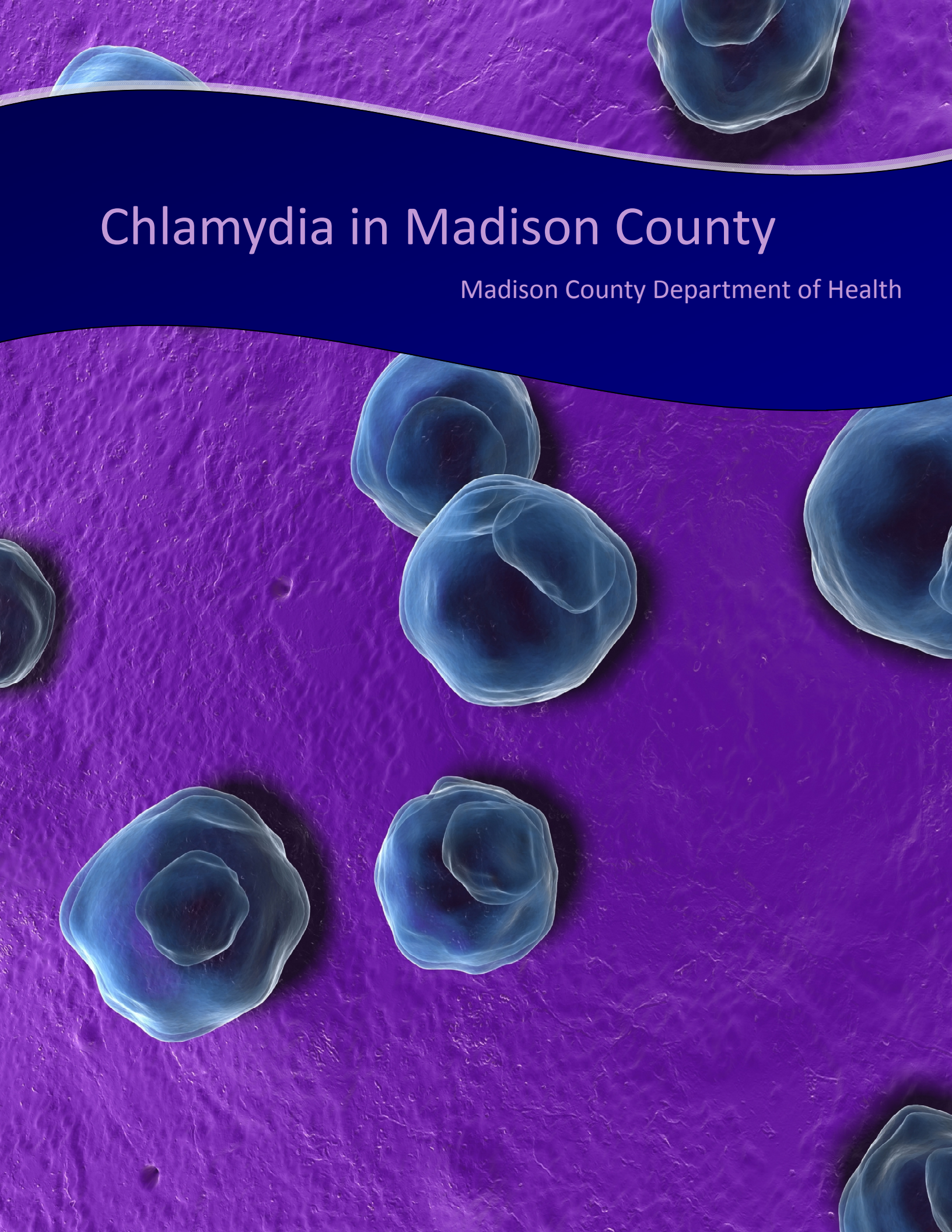
Chlamydia in Madison County

Madison County Department of Health



Together, we can make a difference, but it will take all of us – CDC, health departments, healthcare providers, community organizations, and individuals.

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Contents

Introduction

Chlamydia trachomatis (Chlamydia) is the most prevalently reported sexually transmitted infection (STI) both locally and nationally. The terms sexually transmitted infection (STI) and sexually transmitted disease (STD) are both used when classifying Chlamydia. The term STD is used when the infection is symptomatic and the term STI is used whenever an infection is detected. Infection is caused by the bacterium *Chlamydia trachomatis* and affects people of all ages, genders, and ethnicities. Most infections are asymptomatic, and if left untreated, can cause a range of adverse effects including pelvic inflammatory disease (a major cause of infertility, ectopic pregnancy, and chronic pelvic pain in females). The inflammation associated with infection can also increase the transmission risk of other sexually transmitted infections such as HIV. Chlamydia may cause abnormal discharge from the penis or vagina, burning sensation with urination, pain and/or swelling in the testicles, rectal pain, and bleeding (CDC, 2010).

Background

Chlamydia can infect any person that is sexually active; however, risk factors have been identified that increase the likelihood of transmitting the infection. Behavioral risk factors include engaging in unprotected sex, having multiple sexual partners, using or abusing alcohol and drugs, not using a barrier method at every sexual encounter, having sexual contact with a person that has an STI, and exchanging sexual acts for goods or money. People are more likely to contract an STI in a community with a high prevalence of STIs, especially when a community is isolated, has limited social support, or has limited access to STI prevention and management programs. In most cases these communities exhibit high poverty rates, income inequality, high unemployment rates, and low education levels (Mayo Clinic, 2017). People that have other STIs are more at risk for a secondary infection related to inflammation. In addition, adolescent females are more prone to Chlamydial infections because of cervical cell structure (CDC, 2015a)

Due to the asymptomatic nature of the infection most providers use screening tests for detection. The Centers for Disease Control and Prevention (CDC) recommends that sexually active women ≤25 years old receive screening at least annually and with every new sexual partner. Recommendations for screening men have been considered; however, to date the CDC is focusing screening efforts on the target population of women ≤ 25 years old due to infection prevalence, behavioral risk factors, and biologic factors. The CDC does suggest that there are certain groups of men (men who have sex with men or MSM) who should receive regular and targeted screening when resources permit, due to behavioral risk factors and the nature of transmission. Testing is completed using either a urine test or swab sample of the anatomic exposure site.

Nationally

In 2015, chlamydia, gonorrhea, and syphilis rates reached an all-time high nationwide (CDC, 2016a). A press release issued by the CDC on October 19, 2016 urged intervention and prevention for the growing issue. The CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Director, Dr. Jonathan Mermin, stated "STD rates are rising, and many of the country's systems for preventing STD's have eroded. We must mobilize, rebuild and expand services – or the human and economic burden will continue to grow" (CDC, 2016b). In 2015, 1.5 million cases of chlamydia were reported, representing the highest number of annual cases ever reported to the CDC of any reportable condition. Chlamydia continues to impact both men and women at an increased rate. The CDC reported that in 2015, chlamydia rates in women increased by 3.8% and by 10.5% in men across the country. National data have shown that adolescent women aged 15—24 are most at risk and account for one half of newly diagnosed laboratory confirmed cases (CDC, 2016c).

Separate from the CDC's data collection and monitoring, some health care providers collect data through quality assurance measures and Medicaid reports. The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by about ninety percent of insurance plans in the U.S. (NCQA, 2017). HEDIS is made up of 81 clearly defined performance measures, and allows providers to compare their practice's performance to national standards. The measures are updated every year to reflect best practices. One HEDIS measure related to Chlamydia states: Assesses women 16–24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year. Data are broken down to screening rates in females aged 16-20 years and 21-24 years, compared across Commercial insurance and Medicaid.

Nationally reported screening rates have remained steady since 2013, as illustrated in Table 1 (NCQA, 2017). Healthcare practices that accept patients with Medicaid or Medicaid Managed Care report chlamydia screening rates for young women, and have seen an increase in screenings nationally. Screening increased from 40.4% of sexually active women aged 16 - 24 years in 2001 to 54.6% in 2014 (CDC, 2015a).

HEDIS measures provide information on screening and testing completed by certain providers. Reports are limited by the fact that not all providers participate in HEDIS and that screenings for people with private insurance are not captured. In addition to the limitations of HEDIS reporting, CDC and New York State Department of Health reports are also limited by the fact that providers do not consistently report cases of suspected infection (i.e., people treated without being tested). The surveillance information reported to the CDC on positive cases does not include further information on behavioral risk factors. Due to the limitations of the data collected, the prevalence of Chlamydia is under-reported (CDC, 2015a).

Chlamydia Screening Rate (16–20 Years)						Chlamydia Screening Rate (21–24 Years)					
	Commercial		Medicaid	Medicare			Commercial		Medicaid	Medicare	
Year	HMO	PPO	HMO	HMO	PPO	Year	HMO	PPO	HMO	HMO	PPO
2015	41.9	38.2	51.5	–	–	2015	52.3	47.7	60.6	–	–
2014	41.6	38.3	51.2	–	–	2014	51.6	46.7	60.1	–	–
2013	41.4	37.8	51.3	–	–	2013	50.3	45.9	61.6	–	–
2012	41.1	38.9	53.5	–	–	2012	49.2	45.5	63.6	–	–
2011	41.5	39.6	54.9	–	–	2011	48.4	44.9	63.4	–	–
2010	40.8	38.1	54.6	–	–	2010	45.7	41.9	62.3	–	–
2009	41.0	37.7	54.4	–	–	2009	45.4	41.4	61.6	–	–
2008	40.1	36.7	52.7	–	–	2008	43.5	39.4	59.4	–	–
2007	36.4	32.4	48.6	–	–	2007	39.2	34.9	54.0	–	–
2006	36.2	29.4	50.5	–	–	2006	38.0	31.2	55.0	–	–
2005	34.4	26.2	49.2	–	–	2005	35.2	27.6	52.5	–	–
2004	32.6	–	45.9	–	–	2004	31.7	–	49.0	–	–
2003	30.4	–	44.3	–	–	2003	29.1	–	46.0	–	–
2002	26.7	–	40.8	–	–	2002	24.5	–	41.5	–	–
2001	24.5	–	39.6	–	–	2001	22.1	–	41.1	–	–
2000	23.6	–	–	–	–	2000	20.7	–	–	–	–
1999	18.5	–	–	–	–	1999	16.0	–	–	–	–

Table 1. Chlamydia Screening in Women, HEDIS measure report for 1999- 2015 responses to the "Assesses women 16–24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year" measure. Source: NCQA. Chlamydia Screening in Women: This HEDIS Measure. http://www.ncqa.org/report-cards/health-plans/state

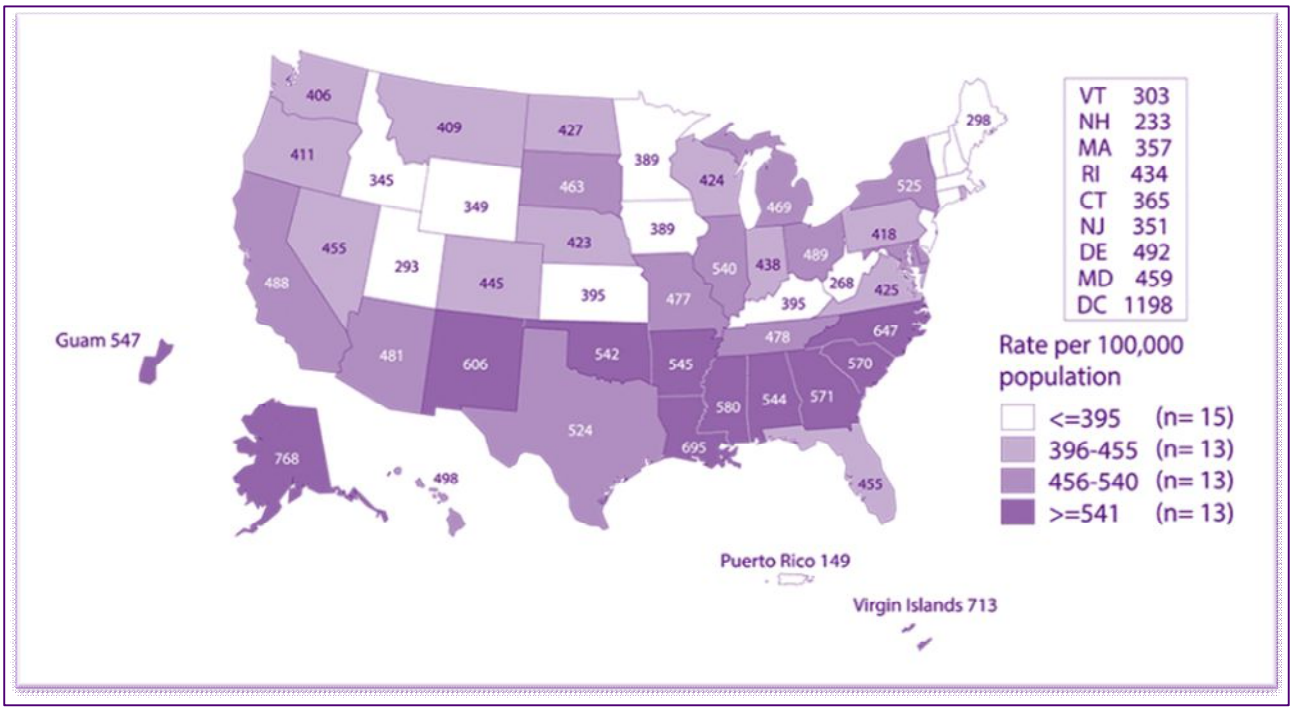


Figure 1: Chlamydia — Rates of Reported Cases by State, United States and Outlying Areas, 2015 NOTE: The total rate of reported cases of chlamydia for the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 475.3 per 100,000 population Source: Chlamydia 2015 STD Surveillance, 2015

New York State

New York State (NYS) reported record numbers of Chlamydia over the past five years. While rates are the highest to date, they are not the highest in the country. Figure 1 is a map of Chlamydia rates per state. Although NYS is not among the states with the highest incidence rates, it is one of the highest in the Northeast region (CDC, 2016a). NYS trends mirror national trends. In 2010 it was reported that women accounted for 75% of New York's Chlamydia cases. In addition to the high rate among women ≤ 25 years, New York identified that rates among African American women 15-19 years old were 10 times higher than in white women of the same age. Rates in Hispanic and American Indian women were three times higher than young White women (NYSDOH, 2010).

The increased rates among African American, Hispanic, and American Indian Women are thought to be largely related to environmental risk factors. These groups are more likely to live in a community with a high prevalence of STIs, communities that are isolated, have limited social support, and have limited access to STI prevention and management programs such as free condom programs and family planning clinics. In most cases these communities exhibit high poverty rates, income inequality, high unemployment rates, and low education levels (Mayo Clinic, 2017). NYS reporting requirements are similar to the national requirements. As such, the reports from NYS share similar data limitations. Specific information on males, MSM, and older individuals is not available. Information on specific American Indian Tribes is not available. Capturing more demographic data would allow health officials to target specific at-risk groups with more certainty.

Madison County

In Madison County, Chlamydia rates have been increasing steadily over the past 15 years. Madison County reported 195 cases of lab-confirmed Chlamydia in 2016. This was the highest number of any confirmed communicable disease to date. While the incidence rate of Chlamydia in Madison County is lower than the national, state, and Central New York (CNY) region levels in comparison, the County has experienced a 180% increase in Chlamydia rates between 2001 and 2016. Figure 2 depicts the top 10 confirmed reportable diseases in Madison County in 2016. Chlamydia accounted for 57% of all reported cases. Figure 3 illustrates the incidence rate of chlamydia cases from 2001 through 2016 in Madison County. Among reported STIs, Chlamydia represented 75% of the confirmed cases reported (Madison County, 2016).

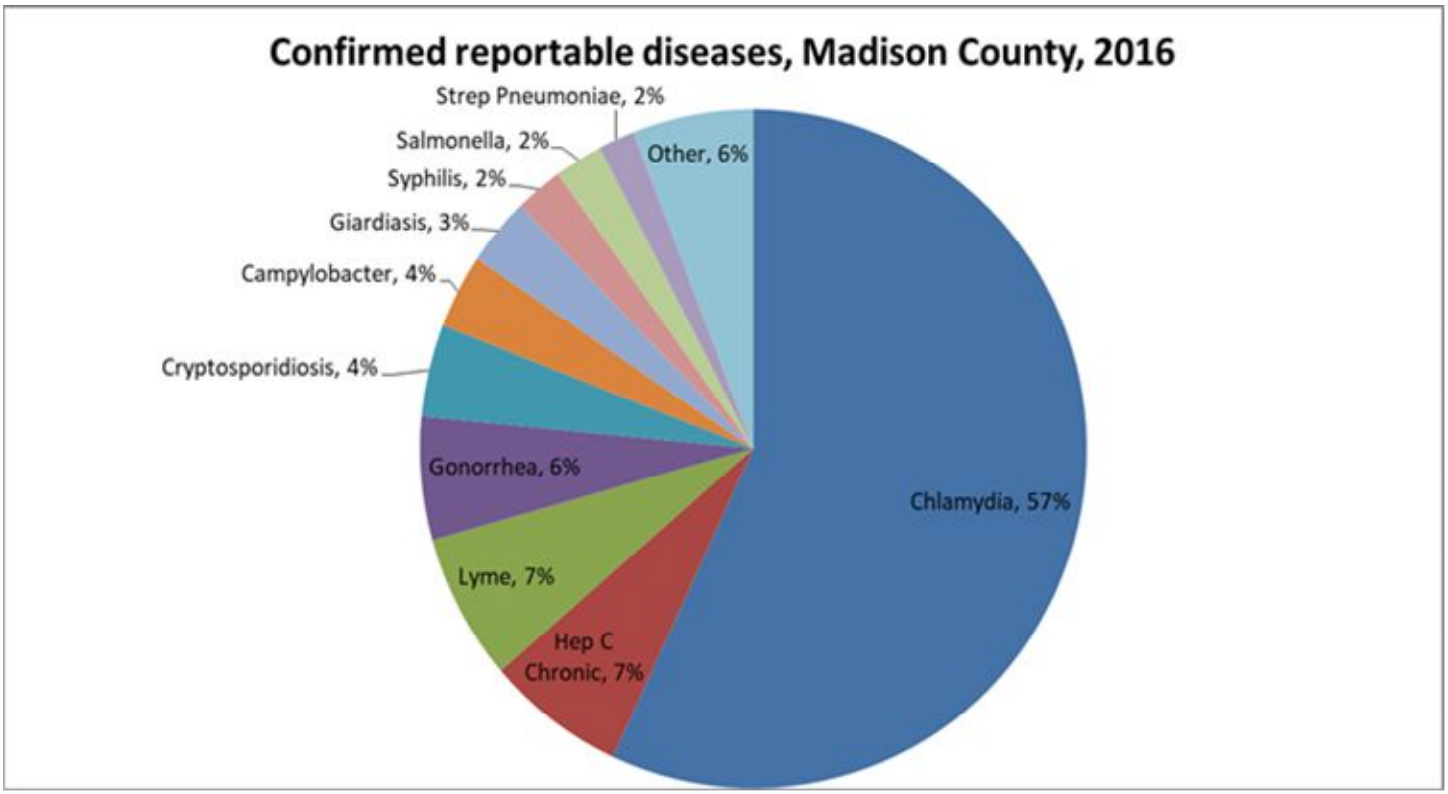


Figure 2: Confirmed reportable diseases in 2016, Madison County 2016. Source: NYSDOH. Health Commerce System. Communicable Disease Electronic Surveillance System (CDESS); US Census Bureau

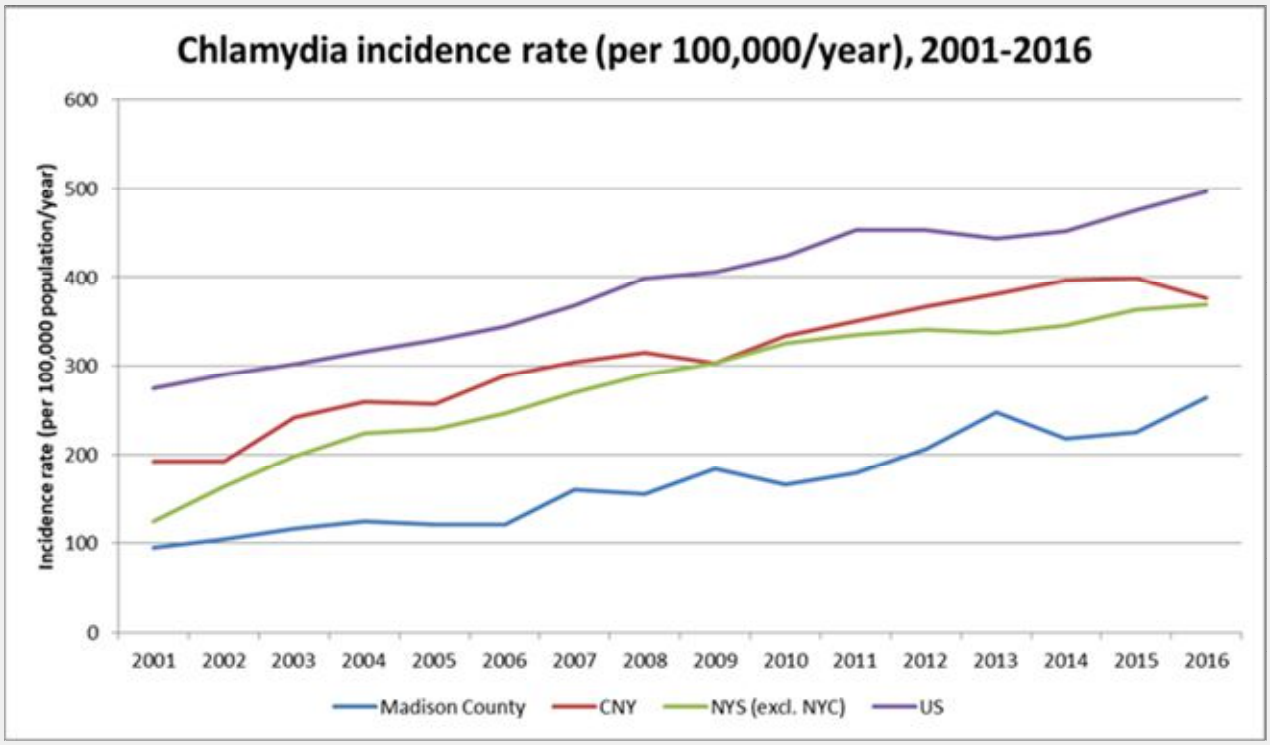


Figure 3. Annual reported Chlamydia rates in the US, New York State, Central New York region, and Madison County, 2001 – 2016. CNY counties: Cayuga, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence, Tompkins Source: Source: NYSDOH. Health Commerce System. Communicable Disease Electronic Surveillance System (CDESS); CDC. Sexually Transmitted Diseases Surveillance.

Madison County's incidence rate by sex and age is consistent with both state and national data. Figure 4 illustrates that the primary occurrence of Madison County lab-confirmed chlamydia cases is in females aged 20-24 years. While these data support prevention efforts targeting young females, it is important to remember that the CDC recommends annual testing of young women. Madison County Department of Health does not currently collect testing information from area providers, and is therefore unable to report data on the number of tests performed. A potential bias in the data may exist due to an under-testing and reporting of males and older females. In addition, there is insufficient data for Madison County that would allow us to further categorize and/or compare Chlamydia rates by ethnic groups, such as American Indian, Hispanic, or African American women to compare with state and national trends.

Information on why a patient gets tested, or reason for exam, is reported to the County Health Department. Prior to 2016, the majority of cases were classified as symptomatic. In 2016, we saw for the first time that the primary reason for testing was "routine screening." This change suggests that primary care providers are screening more frequently, on the initial visit or at more frequent recommended visits for higher risk individuals. Although not measured, we assume that outreach and educational efforts are reaching the target audiences of providers and young women, affecting the increase in routine testing. There was also a change in the recording method used by the County Health Department that can attribute for the decrease in the other and unknown categories. Beginning in 2016, the county health department updated the disease investigation questionnaire to clarify reason for visit. Additional follow-up with the provider's office is now completed if there is a question.

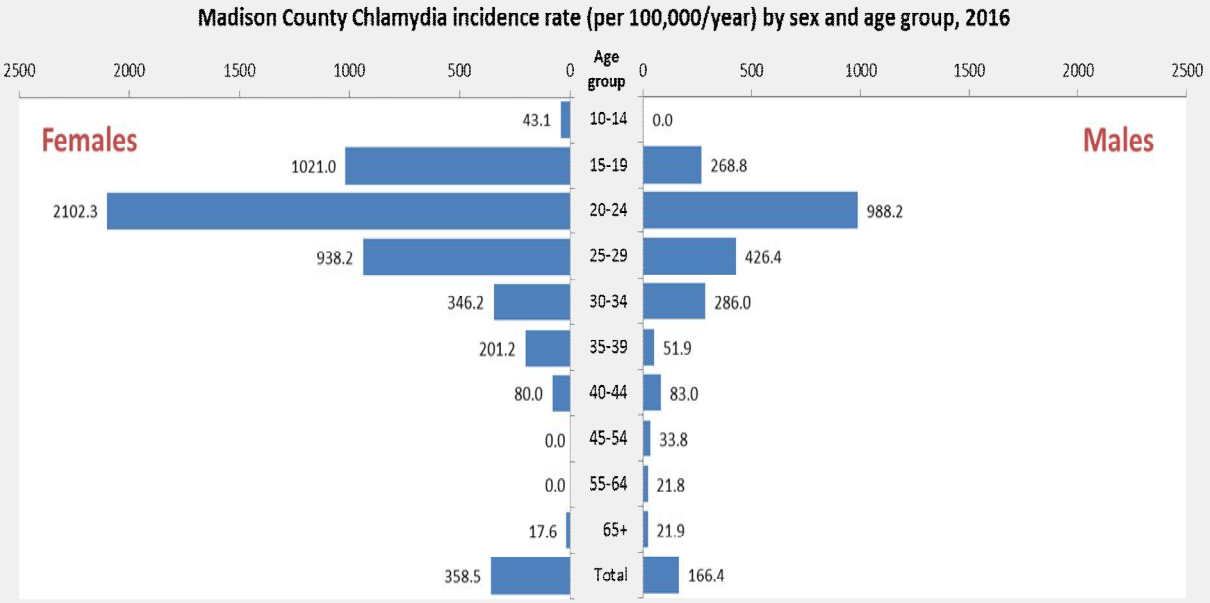


Figure 4. Rates of reported Chlamydia cases by age group and sex, Madison County, 2016.
Source: NYSDOH. Health Commerce System. Communicable Disease Electronic Surveillance System (CDESS); US Census Bureau. 2010 Decennial Census.

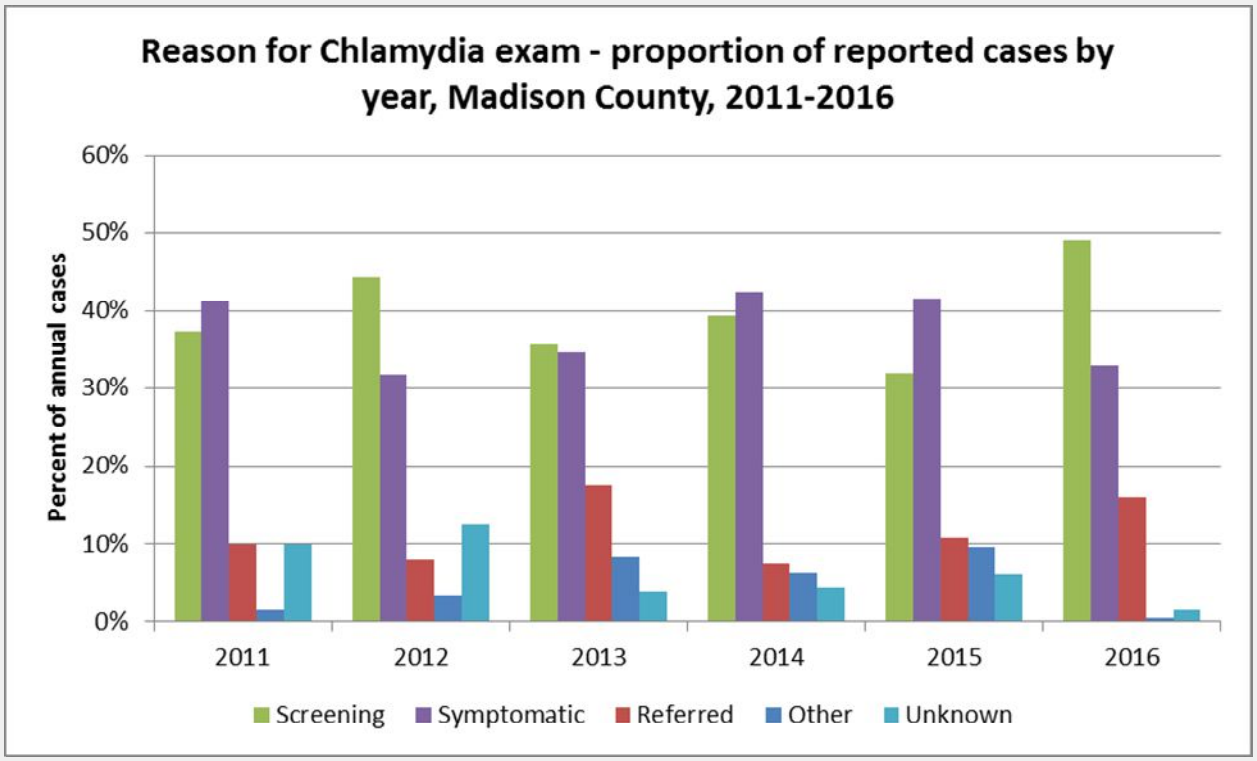


Figure 5. The proportion of annually-reported Chlamydia cases by reason for exam, Madison County, 2011 – 2016.

Source: NYSDOH. Health Commerce System. Communicable Disease Electronic Surveillance System (CDESS).

Testing in primary care offices has recently increased. The CDC reported that nationally, in 2015, over 75% of the lab-confirmed Chlamydia cases were reported by venues outside of a STI clinic. Previously, the majority of testing was completed in a clinic or college setting. This could also suggest that primary care doctors are offering routine STI testing in accordance with CDC guidelines. In more rural areas, this could indicate limited access to testing facilities and clinics (CDC, 2015c).

Madison County residents have access to testing in primary care offices, hospitals, urgent cares, college health centers, and clinics. Chlamydia cases in Madison County from 2013 to 2016 were primarily reported to the health department by primary care doctors. In figure 6, miscellaneous primary medical doctors (PMDs) includes all non-clinic offices including gynecologists.

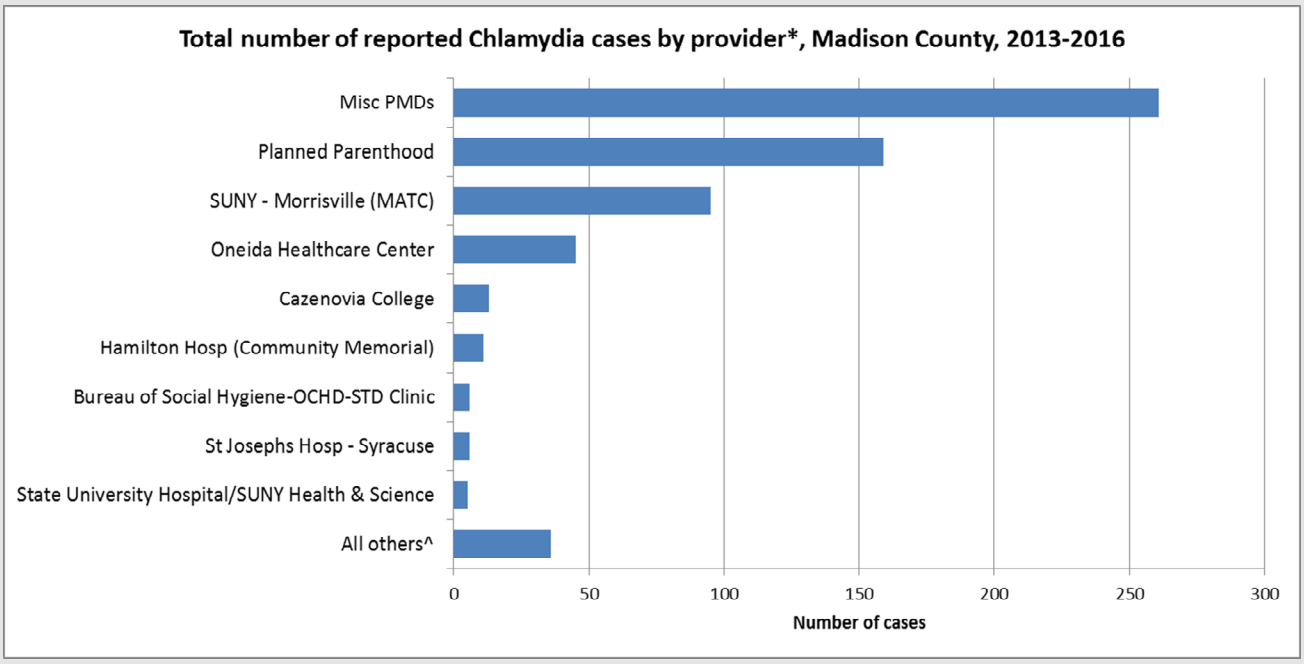


Figure 6. Number of reported Chlamydia cases by provider, Madison County, 2013 – 2016.

*When provider specified (91% of all reported cases).

^23 providers, average 1.7 reports/provider. Source: NYSDOH. Health Commerce System. Communicable Disease Electronic Surveillance System (CDESS).

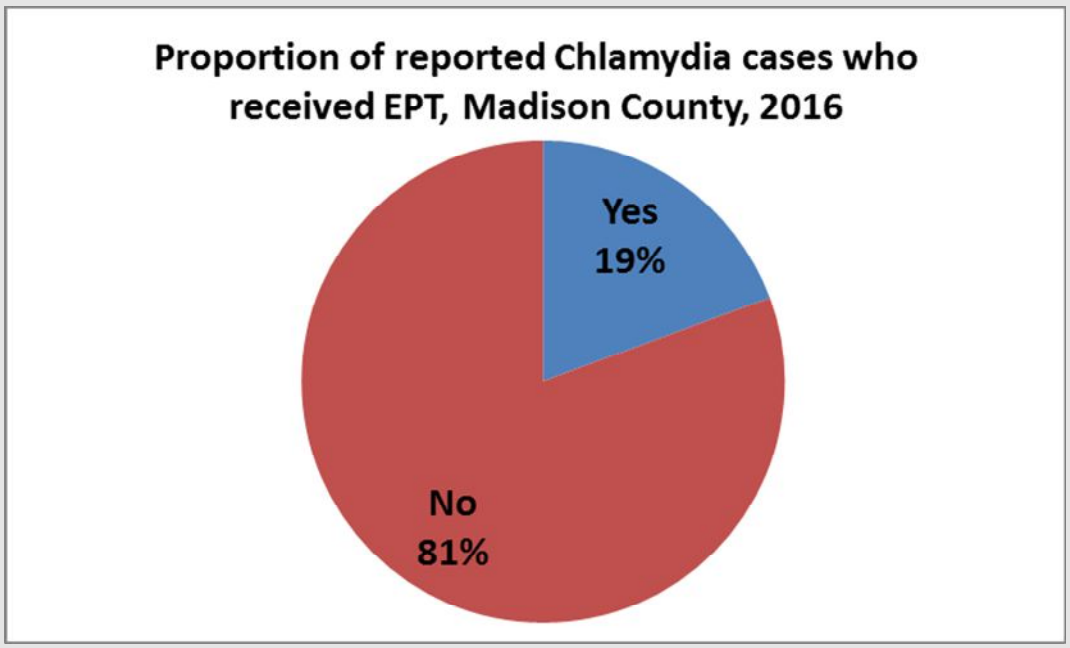


Figure 7. The proportion of total 2016 reported Chlamydia cases (n=196) who received EPT, Madison County. Source: NYSDOH. Health Commerce System. Communicable Disease Electronic Surveillance System (CDESS).

Association of being given EPT at first Chlamydia diagnosis and having a repeat diagnosis in the future, Madison County, 2016					
	Repeat diagnosis in the future				
EPT given		Yes	No		
	Yes	0	32	32	
	No	10	135	145	
		10	167	177	Odds ratio: 0.0

Figure 8. Likelihood of having a repeat Chlamydia diagnosis and being provided Expedited Partner Therapy (EPT) at first diagnosis, among reported Chlamydia cases who were not repeat diagnoses (n=177), Madison County, 2016.Source: NYSDOH. Health Commerce System. Communicable Disease Electronic Surveillance System (CDESS).

Madison County contracts with Planned Parenthood Mohawk Hudson to provide STI screening and treatment to any Madison County resident. Patients are also able to get tested at their primary care physician, college, clinics, either area hospital or an OB/GYN. Madison County Department of Health's Disease Specialist tracks, monitors, and reports all laboratory confirmed cases of chlamydia in accordance with NYS communicable disease reporting requirements. Madison County also facilitates updates and programing for area providers as available. In 2016 Madison County Department of Health staff met with all local OB/GYNs and Primary Care offices to answer questions on treatment recommendations and education on expedited partner therapy (EPT).

Many area providers reported concerns and reluctance to utilizing EPT. The most common concern was providing medication to a non-patient. There are certain legal protections and safety information available for health care providers on the NYS Department of Health's (NYSDOH) website. Providers should also be aware that there are some special populations for whom EPT is not recommended, for example people diagnosed with more than one STI.

The use of EPT in Madison County has been implemented, however only 19% of patients receive it. It is unclear if there is a direct relationship to receiving EPT and reinfection in Madison County. Figure 8 illustrates data collected in 2016 that compares the likelihood of chlamydia reinfection if given EPT. This data suggests that EPT reduces the likelihood of reinfection. There is no clear information on patient awareness of EPT availability , or any demographic data on the partners treated.

Information available at the county level is limited due to sample size and collection methods. Demographic data of patient's age, address, and gender are consistently captured. Madison County lacks information on patient payer source, ethnicity, or risk factors including social determinants of health, and partner information. Most prevention programs are targeted and utilize these specific breakdowns to drive public awareness campaigns and provider outreach efforts.

Current Strategies & Initiatives

STIs have been a focus for Federal, State, and Local health departments for more than 15 years. STIs were one of 22 priority areas for Healthy People 2000 (ODPHP, 2017) Since that time all levels of government have used a multisystem approach. The existing framework consists of surveillance, treatment, education, risk reduction, and legislation.

Surveillance

Surveillance activities are designed to assess the STI burden. They identify vulnerable population groups, provide data to advocate for resources and interventions, and monitor the impact of those interventions. These activities are completed on world, national, state and local levels. At any level, surveillance depends on routine recording and reporting of patients seen and treated at healthcare facilities.

The World Health Organization (WHO) focuses surveillance efforts on improving quality and completeness of STI data at a country level with training, development of guidelines, strengthening research and laboratory capacity, and promoting better utilization of data for monitoring and evaluating intervention activities (WHO, 2017). Similarly the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services (HHS) complete surveillance measures on a national level. Both organizations provide training and best practice guidelines, report surveillance data, and promote the use of data to drive intervention activities. The CDC and HHS have both provided funding and incentives for surveillance initiatives. The use of electronic health records (EHR) and central laboratory reporting have both been used to improve data reporting.

State and local surveillance efforts include utilizing EHRs and central laboratory reporting for collecting data. EHRs have enabled providers to upload data to an information exchange where it can be accessed for more detailed and standardized reporting. Central laboratory reporting automatically sends any positive labs directly to the NYSDOH, as required. Madison County works with area providers and the NYS Partner Notification Program to ensure CDC treatment guidelines are followed and partners are notified and treated. The county reports surveillance information on a regular basis to the Disease Surveillance Committee to discuss trends and possible interventions.

Treatment

Treatment of the infected person and all sexual partners within the last six months is considered the most effective way to prevent transmission (CDC, 2017a). Treating pregnant women has been found to prevent transmission through the birthing process. Treatment is considered complete and patients are free from infection after taking the prescribed medication and abstaining from sexual contact for seven days. Reinfection may occur at any time when exposed to the bacteria; there is no known immunity response or available vaccination. Behavioral changes and safer sex practices can reduce a person's exposure risk. The only way to prevent exposure is abstinence. After successful treatment, retesting is recommended in three months. There are alternate treatments and special considerations available on the CDC's website (CDC, 2017a).

Education

Schools are encouraged to incorporate age-appropriate sexual health education for grades K-12, however evidence based programs are not mandated. Sexual Health is not a separate course, but typically involves the inclusion of sexual health education topics as part of the state-required comprehensive health education class. In addition to factual knowledge, health instruction also includes teaching students how to make healthy life choices through values exploration, goal setting, and communication with family. Lessons in self-management, relationship management, stress management, communication, decision making, and advocacy skills address critical components of health and sex education. Public School Districts in New York State are able to choose which grade levels receive sex education. Amish, tribal, and private schools are not required to follow New York State regulations. When incorporated, age appropriate information can be included at all levels of health education (NYS Department of Education, 2011).

There have been numerous national campaigns to promote awareness and to encourage people to receive testing. *GYT: Get Yourself Tested* is one of the more recognizable campaigns. It is the result of a partnership with the American College Health Association, Kaiser Family Foundation, National Coalition of STD Directors, MTV, and Planned Parenthood Federation of America with the CDC providing consultation. Posters, flyers, buttons, and stickers are available for free from the GYT website (CDC, 2017b).

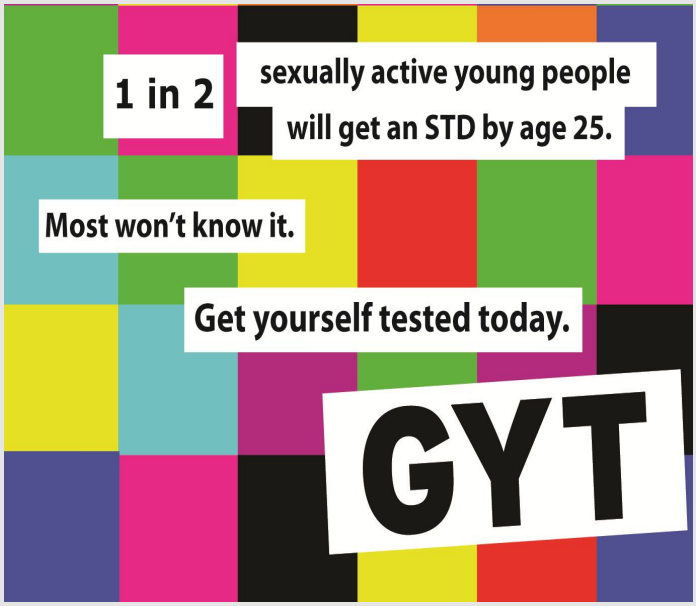
Data suggest that teens are waiting longer to have sexual intercourse. The Madison County 2014 Teen Assessment Project (TAP) survey reported that about 75% of teens, in grades 7-12, reported not having intercourse, and 12% of those who have had intercourse reported always using condoms. In 2010, 69% of 7th –12th grade teens had never had intercourse, and 14% always used condoms (Madison County Youth Bureau, 2015). The TAP survey did not specifically ask about sexual education courses or awareness campaigns, but the data indicate that the targeted age group is responding in some way to prevention efforts.

Best Practice Highlight (Spokane, WA)

The Spokane Regional Health District (SRHD) in Washington State identified that the increase of STIs in their community was causing a burden. The SRHD began by surveying their area providers and found that about 40% were not following the screening guidelines. In response the SRHD conducted an assessment of area providers on their screening practices and asked if they would be interested in serving on a coalition to address the issues identified. The coalition met and developed a peer to peer approach to influence other clinicians in the community. The coalition designed a tool kit and performed face to face detailing. Once the initial detailing was complete feedback was positive. Later a survey determined that 31% of providers were not screening within compliance. The coalition meets quarterly and continues to address current issues. (NACCHO Model Practices, 2011)

Risk Reduction

Community based organizations, primary care providers, and other advocacy groups across the country all promote reducing risk by getting tested regularly and preventing partner exposure. New York State supports an initiative of the New York State Department of Health's AIDS Institute called the New York State Condom Program (NYSDOH, 2014). The program promotes prevention of STIs through increasing the availability of condoms. The program offers eligible organizations free male and female condoms to distribute at no cost. The program encourages community partners to define strategies for distribution, promote safer sex, and sexual health. Not-for-profits, some Health Care Facilities, and government agencies are eligible to apply for the program through the New York State Department of Health's website: https://www.health.ny.gov/diseases/aids/consumers/condoms/nyscondom.htm (NYSDOH, 2017).



Legislation

New York State Public Health Law section 2312 and section 23.4 allow health care providers to prescribe certain antibiotics to the sexual partner(s) of a patient who has tested positive with chlamydia. This program is referred to as Expedited Partner Therapy (EPT) and is exempt from the e-prescribing mandate. It has been found that treating the sex partners of people testing positive for chlamydia with EPT decreases the rate of transmission and reinfection (NYSDOH, 2017b).

The New York State Senate has a bill pending (SB 905) which mandates that medically accurate and age-appropriate sex education is taught in grades one through twelve in all public schools. Also pending SB 1889 would establish an age-appropriate sex education grant program though the State Department of Health. Title 8 section 135.2 currently requires AIDS education and allows parents to opt-out on behalf of their children. If passed, these laws would require schools across New York State to offer age appropriate sex education in grades K-12 (National Conference of State Legislatures, 2016).

Strategies & Recommendations

Overarching Goal:

Reduce the rate of Chlamydia infections reported in Madison County by 5%

Baseline: 266.8
Target: 253.4
Target date: January 2020

Madison County Department of Health is committed to addressing the growing Chlamydia rates and has set a goal to reduce them in the county by 5%. In order to reduce the chlamydia rates, Madison County recommends targeting key groups: providers, patients, partners, and the public. The recommendations outlined in figure 9 are the result of local, state, and national data review and recommendations from the CDC and New York State Department of Health . The recommendations highlight gaps and provide evidence-based strategies identified through research and analysis. These recommendations will evolve based on input from key stakeholders and should in no way be interpreted as replacements for existing efforts.

Focus Area #1: Testing

Baseline: To be established

Target: Increase the % of people tested by 10%

Target date: To be established

Chlamydia testing is the easiest and most cost effective way to address infection rates. Improvements in laboratory testing procedures have reduced cost and testing is covered by most insurance plans. The sensitivity of the tests has also improved significantly, making detection easier and sampling procedures more patient-friendly (NCQA, 2017). Chlamydia infections are usually asymptomatic, making routine testing the most effective way to limit the spread of infection among sexually active people. As previously reported, only about 30% of cases reported in Madison County were experiencing symptoms. Testing should be offered in accordance with CDC guidelines, or more frequently if a patient reports any additional risk factors.

Focus Area #2:Treatment

Baseline: 19% of patients receive EPT
Target: 25% of patients receive EPT
Target date: To be established

Chlamydia is treated with antibiotics. The CDC released updated treatment guidelines in 2015 (CDC, 2017a). The recommended treatment is a single 1g dose of Azithromycin, or a 7-day course of 100 mg dose of Doxycycline taken twice daily. The Azithromycin is preferred due to the ease of taking the single dose and ensures that the patient does not skip any days of medication. The CDC guidelines offer alternative treatments for people with allergies to the recommended medications. Persons treated for Chlamydia should also refrain from sexual contact for 7 days to avoid infecting others, and/or reinfecting themselves .

Treating both the diagnosed patient and his/her partner(s) prevents adverse reproductive health complications, reinfection, and spreading the disease to other persons. While it is ideal to have all partners clinically diagnosed in a providers office, EPT is an effective and efficient way to treat partners.

Focus Area #3: Surveillance

Baseline: To be established

Target: To increase the % of patients with a complete history collected by 10%

Target date: To be established

New York State requires local health departments to collect and report data on all positive chlamydia tests. Healthcare providers are required to report the following to their local health departments: patient name, address, phone number, date of birth, gender, date of diagnosis, reason for exam, site of infection, and treatment given. Madison County makes every attempt to collect as much information as possible from the provider including: race, if EPT was provided, ethnicity, if the patient is pregnant, types of sexual partners (male, female, both), types of symptoms, previous positive test in the past 90 days, and occupation. Gathering an accurate and complete history on each case helps to see the big picture and better focus our targeted efforts.

Focus Area #4:Education and Prevention

Baseline: To be established

Target: Increase the percent of schools with an evidence-based sexual health education program by 10%

Target date: To be established

Sexual abstinence is the only way to prevent STIs; however, there are ways to reduce the risks of transmitting them among sexually active people. STI programs across the U.S. conduct public health activities aimed to: educate on safer sex behaviors; prevent the spread of STIs through counseling and treatment; and provide health services to partners of people infected with STIs. Madison County Department of Health staff meet with school nurses and health teachers annually to provide them with the most up-to-date and accurate information on STI trends and treatments to support the current sexual health education. In addition, New York State Disease Intervention Specialists work closely with college health services and high school nurses to conduct partner notifications when cases are found in school populations.

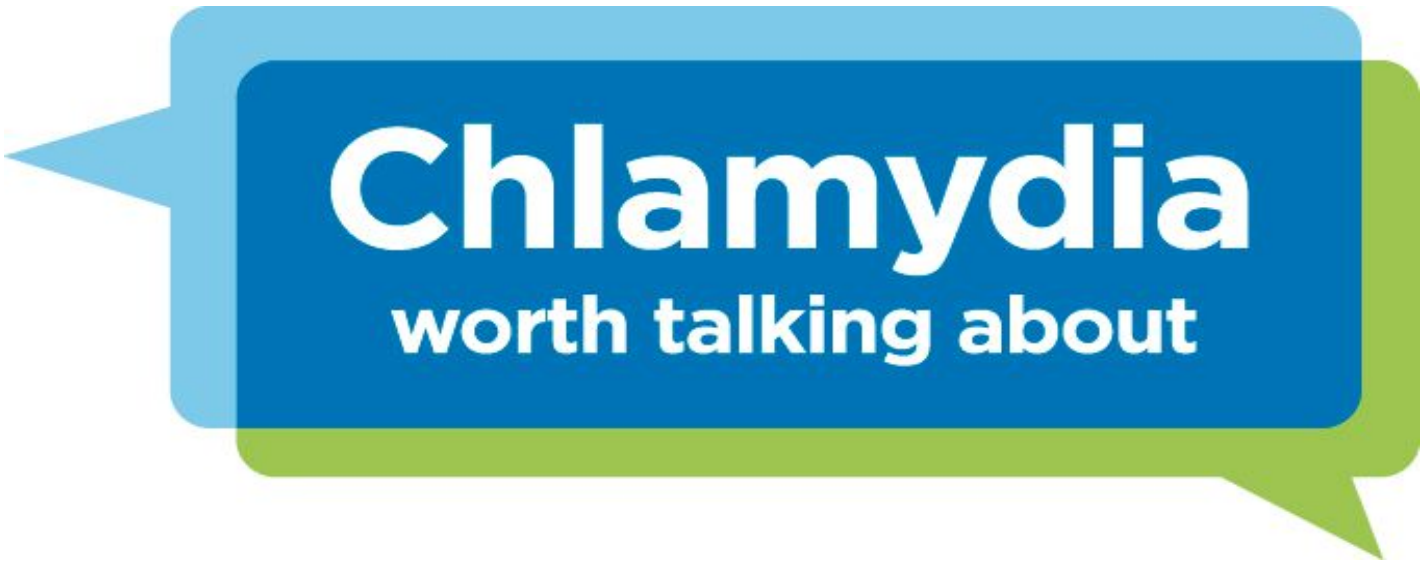


Figure 9

Madison County Recommendations

	Provider
Testing	Assess the following determinates for availability and access in Madison County: • Number of testing sites • Location of testing sites • Hours of operation • Insurance accepted Assess laboratory procedures and timelines to determine if lag time in result reporting impacts patient notification. Engage stakeholders in developing a county-based work plan that addresses: • Access to test site locations • Hours of operation • Testing FAQs
Treatment	Assess the following determinates for availability and access in Madison County: • Number of treatment sites • Location of treatment sites • Hours of operation • Insurance accepted • Services offered including EPT, male services, and in house treatment Assess knowledge of CDC treatment guidelines, detailed patient histories, and EPT.
	All information should be shared using the appropriate age and reading level
Surveillance	Research and identify patient data collection practices of Madison County offices offering STI testing. Standardize information reported by all Madison County offices offering STI testing. Research total testing numbers for Madison County to establish baseline data.
	Create an integrated County Surveillance System
Education and Prevention	Identify and promote trainings related to Chlamydia and other STIs. Launch a detailing campaign for area providers focusing on EPT, CDC Treatment Guidelines, testing guidelines, required reporting, and other issues as identified.

	Patient	Partner	Public
Testing	Engage stakeholders in developing a county based work plan that addresses: • Access to test site locations • Hours of operation • Testing FAQs		
Treatment	Provide all patients with medically effective treatment and receive medically accurate education including but not limited to: • Partner notification • EPT availability • Avoiding reinfection	Assure all partners are treated appropriately through education including: • Health literacy • Partner notification • EPT availability • Avoiding reinfection	Assure correct treatment information is included throughout various media platforms.
	All information should be shared using the appropriate age and reading level		
Surveillance	Develop a system to identify trends and at risk populations in Madison County.	Develop a system to track partner treatment and notification rates.	Make data readily available.
	Create an integrated County Surveillance System		
Education and Prevention	Provide all patients comprehensive education on treating and preventing STIs including partner notification.	Identify and promote evidence based programing available to stake holders such as: • Madison County School Districts • Community Based Organizations • Parents • Colleges Implement a targeted STI awareness campaign focusing on prevention.	

Moving Forward:

Reducing the Chlamydia rates in Madison County will be a multidisciplinary project. The first step in reducing the rates will be to present our findings to the public using the *Chlamydia in Madison County* report. The purpose of this report is to provide a comprehensive description of what Chlamydia rates in Madison County look like, and identify areas that should be addressed.

The Madison County Department of Health will identify key stakeholders in the community and invite them to participate in a county wide coalition. The coalition will be tasked with developing an action plan based on the recommendations outlined in this report.

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