

SEXUALLY TRANSMITTED INFECTIONS IN MCHENRY COUNTY

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Sexually Transmitted Infection (STI)

- STD vs. STI

- *Many people are “infected” but do not exhibit symptoms of the “disease”.*

- Sexually transmitted infections (STIs) are the most common infectious diseases in the United States

- *Nationwide prevalence of more than 110 million cases*
 - *20 million new cases occur every year*
 - *\$16 billion in total medical costs*

Sexually Transmitted Infection (STI)

■ Transmission

- *High risk sexual behavior*
- *Sharing needles to inject drugs*
- *Health-care setting*
- *Mother to baby during childbirth*

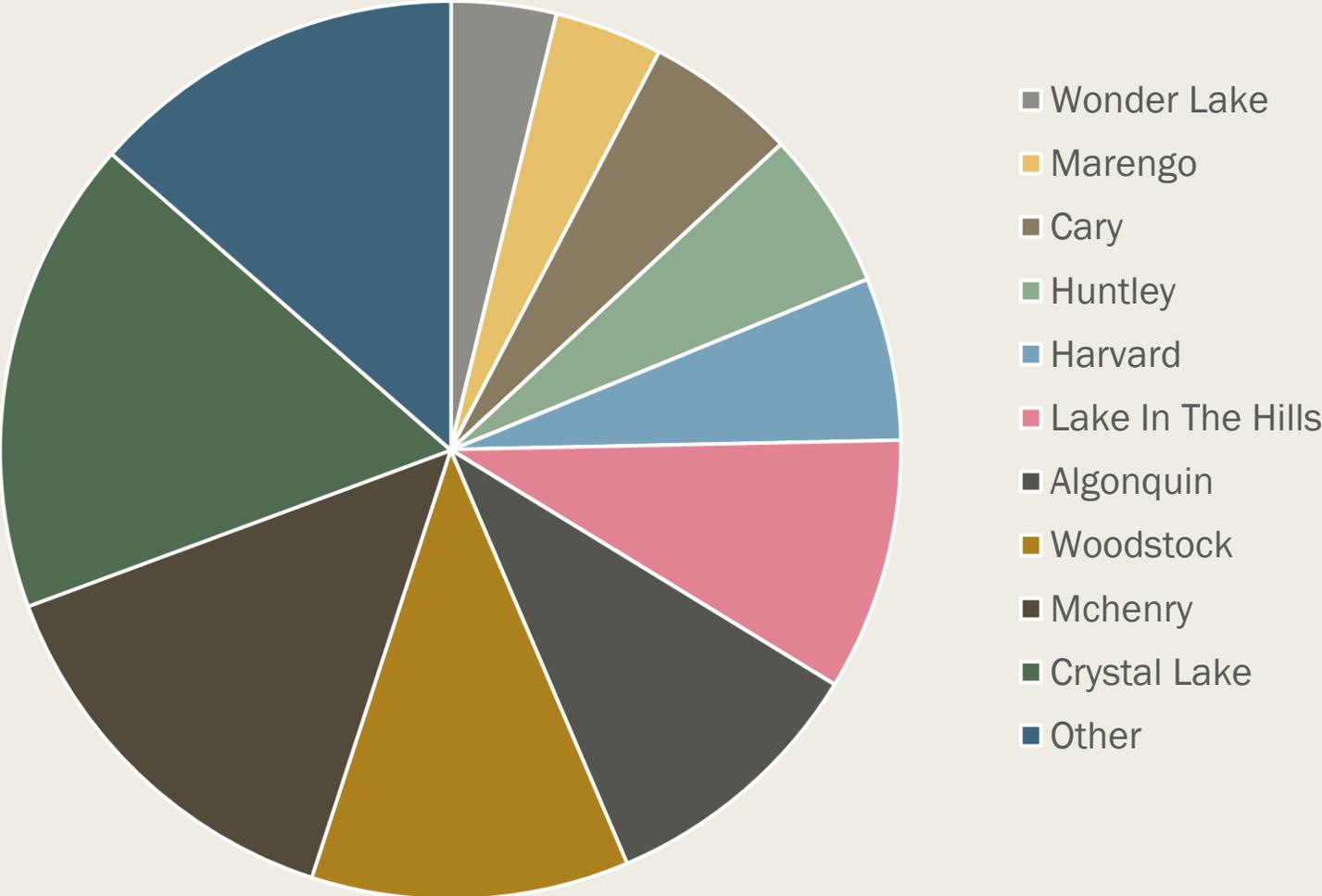
Chlamydia

- The most common reportable STI
- CDC estimates 2.86 million infections occur every year in the U.S
- 80% of infected women do not have symptoms
- Most common among young people due to behaviors
- Women under 25 and older women with risk factors need testing every year
- It is estimated that 1 in 15 sexually active females aged 14-19 years has chlamydia

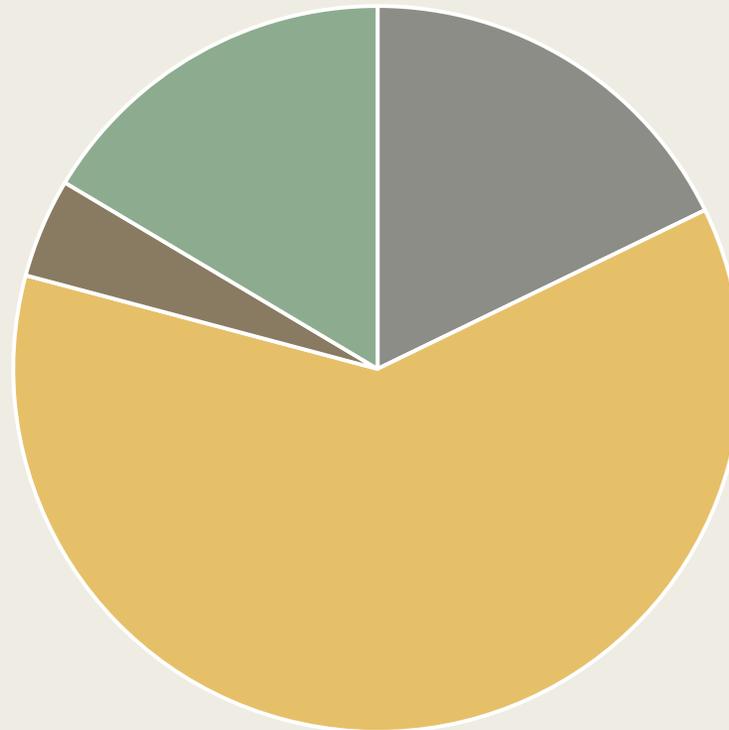
Chlamydia

- Bacterial infection (*Chlamydia trachomatis*)
 - *Treated with antibiotic (Azithromycin)*
- If left untreated, it can cause infertility in women or fatal ectopic pregnancy.
- Infected pregnant women
 - *Premature delivery*
 - *Infect infant during delivery causing severe eye infections and pneumonia*

Chlamydia Cases by City 2014 - July 2016



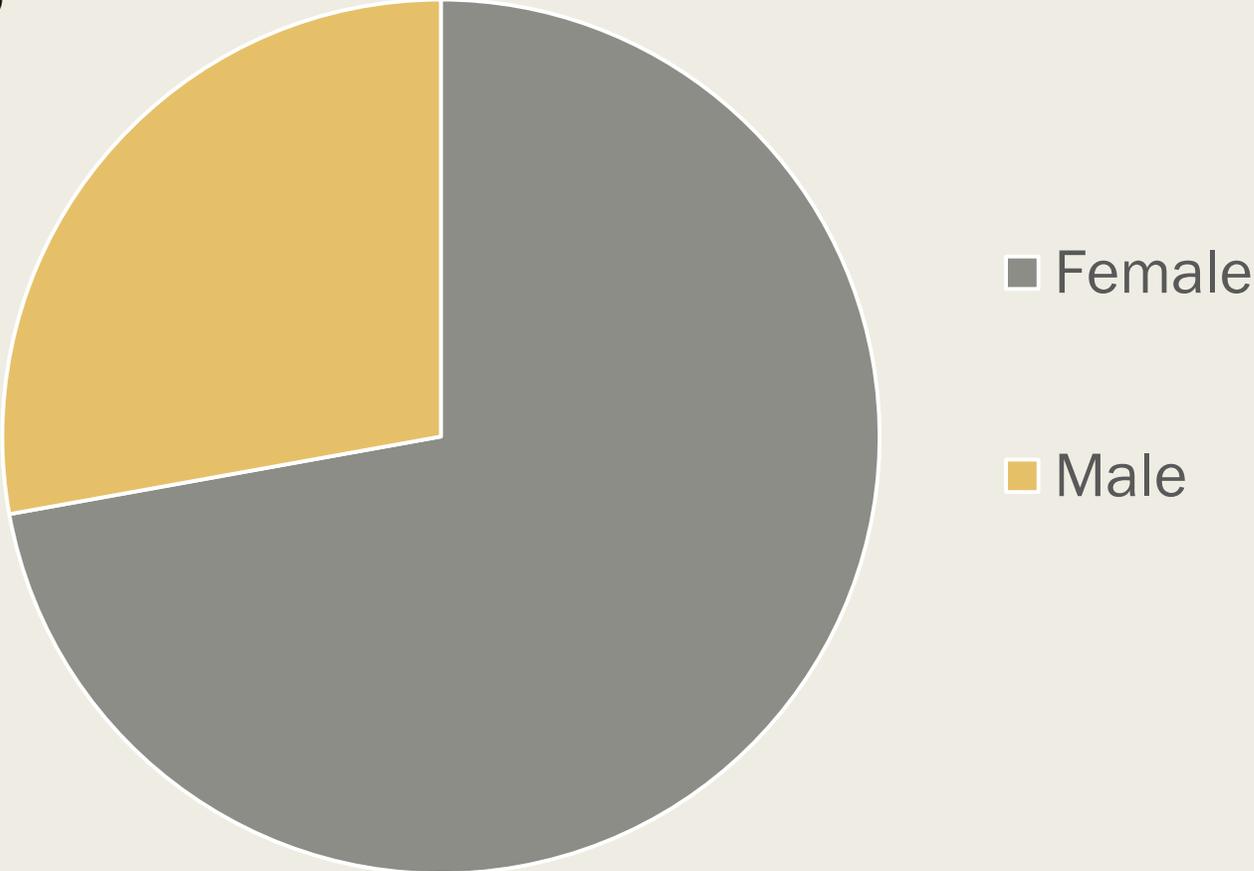
Chlamydia Count by Race 2014 - July 2016



- Hispanic
- White
- Black
- Unknown/Other

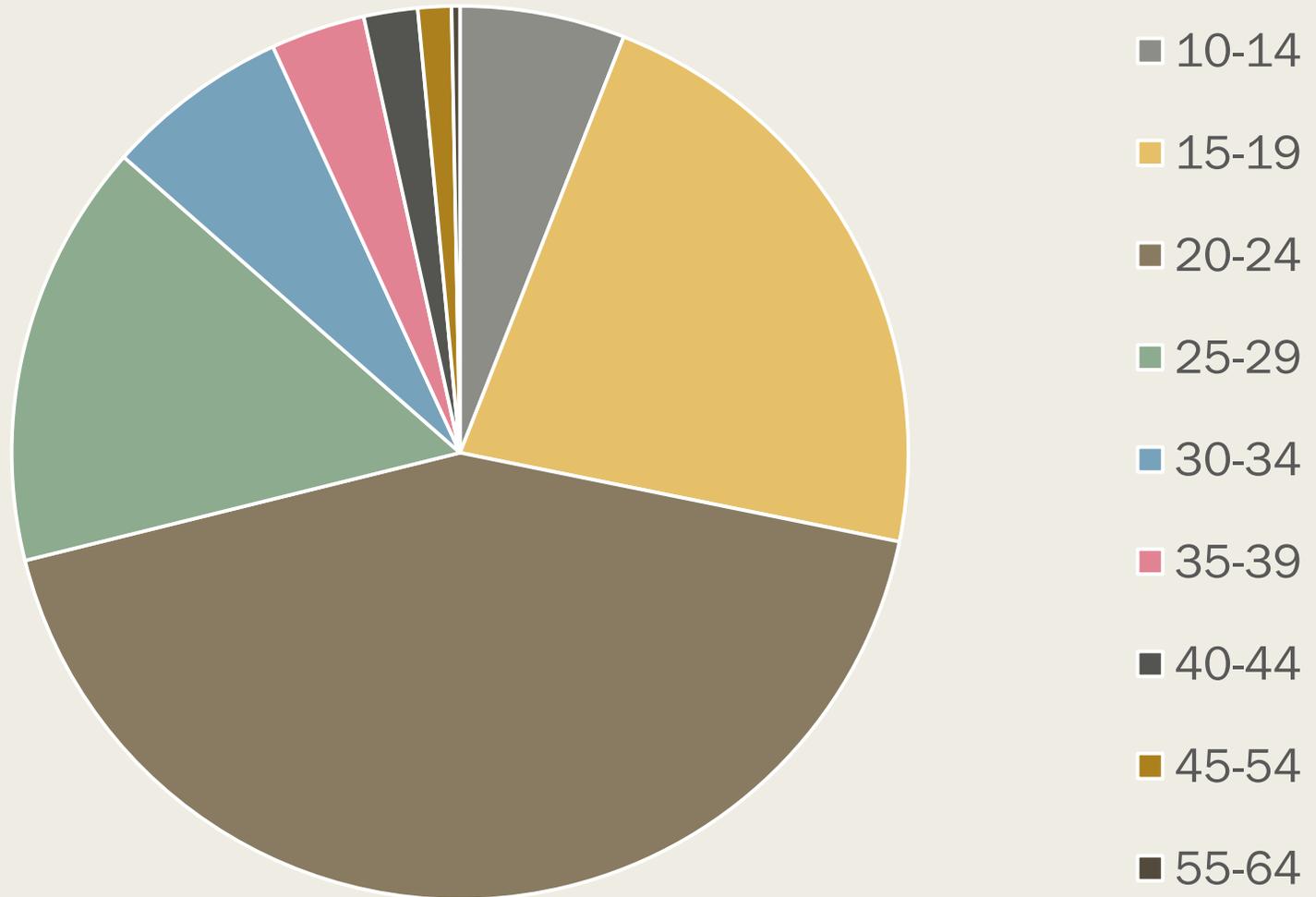
Chlamydia Count by Sex

2014 - July 2016

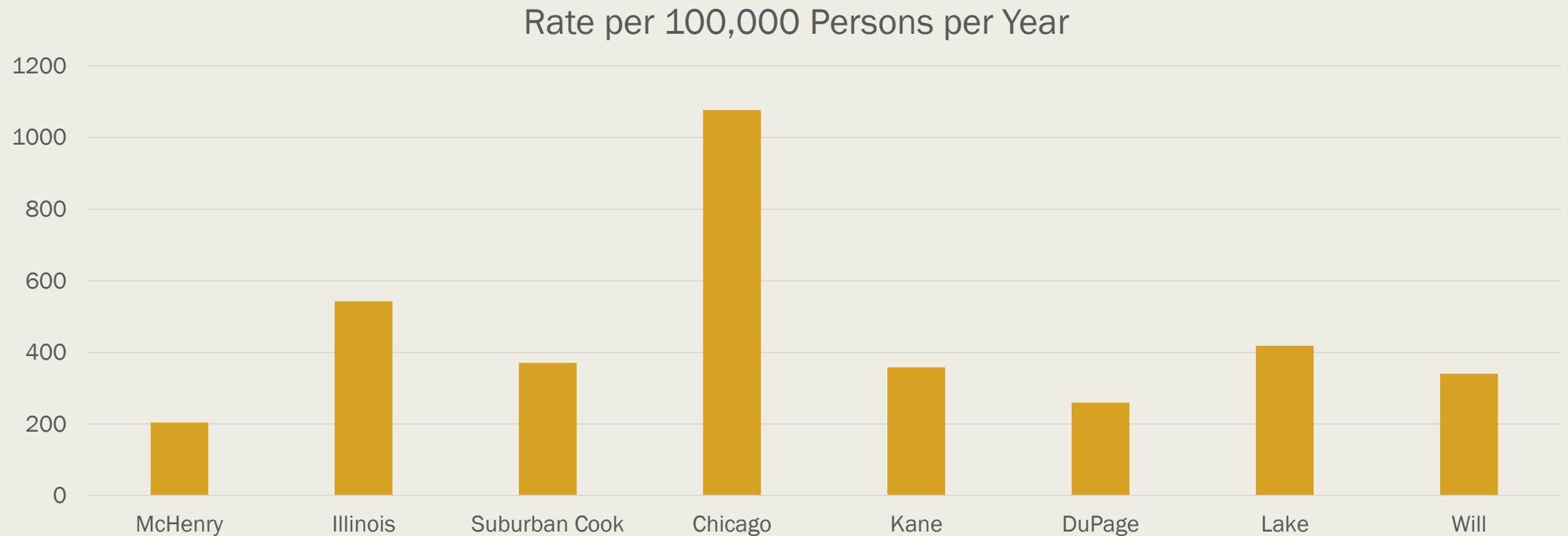


Chlamydia Counts by Age Range

2014 - July 2016



Chlamydia Rate, Collar Counties and the State of Illinois 2015



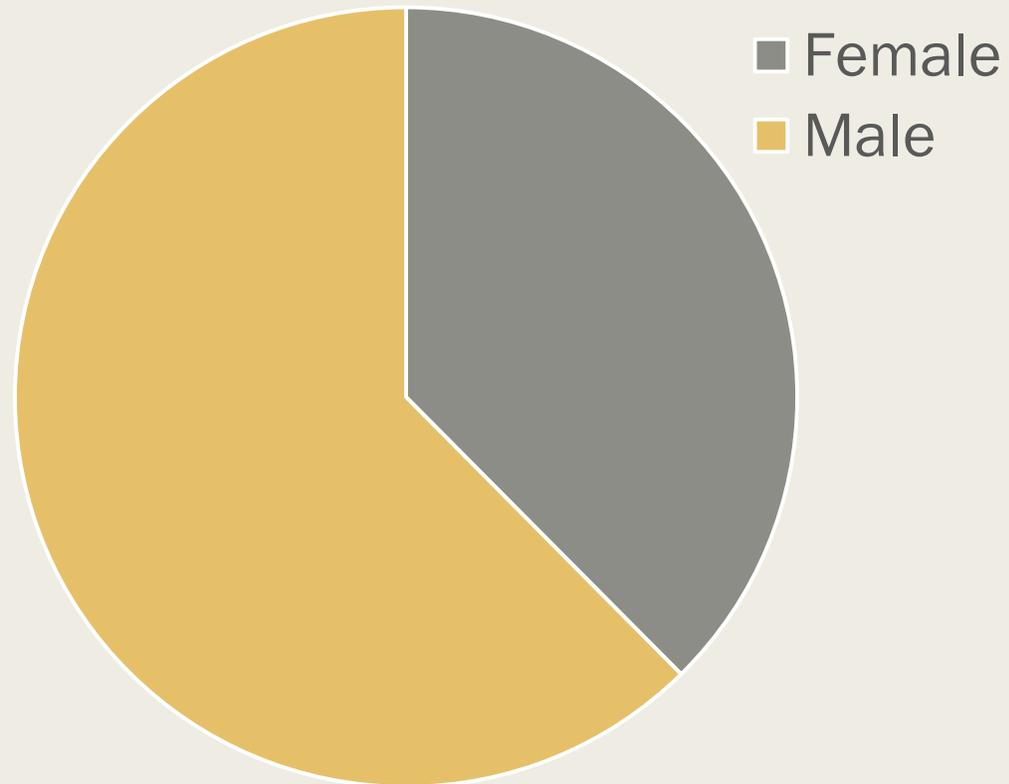
Gonorrhea

- Second most common reportable STI
- CDC estimates that annually more than 700,000 people in the U.S. get new infections, and less than half of these are reported
- The approximate annual cost of gonorrhea and its complications in Illinois is more than \$3 million
- Disproportionately affects sexually active teenagers, young adults, and African Americans
- Over the last 5 years, McHenry County has seen the number of reported cases nearly double

Gonorrhea

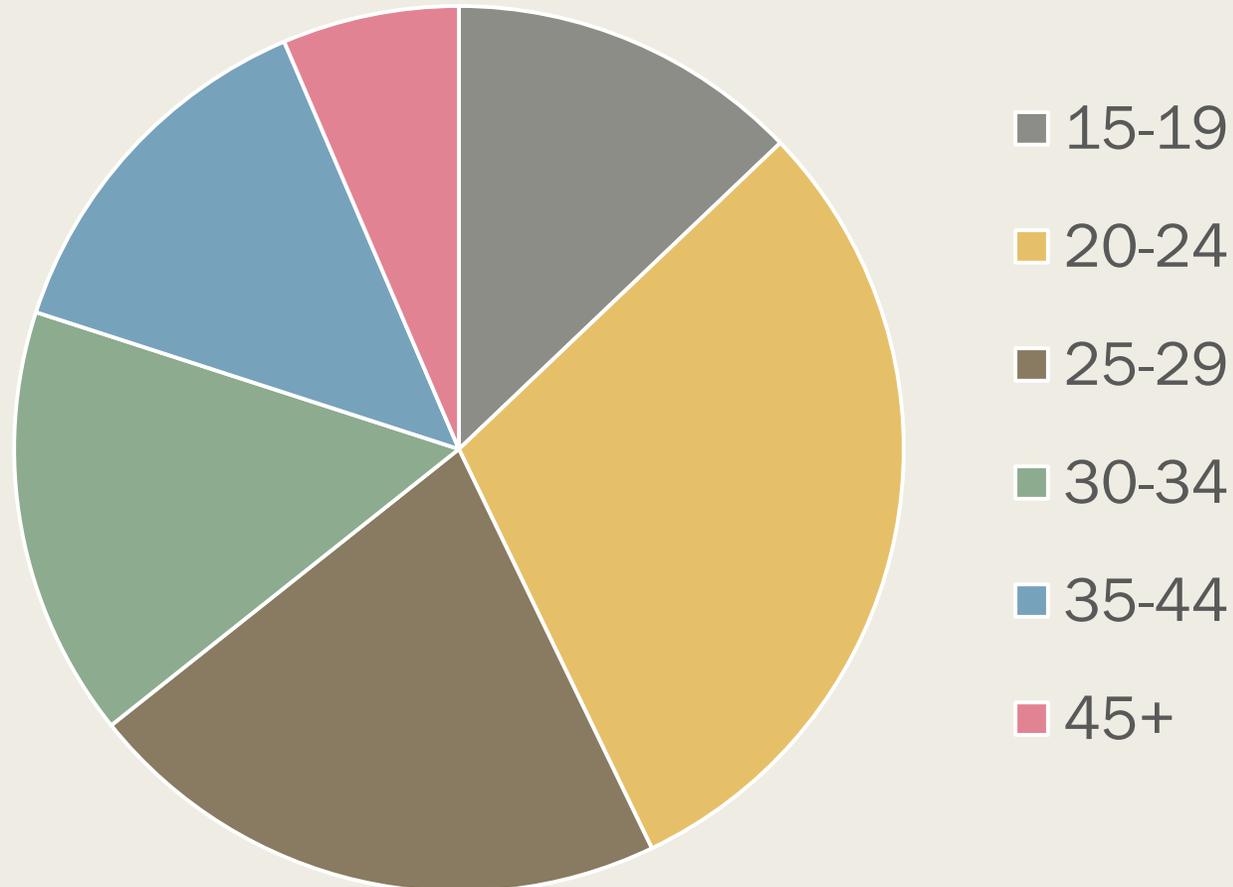
- Caused by bacterium *Neisseria gonorrhoeae* (gonococcus)
 - *Treated with antibiotics (Ceftriaxone and Azithromycin)*
- Gonorrhea treatment is complicated by the development of resistance to antimicrobials
 - *Providers need to be diligent about following treatment guidelines, partner notification, and follow-up testing*
- Untreated gonorrhea can cause infertility or fatal ectopic pregnancy as well as heart disease, arthritis, skin disease and blindness

Gonorrhea Counts by Sex 2014 - July 2016

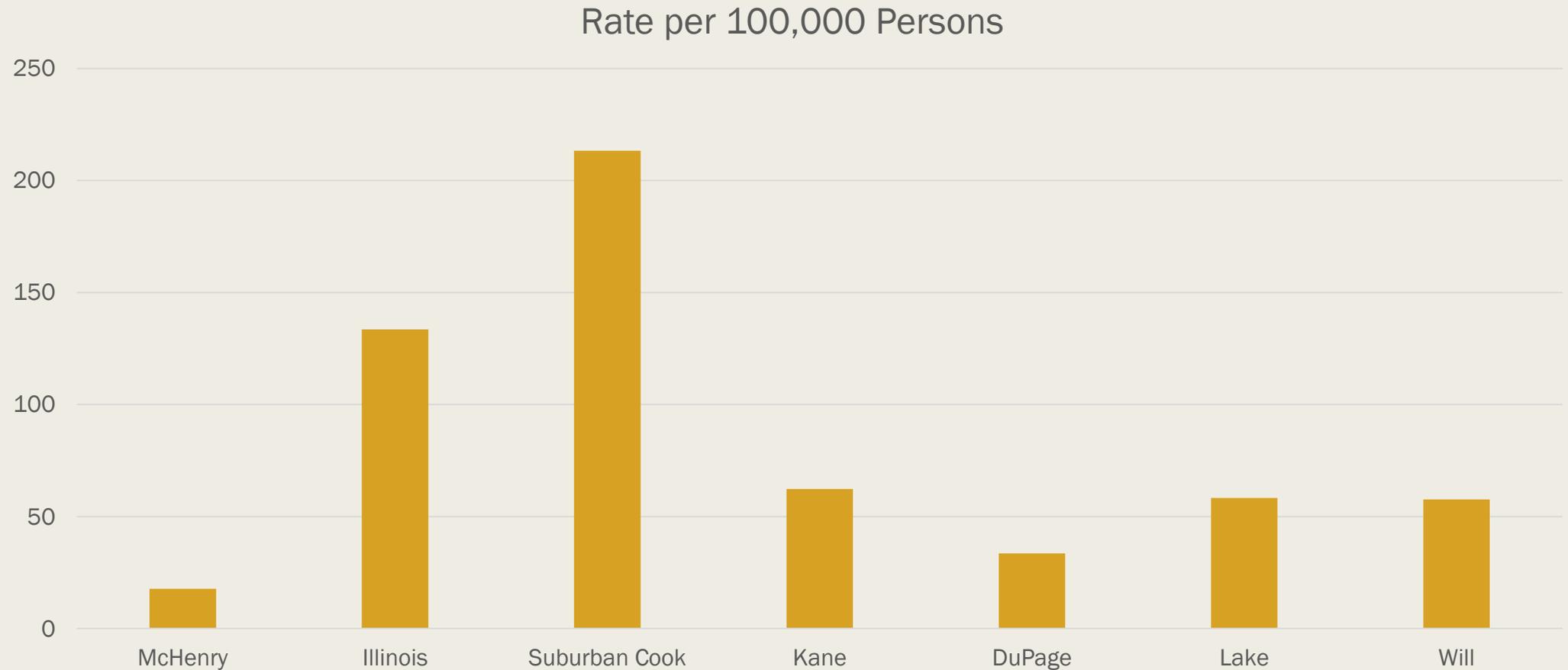


Gonorrhea Counts by Age Range

2014 - July 2016



Gonorrhea Rate, Collar Counties and the State of Illinois 2015



Syphilis

- After national syphilis rates hit historic lows in 2001, they increased almost every year since, peaking in 2014 with the highest rate reported in 20 years.
 - *Nearly 20,000 syphilis cases reported in 2014, compared to 6,103 in 2001.*
- Before 2013, increasing syphilis rates were mainly due to cases among the MSM community. From 2013-2014, syphilis rates increased in women.
 - *Nearly a 23% increase in syphilis rates for women from 2013-2014.*
- More cases of syphilis in women leads to an increase in congenital syphilis.
 - *37% increase in congenital syphilis rates from 2012-2014.*
- McHenry County:
 - *75% increase in syphilis cases 2014-2015*
 - *13 positive syphilis cases as of 07/15/2016, an alarming increase compared to previous average of 6 cases per year.*

Syphilis

- Syphilis can cause long-term complications and/or death if not adequately treated
- Bacterial infection (*Treponema pallidum*)
 - *Antibiotic treatment is based on infectious stage*
- Every case is serious, requiring a timely and thorough contact investigation.

Syphilis

- A staging algorithm is used to determine when the infection occurred and to guide treatment:

- *Primary – presence of a painless chancre occurring 1-12 weeks following infection.*
- *Secondary – presence of a rash commonly on the palms and soles of feet, but can occur anywhere. May experience flu-like symptoms.*

**Chancre and rash will resolve on their own, but syphilis remains in the body.*

- *Early Latent – infection occurred in the last 12 months; asymptomatic.*
- *Late Latent – infection occurred over 12 months ago; asymptomatic.*

Syphilis

Positive syphilis cases in McHenry County	
2011	11
2012	4
2013	3
2014	7
2015	7
2016 (as of 07/15/2016)	13

HIV (Human Immunodeficiency Virus)

- In 2014, the estimated number of new HIV diagnoses in the United States was 44,073.
 - *35,571 among adult and adolescent males (13 years or older)*
 - *8,328 among adult and adolescent females*
 - *174 among children younger than 13 years.*
- In 2014, estimated HIV infections classified as stage 3 (AIDS) was 20,896.
 - *15,624 among adult and adolescent males*
 - *5,168 among adult and adolescent females*
 - *104 were among children younger than 13.*

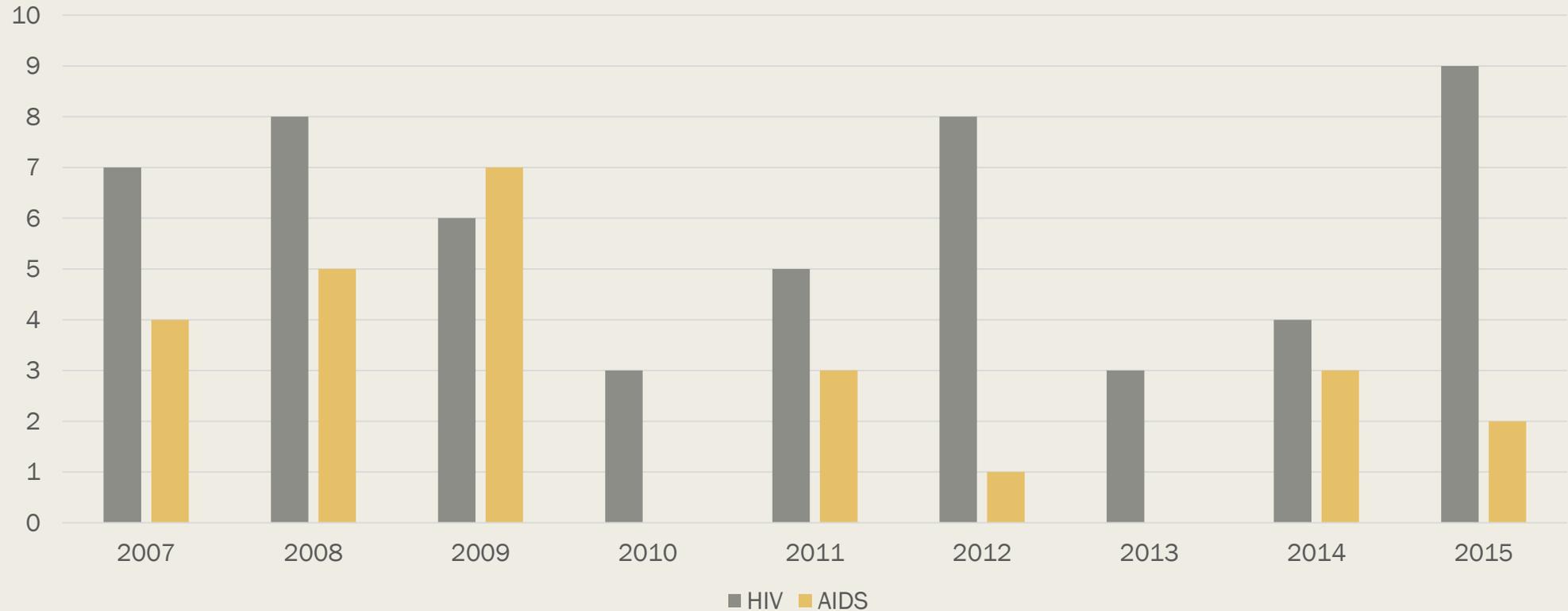
HIV (Human Immunodeficiency Virus)

- About 36.9 million people are living with HIV around the world.
- Estimated 1.2 million people have died from AIDS-related illnesses.
- McHenry County, since 2008:
 - *60 cases of HIV (rate 2.6 per 100,000)*
 - *25 cases of AIDS (rate 1.1 per 100,000)*
 - *8 new cases identified in 2015*

HIV (Human Immunodeficiency Virus)

- Viral infection therefore no cure
 - *Antiretroviral therapy (ART) dramatically prolongs the life of many people and decreases the chance of infecting other partners.*
 - *Prior to the mid-1990s, people with HIV could progress to AIDS in just a few years. Since the use of ART, people can have a nearly normal life expectancy.*
- Advances in technology have made testing far more efficient
 - *Combination, or fourth-generation testing:*
 - *Looks for both antibodies (your body's immune response to infection) and antigens (the virus).*
 - *For most, it can accurately detect HIV infection within 2 to 6 weeks following exposure, versus 3-12 weeks using antibody testing alone.*

HIV/AIDS Cases Reported in McHenry County 2007-2015



Hepatitis B (HBV)

- Global public health problem: Estimated 300 million people living around the world with chronic HBV, with 1.5 million living in the U.S.
- Approximately 15%-25% of people with chronic HBV develop liver damage, including liver cancer
- Up to two-thirds of Americans living with chronic HBV do not know they are infected
- Disproportionately affects Asian and Pacific Islanders (APIs)
 - *APIs account for more than 50% of Americans living with chronic Hepatitis B, but make up less than 5% of the total population*

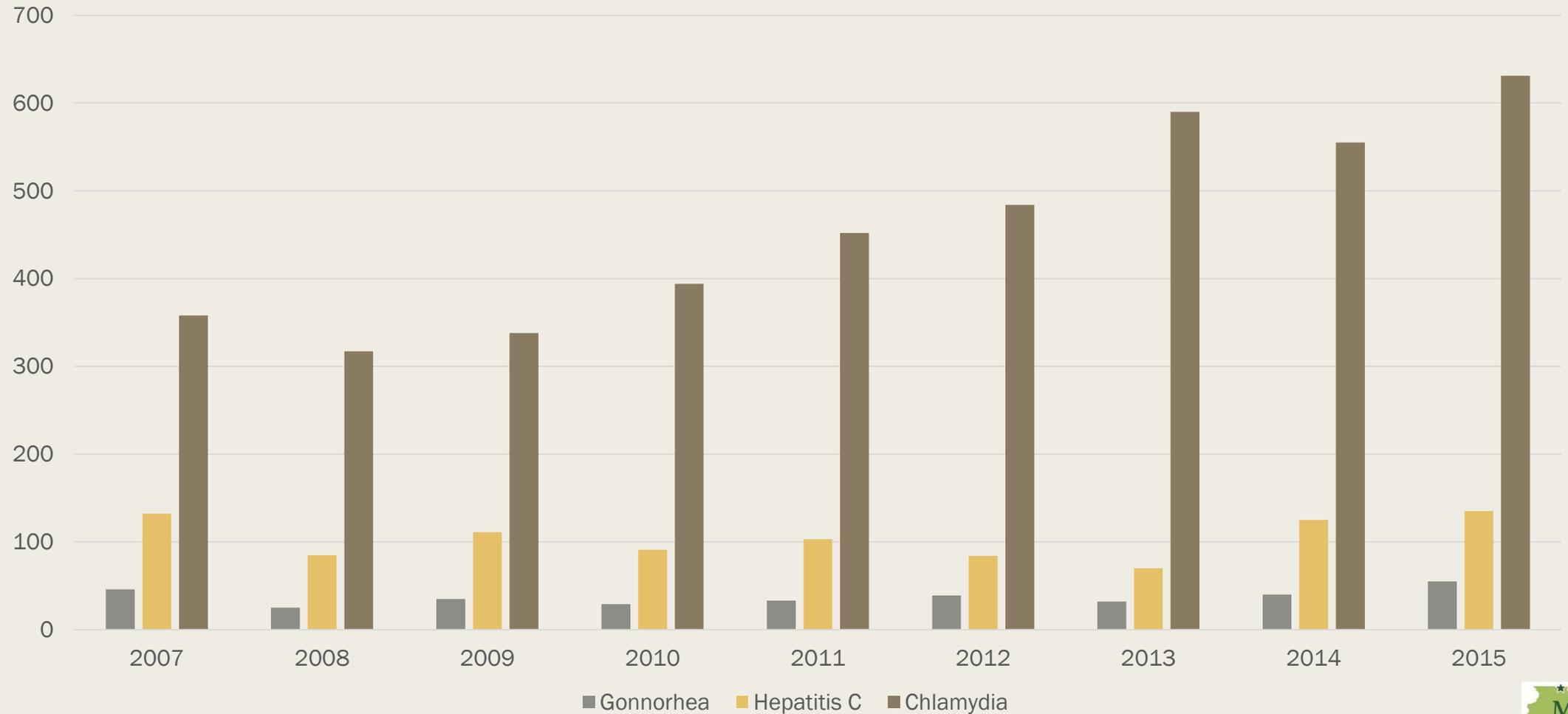
Hepatitis B (HBV)

- Viral infection causes inflammation of the liver, which can lead to permanent damage and cancer
- Spread by contact with blood or other bodily fluids of an infected person by:
 - *High risk sexual behavior*
 - *Sharing needles to inject drugs*
 - *Health-care setting*
 - *Mother to baby during childbirth*
 - *Up to 90% of babies who become infected at birth with HBV, and up to half of children who are infected before 5 years of age, develop chronic HBV*
 - *Vaccination success in prevention*
 - *HBV infections among children and adolescents have decreased by 95% since 1990*

Hepatitis C (HCV)

- Individuals often have no symptoms
- Estimated 4 million HCV chronic carriers, approximately 70% of all HCV carriers will develop chronic liver disease
- Spread by contact with blood of an infected person, can live outside the body on environmental surfaces up to 3 weeks
- Spread chiefly through Injection Drug Use (IDU) and sexual contact
- CDC recommends testing all persons born between 1945 and 1965 and individuals with risk behaviors
- Advancements in technology have proven to be successful in managing specific genotype

McHenry County Most Common STI by Year



MCDH

- Goal is to manage and prevent STI transmission:
 - *Reach individuals at risk*
 - *Ensure access to testing and diagnosis*
 - *Administer appropriate treatment*
 - *Provide follow-up care*
 - *Provide care for partners of those infected*
 - *Education*

MCDH

- MCDH offers the only STD clinic in the county
- Comprehensive STI testing for persons 12 years of age and older
 - *Chlamydia, gonorrhea, syphilis, and HIV*
 - *Cost is \$50*
 - *Includes treatment when needed*
 - *HIV counseling and referral services*
 - *Education*
- Risk reduction counseling and condom distribution
- Surveillance

MCDH

- Trained additional CD program staff for clinic.
- Expand clinic days, hours, and location.
- Partnered with commercial lab to remove barriers to testing.
- Partnered with McHenry Community College to offer STI testing on campus at a reduced fee.
- Partnered with Rosecrance to provide education to a vulnerable population.
- Completed mailing to providers throughout the county to build rapport, inform them of our services, encourage testing/referrals, and provide treatment guidelines.
- Reduce burden of healthcare costs to shift patients from ER visits to MCDH for STD testing and/or treatment.

QUESTIONS ?