





About This Report

In a year consumed by COVID-19, Monroe County continued to face a health crisis of another kind. Sexually transmitted infections remain a problem.

A report from the New York State Health Department in February 2021 showed that Monroe County reported a 77% increase in cases of gonorrhea in 2020 compared with 2019 – the highest countywide increase in the state.

This was against the backdrop of a 40% increase statewide overall. For context, Erie County was second with a 56% increase and Onondaga was third with a 35% increase.

Among age groups statewide, the highest proportion of diagnoses in 2020 was seen in individuals aged 20-29 (49%), 30-39 (22%) and 15-19 (16%).

The increase in cases of gonorrhea is one example of why sexually transmitted infections (STIs) remain important health problems here and around the world. Sexual Health in Rochester/Monroe County is designed to highlight problems and solutions for STIs in the Rochester region.

This report highlights the shared nature of the problems of STIs locally and suggests solutions for reducing their occurrence. It is written for doctors and health care providers, public health professionals, health educators, parents, and for people who are sexually active and those considering sexual activity – basically anyone interested in the sexual health of the community.

The report provides: (1) patient-centered approaches to taking a sexual history and incorporating this vital information into primary care practice, (2) ways to address the needs of LGBT and men having sex with men (MSM) populations, and (3) suggestions for how clinicians view sexual health that improve community health and reduce stigma.

STIs cost the U.S. health care system approximately \$16 billion a year, according to the Centers for Disease Control and Prevention's HealthyPeople.gov. On the local level, Excellus BlueCross BlueShield, the area's largest health insurer, lists STI prevention counseling among the preventive services provided at no out-of-pocket cost to subscribers. STIs exact more than a financial burden. They can cause loss of productivity, reproductive health problems, affect the fetus, cause cancer and contribute to the transmission of HIV.

ACT Rochester and Trillium Health worked on this report to increase awareness of STIs to provide recommendations to health care providers and payers for reducing the incidence of these largely preventable infections.

The LGBT+ Giving Circle of Rochester Area Community Foundation made this report possible. Our hope is that you find this report meaningful. We also want to send the message of support for organizations and individuals that serve, are inclusive of, or are allied with the lesbian, gay, bisexual and transgender communities to enhance and strengthen our region.

I am grateful for the contributions of my colleagues Robert Biernbaum, D.O.; Monroe County Department of Public Health Commissioner Michael Mendoza, M.D.; Marguerite Urban, M.D. and Alida Merrill. Special thanks to Ann Johnson, Executive Director, ACT Rochester and Andrea DeMeo, President and CEO, Trillium Health for their guidance and their review of this report.

- William M. Valenti, M.D.

Sexual Health in Rochester/Monroe County

Sexually Transmitted Infections Are a Shared Problem with Shared Solutions March 2021





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About Trillium Health

As a Federally Qualified Health Center based in Rochester, NY, Trillium Health's mission is to promote health equity by providing affordable and extraordinary primary and specialty health care to all, including LGBTQ+ communities. For more information, please visit www.trilliumhealth.org.

About ACT Rochester

Launched in 2009, ACT Rochester's purpose is to change the culture of community problem-solving and associated decision-making through the use of credible, independent and timely data. This is accomplished when people LEARN about key issues, CONNECT with others in the community, and ACT to promote change. For more information, please visit www.ACTRochester.org.

*Version 2. Report updated March 26, 2021 to make a clarification.

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Executive Summary

This report summarizes evidence for our community to develop a comprehensive framework to promote sexual health and prevent and treat sexually transmitted infections (STIs). The fundamentals of this framework include having health care providers routinely take a sexual history, improving convenience and capacity of STI screening, enhancing education for prevention and treatment, and developing a view of sex and sexuality that is more affirming and less stigmatizing for the patient.

This report consists of eight sections:

Section 1: Rates of Sexually Transmitted Infections

Section 2: Overview of Sexual Health

Section 3: Understanding Risk in Sexual Behavior

Section 4: Perceived Knowledge and Treatment of HIV

Section 5: Prevention of Other Sexually Transmitted Infections

Section 6: Technology, Stigma and the Public Health Response

Section 7: Ways to Support Sexual Health

Section 8: Conclusions and Recommendation Strategies

Section 1: Rates of Sexually Transmitted Infections

According to 2018 data from the U.S. Centers for Disease Control and Prevention (CDC), 2.4 million cases of syphilis, gonorrhea and chlamydia were reported — the fifth straight record-breaking year in the United States for sexually transmitted infections (STIs; also called sexually transmitted diseases, or STDs).

The situation is similar throughout New York State, including greater Rochester. Monroe County's 77% increase in cases of gonorrhea in 2020 compared with 2019 occurred against the backdrop of increasing STIs across New York State.

For example, in 2019, the New York State Department of Health reported that:

- In 2018, Monroe County had 5,382 cases of chlamydia and 1,888 cases of gonorrhea, among the highest local rates in the state outside New York City.
- Syphilis cases declined statewide in 2017, reversing a 5-year trend; however, syphilis in pregnant women continues to deserve special attention because of the risk of transmission from mother to fetus in utero.
- Monroe County trends follow those in New York State overall, with 55 percent of STIs diagnosed among people younger than age 26.
- The people at highest risk for STIs are young people, non-Hispanic Black individuals, and gay, bisexual and other men who have sex with men (MSM).
- Many cases of syphilis, gonorrhea and chlamydia go undiagnosed and unreported to state or federal health departments. Other highly prevalent STIs, such as human papilloma virus (HPV), genital herpes, and trichomoniasis, are not reported at all.

Experts say the sharp increase in STIs could be reversed with improved funding and access to screening and treatment, a more comprehensive approach to sexual health, and more effective sexual health education.

Increased screening, new and changing transmission patterns, and less condom use account for some of the reported increases. Underfunded STI healthcare settings and programming services for diagnosis and treatment are often cited as contributing factors, according to experts from the National Coalition of STD Directors and CDC. Finally, the COVID-19 pandemic has presented additional challenges on how we conduct our lives – including our sexual encounters – that are difficult to quantify.

STI rates are one indicator of overall community health. This report focused on gonorrhea, syphilis and chlamydia, the STIs that are reported to public health officials.

This region's higher rate of STIs is a call to action. This is an opportunity for clinicians, public health workers, health educators — and parents — to rethink our approach to STIs. Instead of the usual response of addressing one STI episode at a time, there is a need for a comprehensive approach to sexual health that views STIs in terms of primary care. Such a strategy addresses physical and mental health as well as the social determinants of health.

Section 2: Overview of Sexual Health

Definition of Sexual Health

A CDC workgroup defines sexual health in individual and community terms as:

"A state of well-being in relation to sexuality across the life span that involves physical, emotional, mental, social, and spiritual dimensions. Sexual health is an intrinsic element of human health and is based on a positive, equitable, and respectful approach to sexuality, relationships, and reproduction that is free of coercion, fear, discrimination, stigma, shame, and violence.

It includes the ability to understand the benefits, risks, and responsibilities of sexual behavior; the prevention and care of disease and other adverse outcomes; and the possibility of fulfilling sexual relationships. Sexual health is impacted by socioeconomic and cultural contexts—including policies, practices, and services—that support healthy outcomes for individuals, families, and their communities."

CDC Sexual Health Workgroup: https://bit.ly/3rUPnAc

To optimize sexual health, the CDC National Prevention Strategy and Healthy People 2020 recommend increasing access to sexual health services, emphasizing sexual health education, and encouraging screening for STIs, including human immunodeficiency virus (HIV). To be most effective, these activities should encourage healthcare providers to take a patient-centered approach.

Although this new emphasis presents an opportunity to improve sexual health, it also presents a challenge to the healthcare community. The approach to patient care around sexuality and sexual behavior will need to be reframed. To meet this challenge, educational efforts for healthcare providers and patients need to shift in favor of a more comprehensive approach to understanding and promoting sexual health throughout the life span.

The Sexual History

Understanding a patient's sexual history is the gateway to helping the individual achieve good sexual health. The sexual history is a driver of more comprehensive and thorough HIV and STI screening, prevention and treatment, and education about overall sexual health. Providers need to develop strategies for discussions with patients that lead to complete sexual histories.

Four templates for recording sexual histories in various practice settings are discussed below. All of them help the provider and patient overcome hesitation when discussing sexual health:

New York State Department of Health. This framework suggests various scripts to inform patient screening, treatment, prevention, and education as a part of a health care plan. The document emphasizes open-ended questions to put the patient at ease. It starts with asking the patient, "Do you have sex with men only, women only, or both?" https://bit.ly/3lcjscc

Conversation between patient and provider. The patient is a 19-year-old male with a urethral (penis) discharge that started the day before.

Provider: When was the last

time you had sex?

Patient: 4 weeks ago.

NOTE: Provider knows that gonorrhea and chlamydia have 3-5 day incubation periods, so the one-month timeline did not fit

Provider: Was there any other kind of sexual contact?

Patient: No.

Provider: Oral sex? Where someone put your penis in their mouth?

Patient: Well, yes. That

happened.

Provider: When was that?

Patient: 5 days ago.

The National Association of Community Health Centers (NAHC). The algorithm puts the patient at ease and normalizes taking a sexual history across the life span by using a patient-centered, systemwide approach for health centers. Three straightforward questions drive the next steps: (1) Have you been sexually active in the last year? (2) Do you have sex with men, women or both? (3) How many people have you had sex with in the last year? Developed with the National LGBT Health Education Center/ Fenway Health, the algorithm includes a sexual risk-taking assessment. http://bit.ly/lgbt-health-edu

Trillium Health, Rochester (Appendix 1). This flowsheet or checklist is used in a sexual health program that focuses on HIV/ STI prevention and can be adapted to the electronic health record. In this case, the patient completes the form and the provider reviews the form with the patient to discuss their responses.

The American College of Obstetrics and Gynecology (ACOG; Appendix 2). This 2017 recommendation links the sexual history to reproductive and women's health. The guidance asks about sexual practices, including oral, genital and anal sex. The questions include sexual health discussions as a part of contraceptives and family planning. Assuming that all women are heterosexual would miss an important part of the sexual history for women who have sex with women. Therefore, the question about partners is: "Are your partners men, women or both?" When taking a sexual history, it is important to remember that the term "having sex" is a relative term to many people. For example, not every patient will consider oral sex in the same way as they consider other sexual contact. In the example in the sidebar, the patient was eventually screened for gonorrhea and chlamydia, then treated presumptively for both. Both throat and urine specimens were positive for chlamydia.

Take home message: the term "having sex" means different things to different people. More experienced interviewers might want to consider asking, "What body parts do you use for sex."

Sex-positive Approach – Key Points

The term "sex-positive":

- Has been used since the 1920s.
- Affirms that sex can be a healthy part of human life that should not be shamed or stigmatized.
- Normalizes all consensual sexual activity.
- Affirms the choices others make regarding sex, even if those choices are different from the ones we would make.

The Sex-positive Approach

The sex-positive or sex-affirmative approach is a social and philosophical movement that regards all consensual sexual activities as fundamentally healthy and pleasurable. Sexpositive encourages sexual pleasure and experimentation. This approach advocates for comprehensive, accurate sex education and safer sex as part of the experience. The movement generally makes no moral distinctions among types of sexual activities, regarding these choices as matters of personal preference. Consensual is the operative word here.

International Society of Sexual Medicine: http://bit.ly/sex_positive

For the provider, sex-positive means taking a clinical approach to sex, sexuality and sexual behaviors of patients. A comprehensive sexual history informs the screening, prevention and educational efforts for patients. This recognizes that a patient's sexual behaviors may not align with a provider's cultural and religious values. In other situations, patients may have experienced past trauma. Such trauma can be difficult to discuss and create anxiety when discussing sexual situations.

Sexual Orientation and Gender Identity

In recent years, there has been movement beyond the traditional male/female binary approach to gender. This contemporary approach uses both sexual orientation and gender identity to more accurately define the human sexual experience. Some helpful definitions are:

Gender binary: the classification of gender, whether by social system or cultural belief, into two distinct, opposite, and disconnected forms of masculine and feminine.

Sexual orientation: a person's enduring physical, romantic, and/or emotional attraction to another person (for example: straight, gay, lesbian, bisexual).

LGBT: the lesbian, gay, bisexual, and transgender communities. The first three letters (LGB) refer to sexual orientation. The 'T' refers to gender identity.

Cisgender: someone whose gender identity and expression are the same as the sex they were assigned at birth.

Transgender: someone whose gender identity and/or expression are different from the sex they were assigned at birth. Transgender people may be straight, lesbian, gay, or bisexual. For example, a person who transitions from male to female and is attracted solely to men would typically identify as a straight woman.

Non-binary: someone who does not define their gender based on the binaries of male and female.

Section 3: Understanding Risk in Sexual Behavior

Youth Behavior in Monroe County

The Youth Risk Behavior Survey (YRBS), designed and validated by the U.S. Centers for Disease Control and Prevention (CDC), has been conducted nationally and in several states and localities since 1990. During the 2018-2019 school year, the Monroe County Department of Public Health (MCDPH) conducted the YRBS in 16 public high schools. All surveys were administered through an online platform with a representative sample of 1,828 surveys selected for the report. Some highlights:

- 31% of respondents have engaged in sexual intercourse.
- 21% engaged in sexual intercourse in the past three months (sexually active).
- 6% of sexually active females reported using long-acting reverse contraception (LARC; an IUD or implant) and their partner used a condom the most recent time they had sex.
- 47% of sexually active females reported their partner used a condom the most recent time they had sex.
- 61% of sexually active males reported they used a condom the most recent time they had sex. (The questions did not ask gender of the partner).
- Between 2007 and 2019, there was a decrease in the proportion of sexually active students who reported using a condom.

Perceived vs. Real Risk: Ending the HIV Epidemic

Regardless of age or other demographics, people tend to underestimate - and sometimes even deny - their risk for STIs in general and HIV specifically. This has been shown in younger people and adults older than 50 who fail to appreciate their risk for either STIs or HIV. The concepts of infection transmission are not well understood by many, which could lead to the disconnect in perceived vs. real risk of HIV or STIs overall.

Pre-exposure Prophylaxis (PrEP) is a biomedical intervention to reduce the risk of HIV infection, currently one pill a day. While those most at risk have heard of PrEP for high-risk persons, they tend to underestimate their true risk for HIV. Realigning perceived risk with real risk is crucial to reach people who need this biomedical intervention to prevent HIV.

Realigning perceived risk with real risk is a major effort of New York State's End the HIV Epidemic initiative (EtE), started in 2014 by Gov. Andrew Cuomo. The three-pronged, comprehensive EtE strategy: (1) identifies persons with HIV who remain undiagnosed through increased HIV testing; (2) links and retains persons diagnosed with HIV in health care to maximize virus suppression so they remain healthy and prevent further HIV transmission sexually; and (3) facilitates access to PrEP for high-risk persons to keep them HIV negative.

Under this effort, the New York State Department of Health reported a decrease in new infections in the year 2018. That year, the state reported a total number of two thousand and nineteen (N=2,019) new HIV infections. This is a drop of 11% from the year 2017, and a decrease of 28% since the year 2014. (New York: http://bit.ly/ny_end_epidemic, U.S, http://bit.ly/UN_2030). However, new HIV infections vary by region, with the greatest decreases seen in the New York City region.

In the first nine months of 2020, Monroe County recorded as many new HIV diagnoses (N=55) as in any of the previous four years, following an upward trend that began in mid-2019. In the same 9-month period of 2020, there were 10 HIV diagnoses among people who inject intravenous drugs.

Historically, there were 10 diagnoses among injection drug users in all of 2019, and the average for 2013-2018 was less than 4 new HIV infections per year among injection drug users.

Section 4: Perceived Knowledge and Treatment of HIV

A 2019 study, "Owning HIV: Young Adults and the Fight Ahead," by the Prevention Access Campaign, a global force behind End the HIV Epidemic, showed low levels of knowledge of HIV transmission along with high-risk sexual behaviors among 1592 members of Generation Z (ages 18-22) and Millennials (ages 23-36).

For all the scientific advances, data from Gen Z and Millennials indicate there still is work to be done on ending stigma of the disease and fear of contagion:

- Despite there being no risk of HIV transmission through casual contact, more than 28% of HIVnegative Millennials say they have avoided hugging, talking to or being friends with someone who is HIV-positive.
- 30% said they would prefer not to interact socially with someone who has HIV.
- 39% of HIV-positive Gen Zs and 28% of HIV-positive Millennials reported having trouble with forming new romantic or sexual relationships due to that status.
- Among those who are HIV-positive, 84% of Gen Zs and 65% of Millennials said they abstain from sex due to their status.
- 54% of HIV-negative respondents said they don't use any barrier protection during sex.
- 90% of respondents living with HIV agree that someone may avoid sharing their status because of the fear of losing friends or family, or experiencing mental, physical or emotional abuse.

Status-neutral HIV Treatment and Prevention

The status-neutral concept of interrupting HIV transmission attempts to unify HIV testing, prevention and treatment. Status-neutral starts with HIV testing. Depending on the patient's HIV status, HIV-positive people are referred to HIV treatment with the goal of achieving an undetectable viral load to prevent sexual transmission of HIV. HIV-negative people at high risk for HIV are prescribed pre-exposure prophylaxis (PrEP).

Pre-exposure HIV Prophylaxis (PrEP)

Using condoms every time, reducing the number of partners, knowing the HIV status of the partner and regular HIV testing are behavioral interventions that remain central to reducing HIV risk.

In 2012, a biomedical intervention for HIV prevention was approved in the U.S. The once-a-day pill to prevent HIV infection now is available globally, with a few exceptions, and has advanced the field of HIV prevention science. As of early 2020, there are two FDA-approved PrEP regimens, each containing two antiretroviral medications combined into one pill. When taken as directed, these regimens have been shown to decrease the risk of new infection up to 99%. Among people who inject drugs, PrEP reduces the risk of HIV by at least 74% when taken daily. PrEP is much less effective if it is not taken consistently.

Another advance in prevention science is "PrEP on Demand" or the 2-1-1 option. Studies show that this option is equally effective to daily PrEP. This involves taking two pills prior to a sexual encounter followed by one pill a day for two days after the encounter. This dosing schedule is not yet approved by the U.S. FDA. However, it is a prevention option for those who are able to plan their sexual encounters more precisely. It is not an option for people who have sex frequently or are more spontaneous with their sexual activities. A long-acting, monthly injection for PrEP is expected in 2021-22, and other long term prevention options are being studied.

PrEP persistence refers to sustained PrEP use over time (e.g. months, years), usually measured by the patient's pharmacy refill schedules. The related measure of PrEP adherence refers to an individual taking the medication as directed. In a U.S. study of pharmacy records, researchers reported: https://bit.ly/3czuLY7

- Only 29% of people ages 18 to 25 stayed on PrEP throughout two years. Younger individuals may
 be more likely to experience challenges in a number of areas, including cost, fear of disclosure due
 to use of parental insurance, limited experience with the healthcare system, and financial barriers.
- Median persistence was 14.5 months for people with commercial health insurance and 7.6 months for people with Medicaid. Men had higher persistence than women, in both groups. Persistence was higher for older persons (20.5 months for those aged 45-54).
- In the Medicaid cohort, White users had greater persistence than Black users. Risk behavior data
 were not available for this pharmacy refill database undoubtedly, some individuals who stopped
 PrEP did so because of a change in risk behavior. In any case, these results give one look at
 persistence of PrEP.

Among Black men who have sex with men (MSM):

- 79 of the 125 individuals (63%) discontinued PrEP at least once during study follow-up;
- 54 of the 79 (68%) individuals who discontinued PrEP use subsequently restarted PrEP;
- 27 of the 125 individuals (22%) discontinued PrEP use 2 or more times; and
- The median time to first PrEP discontinuation was 219 days.

Post-exposure HIV Prophylaxis (PEP)

PEP is available for use after a high-risk sexual exposure to HIV – usually anal sex without a condom or condom failure with someone of unknown HIV status. The 30-day regimen of 3 anti-HIV drugs is thought to be most effective within 72 hours of exposure, so prompt access to drugs is critical. PEP is a gateway to PrEP, and 50% or more of patients make the transition to PrEP at the end of the 30-day PEP course of therapy. Access to PEP locally is through hospital emergency departments or Trillium Health's 24/7 Pharmacy PEPline (585-244-9000 or 800.923.9394).

HIV Treatment as Prevention (TasP)

Since 2016, a number of research studies have shown no HIV transmission from a virally suppressed HIV-positive partner to an HIV-negative partner taking PrEP. People with HIV who take HIV (antiretroviral) drugs as prescribed and achieve and maintain an undetectable viral load (the amount of HIV in a person's blood) have, effectively, no risk of transmitting HIV through sex.

Section 5: Prevention of Other Sexually Transmitted Infections

Since PrEP does not protect against other STIs, a comprehensive program that includes condom use is key to prevention for a range of infections. Prevention programs should reflect the diversity of the people we are trying to reach and work best if staff includes peers, who are people with the same lived experience as the patient. The standard PrEP follow-up is every 3-6 months for STI screening, including syphilis and HIV testing. The visit also includes a sexual history review, education as needed, and insurance review that help avoid treatment interruptions and ensure PrEP persistence.

These visits have the added benefit of the patient "checking in" with prevention staff to discuss continued prevention measures designed to keep the patient HIV-negative in addition to reducing the risk for other STIs.

Human Papillomavirus Vaccine (HPV)

HPV causes nearly all cervical cancers and some cancers of the vagina, vulva, penis, anus, and throat. Cervical cancer screening and HPV vaccination can prevent many of these cancers.

U.S. public health experts believe that nearly 100% of HPV related cancers are preventable with vaccine. On average, 34,800 cancers reported annually in the U.S. during 2012-2016 were attributable to HPV. Of these, 32,100 (92%) were attributable to HPV types included in current vaccine that targets nine HPV types.

Since HPV vaccines were first introduced in the U.S. in 2006, there have been changes in the range of protection they offer and the dosing regimen. The vaccines originally were recommended only for girls and young women. As the role of males in the spread of HPV has been more widely understood, the recommendation now includes vaccination for boys and young men.

In 2014, the FDA approved Gardasil 9® (9vHPV, Merck), which covers the same four HPV types as the original Gardasil (4vHPV), as well as five additional HPV types. In 2018, Gardasil 9 was approved for use in males and females ages 9 through 45. In 2016, a 2-dose vaccination schedule for boys and girls ages 9-14 was approved. After age 15, a 3-dose schedule is recommended.

There are no recommendations on revaccination with 9vHPV in those previously vaccinated with 4vHPV. Revaccination has been shown to be safe and the decision should be determined individually per current guidance. https://bit.ly/3lk8dOM

Despite the known benefit to individual health, only half of U.S. adolescents in 2018 were up to date on HPV vaccination. In 2017, 69% of New York teens received at least one dose. Other countries, such as Canada and Australia, have had notable success in vaccinating young people. Both countries have experienced substantial decreases in HPV infections in males and females.

Extragenital STI Testing

Extragenital testing refers to three-site STI screening that includes throat and rectal testing in addition to genital screening.

Extragenital STI Testing – men who have sex with men (MSM): Extragenital testing refers to screening of the throat and rectum in addition to the penis. This is especially important in men who have sex with men. The CDC reports significant numbers of cases of chlamydia and gonorrhea will be missed without extragenital testing. In a 2017 survey, CDC reported that in 2,000 MSM screened, 1 in 8 had an extragenital source of either chlamydia or gonorrhea. Others have shown that when limiting STI screening to genitals only, 50% or more of infections will be at other body sites and will be missed.

Extragenital STI Testing – women: The National Survey of Sexual Health and Behavior (NSSHB) is a nationally representative sexual health survey, last published in the United States in 2010. According to NSSHB, more than 20% of women ages 25-39 reported receptive anal intercourse in the last year.

Limited data exist regarding the prevalence of rectal infection with chlamydia or gonorrhea in women who practice receptive anal intercourse. There are a few prevalence studies but no national surveillance data.

Assuming that our female patients do not have anal sex is just that: an assumption – and a missed opportunity. Experience in some communities has added to our understanding of STIs in women who have anal sex. One study in an STI program in Miami showed that only 97 of 3398 (2.9%) of women (median age, 28 years) were screened for rectal chlamydia or gonorrhea. Of the small number of women screened, 27.8% were positive for either one or both organisms. Researchers concluded that rectal screening for chlamydia and gonorrhea should be included in STI prevention strategies, especially in younger women.

More recently, a chlamydia vaccine trial of both injectable and intranasal vaccines showed that the vaccine is safe and well-tolerated. Further studies in larger numbers of patients are underway with results expected during 2021.

Clinical Matters

Specific treatment recommendations for STIs are beyond the scope of this brief report. The CDC's most recent treatment guidelines provide details. https://bit.ly/3t8YIF2

A recent treatment option involves Expedited Partner Therapy (EPT) to make prompt treatment available to sexual partners of people with gonorrhea and chlamydia. Previously, EPT was limited to chlamydia only. Currently, EPT is also available for partners of people with gonorrhea. https://on.ny.gov/3gBitU3

Sexual Health and COVID-19 – Key Points

How can we continue to have a healthy sex life in a COVID-19 era?

At the moment, the CDC recommends social distancing (minimum of 6 feet) as your best defense against COVID-19.

- You are your safest sex partner. Self-pleasure (masturbation) is a great option and is a sure way to prevent the spread of COVID-19.
- Avoid sex with anyone outside of your "bubble."
- If you have sex with anyone outside of your bubble, have as few partners as possible.
- Talk with your partner(s) and create a game plan on how you can limit your risk for COVID-19.
- When available to you, take the COVID-19 vaccine.
- If you are exposed to COVID-19, get tested.

National Coalition of STD Directors: https://bit.lv/30v0Jie

Section 6: Technology, Stigma and the Public Health Response

Regulatory Framework

Every state allows minors to consent to STI testing and care without parental approval. A number of states set an age threshold for the right to consent without parental involvement. In these states, the minimum age ranges from 12 to 14 years of age.

As of 2019, New York is one of 31 states allowing minors also to consent to HIV testing and treatment, including PrEP, without parental approval. In New York, the age of consent is 13. For details: https://on.ny.gov/3vfgfNq and https://on.ny.gov/3vfgfNq and https://on.ny.gov/3vfgfNq and https://on.ny.gov/3tcV9h3

Early in the HIV epidemic, the convergence of sexually transmitted disease, gay men, injection drug users, and fear of contagion resulted in stigma of people with HIV. Fear of the disease led many states to pass laws that established criminal penalties for failing to disclose infection, for exposing others to HIV, and for transmitting HIV intentionally or unintentionally. In many cases, these laws apply regardless of protective measures the HIV-positive person may take.

When many of these laws were passed, the routes of HIV transmission and prevention science were not as well understood as they are today. In some cases, these laws reflect assumptions that are not supported by the science. For example, some state laws criminalize biting or spitting by HIV-positive persons even though saliva contact is not generally considered a transmission risk.

These laws are specific to HIV, and the same standard is not applied to other infections such as hepatitis B and C, which also can be transmitted via sexual activity.

New York Public Health Law requires physicians, health care facilities, and clinical laboratories to report certain communicable diseases – including some STIs and HIV – to public health authorities. Prior to 1998, HIV was not reportable because of concerns around privacy and stigma.

Molecular surveillance for HIV is a global public health strategy that has been used in New York State since 2017. The method takes time-honored public health disease control efforts to a new level by using genetic information (gene sequencing) of HIV in individual patients to identify clusters of HIV spread. The assumption is that faster identification of clusters leads to quicker intervention, including HIV testing in social networks, linkages to treatment and prevention.

Section 7: Ways to Support Sexual Health

The COVID-19 pandemic limited facility-based services and in-person meetings between providers and patients. Nevertheless, there are ways for providers, educators and others in the community to promote sexual health for adults and youth.

One way is for clinicians to follow CDC guidelines on treatment for symptomatic patients and their partners even when a face-to-face evaluation is not feasible.

Whether in a virtual visit or in-person visit, clinicians can conduct a complete sexual health history. Clinicians can assess for risk of STIs. By asking about the number of partners, type of sex (i.e., vaginal, anal, oral), sex of partners, drugs used, and route of drug ingestion, clinicians can determine whether or which type of lab test is appropriate for someone at risk.

An advisory from the New York State Department of Health offers ways for providers and community-based organizations to support sexual health and prevent STIs. Information is at: https://on.ny.gov/3l2tVH7

For providers:

- Conduct a complete sexual health history, risk, and drug use assessment for every patient. Ask about specific behaviors, such as the number of partners, type of sex (i.e., vaginal, anal, oral), sex of partners, drugs used, and route of drug ingestion, to help guide laboratory testing.
- Screen for STIs and HIV in all sexually active people, with frequency based on risk. Treat promptly and/or link to care.
- Test at the anatomic sites of exposure.
- Encourage patients to refer their sex or needle-sharing partners to medical care for STI screening and treatment, including HIV testing.
- Offer pre-exposure HIV prophylaxis (PrEP) and Post-Exposure Prophylaxis (PEP) as indicated.
- Collaborate with state and county public health personnel on partner notification efforts.
- Refer consenting patients to community-based organizations for support services as needed.
- Report all suspected and confirmed STI cases promptly to local county health department.
- Ensure your employees and colleagues have access to current information and tools to promote health equity. https://bit.ly/3etASzA

For community-based organizations:

- Partner with providers on support services.
- Implement targeted patient/client recruitment: prioritize agency services to identify individuals
 who do not access healthcare services or who may not otherwise have access to HIV and STI
 testing in clinical settings. These persons may benefit most from HIV and STI testing services in
 non-clinical settings.
- Conduct venue-based and/or mobile HIV/STI testing activities appropriate to the needs of your community.
- Provide harm-reduction services, such as access to clean syringes and support services for people who inject drugs.
- Provide evidence-based prevention activities that are culturally relevant.
- Promote healthy behaviors by making condoms available at no cost and increase access to condoms in ways that reduce embarrassment or discomfort.
- Work with existing coordinating and community planning bodies such as New York State and the HIV epidemic regional steering committees.

A comprehensive approach to sexual health is vital to the overall health of teens and young adults. Here are ways to promote sexual well-being in the younger generation:

- Promote healthy relationship skills to prevent adolescent relationship abuse and sexual violence.
- Increase knowledge of and access to contraception and other sexual health services through high-quality, accessible, nonjudgmental, developmentally appropriate and youth-friendly health services.
- Reduce the rate of unintended teen pregnancy by encouraging the implementation of comprehensive evidence-based adolescent pregnancy prevention programming.

Sexually Transmitted Infections: Adopting a Sexual Health Paradigm

Our experience in Rochester/Monroe County is aligned with the March 24, 2021 report "Sexually Transmitted Infections: Adopting a Sexual Health Paradigm."

Issued by the National Academies of Sciences, Engineering and Medicine (NASEM), their report parallels the framework presented in our report and acknowledges that sexual health is an essential component of overall health.

The 12-chapter report addresses the following key themes:

- A need to shift to a sexual health paradigm to diffuse stigma and shame.
 We need a greater focus on men's sexual health, including men who have sex with men, to shift the burden from women and children.
- Broader ownership and accountability in responding to STIs. Currently, the focus is too narrowly vested in public health settings. One new area calls for better support for parents/guardians to improve adolescent sexual health, and encourage sexual history taking.
- Infrastructure issues. COVID-19 has exposed weaknesses in public health preparedness, infrastructure, workforce deployment and surge capacity. Accordingly, bolster existing systems and programs with enhanced Federal leadership and support, including modernized surveillance, timeliness of treatment guidelines, enhanced funding, and workforce expansion.
- **Embrace innovation and policy changes.** We need to close gaps in STI treatment/ prevention services by overcoming access, confidentiality and cost issues. We need to acknowledge structural racism and other structural inequities, and promote interventions to influence the social determinants of health. We need to adopt innovations to improve access to testing, and harness technology and social media as prevention tools.

Link to download report: <u>Sexually Transmitted Infections: Adopting a Sexual Health Paradigm | The National Academies Press (nap.edu)</u>

Section 8: Conclusion and Recommended Strategies

Public health agencies are beginning to enhance the sexual health framework. The New York State Department of Health's Interagency collaboration has developed a comprehensive plan. What follows are potential strategies based on that plan.

Strategy 1:

- Promote continuity and consistency of evidence-based and medically accurate health education across the state.
 - Encourage communities to assess and identify need for comprehensive gender-neutral and lesbian, gay, bisexual, and transgender (LGBT) inclusive sexual health education.

Strategy 2:

- Reduce the rate of HIV/STD infections
 - o Increase young people's sexual health knowledge, skills and self-confidence.

Strategy 3:

- Reduce the rate of unintended teen pregnancy
 - Encourage as appropriate the implementation of comprehensive evidence-based adolescent pregnancy prevention programming.

Strategy 4:

- > Use school-based health centers for HIV/STI testing and screening.
 - As appropriate, link students to comprehensive sexual health care.

Strategy 5:

- Promote healthy and safe relationships and decision making
 - Promote healthy relationship skills to prevent adolescent relationship abuse and sexual violence. Engage young people, parents and caregivers, and other trusted adults to assist young people to build social and emotional skills for healthy relationships based on equality, respect and trust.

Strategy 6:

- Increase knowledge of and access to contraception and other sexual health services
 - Develop high-quality, accessible, nonjudgmental, developmentally appropriate and youth-friendly health services. Refer as appropriate to sexual health services that are welcoming and within and beyond traditional health care settings. These environments help young people feel motivated and safe to ask questions and express themselves while feeling trusted to make the best choices for themselves.

Strategy 7:

- Use dating apps to promote sexual health
 - Smartphone applications (apps) have become major forces in how people meet for friendship, relationship, and sexual encounters. In sex-positive terms, dating apps can be another opportunity for sexual health promotion and link people to sexual health services.

Strategy 8:

- Involve community-based organizations in sexual health education.
 - o Consider the sites for testing and harm-reduction services.
 - o Partner with the agencies to refer clients to higher levels of medical care.
 - o Take advantage of culturally responsive and relevant methods of connecting with clients.

Resource Links:

Assessing Risk for PrEP

- Perception of Risk Increases PrEP Uptake When Access Is Not a Factor: http://bit.ly/mdmag-prep
- A Comparison of Actual and Perceived Sexual Risk among Older Adults: http://bit.ly/ncbi-sexualriskolderadults

Clinical Matters

CDC 2015 Sexually Transmitted Diseases Treatment Guidelines: http://bit.ly/CDC-2015-treatmentguide

Extragenital STI Testing

- Infection Among Men Who Have Sex With Men: http://bit.ly/oxford-MSM-STI
- Sexual Behavior in the United States: Results from a National Probability Sample of Men and Women Ages 14–94: http://bit.ly/wiley-sex-behavior
- Findings from the National Survey of Sexual Health and Behavior (NSSHB): http://bit.ly/wiley-sexual-medicine
- Rectal infections with chlamydia and gonorrhea in women attending a multiethnic sexually transmitted diseases urban clinic: http://bit.ly/ncbi-sti-women

HIV Treatment and Prevention

- Antiretroviral Therapy for the Prevention of HIV-1 Transmission: http://bit.ly/NEJM-prevention
- New HIV Diagnoses Fall to Historic Lows in NYC: http://bit.ly/nyc-hiv-stats
- CDC HIV Treatment as Prevention: http://bit.ly/CDC-hiv-treatment
- CDC Let's Stop HIV Together: http://bit.ly/CDC-act-against-aids

HPV Target for elimination

- Towards the eradication of HPV infection through universal specific vaccination: http://bit.ly/ncbi-end-hpv
- FDA approves expanded use of Gardasil 9 to include individuals 27 through 45 years old: http://bit.ly/FDA-gardasil
- Use of a 2-Dose Schedule for Human Papillomavirus Vaccination Updated Recommendations of the Advisory Committee on Immunization Practices: http://bit.ly/CDC-hpv-dose

HPV Vaccine

- Population-level impact and herd effects following the introduction of human papillomavirus vaccination programmes: updated systematic review and meta-analysis: http://bit.ly/lancet-HPV
- The projected timeframe until cervical cancer elimination in Australia: a modelling study: http://bit.ly/lancet-cervical-cancer
- Human Papillomavirus—Attributable Cancers United States, 2012–2016: http://bit.ly/CDC-hpv
- HPV Vaccination Rate in U.S. Girls Has Stalled: http://bit.ly/healthyday-hpv-rates

Monroe County

2019 Monroe County Youth Risk Behavior Survey Report: http://bit.ly/monroe-2019-YRBS

New York State

New York State Sexual Health Plan (updated 2018): http://bit.ly/NY-2018-youth-plan

Pre-exposure HIV Prophylaxis (PrEP) FAQ

• HIV Pre-exposure Prophylaxis (PrEP): Individualized HIV Prevention: http://bit.ly/ny-gov-prep

Sexual Health Guidance for Providers

- Sexual Health Training and Education in the U.S.: http://bit.ly/ncbi-sexualhealth-training
- Sexual Health and Your Patients: A Provider's Guide: http://bit.ly/sexualhealth-provider-guide

Sexual History Taking

- The role of provider interactions on comprehensive sexual healthcare among young men who have sex with men: http://bit.lv/ncbi-sexualhistory
- American College of Obstetrics and Gynecology: http://bit.ly/ACOG-sexualhealth
- Taking Routine Histories of Sexual Health: A System-wide Approach for Health Centers: http://bit.ly/lgbt-health-edu

Sexual Orientation and Gender Identity

- A complete glossary of terms: http://bit.ly/hrc-glossary
- Sexual orientation and gender identity: http://bit.ly/apa-sexual-orientation
- Has Gender Always Been Binary?: http://bit.ly/psych-gender-binary

Sex-positive Health Care

- Sex Positivity and Counseling Psychology: An Introduction to the Major Contribution: http://bit.ly/apa-sex-positivity
- Sex-Positive Healthcare: Respecting Diversity in Sexual Identity, Orientation, and Practices among Patients: http://bit.ly/cdny-diversity-healthcare
- Sex-positive movement: http://bit.ly/wiki-sexpositive
- What does "sex-positive" mean?: http://bit.ly/issm-sexpositive

STI Reports

- CDC Sexually Transmitted Disease Surveillance 2018: http://bit.ly/CDC-STD2018
- Sexually Transmitted Infections Surveillance Report, New York State 2017: http://bit.ly/NYS2017-STI

Young Adults and PrEP

- New Survey of Young Adults Uncovers Low Levels of Accurate Knowledge About HIV Transmission Coupled with High-Risk Sexual Behaviors: http://bit.ly/HIV-youth-knowledge
- In the USA, only two in five PrEP users keep taking it over two years: http://bit.ly/aidsmap-prep
- Persistence on HIV pre-exposure prophylaxis medication over a 2-year period among a national sample of 7148 PrEP users, United States, 2015 to 2017: http://bit.ly/wiley-prep

Youth Risk Behavior

- Adolescent and School Health: http://bit.ly/CDC-yrbss
- 2019 Monroe County Youth Risk Behavior Survey Report: http://bit.ly/monroe-2019-YRBS

STI / SEXUAL HEALTH RESOURCES - MONROE COUNTY, NY

TRILLIUM HEALTH

259 Monroe Avenue Rochester, NY 14607 585.545.7200; PrEP line 585.454.7737 24/7 PEP 800.923.9394 https://www.trilliumhealth.org

THE MOCHA CENTER ROCHESTER, A DIVISION OF TRILLIUM HEALTH

470 West Main Street Rochester, NY 14608 585.420.1400 https://www.mochacenter.org

MONROE COUNTY DEPARTMENT OF HEALTH STD CLINIC (OPERATED BY UR MEDICINE)

Bullshead Plaza 855 West Main Street Rochester, NY 14611 585.753.5481

https://www.urmc.rochester.edu/medicine/infectio us-disease/patient-care/std-clinic.aspx

MONROE COUNTY STD/HIV DISEASE **CONTROL PROGRAM (FOR PROVIDERS)**

111 Westfall Road Rochester, NY 14620 585.753.5391 https://www.monroecounty.gov/health-nursing-STD-HIV

CENTER FOR COMMUNITY PRACTICE / UNIVERSITY OF ROCHESTER (FOR PROVIDERS)

585.274.3044

https://www.urccp.org/index.cfm?Page=Home

STRONG MEMORIAL HOSPITAL AIDS CENTER

601 Elmwood Avenue Rochester, NY 14642 585.275.0526

https://www.urmc.rochester.edu/medicine/infectio us-disease/patient-care/aids-center.aspx

URMC ADOLESCENT & YOUNG ADULT REPRODUCTIVE HEALTHCARE

Golisano Children's Hospital

601 Elmwood Avenue Rochester, NY 14642 585.275.2964 https://www.urmc.rochester.edu/childrenshospital/adolescent/reproductive-healthcare.aspx

PLANNED PARENTHOOD

114 University Avenue

Rochester, NY 14605 866.600.6886 https://www.plannedparenthood.org/plannedparenthood-central-western-new-york

JORDAN HEALTH

585-423-5800 https://www.jordanhealth.org/

SOUTH AVENUE WOMEN'S SERVICES

1000 South Avenue Rochester, NY 14620 585.271.3850 https://www.southavewomensservices.com/

ACTION FOR A BETTER COMMUNITY - HIGH IMPACT PREVENTION SERVICES FOR YOUTH

400 West Avenue Rochester, NY 14604 585.325.5116 https://www.abcinfo.org/high-impact-preventionservices-for-youth/

CATHOLIC CHARITIES COMMUNITY SERVICES - HIV/AIDS SUPPORT SERVICES

1099 Jay Street, Building J Rochester, NY 14611 585.339.9800 https://www.cccsrochester.org/hiv-aids/supportservices

URGENT CARES PROVIDING HIV & STI TESTING

- Rochester Immediate Care (Rochester Regional Health): https://www.rochesterimmediatecare.com/
- UR Medicine Urgent Care: https://www.urmc.rochester.edu/urgent-care/
- Well Now Urgent Care: https://wellnow.com/location-state/ny

Appendix 1. Trillium Health Sexual Health Questions

1.	How many partners have you had since we last met?
	Number of sexual partners in the past 90 Days:
2.	How many partners have you had in the past year?
	Number of partners:
3.	Tell me about the gender(s) of your partner(s) & the kinds of sex you have:
4.	Do you have any plans for pregnancy/family expansion in the near future? Yes No
	If no, what are you doing to prevent pregnancy?
	If yes, would you like to be referred to fertility/family planning? Yes No
5.	Are there any steps you take to avoid STIs? HIV?
	Are you taking PrEP for HIV? Yes No
	Are you getting frequent/routine testing? Yes No
	Do you talk to your partner(s) about their status and testing history? Yes No
6.	Do you have behaviors that increase the risk for infections?

Appendix 2. American College of Obstetricians and Gynecologists (ACOG)

Sexual History Questions to Ask Patients

1. Partners

- a. Are you currently sexually active (Are you having sex?)
 - If no, have you ever been sexually active?
- b. In recent months, how many partners have you had?
- c. In the past 12 months, how many sex partners have you had?
- d. Are your sex partners men, women, or both?
 - If a patient answers "both" repeat first two questions for each specific gender

2. Practices

- a. I am going to be more explicit here about the kind of sex you have had over the past 12 months to better understand if you are at risk of sexually transmitted infections (STIs).
- b. What kind of sexual contact do you have or have you had?
 - Genital (penis in the vagina)?
 - Anal (penis in the anus)?
 - Oral (mouth on penis, vagina, or anus)?

3. Protection from STI's

- a. Do you and your partner(s) use any protection against STIs?
 - If not, could you tell me the reason?
 - Are you comfortable asking your partner to use condoms?
 - If so, what kind of protection do you use?
 - How often do you use this protection?
 - If "sometimes", in what situations or with whom do you use protection?
- b. Do you have any other questions, or are there other forms of protection from STI's that you would like to discuss today?

4. Past History of STIs

- a. Have you ever been diagnosed with an STI?
 - When?
 - How were you treated?
 - Have you ever had any recurring symptoms or treatment?
- b. Have you ever been treated for human immunodeficiency virus (HIV) or other STIs?
 - Would you like to be tested?
- c. Has your current partner or have any former partners ever been diagnosed or treated for an STI(s)?
 - Were you tested for the same STI(s)?
 - If yes, when were you tested?
 - What was the diagnosis?
 - How was it treated?

5. Prevention of pregnancy

- a. Are you currently trying to become pregnant?
- b. Are you concerned about getting pregnant?
- c. Are you using contraception or practicing any form of birth control?
- d. Is your partner supportive of your using birth control?
- e. Do you need any information on birth control?

- 6. Completing the history
 - a. What other things about your sexual health and sexual practices should we discuss to help ensure your good health?
 - b. What other concerns or questions regarding your sexual health or sexual practices would you like to discuss?

American College of Obstetricians and Gynecologists (ACOG) Sexual Health: http://bit.ly/acog-sexual-health

Appendix 3: ACT Rochester – STI Indicators and Graphs

Sexually transmitted infections are preventable ailments that can cause harmful and costly complications, including reproductive health problems, fetal and perinatal health problems, and cancer. Those who may be infected with common STI's are more vulnerable to HIV infection.

The following graphs highlight data for Monroe County, the City of Rochester (where available) the nine-county Finger Lakes region and New York State. Other geographies (counties grayed out) can be compared by accessing the ACT Rochester link below the graph and selecting options.

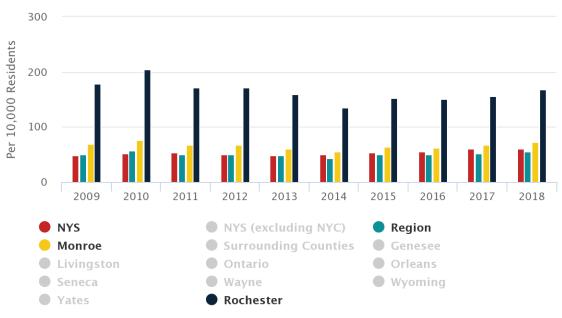
While reviewing the data, please note that not all sexually transmitted disease cases are reported. Variations in screening procedures and community awareness can have an impact on recorded trends. For example, data for Latinos was not available before 2004. Also, many New York Department of Health (NYDOH) reports have been put on hold during COVID due to their increased workload. Schedules for updates have not been released.

List of common STI's:

- AIDS (acquired immunodeficiency syndrome) A disease in which there is a severe loss of the body's cellular immunity, greatly lowering the resistance to infection and malignancy. https://bit.ly/3lkl3LL
- HIV (human immunodeficiency virus) A virus that attacks the body's immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome). There is currently no effective cure. https://bit.ly/3qLWR7v
- Syphilis A sexually transmitted infection that can cause serious health problems if it is not treated.
 Syphilis is divided into stages (primary, secondary, latent, and tertiary). There are different signs and symptoms associated with each stage. https://bit.ly/3bQ2NYT
- Chlamydia A common sexually transmitted disease. It is caused by bacteria called Chlamydia trachomatis. It can infect both men and women. Women can get chlamydia in the cervix, rectum, or throat. Men can get chlamydia in the urethra (inside the penis), rectum, or throat. https://bit.ly/2QbLHwh
- Gonorrhea A sexually transmitted disease (STD) that can infect both men and women. It can
 cause infections in the genitals, rectum, and throat. It is a very common infection, especially among
 young people ages 15-24 years. https://bit.ly/3trINBx
- **Genital Herpes (HSV-1, HSV-2)** A common sexually transmitted disease (STD) that any sexually active person can get. Most people with the virus don't have symptoms. Even without signs of the disease, herpes can still be spread to sex partners. https://bit.ly/3bT5zwh
- Human Papillomavirus (HPV) The most common sexually transmitted infection in the United States. Some health effects caused by HPV can be prevented by the HPV vaccines. https://bit.ly/3rT2S3C

Chlamydia Infections

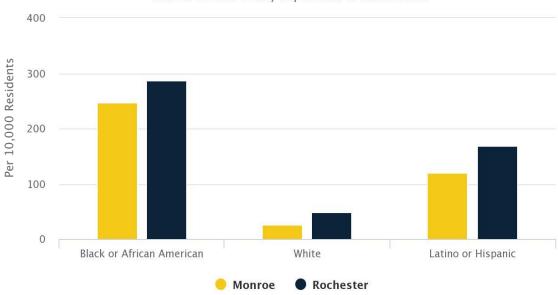
Source: New York State Department of Health



For more information visit ACTRochester.org/health/chlamydia-rate

Chlamydia Infections within Monroe County, by Race/Ethnicity, 2019

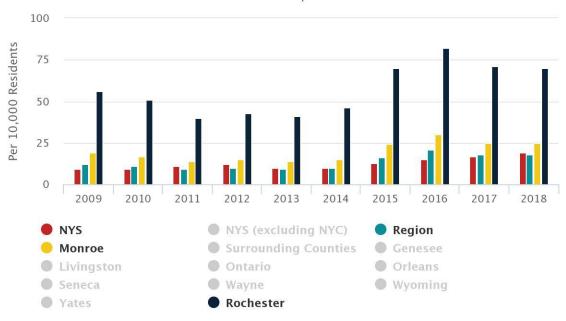
Source: Monroe County Department of Public Health



For more information visit <u>ACTRochester.org/health/chlamydia-rates-within-monroe-county</u>

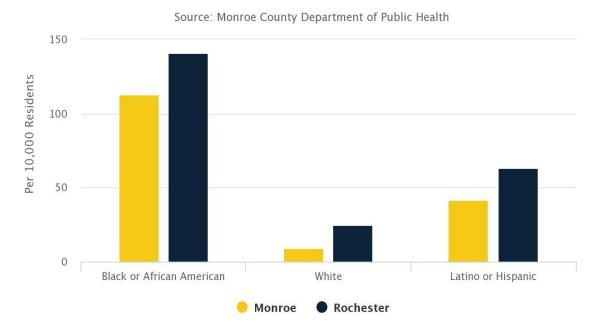
Gonorrhea Infections

Source: New York State Department of Health



For more information visit ACTRochester.org/health/gonorrhea-rate

Gonorrhea Infections in Monroe County, by Race/Ethnicity, 2019



For more information visit ACTRochester.org/health/gonorrhea-rates-within-monroe-county

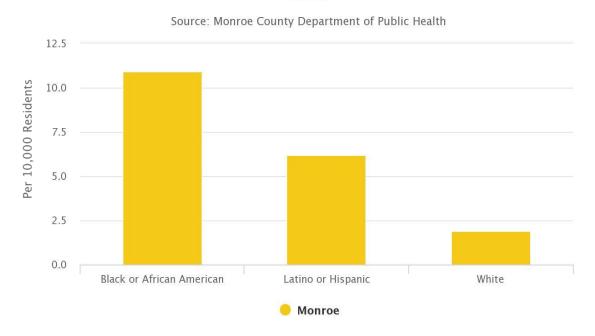
Early Syphilis Infections

Source: New York State Department of Health



For more information visit ACTRochester.org/health/early-syphilis-rates

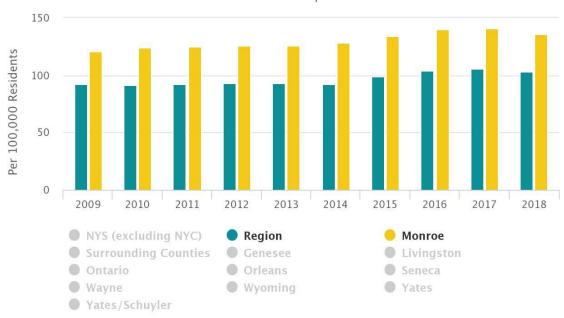
Early Syphilis Infections in Monroe County, by Race/Ethnicity, 2019



For more information visit $\underline{ACTRochester.org/health/early-syphilis-rates-within-monroe-county-by-race-ethnicity}$

People Living with HIV





For more information visit ACTRochester.org/health/people-living-with-hiv

People Living with HIV, by Race/Ethnicity, 2018

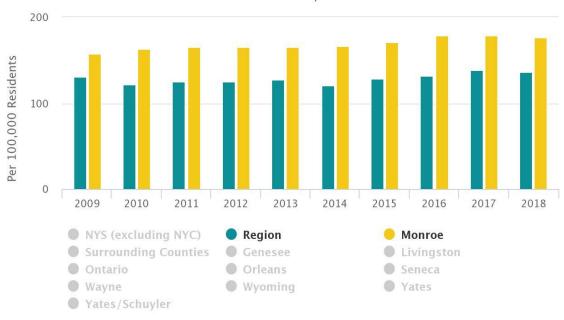
Source: New York State Department of Health



For more information visit ACTRochester.org/health/people-living-with-hiv-by-race-ethnicity

People Living with AIDS

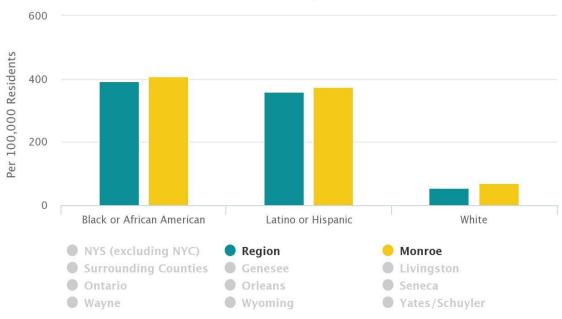
Source: New York State Department of Health



For more information visit ACTRochester.org/health/people-living-with-aids

People Living with AIDS, by Race/Ethnicity, 2018

Source: New York State Department of Health



For more information visit ACTRochester.org/health/people-living-with-aids-by-race-ethnicity