

STD Prevention Messages: 2010

Al Katz, MD, MPH
Staff Physician, Diamond Head STD Clinic,
Hawaii State Department of Health
Professor, Department of Public Health Sciences,
John A. Burns School of Medicine,
University of Hawaii

STD prevention and control: five major CDC strategies

- The prevention and control of STDs are based on “five major strategies” elucidated by the CDC in their “Sexually Transmitted Diseases, Treatment Guidelines”

STD prevention and control: Strategy #1

- Education and counseling of persons at risk on ways to avoid STDs through changes in sexual behaviors

Specific prevention methods: education and counseling

- **Abstinence:** “The most reliable way to avoid transmission of STDs is to abstain from sex . . .”

CDC. Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006;55(RR-11):3.

Prevention methods: education and counseling II

- **Mutual monogamy:** “. . . or be in a long-term, mutually monogamous relationship with an uninfected partner.”

CDC. Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006;55(RR-11):3.

Prevention methods: education and counseling III

- **Male condoms:** “When used consistently and correctly, male latex condoms are highly effective in preventing the sexual transmission of HIV infection . . . and can reduce the risk for other STDs.”

CDC. Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006;55(RR-11):4.

STD prevention and control: Strategy #2

- Identification of asymptotically infected persons and of symptomatic persons unlikely to seek diagnostic and treatment services

Identification of asymptotically infected persons

- CDC recommends annual chlamydia screening for all sexually active females ≤ 25 years old
- US Preventive Services Task Force 2007 recommendations target women ≤ 24 years old

CDC. Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006;55(RR-11):38.

www.ahrq.gov/clinic/uspstf/uspstfchl.htm

Identification of asymptotically infected persons II

- Identification and screening of members of sexual/social networks*

*J Community Health 2009;34:357-360

STD prevention and control: Strategy #3

- Effective diagnosis and treatment of infected persons

Effective treatment includes appropriate follow-up

- Due to increased risk of reinfection with gonorrhea and chlamydia, case-patients should be retested 3 months after treatment.

1. CDC. Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006;55(RR-11):40,45
2. Sex Transm Dis 2009;36:478-489.

STD prevention and control: Strategy #4

- Evaluation, treatment, and counseling of sex partners of persons who are infected with an STD

Evaluation, treatment, and counseling of sex partners

- Contact tracing/partner notification (traditional approach)
 - Expedited partner therapy/patient-delivered therapy for heterosexual men and women with chlamydial infections or gonorrhea²
2. CDC. Expedited partner therapy in the management of sexually transmitted diseases. Atlanta, GA: US Department of Health and Human Services, 2006

STD prevention and control: Strategy #5

- Preexposure vaccination of persons at risk for vaccine-preventable STD

Specific prevention method

- **Preexposure vaccination:** "Preexposure vaccination is one of the most effective methods for preventing transmission of some STDs."^{*}
 - **Hepatitis B:** "Every person being evaluated or treated for an STD who is not already vaccinated should receive hepatitis B vaccination."
 - **HPV:** vaccination recommended for females 11 or 12 years old, with "catch-up" for ages 13 through 26.

^{*}CDC. Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006;55(RR-11):4.

Additional prevention method specific for HSV-2

- **Daily suppressive antiviral therapy:** "The risk of HSV-2 sexual transmission can be decreased by the daily use of valacyclovir by the infected person."

CDC. Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006;55(RR-11):19.

Delivering an effective prevention message

- Establish rapport with your patients
 - Mastery of counseling skills: nonjudgmental attitude, respect, and compassion
- Obtain a sexual history
 - Open ended questions
 - Understandable and "normalizing" language

Sexual history taking should be routinely practiced

- Sexual histories are imperative both for assessing STD risk and for interpreting STD test results.
- Physicians who do not obtain sexual histories are at risk of both missing patients who practice unsafe behaviors who should be screened for STDs, and of misinterpreting STD screening test results when these tests are used.

The “Five Ps” of a thorough sexual history

- Partners
- Prevention of Pregnancy
- Protection from STDs
- Practices
- Past history of STDs

Barriers to Prevention

- Health care providers may avoid or neglect sexual histories and may opt not to provide educational counseling to their patients.

Clin Infect Dis 2004;38:814-819.

Barriers to Prevention II

- Challenge of maintaining abstinence, and poor research record for abstinence-only based education

Meta-analysis of randomized clinical trials comparing “comprehensive risk reduction” and “abstinence education” for adolescents

- Comprehensive risk reduction
 - Sexual activity: OR = 0.80 (95% CI: 0.69-0.93)
 - STI: OR = 0.60 (95% CI: 0.44-0.82)
- Abstinence education
 - Sexual activity: OR = 0.94 (0.81-1.10)
 - STI: OR = 1.08 (0.90-1.29)

Oral presentation A6b. National STD Prevention Conference, Atlanta GA, 9 March 2010.

CDC Task Force on Community Preventive Services recommendations:

- A “comprehensive risk reduction” approach is recommended for STI prevention among adolescents
- Insufficient evidence to determine effectiveness of “abstinence education” to prevent STIs among adolescents

Oral presentation A6b. National STD Prevention Conference, Atlanta GA, 9 March 2010.

Limitations of abstinence-only based approach

- “Condoms will break, but I can assure you that vows of abstinence will break more easily than condoms.”

Former US Surgeon General Jocelyn Elders

Barriers to Prevention III

- Knowledge of condom efficacy ≠ Behavioral change/consistency of usage

Condom beliefs and consistent condom usage: the disconnect

- Over 90% of adults agree that condoms are effective in STD prevention¹
- BUT, less than 25% of sexually active unmarried 15-44 year olds who had ever used a condom and who had sexual intercourse during the 4 weeks prior to interview used condoms consistently²

1. *Perspect Sex Reprod Health* 2005;37:148-154.
2. www.cdc.gov/nchs/nsfg/abc_list_c.htm

Barriers to Prevention IV

- Access to STD screening for high risk adolescents

“Ideal” adolescent STD prevention service components

- Geographic accessibility
- Evening and weekend hours
- Urine-based screening
- *Perhaps* in a non-clinical setting frequented by adolescents (e.g., rec center, community center); some concerns that non-medical locations (such as the mall) might threaten privacy

- BMC Public Health 2004;4:21,
www.biomedcentral.com/1471-2458/4/21

School based clinics?

- For geographically “at-risk” adolescent populations, this has been successful, but in areas with low prevalence, there has been low rates of participation and low rates of positive results

Infect Dis Clin N Am 2005;19:513-540.

Barriers to Prevention V

- Financial barriers
 - Immunization
 - Screening
- Legal barriers
 - Expedited partner therapy*

*www.cdc.gov/std/ept/legal/default.htm