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The CDC's Division of Adolescent and School Health Approach to Sexual Health Education in Schools: 3 Decades in Review

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Abstract

BACKGROUND: School health education, including sexual health education, plays a crucial role in shaping adolescents' protective health behaviors, experiences, and outcomes. Adolescents need functional knowledge and skills to practice, adopt, and maintain healthy behaviors for preventing sexually transmitted infections (STIs), including human immunodeficiency virus (HIV), and unintended pregnancy.

METHODS: The US Centers for Disease Control and Prevention's Division of Adolescent and School Health (CDC/DASH) has advanced school-based approaches to STI/HIV and

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pregnancy prevention through surveillance, research and evaluation, and program partnership and collaboration for over 3 decades.

RESULTS: CDC/DASH uses systematic and innovative strategies to identify the breadth of adolescent sexual health evidence; characterize key elements of effective educational curricula; and provide practical guidance to support school-based delivery. CDC/DASH's approach to effective health and sexual health education in schools has changed dramatically over the past 30 years and must continue to progress.

CONCLUSION: This paper describes how and why that approach has evolved and outlines directions for the future.

Keywords

sexual health education; sexuality education; sex education; STI/HIV prevention; adolescent pregnancy prevention; school health

BACKGROUND

Health behaviors and experiences during adolescence set the stage for health into adulthood. Specifically, adolescents' behaviors and experiences related to sexual health, violence, substance use, and poor mental health and suicide can increase their risks for sexually transmitted infections (STI), including HIV, and unintended or mistimed pregnancy.¹ In 2019, 27.4% of high school students reported being currently sexually active (ie, past 3 months), and nearly half (46%) of those students did not use a condom at last sex.² Moreover, approximately 15% of currently sexually active students reported using no method of contraception to prevent pregnancy and 21.2% reported drinking alcohol or using drugs before last sex.² Only 9% of all high school students surveyed had ever been tested for HIV,¹ and even fewer (8.6%) reported STI testing in the past 12 months.¹ Related to violence and victimization, among the 66.1% of students nationwide who dated or went out with someone during the last year, 8.2% had been forced to do "sexual things" (eg, kissing, touching, or physically forced to have sexual intercourse) and 7.3% were physically forced to have sex when they did not want to.¹ Over a third (37%) of students reported feeling sad or hopeless almost every day for 2 or more consecutive weeks, and 18.8% had seriously considered attempting suicide within the last year.¹

Educational interventions, targeting a variety of health issues, can address these risk behaviors and experiences and mitigate negative consequences for adolescents. For decades, school-based sexual health education (SBSHE) has been used to reduce sexual risk behaviors associated with STI/HIV and unintended pregnancy, as well as provide opportunities for students to build health-enhancing knowledge and skills needed for a healthy transition into adulthood.³⁻⁵ This paper outlines how SBSHE has evolved as a critical public health approach through 3 decades of work in the US Centers for Disease Control and Prevention's (CDC) Division of Adolescent and School Health (DASH).

LITERATURE REVIEW

School-based sexual health education, as part of a comprehensive school health education framework, uses a systematic, evidence-informed approach to promote sexual health and prevent risk behaviors and experiences associated with STI/HIV and unintended pregnancy.⁶ SBSHE uses medically accurate, developmentally and culturally inclusive information, and skill-building to address sequential learning and behavioral outcomes across pre-K through grade 12.^{6,7} Figure 1 illustrates the expected healthy behavior outcomes (HBOs) resulting from students' engagement in sequential pre-K-12 sexual health curricula. Students are best able to adopt and maintain these HBOs when they receive a progression of structured learning opportunities to apply functional knowledge and practice skills that promote healthy decision-making and reduce risk behaviors.^{6,8}

Across school and community settings, comprehensive sexual health programs, sometimes referred to as sexual risk reduction (SRR) programs, have been found to delay first sexual intercourse, decrease the number of sexual partners, and increase condom and contraceptive use among youth.⁸⁻¹⁸ Further, meta-analytic evidence reported by Chin et al. for the US Community Preventive Services Task Force's Guide to Community Prevention Services suggests that, across 62 studies of group-based SRR interventions, statistically significant reductions were observed in sexual activity, number of sexual partners, unprotected sexual activity, and risk of STIs among study participants.³ Notably, HIV prevention programs studied have not been shown to hasten initiation of sexual interaction among adolescents, even when those sexual health programs encouraged sexually active youth to use condoms.^{8,13}

The US education system provides a structure to deliver health promotion which is broad in scope and reach.¹⁹ Schools have daily, direct contact with approximately 56 million students during the most critical years of social, physical, and intellectual development,^{16,20} making them suitable venues for addressing a variety of outcomes, beyond just academics. In addition, many schools have staff with knowledge of critical health risk and protective behaviors and have preexisting infrastructure that can support a varied set of helpful interventions. Research suggests health and academics are complementary: school health programs can have a positive effect on academic performance^{21,22} as well as directly contribute to students' ability to successfully practice health-enhancing behaviors.^{23,24} Health risk behaviors and experiences such as early sexual initiation, violence, and substance use are consistently linked to poor grades and test scores and lower educational attainment,²⁰⁻²³ and in turn, academic success is an excellent indicator for the overall student wellbeing and a primary predictor and determinant of adult health outcomes.²⁵⁻²⁷ National education organizations recognize the interconnectedness of health and academics and assert the need to promote health through schools.²⁸⁻³¹ This integration and coordination between health and learning is reflected prominently in the Whole School, Whole Community, Whole Child model.^{32,33}

Despite the benefits of SBSHE, laws and policies governing how schools interpret and implement such education vary greatly,³⁴⁻³⁷ largely shaping decisions about health curricula.^{37,38} School implementation data illustrate jurisdictional differences in delivery

of health and sexual health education. In 2018, the percentage of schools implementing health education instruction, often including sexuality-related topics, in a required course for students in any of grades 6 through 12 ranged from 67.6% to 99.4% across states (median: 93.7%).³⁹ Trend data (2008-2016) also suggest scant improvements over time in the percentage of schools implementing instruction on key sexual and reproductive health topics (eg, abstinence and condoms) in required courses for students in secondary schools.³⁴ Varied sociopolitical landscapes affect schools' ability to exercise local decision making within state mandated or recommended sexual health education requirements, contributing to variation and inconsistency in the structure, frequency, and quality of approaches to address STI/HIV and unintended pregnancy prevention.^{34,36}

Innovation to Support SBSHE

For more than 30 years, CDC/DASH has supported innovative, school-based approaches to STI/HIV and pregnancy prevention through national surveillance, research and evaluation, and programmatic partnership with state and local public health and education agencies. Throughout this time, CDC/DASH has developed approaches that allow SBSHE to remain dynamic and responsive to disease outbreaks, changes in societal norms and values, shifts in political and funding infrastructure, and implementation challenges faced by schools and communities. Figure 2 illustrates key innovative events in CDC/DASH's timeline of work to establish a national school health program, advance program-based guidance in sexual health, develop an elements-based approach to health education, and create systems to promote SBSHE implementation activities.

Establishing a national school health program.—As a foundation, CDC/DASH contributed the first coordinated framework to connect students' health and learning,⁴⁰ resulting in the establishment of a national program. In this work, CDC/DASH developed the first guidelines to improve school-based HIV/AIDS prevention education incorporating scientifically accurate and theory-based research⁴¹ and identified effective and practical programs for use in schools.⁴² In 1987, CDC/DASH launched the first national school-based delivery model to prevent HIV/AIDS among youth,⁴³⁻⁴⁵ shifting the CDC funding paradigm, which previously only funded public health agencies. Since 1990, the Youth Risk Behavior Surveillance System (YRBSS) has monitored health behaviors contributing to the leading causes of death, disability, and social problems among US youth and adults.⁴⁶ Additionally, School Health Profiles, a system of surveys assessing school health policies and practices in states, school districts, and territories, has shaped the work of the school health field since 1996.³⁹

The CDC/DASH approach has grown markedly over the last 30 years prompting interest in documenting past successes, current approaches, and future directions to continue support for SBSHE. In this paper, we chronicle CDC/DASH's *past* successes in strengthening program-specific guidance to prevent STI/HIV and unintended pregnancy; describe *current* elements-based approaches shaping SBSHE; and highlight *future* priorities to expand systems and evidence for multicomponent implementation. We share critical insights and lessons learned in the advancement of this work, in hopes of supporting others working in this field.

Past success with STI/HIV and pregnancy prevention through program-specific guidance.—The late 1980s saw the onset of HIV prevention and treatment efforts, and tremendous stigma and fear of people living with HIV. In 1986, the US Surgeon General's Report on AIDS called for a nationwide education campaign including early SBSHE, increased use of condoms, and voluntary HIV testing among school-aged youth.⁴¹ As a result, program developers and researchers scrambled to adapt and evaluate SBSHE programs that addressed HIV-specific needs among youth. Soon thereafter, the US Congress called for schools to establish and conduct risk reduction activities through program-specific technical assistance and evaluations that addressed adolescent HIV/AIDS prevention programs^{42,47}; yet a persistent gap in evidence that rigorously and systematically documented effective SBSHE programs made it difficult for schools to select risk reduction activities effective at changing adolescent sexual behaviors.

In response, CDC/DASH launched the Research to Classroom: Programs-that-Work (PTW) Initiative in 1992 to establish a systematic, external review process to identify sexual risk reduction and tobacco use prevention education programs with credible evidence of effectiveness that were practical and feasible for use in schools.⁴² To be eligible for PTW, studies reporting program effectiveness had to employ an experimental or quasi-experimental research design, including, at minimum, a 4-week follow-up period; demonstrate a significant positive effect in reducing sexual or tobacco risk behaviors among youth; report no increases in risk behavior at follow-up; and publish results in a refereed journal. Programs-that-Work also identified program practicality by assessing developmental and cultural appropriateness for target audiences of youth, adequacy of teacher materials, and feasibility for broad implementation for most teachers and school staff.⁴²

Once programs were screened as eligible for PTW, CDC/DASH employed a 2-pronged strategy using expert panels (ie, research-focused and practice-focused) for each round of program identification to designate programs as evidence-based and created a comprehensive plan to translate and disseminate identified program findings. First, CDC/DASH commissioned a scientific review panel to evaluate credible evidence of effectiveness across eligible sexual health education and tobacco prevention programs. The use of a second practice-focused panel was unique to CDC/DASH's approach to program selection. This panel determined the feasibility and acceptability of the sexual health education programs for school-based delivery. Consisting of experts external to CDC/DASH, and independent of the programs under consideration, the panel assessed practicality of implementing curricula and training materials,⁴² accuracy of content in concordance with CDC's HIV/AIDS prevention education guidelines,⁴¹ and potential barriers to implementation.

Based on results from the scientific and practice-focused panels, CDC/DASH concluded that 8 programs demonstrated evidence of effectiveness and feasibility for reducing adolescent sexual risk behaviors associated with STI/HIV and unintended pregnancy.^{14,42} Findings guided schools in identifying and selecting programs with evidence of effectiveness and motivated researchers to continue evaluation studies that published program effectiveness results. CDC/DASH commissioned program developers and independent national non-governmental organizations (NGOs) to package curricula and training materials and

established a national training framework (eg, training cadres) to facilitate workshops with schools to implement effective sexual health programs. Concurrently, CDC/DASH provided funding for technical assistance, capacity building, and programmatic evaluation focused on findings from PTW.

By the discontinuation of PTW in 2002, CDC/DASH had pioneered the translation of research to practice within SBSHE by (a) establishing a standard of evidence for program effectiveness, and (b) providing practical guidance to improve feasibility of implementation. The success of CDC/DASH's work across this period set a foundation for communicating measurable impact of SRR programs and provided program-specific guidance (ie, effectiveness and practicality) for schools to consider when addressing STI/HIV and unintended pregnancy prevention.^{14,42}

Current elements-based approaches to support SBSHE.—Although PTW advanced the field's understanding of SBSHE effectiveness and practicality, it also highlighted barriers to implementing evidence-based programs (EBPs) in schools. First, PTW identified only 8 programs effective at reducing adolescent sexual risk behaviors that could feasibly be implemented in schools. Typically, these programs were tested with unique sub-groups (eg, Hispanic females, ages 13-15) in a specific city or region, prompting questions from racial/ethnically and geographically diverse schools about the applicability of such programs for their students populations.⁴² Second, EBPs typically included extensive staffing, resource support, and time investments that were largely unrealistic for schools to provide and maintain.⁴² Constraints on instructional time and scheduling, limited access to curricula materials, and cost of purchasing EBPs led to threats in implementation fidelity, replicability, and potential impact on outcomes.^{48,49} Considering these challenges, the PTW initiative exposed limitations in program-specific guidance, prompting CDC/DASH to shift toward understanding characteristics of effective programs and pioneering the elements-based approach to SBSHE.

CDC/DASH defines an elements-based approach as the systematic identification of key elements consistent, or shared, across programs demonstrating evidence of effectiveness on desired health outcomes. Such an approach is highly beneficial. First, synthesizing shared elements allowed CDC/DASH to move from identifying specific sexual health education programs or curricula to highlighting cross-cutting characteristics that may contribute to improved effectiveness. The approach summarizes commonalities across a variety of program types, target audiences, and geographic settings, and is applicable across health-related primary prevention broadly, not just stand-alone or single-subject programs (eg, sexual health). This approach has yielded 3 critical resources to support schools' implementation of health and sexual health education programming, including the Characteristics of Effective Health Education Curricula,⁵⁰ the Health Education Curriculum Analysis Tool (HECAT),⁶ and the Developing a Sexual Health Education Scope and Sequence (S&S).⁷

Informed by the expert panels on effective and practical programs and evidence from seminal systematic reviews of the literature,^{4,14,15} CDC created the curricula expectations resource entitled Characteristics of Effective Health Education Curriculum (often known as

15 characteristics) (see Figure 3).⁵⁰ The framework includes 15 characteristics, synthesized from empirical and practice-based evidence and shared by programs effective in changing student health behaviors.^{4,8,48,51-62} The 15 characteristics assert the importance of teaching functional health information and emphasize curricula's need to shape personal values and beliefs that support healthy behaviors, influence group norms that value a healthy lifestyle, and develop health-enhancing skills to promote behavior change.⁵⁰ Evidence from this review suggest that ineffective curricula may often overemphasize the teaching of scientific facts, focused solely on increasing student knowledge, without also addressing other elements necessary for turning knowledge into healthy decisions and behaviors.⁵⁰

The second resource is CDC's Health Education Curriculum Analysis Tool (HECAT). Beginning in 2002, a multisector partnership between public and school health researchers and practitioners, state and local education agencies (SEAs/LEAs), and national NGOs was established to create the HECAT.⁶ The HECAT is used to systematically analyze health curricula, and results help schools or other youth-serving organizations select, revise, or develop curricula effective at meeting local health needs and priorities.⁶ The tool features 10 health topic modules including alcohol and other drugs; food and nutrition; mental and emotional health; personal health and wellness; physical activity; safety; sexual health; tobacco; violence prevention; and comprehensive health education.⁶ Each module articulates healthy behavior outcomes (HBOs) (ie, desired behavioral results from health education curricula) and outlines essential knowledge and skill expectations across grade spans (ie, preK-2, 3-5, 6-8, and 9-12).^{63,64} The tool uses 2 seminal resources, the 15 Characteristics and the National Health Education Standards (NHES),^{6,63} as organizing frameworks. The NHES include 8 health-related knowledge and skill standards, with coresponding performance indicators, for students across grades K-12 aimed at improving personal, family, and community health.^{63,64} The first edition of the HECAT was released in 2006, revised in 2012, and most recently updated in 2021.⁶

The final elements-based resource is CDC Developing a Sexual Health Education Scope and Sequence (S&S).⁷ A S&S assists schools in curricula alignment and mapping to ensure learning objectives or content and skills align with target healthy behavior outcomes.⁶⁵ The S&S articulates what students should know or do and when it should be taught for each grade or grade span to lower their risk of STI/HIV and unintended pregnancy.⁷ The S&S outlines the breadth of health topics across grade spans (PreK-12th) (scope), and the logical progression of essential health knowledge, skills, and HBOs to prevent STI/HIV and unintended pregnancy (sequence).⁷ District-level data illustrate variation in the percentage of schools providing health education teachers with a sexual health S&S for instruction in required courses in grades 6-12, ranging from 42.7% to 83.5% across states and from 45.4% to 100.0% across large urban school districts (medians: 60.2% and 81.9%, respectively).³⁹ Low prevalence of this curricular practice, particularly among younger grade levels, suggests schools need additional S&S support in identifying and aligning learning objectives with functional health knowledge and skills needed to meet sexual health behavioral outcomes.

To complement HECAT and S&S resources, CDC/DASH has long collaborated with internal and external partners to create companion resources for SBSHE. Other CDC divisions, including Division of Reproductive Health (DRH) and Division of HIV

Prevention, were instrumental in developing evidence-based and practical resources such as the Promoting Science-Based Approaches to Teen Pregnancy Prevention Using Getting to Outcomes (PSBO-GTO) tools⁶⁶ and Compendium of Evidence-based Intervention and Best Practices⁶⁷ to support STI/HIV and pregnancy prevention delivered through schools. Moreover, DRH and ETR (Education, Training, and Research), with CDC/DASH contributions, developed program adaptation toolkits (eg, Red, Yellow, and Green) to guide implementation fidelity to core components among sexual health EBPs.^{49,68} CDC/DASH's elements-based approach to support SBSHE helped juxtapose the field's reliance on EBPs with characteristics of effective health education programs responsive and flexible to school priorities. This pivotal shift ushered in a framework for implementing SBSHE and general health education that was more sustainable for school decision makers and communities.

Create systems to promote SBSHE implementation.—To further promote broad, systems-level implementation of SBSHE, CDC/DASH has drawn on the elements-based approach to refine a multicomponent school-based model to promote positive health outcomes among adolescents, including reducing STI/HIV, unintended pregnancies, and related behaviors.⁶⁹ Inclusive of strategies addressing sexual health education, health services, and inclusive school environments, current implementation in 28 local education agencies (ie, school districts) and local education agency consortia (groups of local education agencies) across the United States, reaching approximately 2 million students annually. This translates to approximately 8% of all US middle and high school students.⁷⁰ Notwithstanding the impact of local school, community, and sociopolitical influences on educational policies, curricula and instruction, CDC/DASH applies priority funding at the school district-level helping to establish infrastructure needed to implement, scale, and sustain SBSHE; more information can be found elsewhere.⁷¹

The sexual health education strategy, as part of a larger and coordinated system, describes implementation activities in 3 overlapping domains aimed to (1) increase staff capacity, (2) improve student access to programs and services, and (3) engage parent and community partners⁷¹ (see Table 1). As with previous iterations of the CDC/DASH model, a network of national NGOs provide intensive technical assistance for SBSHE implementation activities, as well as specialized capacity building to multisector, state-level leadership teams to assess and coordinate model policy development and implementation related to school-based STI/HIV and pregnancy prevention.⁷⁰ Research suggests CDC/DASH's model, including sexual health activities, are effective in improving adolescent knowledge and skills and decreasing sexual risk behaviors (eg, multiple sex partners),⁷² violence victimization, and substance use.⁷³

IMPLICATIONS FOR SCHOOL HEALTH

Future Priorities for Expanding Multicomponent Implementation in SBSHE

Since CDC/DASH's inception in 1987, SBSHE has grown tremendously, yet new and unforeseen challenges require new approaches. Looking ahead, CDC/DASH has identified 4 priority areas to further enable schools to implement effective STI/HIV and unintended pregnancy prevention.

1. Advancing a multicomponent curriculum framework in SBSHE. CDC/DASH recognizes that sexual health cannot be addressed in a vacuum. Adolescent sexual and reproductive health goals cannot be achieved by focusing solely on STI/HIV and pregnancy-specific information and skills. Multiple health domains (eg, physical, mental/emotional, social, and sexual) are interrelated; addressing them requires educational approaches that are comprehensive in scope and sequence. CDC/DASH supports expansion of traditional SBSHE to incorporate functional knowledge and skills related to promoting mental/emotional health; preventing interpersonal, dating, and gender-based violence and substance use; and incorporating social, racial, and reproductive justice principles to advance equity. Such expansion more adequately addresses the intrapersonal, interpersonal, and social determinants influencing health behavior.^{74,75} A multicomponent framework, used commonly in comprehensive health education, address knowledge and skill expectations across related health domains and help adolescents build protective mindsets, strategies, and behaviors to mitigate complex health risks and outcomes.
2. Exploring early learning opportunities to address multiple health domains, including human sexuality. To promote youth protective behaviors and mitigate health risks and experiences, prevention education is needed early and often.⁷⁶ CDC/DASH supports growth in research and practice to help schools implement developmentally appropriate health education in elementary settings. Nationally representative data suggests, in 2014, an average of only 1.9 hours of required instruction on human sexuality was provided in elementary settings.⁷⁷ Despite well-documented effectiveness for school physical activity and nutrition programs on improving health and education outcomes among students,⁷⁸ evidence of elementary-focused approaches addressing other health domains such as violence, substance use, and sexual health remain limited. Additionally, exploring the influence school connectedness and social and emotional learning have on health and academic outcomes among elementary-aged youth is an addition to CDC/DASH's portfolio.^{20,78} Acknowledging that primary prevention with younger children aims to influence psychosocial antecedents to health-related behaviors (eg, attitudes/beliefs and intentions), CDC/DASH sees this work as necessary to prevent health risk behaviors and experiences reported by older youth.⁴⁶
3. Improving inclusivity and relevance of SBSHE for students with lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) identities. Disparities in sexual and reproductive health place students with LGBTQ identities at disproportionate risk for STI/HIV and unintended pregnancy when compared to heterosexual and cisgender peers.^{1,79,80} Research and practice evidence confirms that current approaches to SBSHE are often inappropriate for students with LGBTQ identities, as they frequently lack context relevant to these youths' protective and risk factors, experiences, identities, and are grounded in cis- and heteronormative (i.e., Cis-normative assumptions assert that people are either men or women based on their body parts; implying being cisgender

is superior to being transgender, non-binary, or gender non-conforming. Heteronormative assumptions assert that being heterosexual (i.e., straight) is normal and not being heterosexual (eg, gay, lesbian, bisexual, demisexual, pansexual, asexual) is abnormal) assumptions.⁸¹⁻⁸³ For example, results from the National School Climate Survey indicate, among LGBTQ youth who received SBSHE, approximately 79% report no inclusion of LGB topics and 83% report no inclusion of transgender/gender nonconforming topics.⁸⁴ To address this gap, CDC/DASH and others have identified key elements and characteristics of inclusive sexual health education content and delivery relevant to LGBTQ youth.^{85,86} Critical next steps include robust and ongoing surveillance of health risk behaviors and experiences among youth with LGBTQ identities and empirically testing the acceptability and effectiveness of inclusive and affirming SBSHE on health outcomes.^{87,88}

4. Strengthening teacher and staff SBSHE instructional delivery. Evidence suggests teachers play a substantial role in student learning and academic performance,^{19,90-91} and that positive teacher-student relationships and perceived and actual support from educators are protective factors linked to improved school connectedness and health-related outcomes.^{92,93} Considering this, a deep understanding of the instructional practices needed in sexual health classrooms is warranted. CDC's Health Education Teacher Instructional Competency (HETIC) framework was developed to illustrate the essential teacher knowledge and skills (ie, instructional competencies) needed for quality instruction in school health education.⁹⁴ The HETIC framework synthesizes the professional teaching literature, introducing a unified competency-based framework to guide health education delivery across all health-related content areas. In response to growing interest in the science of implementation, program fidelity, and adaptation for school-based interventions,²⁴ the HETIC framework captures the complexities of teaching and learning, asserting 5 knowledge categories and 11 core instructional skills.⁹⁴ CDC/DASH uses the HETIC framework to guide technical assistance and capacity building to strengthen staff delivery of SBSHE, and inform school-based research and evaluation.^{95,96}

Conclusion

Schools have significant influence on the academic, social, and civic outcomes of the nation's youth. Central to their role, is promoting health by equipping youth with functional knowledge and skills to help practice, adopt, and maintain behaviors to prevent STI/HIV and unintended pregnancy, and other related outcomes. Over the last 30 years, CDC/DASH and a host of federal, national, and state/local education and health partners have supported local decision making for sexual health education in schools. CDC/DASH's approach has yielded national priorities for SBSHE; delineated the breadth of sexual health evidence; characterized elements of effective health education programming; and provided practical guidance and tools for school-based delivery. The US Centers for Disease Control and Prevention's Division of Adolescent and School Health has supported infrastructure and funding to facilitate systems-level strategies and expansion of research and practice to

meet the demands of multicomponent implementation and sustainability in schools. Despite progress and new challenges ahead, CDC/DASH remains committed to strengthening schools, families, and communities to prevent STI/HIV and unintended pregnancies and help youth become healthy, successful adults.

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A Pre-K–12 sexual health curriculum should enable students to...

- HBO 1. Recognize developmental changes experienced by self and others during childhood and adolescence.
- HBO 2. Establish and maintain healthy relationships.
- HBO 3. Treat all people with dignity and respect with regard to their gender identity and sexual orientation.
- HBO 4. Give and receive consent in all situations.
- HBO 5. Be sexually abstinent.
- HBO 6. Engage in behaviors that prevent or reduce sexually transmitted infections (STIs), including HIV.
- HBO 7. Engage in behaviors that prevent or reduce unintended pregnancy.
- HBO 8. Support others to avoid or reduce sexual risk behaviors.
- HBO 9. Avoid pressuring others to engage in sexual behaviors.
- HBO 10. Use appropriate health services to promote sexual and reproductive health.

Figure 1. CDC’s Health Education Curriculum Analysis Tool (HECAT) Expected Healthy Behavior Outcomes (HBOs) From a Sexual Health Education Curriculum⁶

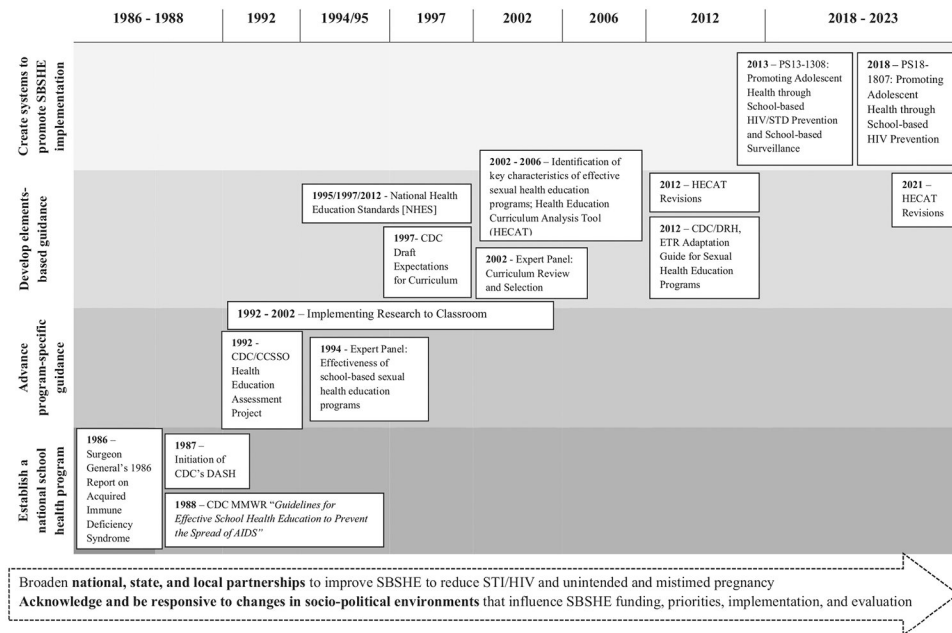


Figure 2. CDC Division of Adolescent and School Health (DASH) Timeline of Innovative Events to Advance School-Based Sexual Health Education (SBSHE) That Addresses STI/HIV and Unintended Pregnancy Prevention

Research suggests health education curriculum effective in addressing youth health outcomes share common characteristics, including...

1. Focuses on clear health goals and related behavioral outcomes.
2. Is research-based and theory-driven.
3. Addresses individual values, attitudes, and beliefs.
4. Addressed individual and group norms that support health-enhancing behaviors.
5. Focuses on reinforcing protective factors and increasing perception of personal risk and harmfulness of engaging in specific unhealthy practices and behavior.
6. Addresses social pressures and influences.
7. Builds personal competence, social competence, and self-efficacy by addressing skills.
8. Provides functional health knowledge that is basic, accurate, and directly contributes to health-promoting decisions and behaviors.
9. Uses strategies designed to personalize information and engage students.
10. Provides age-appropriate and developmentally appropriate information, learning strategies, teaching methods, and materials.
11. Incorporates learning strategies, teaching methods, and materials that are culturally inclusive.
12. Provides adequate time for instruction and learning.
13. Provides opportunities to reinforce skills and positive health behaviors.
14. Provides opportunities to make positive connections with influential others.
15. Includes teacher information and plans for professional development that enhances effectiveness of instruction and student learning.

Figure 3. CDC’s 15 Characteristics of an Effective Health Education Curriculum^{3,44,48-62}

Evidence-Informed Domains and Suggested Implementation Activities for Sexual Health Education as Part Of CDC/DASH’s School-Based HIV/STI and Pregnancy Prevention Approach^{69,71}

Table 1.

Domain	Implementation Activities for Sexual Health Education
Strengthen staff capacity	<ul style="list-style-type: none"> <li data-bbox="345 205 386 1493">Identify and approve a list of instructional competencies to be demonstrated by those teaching skills-based health and sexual health education in middle and high school. <li data-bbox="402 205 443 1562">Provide necessary training at local education agency (ie, LEA) once per year to ensure school health and sexual health education teachers have content knowledge, comfort, and instructional competencies to effectively implement approved school health and sexual health education instructional programs. <li data-bbox="459 205 505 1493">Develop and implement a technical assistance plan that incorporates teacher observation, coaching, peer mentoring, and other methods to improve an individual teacher’s sexual health education instruction in a select number of schools annually.
Increase student access to programs and services	<ul style="list-style-type: none"> <li data-bbox="540 180 581 1493">Establish, adopt, and implement a skills-based health education course requirement, which includes sexual health education content, for all students attending middle and high schools in the district. <li data-bbox="597 180 638 1493">Develop and approve a health education scope and sequence that delineates sexual health education learning outcomes for all students in middle and high schools in the district. <li data-bbox="654 180 695 1493">Develop, revise, or select a sexual health education instructional program consistent with the approved scope and sequence, and inclusive of instructional lessons, student learning activities, resources, and student assessments. <li data-bbox="711 180 751 1493">Develop, update, and foster use of teaching tools and resources (eg, lesson pacing guide, specific lesson plans) for teachers to continuously improve delivery of the identified sexual health education instructional program. <li data-bbox="768 180 813 1493">Develop, revise, or select health education instructional programs for students in elementary grades that align with the priorities for health education and sexual health education established in the health education scope and sequence. <li data-bbox="829 180 854 1493">Incorporate specific changes to existing instructional programs to better meet the needs of lesbian, gay, bisexual, and transgender (LGBT) youth. <li data-bbox="870 180 894 1493">Strengthen student assessment instruments to more accurately assess student mastery of health education knowledge and skills.
Engage parent and community partners	<ul style="list-style-type: none"> <li data-bbox="930 222 971 1493">Establish and maintain a School Health Advisory Council (SHAC) that regularly provides district-level advice and guidance to improve health and sexual health education programs for students and health and sexual health education instruction for staff. <li data-bbox="987 699 1011 1493">Integrate strategies to actively engage parents in sexual health education and instructional programs.