of reported cases of women with syphilis.
- Congenital syphilis cases continue to be steady.





CDC's Latest Messages

In addition to new data released in previous slides, CDC's also relayed messages:

- Sharp increase of syphilis among newborns underscore need for improved testing and treatment for pregnant women.
- Getting tested once during pregnancy is likely not enough to avoid the preventable consequences of congenital syphilis.
- CDC is committed to protecting newborns – and mothers – from syphilis.



Sexual Health Initiatives

- Active screening of adolescents, pregnant women, and MSM at sites of exposures.
 - Chlamydia screening initiatives
 - Actively screen sexually active females 15-24 at least once a year
 - PrEP initiatives
 - 1 pill a day (Truvada: emtricitabine & tenofovir) can lower risk for HIV infection via sex by 90% among HIV- clients (70% protection for HIV infection through injection drugs).
 - Those with high risk on PrEP should be routinely tested for chlamydia, gonorrhea, and syphilis in addition to HIV testing.
 - Testing should include all sites of exposure (genital, rectal, oral)



Sexual Health Initiatives

- Monitoring of GC antibiotic resistance
 - Gonorrhea Isolate Surveillance Project (GISP)
 - First 25 men who attend STD clinics with signs/symptoms
 - 33 sentinel sites nationwide
 - Data/science lead to changes in Rx regimen in 2010 and 2015.
 - Adequacy of gonorrhea treatment of reported cases.



Sexual Health Initiatives

- Importance of counseling and partner services (i.e., elicit partners) to stop spread and re-infection.
- Importance of partner therapy to prevent re-infection
 - Expedited Partner Therapy (EPT)

Contact Information

Jen Layden, MD, PhD

Chief Medical Officer and State Epidemiologist

If you have questions, contact

IDPH STD Section: 217-782-2747