Let’s Talk About Sex: Removing Barriers to Screening Adolescents for STIs

HAROLD WIESENFELD MD
SUSAN BRILL MD
Q&A will be held at the end of the presentation.

Please type questions in the Q&A function located on the control bar at the top or bottom of your screen.
STIs and Screening

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UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE
Overview- Part 1

Overview of Chlamydia and Gonorrhea
- National data
- New Jersey data
- Importance of these STDs to reproductive health

Screening tests:
- Screening recommendations
- Specimen types and performance
- Specimen collection

Do parents want their adolescent child screened for STDs?

Disclosures: NONE
The Impact of STDs on Women’s Health

“A variety of women’s health problems, including infertility, ectopic pregnancy, and chronic pelvic pain, result from unrecognized or untreated STDs”

Institute of Medicine 1997
Chlamydia — Rates of Reported Cases by Sex, United States, 2000–2017
Chlamydia — Rates of Reported Cases by Age Group and Sex, United States, 2017
Chlamydia — Percentage of Reported Cases Among Women by Reporting Source*, US 2008–2017
## STIs Are on the Rise!

<table>
<thead>
<tr>
<th>Disease</th>
<th>United States 2017</th>
<th>New Jersey 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Cases</td>
<td>Rate Increase since 2013</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>1.7 million</td>
<td>22%</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>555,608</td>
<td>67%</td>
</tr>
<tr>
<td>CT/GC 19 and Under</td>
<td>544,957</td>
<td>13%</td>
</tr>
<tr>
<td>Primary &amp; Secondary Syphilis</td>
<td>30,644</td>
<td>76%</td>
</tr>
<tr>
<td>Congenital Syphilis</td>
<td>918</td>
<td>154%</td>
</tr>
</tbody>
</table>

[https://www.nj.gov/health/hivstdtb/stds/stats.shtml](https://www.nj.gov/health/hivstdtb/stds/stats.shtml)
NATIONALLY - 2017

Young people account for a substantial proportion of new STIs

**Gonorrhea**
- 70%
- Total Infections: 820,000

**Chlamydia**
- 63%
- Total Infections: 2.9 million

**HPV**
- 49%
- Total Infections: 14.1 million

**Genital Herpes**
- 45%
- 776,000

**HIV**
- 26%
- *Ages 13-24: 47,500

**Syphilis**
- 20%
- 55,400

NEW JERSEY

**Gonorrhea**
- 47%
- Total Infections: 9,454

**Chlamydia**
- 64%
- Total Infections: 35,304

**HPV**
- Total Infections: ?

**Genital Herpes**
- Total Infections: ?

**HIV**
- 17%
- Total Infections: 1,148

**Syphilis**
- 24%
- Total Infections: 1,364
Sequelae of *Chlamydia trachomatis*
Importance of Chlamydia and Gonorrhea Control

**Acute symptomatic illness** (cervicitis, urethritis, proctitis, pharyngitis etc)

70% of chlamydial infections are asymptomatic

**SEQUELAE:**
- Early sequelae: PID
- Late sequelae:
  - Infertility
  - Ectopic pregnancy
  - Chronic pelvic pain

**Neonatal infections:** pneumonitis, conjunctivitis
*Chlamydia trachomatis* and Ascension to the Upper Genital Tract in Women.
Can Screening for Chlamydia Prevent PID?

### Incidence and Risk of PID according to Study Group

<table>
<thead>
<tr>
<th></th>
<th>Screening</th>
<th>Usual Care</th>
<th>Relative Risk (95% CI)</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of cases</td>
<td>9</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>8</td>
<td>18</td>
<td>0.44 (0.20–0.90)</td>
<td>0.42 (0.20–0.89)</td>
</tr>
</tbody>
</table>

*Rates are expressed per 10,000 woman-months. CI denotes confidence interval. The relative risk is unadjusted. The odds ratio is adjusted for age, marital status, and use of douching.*

Scholes NEJM 1996
Chlamydia Screening Recommendations for Sexually Active Nonpregnant and Pregnant Women.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Nonpregnant Women</th>
<th>Pregnant Women</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Preventive Services Task Force⁶⁶</td>
<td>All women ≤24 yr; women &gt;24 yr with risk factors</td>
<td>With new or persistent risk factors</td>
<td>All women ≤24 yr</td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention⁷</td>
<td>All women ≤24 yr; women &gt;24 yr with risk factors</td>
<td>Annual</td>
<td>All women ≤24 yr; women &gt;24 yr with risk factors</td>
</tr>
<tr>
<td>American College of Obstetricians and Gynecologists⁴⁷,⁴⁸</td>
<td>All women ≤24 yr; women &gt;24 yr with risk factors</td>
<td>Annual</td>
<td>All</td>
</tr>
<tr>
<td>American Academy of Pediatrics⁴⁸,⁴⁹</td>
<td>All women ≤25 yr</td>
<td>Annual</td>
<td>All</td>
</tr>
<tr>
<td>American Academy of Family Physicians⁵⁰</td>
<td>All women ≤24 yr; women &gt;24 yr with risk factors</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

* Risk factors for chlamydia include new or multiple sexual partners, more than one sexual partner, current sexual partner with a sexually transmitted disease, and sexual partner with other concurrent sexual partners.
# Diagnostic Accuracy of Chlamydia Tests by Specimen Type

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Sensitivity</th>
<th>Positive Predictive Value (\text{percent})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endocervix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcription-mediated amplification</td>
<td>89.0–97.1</td>
<td>89.4–100</td>
</tr>
<tr>
<td>Strand displacement amplification</td>
<td>86.4–96.2</td>
<td>86.9–100</td>
</tr>
<tr>
<td>Polymerase chain reaction</td>
<td>86.4–95.8</td>
<td>88.5–100</td>
</tr>
<tr>
<td>Vaginal swabs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obtained by a clinician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcription-mediated amplification</td>
<td>89.9</td>
<td>92.2</td>
</tr>
<tr>
<td>Polymerase chain reaction</td>
<td>93.3</td>
<td>92.1–100</td>
</tr>
<tr>
<td>Collected by the patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcription-mediated amplification</td>
<td>93.3–97.0</td>
<td>94.9–99.4</td>
</tr>
<tr>
<td>Strand displacement amplification</td>
<td>96.5</td>
<td>94.8</td>
</tr>
<tr>
<td>Polymerase chain reaction</td>
<td>90.7–98.0</td>
<td>87.3–99.4</td>
</tr>
<tr>
<td>Urine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcription-mediated amplification</td>
<td>72.0–98.2</td>
<td>92.5–96.5</td>
</tr>
<tr>
<td>Strand displacement amplification</td>
<td>93.0–96.2</td>
<td>93.8–94.4</td>
</tr>
<tr>
<td>Polymerase chain reaction</td>
<td>84.0–96.1</td>
<td>92.7–99.0</td>
</tr>
</tbody>
</table>

* Specificity and negative predictive values were all 97.5% or greater. All data in the table were adapted from Nelson et al.26
Positive Predictive Value: The Influence of Disease Prevalence

Zenilman et al. Sex Transm Infect 2003;79:94-97
Self-Collection of Vaginal Swabs
Pittsburgh Pennsylvania

Convenience sample of 228 high school female students in Pittsburgh
Self-collected vaginal swabs

<table>
<thead>
<tr>
<th>ANY STD:</th>
<th>18% (40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>8% (8)</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>2% (4)</td>
</tr>
<tr>
<td>Trichomoniasis</td>
<td>10% (23)</td>
</tr>
</tbody>
</table>

13% of females who never previously had a pelvic exam tested positive
51% had no intent to get tested in near future
Easy to perform (99%)/ preferable to GYN exam (84%)
Chlamydia Screening in Adolescents- Sample Collection

Endocervical sample
- Requires vaginal speculum exam

Vaginal Swabs
- Provider-collected
- **Patient Self-Collected**
  - Insert about 2 inches in the vagina, gently rotate against vaginal walls for 10-30 seconds

Urine samples
- First-catch optimal
- Place urine in transport tube

Several commercial assays FDA approved for cervix, vaginal, urine samples
Parental Acceptance of STD Screening at the Pediatrician’s Office

Katherine Lane, Elizabeth Miller, MD, PhD, Laura Kisloff, MD, and Harold Wiesenfeld, MD
Background

• Pediatricians are well positioned to provide screening for their adolescent patients

• Few sexually-active adolescents were screened for chlamydia and gonorrhea at pediatric well visits

• Many provider barriers have been identified (e.g., a lack of request from parents, awkwardness)

• Providers may be more likely to offer screening if they knew parents were accepting
Methods

- Confidential survey of parents of adolescents aged 15-17 years accompanying a child to an appointment

- Three pediatric practices [two urban practices; one practice in a mostly rural county]

- Convenience sample
Methods

- **Primary Outcome:** parent willingness to have their adolescent screened for chlamydia and gonorrhea

  - Defined as annual testing of all adolescents age 15 and older regardless of whether or not they have had sex (unless declined by patient or parent)

  - Described as collecting a urine sample to test for gonorrhea and chlamydia
Results

Enrolled 168 parents (86% participation rate): 87% female, age 32-64 years (mean = 46); Race: White (146, 85%), Black (21, 12%), Asian (5, 3%)

Most appointments were routine (53%) or sick (36%) visits

Primary Outcome: If your provider offered routine STD screening for gonorrhea and chlamydia for your child aged 15-17, would you accept?
Results

Most parents (73%) believe it is important for their adolescent to spend time alone with their provider.

Parents perceive sexual health topics to be as important for providers to talk to their adolescent about as other preventive health topics.

<table>
<thead>
<tr>
<th>Topic</th>
<th>% Very</th>
<th>% Important</th>
<th>% Somewhat</th>
<th>% Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression/Suicide</td>
<td>67%</td>
<td></td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>Drug/Alcohol Use</td>
<td>63%</td>
<td></td>
<td>27%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>STDs</strong></td>
<td>61%</td>
<td></td>
<td>24%</td>
<td>10%</td>
</tr>
<tr>
<td>SAFE SEX PRACTICES</td>
<td>57%</td>
<td></td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>Diet/Nutrition/Eating Disorders</td>
<td>55%</td>
<td></td>
<td>36%</td>
<td>5%</td>
</tr>
<tr>
<td>STD SCREENING/TESTING</td>
<td>55%</td>
<td></td>
<td>24%</td>
<td>11%</td>
</tr>
<tr>
<td>Exercise/Sports</td>
<td>44%</td>
<td></td>
<td>39%</td>
<td>15%</td>
</tr>
<tr>
<td>Obesity</td>
<td>44%</td>
<td></td>
<td>35%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Poll
How to Get a Sexual History in Adolescents

DR. SUSAN R BRILL
CHIEF OF ADOLESCENT MEDICINE
THE CHILDREN’S HOSPITAL AT
SAINT PETER’S UNIVERSITY HOSPITAL
CHAIR OF ADOLESCENT COMMITTEE AAPNJ
Adolescent medicine 101: How do we get into adolescents’ heads?
Current Data on Sexual Activity

Overall teen birth rate has declined to lowest level in 7 decades.

Roughly 75% of sexually active girls reported using contraception at first sex, up from 48% in 1982.

Boys are waiting longer to have sex, fewer report intercourse before age 15.

In 2006-2008, 3% of males and 8% of females age 18-19 reported their sexual orientation was homosexual or bisexual, similar proportions reported same sex behavior.

*Alan Guttmacher Institute Fact Sheet: American Teens’ Sexual and Reproductive Health, May 2014*
Adolescent Confidentiality

Maintaining confidentiality goes hand in hand with providing appropriate care for teens

Has been a roadblock for access to care, and STI screening

Important to know state and national laws regarding provision of care
Adolescent Confidentiality

In general, minors in all 50 states can consent and receive family planning services; some states have limitations based on age or status.

All states permit minors to consent for STI services.


NJ consent and confidentiality document is now posted on NJAAP website, authored by Center for Adolescent Health & the Law. See [http://njaap.org/programs/adolescent-health/resources/](http://njaap.org/programs/adolescent-health/resources/)
Specific State Laws

**STI care N.J. Stat. Ann. § 9:17A-4** A minor who has or believes her or she may have a sexually transmitted infection may consent for medical or surgical care or services by a hospital or physician.

**HIV/AIDS Care N.J. Stat. Ann. § 9:17A-4** A minor who is at least 13 years of age and is or believes that he or she may be infected with HIV or have AIDS may consent to medical or surgical care or services by a hospital, public clinic, or licensed physician.

**Adolescent & Young Adult Health Care in New Jersey A Guide to Understanding Consent & Confidentiality Laws** Abigail English, JD, Center for Adolescent Health & the Law March 2019
A word about EOBs..

Impossible to guarantee confidentiality 100 percent of the time

Many Medicaid recipients do not receive EOBs

Commercial plans EOB statement reports “laboratory services” but not specific labs ordered

Can often bundle the labs with routine testing diagnostic codes
How to take a good sexual history

Establish a policy that parents should leave the room by a certain age, for a portion of the visit. (age 12-13)

Educate staff regarding confidentiality laws

Consider using a written/ electronic questionnaire

Be relaxed, ask open ended questions
How to ask...

Be non-judgmental

Ask general questions first, then details

Start by asking..

“Have you ever had an intimate relationship with someone? “

“Was this with a male partner or a female partner”
How to ask...

Some examples of phrases you can use:

Are you using protection?
What have you tried?
Are you having any pain?
Do you have any other concerns?
Ask about STIs

Have you ever worried you had an STI?
Have you ever been tested?
Do you know what to look for?
How many partners have you had? ***

**explain basic statistical concepts, can draw a diagram.**
Adolescent Reproductive and Sexual Health Education Program (ARSHEP) is our comprehensive, evidence-based curriculum. It is a unique educational tool for residency programs, youth-serving health professionals, and self-guided learning. These PowerPoint modules and patient standardized case videos are free to use, edit, and share.

Best Practices
- Advocating for confidential, adolescent-friendly, culturally competent care

LGBTQ Essentials
- Providing care for lesbian, gay, bisexual, transgender, and questioning youth

Sexual Health
- Talking to youth of all genders about sex, sexuality, and contraception
Sample interview...
Provider Resources

Resources:

www.prch.org—Physicians for Reproductive Choice and Health
www.glma.org—Gay and Lesbian Medical Association
www.aap.org—The American Academy of Pediatrics
www.acog.org—The American College of Obstetricians and Gynecologists
www.adolescenthealth.org—The Society for Adolescent Health and Medicine
http://www.aclu.org/reproductiverights—The Reproductive Freedom Project of the American Civil Liberties Union
www.advocatesforyouth.org—Advocates for Youth
www.guttmacher.org—Guttmacher Institute
www.cahl.org—Center for Adolescent Health and the Law
http://janefondacenter.emory.edu/—The Jane Fonda Center of Emory University
www.siecus.org—The Sexuality Information and Education Council of the United States
www.arhp.org—The Association of Reproductive Health Professionals
General resources for professionals caring for teenagers

www.youngwomenshealth.org
www.youngmenshealth.org
www.aap.org
Your Adolescent Patients are at Risk! What Can You Do?

- Join the MOC part 4 approved QI program to improve STI screening.
- Limited to 25 practices! Only a few spots remaining.
- Enrollment closes July 31, 2019.
- Contact Regina Grazel at rgrazel@njaap.org or Sharleen van Vlijmen at svanvlijmen@njaap.org
Questions?

Please type questions in the Q&A function located on the control bar at the top or bottom of your screen.