

**Review of
Comprehensive Sex Education Curricula**

**The Administration for Children and Families (ACF)
Department of Health and Human Services (HHS)**

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Introduction

“Comprehensive Sex Education” curricula for adolescents have been endorsed by various governmental agencies, educational organizations, and teenage advocacy groups as the most effective educational method for reducing teenage pregnancy and helping prevent the spread of sexually transmitted diseases (STDs) among America’s youth. The National Institutes of Health (NIH) defines Comprehensive Sex Education (CSE) as “teaching both abstinence and the use of protective methods for sexually active youth”; NIH states that CSE curricula have been “shown to delay sexual activity among teens.”¹ Non-governmental groups that support CSE have also made statements linking CSE curricula to abstinence as well as reduction of pregnancy and sexually transmitted infections (STIs).²

The Administration for Children and Families, within the Department of Health and Human Services undertook an examination of some of the most common CSE curricula currently in use. The purpose of this examination was to inform federal policymakers of the content, medical accuracy, and effectiveness of CSE curricula currently in use.

Background

In 2005, Senators Santorum and Coburn requested that the Administration for Children and Families (ACF) review and evaluate comprehensive sex education programs supported with federal dollars. The Senators wrote to the Assistant Secretary for Children and Families,

“In particular, we would appreciate a review that explores the effectiveness of these programs in reducing teen pregnancy rates and the transmission of sexually transmitted diseases. In addition, please assess the effectiveness of these programs in advancing the greater goal of encouraging teens to make the healthy decision to delay sexual activity. Please also include an evaluation of the scientific accuracy of the content of these programs. Finally, we would appreciate an assessment of how the actual content of these programs compares to their stated goals.”

In response, ACF contracted with the Sagamore Institute for Policy Research to review some of the most common CSE curricula currently in use. ACF also requested and received comments on these reviews from the Medical Institute for Sexual Health (MISH).

¹ Demographic and Behavioral Sciences Branch, NICHD: *Report to the NACHHD Council, 2003*, The National Institute of Child Health and Human Development (NICHD), The Demographic and Behavioral Sciences Branch (DBSB).

² The Sexuality Information and Education Council of the United States (SIECUS) has stated that, “Numerous studies and evaluations published in peer-reviewed literature suggest that comprehensive sexuality education is an effective strategy to help young people delay their involvement in sexual intercourse.” [*Issues and Answers: Fact Sheet on Sexuality Education*, SIECUS Report, Volume 29, Number 6 - August/September 2001.] Also, with regard to sexually transmitted diseases (STDs), the American Psychological Association has concluded that, “only comprehensive sex education is effective in protecting adolescents from pregnancy and sexually transmitted illnesses at first intercourse and during later sexual activity.” [APA Online, American Psychological Association, Press Release, *Based on the Research, Comprehensive Sex Education is more Effective at Stopping the Spread of HIV Infection, Says APA Committee*, <http://www.apa.org/releases/sexeducation.html>, February 23, 2005.]

Research Questions and Methodology

In response to the request from Senators Santorum and Coburn, the curriculum reviews evaluated four questions:

- 1. Does the content of the comprehensive sex education curricula mirror the stated purposes?**
- 2. What is the content of comprehensive sex education curricula?**
- 3. Do comprehensive sex education curricula contain medically inaccurate statements?**
- 4. Do evaluations of these curricula show them to be effective at (a) delaying sexual debut and (b) reducing sex without condoms?**

The initial charge of this project was to evaluate the content and effectiveness of the “most frequently used” CSE curricula. After a thorough search, which included contacting publishers, researchers, distributors, and advocacy groups, it was determined that a list ranked by “frequency of use” or “number of copies purchased” was not in existence nor could one be produced.

Instead, curricula were chosen for this study based on the frequency and strength of endorsement received from leading and recognized sexuality information organizations and resources.³ A curriculum was considered to be “endorsed” if a source recommended it or promoted it as a “program that works.” The curricula mentioned most frequently were chosen for this study if they were school-based (i.e. not solely for community organizations), widely available, and described by at least one source as “comprehensive” or “abstinence-plus.” Additional weight was given to curricula described as evidence-based or as a “program that works.”

It should be noted that some of the curricula reviewed do not state in their materials that they have an abstinence focus – i.e. that they are “comprehensive sex education,” “abstinence plus,” or in some other way focused on abstinence. However, if a curriculum were endorsed as “comprehensive” or “abstinence plus” by a leading sexuality information organization and resources, it was assumed that the curriculum would be purchased and used for the purpose of providing comprehensive sex education. Additionally of note, some of the curricula have

³ These organizations include:

- Sexuality Information and Education Council of the United States (SIECUS), a sexuality education, health, and rights advocacy group;
- ETR (Education, Training, Research) Associates, a publisher of CSE curricula, and their “Resource Center for Adolescent Pregnancy Prevention” (ReCAPP);
- Child Trends, a nonprofit, nonpartisan research organization;
- Planned Parenthood (including national and regional offices);
- The Alan Guttmacher Institute, nonprofit organization focused on sexual and reproductive health research, policy analysis and public education;
- Advocates for Youth, a nonprofit organization dedicated to creating programs and advocating for policies that help young people make informed and responsible decisions about their reproductive and sexual health;
- *Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy*, by Douglas Kirby; and
- Program Archive on Sexuality, Health & Adolescence (PASHA).

recently published revisions with added abstinence components. In every case, the most recent version of the curricula available was studied.

Nine curricula met the criteria for this study and were subsequently reviewed:

1. *Reducing the Risk: Building Skills to Prevent Pregnancy, STD & HIV (4th Edition)*, by R. Barth, 2004.
2. *Be Proud! Be Responsible!*, L. Jemmott, J. Jemmott, K. McCaffree, published by Select Media, Inc. 2003.
3. *Safer Choices: Preventing HIV, Other STD and Pregnancy (Level 1)*, by J. Fetro, R. Barth, K. Coyle, published by ETR Associates, 1998; and *Safer Choices: Preventing HIV, Other STD and Pregnancy (Level 2)*, by K. Coyle and J. Fetro, published by ETR Associates, 1998.
4. *AIDS Prevention for Adolescents in School*, by S. Kasen, and I. Tropp, distributed by the Program Archive on Sexuality, Health, and Adolescence (PASHA), 2003.
5. *BART=Becoming a Responsible Teen (Revised Edition)*, by J. Lawrence, published by ETR (Education, Training, Research) Associates, 2005.
6. *Teen Talk: An Adolescent Pregnancy Prevention Program*, by M. Eisen, A. McAlister, G. Zellman, distributed by PASHA, 2003.
7. *Reach for Health, Curriculum⁴, Grade 8*, by L. O'Donnell, et al., by Education Development Center, Inc., 2003.
8. *Making Proud Choices*. L. Jemmott, J. Jemmott, K. McCaffree, published by Select Media, Inc., 2001, 2002.
9. *Positive Images: Teaching Abstinence, Contraception, and Sexual Healthy*, by P. Brick and B. Taverner, published by Planned Parenthood of Greater Northern New Jersey, Inc., 2001.

The curriculum review consisted of four components. First, each curriculum underwent an extensive content analysis, i.e. a word-by-word count of instances in which certain words or themes (e.g. condoms, abstinence) are mentioned. Content analyses offer insight into the weight respective curricula give to key themes. Appendix A contains the complete content analysis for each curriculum reviewed.

Second, the stated purposes of the curricula were compared to the actual emphases of the curricula, as demonstrated by the content analysis.

Third, curriculum content was evaluated for medical accuracy, primarily the accuracy of statements about condoms (including statements on a common spermicide, nonoxynol-9, that was previously recommended to be added to condoms).

Lastly, evaluations of each curriculum – which offer insights into curriculum effectiveness at delaying sexual debut and increasing condom use – were located and summarized.

⁴ *Reach for Health* is often packaged together with *Community Youth Service*, which is a community based program. *Reach for Health* is endorsed as a stand-alone classroom curriculum.

Appendix B contains a curriculum-by-curriculum review of the each curriculum's content, medical accuracy, and evaluations of each curriculum.

Findings

The curriculum reviews yielded the following findings:

- **Does the content of the curricula mirror their stated purposes?** While the content of the curricula reviewed adheres to their stated purposes for the most part, these curricula often do not spend as much time discussing abstinence as they do discussing contraception and ways to lessen risks of sexual activity. Of the curricula reviewed, the curriculum with the most balanced discussion of abstinence and safer-sex still discussed condoms and contraception nearly seven times more than abstinence.⁵ Three of the nine curricula reviewed did not have a stated purpose of promoting abstinence; however, two of these three curricula still discussed abstinence as an option (although, again, discussion of condoms and safer sex predominated). As a last note, it is important to recognize that, although some of the curricula do not include abstinence as a stated purpose, some sexuality information organizations and resources recommend these curricula as comprehensive sex education.
- **What is the content of comprehensive sex education curricula?** As mentioned in the previous paragraph, these curricula focus on contraception and ways to lessen risks of sexual activity, although abstinence is at times a non-trivial component. Curriculum approaches to discussing contraception and ways to lessen risks of sexual activity can be grouped in three broad areas: (1) how to obtain protective devices (e.g. condoms), (2) how to broach a discussion on introducing these devices in a relationship, and (3) how to correctly use the devices. Below are a few excerpts from the curricula in these three areas.
 - **How to obtain protective devices:** “How can you minimize your embarrassment when buying condoms? ... Take a friend along; find stores where you don't have to ask for condoms (e.g. stocked on open counter or shelf); wear shades or a disguise so no one will recognize you; have a friend or sibling who isn't embarrassed buy them for you; make up a condom request card that you can hand to the store clerk (Show example)” (*AIDS Prevention for Adolescents in School*, p. 63).
 - **How to broach a discussion on introducing these devices in a relationship:** “Teacher states: “Pretend I am your sexual partner. I am going to read more excuses (for not using condoms) and I want you to convince me to use a condom” (*Making Proud Choices*, p. 157).
 - **How to correctly use the devices:** “Have volunteers come to the front of the room (preferably an equal number of males and females). Distribute one card to

⁵ The content analysis counted words used in each curriculum. Of the words counted, variations on the word “condom” occurred 235 times and variations on the word “contraception” occurred 381 times, while variations on the word “abstinence” occurred 87 times.

each. Give them a few minutes to arrange themselves in the proper order so their cards illustrate effective condom use from start to finish. Non-participants observe how the group completes this task and review the final order. When the order is correct, post the cards in the front of the room. CORRECT ORDER: (Sexual Arousal, Erection, Leave Room at the Tip, Roll Condom On, Intercourse, Orgasm/Ejaculation, Hold Onto Rim, Withdraw the Penis, Loss of Erection, Relaxation). Ask a volunteer to describe each step in condom use, using the index and middle finger or a model of a penis” (*Positive Images*, p. 102).

- **Do the curricula contain medically inaccurate statements?** Most comprehensive sex education curricula reviewed contain some level of medical inaccuracy. Of the nine curricula reviewed, three had no medically inaccurate statements.⁶ The most common type of medical inaccuracy involved promotion of nonoxynol-9, a common spermicide; three curricula had medical inaccuracies involving nonoxynol-9.⁷ While condoms with nonoxynol-9 (N-9) had previously been recommended for reducing the risk of HIV and other STD in the 1990s, research over the last decade has demonstrated that nonoxynol-9 is at best ineffective against STDs and HIV, and at worse increases risk.⁸

Other inaccuracies included: (a) one curriculum that used the term “dental dam” instead of the FDA-approved “rubber dam”⁹; (b) one curriculum that quoted first year condom failure rates for pregnancy at 12%, when the correct statistic is 15%¹⁰; and (c) one curriculum that stated that all condoms marketed in the United States “meet federal assurance standards” (which is not true).¹¹

In terms of inaccurate statistics related to condom effectiveness, eight of the nine curricula did not have any inaccuracies. The one curriculum which did have inaccuracies, *Making Proud Choices*, had three erroneous statements.¹²

Although there were few inaccurate statements regarding condom effectiveness, the curricula do not state the risks of condom failure as extensively as is done in some abstinence-until-marriage curricula, nor do they discuss condom failure rates in context. Indeed, there were misleading statements in every curriculum reviewed. For example, one curriculum states, “When used correctly, latex condoms prevent pregnancy 97% of the time.”¹³ While this statement is technically true,¹⁴ 15% percent of women using condoms for contraception experience an unintended pregnancy during the first year of

⁶ The three curricula without any medical inaccuracies were *Reducing the Risk*, *BART = Becoming a Responsible Teen*, and *Teen Talk*.

⁷ Three curricula contain references to nonoxynol-9: see reviews of *Be Proud! Be Responsible!*, *AIDS Prevention for Adolescents in School*, and *Reach for Health* in Appendix B for more information.

⁸ Twelve peer-reviewed studies that evaluated N-9 were published from 1992 through 2004. None showed any reduction in STDs including HIV; one showed an increase in gonorrhea and two showed increases in HIV.

⁹ See review of *Be Proud! Be Responsible!* in Appendix B for more information.

¹⁰ See review of *Safer Choices* in Appendix B for more information.

¹¹ See review of *Positive Choices* in Appendix B for more information.

¹² See review of *Making Proud Choices* in Appendix B for more information.

¹³ *Safer Choices*, Implementation Guide, p. 176.

¹⁴ Trussell J. Contraceptive Efficacy. In Hatcher RA, et al. (Eds.) *Contraceptive Technology*. 1998. Chapter 31:779-844, 17th Revised Ed., Ardent Media, New York, NY. As cited in National Institute of Allergy and Infectious Diseases. *Workshop Summary: Scientific Evidence on Condom Effectiveness for Sexually Transmitted Disease (STD) Prevention*. Bethesda, MD: National Institute of Allergy and Infectious Diseases; 2001.

“typical use,”¹⁵ and 20% of adolescents under the age of 18 using condoms for contraception get pregnant within one year.¹⁶

For perspective, it may be helpful to compare the error rate reported here with statistics cited in the December 2004 report entitled “The Content of Federally Funded Abstinence Education Programs,” which is typically called the Waxman Report.¹⁷ This report found that, of thirteen abstinence-until-marriage curricula reviewed, eleven contained medically inaccurate statements; in all thirteen curricula (nearly 5,000 pages of information), there were 49 instances of questionable information.¹⁸ It could easily be argued that the comprehensive sex education curricula reviewed for this report have a similar rate of error compared with abstinence-until-marriage curricula.

- **Do evaluations of these curricula show them to be effective at (a) delaying sexual debut and (b) reducing sex without condoms?** According to the evaluations reviewed, these curricula show some small positive impacts on (b) reducing sex without condoms, and to a lesser extent (a) delaying sexual debut. Specifically, there were evaluations for eight of the nine curricula reviewed. Of those eight curricula, seven showed at least some positive impacts on condom use; two showed some positive impacts on delay of sexual initiation.¹⁹ One curriculum (*Teen Talk*) showed the only negative impact: for sexually inexperienced females, there was a negative impact on first intercourse and on consistent use of contraceptives. Often the impacts observed in evaluations are small, and most often the impacts do not extend three or six months after a curriculum has been used.²⁰ It is important to note that evaluations of the curricula do have limitations. All curricula were evaluated by the curriculum authors themselves (although all evaluations were peer-reviewed and published in established journals). Also, the sample sizes are small in some of the evaluations, and research design issues decrease the ability to draw conclusions from some of the evaluations. Appendix B contains details on the evaluations of these curricula.

Conclusion

Research on the effectiveness of nine commonly used comprehensive sex education curricula demonstrates that, while such curricula show small positive impacts on increasing condom use among youth, only a couple of curricula show impacts on delaying sexual debut; moreover,

¹⁵ Trussell J. The essentials of contraception: Efficacy, safety, and personal considerations. In: Hatcher RA, Trussell J, Stewart FH, *et al.*, eds. *Contraceptive Technology*. 18th Revised ed. New York: Ardent Media, Inc.; 2005:221-252.

¹⁶ Grady WR, Hayward MD, Yagi J. Contraceptive failure in the United States: estimates from the 1982 National Survey of Family Growth. *Fam Plann Perspect* 1986;18(5):200-209.

¹⁷ United States House of Representatives, Committee on Government Reform – Minority Staff, Special Investigations Division. (December 2004). “The Content of Federally Funded Abstinence-Only Education Programs.” Available at <http://reform.democrats.house.gov/Documents/20041201102153-50247.pdf>

¹⁸ The United States House of Representatives Committee on Government Reform provided a rebuttal to the Waxman report; see United States House of Representatives, Committee on Government Reform. (October 2006). “Abstinence and Its Critics.” Available at <http://reform.house.gov/UploadedFiles/Abstinence%20and%20its%20Critics.pdf>

¹⁹ A third curriculum, *Teen Talk*, showed no impact on initiation of sex overall, but there was a small abstinence effect for males.

²⁰ Examples of curricula that did show results past 3 months include: (1) *Making Proud Choices* showed positive impacts on increased condom use 6 and 12 months post-intervention; and (2) *Reducing the Risk* showed positive impacts on delaying sexual debut 18 months post intervention.

effects most often disappear over time. The fact that both the stated purposes and the actual content of these curricula emphasize ways to lessen risks associated with sexual activity – and not necessarily avoiding sexual activity – may explain why research shows them to be more effective at increasing condom use than at delaying sexual debut. Lastly, although the medical accuracy of comprehensive sex education curricula is nearly 100% – similar to that of abstinence-until-marriage curricula – efforts could be made to more extensively detail condom failure rates in context.

