

Medical Accuracy in Comprehensive Sexual Health Education

“Medically accurate” is defined as “verified or supported by research conducted in compliance with scientific methods and published in peer-reviewed journals, where appropriate, and recognized as accurate and objective by professional organizations and agencies with expertise in the relevant field, such as the federal Centers for Disease Control and Prevention, the American Public Health Association, the American Academy of Pediatrics, and the American College of Obstetricians and Gynecologists.”

EC § 51931(f).

The Problem

As school districts implement the California Healthy Youth Act, the law is clear that they must adopt materials that are medically accurate. However, opponents of comprehensive sexual health education have for many years attempted to co-opt “medical accuracy,” including by promoting ideologically-based misinformation as fact, by claiming an evidence basis for information that has been disproved, and by using evidence in misleading ways. As a result, many curricular materials—including textbooks and videos—contain content that is medically inaccurate and not permissible for use in California public schools. False claims are harmful simply because they spread incorrect and misleading information, however, there are often additional harms that come with misinformation in the context of public health and sex education.

Advocates’ Role

Determining and ensuring medical accuracy in sexual health education curricula is the responsibility of curriculum developers, trained health educators, and school health personnel and administrators—not advocates for comprehensive sex ed. However, as an advocate, there is still a role you can play. Although you are not expected to be a content expert or have the technical knowledge to identify medically inaccurate or out-of-date information, you can familiarize yourself with some of the common inaccuracies, flag them for your school district if you encounter them, and direct school administrators to sources of correct information.

Common Misinformation, What the Actual Evidence Shows, and the Potential for Additional Harm

ABORTION

MISINFORMATION: *Abortion causes future fertility problems and/or negative psychological consequences.*

ACTUAL EVIDENCE: The safety of abortion is supported by a large body of scientific research. The physical risks associated with abortion are minimal¹ and multiple studies demonstrate that pregnancy termination has no negative effects on subsequent fertility.² While individual experiences vary widely, the most methodologically sound, population-level research shows that the relative risk of mental health problems following a first-trimester abortion is no greater than the risk among adults who deliver an unwanted pregnancy and that the majority of adults who terminate a pregnancy do not experience mental health problems.³ The term “post-abortion syndrome,” a phrase

commonly used to describe the alleged negative psychological consequences of abortion, is not recognized by any professional psychology group.²

ADDITIONAL HARM: Reinforces abortion stigma and fear about abortion safety.

MISINFORMATION: *Fetuses can feel pain at 20 weeks gestational age.*

ACTUAL EVIDENCE: According to clinical definitions, pain is both a physical and psychological experience that not only requires sensory perception, but also a conscious, emotional recognition of stimulus, which is distinct from a reflex response.⁴ Studies of neuroanatomy and fetal development show that the structures and neuro-pathways necessary to perceive pain are not developed until at least the third trimester of pregnancy.²

ADDITIONAL HARM: Reinforces abortion stigma and promotes policies aimed at restricting abortion access.

ABSTINENCE

MISINFORMATION: *Having sex at a young age will result in pregnancy and prevent youth from achieving their goals.*

ACTUAL EVIDENCE: Over a quarter of all high school students in the U.S. have had sex.⁵ Yet, there have been significant declines in the overall adolescent birth rate over the last two decades,⁶ which are largely attributed to the increased use of effective contraceptives.⁷ The outcomes of teen sexual activity and unintended pregnancy are dependent on multiple contextual factors which include sexual health education, contraceptive use, access to resources, socioeconomic status, and familial and social supports.⁸

ADDITIONAL HARM: Stigmatizes sexual activity, which is a normal part of human development; discounts the value of contraception in preventing unintended pregnancy; assumes a heterosexual couple, thereby ignoring the reality of same-sex couples; and shames young parents. Also promotes the idea that individuals are solely responsible for their success without acknowledging the responsibility of governments and systems to create supports for student and working parents.

MISINFORMATION: *Sex outside a long-term, committed relationship has damaging emotional consequences and hinders young people's ability to form healthy bonds later in life.*

ACTUAL EVIDENCE: According to the proponents of this misinformation, animal studies on the release of hormones associated with social bonding during sex provide support for their belief that monogamy is rooted in biology. However, animal models do not account for the complex emotional and cognitive processes involved in human sexuality.⁹ Research on adolescent neurology reveals puberty to be an important developmental period for gaining the skills and experience needed to navigate future romantic and social interactions, and that with appropriate support, adolescents have the cognitive ability for safe sexual experiences.⁹ While “break-ups” can be painful at any age, there is no clinical research on the neural effects of sex outside the context of marriage.¹⁰

ADDITIONAL HARM: Promotes views about sex and marriage that are based on ideology, not science; stigmatizes people who have sex outside of marriage or long-term committed relationships.

MISINFORMATION: *Having intercourse with one person is like having sex with all their past partners.*

ACTUAL EVIDENCE: Barrier methods greatly reduce the risk of all types of STI transmission and effective treatments exist to cure bacterial sexually transmitted infections (STIs) such as chlamydia and gonorrhea.¹¹ Having multiple sexual partners does increase a person's potential for exposure to STIs and therefore the risk of contracting one, which only highlights the importance of testing and conversations between sexual partners.¹²

ADDITIONAL HARM: Diminishes the importance of STI testing and treatment for prevention; stigmatizes sexual activity, which is a normal part of human development; and discourages open communication between sexual partners about risk and prevention.

CONTRACEPTION & STI PROTECTION

MISINFORMATION: *Emergency contraception (EC) ends a pregnancy.*

ACTUAL EVIDENCE: Emergency contraception is a form of hormonal birth control that works by preventing or delaying ovulation (release of an egg) to reduce the likelihood that an egg and sperm will join after unprotected sex. If a fertilized egg has already implanted in the uterus, EC will not harm the pregnancy.¹³

ADDITIONAL HARM: Confuses EC with medication abortion; extends abortion stigma to contraception; and could result in people rejecting an effective, post-intercourse method of pregnancy prevention.

MISINFORMATION: *Intrauterine devices (IUDs) are dangerous for adolescents.*

ACTUAL EVIDENCE: For those who choose them, IUDs are among the most effective forms of long-acting reversible contraception (LARC) and do not require regular maintenance, which make them particularly well-suited for those young people who may have difficulty negotiating or regularly accessing other contraceptives. Complications related to IUDs are rare and do not differ significantly between adults and adolescents.¹⁴ Both the American College of Obstetrics and Gynecology (ACOG) and the American Academy of Pediatrics (AAP) endorse the use of IUDs for adolescents who wish to prevent pregnancy.¹⁵

ADDITIONAL HARM: Reinforces stigma and unnecessary fear about the safety and side-effects of contraception for young people; could result in young people rejecting effective pregnancy prevention methods.

MISINFORMATION: *Contraceptive methods such as birth control pills cause infertility.*

ACTUAL EVIDENCE: Tubal ligation and vasectomy are the only permanent forms of birth control. All other contraceptive methods function to prevent pregnancy only while in use.¹⁶ A review of existing research on the return of fertility after contraceptives are discontinued concludes that, regardless of duration and contraceptive type, there is no significant influence on the return to fertility attributed to contraception.¹⁷

ADDITIONAL HARM: Reinforces stigma and unnecessary fear about the safety and side-effects of contraception; could result in people rejecting effective pregnancy prevention methods.

MISINFORMATION: *Condoms do not protect against the human papillomavirus (HPV).*

ACTUAL EVIDENCE: The human papillomavirus is spread through skin-to-skin contact mainly through the genital areas—some of which are covered by condoms and some of which are not.¹⁸

Therefore, protection depends on the site of the infection, but condoms provide an impermeable barrier to pathogens present in the areas with coverage. While research on HPV continues to advance, a number of studies have shown that condoms reduce the risk of acquiring HPV and are associated with lower risks of negative outcomes including cervical cancer.¹⁹

ADDITIONAL HARM: Disputes the importance of condoms for STI control; negates harm-reduction efforts; and could discourage condom use.

MISINFORMATION: *Condoms are not FDA-approved for anal sex and therefore are not protective against STIs.*

ACTUAL EVIDENCE: The role of the Food and Drug Administration (FDA) is to evaluate and approve medical products for the U.S. market and to conduct quality assurance testing, not to recommend the intended use of those products.²⁰ The Center for Disease Control (CDC) is the federal body that makes public health recommendations and clinical guidelines.²¹ Latex condoms are FDA-approved for sale in the U.S.²² and the CDC recommends using condoms consistently during anal sex to reduce the risk of contracting HIV and other STIs.²³

ADDITIONAL HARM: Deceptively undermines the importance of condoms for STI control; negates harm-reduction efforts for STI prevention; and could result in people rejecting an effective STI prevention method.

GENDER

MISINFORMATION: *Men and boys are driven by sex and women and girls seek connection and intimacy.*

ACTUAL EVIDENCE: Those promoting this misinformation cite higher levels of the hormone oxytocin in female mammals, which is associated with reproduction in both sexes, and evolutionary theory to assert gender differences in sexual desire and behavior. But comprehensive reviews of psychological literature indicate that there are larger in-gender variations in sexual behavior than there are between genders and that biology is just one of many factors that influence human sexuality.²⁴

ADDITIONAL HARM: Promotes gender stereotypes and rigid gender binary; stigmatizes female sexual desire.

MISINFORMATION: *Addressing gender identity and using students' preferred pronouns and chosen names in school is confusing for young people and causes emotional distress.*

ACTUAL EVIDENCE: There is no evidence to indicate that introducing the topic of gender during adolescence impacts identity formation. However, for transgender people, being assigned a gender that does not align with their gender identity can cause severe distress in both children and adults.²⁵ Research reflects elevated risk for poor mental health outcomes among gender non-conforming youth²⁶ yet it also suggests that social supports are associated with more positive mental health.²⁷ A recent study demonstrates that transgender youth who were able to use their chosen names in multiple contexts (including school) reported fewer depressive symptoms and less suicidal ideation than those who were not referred to by their chosen names.²⁶ Additionally, national surveys of LGBTQ youth show that those who received inclusive curricular resources were less likely to hear negative remarks about transgender people and felt more connected to their schools.²⁷

ADDITIONAL HARM: Excludes and stigmatizes transgender and gender non-conforming people.

SEXUAL ORIENTATION

MISINFORMATION: *Same-sex relationships lead to increased substance use and depression.*

ACTUAL EVIDENCE: These claims confuse causality with the mediating factors for negative health outcomes. Although LGBTQ youth are shown to be at higher risk for substance use and poor mental health, it is the mistreatment resulting from anti-LGBTQ bias that accounts for these disparities²⁸—not the involvement in same-sex relationships. Nationally representative surveys show that the majority of LGBTQ youth have experienced some kind of harassment or discrimination at school, and those who experienced higher levels of victimization reported lower self-esteem and higher levels of depression.²⁷ In addition, research indicates that efforts to convert or change an LGBTQ person’s sexual orientation lack scientific credibility and may cause severe emotional harm, particularly for young people.²⁹

ADDITIONAL HARM: Stigmatizes LGBTQ people and ignores the social context of marginalization and discrimination that impact individual behavior and emotion.

Resources

If you see any of the above or similar misinformation in your district’s health education materials, it’s a good sign that you may need to consult outside content experts or reputable sexual health resources. We recommend starting with the references cited in this document and the following reputable organizations:

- **American College of Obstetricians and Gynecologists:** <https://www.acog.org>
- **Centers for Disease Control and Prevention:** <https://www.cdc.gov/sexualhealth/Default.html>
- **CA Department of Public Health:** <https://www.cdph.ca.gov>
- **National Institutes of Health – MedlinePlus:** https://medlineplus.gov/all_healthtopics.html
- **Planned Parenthood – For Teens:** <https://www.plannedparenthood.org/learn/teens>

These agencies and organizations are respected resources based on their medical expertise, high standards for data collection and reporting, and processes for ensuring the accuracy and generalizability of their findings. However, we encourage the same level of critical thinking and analysis for all sources of information, regardless of their government or organizational affiliation.

Districts and educators will often complement a written curriculum with videos, images, or worksheets to address all areas of comprehensive sexual health education and appeal to a wide range of learning styles. Many times, they find these materials online. While the internet can be a great place to locate free and factual materials, be aware that just because something looks polished or is produced by a professional-sounding organization, that does not mean it’s accurate or unbiased.

Just as we encourage adolescents to be critical consumers of media, we as adults must also learn to distinguish factual sources of information. The Department of Health and Human Services, National Institutes of Health has developed basic guidelines to assist with finding and evaluating online health resources: <https://nccih.nih.gov/health/webresources#hed1>

Start By Asking Some Basic Questions

- Did the resource come from a California governmental agency, an educational institution, or a sexual/reproductive health organization?
- Was the information reviewed by health professionals or content experts?
- Do the authors or organization describe and cite the evidence that the materials are based on?
- When were the materials or curricula published? Could advances in science and medicine make the information outdated and thus inaccurate?
- Does the organization that created the content appear to be opposed to the goals of comprehensive sexual health education based on its website or other public presence?
- What do other reputable sources have to say about the organization?

Commonly-Cited Sources of Misinformation

When reviewing materials, it's valuable to keep an eye out for the following organizations that are opposed to comprehensive sexual health education:

- **American College of Pediatricians:** <https://www.acpeds.org/>
- **The Institute for Research and Evaluation:** <https://www.institute-research.com/index2.php?menu=m1>
- **Medical Institute for Sexual Health:** <https://www.medinstitute.org/>

Despite their neutral sounding names and memberships that include medical professionals, these groups are advocates of abstinence-only-until-heterosexual-marriage programs and are not considered reputable sources of information.

For instance, the American College of Pediatricians (ACPeds) markets itself as an organization for healthcare professionals dedicated to the welfare of children. Yet, the mission and core values found on its website demonstrate a strong anti-LGBTQ bias that inserts religious morality into the presentation of scientific research.³⁰ An unidentified “Dr. Veritas” authors multiple articles that make baseless claims linking transgender people to pedophilia and incorrectly correlate child abuse with same-sex parenting.³¹ The statements are justified with references to methodically flawed research that is not directly cited in-text. Furthermore, the Southern Poverty Law Center³² classifies ACPeds as a hate group and the director of the National Institutes of Health (NIH) has publicly criticized ACPeds for misusing scientific findings with the intention to mislead.³³

Questions & Concerns?

For further questions related to medical accuracy, contact your county or state public health department.

For more information about the California Healthy Youth Act, please visit our Know Your Rights webpage at <https://www.aclunc.org/our-work/know-your-rights/sex-education>.

If you are concerned about the accuracy and objectivity of your district's sex ed materials, please contact us at sexualhealth@acluca.org.

Endnotes

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For more information, go to http://www.aclunc.org/sex_ed.

If you are concerned that your school is not following the law, contact the ACLU for help.