Is sex ed good for your health?

Story map connects health indicators to sex education policies across the United States

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Introduction


Presented as a story map, the publication explores sex education legislation and policies by state when compared to respective health indicators: sexual violence, physical dating violence, bullying and harassment of LGB youth, suicide, contraceptive prevalence rate, sexually transmitted infection (STI) rate, and teen birth rate. The first of its kind, this visual story provides new insight into the impact of comprehensive sex education on the health outcomes of young people nationwide. This story map can be used by advocates to build a case for comprehensive sex education in their communities. At a glance, advocates can use this innovative tool to highlight how their state compares to the national average across a range of sexual health outcomes in addition to state sex education mandates. While the story map reveals stark gaps in data collection on specific health indicators, advocates are able to use this information to make the case for increased data collection in addition to more robust sex education requirements. It can also be used as a tool for researchers to further determine how state sex education policies impact the health and well-being of young people across the United States.
Data for many of the health indicators are derived from the **Youth Risk Behavior Surveillance System (YRBSS)**, which is a national survey conducted by the Centers for Disease Control and Prevention (CDC) in public and private schools throughout the United States. Not all states report on all health behaviors, and significantly, only ten states and nine districts piloted a question concerning gender identity in the 2017 survey. As a result, there are limitations to the observations and correlations within the story map. This discrepancy underscores the need for more rigorous scientific data to demonstrate the positive health outcomes that result from comprehensive sex education.

**Comprehensive sex education (CSE)** programs are school-based, start in kindergarten, and continue through grade 12. Comprehensive sex education programs include developmentally and culturally responsive, science-based, and medically accurate information on a broad set of topics related to sexuality, including human development, relationships, personal skills, sexual health, and society and culture. CSE programs provide students with opportunities for learning information, exploring their attitudes and values, and developing skills. CSE teaches critical life skills and is a powerful tool for addressing reproductive justice, gender equity, lesbian, gay, bisexual, transgender, and queer (LGBTQ) equality, violence prevention, and power and oppression. Currently, 29 states mandate sex education for young people in schools.

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3 Johns, M.M., Lowry, R., Andrzejewski, J., et al. (2019). Transgender identity and experiences of violence victimization, substance use, suicide risk, and sexual risk behaviors among high school students—19 states and large urban school districts, 2017. MMWR. [https://www.cdc.gov/mmwr/volumes/68/wr/mm6803a3.htm](https://www.cdc.gov/mmwr/volumes/68/wr/mm6803a3.htm)


Interpersonal violence

a. Sexual violence

Reported rates of sexual violence by women have gradually decreased since 1995.6 Despite this positive trend, an average of 400,000 cases of sexual assault are reported each year, and the majority of survivors of sexual assault report being victimized for the first time before the age of 25 years old.7 Young women aged 16-19 are four times more likely than the general population to be survivors of rape, attempted rape, or sexual assault. It is also reported that lesbian, gay, and bisexual (LGB) youth experience sexual violence at over double the rate of their heterosexual peers.2 While not widely captured in the 2017 YRBSS due to the new nature of its inclusion in the questionnaire, transgender youth in particular experience disproportionate rates of sexual violence. According to the 2015 U.S. Transgender Survey, 13% of transgender and gender expansive people reported being sexually assaulted in grades K-12 and cited their gender identity as the cause of the attack.8

While young women and LGBTQ youth make up the vast majority of reported young people who experience sexual violence, nationwide mandates concerning instruction on sexual violence prevention are overwhelmingly insufficient. Of the states that report to the YRBSS on sexual violence, only California and New Hampshire mandate students be taught about consent; notably, both California and New Hampshire have sexual violence rates below the national average.1 Right now, only nine states (California, Colorado, Hawaii, Illinois, Maryland, Missouri, Oklahoma, Virginia, and Washington) mandate students be taught about consent.5 Furthermore, within healthy relationships curriculum, 21 states do not mandate instruction on violence prevention.5 While instruction on consent varies greatly depending on the state, certain states provide a more comprehensive definition of what must be included in consent curriculum. For example, in Illinois, educators must
provide an age-appropriate discussion on the meaning of consent that recognizes the following:

A. consent is a freely given agreement to sexual activity.

B. consent to one particular sexual activity does not constitute consent to other types of sexual activities.

C. a person’s lack of verbal or physical resistance or submission resulting from the use or threat of force does not constitute consent.

D. a person’s manner of dress does not constitute consent.

E. a person’s consent to past sexual activity does not constitute consent to future sexual activity.

F. a person’s consent to engage in sexual activity with one person does not constitute consent to engage in sexual activity with another person.

G. a person can withdraw consent at any time.

H. a person cannot consent to sexual activity if that person is unable to understand the nature of the activity or give knowing consent due to certain circumstances that include, but are not limited to, (i) the person is incapacitated due to the use or influence of alcohol or drugs, (ii) the person is asleep or unconscious, (iii) the person is a minor, or (iv) the person is incapacitated due to a mental disability.

The story map reveals an unclear relationship between sex education legislation and sexual violence among high school students, which is due to a large number of states failing to report on this measure in the YRBSS. Moreover, comprehensive sex education within the United States has historically not been recognized as the powerful tool for violence prevention that we know it is. While some studies have revealed the connection between sexual violence prevention and sex education, more robust research is essential to strengthen this relationship. The absence of such data may be a byproduct of the inability to recognize the power of comprehensive sex education as violence prevention.

A comprehensive sex education program that meets the National Sex Education Standards has the potential to prevent sexual violence perpetration for many reasons, including that sexual violence risk factors have been shown to be mitigated through educational interventions. Further, beginning comprehensive sex education programs in kindergarten is critical. At this early point in the life course, a number of risk factors begin to develop. Through educating young children, sex educators can address sexual violence before it occurs.

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b. Physical dating violence

On average, one in 10 high school students have experienced physical dating violence from an intimate partner in the past year.\(^\text{11}\) One in nine of these students are young women, and one in 36 are young men.\(^\text{2}\)

Among all youth, **Black women report the highest rates of experiencing physical dating violence at 13.1%**.\(^\text{2}\) Similar to data surrounding sexual violence, LGB students report experiencing physical dating violence at over double the rate of their heterosexual peers.\(^\text{2}\)

The story map demonstrates that a large number of states do not report on physical dating violence in the YRBSS.\(^\text{1}\) Of the available data, the national average for physical dating violence reported among high school students is 8.53%.\(^\text{2}\)

While these staggering rates help emphasize the urgent need for advanced instruction on healthy relationships and violence prevention within sex education, states continue to fall behind. Right now, only 22 states mandate some instruction on healthy relationships, and **only nine states (California, Colorado, Hawaii, Illinois, Maryland, New Mexico, Oregon, Texas, and Vermont) mandate comprehensive instruction on healthy relationships**.\(^\text{5}\)

Within healthy relationships curriculum, only 24 states mandate instruction on communication skills.\(^\text{5}\)

Though the story map reveals an unclear relationship between sex education legislation and physical dating violence, this lack of concrete data underscores the need for additional rigorous, large-scale scientific research that further demonstrates comprehensive sex education as a powerful vehicle for violence prevention.

c. Bullying

Bullying remains an urgent public health concern with 20% of high school students reporting being bullied on school property in the last year. People bully for many reasons, though primary motives include low self-esteem, emotional neglect, and some bullies may be victims of violence themselves.

Discriminatory school policies further exacerbate the adverse conditions many LGBTQ youth are forced to tolerate on a daily basis. Right now, only 11 states have policies that include affirming instruction on LGBTQ identities.

Of the states that report in the YRBSS, the story map indicates Oklahoma has the highest rate of LGB students who report being bullied (48.3%), and Oklahoma also mandates students be taught that homosexual behaviors are the primary cause for HIV/AIDS.

Alabama, Arizona, Mississippi, Oklahoma, and Utah mandate students be taught negative outcomes of homosexuality (e.g. teachers cannot “suggest that some methods of sex are safe methods of homosexual sex”). Notably, in Arizona, 40.9% of LGB high school students report being bullied (compared to the national average of 34.01%). Alabama, Mississippi, and Utah have sex education legislation that mandates students be taught negative outcomes of homosexuality, though these states do not report on bullying in the YRBSS. North Carolina includes language in their sex education legislation that promotes a heterosexual standard but does not directly mandate negative depictions of homosexuality. Notably, a previous law prohibited discussion of LGBTQ topics in South Carolina, though in March 2020, a U.S. district judge ruled this unconstitutional.

While students of all demographics report being bullied, LGB students report being bullied at significantly higher rates than their heterosexual peers. For instance, 70.1% of LGB youth reported experiencing verbal harassment in 2017. Additionally, 77% of those who were perceived as transgender report having one or more negative experiences at school because of their perceived transgender identity, including verbal harassment and physical violence. Increased rates of bullying can contribute to adverse health outcomes for LGB youth.

Though observable patterns within the story map are limited due to many states not reporting in the YRBSS, the data demonstrate that many states lack formal mandates for sex education that are inclusive of the full spectrum of gender identity and sexual orientation.
d. Suicide

Suicide was the second leading cause of death among young people in 2017.\(^\text{17}\) Between 2008 to 2015, hospital admissions for suicidal ideation and attempts among young people more than doubled.\(^\text{18}\) Young women report seriously considering suicide at nearly twice the rate of their male peers, and LGB youth report seriously considering suicide at over three times the rate of their heterosexual peers.\(^\text{2}\) Such devastating indicators do not exist in a vacuum, as associated health factors like bullying and dating violence underscore this disparate impact on young women and lesbian, gay, and bisexual youth.

As noted in the story map, it is difficult to untangle the relationship between sex education legislation and suicidal ideation given the breadth of this particular indicator.\(^\text{1}\) Analyses of YRBSS data demonstrate that 47.7% of LGB youth had seriously considered attempting suicide compared to 13.3% of their heterosexual peers.\(^\text{2}\) Further, the prevalence of suicidal ideation is higher among heterosexual female students (16.9%) compared to heterosexual male (10.2%) students.\(^\text{2}\) It is also higher among lesbian and bisexual female students (51.0%) compared to gay and bisexual male students (37.0%).\(^\text{2}\) Transgender youth also experience disparate rates of suicidal ideation, with an overwhelming 35% of transgender youth reporting that they have attempted suicide.\(^\text{3}\)

Because comprehensive sex education provides affirming instruction on sexual orientation and gender identity, along with instruction on healthy relationships, self-esteem, body confidence, and personal safety, it has the powerful potential to act as a method of suicide prevention.

Again, the lack of rigorous, large-scale scientific research that demonstrates the correlation between comprehensive sex education and suicide is likely a byproduct of the inability to recognize the power of sex education as violence prevention. While early data suggest that comprehensive sex education can successfully address violence prevention, further data is needed to underscore this correlation.\(^\text{1}\)
Sexual and reproductive health

a. Contraceptive use

Contraceptive prevalence refers to the percentage of high school students who reported using any form of contraception prior to their last sexual intercourse. While the rate of contraceptive prevalence is again multifactorial, the nationwide patchwork of sex education requirements likely influences contraceptive use. Right now, only 16 states require instruction on condoms or contraception, if sex education is provided.5

The primary observable pattern that emerges within the story map is that states with the lowest rates of contraceptive prevalence—Texas, Arkansas, and Nevada—do not mandate contraceptive education.1 Further, an overwhelming 35 states require schools to stress abstinence when sex education or HIV/STI instruction is provided.5

Moreover, while contraceptive use is essential in preventing unintended pregnancy and the spread of STIs when condoms are used, access to health centers that offer the full range of contraceptives varies greatly across the United States. Nineteen million women currently live in counties where they lack reasonable access to health centers that offer the full range of contraceptive methods.19 These areas are referred to as contraceptive deserts. Even further, 1.6 million women live in counties without a single health center that offers the full range of contraceptive options.19

While contraceptive use among young people has increased since the 1990s, contraceptive prevalence continues to be inconsistent. In 2017, 18% of U.S. high school women reported they were either unsure if they used birth control or they used no method at all during their last sexual intercourse.2

As indicated by observable patterns within the story map, legislation that requires students be taught about contraception has the potential to improve contraceptive prevalence among adolescents.1 In addition to such legislative advancements, it is essential that young people have the means to access healthcare providers in their respective communities that allow them to obtain said contraception. Without the means to access reproductive healthcare services, education on contraception is rendered ineffective.

b. Sexually transmitted infections (STIs)

In recent years, reported rates of sexually transmitted infections have continued to increase across the United States. In 2018, nearly 2.5 million cases of chlamydia, gonorrhea, and syphilis were reported.20 Young people aged 15-24 made up almost two thirds of all reported chlamydia cases.20 While STIs have impacted communities nationwide, young people in particular continue to be disproportionately represented among reported cases. Currently, young people represent an estimated half of all reported STI cases annually and 62% of all chlamydia cases, despite representing only 13% of the population.20

However, STI education continues to be neglected in schools nationwide. Fifteen states do not require sex education or HIV/STI instruction to be age-appropriate, medically accurate, culturally responsive, or evidence-based.5 Fourteen states do not require HIV/STI education at all.5 Further, observable patterns within the story map demonstrate that STI rates are particularly high throughout much of the country’s Southeast and Midwest regions.1 Mississippi and Louisiana, in particular, report the highest STI rates compared to other states. Mississippi does not mandate HIV/STI education, and Louisiana does not mandate sex education or HIV/STI education at all.1,5

Moreover, additional disparities exist among reported STI cases that demonstrate the stark gap in access to preventive care for communities of color and men who have sex with men (MSM). In 2018, the rate of reported chlamydia cases among Black men aged 15-19 was 9.1 times higher than the rate of their white peers.21 The rate among Black women aged 15-19 was 4.5 times higher than the rate reported among their white peers.21 Similar racial disparities are reported for American Indians/Alaska Natives (3.7 times the rate among whites), Native Hawaiians and other Pacific Islanders (3.3 times the rate among whites and 5.3 times the rate among Asians) and Hispanics (1.9 times the rate among whites).21 While similar rates regarding young men who have sex with men are not readily available, MSM accounted for 68.2% of reported primary and secondary syphilis cases in 2017.22

As indicated by observable patterns within the story map, legislation that requires sex education and HIV/STI instruction to be medically accurate, culturally responsive, and evidence-based directly addresses this epidemic that disproportionately impacts young people, communities of color, and men who have sex with men.1

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c. Teen birth

Teen birth rate in the United States has historically been among the highest in the developed world. While it has dramatically decreased over time, the United States teen birth rate still remains high compared to other developed countries. Between 1991-2005, the U.S. teen birth rate declined by more than a third, from 62 births per 1,000 women aged 15-19 years to 40 births per 1,000 women aged 15-19 years old. Despite rapid declines in teen birth rates across all major racial and ethnic groups, disparities continue to persist. In 2018, the birth rate among Hispanic and Black teens aged 15-19 was almost double the rate of white teens and more than five times the rate among Asians and Pacific Islanders.

Observable patterns emerge within the story map between sex education legislation and teen birth rate. Teen birth rates appear to be lowest in the Northeast, as well as in Minnesota. Of the states with the lowest teen birth rates (less than 12.5 births per 1,000 women aged 15-19), six out of seven states mandate sex education (Connecticut, Minnesota, New Hampshire, New Jersey, New York, Vermont).

While the explanation for the decline in teen birth rate is multifactorial, some of the rationale may be attributed to stronger sex education policies across the country and access to contraception options made available through services such as the Affordable Care Act.

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Policy and research recommendations

Access to comprehensive sex education can be a reality for young people nationwide through implementation of comprehensive policies at the federal, state, and local levels. Advanced sex education policies, coupled with substantial funding, educator training and development, and robust reporting requirements, can provide the quantitative data needed to further demonstrate the relationship between comprehensive sex education and health outcomes among young people.
Federal

• Demand Congress pass the Real Education for Healthy Youth Act (S.1524/H.R. 2720), which would create the first-ever federal funding stream for comprehensive sex education nationwide and would prohibit funding for failed abstinence-only programming.

• Demand Congress pass the Youth Access to Sexual Health Services Act (S.1530/H.R. 2701), which would provide community grants to increase and improve access to sexual and reproductive healthcare and related services for young people of color, immigrant youth, LGBTQ youth, youth in foster care, youth experiencing homelessness, youth in juvenile detention, and otherwise marginalized young people.

• Ensure that the Centers for Disease Control and Prevention (CDC) Division of Adolescent and School Health (DASH) expands the Youth Risk Behavior Surveillance System (YRBSS) to include questions related to gender identity and sexual orientation, following results from the 2017 pilot question on gender identity implemented across 19 states and localities.

• Demand Congress include appropriations to increase federal funding for programs that advance sex education nationwide (e.g. DASH) and eliminate funding for abstinence-only, “sexual risk avoidance” programming.

State

• Pass statewide comprehensive sex education mandates.

• Require the State Department of Education to align statewide sex education curriculum requirements with the National Sex Education Standards.

• Allocate additional funding for the implementation of comprehensive sex education and educator training in appropriations for each fiscal year.

• Mandate accountability and oversight requirements to track the implementation progress of sex education and collect aggregate data on topics taught.

• Allocate substantial funding to ensure educators are trained in accordance with the National Teacher Preparation Standards for Sexuality Education.

Local

• Work with local school boards to implement comprehensive sex education policies.

• Utilize the SIECUS Community Action Toolkit to foster community involvement in advancing sex education requirements.

• Ensure educators are trained according to the National Teacher Preparation Standards for Sexuality Education.

Research recommendations

• Advocate to make sex education-related YRBS questions mandatory for all states.

• Advocate for additional surveillance and monitoring questions on national and statewide CSE program evaluations in order to track health and behavior outcomes beyond pregnancy and disease prevention.

• Issue a call to action for research that focuses on positive health, behavior, and social inclusion outcomes of comprehensive sex education.
Conclusion

The *Sexuality Education Legislation and Policy: A State-by-State Comparison of Health Indicators* story map demonstrates a range of health indicators that are affected by comprehensive sex education policies nationwide.

While many observable patterns emerge when comparing health indicators and sex education requirements, clear gaps in data inhibit the definitive analysis of the impact of comprehensive sex education on sexual violence, physical dating violence, bullying and harassment of LGB youth, suicide, contraceptive prevalence rates, STI rates, and teen birth rates.

To build upon current research that demonstrates the correlation between comprehensive sex education and positive health outcomes among young people, the collection of additional data is essential.

Through the advancement of uniform statewide and national comprehensive sex education policies and continued participation in surveys like the YRBSS, these correlations may be further clarified to underscore the importance of comprehensive sex education.

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