Adolescents and STIs

IHS Webinar
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GOALS OF TODAY’S TALK:

1. Employ a list of the essential components of youth friendly clinical services.

2. Analyze the current challenges to the prevention and management of STD in the adolescent population.

3. Apply the major components of (5 P’s) to a routine sexual history and understand the value of taking a sexual history.
Why Focus on Adolescent Health?

• Lifelong health habits are formed in this time period, creating a unique window for education, contact, and interventions that can change a life

• Opportunity to fulfill adolescents’ often overlooked need for age-appropriate healthcare, especially reproductive healthcare, and to advocate on their behalf

• Time of exciting but potentially overwhelming rapid change and growth – both youth and their families can benefit from extra support
QUIZ Question #1:
At what average age do U.S. females first have vaginal intercourse?

a. 14.2 years  
b. 15.5 years  
c. 16.3 years  
d. 17.2 years
ADOLESCENCE: AN OVERVIEW
Adolescents

- Adolescents are:
  - Healthy
  - Resilient
  - Independent, yet vulnerable

- Adolescents are not:
  - Big children
  - Little adults
The Culture of Adolescence

- Peer dependent
- Egocentric
- Distinct language and dress
- Popular culture influence
- Ongoing search for identity
Early Adolescence 11–14

- Characterized by a spurt of growth
- Beginning of sexual maturation
- Start to think abstractly
Middle
Adolescence 15–17

• Physical changes of puberty are complete
• Develop a stronger sense of identity and relate more strongly to peer group
• Thinking becomes more reflective

Photo source https://ncfy.acf.hhs.gov
Late Adolescence
18 and older

• The body continues to develop and takes adult form
• Development of distinct identity and more settled ideas and opinions
Tasks of Adolescence

• Achieving independence from parents
• Adopting peer codes and lifestyles
• Assigning increased importance to body image and accepting it
• Establishing sexual, ego, vocational, and moral identities
Adolescent Brain Development

• Brain size = 90% by age 6
• After that, growth is in complexity not size
• White matter increases and greater neural connectivity and integration => greater plasticity
• Pruning, increased density, and maturation occur in the prefrontal cortex last

Red indicates more gray matter, blue less gray matter. Gray matter wanes in a back-to-front wave as the brain matures and neural connections are pruned.
Adolescent Brain Development

• Pre-frontal cortex is critical area for higher-order thinking and executive function

• Risk-taking, impulsivity, and questionable decision-making may be attributable to immaturity of pre-frontal cortex

• Pre-frontal cortex also modulates contributions of parts of brain that focus on reward-processing behaviors (ventral striatum) and harm-avoidance behaviors (amygdala)

Moreno and Trainor, Adolescence extended: implications of new brain research on medicine and policy. *Acta Paediatrica,* 2013
Adolescent Brain Development

• Balance between reward and risk of harm is essential for higher-level thinking expected of teens such as driving, academics, and other responsibilities

• Until the neural circuitry between pre-frontal cortex, ventral striatum, and amygdala is complete, adolescents experience stressors as more exciting than adults
THE AVERAGE TEENAGE BRAIN
Sexuality and Adolescence

Sexuality is a normal part of ADOLESCENCE and human development, and is expressed in different ways and at different times for all individuals.

However, it is important to keep in mind that...
MORE than 50% of U.S. adolescents have had sex by the time they reach the age of 18

Average Age of 1st Vaginal Intercourse (heterosexual)

- Males    16.8 years
- Females  17.2 years

(Correct answer to Quiz Question #1!)

National Survey Family Growth, 2011-2013
Although 15–24 year olds represent only one-quarter of the sexually active population, they account for nearly half (9.1 million) of the 18.9 million new cases of STIs each year.
Estimated number of new sexually transmitted infections
- United States: 2008

Ages 25+

Ages 15-24

Hepatitis B: 19,000
HIV*: 41,400
Syphilis: 55,400
HSV-2: 776,000
Gonorrhea: 820,000
Trichomoniasis: 1,090,000
Chlamydia: 2,860,000
HPV: 14,100,000

Total: 19,738,800

Young people (15-24) represent 50% of all new STIs

*HIV incidence not calculated by age in this analysis

Bars are for illustration only; not to scale, due to wide range in numbers of infections

Chlamydia — Rates of Reported Cases by Race/Ethnicity, United States, 2011–2015

Rate (per 100,000 population)

Year

2011  2012  2013  2014  2015

Blacks

American Indians/Alaska Natives

Hispanics

Whites

Multirace

Native Hawaiian/Other Pacific Islanders

Asians

Gonorrhea — Rates of Reported Cases by Race/Ethnicity, United States, 2011–2015

Rate (per 100,000 population)

NOTE: Includes 45 states reporting race/ethnicity data in Office of Management and Budget compliant formats during 2011–2015

*AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiian/Other Pacific Islanders.
Primary and Secondary Syphilis — Rates of Reported Cases Among Females Aged 15–19 Years by Race/Ethnicity, United States, 2010–2014

Rate (per 100,000 population)

2010  2011  2012  2013  2014

Year

AI/AN*  Asians  Blacks  Whites  Hispanics  NHOPi*  Multirace

*AI/AN=American Indians/Alaska Natives; NHOPI = Native Hawaiian/Other Pacific Islanders.

WHY ARE ADOLESCENTS SO DISPROPORTIONATELY AFFECTED BY STIs??

• Biological
• Cognitive
• Behavioral
• Social
• Societal
QUIZ Question #2: what percentage of U.S. teenagers used condoms at their last sexual intercourse in 2013?

a. 38%
b. 43%
c. 57%
d. 66%

Youth Risk Behavior Survey, CDC, 2013
WHY ARE ADOLESCENTS SO DISPROPORTIONATELY AFFECTED BY STIs??

Many Factors

• Biological
• Cognitive
• Behavioral
• Social
• Societal
Biological Risk Factors: Females

- **Adolescent cervix** (increased cervical ectopy)
- Lack of immunity from prior infections
- Smaller introitus
- Lack of lubrication

Can lead to dry, traumatic sex
Cognitive Risk Factors

• Early adolescence: concrete thinking
  Often unable to plan ahead for condoms

• Personal fable
  – Unable to judge risk for STIs
  – “Other people get STIs,”
  – “That would not happen to me”
Behavioral Risk Factors

- Young Age at First Intercourse
- Sexual Activity with New Partner
- Multiple Sexual Partners
- Substance Use
- Mental Health
Behavioral Risk
Factor: Older Partners

Relationships with older partners are predisposed to power imbalance

• Sexual negotiation for the adolescent is more difficult
• Increased risk of involuntary intercourse, lack of protective behavior, and exposure to STIs
Percentage of High School Students Who Used a Condom, * 1991-2015†

BEHAVIORAL RISK FACTOR: CONDOM DIS-USE

*During last sexual intercourse among students who were currently sexually active

Percentage of High School Students Who Used a Condom,* by Sex,† Grade,† and Race/Ethnicity,† 2015

*During last sexual intercourse among students who were currently sexually active
†M > F; 9th > 12th, 10th > 12th; B > H (Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.

National Youth Risk Behavior Survey, 2015
Behavioral Risk Factor: Substance Abuse

Percentage of High School Students Who Drank Alcohol or Used Drugs Before Last Sexual Intercourse,* by Sex,† Grade, and Race/Ethnicity, 2015

*Among students who were currently sexually active
†M > F (Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.

National Youth Risk Behavior Survey, 2015
Percentage of High School Students Who Had Sexual Intercourse with Four or More Persons,* by Sex,† Grade,† and Race/Ethnicity,† 2015

BEHAVIORAL RISK FACTOR: MULTIPLE PARTNERS

*During their life
†M > F; 10th > 9th, 11th > 9th, 11th > 10th, 12th > 9th, 12th > 10th, 12th > 11th; B > H, B > W
(Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.
Social Risk Factors:
Pool of disease in social network
Sexual risk- **Protective** Factors among adolescents

- Peer support for contraception and condoms
- Communication with parents about sex
- Connection to family
- Connection to community organizations
- **Future goals:** school, job, valued role in the world
QUIZ Question #3: What was the percent change in the teen birthrate between 1991 and 2015?

a) 13% increase
b) No change
c) 17% decrease
d) 38% decrease
e) 64% decrease
THERE IS GOOD NEWS!

The birth rate for US Teenagers in 2013 fell to the lowest rate ever reported, and fell for both younger and older teens – and dropped even more in 2014 and 2015
THERE IS GOOD NEWS!

Declines in teenage birth rates occurred in all ethnic groups

*Overall rate in 2015 was 22/1000

NCHS Data Brief No. 59, 2016:
https://www.cdc.gov/nchs/products/databriefs.htm

Quiz question #3 answer: 64%!!
Causes of Recent Decline in Teen Pregnancy

• 2006 analysis concluded that for 15–19 year olds:

  - 14% due to Decrease in Sexual Activity
  - 86% due to Increase in Contraceptive Use

BUT, UNFORTUNATELY... It’s not all good news

- 2011 teen pregnancy rate in US= 57/1000 (82% unintended)
- In Switzerland: 8/1000

*4/8/14 MMWR: >80% sexually active 15-17 yo’s did not have sex ed until after they became sexually active*
And, more -- room for improvement.

Vaccination Coverage among 13-17 yr olds, Males & Females, 2006-2013

In 2014 only 39.7% girls 13-17 had completed HPV vaccine series

In 2014 only 21.6% boys 13-17 had completed HPV vaccine series
Formulas for success in preventing teen pregnancy and STIs?

- Nations with the most sex-positive sexual instruction have best outcomes
- Societal acceptance of adolescent sexual relationships
- Comprehensive information about sexuality
- Clear expectations about preventing pregnancy and STIs

Robert Blum, Office of Adolescent Health Webcast *A Global Look at Adolescent Pregnancy Prevention: Strategies for Success, National Teen Pregnancy*
What can we do to help?
What can we do to help?

• Provision of Adolescent Friendly Health Services
• Respect of Minor Consent and Confidentiality Laws
• Appropriate Screening and Treatment
• Engage Involved Family Members
Adolescent-Friendly Health Services essentials:

- Adolescent-specific care and setting are ideal
  --displays, training, peer-educators
- Comfortable, confidential, safe space
- Adolescent-friendly office staff and providers
- Financial affordability, flexible scheduling and comprehensive services
Adolescent-Friendly Health Services essentials:

• Assistance with registration for available resources that can cover sensitive services

• Services for patients transitioning to adult health care system

• Sensitivity to how ability, age, culture, gender identity, sexual orientation, religion, and socioeconomic status can affect an adolescent’s reproductive health

http://bit.ly/1NZb0Zm
Advance Discussion of Confidentiality

• If in pediatric or family-based setting, inform parents about confidentiality policy **before visit**
  
  – Letter home:
    
    • Detail when parent will be included in clinical visit and when not
    
    • Discuss billing issues
  
  • Display materials such as posters or brochures discussing importance of doctor/patient confidentiality

• **Explain confidentiality rules to youth prior to taking their history**
A Note to Parents from your Teen’s Doctor

- Teens need to have more input in their health in order to build responsibility.
- I will give your teen a chance to talk to me alone during each exam.
- In California, teens can receive some services on their own. I cannot talk to you about your teen’s use of these services without permission from your teen. Talk to me about what these services are.
- I encourage teens to talk about their health with their parents.
- I am happy to answer any questions or concerns you may have!
The **TRUTH ABOUT Confidentiality**

Confidentiality means privacy.

**Confidential health care** means that information is kept private between you and your doctor or nurse.

Your doctor or nurse **CANNOT** tell your parents or guardians about your visits for:
- Pregnancy
- Birth control or abortion
- Sexually transmitted diseases (STDs)

For your safety, some things **CANNOT** stay confidential. Your doctor or nurse has to contact someone else for help if you say:
- You were or are being physically or sexually abused.
- You are going to hurt yourself or someone else.
- You are under 16 and having sex with someone 21 years or older.
- You are under 14 and having sex with someone 14 years or older.

**CONFIDENTIALITY TIPS FOR TEENS**

* Ask questions about confidentiality. You can ask your doctor or nurse and health insurance plan what information will be shared with your parent/guardians.

* Know your rights in the health care system and speak up.

* Read and understand forms before you sign them.

Even if you do **NOT** need permission from your parent/guardian to see a doctor, it's a good idea to talk with them or a trusted adult about the help you need.

Every state has different confidentiality laws. This information applies **ONLY** to California. Visit [www.youthhealthrights.org](http://www.youthhealthrights.org) for more information about laws that protect your privacy when talking to your health care provider.
SCREENING FOR RISK AND RESILIENCE APPROPRIATELY

THE HEADDSS EXAM

H: HOME
E: EDUCATION
A: ACTIVITIES
D: DIET and EXERCISE
D: DRUGS and ALCOHOL S:
S: SUICIDE and DEPRESSION
S: SEXUAL ACTIVITY
General Considerations for Taking a Sexual History

• Make no assumptions
  • Ask all patients about gender and number of partners
  • Ask about specific sexual practices
    ✓ Vaginal, anal and oral sex

• Be clear
  • Avoid medical jargon
  • Restate and expand
  • Clarify stories when necessary
Introducing the Sexual History with Teens

• Acknowledge personal nature of the subject matter
  – Using humor is ok!

• Emphasize confidentiality, but be sure to include its limits

• Stress health issues related to sexual behaviors

• Explain how the information will help you take better care of the teen
  – “this will help me figure out what you need to be tested for”
  – “there are some sexual health problems that can cause lots of problems, but you may not know you have them”
  – “we can also brainstorm about ways you can keep yourself healthy”
Introductory Statement:
An example

- I am going to ask you some questions about your romantic relationships and the physical parts of those relationships. I talk to all of my teen patients about this, to help me figure out what other health-related things I can help with.

- If you didn’t establish confidentiality and its boundaries, let them know about that now!
CDC: The Five “P’s”

- Partners
- (Sexual) Practices
- Past STDs
- Prevention of STDs/HIV
- Pregnancy prevention, history and plans
The 5 (or 6) P’s: the details

- **Past STDs**
  - Have you ever had any sexually transmitted infections? Like gonorrhea, chlamydia, or herpes? When?

- **Partners**
  - Have your sex partners been men, women or both?
  - How many partners have you had? How about in the last 3 months?

- **(Sexual) Practices**
  - What types of sex did you have? Oral, anal, vaginal?

- **Prevention of STDs/HIV**
  - What do you do to prevent catching an STD or HIV?
  - What percent of the time do you use condoms?
    - or, All/most/some/none of the time

- **Pregnancy history, prevention, and/or plans**
  - Have you ever been pregnant, or has your current (or past) partner(s)?
  - When is the soonest you would want to be a parent (or have your next child)?
  - What do you and your partner(s) do to prevent pregnancy?

**For Teens, one more P:**

- **Presentation**
  - when did you first become sexually active?

https://www.cdc.gov/std/treatment/sexualhistory.pdf
Communication Skills to Facilitate the Adolescent Sexual History

- Use open-ended questions rather than leading or “yes/no” questions
- Encourage patients to talk, when needed
- Use active listening cues
- Use neutral language, be non-judgmental
- Give range of behaviors, normalize
  - “some of my patients find it difficult to use a condom every time they have sex – what about you?”
Appropriate Screening for STIs in Adolescents and Young Adults

2015 CDC Guidelines
STD Screening for Adolescents and Young Adults

<table>
<thead>
<tr>
<th>Sexually Active females &lt;25 years old*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine (annual) <strong>chlamydia</strong> and <strong>gonorrhea</strong> screening*</td>
</tr>
<tr>
<td>HIV screening should be discussed and offered to all females**</td>
</tr>
<tr>
<td>Other STD screening based on risk</td>
</tr>
</tbody>
</table>

If pregnant:
- Chlamydia
- Gonorrhea (<25 years of age or risk)
- HIV, RPR, and HepB sAg
- Hep C (if high risk)

If incarcerated:
- GC/CT up to age 35 yo
- Syphilis Screening: Universal screening on basis of local area and institutional prevalence of early infectious syphilis

*now harmonized with USPSTF - previously CDC included <25

**previously “encouraged” for those who are sexually active

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CDC 2015 STD Tx Guidelines at [www.cdc.gov/std/treatment](http://www.cdc.gov/std/treatment)

*USPSTF Grade B
STD Screening for Adolescents and Young Adults: Males

Sexually Active males, non-MSM

HIV screening should be offered to all males

All other STD screening based on risk

If incarcerated: GC/CT recommended up to age 35, syphilis screening same as females

YMSM:

HIV
Syphilis
Urethral GC and CT
Rectal GC and CT (if RAI)
Pharyngeal GC (if receptive oral sex)
Hepatitis B (HBsAg, freq not specified)
HCV (if HIV+, at least annually) -- NEW
HSV-2 serology (consider)

at least annually, more frequent if at high risk – multiple/anonymous partners, drug use, high risk partners

Anal Cancer in HIV+ MSM: Data insufficient to recommend routine screening, some centers perform anal Pap and HRA
Routine HIV Screening

- All persons who seek STD screening
- CDC recommends: at least one time screening for all patients aged 13-64 years

Vs. USPSTF:
- Screen ages 15 to 65 years
- Risk based screening for younger adolescents & older adults
- Screen pregnant women

CDC 2015 STD Treatment Guidelines
MMWR 2006;55(No. RR-14).
Questions?
Adolescents and STIs: Creating Alternative Approaches

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Terry Friend CNM, MSN
National Forensic Nurse Consultant
HIV IS SEXUALLY TRANSMITTED

NUMBER OF SEXUALLY TRANSMITTED DISEASES (STDs) IN EACH AGE GROUP

Under 14 1
14-16 Years 59
17-19 Years 124
20-24 Years 109
25-30 Years 45
Over 30 16

More than 50% of the total STDs are in high school age people (age 14-19)

KNOW YOUR PARTNER, USE PROTECTION

FOR MORE INFORMATION CONTACT L.H.S. MIDWIFERY @ (605) 867 3003 OR OST HEALTH EDUCATION @ (605) 867-2067
IHS PARTNERS

• Tribe
  – Health Education
  – Council
• Parents/Guardians
• Schools
  – Students
  – School Boards
  – Bureau of Indian Education
• State Education Association
• State Public Health Department
BASKETBALL TOURNAMENT HIV SCREENING AND EDUCATION

• High School Basketball Tournament

• 4 day event

• Civic Center
GOALS

• Normalize HIV testing by offering the test in public among other routine screening tests

• Provide accurate HIV information to an audience largely attended by adolescents

• Decrease stigma by showing mothers, fathers, aunties, uncles, grandmothers, grandfathers, cousins, friends all receiving HIV testing
GOALS Continued

• Provide a non-invasive test in a non-clinical environment (private)

• Individual education and using a personal risk assessment

• Immediate post-test result and counseling; chance to influence behavior change
RESULTS

• HIV Screening and Education
  – Year 1 80 testers
  – Year 2 120 testers
  – Year 3 300+

• Next Steps
  – Trained CHRs
  – Tribal Health
HIGH SCHOOL REPRODUCTIVE HEALTH CLINICS

• Small Grant (Tribe and IHS)
• Tribal Council
• School Board
• Superintendent
• Principal
• Parents
ADOLESCENT HEALTH SCREENING

• Students:
  – One-on-one education
  – Private setting
  – Familiar environment
  – STI/HIV testing
    • Giving results a little tricky
DAY 1

• Group STI/HIV education, each grade

• Slide presentation - detailed

• Prep for individual screening
DAY 2

• Individual Screen begins
  – Student interviews
  – Start with senior class

• Urine GC/CT test offered
  – Changed to everyone, regardless of history

• Oral HIV test offered
DAY 3

• Students present for care
  – Revealing personal issues
  – Referrals to Behavioral Health
  – School transporting students for additional services

• We started to feel overwhelmed!
WHAT’S GOING ON?

• We asked questions

• Opened the door
  - School is a safe environment
  - Comfort
  - Control
  - Choice to participate/divulge
WHAT WE FOUND

• Health Factors
  – Obesity (BMI - HT/WT)
  – Commercial Tobacco use
  – Alcohol
  – Drugs
  – Depression
  – Violence (personal/family)
  – Unintended pregnancy risk
  – STI / HIV risk
SEXUAL ACTIVITY

- Sexually active = 72%
- Mean age of onset = 15
- Sexually active by age 15 = 52%
STI RATES

• 13% overall positive CT/GC
• 23% in upper classman

• 50% male
• 50% female

• Most students never screened previously
SCHOOL PROGRAM GROWTH

• Second school added for reproductive health clinic

• Invited to middle schools
  – Schools: state, BIE, contract schools, faith-based
  – Education: PowerPoint with factual information

• Sacred Beginnings Curriculum
EDUCATION & SCREENING VENUES

• Pow Wows
• Rodeo
• College Centers
• Correctional Facility
• Cultural engagement
• Other
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