A Tale of Two States: What We Learn from California and Texas

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Unplanned teen births in the United States have grave physical, mental, social, educational, and economic consequences for teens, their offspring, and society as a whole. Teen births cost the US more than $10.9 billion in 2008 alone, but, more important, contribute to our nation’s poor educational outcomes, child abuse and neglect, poverty, and high health care costs.

While teen birth rates in the US have been decreasing over the last several decades, US rates do not compare favorably with other developed countries. Figure 1 shows that the US birth rate is one of the highest when compared with other developed countries. Teen birth rates also vary widely across individual states with two states, Texas and California, accounting for 24% of all teen births in the US. In 2008, Texas had a teen birth rate of 63.2 per 1,000 girls, or 53% greater than the US average, and California had a teen birth rate of 39.5 per 1,000 girls, just slightly under the US rate. The Texas teen birth rate is 60% higher than the California rate. When examining birth rates among racial/ethnic groups and comparing Texas to California, the teen birth rate is 50% higher among Texas Hispanic teens; 43% higher among black Texas teens, and more than double among white Texas teens.

Because Texas and California have very similar demographic characteristics but very different teen birth rates, this paper explores the differences in the California and Texas teen birth rates over time by examining population characteristics, sex education, and reproductive health policy in both states. While this paper does not attempt to draw statistical or causal inferences by comparing these two states, this case study highlights potential factors for further investigation.

**Differences in Teen Birth Rates from 1981 to 2008**

In 1981, the Texas teen birth rate was 75.2 per 1,000 girls compared to 54.5 per 1,000 girls in California and 52.2 per 1,000 girls in the entire United States (see Figure 2). Compared to the US average, the 1981 Texas teen birth rate was 16% higher among white teens, 9% higher among black teens, and 18% higher among Hispanic teens. Compared to California rates, the 1981 Texas teen birth rate was 23% higher among white teens, 16% higher among black teens, and 21% higher among Hispanic teens.

Teen birth rates in Texas and California were highest in 1991, but by 2008, Californians saw their teen birth rate drop below that of the nation, a change of 28% between 1981 (54.5 per 1,000 girls aged 15 to 19) and 2008 (39.5 per 1,000 girls); the Texas teen birth rate dropped only
Figure 1. Birth Rates in Developed Countries, California, and Texas for Girls Aged 15–19, 2008

16% between 1981 (75.2 per 1,000 girls) and 2008 (63.2 per 1,000 girls; see Figure 2). The United States experienced the largest decline in teen births among black teens (37% decline) with Texas and California experiencing similar declines, 39% and 46%, respectively. Similarly, large declines in teen births were also observed among white teens, with teen birth rates declining by 34% in the US, 41% in Texas, and 60% in California. The smallest decline in teen births was seen for Hispanic teens. Among Hispanic teens, the United States had a 6% decline in teen births whereas Texas had a 4% decline and California had a 24% decline.

Demographic Comparison between Texas and California
Because teen birth rates vary so dramatically by racial/ethnic group, one potential explanation for differences in teen birth rates among US states could be explained by differences in demographic characteristics. However, this does not seem to account for the difference between California and Texas because when comparing the racial/ethnic composition between these two states, they are quite similar demographically.
**Figure 2.** Birth Rates in the US, California, and Texas for Girls Aged 15–19, 1981–2008, by Race/Ethnicity

**2A. Total**

**2B. Non-Hispanic White**
Figures provided by Ronna Popkin, MS; Douglas Kirby, PhD; and John Santelli, MD, MPH (email communication, September 2011). Data on births are from the National Vital Statistics System; population estimates are from the US Census Bureau and National Center for Health Statistics.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Texas</th>
<th>%</th>
<th>California</th>
<th>%</th>
<th>Texas</th>
<th>%</th>
<th>California</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1980a</td>
<td></td>
<td>1990b</td>
<td></td>
<td>2000b</td>
<td></td>
<td>2008b</td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>14,229,191</td>
<td>4.6</td>
<td>23,667,902</td>
<td>3.8</td>
<td>20,945,963</td>
<td>3.8</td>
<td>33,994,571</td>
<td>3.6</td>
</tr>
<tr>
<td>Total females 15–19</td>
<td>661,322</td>
<td>4.6</td>
<td>1,008,781</td>
<td>4.3</td>
<td>859,370</td>
<td>3.5</td>
<td>1,180,896</td>
<td>3.5</td>
</tr>
<tr>
<td>Females 15–19 by race/ethnicityd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>164,160</td>
<td>24.8</td>
<td>238,466</td>
<td>23.6</td>
<td>208,623</td>
<td>32.6</td>
<td>338,558</td>
<td>34.4</td>
</tr>
<tr>
<td>Black</td>
<td>94,737</td>
<td>14.3</td>
<td>97,802</td>
<td>9.7</td>
<td>86,598</td>
<td>13.5</td>
<td>78,584</td>
<td>8.0</td>
</tr>
<tr>
<td>White</td>
<td>496,488</td>
<td>75</td>
<td>750,188</td>
<td>74.4</td>
<td>330,325</td>
<td>51.6</td>
<td>454,603</td>
<td>46.2</td>
</tr>
<tr>
<td>Asian</td>
<td>NA</td>
<td></td>
<td>NA</td>
<td></td>
<td>12,347</td>
<td>1.9</td>
<td>105,758</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Note. Black = Non-Hispanic Black, White = Non-Hispanic White, Asian = Asian/Pacific Islander

aData from the US Census
bData from National Center for Health Statistics

cProportion of total population that are female 15–19

dProportion of total females 15–19 by race/ethnicity

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Table 1 compares the demographic composition of females aged 15 to 19 years for Texas and California from 1980 to 2008. While California has a much larger total population than Texas, the proportion of the population who were 15-to-19-year-old females was similar, making up about 3 to 4% of the population in each state. Texas and California have similar proportions of Hispanics, and both states saw an increase in the number of Hispanic girls in the population between 1980 and 2008. In 1980, Texas had more than 164,000 Hispanic females aged 15 to 19 (about 25% of the population of females aged 15 to 19 years) while California had more than 238,000 Hispanic females aged 15 to 19 (about 24% of the population of females aged 15 to 19 years). By 2008, the number of Hispanic females aged 15 to 19 in Texas increased by over 117% while in California, the number of Hispanic females aged 15 to 19 increased 146%.

In 2008, Hispanics accounted for 41% and 45% of the Texas and California females aged 15 to 19, respectively. Texas has slightly more white and black females than California, and California has significantly more Asian females than Texas.

Other demographic factors that may explain differences in teen birth rates between Texas and California are poverty levels, educational factors, and the percent foreign-born Hispanics (Table 2). Texas had a slightly higher poverty rate in all years, and there were some minor differences in the proportion of high school graduates. California had a higher percent of immigrants but a lower proportion of immigrants who were Hispanic. These differences are unlikely to fully explain differences in birth rates between California and Texas.


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</thead>
<tbody>
<tr>
<td></td>
<td>CA</td>
<td>TX</td>
<td>CA</td>
<td>TX</td>
</tr>
<tr>
<td>Poverty</td>
<td>11.4%</td>
<td>14.7%</td>
<td>13.9%</td>
<td>15.9%</td>
</tr>
<tr>
<td>High school graduates</td>
<td>62.7%</td>
<td>55.0%</td>
<td>63.2%</td>
<td>68.9%</td>
</tr>
<tr>
<td>Immigrants</td>
<td>15.1%</td>
<td>6.0%</td>
<td>21.7%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Foreign-born Hispanic</td>
<td>6.4%</td>
<td>3.7%</td>
<td>10.6%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

aData from the US Census and the American Community Survey (1980, 1990) and the American Community Survey (2000, 2008)

Data from the *US Census*\(^{10,11,17}\) (1980, 1990, 2000) and *Pew Hispanic Center*\(^{18}\) (2008)

**Differences in Programs and Policies**

Key strategies have been proven to reduce adolescent sexual risk taking and teen pregnancies.\(^{19, 20}\) Studies indicate that evidence-based sex education programs can reduce sexual risk taking behaviors among teens.\(^{19}\) Moreover, access to contraception has been shown to be a key strategy in the reduction of teen births in the United States.\(^{20}\) Policies supporting widespread access to effective sex education programs and contraception are key to preventing teen births; however, US states have various policies regarding these issues. Differences in state policies and approaches regarding adolescent reproductive health may help explain differences in teen birth rates among California and Texas.

**School-Based Sex Education**

California has worked diligently to achieve the 49% reduction in the teen birth rate. Advocates in California have striven to educate each governor’s administration about the epidemic of teen births, and the California government has been receptive to implementing policies that would positively impact the reduction in teen births and teen pregnancies in the state.\(^{21}\)

In 1991, California mandated that schools teach HIV/AIDS prevention, which includes education on abstinence and condom use. California learned early that abstinence-until-marriage education is not effective. In 1992, California enacted the Education Now and Babies Later (ENABL) program, which was an abstinence-until-marriage initiative. Although the program was popular with parents and teens, in 1995, the program was canceled mid-year when an evaluation of the program showed that it had no effect in reducing the initiation of sexual activity. The governor concluded that more comprehensive sex education was necessary.\(^{21}\) In 2003, the California Comprehensive Sexual Health and HIV/AIDS Prevention Education Act was enacted. Although this measure does not mandate that sexual health education be taught in schools, it requires that when taught, it must be medically accurate, age-appropriate, and comprehensive. From seventh grade on, instruction must include abstinence and medically accurate information on other methods of preventing pregnancy and STDs. Instruction on contraceptive methods must include information on effectiveness and safety of all FDA-approved contraceptive methods, including emergency contraception. In addition, the teaching or promotion of religious doctrine is prohibited.
Table 3 displays the comparison of state policy in sex and HIV education. Whereas California mandates HIV education, Texas mandates neither sex education nor HIV education in schools. California requires this education to be medically accurate, culturally appropriate, and unbiased, including information on abstinence, contraception, and condoms. Texas, on the other hand, only mandates that sex education stress the importance of sex only within marriage.22

Although sex education is not mandated in California, it is widely taught. According to a 2003 statewide survey conducted by the American Civil Liberties Union (ACLU) of Northern California,23 96% of middle and high schools provide sex education. Although HIV/AIDS prevention education is mandated to be taught once in middle school and once in high school, only 94% of schools reported that they are teaching it; however, 53% of middle schools and 29% of high schools reported teaching it in more than one year, with 17% of high schools reporting teaching HIV/AIDS prevention in all four years.

While no systematic data is collected on what teens are taught in their sex education classes, the Youth Risk Behavior Surveillance System (YRBSS) collects information about whether high school students are taught about AIDS or HIV infection, a marker for whether students are receiving the most basic sex education. Results show that 17% of high school students in Texas were never taught about AIDS or HIV infection.24 Large disparities by race/ethnicity exist in the proportion of students never taught about AIDS or HIV infection: 25% of Hispanics compared to 12% of black students and 11% of white students. Data for the entire state of California were not reported; however, the data for Los Angeles indicate that 15% of all students were not taught about AIDS and HIV, with little

<table>
<thead>
<tr>
<th>Table 3. Sexual Health Education in Texas and California</th>
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<tbody>
<tr>
<td>Sex or HIV Education</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Mandated</td>
</tr>
<tr>
<td>Must be medically accurate</td>
</tr>
<tr>
<td>Must be culturally appropriate and unbiased</td>
</tr>
<tr>
<td>Cannot promote religion</td>
</tr>
<tr>
<td>Must provide information on contraception</td>
</tr>
<tr>
<td>Must include the importance of sex only within marriage</td>
</tr>
<tr>
<td>Must include information on condoms</td>
</tr>
</tbody>
</table>

Data from the Guttmacher Institute22
difference by race/ethnicity: 13% white, 16% Hispanic, and no report for black students.\textsuperscript{24}

In 1996, an entitlement program was offered under Title V of the Social Security Act to guarantee $50 million per year to states for grants to offer abstinence-only education. Title V funding was designed to help states reduce teen pregnancy and births and provided a federal definition of an eligible abstinence-education program, which, among other things, prohibited discussion of condoms and contraception and required teaching that sex outside of marriage can be physically and mentally harmful.\textsuperscript{25}

California never applied for Title V funds and continually rebuffed attempts to require participation.\textsuperscript{21} In contrast, Texas has routinely received Title V funds and received over $18 million in Title V funding in 2007.\textsuperscript{26} Not surprisingly, in 2007, 94\% of Texas school districts were teaching abstinence-only sex education.\textsuperscript{27}

In 2010, the federal government initiated the Personal Responsibility Education Program (PREP), which is funding designated for comprehensive sexuality education. The legislation also reinstated Title V funding, which had expired in 2009. In 2010, Texas applied only for Title V funding while California applied only for PREP funding.\textsuperscript{28}

Family Planning and Access to Contraception

California recognized that in addition to providing teens with medically-accurate sex education in schools, efforts also must be made to provide teens with access to contraception and other family planning.\textsuperscript{21} Thus, in 1997, California initiated the Family Planning, Access, Care, and Treatment (Family PACT) program. This program provides contraceptive and reproductive health services at no cost to Californians with incomes up to 200\% of the federal poverty level. Family PACT is designed to be teen friendly:

- Teens can register based on personal income rather than household income.
- Many services are provided confidentially without requiring notification of a parent.
- Teens can enroll in the program onsite at a clinic and receive services in the same day.
- The program engages private physicians, which greatly expands access to care.
- The program provides services to low-income teens regardless of immigration status, using state dollars to cover costs not reimbursable by federal funds.
In 2005, the Guttmacher Institute recognized California’s efforts, ranking California first in improving access to contraception.\(^{29}\)

The primary federal program providing contraceptive services to women in need is Title X, authorized by the Public Health Service Act. This federal funding sets family planning policy and subsidizes direct client services. Title X funding is critical to assist women of all ages to avoid unintended pregnancy. It is estimated that without contraceptive services at Title X clinics, unintended pregnancies would be 46% higher.\(^{30}\)

Table 4 provides a comparison of Title X access to contraception for women of childbearing age (13–44) in California\(^ {31}\) and Texas\(^ {32}\) in 2008. Texas had 10% more women who were uninsured and could not afford to pay for private health care. Although California had 38% more women in need, Texas served a much smaller percentage of women in need of contraception services compared to California (15% vs. 41%). In addition, California allows minors to consent to state-funded contraceptive services whereas Texas requires parental consent unless minors are married. Furthermore, California mandates insurance coverage of contraception whereas Texas does not.

**Table 4. Contraceptive Need and Services in Texas and California, 2008**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Texas</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women aged 13-44 in need of contraceptive services</td>
<td>1,462,400</td>
<td>2,373,500</td>
</tr>
<tr>
<td>Of women who were in need of services, percent of women served</td>
<td>15%</td>
<td>41%</td>
</tr>
<tr>
<td>Women receiving contraceptive services and supplies</td>
<td>221,000</td>
<td>963,600</td>
</tr>
<tr>
<td>Percent of women aged 15-44 who are uninsured</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>Mandates insurance coverage of contraception</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Explicitly allows minor to consent to state contraceptive services</td>
<td>Only if married</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Data from the Guttmacher Institute\(^ {31,32}\)

**Public–Private Partnerships**

An additional component of California’s success in reducing teen pregnancy may be the engagement of private foundations.\(^ {33}\) In 1995, The California Wellness Foundation undertook a 10-year Teen Pregnancy Prevention Initiative (TPPI), with a goal to “reduce the incidence of teen pregnancy by
defining teen pregnancy as not only an individual and family problem, but also as an adult and societal problem;

reinforcing community norms that value healthy adolescent sexuality instead of rewarding pregnancies and high-risk sexual behaviors; and

increasing the proportion of teens who delay the initiation of sexual activity and/or effectively use contraception.”

California Wellness provided almost $60 million in grants for efforts including research, public education, policy advocacy, professional development, leadership recognition, and community outreach. These grants were used for innovative programs, such as a “hot spot” analysis, computing teen birth rates for all California zip codes. The analysis identified teen birth rates in the 75th percentile. Experts in adolescent pregnancy reviewed these hot spots for accuracy and grouped them into project areas based on their infrastructure, demographics, and geography. This approach allowed the state to better use scarce resources for more effective planning and implementation.

Another innovative program funded by California Wellness was the Get Real About Teen Pregnancy media campaign, which was designed to increase public support for state and local policies to encourage and fund effective sex education, contraceptive services, and youth development activities. Additional grants funded workforce training for health care workers, social service providers, and educators to support teens in making healthy decisions as well as youth scholarships to recognize young leaders who made significant contributions to teen pregnancy prevention efforts and to encourage them to pursue careers in the health professions.

Lessons Learned
Over the past several decades, California has implemented a successful multilayered approach to prevent teen pregnancy. Effective strategies employed in these efforts include (1) implementing policies to mandate that sexual health should be comprehensive, medically accurate, age-appropriate, and unbiased; (2) increasing access to contraception; (3) initiating a public–private partnership to increase funding for innovative programs that might not otherwise be funded by government agencies; (4) educating the workforce to assist youth in making better decisions; and (5) changing the normative beliefs about teen pregnancy and adolescent sexual health.
These efforts have served to reduce California’s teen birth rate to lower than the national rate. However, advocates recognize that they must continue to strengthen their efforts. Ongoing battles are waged to maintain school-based comprehensive sex education. For example, the ACLU of Northern California maintains a survey website to identify schools that have sex education programs that violate California law, and California officials must continue to resist the pressure to accept Title V funding.

Adaptability is another factor in California’s success. Agencies continue to review the work being done and change those tactics that do not prove to be effective. Former Governor Pete Wilson’s effort to discontinue the ENABL program—his own initiative—in mid-year is an excellent example of this adaptability. Continually adapting programs to improve outcomes is a necessary step, especially in the current environment of fast-paced technological advances and limited financial resources.

What Texas Can Do

Texas can learn much from California’s successful campaign to reduce teen pregnancy. Implementing a multifaceted approach to teen pregnancy prevention similar to that of California could lower the Texas teen birth rate to 32.8 per 1,000 teen births. We would have 21,411 fewer teen births per year at a cost savings of more than $35 million in direct medical costs.

Texas needs to implement policies to mandate medically accurate, comprehensive, school-based sexual education. More districts across Texas are beginning to recognize that abstinence-only education is not the solution and are opting to move to more comprehensive, evidence-based sex education programming. Also, efforts are currently underway to disseminate evidence-based sexual health curricula more widely in targeted counties in Texas through an initiative out of the Federal Office of Adolescent Health. Without creating a mandate, however, most districts will maintain the status quo and continue abstinence-only education.

A statewide media campaign to reframe the problem of teen pregnancy is another necessary component of the efforts that are needed in Texas. Too often, blame is placed on factors or populations. The problem of teen pregnancy needs to become the responsibility of all Texans. State and federal funds are not likely to permit funding for such an effort, so engaging private foundations to fund such a campaign is likely needed.

An additional step in decreasing the Texas teen birth rate is to map teen birth rates in Texas to identify hot spots. Figure 3 displays 2008 teen
birth rates in Texas by zip codes. While further analysis needs to be done to identify true hot spots based on population size and infrastructure, this Texas map clearly identifies significantly high rates of teen births throughout the state, with 433 zip codes (26.3%) having teen birth rates of 90 per 1,000 or greater. Targeting these high risk areas would allow more effective use of limited resources.

Additionally, improving access to contraceptive services is a significant component that is necessary to reduce the Texas teen birth rate. Texas needs to change policies to mandate that insurers provide coverage for contraception as well as increase the number of women in need of services who are served by Title X funding. Furthermore, minimizing the barriers to teens obtaining contraception should be a priority.

**Figure 3.** Texas Teen Birth Rates by ZIP Code, 2008

Data from the *Texas Department of State Health Services*[^36]

[^36]: A coordinated partnership among Texas state government, sexual health advocates, community health organizations, and private
foundations would be a significant accomplishment in a statewide effort to reduce teen pregnancy. Each of these stakeholders would play an important role in working toward a solution, be it funding innovative programs, disseminating information, educating the workforce, or adopting beneficial policies.

Texas has a great deal of work to do to reduce the teen birth rate below the national average, but California is an example of what is possible to accomplish with coordinated, diligent efforts to change the status quo. Though California’s work is far from done, Californians benefit from the improved health and cost savings associated with a significant reduction in teen births.

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