Sexual Health and Adolescents: Addressing the High Rates of Sexually Transmitted Infections in Maryland Youth

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Mission and Vision

• **Mission**
  The mission of the Prevention and Health Promotion Administration is to protect, promote and improve the health and well-being of all Marylanders and their families through provision of public health leadership and through community-based public health efforts in partnership with local health departments, providers, community based organizations, and public and private sector agencies, giving special attention to at-risk and vulnerable populations.

• **Vision**
  The Prevention and Health Promotion Administration envisions a future in which all Marylanders and their families enjoy optimal health and well-being.
The Center for STI Prevention (CSTIP)

- **Policy & Coalition Building**: Developing policies to improve population-level health. Partnering with health systems, providers, government and other stakeholders.

- **Surveillance**: Collecting, cleaning, analyzing data to monitor disease trends and provider and laboratory reporting issues; disseminate findings.

- **Linkage to Care**: Assuring people diagnosed with HIV are linked with providers and remain in care.

- **Partner Services**: Interviewing patients and notifying partners of possible exposure to an STI; assuring testing, counseling and treatment for partners.

- **Technical assistance, consulting, training and education**: occurs throughout each phase as needed.
Today’s Presentation & Discussion

- Overview of Sexually Transmitted Infections (STIs)
- State of State - chlamydia, gonorrhea, syphilis in Maryland
- Sexual Risk Behaviors in Maryland Youth
- Best Practices & Promising Practices
- Discussion: How can we help you protect your students’ sexual and reproductive health?
Overview of Sexually Transmitted Infections (STIs)
Unique Factors Place Youth at Risk for STIs

**Insufficient Screening**
Many young women don’t receive the chlamydia screening CDC recommends

**Confidentiality Concerns**
Many are reluctant to disclose risk behaviors to doctors

**Biology**
Young women’s bodies are biologically more susceptible to STIs

**Lack of Access to Healthcare**
Youth often lack insurance or transportation needed to access prevention services

**Multiple Sex Partners**
Many young people have multiple partners, which increases STI risk
Some Groups are Disproportionately Affected by STIs

- Adolescents and Young Adults
- Gay, Bisexual, & other Men who have Sex with Men
- Some Racial and Ethnic Minorities
Chlamydia Fast Facts

• Most common notifiable disease in the U.S. and in Maryland.
• Infections are usually asymptomatic→underdiagnosed, underreported.
• Organism can infect all sites of exposure: genital/reproductive tract; oropharynx, rectum.
• Untreated infections can result in serious, chronic sequelae, especially in females: pelvic inflammatory disease (PID), infertility and chronic pelvic pain.
• 6/10 infections are among women.
• Rates of reported infections in the United States increased by 4.7% between 2015 and 2016, and 11.7% in Maryland.
Gonorrhea Fast Facts

• The second most commonly reported notifiable disease in the U.S. and in Maryland.

• Infections are usually asymptomatic → underdiagnosed, underreported.

• Organism can infect all sites of exposure: genital/reproductive tract; oropharynx, rectum

• Untreated infections can result in serious, chronic sequelae, especially in females: pelvic inflammatory disease (PID), infertility and chronic pelvic pain.

• Rates of reported infections increased **18.5% in the U.S.** between 2015 and 2016, and nearly **40% in Maryland**.

• Progressively developing resistance to antibiotics.
Emerging multi-drug resistant gonorrhea is an urgent threat.

Declining susceptibility to cephalosporin, and now azithromycin, threatens the last recommended gonorrhea treatment.

Dual therapy still highly effective (azithromycin + ceftriaxone).

Several promising antibiotic drugs being studied, but likely years from being commercially available.
Treatment of Uncomplicated Gonococcal Infections of Cervix, Urethra & Rectum

Ceftriaxone 250 mg as a single intramuscular dose
PLUS
Azithromycin 1 g orally

Alternative if Ceftriaxone not available:
Cefixime 400 mg PLUS azithromycin 1 gram

Syphilis Fast Facts

• A genital ulcerative disease associated with significant complications if left untreated, including congenital syphilis – fetal/infant death, or lifelong disabilities - and can increase susceptibility and transmissibility of HIV.

• Infectious stages (Primary & Secondary) are characterized by painless sores and/or a skin rash.

• Men account for 89% of P&S syphilis cases in the U.S.

• Highest rates are among men who have sex with men (MSM).
The State of the State
Chlamydia, Gonorrhea and Syphilis in Maryland
STDs!!
Current Trends – Chlamydia and Gonorrhea, Maryland, 2007-2017

Source: MDH Center for STI Prevention, May 2018
Current Trends – P&S Syphilis Getting Younger, Maryland, 2007-2017

Source: MDH Center for STI Prevention, May 2018
Chlamydia & Gonorrhea in Youth
Maryland, 2017

Chlamydia and gonorrhea disproportionally affect youth ages 15 to 24. Compared to older adults, teens and young adults are at a higher risk of acquiring STIs due to a combination of behavioral, biological, and cultural factors.
Chlamydia & Gonorrhea in Youth, Maryland, 2017

Chlamydia & Gonorrhea by Age Group in Maryland, 2017

Source: MDH Center for STI Prevention, May 2018
Chlamydia & Gonorrhea in Youth, Maryland, 2017

Source: MDH Center for STI Prevention, May 2018
Chlamydia by County - 2017

Rates for teens are 360% higher on average!

Rates in Dorchester are 630% higher than all age groups

Source: MDH Center for STI Prevention, May 2018
Gonorrhea by County - 2017

Rates for teens are 184% higher on average!

All Ages Rate per 100,000

Ages 15-19 Rate per 100,000

Rates for teens in Worcester are 5x higher than rates for all ages

Source: MDH Center for STI Prevention, May 2018
Sexual Risk Behaviors in Maryland Youth
About the Youth Risk Behavior Survey (YRBS)

• Conducted every two years to track priority health risk behaviors among youth. Summary tables, trend reports and analyses available by age, grade, race/ethnicity, jurisdiction from Middle through High School.

• In 2013, the YRBS high school questionnaire added questions on sexual identity, sexual behavior, and sexual and dating violence.

• 2016 data now available (final report due out this summer): https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx

• 2016 sample included:
  • 51,087 public high school students (full questionnaire)
  • 23,568 public middle school students (abbreviated questionnaire)
13% of high school students identify as gay, lesbian or bisexual.

7.6% of males and 17.5% of females identify as gay, lesbian or bisexual.
Sexual Behavior – Ever Had Sex

- 31.8% of all high school students answered they have had sexual intercourse.

- Males 18 or older (but still in high school) had the highest proportion answering that they had sexual intercourse, 57.6%

https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx
Sexual Behavior – Sex before 13

• 4.3% of high school students answered that their first sexual intercourse was before 13 years (6.5% for males, 2.0% for females)
Sexual Behavior – 4+ Partners

- 7.7% of high school students report that they have had more than 4 sexual partners.

https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx
Condom Use

- Of students who reported having sex in the past 3 months, 56.9% reported using a condom.

- This graph shows a decrease in condom use as students advance in school – possibly due to increased use of LARC and BC pills among girls (or lower perceived risk after having sex for a few years?)

https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx
• 15.8% of high school students used *no* form of birth control the last time they had sex.
Sex + Alcohol/Drugs

Percentage of students who drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active)

- 1 out of 5 high school students used drugs or alcohol before their last sexual intercourse (21.2%)

https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx
Sexual Coercion

- 8.8% of high school students answered that they have been forced to have sex when they didn’t want to.
- 18.6% of high school girls, age 18+, have been forced to have sex when they did not want to.

https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx
Recommended Best Practices for STI Prevention
Preventing Sexually Transmitted Infections

- Access to medically accurate comprehensive sexual health information
- Abstinence (vaginal, oral, anal sex)
- Reduce Number of Sex Partners
- Mutual Monogamy
- Use Condoms
- Vaccination (HPV, HBV, HAV)
- Get Tested & Treated
  - Local Health Departments
  - Planned Parenthood clinics
  - Zip code locator for free, confidential testing sites: https://gettested.cdc.gov/
Routine STI Screening Recommendations

• Annual Chlamydia/Gonorrhea screening recommended for all sexually active females <25. Test all sites of exposure!

• Screening recommended for sexually active women > 25 at increased risk. Test all sites of exposure!
  • Risk factors: New/anonymous/multiple sex partners; prior STI; partner with concurrent or multiple partners; partner with an STI; exchanging sex for drugs/money

• Annual STI screening recommended for sexually active MSM, regardless of condom use:
  • Chlamydia testing at sites of exposure-urethra, rectum (not rec for oral)
  • Gonorrhea testing at sites of exposure-urethra, rectum, oropharynx
  • Syphilis testing
  • HIV testing – unknown status; negative and at risk since prior test

• STI screening every 3 to 6 months if at increased risk
Expedited Partner Therapy (EPT)

Definition:

- Voluntary clinical practice of providing antibiotic therapy, via medication or prescriptions, to sex partners of patients diagnosed with a STI without an intervening medical assessment
  - (AKA: Patient-Delivered Partner Therapy)
- Intended for partners who are unable or unlikely to obtain timely STI testing and treatment

Purpose:

- Reduce re-infection of index patients
- Prevent long-term sequelae of untreated STIs
- Halt further transmission

- Maryland EPT resources at:  http://bit.ly/EPTMaryland
Legally Permissible in MD for partner treatment of Chlamydia, Gonorrhea and Trichomoniasis

Recommended Treatment Regimens for EPT

<table>
<thead>
<tr>
<th>Infection Diagnosed in Index Patient</th>
<th>Recommended Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia Only</td>
<td>Azithromycin (Zithromax) – 1 gm orally once</td>
</tr>
</tbody>
</table>
| **Gonorrhea * (regardless of chlamydia diagnosis)** | **Dual Treatment:**  
  Cefixime (Suprax) - 400 mg orally once  
  **PLUS**  
  Azithromycin (Zithromax) - 1 gm orally once |
| **Trichomoniasis**                   | Metronidazole (Flagyl, Metrogel) - 2 gm orally once  
  **or**  
  Tinidazole (Tindamax) - 2 gm orally once |
Chlamydia Patient Fact Sheet: Front

**PATIENT INFORMATION:**
Chlamydia Treatment for Your Partners

**Why am I getting extra medicine or a prescription?**
- You have been diagnosed with chlamydia (kluh-MEE-dee-uh). It is a sexually transmitted infection (STI). That means it is transmitted or spread through oral, vaginal, or anal sex with an infected person.
- You have been given a prescription for azithromycin (uh-zith-ROH-my-sin), or the medicine itself, to treat (cure) your chlamydia. You also were given the same prescription or medicine to give to your sex partners. Bringing medicine to your partners this way is called Expedited Partner Therapy, or EPT. Once your partners are treated, they won’t develop serious health problems, infect you again, or pass chlamydia on to others.

**What do I need to know about chlamydia?**
- Most people with chlamydia don’t have any symptoms (signs of infection). You can be infected and not know it.
- Or, you may have discharge (drip) from the penis, vagina and/or anus, pain, or a burning feeling when you urinate (pee).
- If you don’t get treated, you may develop serious, even life-long health problems.
- If you don’t get treated and you are female, you may not be able to get pregnant.
- Pregnant women with chlamydia can pass the infection to their babies during pregnancy causing very serious health problems.

What should I do next?
- Get treated.
- Tell all your recent sex partners. Explain that you have been diagnosed with chlamydia and got medicine to treat it. They need medicine, too.
- Give them the medicine or prescription and the printed information from your health care provider.
- Encourage your partners to visit a health care provider. They should get tested for other STIs, even if they take the EPT medicine.
- Visit a health care provider in 3 months to get tested again for chlamydia.

How do I tell my partners I was treated for chlamydia?
Telling your partners that you have an STI can be hard, but it is the right thing to do. The best way to tell your partners is by being open and honest.

Avoid STIs in the Future
The only way to completely avoid STIs, including HIV, is not to have sex. If you do have sex, do it safely. Use a latex condom every time and for every kind of sex - anal and vaginal, and a condom or dental dam for oral sex.
You can lower your chances of getting STIs, including HIV, by limiting the number of people you have sex with. The more sex partners you have, the higher your risk of getting an STI.

Chlamydia Patient Fact Sheet: Back

**What if my partner blames me?**
People worry about their partners being angry, but you may not be the one who infected them. Explain that chlamydia usually doesn’t have symptoms. A person can have it for a long time and not know it. The most important thing is to tell your partners about the infection. Take steps so that you and your sex partners get healthy, and avoid future STIs.

**Other Questions You May Have.**
*My sex partners have no symptoms. Should they still take the medicine?*
Yes. People with chlamydia may not have any symptoms. Taking the medicine will cure it.

*What if my sex partner is pregnant or thinks she may be pregnant?*
If your sex partner is pregnant or thinks she may be pregnant, it is okay for her to take this medicine. The medicine used to treat chlamydia will not hurt the baby. But she should see a health care provider as soon as possible to be tested for other STIs, which she can pass on to her baby during pregnancy.

*What should I do after giving my partners this medicine?*
The medicine takes 7 days to work. Do not have sex (vaginal, oral, or anal) for at least 7 days after both you and your partners have been treated. You can get chlamydia again if you have sex before the medicine cures your partners. If you do have sex, use a latex condom or dental dam (for oral sex) so you don’t get infected again.

*What if a partner won’t take the medicine?*
If your sex partner won’t take the medicine, he or she should see a health care provider as soon as possible to get tested for chlamydia, gonorrhea and other STIs. Tell your partners that not getting treated could result in serious health problems.

Center for STI Prevention
www.tinyurl.com/EPTMaryland
September 2017
Promising Practices
Promising School-Related Practices to Protect Youth Sexual and Reproductive Health

- Comprehensive sexual health education
- Access to condoms on-site
- Resource directories for students seeking STI-related information, STI/pregnancy testing, condoms
- Increased youth access to sexual health services
  - Coordinated referral to off-site sexual health services, in traditional and non-traditional settings (local health depts., mobile vans, etc.)
  - School-based STI screening (assures key sexual health services in teen-friendly and accessible locations)
Why Screen in Schools?

- Significant STI burden among youth
- Importance of addressing health disparities among black, Hispanic and LGBTQ students
- Well-documented barriers to adolescents obtaining quality healthcare
- Lack of school-based health centers in all jurisdictions (~84 SBHCs currently in MD)
- Lack of comprehensive sexual health education across all jurisdictions
- Access to youth allows for a population-based intervention: easily administered urine test
School-Based Chlamydia & Gonorrhea Screening Programs

- Boston
- Chicago
- Florida
- Philadelphia
- Los Angeles
- Memphis

- Michigan
- New Orleans
- New York
- San Francisco
- Washington, DC
- Other?
Philadelphia

• Philadelphia began screening for CT/GC in all public high schools in 2003
• Screen ~ 10,000 students/year
• Screening program is highly cost-effective relative to other commonly accepted interventions
• Effectiveness and cost-effectiveness enhanced by including males


Philadelphia Findings: HIV Risk for Teens who had STIs

• Adolescents with STIs were at 2.3 - 2.6 times greater risk for subsequent HIV infection.

• Risk of subsequent HIV infection was more than 3 times as high among those with multiple gonococcal infections as among those with none.

Washington, DC

- All DC Public High Schools Participate
- Launched in 2009
- Opt-out program
- Urine-based Gonorrhea and Chlamydia screening
- Results available within a week over the phone
- Option to receive treatment at school within 5-10 days
Washington, DC - What people are saying...

“The process is school friendly, adheres to confidentiality and is non-threatening to students” – Principal

“The school told me that I had the option to have my child tested and I agreed because I know that knowing they’re healthy is better than not knowing.” – Parent

“What I liked about the program was that they care about your protection and privacy. And that I was able to talk with someone who really wanted to help me.” – Student
School-wide Screening: A Tool in the Fight Against Chlamydia and Gonorrhea

- Initiated in 2011 in select SE Michigan high-schools - 16 currently screening
- Has proven to be an effective strategy to decrease prevalence in a population
Schoolwide CT Screening Comparative Findings:
Kalamazoo Public Schools (School year 2015-2016)
and Detroit Public Schools (school year 2014-2015)

At risk and reason for testing

- It was offered
- My friends are getting tested
- I have had sex without a condom
- I am sexually active
- I am concerned about my health
- I have tested positive before
- I think I have symptoms
- My partner is getting tested
- Other

Kalamazoo
Detroit
Schoolwide CT Screening Comparative Findings:
Kalamazoo Public Schools (School year 2015-2016)
and Detroit Public Schools (school year 2014-2015)

Not at risk and reason for testing

- it was offered
- My friends are getting tested
- I have had sex without a condom
- I am sexually active
- I am concerned about my health
- I have tested positive before
- I think I have symptoms
- My partner is getting tested
- other

Kalamazoo | Detroit
Ideas for Collaboration: State and Local Health & Education Agencies; Schools; Policy-Makers

- On-site, school-based STI testing
- Professional development for school staff
- Model and sample policies for referrals to and delivery of SHS
- Key sexual health services in teen friendly and accessible locations
- Educational resources for students and faculty
- Technical assistance and tools on facilitating access to services
- Linkages with local organizations and youth-friendly providers
- Training for students and their parents/guardians
Resources for Educators, School Nurses, Youth, Parents
MDH Center for STI Prevention
https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/Home.aspx
GET YOURSELF TALKING ABOUT SEXUAL HEALTH

THE MIDDLE SCHOOL YEARS

WHERE YOUR CHILD IS...

Physically:
- Experiencing a growth spurt
- Producing hormones that gradually create changes in body shape and functioning
- Likely experiencing first period/first ejaculation, signaling the capacity to reproduce
- Likely fantasizing about others in a romantic or sexual way

Intelectually:
- Continuing to establish independence, develop their own opinions, and assume greater responsibility for themselves
- Developing more sophisticated decision-making skills, but still needing adult presence and supervision
- Needing adults to treat them with greater respect for their ability to think and make some decisions on their own

Emotionally/Socially:
- Experiencing feelings of insecurity because of physical changes and the desire to fit in with peers
- Wondering frequently if they—and their thoughts, desires, feelings, bodies, behaviors—are normal; may be struggling with internal conflicts regarding sexual orientation (e.g. "straight" or "gay")
- Placing higher priority on peer relationships; some of these begin taking on new dimensions of sexual and/or romantic interest
- Increasingly self-conscious and self-centered, but beginning to understand and appreciate the components of caring and trusting relationships
- Experiencing unexpected mood swings that can create challenges for parents and others; their relationships may wax and wane with greater frequency
- Desiring greater privacy and space away from parents and other family members
- Often feeling embarrassed or uncomfortable about sexual topics because those are becoming more "real", more hesitant when asking parents and other adults questions about sexual health and sexuality
- Wondering "how far" people their age should go sexually, and making comparisons with others about who "likes" whom and who's done what sexually; labeling others regarding appearance and sexual activity is also common

INFO TO PROVIDE

- How to maintain a positive self-concept in a time of great change
- Information about risks of oral, anal, or vaginal sexual contact and how to prevent sexually transmitted infections and pregnancy

MESSAGES TO GIVE

"It may not feel comfortable at times, but puberty and these changes you're experiencing are all normal."

"It's okay if you are (or are not) going through puberty now. Everyone develops at his or her own pace."

"I will respect your need for privacy, and I also want you to know you can always talk to me. I'm here for you."

"You're beginning to look more like an adult and have adult feelings, but you still have a lot of developing left to do. Engaging in risky sexual behaviors like oral, anal, or vaginal sexual contact at this time in your life is beyond your ability to manage physically or emotionally."

GOOD TIMES TO TALK

- When your child worries about not being attractive
- When talking to your child about health
- When your child asks about body changes
- When your child worries about not looking like their friends
- When your child says they don't want to talk about something
- When setting boundaries with your child
- As your child becomes interested in romantic relationships
Residents of Maryland, Washington DC, and Alaska can order a kit to collect a sample in the privacy and comfort of their home, then mail it back to be tested for chlamydia, gonorrhea, and trichomonas. It's easy to do and the results are reliable!

If you think you have an STI or that you have been exposed to an STI, STOP having sex immediately until you are tested and/or treated by a healthcare provider.

If you have an STI, you are at increased risk for getting HIV (Human Immunodeficiency Virus) if you are exposed to that virus. HIV is the virus that causes AIDS.

You can order a collection kit on this website to be tested for chlamydia, gonorrhea, and trichomonas.
Resources

Maryland Department of Health
Prevention and Health Promotion Administration
  Infectious Disease Prevention and Health Services Bureau
  Center for STI Prevention
  410-767-6690
  http://phpa.health.maryland.gov/OIDPCS/CSTIP/

  Maternal and Child Health Bureau
  Adolescent Health, Teen Pregnancy Prevention, Title V Family Planning
  https://phpa.health.maryland.gov/mch/Pages/child_health.aspx

Centers for Disease Control and Prevention (CDC)
  Division of STD Prevention (DSTDP)
  1-800-CDC-INFO (1-800-232-4636)
  www.cdc.gov/std

  Division of Adolescent and School Health (DASH)
  1-800-CDC-INFO
  www.cdc.gov/HealthyYouth/about/index.htm
Web Resources for Youth

GYT Campaign & It’s Your (Sex) Life Website
Resources for teens: FAQ on STDs & HIV; zip-code-specific STD & HIV testing sites
www.itsyoursexlife.com/gyt

I Wanna Know
Site for Teens, sponsored by ASHA
www.iwannaknow.org

Scarleteen
“Sex Ed for the Real World”
www.scarleteen.com

LGBTQ + Youth Resource Guide For Maryland
https://freestate-justice.org/lgbtq-youth-resource-guide-for-maryland/
Establishing Organizational Partnerships to Increase Student Access to Sexual Health Services

A Resource Guide for Education Agencies

Discussion

What are you seeing with respect to STIs at your schools?

What STI-related education or prevention efforts do you currently provide at your schools?

- What challenges and successes?
- In your specific jurisdictions, are you currently allowed to make condoms available to your students?

What gaps exist between what you’d like to do to improve your students’ sexual/reproductive health and what you can do?

- What STI-related education or prevention efforts would you consider undertaking if you had enough resources (funds, time, training, etc.)?