Overview of the 2010 CDC Sexually Transmitted Diseases Treatment Guidelines

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Overview

- Review highlights and changes to the CDC 2010 STD Treatment Guidelines:
  - Prevention Guidance/screening strategies
  - Testing modalities
  - Treatment
  - Partner Management
  - Follow-up

Disclosure Statement

- I have no relevant financial relationships with any manufacturer(s) or commercial product(s) and/or provider of commercial services discussed in this CME activity.

- I do not intend to discuss an unapproved or investigative use of a commercial product or device in this presentation.
Clinical Prevention Guidance

STD Screening: Requires asking

“Whew—way too much information.”

Clinical Prevention Guidance

- Risk assessment: Sexual History
- STD/HIV Prevention Counseling
  - Integrate sexuality education into clinical practice
  - Discuss prevention methods: condom use, microbicides, circumcision, PEP and PrEP, emergency contraception
  - Partner Treatment

Clinical Prevention Guidance

Pre-exposure Vaccination

- Hepatitis B
  - Recommended for all unvaccinated, uninfected persons being evaluated for an STD; all HIV+ persons
- Hepatitis A
  - Recommended for Men who have sex with men (MSM) and injection drug users; all HIV+ persons
- HPV
STD Screening

Persons in Correctional Facilities
• High prevalence of STDs, HIV, viral hepatitis
• Chlamydia and Gonorrhea screening recommended for all females up to 35 years of age
• Syphilis screening based on local epidemiology
• Consider screening males ≤ 30 years*

*CDC, Male Chlamydia Screening Consultation, 2007

STD Screening

Women who have sex with women (WSW)
• Do not presume low or no risk for STDs
• Screen for STDs as recommended
• Routine cervical cancer screening and HPV vaccination
• Bacterial Vaginosis more common among WSW, but routine screening for BV not recommended

STD Screening

Pregnant women
• HIV: at first prenatal visit; retest during 3rd trimester for women at high risk*
• Syphilis serologies
• Hepatitis B surface Ag
• Chlamydia: first prenatal visit; repeat during 3rd trimester for women <25 yrs or with multiple partners
• Gonorrhea and Hepatitis C if increased risk
• No routine HSV, BV, or trichomonas screening

*behavioral risk; those in areas of high HIV incidence; or living in a facility with HIV incidence of ≥ 1/1000 women screened
STD Screening

Adolescents
• Confidentiality issues; Explanation of Benefits (EOB)
• Chlamydia: all sexually active females ≤ 25 years
• Gonorrhea: if increased risk (including ≤ 25yrs)
• HIV
• No routine screening of asymptomatic adolescents for syphilis, trichomoniasis, BV, HPV, HAV, HBV
• Cervical cancer screening begins at age 21

STD Screening

Men who have Sex with Men (MSM)
• HIV
• HBsAg
• Syphilis serology
• Urethral gonorrhea and chlamydia
• Rectal gonorrhea and chlamydia
• Pharyngeal gonorrhea
• Consider HSV-2 serologic testing
• Screen every 3-6 months for those with multiple or anonymous partners
• Vaccinate against both Hepatitis A and B

Chlamydia
Chlamydia Screening

**Females**
- Screen all sexually active women ≤25 at least annually

**Males**
- Chlamydia screening among sexually active young men should be considered in clinical settings with high prevalence of chlamydia:
  - Adolescent clinics
  - STD clinics
  - Correctional facilities
  - Among men who have sex with men (MSM)

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Chlamydia Screening

**MSM**
- Screen all sexually active men who have sex with men (MSM) for *C. trachomatis* infection at least annually
- Screen at sites of exposure:
  - Urethral (urine NAAT)
  - Rectal (rectal NAAT*)
- Pharyngeal screening not recommended

*Not FDA-approved; require local lab validation

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**Prevalence of chlamydia and gonorrhea infection in symptomatic vs. asymptomatic MSM by anatomical site**

Schachter J et al. STD July 2008; 35:637 - 642
Proportion of chlamydial and gonococcal infections not identified if only urine/urethral screening was performed among men who have sex with men, San Francisco, CA, 2003

From Kent CK et al. CID 2005;41:67-74

Gonorrhea

Gonorrhea Screening

Females

- Screen all sexually active women at increased risk *, including:
  - Age < 25, previous history of STIs, new/multiple sex partners, inconsistent condom use, sex work, drug use
  - No screening recommendation for low-risk/low-prevalence areas
  - Screen pregnant women with risk factors *
Gonorrhea Screening

MSM
• Screen all sexually active men who have sex with men (MSM) for N. gonorrhoeae infection at least annually
• Screen at sites of exposure:
  – Urethral (urine NAAT)
  – Rectal (rectal NAAT*)
  – Pharyngeal (pharyngeal NAAT*)

*Not FDA-approved; require local lab validation

Chlamydia and Gonorrhea Testing

Nucleic Acid Amplification Tests (NAAT)
• High sensitivity and specificity
• Non-invasive specimen types available
  – Optimal specimen types:
    ♀ vaginal swabs
    ♂ urine

Urine NAATs:
• Most sensitive with a “first void” specimen
• First morning void NOT REQUIRED
• Female urine is acceptable, but may have reduced performance compared to genital swab samples¹

Rectal and pharyngeal NAATs:
• Not FDA approved, but may be locally validated:
  http://www.aphl.org/aphlprograms/infectious/std/pages
Syphilis Screening

- Screen persons at increased risk:
  Commercial sex workers, persons who exchange sex for drugs, MSM with high risk sexual behavior, those in adult correctional facilities (USPSTF, 7/2004)
- Screen all pregnant women (USPSTF, 5/2009)
- Screen all sexually active MSM at least annually
- Screen all sexually active HIV-positive persons at least annually

Syphilis Testing

Traditional Testing Algorithm

<table>
<thead>
<tr>
<th>Non-treponemal Tests</th>
<th>Treponemal Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPR, VDRL</td>
<td>FTA-Abs, TP-PA</td>
</tr>
<tr>
<td>• Non-specific</td>
<td>• Specific</td>
</tr>
<tr>
<td>• Quantitative</td>
<td>• Qualitative</td>
</tr>
<tr>
<td>• Reactive declines with time</td>
<td>• Reactivity persists over lifetime</td>
</tr>
</tbody>
</table>

EIA
Evaluate clinically, determine whether treated for syphilis in the past, assess risk for infection, and administer therapy according CDC’s 2010 STD Treatment Guidelines.

¶ If at risk for syphilis, repeat RPR in several weeks.

http://www.cdc.gov/std/syphilis/Syphilis-Webinar.htm

Syphilis Treatment

**Recommended regimen:**
Benzathine penicillin G 2.4 million units IM in a single dose for primary, secondary and early-latent syphilis

**Alternative regimens:**
- Doxycycline 100mg BID x 14 days
- Azithromycin 2g PO x 1:
  - Use with caution!
  - Not recommended for treatment of MSM or pregnant women

Herpes
Herpes Simplex Virus (HSV)

- Screening for HSV-1 and HSV-2 in the general population is not indicated
- Evidence does not support routine HSV-2 serologic screening among previously undiagnosed women during pregnancy
- **Type-specific serologic tests should be considered for:**
  - persons presenting for an STD evaluation (especially those with multiple sex partners);
  - persons with HIV infection;
  - MSM at increased risk for HIV acquisition
  - partners of HSV-2 infected persons
  - Persons with atypical genital symptoms or HSV diagnosis without laboratory confirmation

Human Papillomavirus (HPV)

- Cervical cancer screening should begin at **age 21**, regardless of age onset of sexual intercourse*
  - Screen every 2 years for women aged 21 – 29 yrs
  - Women age > 30 with 3 consecutive negative paps: every 3 years until age 65-70
- Consider anal cancer screening among HIV+ MSM
- HIV positive women: cervical cytology twice (q6months) within first year after initial diagnosis and, if normal, annual screening thereafter (DHHS)

*ACOG, December 2009; CDC 2010

ACOG, December 2009; CDC 2010
Cervical Cancer Screening Recommendation, March 2012

- Screen all women ages 21 to 65 years with cytology every 3 years
- Women ages 30 to 65 years may be screened with cytology + HPV testing every 5 years
- No screening recommended for women under 21 years
- No screening for women who have had a hysterectomy with removal of the cervix and who do not have a history of a high-grade precancerous lesion (i.e., CIN 2 or 3) or cervical cancer.
- No HPV testing, alone or in combination with cytology, in women younger than age 30 years.

HPV Testing

- HPV DNA testing is not recommended for the following situations:
  - Deciding whether to vaccinate for HPV;
  - Conducting STD screening for HPV;
  - Triaging LSIL;
  - Testing adolescents aged < 21 years; and
  - Screening for primary cervical cancer as a stand-alone test (i.e. without a pap test)

HPV Treatment

- New FDA-approved patient-applied treatment for external genital warts: sinecatechins 15% (VEREGEN®)
  - Requires application TID
  - May weaken latex condoms and diaphragms
  - Recommended only for external genital or perianal warts
  - Not recommended for use in HIV-infected persons, immunocompromised persons, those with clinical genital herpes, or in pregnant patients
### HPV Vaccine

- **Two types:**
  - **Cervarix** (HPV 16 & 18)
  - **Gardasil** (HPV 6, 11, 16, 18)

- Recommended as routine vaccination for **females** 11-12 yrs; approved for ages 9 through 26
- Onset of sexual activity should not be considered in making a decision for vaccination
- Schedule: 0, 2, 6 months
- Women who have received HPV vaccine should continue routine cervical cancer screening

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### HPV Vaccine

**HPV4 (Gardasil)**

- Licensed for use in **males** to prevent **genital warts** (2009); and for prevention of **anal cancer** in **males and females** (2010)
- October, 2011: ACIP recommended HPV4 as routine vaccination for **males** 11-12 yrs; may start series at age 9 yrs
- Vaccination recommended for males aged 13 through 21 years who have not completed the 3-dose series
- Males aged 22 through 26 years may be vaccinated
- Immunocompromised and MSM: routine vaccination through age 26 years

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### Trichomonas
Trichomonas Screening

- Consider screening females:
  - Seeking care for vaginal discharge
  - Seeking care in an STD clinic
  - At-risk: new or multiple sex partners, other STIs, inconsistent condom use, commercial sex work, IV drug use
- No screening recommendation for men

Bacterial Vaginosis (BV)

Screening:
- No routine screening recommendation
- Evidence is *insufficient* to recommend screening for BV in pregnant women at high risk for preterm delivery

Treatment:
- Alternative oral regimens added to Metronidazole:
  - Tinidazole 2g PO QD x 2 days
  - Tinidazole 1g PO QD x 5 days
- No value in commercially available probiotics
Thank you!