

Exemplary Sexual Health Education (ESHE)

Rationale:

Just as schools are critical to preparing students academically and socially, they are also vital partners in helping young people take responsibility for their health and adopt health-enhancing attitudes and behaviors that can last a lifetime. Health education is integral to the primary mission of schools, and provides young people with the knowledge and skills they need to become successful learners and healthy and productive adults. Increasing the number of schools that provide health education on key health problems, such as HIV, other STD, and pregnancy, is a critical objective for improving our nation's health.^{1,2}

Thirty-three states currently mandate HIV education; of those, 20 mandate additional sexual education (e.g., programs that describe sexual development, provide skills to establish healthy relationships and prevent behaviors that increase the risk of HIV, other STD, and unintended pregnancy).³ Regardless of the emphasis in content, sexual health education programs should be medically accurate; consistent with scientific evidence; tailored to students' contexts and the needs and educational practices of communities; and should use effective classroom instructional methods. Sexual health education should allow students to develop and demonstrate developmentally appropriate sexual risk avoidance and reduction-related knowledge, attitudes, skills, and practices.

Independent reviews of the scientific evidence show that well-designed and well-implemented HIV/STD prevention programs are effective in decreasing sexual risk behaviors among youth.^{4,5}

Specific outcomes include:

- Delaying first sexual intercourse⁶⁻⁹
- Reducing the number of sex partners⁹⁻¹²
- Decreasing the number of times students have unprotected sex¹³⁻¹⁵
- Increasing condom use^{14,16,17}

Notably, the HIV prevention programs were not shown to hasten initiation of sexual intercourse among adolescents, even when those curricula encouraged sexually active young people to use condoms.^{18,19}

In addition, effective HIV/STD prevention programs can be cost-effective. An economic analysis of one school-based sexual risk reduction program found that for every dollar invested in the program, \$2.65 was saved in medical costs and lost productivity.²⁰ Other studies have found similar savings for HIV prevention programs focusing on youth who are at disproportionate risk for HIV, including young gay and bisexual men^{21,22} and urban African American male adolescents.²³

Definitions:

1. **Evidence-Based Interventions (EBI):** A program that has been (i) proven effective on the basis of rigorous scientific research and evaluation and (ii) identified through a systematic independent review. This funding opportunity announcement (FOA) is specifically interested in those EBIs that show effectiveness in changing behavior associated with the risk factors for HIV/

STD infection and/or unintended pregnancy among youth; these behaviors may include delaying sexual activity, reducing the frequency of sex, reducing the number of sexual partners, and/or increasing condom or contraceptive use.

2. Evidence-Informed Programs (EI): “A program that is informed by scientific research and effective practice. Such a program replicates evidence-based programs or substantially incorporates elements of effective programs. The program shows some evidence of effectiveness, although it has not undergone enough rigorous evaluation to be proven effective”.²⁴
3. Exemplary²⁵ Sexual Health Education (ESHE): A systematic, evidence-informed approach to sexual health education that includes the use of grade-specific, evidence-based interventions, but also emphasizes sequential learning across elementary, middle, and high school grade levels. ESHE provides adolescents the essential knowledge and critical skills needed to avoid HIV, other STD, and unintended pregnancy. ESHE is delivered by well-qualified and trained teachers, uses strategies that are relevant and engaging, and consists of elements that are medically accurate, developmentally and culturally appropriate, and consistent with the scientific research on effective sexual health education. For more information: www.cdc.gov/healthyyouth/sher/characteristics/index.htm and [www.cdc.gov/healthyyouth/hecat/pdf/HECAT Module SH.pdf](http://www.cdc.gov/healthyyouth/hecat/pdf/HECAT_Module_SH.pdf).

Resources:

- Characteristics of an effective health education curriculum
<http://www.cdc.gov/healthyyouth/sher/characteristics/index.htm>
- Analysis of health education curriculum
<http://www.cdc.gov/healthyyouth/HECAT/>
- Federal registries of evidence-based programs for youth
<http://www.cdc.gov/healthyyouth/AdolescentHealth/registries.htm>
- Selecting and implementing evidence-based sexual health education programs
<http://www.cdc.gov/TeenPregnancy/PDF/LittlePSBA-GTO.pdf>
http://www.nrepp.samhsa.gov/Courses/Implementations/NREPP_0101_0010.html
- Adapting sexual health education curriculum
<http://www.acf.hhs.gov/sites/default/files/fysb/prep-making-adaptations-ts.pdf>

References:

1. The White House Office of National AIDS Policy. National HIV/AIDS Strategy for the United States. Washington, DC: White House; 2010. Available at <http://aids.gov/federal-resources/national-hiv-aids-strategy/nhas.pdf>.
2. U.S. Department of Health and Human Services. *Healthy People 2020*. U.S. Department of Health and Human Services Web site. Available at <http://www.healthypeople.gov/2020/default.aspx>.

3. Guttmacher Institute. State Policies in Brief: Sex and HIV Education (As of January 1, 2013). Guttmacher Institute Web site. Available at http://www.guttmacher.org/statecenter/spibs/spib_SE.pdf.
4. Mathematica Policy Research and Child Trends. *Identifying Programs That Impact Teen Pregnancy, Sexually Transmitted Infections, and Associated Sexual Risk Behaviors: Review Protocol 2.0*. U.S. Department of Health and Human Services/Adolescent School Health Web site. Available at <http://www.hhs.gov/ash/oah/oah-initiatives/tpp/eb-programs-review-v2.pdf>.
5. Chin HB, Sipe TA, Elder R, Mercer SL, Chattopadhyay SK, Jacob V, et al. The effectiveness of group-based comprehensive risk-reduction and abstinence education interventions to prevent or reduce the risk of adolescent pregnancy, human immunodeficiency virus, and sexually transmitted infections: two systematic reviews for the Guide to Community Preventive Services. *American Journal of Preventive Medicine* 2012;42(3):272–294.
6. Tortolero S, Markham C, Peskin M, Shegog R, Addy R, Escobar-Chavez L, et al. It's your game: keep it real: delaying sexual behavior with an effective middle school program. *Journal of Adolescent Health* 2010;46(2):169–179.
7. Coyle K, Kirby D, Marín B, Gómez C, Gregorich S. Draw the line/respect the line: a randomized trial of a middle school intervention to reduce sexual risk behaviors. *American Journal of Public Health* 2004;94(5):843–851.
8. Sikkema K, Anderson E, Kelly J, Winett R, Gore-Felton C, Roffman R, et al. Outcomes of a randomized, controlled community-level HIV prevention intervention for adolescents in low-income housing developments. *AIDS* 2005;19(14):1509–1516.
9. Jemmott J, Jemmott L, Fong G. Efficacy of a theory-based abstinence-only intervention over 24 months: a randomized controlled trial with young adolescents. *Archives of Pediatrics & Adolescent Medicine* 2010;164(2):152–159.
10. Villarruel A, Jemmott J, Jemmott L. A randomized controlled trial testing an HIV prevention intervention for Latino youth. *Archives of Pediatrics & Adolescent Medicine* 2006;160(8):772–777.
11. Koniak-Griffin D, Lesser J, Nyamathi A, Uman G, Stein J, Cumberland W. Project CHARM: an HIV prevention program for adolescent mothers. *Family & Community Health* 2003;26(2):94–107.
12. Shrier L, Ancheta R, Goodman E, Chiou V, Lyden M, Emans J. Randomized controlled trial of a safer sex intervention for high-risk adolescent girls. *Archives of Pediatrics & Adolescent Medicine* 2001;155:73–79.
13. Markham CM, Tortolero SR, Peskin MF, Shegog R, Thiel M, Baumler ER, et al. Sexual risk avoidance and sexual risk reduction interventions for middle school youth: a randomized controlled trial. *Journal of Adolescent Health* 2012;50(3):279–288.
14. Coyle K, Kirby D, Robin L, Banspach S, Baumler E, Glassman J. All4You! A randomized trial of an HIV, other STDs, and pregnancy prevention intervention for alternative school students. *AIDS Education and Prevention* 2006;18(3):187–203.
15. Jemmott J, Jemmott L, Braverman P, Fong G. HIV/STD risk reduction interventions for African American and Latino adolescent girls at an adolescent medicine clinic: a randomized controlled trial. *Archives of Pediatrics & Adolescent Medicine* 2005;159:440–449.
16. DiClemente R, Wingood G, Rose E, Sales E, Lang D, Caliendo A, et al. Efficacy of sexually transmitted disease/human immunodeficiency virus sexual risk-reduction intervention for African American adolescent females seeking sexual health services: a randomized controlled trial. *Archives of Pediatric & Adolescent Medicine* 2009;163(12):1112–1121.
17. DiClemente R, Wingood G, Harrington K, Lang D, Davies S, Hook E III, et al. Efficacy of an HIV prevention intervention for African American adolescent girls: a randomized controlled trial. *Journal of the American Medical Association* 2004;292:171–179.
18. Kirby D. *Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases*. Washington, DC: National Campaign to Prevent Teen Pregnancy;2007.
19. Kirby D. The impact of abstinence and comprehensive sex and STD/HIV education programs on adolescent sexual behavior. *Sexuality Research & Social Policy* 2008;5(3):18–27.
20. Wang L, Davis M, Robin L, Collins J, Coyle K. Economic evaluation of Safer Choices: a school-based HIV/STD and pregnancy prevention program. *Archives of Pediatrics & Adolescent Medicine* 2000;154(10):1017–1024.
21. Tao G, Remafedi G. Economic evaluation of an HIV prevention intervention for gay and bisexual male adolescents. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1998;83–90.
22. Kahn J, Kegeles S, Hays R, Beltzer N. Cost-effectiveness of the Mpowerment project, a community-level intervention for young gay men. *Journal of Acquired Immune Deficiency Syndrome* 2001;27(5):482–491.
23. Pinkerton S, Holtgrave D, Jemmott J. Economic evaluation of HIV risk reduction intervention in African-American male adolescents. *Journal of Acquired Immune Deficiency Syndrome* 2000;25(2):164–172.

24. Djamba YK, Davidson TC, Aga MG. Sexual Health of Young People in the U.S. South: Challenges and Opportunities. Montgomery, Alabama: Center for Demographic Research. March 2012. Available at http://www.demographics.aum.edu/uploadedfile/CDR_SexualHealth_6-1.pdf.
25. CDC. Indicators for School Health Programs. HIV Prevention: State Education Agencies. 2011. Available at http://www.cdc.gov/healthyyouth/evaluation/indicators/pdf/questionnaires/quest_hivsea_2012.pdf.