



The Social & Economic Costs & Consequences of Teen Pregnancy in Nebraska

A report submitted to:
The Holland Children's Institute

Submitted By:
Renaisa S. Anthony, MD, MPH
Hongmei Wang, PhD

Co-Authors:
Rajvi Wani, B.Pharm, MS
Beeta, Kashani MPH



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INTRODUCTION:

Adolescent pregnancy, also termed teen pregnancy, is a long-standing global issue impacting the health and lives of youth worldwide, particularly girls. An estimated 7.3 million teen girls (19 and under) become pregnant each year. At least 2 million are under the age of 14 worldwide.¹ Globally, the highest rates of teen pregnancy are reported in sub-Saharan Africa and the lowest rates are found in South Korea and Switzerland.²

The United States (US) is not exempt from the incidence or impact of teen pregnancy. While US teen pregnancy rates have declined over the past 40 years, the US consistently ranks in the top three for highest teen pregnancy rates among industrialized countries (often competing for the number #1 position with the United Kingdom).² Teen pregnancy is a complex, controversial and challenging public health issue. Furthermore, pervasive racial & ethnic, socioeconomic and geographic disparities persist across the nation.

According to the latest US Census, in 2010, more than 600,000 teen girls (aged 15-19) became pregnant and over 365,000 gave birth.³ That year, **Nebraska contributed 2,710 teen pregnancies and 1,390 teen births.**⁴ Studies continue to demonstrate the social and economic impacts of teen pregnancy on teen youth, their children, families, community and society. The social costs and consequences of teen pregnancy are profound including but not limited to decreased rates of high school graduation, lower income earning potential, lower overall educational attainment and poverty to name a few. The economic costs and consequences of teen pregnancy and birth to US taxpayers is astounding, ranging from \$9.5 to \$11 billion per year depending on the economic model.⁵ During the last US Census in 2010, the economic costs of teen pregnancy and births in Nebraska was an estimated \$59 million. These costs are calculated using multiple factors such as healthcare costs, lost productivity and social benefits like Medicaid, Women, Infants and Children (WIC), housing subsidies, etc. However, the social costs of teen pregnancy is multifold and much more complex to calculate.

"The Social & Economic Costs & Consequences of Teen Pregnancy in Nebraska" report highlights the current trends, disparities and risk/protective factors associated with teen pregnancy and births across the State of Nebraska. The social and economic costs and consequences are also presented. The summation of the report offers a **Top 10: Teen Pregnancy Prevention Recommendation** list to prevent teen pregnancy in Nebraska. The proposed solutions are designed to prevent teen pregnancy and simultaneously reduce disparities across Nebraska. Two supplemental reports are also included at the end of the report: 1) national teen pregnancy prevention programs and initiatives, and 2) federal funding sources for teen pregnancy prevention. Appendix A provides the latest and most comprehensive teen pregnancy, birth and abortion data from 2011 by state.

For the purposes of this report, the focus is specifically on teen pregnancy. Other outcomes like sexually transmitted infections and the overall concept of unintended pregnancies are mentioned but not emphasized. Meaningful and productive discussions of teen pregnancy prevention require that we collectively acknowledge and address the biological causes of pregnancy.

It is also assumed that teen pregnancy results from reproductively capable teen females engaging in sexual intercourse with reproductively capable males (of any age) that result in the biological processes of fertilization and the implantation of an embryo. Therefore, we begin this report with an examination of sexual behaviors and practices of teens in Nebraska.

SEXUAL BEHAVIORS & PRACTICES OF NEBRASKAN TEENS:

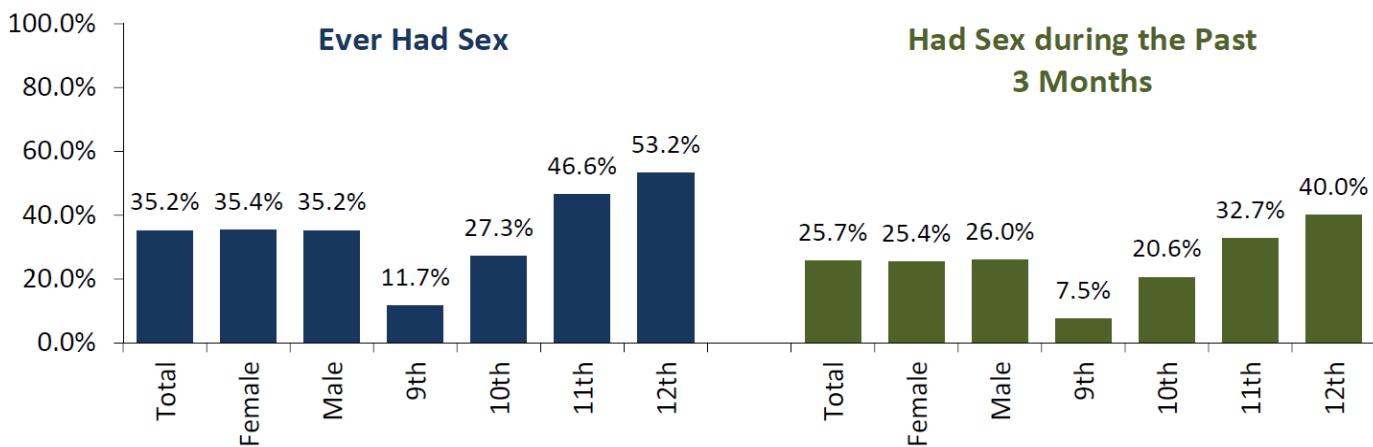
Adolescents across the U.S are engaging in sexual behaviors and practices that can result in pregnancy and other adverse health outcomes like sexually transmitted infections (STIs). Teen pregnancy rates have declined over time. However, the rates of high school students engaging in sexual intercourse has been relatively consistent over the past 10 years.⁶ Known protective and risk factors can help predict which adolescents are at higher risk of engaging in risky sexual behaviors. Understanding and predicting the sexual behaviors and practices of teens is essential to developing and implementing effective teen pregnancy prevention efforts.

Every year, the Centers for Disease Control (CDC) conducts the **Youth Risk Behavioral Surveillance Survey (YRBSS)** across the nation to assess youth behaviors like sexual intercourse, contraception use, alcohol and drug use that contribute to the leading causes of mortality and morbidity. The most recent YRBSS data is from 2013 in which 13,583 students were surveyed nationwide.⁷

Table 1: 2013 Youth Risk Behavioral Surveillance Survey Data⁷

Among U.S. high school students: (n=13,583)	Among Nebraska high school students: (n= not reported)
<ul style="list-style-type: none"> • 47% reported ever engaging in sexual intercourse • 5.6% reported having sexual intercourse before age 13 • 34% had sexual intercourse during the previous 3 months • Of the 34%, 41% did not use a condom the last time they had sex • 15% had had sex with four or more people during their life • 88% of sexually active students had never been tested for HIV 	<ul style="list-style-type: none"> • 35% reported ever engaging in sexual intercourse • 4.1 % reported having sexual intercourse before age 13 • 26% had sexual intercourse during the previous 3 months • Of the 26%, 38% did not use a condom the last time they had sex • 9% had had sex with four or more people during their life • # of sexually active students tested for HIV (not reported)

Graph 1: 2013 CDC Youth Risk Behavioral Surveillance Survey Nebraska⁷



In 2014, the Nebraska Department of Health and Human Services (DHHS) released the 2013 YRBSS data report. While overall reported rates are lower than national rates, over 53% of Nebraskan teens reported ever having sex by the 12th grade. This represents 50% of the student population and over 40% had engaged in sexual intercourse during the past 3 months. Nebraskan high school students reported lower rates of ever having sex, sex before age 13, four or more sexual partners and currently being sexual active than students nationwide. Other categories, including but not limited to condom use, birth control pill use and drinking alcohol during last sexual encounter was comparable to students nationwide. Nebraska students reported **never being taught about HIV/AIDs in school** at higher rates compared to student nationwide. Understanding the sexual behaviors and practices of Nebraskan teens can inform statewide, county and local teen pregnancy prevention efforts.

UNDERSTANDING TEEN PREGNANCY, BIRTH & ABORTION RATES:

From a biological standpoint teen pregnancy prevention is straightforward and relatively simple. However, the social costs and consequences coupled with political controversy complicate an already convoluted, multifactorial issue. Teen pregnancy rates continue to decline with teen pregnancy prevention efforts.⁸ **The decline in teen pregnancy, birth and abortion rates has been attributed to two major factors: delayed age of sexual initiation and increased use of contraceptives by sexually active teens.**⁹

A 2007 state-level analysis attributed 86% of the decrease in teen pregnancy to increased contraceptive use and 14% was attributable to a decrease in the number of sexually active teen girls.¹⁰ Effective teen pregnancy prevention is not a one size fits all approach but requires strategically tailored efforts that not only encourage abstinence and delayed sexual initiation among teens who have not engaged in sexual activity but also promote condom and contraceptive use

among sexually active teens. Despite improvement in overall teen pregnancy and birth rates, the US continues to report higher rates than other industrialized countries.¹¹ The factors most often credited for this trend include **abstinence only sex education policies, disparities in socioeconomic status, poverty, education, barriers to adolescent reproductive and sexual health care services, and abortion restrictions.**¹²

Disparities in teen pregnancy, birth and abortion rates are most profound among minority, low socioeconomic and rural teens.¹³ It is important to note the distinction between teen pregnancy and teen births. All pregnancies, including teen pregnancies, result in one of three outcomes; 1) birth 2) elective termination (abortion), and 3) spontaneous termination (miscarriage and stillbirths). **A majority of teen pregnancies, approximately 60%, result in live births, while 26% end in abortion and 15% in miscarriage or stillbirths.**¹⁴ Methods for calculating teen pregnancy, birth and abortion rates are shown below.

Useful Definitions According to the Center's for Disease Control (CDC):¹⁵

Teen Pregnancy Rates: represent the number of teen girls who become pregnant irrespective of the outcome. The CDC defines teen pregnancy for females aged 15-19 (only). These rates are calculated by the total number of live births plus the number of reported induced terminations (abortions) per 1,000 teen girls in the age range. Teen pregnancy rates are often underestimated for it is impossible to capture the true numbers of pregnancies that do not result in live births (i.e. early miscarriage, non-reported terminations). Furthermore, girls under the age of 15 are not calculated into the teen pregnancy rate.¹⁶ **Example:** In 2010, in the US, an estimated 625,000 girls (under age 20) became pregnant, approximately 614,000 were ages 15-19, and 11,000 were under age 14. The overall teen pregnancy rate for 2010 was 57.4 pregnancies per 1,000 girls age 15-19 (6% of teens became pregnant in 2010).¹⁶

Teen Birth Rates: represent the number of teen girls who become pregnant and continue their pregnancies resulting in a live birth. These rates are calculated by the total number of live births per 1,000 teen girls aged 15-19 and usually collected from birth certificate data. Birth rates are more accurate in comparison to pregnancy rates given all live births receive a U.S. birth certificate and are registered with vital statistic records.¹⁶ **Example:** In 2010, in the US, an estimated 365,000 pregnant girls aged 15-19 gave birth representing a teen birth rate of 34.4 births per 1,000 girls.¹⁷

Teen Abortion Rates: represent the number of teen girls who terminate their pregnancies by obtaining legal abortion services. These rates are calculated by the total number of legal abortions per 1,000 teen girls aged 15-19. Teen abortion rates are also underestimated. Albeit most terminations occur legally in the U.S. Some abortion services may be performed at locations where mandatory reporting is not required or common practice.¹⁶ **Example:** In 2010, in the US, an estimated 157,450 abortions were performed among teen girls aged 15–19 had 157,450 abortions representing a teen abortion rate of 14.7 abortions per 1,000 girls.¹⁷

PREGNANCY, BIRTH & ABORTION RATES OF NEBRASKAN TEENS:

Overall, the state of Nebraska's teen pregnancy, birth and abortion rates are lower than the national average. Similar to US trends, the rates for each category (pregnancy, birth and abortion) in Nebraska are also on the decline. However, significant disparities exist in which certain counties, zip codes and population groups experience higher and disproportionate rates of teen pregnancy, birth and abortion.

Teen pregnancy, birth and abortion rates vary slightly depending on the source. The 2010 teen pregnancy, birth and abortion rates are provided as examples above in the "**Useful Definitions According to the CDC**" section. Up to date teen birth rates are often available and relatively accurate. However, teen pregnancy and abortion rates often lag behind given the data sources necessary for calculation.

The most recent and comprehensive report published in April 2016 by the Guttmacher Institute entitled "**U.S. Teenage Pregnancies, Births and Abortions, 2011: State Trends by Age, Race and Ethnicity**" provides the most recent data for pregnancy, birth and abortion by state, age, race and ethnicity. (Appendix A: Pregnancy, Birth and Abortion tables)¹⁷

Table 2: US & Nebraska Teen Population (2011):¹⁷

Population estimates for women 15-19, by age group and by race/ethnicity in Nebraska			
Females aged	Nebraska		United States
15-17	36,508		6,205,921
18-19	26,792		4,335,021
15-19	63,300		10,540,942
Population estimate for women age 15-19 by race & ethnicity			
Non Hispanic White	Non Hispanic Black	Non Hispanic Other	Hispanic
49,131	4,145	2,220	7,804

The state of Nebraska is located in the Midwestern plains of the United States. Demographically, majority of the state is Non-Hispanic White (89%). This is also evident in the teen pregnancy age range of 15-19. Majority of Nebraskan teens are Non-Hispanic White, followed by Hispanic and Black. The population estimates for Native American/Alaskan Natives and Asian Americans were not provided in the 2016 report from the Guttmacher Institute.¹⁸

Table 3: US and Nebraska Teen Pregnancy & Teen Pregnancy Rates (2011):¹⁷

# Teen Pregnancies by Age		
Females Aged	Nebraska	United States
Under 15	30	9,680
15-17	700	165,810
18-19	1,800	386,830
15-19	2,500	552,640
Teen Pregnancy Rates by Age		
Females Aged	Nebraska	United States
15-17	19	27
18-19	67	89
15-19	39	52

In 2011, **2,500** girls ages **15-19** became pregnant. Older teen girls (18-19) had higher teen pregnancy rates than younger teen girls (15-17). Nebraska teen pregnancy rates for each age cohort, 15-17 and 18-19 were also lower than the national average. Overall, the 2011 teen pregnancy rate in Nebraska was **39** pregnancies per 1,000 girls aged 15-19 which is lower than the national teen pregnancy rate of **68**.

Table 4: US and Nebraska Teen Birth & Birth Rates (2011):¹⁷

# Teen Births By Age		
Females Aged	Nebraska	United States
Under 15	14	3,974
15-17	459	95,538
18-19	1,272	234,234
15-19	1,731	329,772
# Teen Births by Race/Ethnicity ¹⁹		
Mother's Race/Ethnicity	Nebraska	United States
Non Hispanic White	943 (54%)	130,398 (39%)
Non Hispanic Black	188 (11%)	79,263 (24%)
American Indian or Alaska Native ^{2,3}	87 (5%)	6,897 (2%)
Asian or Pacific Islander ^{2,3}	35 (2%)	5,772 (2%)
Hispanic ⁴	504 (29%)	109,660 (33%)

¹ Includes all births, including those with Hispanic origin not stated and not shown separately.

² Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards.

³ Includes persons of Hispanic origin according to mother's reported race

⁴ Includes all persons of Hispanic origin of any race

Teen Birth Rates by Age

Females Aged	Nebraska	United States
15-17	13	14
18-19	47	54

15-19	27	31	
Teen Birth Rates By Race & Ethnicity			
Non Hispanic White	Non Hispanic Black	Non Hispanic Other	Hispanic
19	45	28	68

In 2011, 1,731 girls ages 15-19 gave birth. Older teen girls (18-19) accounted for over 70% of teen births. Nebraska teen birth rates for each age cohort, 15-17 and 18-19 were also lower than the national average. However, the gap between Nebraska and national teen birth rates is less than the gap between Nebraska and national teen pregnancy rates. Nebraskan teens are less likely to become pregnant compared to the national average. However, when Nebraskan teens become pregnant they are more likely to become teen mothers. Overall, the 2011 teen birth rate in Nebraska was 27 births per 1,000 girls aged 15-19 which is slightly lower than the national teen birth rate of 31.

Table 5: US and Nebraska Teen Abortion & Abortion Rates (2011): ¹⁷

# of Abortions by Age		
Females Aged	Nebraska	United States
Under 15	10	4,460
15-17	140	46,510
18-19	250	96,140
15-19	380	142,650
Abortion Rates by Age		
Females Aged	Nebraska	United States
15-17	4	7
18-19	9	22
15-19	6	14

In 2011, 380 girls ages 15-19 obtained legal abortions. Older teen girls (18-19) accounted for over 65% of abortions. Overall, the 2011 teen abortion rate in Nebraska was 6 births per 1,000 girls aged 15-19 compared to the national teen pregnancy rate of 14. Abortion rates by race and ethnicity are not provided in the 2016 report. Consistent with national trends, pregnancy rates increase with age in which older teens (18-19) are more likely to become pregnant in comparison to younger teens (15-17). Therefore, more abortions occur among older teens in comparison to younger teens. Of note, Nebraska has one of the lowest abortion rates nationally. Nebraska also has some of the most stringent abortion policies including but not limited to parental consent, waiting periods, mandatory ultrasounds and gestational age limits.¹⁵

DISPARITIES IN NEBRASKA TEEN PREGNANCY & BIRTH RATES:

As evidenced in the previous charts, teen pregnancy and birth rates differ by age, race and ethnicity. Rates also differ by geographic location and socioeconomic status. These differences are known as disparities and have persisted over time. Older, minority, rural and low income teens face the highest risks of becoming pregnant.²⁰

AGE RELATED DISPARITIES in teen pregnancy and birth rates exist most clearly across age groups. As shown earlier in this report, older teen girls (18-19) are more likely to become pregnant, give birth and/or have abortions than their younger teen counterparts under 18. From 2012-2013,

18-19 year olds represented 40% of the female teen population but accounted for 70% of total teen births.²⁰ Older teen girls represent a unique group with specific needs and considerations for teen pregnancy prevention efforts. Such efforts would differ from those implemented in the under 18, predominately high school teen population.

In most states the age of consent, age to vote and age of adulthood is 18; in Nebraska the age is 19. Nonetheless, this cohort of teens is more likely to be out of the secondary education system (high school) and either employed, enrolled in the armed services or obtaining post-secondary education or skills (community college, college or vocational school).

RACIAL & ETHNIC DISPARITIES in teen pregnancy and birth rates are prevalent across the country. Nationally, Hispanic girls experience the highest teen birth rates followed by non-Hispanic Black girls. In 2013, Hispanic and non-Hispanic Black **teen birth rates** were two times higher than the rate for non-Hispanic White. In fact, in 2013, Hispanic and non-Hispanic Black girls accounted for 57% of the U.S. teen births.^{21, 22} Over half of Latina teens get pregnant at least once before age 20, which is twice the national average. Nationally, **African American teens have the highest pregnancy rates**

and abortion ratio (proportion of pregnancies ending in abortion) and the 2nd highest birth rates.²³ **Hispanic teens** have the 2nd highest pregnancy rates, the highest birth rates, and the lowest abortion ratio. **White teens** had the lowest pregnancy rates, birth rates and 2nd highest abortion ratio.

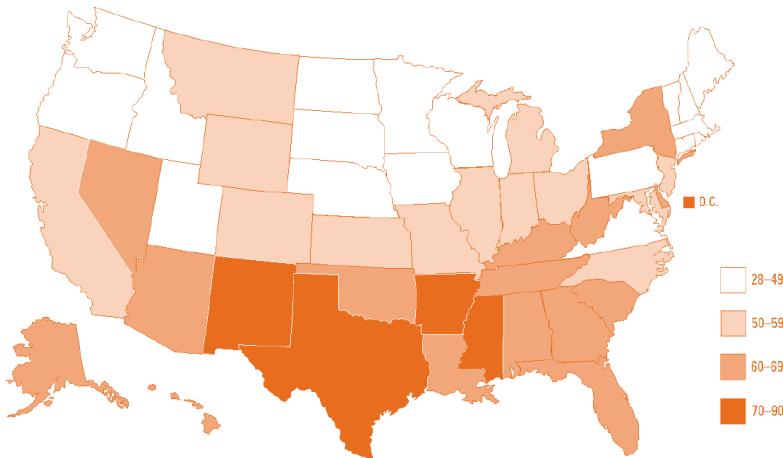
From 2007-2014, **teen birth rates decreased by 50%** for Hispanic teens, **48%** for Asian/Pacific Islander teens, **45%** for American Indian/Alaska Native teens, **44%** for Black teens, and **36%** for White teens.²⁴ Nonetheless, as recently as 2014, which had one of **the lowest recorded teen birth rates to date**, Hispanic teens gave birth at a rate of **38.0** per 1,000 Hispanic teens. Black teens gave birth at a rate of **34.9** per 1,000 Black teens. American Indian/Alaska Native teens gave birth at a rate of **27.3** per 1,000 American Indian/Alaska Native teens. In contrast, White teens gave birth at a rate of **17.3** per 1,000 White teens, and Asian/Pacific Islander teens gave birth at the lowest rate, **7.7** per 1,000 Asian/Pacific Islanders teens.²⁴ These disparities in pregnancy and birth rates warrant attention with dedicated culturally relevant interventions, policies and resources to thwart such trends and reduce disparities.²⁵

Nebraska is not exempt from racial and ethnic disparities in teen pregnancy and birth rates. Nebraska is a predominately non-Hispanic White state with a growing Hispanic/Latino population. According to the US Census, in 2014 it was estimated that **89% of Nebraskans were White, 10.2% Hispanic, 4.9% Black, 2.2% Asian/Pacific Islanders, and 1.4% American Indian/Alaskan Native**. The Hispanic population almost doubled in Nebraska from 2000-2010 representing the largest minority population in Nebraska.²⁶ It is important to note that birth rates are calculated based on the total number of births per 1,000 teen girls aged 15-19. Therefore, state demographics impact birth rates. In Nebraska, more babies are born to non-Hispanic White teen moms than any other racial cohort combined (54%), followed by Hispanic teen moms (29%), and African American teen moms (11%). American Indian/Alaskan Native (5%) and Asian/Pacific Islanders (2%) teen moms had the lowest number of babies born in the state.

Table 6: Nebraska # Teen Births by Race/Ethnicity¹⁹

Mother's Race/Ethnicity	Nebraska	United States
Non Hispanic White	943 (54%)	130,398 (39%)
Non Hispanic Black	188 (11%)	79,263 (24%)
American Indian or Alaska Native	87 (5%)	6,897 (2%)
Asian or Pacific Islander	35 (2%)	5,772 (2%)
Hispanic	504 (29%)	109,660 (33%)

2010 Teen Pregnancy Rates by State²⁸

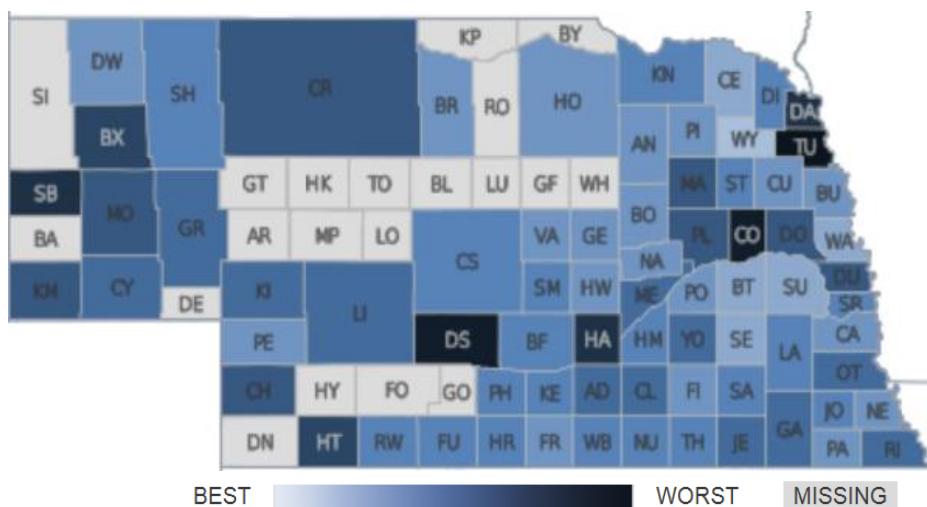


GEOGRAPHIC DISPARITIES: Teen birth rates vary across the nation based on state, county, zip code and rural vs. urban location. Geographic disparities exist in which rural counties experience higher teen pregnancy and birth rates compared to urban and suburban counties regardless of race/ethnicity.²⁷ In 2010, the national teen birth rate in rural counties was 42 births per 1,000 teens compared to the rest of the country at 33 births per 1,000 teens. Teen birth rates in rural counties are also on the decline—from 1990 to 2010, rural teen birth rates declined 32%. However, the decline was slower compared to urban counties at 49% and suburban counties at 40%.²⁷

In Nebraska, teen pregnancy and birth rates vary by county and zip code. A majority of the state is zoned as rural. Therefore, it is anticipated that some of the highest teen pregnancy and birth rates would be observed in rural counties. The **Robert Wood Johnson (RWJ) County Health Rankings** provides an online source to compare multiple health outcomes across US counties. The most recent RWJ rankings for teen birth rates are from 2016.

<http://www.countyhealthrankings.org/app/nebraska/2016/measure/factors/14/datasource>²⁸ Many of the counties reporting the highest teen birth rates are indeed categorized as rural.

2016 RWJ Teen Birth Rates in Nebraska²⁹



SOCIOECONOMIC DISPARITIES: in teen pregnancy and birth rates exist across socioeconomic groups. According to the 2013 Public Health Report *“Socioeconomic Disadvantage as a Social Determinant of Teen Childbearing in the U.S.”* the socioeconomic status of communities (counties, zip codes) and families are correlated with risks for teen pregnancy and birth.²⁹ It is not surprising that teens growing up in poverty represent a high risk population. Teens that are themselves the result of a teen pregnancy are at substantial risk.²⁹

Socioeconomic status can afford teens opportunities to engage in either risk reduction or risk promoting behaviors. For instance, higher socioeconomic groups may have more resources to participate in extracurricular activities compared to lower socioeconomic groups. Extracurricular time is a potential factor in teen pregnancy risks. The more time spent involved extracurricular activities, the lower the risk of teen pregnancy. Moreover, once a teen becomes pregnant, options can be determined by availability of resources. For instance, teens from lower socioeconomic backgrounds may become mothers due to the costs of and lack of access to affordable contraceptives and/or abortion services. These factors must be considered for tailored, need specific teen pregnancy prevention efforts. In the State of Nebraska socioeconomic disparities are profound in which certain counties experience higher rates of poverty.

As shown on the RWJ map on the previous page, Thurston County is located in the Northeastern part of Nebraska. It accounts for some of the highest teen birth rates in the state. Thurston County is also ranked as one of the poorest counties in Nebraska. An estimated 34% of the Thurston population lives in poverty compared to 12.4% for all Nebraskans.³⁰ Thurston County is home to a large percentage of Nebraska's Native American population. An estimated **52% of the residents in the county are Native Americans, followed by 46% White, 0.15% Black, 0.06% Asian and 2.43% Hispanic/Latino** populations. The case of Thurston County, Nebraska mirrors U.S. trends in which underrepresented minorities, lower income and rural populations report higher teen pregnancy and birth rates.

THE SOCIAL COSTS & CONSEQUENCES OF TEEN PREGNANCY:

Racial and ethnic, geographic and socioeconomic disparities in teen pregnancy, birth and abortion rates are profound, persistent and seemingly intractable. Racial and ethnic minority teens, rural teens and those from lower socioeconomic backgrounds are more likely to become pregnant in comparison to counterparts. Research shows that poverty is both a cause and consequence of teen pregnancy.³¹ The social costs and consequences of teen pregnancy are complex and multifold. They impact teen girls, their male partners, children, families, communities and society.

THE EDUCATIONAL IMPACT: The social costs and consequences of teen pregnancy are complex and rooted in decreased educational attainment, subsequent earning potential and poverty. Teen pregnancy and births among older teens (ages 18 and 19) are three times higher than that of younger teens. **Older teens account for 68% of teen pregnancies and 70% of teen births.** Unintended pregnancies can negatively impact educational achievement. 61% of college women who become pregnant during their course of study fail to complete their degree. This rate is 65% higher than that for students who do not become pregnant during college. High risk groups of teens (minority, low income and rural) may attend community colleges based on affordability. An estimated 50% of community college students have been pregnant or gotten someone pregnant at some point.³² As college graduation increases earning potential, a pregnancy during one's teen years has a direct negative impact on their educational attainment and future socioeconomic status. The median income for college graduates has increased 19%, while income among high school drop-outs has decreased 28 percent.³²

Teen mothers and fathers often have less education and are more likely to live in poverty than their peers who are not teen parents. A leading cause of high school and college drop-out rates among teen girls is unintended pregnancy. 30% of teen girls who drop out of high school cite pregnancy or parenthood as the primary reason. These rates are even higher for Hispanic (36%) and African American (38%) girls. Only about 50% of teen mothers receive a high school diploma by 22 years of age, versus approximately 90% of women who had not given birth during adolescence.³³ Teen mothers who live on their own often live below the poverty level and receive some form of public assistance (Section 8 housing, Medicaid, WIC). Furthermore, these teen moms are at increased risk of repeat pregnancy. The social costs and consequences of teen pregnancy can have intergenerational impacts on the mom as well as her child(ren).³⁴

THE INTERGENERATIONAL IMPACT: Statistically, the **children of teen moms** often perform poorly in school, have cognitive delays, are recipients of free and reduced lunch programs, perform poorly on early childhood development indicators, have poor social skills, become high school drop outs and repeat the cycle of teen parenthood when compared to children from non-teen mothers. The children of teen mothers are twice as likely to be placed in foster care, live in poverty, and experience child abuse and neglect.^{35,36,37} Research also shows that the children of teen moms not only start school at a disadvantage, they also fare worse across the life course. Only 66% of children born to teen mothers earn a high school diploma, compared to 81% of children born to non-teen moms.³⁸

Teen pregnancy also impacts the **health of teen moms and their infants**. Teen moms are more likely to have more unintended pregnancies, not recognize they are pregnant early in the pregnancy, and therefore less likely to receive early prenatal care. Teen moms are also less likely to have been taking prenatal vitamins at the time of conception. Teen moms have an increased risk of adverse pregnancy outcomes like pregnancy induced hypertension and preterm labor.³⁹ Babies born to teen moms experience higher rates of prematurity and infant mortality.

Based on the federal poverty guidelines and qualifications, many **children of teen mothers** are also Medicaid recipients. These children often have more health problems and rely more on the health care system than children born to non-teen mothers.³⁶ Based on the federal poverty guidelines and qualifications, many children of teen mothers are also Medicaid recipients. These children often have more health problems and rely more on the health care system than children born to non-teen mothers.

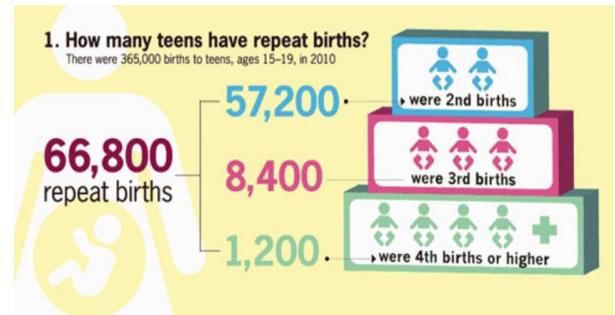
Effective teen pregnancy prevention is essential to reducing poverty, intergenerational poverty and racial/ethnic and geographic disparities. The greatest social impact of teen pregnancy is on educational attainment. Educational attainment is directly related to long term income earning potential and productive contribution to society.

Table 7: 2016 Federal Poverty Levels ⁴⁰

The Department of Health & Human Services (HHS) issues poverty guidelines that are often referred to as the “federal poverty level” (FPL). Federally-facilitated Marketplaces will use the [2016 guidelines](#) when making calculations for the insurance affordability programs starting November 1, 2015.

Household Size	100%	138%	150%	200%	250%	300%	400%
1	\$11,770	\$16,242	\$17,655	\$23,540	\$29,425	\$35,310	\$47,080
2	\$15,930	\$21,983	\$23,895	\$31,860	\$39,825	\$47,790	\$63,720
3	\$20,090	\$27,724	\$30,135	\$40,180	\$50,225	\$60,270	\$80,360
4	\$24,250	\$33,465	\$36,375	\$48,500	\$60,625	\$72,750	\$97,000
5	\$28,410	\$39,205	\$42,615	\$56,820	\$71,025	\$85,230	\$113,640
6	\$32,570	\$44,946	\$48,855	\$65,140	\$81,425	\$97,710	\$130,280
7	\$36,730	\$50,687	\$55,095	\$73,460	\$91,825	\$110,190	\$146,920
8	\$40,890	\$56,428	\$61,335	\$81,780	\$102,225	\$122,670	\$163,360

REPEAT TEEN PREGNANCY MOMS: One of the greatest risk factors for experiencing a teen pregnancy is to already be a teen mom. This unique cohort of teen mothers have been pregnant more than once and warrant unique and need specific, teen pregnancy prevention efforts. It is estimated that over 35% of teen moms will become pregnant again within 2 years of their previous birth without intervention.⁴¹ These teen moms may experience even more severe social consequences.



In 2010, over 66,000 pregnancies among girls aged 15-19 resulted in a repeat teen birth, representing 18.2% of all teen births.⁴² The majority of teens gave birth to their second child (57,000). However, 8,400 teens gave birth to their third child and 1,200 gave birth to their 4th or higher child. Consistent with teen pregnancy trends, racial and ethnic disparities exist. Repeat teen births are the highest among American Indian/Alaska Natives (21.6 percent), Hispanics (20.9 percent) and non-Hispanic Blacks (20.4 percent). The rate was lowest among Whites (14.8 percent). Geographic disparities were also prevalent with repeat teen birth rates the highest in the South and lowest in New England. Repeat teen births ranged from 22 percent in Texas to 10 percent in New Hampshire.⁴³ Teen mothers are at increased risk of having a subsequent teen pregnancy representing a multifactorial and complex public health matter.

Table 8: Repeat Births in Nebraska (2011) ¹⁹

Percent Repeat Births, of all births to females under 20 years of age		
Total	Nebraska	United States
Females aged 15-19	15%	18%
2011 Percent Repeat Births by Race/Ethnicity		
Mother's Race/Ethnicity	Nebraska	United States
Non Hispanic White	12%	14%
Non Hispanic Black	17%	20%
American Indian or Alaska Native	25%	19%
Asian or Pacific Islander	*	17%
Hispanic	19%	20%

The most recent repeat teen birth rates reported for Nebraska are from 2011 in which approximately 262 teens delivered their second birth or higher (3rd, 4th, etc.). Consistent with national trends, racial and ethnic disparities are prevalent in which minority teen girls, namely, American Indian/Alaskan Native, Hispanic and African American girls have higher rates of repeat teen pregnancy in comparison to their White counterparts. Repeat teen birth rates for American Indian/Alaskan Natives are higher in Nebraska in comparison to national averages. However, these rates are expected given the larger population of American Indian/Alaskan Natives residing in Nebraska compared to other U.S. States.

MALES MATTER: Teen pregnancy prevention efforts have focused predominately on teen girls. Majority of teen pregnancies are unintended and occur among non-married teen girls and boys. According to the January 2016, Congressional Research Service Report entitled *Teen Pregnancy Prevention: Statistics and Programs*” teen moms are more likely to drop out of school and have low educational attainment; face unemployment, poverty, and welfare dependency; experience more rapid repeat pregnancy; become single mothers; and experience divorce, if they marry.⁴⁴ Unfortunately, less than 25% of teen moms receive any child support payments from the father of their child. Teen fathers are more likely to be impoverished and pay less than \$800.00 per year in child support.⁴⁵

Racial and ethnic disparities are observed among teen fathers. In 2010, the teen Black male father rate was 29 per 1000 Black males aged 15-19. This rate was more than twice of the White male father rate of 14 per 1000 White males aged 15-19.⁴⁶ The attitudes and beliefs of males may contribute to teen pregnancy rates. According to a recent study interviewing males, most teen males reported that they would be very upset (47%) or a little upset (34%) if they got someone pregnant, while the remaining 18% report that they would be pleased or a little pleased.⁴⁷

Table 9: Of all births to females under 20 years of age, percent outside of marriage, 2011

Total	Nebraska	United States
Females under age 20	90%	89%
Females ages	Nebraska	United States
Under 15	Not available	99%
15-17	97%	95%
18-119	87%	86%
15-19	89%	88%

TEEN PREGNANCY RISK AND PROTECTIVE FACTORS

Teen pregnancy is preventable! Known risk and protective factors have been identified and implemented into evidence based and evidence informed teen pregnancy prevention models.

Useful Definitions for Protective & Risk Factors for Teen Pregnancy⁴⁸

Protective factors for teen pregnancy: defined as factors that discourage one or more behaviors that may lead to pregnancy (i.e. abstinence or delaying age of sexual initiation, limited sex partners and sexual encounters) or encourage behaviors that may prevent pregnancy (i.e. condom and/or contraceptive use). Protective factors are usually the opposite of risk factors.⁴⁸

Risk factors for teen pregnancy: defined as factors that encourage one or more behaviors that may lead to pregnancy (i.e. age of sexual initiation, number of sex partners and frequency of sexual encounters) or discourage behaviors that might prevent pregnancy (i.e. contraceptive or condom use).⁴⁸

Historically, teen sexual behavior, practices and choices have been explored from a risk factor perspective compared to a protective factor perspective.⁴⁹ Understanding the factors that contribute to or prevent teen pregnancy is essential to further reduce teen pregnancy rates and eliminate racial/ethnic, geographic and socioeconomic disparities. In 2005, a report reviewing over 400 studies created a comprehensive resource identifying risk and protective factors for teen pregnancy entitled: *Sexual Risk and Protective Factors: Teen Sexual Behavior, Pregnancy, Childbearing And Sexually Transmitted Disease Which Are Important? Which Can You Change?*⁴⁸ Teen pregnancy risk and protective factors can be categorized into **(4) environmental factors** that characterize the community in which a teen resides and **(15) individual factors** that categorize the modifiable and non-modifiable factors, behaviors, practices and choices of teens that promote or prevent teen pregnancy.⁴⁸

Table 10: Environmental and Individual Risk/Protective Factors:

Factor Type	Specific Factors
Environmental Factors:	<ul style="list-style-type: none"> • Community • Family • Peers & Best Friends • Romantic Partners
Individual Factors:	<ul style="list-style-type: none"> • Biological Factors • Race & Ethnicity • Connection to Family • Connection to School and Success in School • Connection to Religion • Connection to other Community Organizations or Adults • Involvement in Gangs • Alcohol and Drug Use • Aggression • Involvement in Problem or Sensation Seeking Behavior • Paid Work • Involvement in Sports • Cognitive and Personality Traits • Sexual Beliefs, Attitudes, Skills, Motivations and Intentions • Relationships with Romantic Partners and Previous Sexual Behavior

4 dominant themes of environmental and individual factors to prevent or promote teen pregnancy

1) Individual Biological Factors: These factors include inherited biological factors, namely, race and gender. These factors are not causal but **strongly associated with predicting the sexual behaviors, practices and choices** of teens. According to the YRBSS, males and African Americans report higher rates of having sex before the age of 13 and having 4 or more sexual partners. Males (67%) report using condoms more often than females (54%) at their last sexual encounter. Of particular note, African American males report the highest use of condoms at an estimated 75%. White females report higher use of hormonal contraceptives but majority of females (>70%) do not use hormonal contraceptive methods. Only 10% reported dual use of condoms and a hormonal method ultimately reducing both pregnancy and STI risks.⁴⁸

2) Disadvantage Disorganization and Dysfunction: These factors include the **quality of relationships** and the environment in which a teen lives. For instance, family dysfunction, domestic violence, single parent homes, and community violence all are risk factors for teen pregnancy. Conversely, more functional relationships and healthy environments are protective. Research consistently demonstrates that as parental income and education increases, the number of teens reporting never having had sex significantly increases. A significantly higher number of teens residing in two-parent households have never had sexual intercourse, compared with teens residing in one-parent households. Other studies indicate that family structure, income, and parental education are related to adolescent sexual activity and that living in stable households and environments may be conducive to delaying sexual intercourse^{50,51,52,53}. Lastly, some studies found that teen pregnancy was associated with feeling abandoned by one's family and experiencing emotional abuse by one's mother.⁵⁴ Positive adolescent-parent communication, talking to mothers about sexual issues, and satisfaction with maternal relationship were found to be protective factors against teen pregnancy.^{55,56}

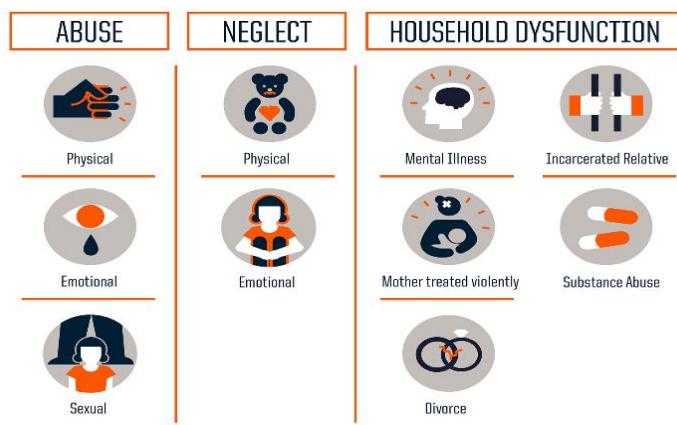
3) Sexual Values, Attitudes and Norms, and Modeling of Sexual Behavior: The **sexual values, attitudes, norms and modeling of sexual behavior can either promote or prevent risky behaviors** that can lead to teen pregnancy. These factors are usually adopted from a teen's parent(s), peers, families and communities. For instance, if a teen is friends with a group of teens engaged in sexual intercourse, the teen is more likely to also engage in sexual intercourse. A strong individual level predictor of teen pregnancy is values, attitudes and norms related to pregnancy intentions. Less than 10% of teen females report the desire to get pregnant, most are ambivalent about pregnancy and many do not believe it will negatively impact their future.⁵⁷ These values, attitudes and norms also impact teen's choices to use contraceptives and condoms. In a study of pregnant females with unintended pregnancies 50% reported not trying to

prevent pregnancy. Many thought they could not get pregnant (31%). Others reported their partners didn't want to use contraceptives (24%). Lastly, some reported they didn't mind getting pregnant (22%).^{58, 59}

4) Connection to Adults & Organizations that Discourage Sex, Unprotected Sex, or Early Childbearing: Teens connected to people or organizations that discourage sex and early childbearing while encouraging responsibility reduce sexual risk taking. Multiple studies show that when teens are strongly and positively attached to their parents, schools, faith-based communities, organizations and community, they are more likely to abstain or avoid unprotected sex.⁴⁹

ADVERSE CHILDHOOD EXPERIENCES: A teen's social and physical environment have a strong influence on their risk for teen pregnancy. In essence, the quality of relationships and the experiences of one's childhood impact both short and long-term outcomes. Teen and unintended pregnancies are closely linked to adverse childhood experiences (ACE). The ACE Study is one of the largest studies conducted in the United States investigating the associations between childhood experiences and health outcomes later in life.

Three Types of ACEs



Source: Centers for Disease Control and Prevention
Credit: Robert Wood Johnson Foundation

There are three types of **Adverse Childhood Experiences**: abuse, neglect, and household dysfunction. These three categories are captured within the 4 dominant themes of environmental and individual factors to prevent or promote teen pregnancy. An ACE Score is calculated by answering yes or no to 10 questions related to the three categories. **Teen pregnancy rates increased from 16% in those with an ACE score of 0 to 53% percent in those with an ACE score of 8.** A graduated increase in teen pregnancy rates was observed for every increase in ACE Score.⁶⁰ Understanding the impact of adverse childhood experiences as a strong predictor and risk factor for teen pregnancy is important for teen pregnancy reduction and the elimination of disparities.

ACE Score Special Populations:

TEENS IN FOSTER CARE: One of the highest teen pregnancy risk groups are children growing up in the foster care system. Teens in the foster care system, by default have higher ACE Scores. These teens incur significantly higher risks of unintended and teen pregnancy. By age 19, teen pregnancy and birth rates of teens in foster care are 2.5 times greater than teens not in the foster care system. **An estimated 50% of girls in foster care become pregnant by age 19 and 75% by age 21 compared to 33% among the general population.** Moreover, by age 21, over 60% of teens in foster care have repeat pregnancies. Males are not exempt in which over 50% of males in the foster care system by age 21 report that they have impregnated someone in comparison to 19% of their male counterparts who are not in the foster care system.^{61, 62, 63} Pregnancy among youth in the foster care system has multiple social and economic costs and consequences that impact not only the teen parent(s) but also the child.⁶⁴

The costs of teen pregnancy among youth in foster care cost the federal and state governments millions of dollars.⁶⁵ The majority of foster care youth qualify for public assistance including but not limited to Medicaid, housing subsidies and child care subsidies. The "age out" ages for states vary and range from 18-21. In Nebraska, teens age out at 19. The passing of the **Affordable Care Act extended Medicaid coverage to foster care** youth, up to age 26.⁶⁶ Females who are aging out of foster care are considered to be at high risk for teen pregnancy.⁶⁷ Teen parents transitioning out of foster care face significant challenges: caring for their children, repeat teen pregnancy, completing education and finding employment.

RUNAWAY AND HOMELESS TEENS are also at increased risk of teen pregnancy and have higher baseline ACE Scores.⁶⁸ The environmental and individual risk factors promote riskier sexual behaviors, practices and choices. Of note, homeless teen girls are at increased risk of sex trafficking, prostitution and having sex for money to meet their basic needs. One study found that 50% of youth living on the street and over 30% of youth living in emergency shelters had been

pregnant at least once.⁶⁸ These ACE Score high risk teen populations require unique, needs specific teen pregnancy prevention efforts and additional social services to improve short and long term outcomes.

POSITIVE DEVIANCE: Positive Deviance is based on the “observation that in every community there are certain individuals or groups whose uncommon behaviors and strategies enable them to find better solutions to problems than their peers, while having access to the same resources and facing similar or worse challenges.”⁶⁹ Understanding “outliers” and learning from their experiences can also influence teen pregnancy prevention efforts.

Positive deviance has been characterized in the **Search Institute’s 40 Developmental Assets: Protective Factors for Positive Youth Development.** The 40 developmental assets are divided into eight categories and further classified as internal or external. The assets represent sets of skills, experiences, relationships, and/or behaviors that enable youth to develop across the life course into successful and productive adults.⁷⁰

The 40 Developmental Assets: Protective Factors for Positive Youth Development

The 20 Internal Assets		The 20 External Assets	
Commitment to Learning 	<ul style="list-style-type: none"> <input type="checkbox"/> Achievement motivation <input type="checkbox"/> School engagement <input type="checkbox"/> Homework <input type="checkbox"/> Bonding to school <input type="checkbox"/> Reading for pleasure 	Support 	<ul style="list-style-type: none"> <input type="checkbox"/> Family support <input type="checkbox"/> Positive family communication <input type="checkbox"/> Other adult relationships <input type="checkbox"/> Caring neighbourhood <input type="checkbox"/> Caring school climate <input type="checkbox"/> Parent involvement in schooling
Positive Values 	<ul style="list-style-type: none"> <input type="checkbox"/> Caring <input type="checkbox"/> Equality and social justice <input type="checkbox"/> Integrity <input type="checkbox"/> Honesty <input type="checkbox"/> Responsibility <input type="checkbox"/> Restraint 	Empowerment 	<ul style="list-style-type: none"> <input type="checkbox"/> Community values youth <input type="checkbox"/> Youth as resources <input type="checkbox"/> Service to others <input type="checkbox"/> Safety
Social Competencies 	<ul style="list-style-type: none"> <input type="checkbox"/> Planning and decision making <input type="checkbox"/> Interpersonal competence <input type="checkbox"/> Cultural competence <input type="checkbox"/> Resistance skills <input type="checkbox"/> Peaceful conflict resolution 	Boundaries and Expectations 	<ul style="list-style-type: none"> <input type="checkbox"/> Family boundaries <input type="checkbox"/> School boundaries <input type="checkbox"/> Neighbourhood boundaries <input type="checkbox"/> Adult role models <input type="checkbox"/> Positive peer influence <input type="checkbox"/> High expectations
Positive Identity 	<ul style="list-style-type: none"> <input type="checkbox"/> Personal power <input type="checkbox"/> Self-esteem <input type="checkbox"/> Sense of purpose <input type="checkbox"/> Positive view of personal future 	Constructive Use of Time 	<ul style="list-style-type: none"> <input type="checkbox"/> Creative activities <input type="checkbox"/> Youth programs <input type="checkbox"/> Religious community <input type="checkbox"/> Time at home

The Search institute has assessed more than 4 million diverse children and youth since 1990. The evidence demonstrates a **strong positive association between developmental assets and youth outcomes.** In essence, the more assets a youth acquires, the greater their short and long term outcomes are across the life course including but not limited to succeeding in school, career and overall life.⁷¹ Youth that possess majority of the 40 developmental assets have “better chances of succeeding in school and becoming happy, healthy, and contributing members of society.”

The developmental assets associated with decreased risks of teen pregnancy:⁷²

<ul style="list-style-type: none"> Non-Parental Adult Role Models Peer Role Models Family Communication Use of Time (Groups/Sports) Use of Time (Religion) 	<ul style="list-style-type: none"> Future Aspirations Responsible Choices. Good Health Practices (Exercise/Nutrition) Community Involvement
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Teens with the aforementioned developments assets report lower rates of engaging in sexual intercourse; current sexual activity; the number of sex partners and higher rates of age at first intercourse; and contraceptive use.^{73,74,75,76} Most notably, more teens with the aforementioned developmental assets report being abstinent and among those who are sexually active are more likely to use contraception and/or condoms.^{77,78}

The “**40 Developmental Assets**” is just one positive youth development model. Moreover, different stakeholders may define positive youth development slightly different. Other models including the 2002 National Research Council and **Institute of Medicine’s “Community Programs to Promote Youth Development”** consistently demonstrate a positive association between these protective factors/assets and youth outcomes.⁷⁹ Effective teen pregnancy programs are shown to include positive youth development components.⁸⁰ These programs focus on developing protective factors or

assets to increase youth self-efficacy and cognition.^{81,82,83} A review of 19 asset-based youth development programs showed significant improvements in positive youth behaviors such as interpersonal skills, quality of adult and peer relationships, self-control, problem-solving, cognitive competencies, self-efficacy, commitment to school, and academic achievement.⁸⁴ (Supplement A: Evidence Based & National Teen Pregnancy Prevention Programs)

RECOMMENDATIONS:

Teen pregnancy, birth and abortion rates have declined significantly over the past decade. Teen pregnancy prevention programs and initiatives across the United States have contributed to the overall decline. Programs and initiatives that increased sexual and reproductive health knowledge coupled with the promotion of abstinence and delayed age of sexual initiation also contributed to the decline. However, programs and initiatives that increased knowledge, availability, access to and use of contraceptives including condoms contributed most to the overall decline. Programs and interventions designed to prevent teen pregnancy should consider the known risk and protective factors including but not limited to reducing adverse childhood experiences (ACE) and the 40 developmental assets for positive youth development.

The **State of Nebraska** has also experienced significant declines in teen pregnancy, birth and abortion rates. Yet, racial/ethnic, geographic and socioeconomic disparities in teen pregnancy persist. 2014 recorded the lowest teen pregnancy rates to date, yet the disparities remained. Such disparities are rooted in a complex socioecological matrix that perpetuates known risk factors for teen pregnancy including but not limited to poverty, cultural norms, family structure and functioning, education and income.

State and local efforts should be designed to reduce teen pregnancy, birth and abortion rates but should also acknowledge and address disparities by focusing efforts on **high risk and special populations** such as **minority youth, current teen moms, youth residing in low income rural and urban areas and those within the foster care system**. Other special populations in need of intervention including additional research and data are teens from the **LGBT and refugee populations**. Lastly, teens in the highest risk categories include those with inherent adverse childhood experiences and substantial risk factors. These teens include those who **are homeless, victims of sex trafficking, prostitutes and other sex workers**.

Healthy People 2020 goals aim to eliminate health disparities, achieve health equity and improve the health of all groups.⁸⁵ The goals and objectives of HP 2020 related to adolescents and family planning may represent an ideal starting point for state and local teen pregnancy prevention programs and efforts. The objectives are listed below.⁸⁵ To reduce teen pregnancy, birth and abortion rates with goals to eliminate disparities, programs and initiatives should consider the following HP2020 objectives:

- Increase the proportion of adolescents aged 17 years and under who have never had sexual intercourse. (delay initiation of sex)
- Increase the proportion of adolescents who receive formal instruction on reproductive health topics before age 18 years old. (comprehensive sex education)
- Increase the proportion of adolescents who talk to a parent or guardian about reproductive health topics before 18 years of age (40 developmental assets: Relationships with Adults)
- Increase the proportion of female adolescents aged 15 to 17 years who have never had sexual intercourse
- Increase the proportion of male adolescents aged 15 to 17 years who have never had sexual intercourse (delay initiation of sex)
- Increase the proportion of sexually active persons aged 15 to 19 years who use condoms and hormonal or intrauterine contraception to both prevent pregnancy and provide barrier protection against disease (condom and contraceptive use)
- Increase the proportion of sexually active persons aged 15 to 19 years who use condoms to both prevent pregnancy and provide barrier protection against STIs.

Pregnancy prevention should also be considered within the context of STI prevention. The use of hormonal contraceptive options has been demonstrated to result in limited use of condoms increasing STI risks. Majority of teen girls are not using hormonal contraceptives (70%) and of those that do, only 10% reported dual condom use. STI prevention methods also prevent teen pregnancy. However, effective teen pregnancy methods only reduce STIs if condoms are consistently and correctly used.

Teen pregnancy and prevention programs should be data driven and evidence informed. Evidence based programs often require implementation to fidelity, meaning the program is implemented exactly as the model requires and adaptation may not be an option. Leveraging data like the Youth Risk Behavioral Surveillance Survey (YRBSS) results can help states and counties better understand youth sexual behaviors, practices and choices. Additional national, state and county level data related to teen pregnancy can be obtained, easily accessed and navigated online by the following reputable data sources:

- **National Campaign to Prevent Teen and Unintended Pregnancy:** <http://thenationalcampaign.org/>
- **U.S. DHHS Office of Adolescent Health:** <http://www.hhs.gov/ash/oah/>
- **CDC Reproductive Health Section: Teen Pregnancy:** <http://www.cdc.gov/teenpregnancy/>
- **State & Territorial Health Departments:** <http://www.cdc.gov/mmwr/international/relres.html>
- **Nebraska Vital Records and Statistics:** <http://dhhs.ne.gov/publichealth/pages/vitalrecords.aspx>
- **RWJ County Health Rankings:** <http://www.countyhealthrankings.org/>
- **U.S. Census Quick Facts:** <http://www.census.gov/quickfacts/table/PST045215/00>
- **Guttmacher Institute:** <https://www.guttmacher.org> (abortion, contraception, family planning)
- **YRBSS Results:** <http://www.cdc.gov/healthyyouth/data/yrbs/results.htm>
- **Bedsider:** <http://bedsider.org> (contraception/youth friendly)

State, county, district and local teen pregnancy prevention programs, interventions and efforts should consider the following recommended components to increase effectiveness and success. They are presented in the Evidence Based Teen Pregnancy Prevention section of this report and restated below:

The **Centers for Disease Control (CDC)** recommends that successful teen pregnancy prevention programs should enhance protective factors and positive youth development by increasing knowledge, skills, beliefs, or attitudes related to teen pregnancy listed below:⁸⁶ Programs should include, address or enhance:

- Knowledge of sexual issues, HIV, other STDs, and pregnancy (including methods of prevention)
- Perception of HIV risk
- Personal values about sex and abstinence
- Attitudes toward condoms (pro and con).
- Perception of peer norms and sexual behavior.
- Individual ability to refuse sex and to use condoms.
- Intent to abstain from sex or limit number of partners.
- Communication with parents or other adults about sex, condoms, and contraception.
- Individual ability to avoid HIV/STD risk and risk behaviors.
- Avoidance of places and situations that might lead to sex.

The **National Campaign to Prevent Teen and Unplanned Pregnancy** identified the following as shared characteristics of previously proven teen pregnancy prevention programs and is complementary to the CDC's recommendations: Programs should:

- Have a strong theoretical framework
- Be rigorously evaluated
- Change behavior (delay sex, increase contraceptive use, reduce # of sexual partners)
- Evaluation results should be published in peer reviewed journals (role for academic partners)

Lastly, numerous teen pregnancy prevention interventions have been implemented across the nation. The evaluation of most interventions revealed limited success in reducing teen pregnancy, birth and abortion rates but improved other outcomes like knowledge and skills. Meta-analysis of programs conducted over time highlight the following additional components of effective teen pregnancy programs which complement both the CDC and the National Campaign to Prevent Teen and Unplanned Pregnancy recommendations: Successful teen pregnancy prevention programs:

- convince teens that not having sex and/or using contraception consistently is the right thing to do
- last a sufficient length of time (i.e., more than a few weeks)
- are operated by leaders who believe in their programs and who are adequately trained
- actively engage participants and personalize the program information
- address peer pressure issues
- teach communication skills
- reflect the age, sexual experience, and culture of young persons in the programs

The TOP 10 pregnancy prevention in Nebraska recommendations are proposed considering the components of effective teen pregnancy prevention programs for the State of Nebraska. Programs and interventions should be tailored to meet the needs of the identified population of interest and should be developed using reputable data. Moreover, programs should be culturally competent, need specific and teen endorsed. As emphasized throughout this report, particular focus should be dedicated to programs and interventions that serve the highest risk populations and are likely to reduce disparities in teen pregnancy, births and abortion rates.

- 1) Require medically-accurate, age-appropriate sex education in public schools with reproductive life planning
- 2) Build public recognition and support for the replication and implementation of evidence-based and community-based strategies that have shown to reduce teen pregnancy and its underlying or associated risk factors
- 3) Build public recognition of the economic impact of teen pregnancy on the State of Nebraska
- 4) Build public recognition of the impact lower teen pregnancy rates can have on reducing individual, child and intergenerational poverty
- 5) Utilize School-Based Health Center, Federally Qualified Health Centers and Title X Clinic services to impact and decrease teen pregnancy rates
- 6) Identify high-risk populations and target resources and services to decrease teen pregnancy rates
- 7) Increase confidential and affordable access to contraceptive services
- 8) Expand insurance coverage and resources for contraception services
- 9) Promote teen pregnancy prevention for both males and females to foster responsible equitable sexual choices
- 10) Educate and empower young men and women to express their sexuality in safe and healthy ways through access to accurate information and high-quality reproductive health services

THE EIGHT CATEGORIES OF DEVELOPMENTAL ASSETS MEASURED IN THE DAP	
External Assets	Internal Assets
 SUPPORT Measures whether children have caring adults in their lives, which may include parents, neighbors, and/or teachers.	 COMMITMENT TO LEARNING Asks questions related to whether children care about school and completing their homework, as well as appreciate learning new things.
 EMPOWERMENT Asks questions about how safe children feel at school and at home, as well as their perception of being valued and appreciated.	 POSITIVE VALUES Seeks to understand if children value taking responsibility for their actions and helping others, are honest and have respect for others and their community.
 BOUNDARIES AND EXPECTATIONS Hones in on whether a child feels he or she must abide by boundaries and expectations set at home, in school and in their neighborhood.	 SOCIAL COMPETENCIES Measures a child's willingness to express his or her feelings, establish relationships with others, say no to activities or suggestions that are dangerous, and can find positive ways to deal with hardships.
 CONSTRUCTIVE USE OF TIME Evaluates whether children are involved in outside activities like clubs, music or art programs or religious groups.	 POSITIVE IDENTITY Measures a child's self-worth.

CONCLUSIONS:

Teen pregnancy is a socially and economically complex problem in the United States impacting youth in all 50 states. Teen pregnancy impacts not only the pregnant teen, but her male partner, child, future children, community and ultimately society. The social and economic impacts of teen pregnancy are sustained over time and impact future generations resulting in low educational attainment and poverty.

When girls are able to reach their full potential the impacts are multifold. Females represent approximately 50% of the US population but give birth to 100% of the population. In essence, healthy and productive girls who are more likely to become healthy and productive women who are more likely to become healthy and productive mothers who are more likely to have healthier and more productive children that over a life span can result in healthier and more productive communities and overall healthier and more productive societies.

Teen pregnancy is preventable! Teen pregnancy, birth and abortion rates have declined over time and prove that dedicated teen pregnancy prevention programs and initiatives can make a substantial impact. State and local policies have great influence and contribute to teen pregnancy trends. Adolescent friendly policies that promote positive youth development, enhance the 40 developmental assets, increase protective factors, reduce risk factors, consider adverse childhood experiences and address disparities are likely to continue the decline in teen pregnancy, birth and abortion rates. However, the controversy prevails regarding known efforts that substantially decrease teen pregnancy rates like condom use and distribution, contraceptive use and even comprehensive sex education.

Teens residing in the State of Nebraska should be afforded every opportunity to lead healthy and productive lives. Teen pregnancy is one of the greatest deterrents for girls reaching their full potential. Preventing teen pregnancy by implementing efforts described throughout this report can ensure Nebraska is indeed the state of the “Good Life”. Efforts include but are not limited to partnering and expanding health care services at school based health centers, promoting comprehensive sex education, and implementing positive youth development programs. Nebraska can indeed be the state where girls grow up to be healthy and productive women who become healthy and productive mothers with healthy and productive children.



The Economic Costs and Consequences of Teen Pregnancy in Nebraska: An Economic Impact Model

Background: Without question the social costs and consequences of teen pregnancy on teen moms, their children and families are complex and can have multigenerational effects. The majority of teen pregnancies are unintended pregnancies and also have widespread economic impacts costing federal and state governments billions of dollars. Studies have shown that teen childbearing is associated with adverse consequences for teen mothers, fathers, and their children (Adams et al., 2009; Maynard, 1997; Scarcella, Bess, R., Zielewski and Green, 2006; Hoffman & Maynard, 2008). Teen mothers and their children are negatively affected in terms of educational attainment and earnings. Teen mothers are more likely to drop out of high school and to never graduate, have a higher risk of receiving public assistance, and living in poverty (Hoffman & Maynard, 2008; Perper, Peterson, & Manlove 2010; Meade et al 2008). Children born to teen mothers are more likely to have worse health outcomes, have academic and behavioral problems in school, and the sons of teen mothers are also more likely to end up in prison (Martin et al 2009; Levine et al 2007; Scher & Hoffman 2008). The fathers are also found to be impacted negatively on the earnings (Brien & Willis 1996).

Teen childbearing is costly to the public sector including federal and state government and the taxpayers who support them (Hoffman 2006). In 2010, the public cost of teen pregnancy and births was estimated to be \$9.4 billion in the United States and to be \$59 million in Nebraska (The National Campaign to prevent Teen and Unplanned Pregnancy 2013). The public cost included in this estimation includes public spending on public assistance to mothers (Temporary Assistance for Needy Families (TANF), Food Stamps, and housing), children's medical care, children's welfare (foster care), incarceration of sons of teen mothers, and lost tax revenue from mothers, fathers, and children due to lower earnings.

State Spending Related to Teen Births in Nebraska

The latest estimation of public costs available in the literature are predominately calculated from 2010. Teen pregnancy rates and births have further declined with the lowest recorded teen birth rates in 2014. In this section, we estimate Nebraska state spending related to teen childbearing in 2014. The state spending related to teen childbearing is the estimated total spending of public programs that are used by teen mothers and their children. Based on the data availability, state spending related to teen childbearing on the following programs in NE are included: Medicaid/children's Health Insurance Program (CHIP), Aid to Dependent Children (ADC), Women, Supplemental Nutrition Assistance Program (SNAP), Infant and Children (WIC), and Child Care subsidy. Unfortunately, state spending on public housing, foster care, incarceration and lost tax revenues were not included in this analysis due to data unavailability. The true cost to taxpayers related to teen pregnancy could be higher when these factors are considered.

Estimation Methods

In this report we estimate both the 'single-cohort' and the 'single-year' state spending related to teen pregnancy in 2014. Single-cohort estimates 'look forward' (18 years after the birth) to measure the costs of teen births in a given year and single-year estimates 'look backward' to measure the costs of public outlays in a given year attributable to teen births (Adams et al. 2009). Program eligibility criteria and average spending per enrollee for each of the public programs in 2014 were obtained from the Nebraska Department of Health and Human Services or secondary data sources (The Annie E. Casey Foundation, 2015). Total number of teen births in NE from 1996 to 2014 were obtained through Nebraska Department of Health and Human Services. Based on these data, we estimated (1) total state spending in year 2014 related to teen births in 2014, (2) total state spending related to the children born to teen moms in 2014 until age 18 (single-cohort estimates), and (3) total state spending in 2014 related to all children aged 18 years or younger and born to teen mothers (single-year estimates). We also calculated potential cost savings related to a reduction of 1000 teen births, 500 teen births, and 10% of teen births in 2014 based on the single-cohort estimation method.

Total state spending in 2014 related to children to teen mothers was calculated as the sum of annual spending of Medicaid/CHIP, ADC, SNAP, WIC, and Child Care Subsidy programs. Annual spending of the programs was estimated by multiplying average cost per enrollee by total number of eligible children born to teen mothers in 2014. Single-cohort estimate was the total state spending related to children born to teen moms in 2014 until they reach age 18. It was calculated as the sum of projected public program spending (multiplying average annual spending per person by total number of eligible children and by the number of years the children will be eligible for the programs) for the 2014 cohort from 2014 to 2032. We did not take into consideration the inflation factor over years in the estimation. Single-year estimate was the total state spending in 2014 related to all children aged 18 years or younger and born to teen mothers. It was calculated as the sum of estimated public program spending (multiplying average cost per enrollee by the total

number of eligible children) for all children born to teen moms from 1996 to 2014. In the main analysis, we assumed that all children born to teen moms meet the income eligibility criteria for these programs and this status remains till the upper range of the age eligibility criteria or age of 18 (All Eligible). Studies found that two-thirds of families begun by a young unmarried mother are poor (Sawhill 1999). In addition, teen moms are less likely to complete the education necessary to qualify for a well-paying job (Hoffman & Maynard, 2008; Perper, Peterson, & Manlove 2010). It is reasonable to assume that most teen moms are eligible for these income-based programs. However, not all eligible mothers and their children may have chosen to participate in the programs for various reasons. We also conducted a sensitivity analysis to estimate state spending related to teen births when 90% (90% Eligible) or 60% (60% Eligible) of the children born to teen mothers were on the public programs in 2014.

Public Program Eligibility Criteria and Average Annual Spending

The age and income eligibility criteria and average spending per child/mother enrollee for these programs were listed in Table 1. Please see Appendix C for federal poverty level table in 2014. As shown in the Table 1,

- Medicaid/ CHIP program covers children below 19 years of age with family income less than 213% Federal Poverty Level(FPL). An average \$3301.72 was spent on each child enrolled in the program in 2014. (NE Medicaid Reform Annual Report 2014)
- Medicaid program also covers pregnant women with income below 185%FPL for prenatal care through the pregnancy, labor, and delivery, and for 60 days postpartum as well as other pregnancy-related care. The estimated per person Medicaid spending on maternal care was \$6,117 per vaginal delivery in 2010 (Truven Health Analytics, 2013).
- ADC program covers children below 19 years of age and the average spending per child in 2014 was \$1945.25.
- SNAP program covers children below 19 years of age with family income below 133%FPL and the average spending per child in 2014 was \$1406.76.
- The WIC program covers women and children with a family income under 185% FPL and spends on (a) women during their pregnancy and six months postpartum; (b) infants until they are a year old; and (c) children aged 1-4 years. Based on the monthly cost number, on average, \$640.35 was spent for each mother enrollee, \$1,732.44 for each infant, and \$557.28 for each child aged 1 to 4 years annually in 2014.
- Child care subsidy program covers children below 13 years of age with family income under 130% FPL and the average spending per child was \$5,172 in 2014.

Table 1. Eligibility criteria, enrollment, average spending of state programs in 2014

Program	Eligible Age	Eligible Income	Average cost per enrollee
Medicaid/CHIP	Child <19	<200% FPL	\$ 3,301.72
	Pregnant women		\$ 6,117.00*
ADC	Child <19		\$ 1,945.25
SNAP	Child <19	<133% FPL	\$ 1,406.76
WIC	Child <5	<185% FPL	
	Pregnancy and 6 months postpartum		\$ 640.35
Infants	<1 year		\$ 1,732.44
Children	1-4 years		\$ 557.28
Child Care Subsidy	Child <13#	<130% FPL	\$ 5,172.00

* 2010 estimation of Medicaid payment for all maternal care of women giving vaginal births.

Children with special needs were not considered in the analysis.

Table 2: Number of children born to teen mothers from 1996 to 2014 in Nebraska.

Year	Births to 10-17 year olds	Births to 18-19 year olds	Total Births to Teens
1996	877	1594	2471
1997	879	1568	2447
1998	846	1639	2485
1999	826	1679	2505
2000	788	1723	2511
2001	785	1634	2419
2002	725	1693	2418
2003	721	1609	2330
2004	696	1594	2290
2005	725	1450	2175
2006	648	1495	2143
2007	711	1592	2303
2008	694	1617	2311
2009	658	1578	2236
2010	562	1413	1975
2011	473	1272	1745
2012	470	1218	1688
2013	424	1140	1564
2014	373	1038	1411
Total	12,881	28,546	41,427

Teen Births from 1996 to 2014 in NE

The total number of children born to teen moms from 1996 to 2014 in Nebraska is shown in Table 2. In 2014, there were 1,411 children born to teen moms. Assuming nullification of influx and efflux of migrants, the estimated total number of children aged 18 years or younger born to teen moms was 41,427 in 2014, the sum of all teen births from 1996 to 2014, in Nebraska. The estimated total number of children aged 13 years or younger born to teen moms is 26,589, the sum of all teen births from 2002 to 2014. The estimated total number of children aged 1 to 4 years born to teen moms was 6,972 in 2014, the sum of all teen births from 2010 to 2013, in Nebraska.

Estimated state spending related to teen childbearing

Based on the average spending per enrollee for each of the programs and the total number of children following the age range of the program eligibility, we calculated the estimated spending for children born to teen mothers in 2014 in Nebraska (1,411) for the first year, and the total spending for these children in the next 18 years until they reach age 18. During the cost estimation, we assumed that all age-eligible children born to teen moms also met the income eligibility criteria of these public programs. We also calculated the total estimated spending for all children aged 18 years or younger in 2014 and born to teen mothers in Nebraska (41,427) under three scenarios: all eligible, 90% eligible, and 60% eligible. The results are shown in Table 3.

Table 3. Estimated state spending related to teen childbearing in 2014

Program	Average cost per enrollee in 2014	Estimated costs for the 1411 teen births in 2014	Estimated costs for 1411 teen births in 2014 until age 18 [#]	Number of children met age criteria in 2014	Estimated costs for all children aged 18 years or younger in 2014 and born to teen mothers		
					All eligible	90% eligible	60% eligible
Medicaid/CHIP							
Children	3,301.72	4,658,731	83,857,157	41,427 ^a	136,780,473	123,102,426	82,068,284
Moms	6,117.00	8,631,087	8,631,087	1,411	8,631,087	7,767,978	5,178,652
ADC	1,945.25	2,744,748	49,405,460	41427 ^a	80,585,872	72,527,285	48,351,523
SNAP	1,406.76	1,984,938	35,728,890	41427 ^a	58,277,847	52,450,062	34,966,708
WIC							
Moms	640.35	903,534	903,534	1,411	903,534	813,180	542,120
Infants	1,732.44	2,444,473	2,444,473	1,411	2,444,473	2,200,026	1,466,684
Children 1-4 Yrs	557.28		3,145,288	6,972 ^b	3,885,356	3,496,821	2,331,214
Child Care subsidy*	5,172.00	7,297,692	94,869,996	26,589 ^c	137,518,308	123,766,477	82,510,985
Total State Spending		28,665,203	278,985,885		429,026,949	386,124,254	257,416,170

[#] Estimated cost = Average cost per enrollee x 1411 x number of years children meet age criteria of the program

* Children with special needs were not considered in the analysis.

^a Estimated total number of children aged 18 years and younger in 2014 & born to teen moms.

^b Estimated total number of children aged 1 to 4 years in 2014 & born to teen moms.

^c Estimated total number of children aged 12 years and younger & born to teen moms.

For the 1,411 children born to teen mothers in 2014, the total state spending on the programs in 2014 was estimated to be **\$28,665,203**. The average cost to state per child was \$20,316 in 2014. By program,

- A total of \$4,658,731 was spent on children and \$8,631,087 on moms by the Medicaid/CHIP program;
- A total cost of \$2,744,748 was spent on teen mothers by the ADC program;
- A total of \$1,984,938 was spent on SNAP program;
- A total of \$903,534 was spent on teen moms from pregnancy to 6 months after postpartum and a total of \$2,444,473 was spent on infants through WIC program.
- A total of \$7,297,692 was spent on child care subsidy.

For the 1,411 children born to teen mothers in 2014, the total state spending for the next 18 years until they reach age 18 was estimated to be **\$278,985,885**. The average total cost to state per child was \$197,722 by the age of 18. By program,

- A total of \$83,857,157 was spent on children and \$8,631,087 on moms by the Medicaid/CHIP program;
- A total cost of \$49,405,460 was spent on teen mothers by the ADC program;
- A total of \$35,728,890 was spent on SNAP program;
- A total of \$6,493,295 was spent through WIC program, including \$903,534 on teen moms from pregnancy to 6 months after postpartum, \$2,444,473 on infants, and \$3,145,288 on children aged 1-4 years.
- A total of \$94,869,996 was spent on child care subsidy.

For the 41,427 children who were born to teen mothers in Nebraska and aged 18 years or younger in 2014, the total state spending on the programs was estimated to be **\$429,026,949** if all children were on the programs. Of which,

- Total Medicaid/CHIP spending was estimated to be \$136,780,473 for children and \$8,631,087 for moms;
- Total ADC spending was estimated to be \$80,585,872;
- Total SNAP program spending was estimated to be \$58,277,847;

- Total WIC spending was \$903,534 on teen moms; \$244,473 on infants, and \$3,885,356 on children 1 to 4 years of age;
- Total Child Care subsidy was estimated to be \$137,518,308 for these children younger than 13 years.

Total state spending was estimated to be **\$386,124,254** if 90% of the children/their moms stayed on the public programs and **\$257,416,170** if 60% of the children/their moms stayed on public programs.

Estimated state savings related to reduced teen births

Table 4 shows estimated cost savings related to reduced teen births under three scenarios, 1000 reduced births, 500 reduced teen births, and 10% of the 1411 teen births in 2014 reduced.

Based on the public spending related teen birth, it is estimated that:

- If efforts are taken to reduce 1000 teen births, potential cost savings are estimated to be \$20,315,523 for the first year, and \$197,722,102 for these children till they become 18 years old.
- If efforts are taken to reduce 500 teen births, potential cost savings are estimated to be \$10,157,761 for the first year, and \$98,861,051 for these children till they become 18 years old.
- If efforts are taken to reduce 10% of the 1411 teen births in 2014, potential cost savings are estimated to be \$2,864,489 for the first year, and \$27,878,816 for these children till they become 18 years old.

Table 4. Estimated cost savings related to reduced teen births under three scenarios

Program	Reduce 1000 Teen Births		Reduce 500 Teen Births		Reduce 10% teen births in 2014	
	Cost savings in the first year [@]	Cost savings until age 18 [#]	Cost savings in the first year [@]	Costs savings until age 18 [#]	Cost savings in the first year [@]	cost savings until age 18 [#]
Medicaid/CHIP						
Children	3,301,723	59,431,012	1,650,861	29,715,506	465,543	8,379,773
Moms	6,117,000	6,117,000	3,058,500	3,058,500	862,497	862,497
ADC	1,945,250	35,014,500	972,625	17,507,250	274,280	4,937,045
SNAP	1,406,760	25,321,680	703,380	12,660,840	198,353	3,570,357
WIC						
Moms	640,350	640,350	320,175	320,175	90,289	90,289
Infants	1,732,440	1,732,440	866,220	866,220	244,274	244,274
Children (1-4 yrs)		2,229,120		1,114,560		314,306
Child Care Subsidy*	5,172,000	67,236,000	2,586,000	33,618,000	729,252	9,480,276
Total	20,315,523	197,722,102	10,157,761	98,861,051	2,864,489	27,878,816

[@] Estimated cost = Average cost per enrollee x number of reduced teen births

[#] Estimated cost = Average cost per enrollee x number of reduced teen births x number of years children meet age criteria of the program

* Children with special needs were not considered in the analysis.

Discussion

The estimation of state spending related to teen births in this section is limited in several ways and caution needs to be taken to understand the assumptions behind these numbers to inform policy decisions. First, the state spending included in this estimation only include Medicaid, ADC, SNAP, WIC, and Childcare subsidy. Some other public spending related to teen births such as state spending on public housing, foster care, incarceration and lost tax revenues were not included in this analysis due to data unavailability. The cost estimation in this section could be smaller than the actual total state spending related to teen births. Second, when estimating long term impact (till children 18 years of age), we

assumed that children or their moms stay on public programs over time but it is likely that some of the teen moms could be off the public programs over time. To avoid overestimation of state spending, we calculated state spending under two alternative scenarios, 60% and 90% of the teen mothers/children of teen mothers stay in the public programs, over years as a sensitivity analysis. Third, when projecting state spending for a cohort of children born to teen moms until age 18 and the cost savings related to reduced teen births, we also assume that these children and their moms stay on the public program over years. In addition, we did not take into consideration the inflation factor in this estimation. The costs are most likely underestimated considering inflation over years. The cost to Medicaid program could also be underestimated because we did not have information on 2014 average cost for pregnant women and had to use an estimation of Medicaid payment for all maternal care of women giving vaginal births in 2010. It is also worth noting that the estimation of state spending did not distinguish the public spending incurred due to the early age of birth of the mothers from other risk factors and thus it is not the net effect of teen childbearing. Nonetheless, it is evident that the State of Nebraska could save millions of dollars if efforts were dedicated to reducing teen pregnancies and births particularly among high risk populations.

2014 Federal Poverty Level Table

Household size	100%	133%	150%	200%	250%	300%	400%
1	11,670	15,521	17,505	23,340	29,175	35,010	46,680
2	15,730	20,921	23,595	31,460	39,325	47,190	62,920
3	19,790	26,321	29,685	39,580	49,475	59,370	79,160
4	23,850	31,721	35,775	47,700	59,625	71,550	95,400
5	27,910	37,120	41,865	55,820	69,775	83,730	111,640
6	31,970	42,520	47,955	63,940	79,925	95,910	127,880
7	36,030	47,920	54,045	72,060	90,075	108,090	144,120
8	40,090	53,320	60,135	80,180	100,225	120,270	160,360

References:

- Adams, E. K., Gavin, N. I., Ayadi, M. F., Santelli, J., & Raskind-Hood, C. (2009). The costs of public services for teenage mothers post-welfare reform: a ten-state study. *Journal of health care finance*, 35(3), 44-58.
- Maynard RA. Kids Having Kids: Economic Costs and Social Consequences of Teen Pregnancy. Urban Institute Press, Washington DC, USA (1997).
- Hoffman, S. (2006). *By the Numbers: The Public Costs of Teen Childbearing*. Washington, DC: National Campaign to Prevent Teen Pregnancy. https://thenationalcampaign.org/sites/default/files/resource-primary-download/btn_national_report.pdf. Accessed December 2015
- Hoffman, S. D., & Maynard, R. A. (Eds.). (2008). *Kids having kids: Economic costs & social consequences of teen pregnancy*. Washington, DC: The Urban Institute.
- Meade, C.S., Kershaw, T.S., & Ickovics,J.R. (2008). The intergenerational cycle of teenage motherhood: An ecological approach. *Health Psychology*, 27(4).419-429.
- Martin, J.A., Hamilton, B.E., Sutton, P.D., Ventura, S.J., Menacker, F., Kirmeyer, S., et al. (2009). Births: Final data for 2006. *National Vital Statistics Reports* 57(7). Hyattsville, MD: National Center for Health Statistics.
- Levine, J.A., Emery, C.R., & Pollack, H. (2007). The well-being of children born to teen mothers. *Journal of Marriage & Family*, 69(1), 105-122.
- Scher, L.S., & Hoffman,S.D.(2008). Consequences of teen childbearing for incarceration among adult children: Updated estimates thorough 2002. In S.D. Hoffman, & R. Maynard (Eds.), *Kids having kids: Economic costs & social consequences of teen pregnancy* (2nd ed., pp. 311-321). Washington, DC: The Urban Institute Press.
- Brien, M.J. and Willis, R.J. (1996). Costs and Consequences for the Fathers. In R.A. Maynard (ed), *Kids having kids: economic costs and social consequences of teen pregnancy*, Washington, DC: The Urban Institute Press.
- Scarella, C. A., Bess, R., Zielewski, E.H., and Green, R. (2006). *The Cost of Protecting Vulnerable Children V*.Washington, DC: The Urban Institute.
- Perper, K., Peterson, K., & Manlove, J., (2010) *Diploma Attachment Among Teen Mothers*, 2010. Child Trends, Fact Sheet: Washington, DC. http://www.childtrends.org/Files//Child_Trends-2010_01_22_FS_DiplomaAttainment.pdf. Accessed March 2016.
- The National Campaign to prevent Teen and Unplanned Pregnancy. (2013) *Counting It Up: The Public Costs of Teen Childbearing: Key Data*. Washington DC. Accessed April, 2016.
<https://thenationalcampaign.org/resource/counting-it-key-data-2013>.
- Truven Health Analytics, (2013) The cost of having a baby in the United States.
<http://transform.childbirthconnection.org/reports/cost/>. Accessed December 2015.
- Nebraska Department of Health and Human Services Division of Medicaid & Long-Term Care, (2014). Nebraska Medicaid Reform Annual Report. <http://dhhs.ne.gov/medicaid/Documents/2014-Medicaid-Annual-Report.pdf>. Accessed January 2016.
- The Annie E. Casey Foundation, (2015). The 2014 KIDS SCOUNT Data Book. Baltimore: The Annie E. Casey Foundation, 2015. <http://www.aecf.org/m/resourcedoc/aecf-2014kidscountdatabook-2014.pdf>. Accessed February 2016.

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SUPPLEMENT A:
**EVIDENCE BASED & NATIONAL TEEN
PREGNANCY PREVENTION PROGRAMS:**

There are multiple approaches to reducing risk teen sexual behaviors, unintended pregnancy and births. Many approaches have produced positive effects, like increasing knowledge and awareness. However, only a few interventions have actually delayed the initiation of sex, increased condom or contraceptive use, and reduced unprotected sex among youth. Research demonstrates that the most effective teen pregnancy reduction efforts have not only increased overall sexual and reproductive health education, but also education and access to contraceptives.

Effective teen pregnancy prevention interventions are essential to reduce teen pregnancy and birth rates and eliminate disparities across the nation and in Nebraska. Prevention interventions should be designed and tailored for high risk and special populations including but not limited to teens who are racial/ethnic minorities, in foster care, homeless, LGBT, living in poverty, as well as those living in both urban and rural areas. Furthermore, according to studies on effective and successful teen pregnancy prevention interventions, programs should include efforts to delay the initiation sex and increase condom or contraceptive use for sexually active teens.⁸⁷

The **CDC categorizes teen pregnancy a “winnable public health battle”** and recommends evidence-based teen pregnancy prevention programs to enhance protective factors and positive youth development to increase knowledge, skills, beliefs, or attitudes related to teen pregnancy listed below:^{88 89}

Evidence-based teen pregnancy prevention programs are varied and can use different frameworks. Many focus on abstinence, delaying first sexual encounter, and condom and/or contraception use for sexually active teens. Interventions shown to be most effective also utilize additional goals to reduce known risk factors, enhance protective factors and increase positive youth development across the 40 developmental assets.⁹⁰ **Specialized teen pregnancy prevention programs** are tailored to teens who have already experienced a teen birth. These programs are designed to prevent repeat teen births. Programs designed to prevent repeat pregnancy and births that have shown to be effective often include mentoring, referrals, case management, parenting classes and home visits.⁹¹

The **Department of Health and Human Services (HHS)** is a major federal funder of teen pregnancy prevention efforts. DHHS has identified and compiled a comprehensive list of 35 evidence-based teen pregnancy prevention models (EBTPPM) found to be effective in delaying sexual activity, increasing condom or contraception use and reducing teen pregnancy. The list includes many programs designed to educate youth and include both abstinence and comprehensive sex education curricula including abstinence teaching and contraceptive use. The following are abstinence-only evidence based teen pregnancy prevention programs endorsed by HHS: (1) Heritage Keepers Abstinence Education; (2) Making a Difference!; and (3) Promoting Health Among Teens!

The 35 evidence-based teen pregnancy prevention programs vary in their approach. Some are curriculum based while others are clinic based and often include contraceptive and family planning services. Programs are designed for multiple settings, including schools and community-based organizations, and many target high risk populations including racial/ethnic minorities and youth in the foster care system. As discussed above, some are abstinence-only, while others promote a more comprehensive sex education approach.

Table 1: DHHS Evidence Based Teen Pregnancy Prevention Models

HHS EBTTP Models	Implementation/Evaluation Setting
Aban Aya Youth Project	Middle school
Adult Identity Mentoring (Project AIM)	Middle school
All4You!	High school, Specialized setting
Assisting in Rehabilitating Kids (ARK)	Specialized setting
Be Proud! Be Responsible!	After school program or community-based organization
Be Proud! Be Responsible! Be Protective!	Middle school, High school
Becoming a Responsible Teen (BART)	After school program or community-based organization
Children's Aid Society (CAS) -- Carrera Programs	After school program or community-based organization
¡Cuídate!	After school program or community-based organization
Draw the Line/Respect the Line	Middle school
Families Talking Together (FTT)	Clinic-based
FOCUS	Specialized setting
Health Improvement Projects for Teens (HIP Teens)	After school program or community-based organization
Heritage Keepers Abstinence Education	Middle school, High school
HORIZONS	Health clinic
It's Your Game: Keep it Real (IYG)	Middle school
Making a Difference!	After school program or community-based organization
Making Proud Choices!	After school program or community-based organization
Project IMAGE	Health Clinic
Project TALC	After school program or community-based organization
Promoting Health Among Teens! Abstinence-Only	After school program or community-based organization
Promoting Health Among Teens! Comprehensive Abstinence and Safer Sex Intervention	After school program or community-based organization
Raising Healthy Children (formerly known as the Seattle Social Development Project)	Elementary school
Reducing the Risk	High school
Respeto/Proteger	After school program or community-based organization
Rikers Health Advocacy Program (RHAP)	Specialized setting
Safer Choices	High school
Safer Sex	Health clinic
SiHLE	Health clinic
Sexual Health and Adolescent Risk Prevention (SHARP) (formerly known as HIV Risk Reduction Among Detained Adolescents)	Specialized setting
Sisters Saving Sisters	Health clinic
STRIVE	After school program or community-based organization
Teen Health Project	After school program or community-based organization
Teen Outreach Program (TOP)	High school
Seventeen Days	Health clinic

TEEN PREGNANCY PREVENTION PROGRAMS & INITIATIVES:

The Gold Standard: Contraception (LARCs): Without a doubt contraception is a primary contributor to the significant decline in teen pregnancy, birth and abortion rates over time. The availability, effectiveness and use of contraceptives are the primary cause of decreased teen pregnancy rates over time. Decreases in teen pregnancy rates (86%) from 1995-2002 are attributed mostly to improvements in contraceptive options. Contraception prevents approximately 1.6 million teen pregnancies every year. However, only 75% of US teens use some form of contraception during their first sexual encounter and less than 30% of sexually active teens aged 15-19 use contraceptive methods consistently.⁹²

COMMUNITY BASED EFFORTS:

The Contraceptive Choice Project⁹³ is the landmark project demonstrating the effectiveness of LARCs in preventing unintended pregnancies, births and abortions. The Project was funded by the Washington University School of Medicine in St. Louis in 2007. The purpose of the study was to evaluate the impact of providing free contraception, namely LARCs to 10,000 women across the life course. 1,404 teens participated, and 72% chose a LARC. Teen pregnancy rates were significantly lower, at 34 per 1000 teens, compared to the national average of 159 per 1000 teens at the time. Furthermore, the abortion rates were also significantly lower, at 10 per 1000 teens in the study, compared to the national average of 42 per 1,000.

The Colorado Family Planning Project.⁹⁴ Colorado is the latest state following in the footsteps of the Choice Project in St. Louis. From 2009-2014, the Colorado Family Planning Project offered free contraceptives, namely LARCs to teens and low income women. The results and trends were similar to the Choice Project in which the teen birth rate decreased 40%, and abortion rate decreased 42% from 2009 to 2013. At the start of the study, 50% of all first births were to girls under the age of 21 from the poorest zip codes in the state. Today, the age has increased to 24. The Colorado project was also funded by the Susan Thompson Buffet Foundation. The Affordable Care Act offered a new opportunity to continue efforts for free contraception. Unfortunately, the state failed to get additional funding through the General Assembly in 2015.

The Iowa Initiative to Reduce Unintended Pregnancies. The Susan Thompson Buffet Foundation has funded multiple states to offer free or reduced cost long acting reversible contraceptives (LARCs) to women at highest risk of unintended pregnancy. In 2007, Iowa received a 5 year grant to fund the Iowa Initiative to Reduce Unintended Pregnancies. Results from 2007-2012 demonstrated that the number of women using IUDs or implants increased from 2,200 in 2007 to more than 9,700 in 2011, with an unintended pregnancy rate drop of 4%.⁹⁵ Based on the success of the project, Iowa lawmakers approved a Medicaid program that provides free birth control for women with incomes less than 300% of the federal poverty level (approximately \$35,000 for one person). Furthermore, Iowa state policies require health insurers to cover all contraceptive methods in health plans.⁹⁶

Milwaukee Wisconsin Teen Pregnancy Prevention Initiative.⁹⁷ In 2006, Milwaukee had the second highest teen birth rate in the nation. Many of the teen births were among teen girls pregnant by adult men. In 2008, the Milwaukee Teen Pregnancy Prevention Initiative was launched. Led by the United Way of Greater Milwaukee, key stakeholders included the Milwaukee Public School system and local community based organizations.¹⁰⁰ The initiative aimed to decrease the teen birth rate by 50% over 10 years. The group contracted and collaborated with Serve Marketing to launch community-wide provocative media and awareness campaigns, including but not limited to, billboards with pregnant boys, prom dresses made out of condoms, and fake movie trailers. Milwaukee public schools also updated their health promotion curriculum to include comprehensive sex education which also included abstinence and contraceptive use. These collective impact efforts resulted in a 50% decrease in overall teen birth rates achieved three years earlier than anticipated. The largest decline was among Hispanics at 56%, followed by non-Hispanic Blacks at 55%, and Whites at 47%.

Douglas County, NE Adolescent Health Project for STI and Teen Pregnancy Prevention. Douglas County, NE has one of the largest STI rates in the United States, exceeding national averages. Furthermore, teen pregnancy rates in Douglas County have declined but racial and ethnic disparities persist. In response to these trends, community, academic, government and non-profit organizations launched a collective impact project in 2014 known as the Adolescent Health Project. The Project is funded by the Omaha Women's Fund through generous donations of local philanthropists. The University of Nebraska Medical Center serves as the academic partner and conducted an environmental scan, needs assessment and literature review on teen pregnancy and STIs in Douglas County. The mixed methods approach revealed a lack of sexual and reproductive health knowledge among Douglas county students and their parents, limited adolescent friendly health care organizations and risky sexual behaviors among youth. The AHP was instrumental in leading the Omaha Public School System comprehensive sex education discussions using evidence-based data to justify revision of the 25-year-old sex education curriculum. In January 2016, OPS voted to update its sex education curriculum to provide age appropriate, evidence-based, comprehensive sex education.

Douglas County, NE Early Childhood Services (ECS) Teen and Young Parent Program (TYPP). ECS-TYPP is a collaborative of five agencies (Child Saving Institute, Lutheran Family Services, Nebraska Children's Home Society, Heartland Family Services and Visiting Nurses Association) that promote healthy lifestyles and educational attainment for limited resource parents and their children. The collaborative utilizes home visits, parenting classes, support groups, and mental health counseling services. 602 teen and young parents (average age 18.9) and 442 children were served from July 2014 to June 2015.

93% of parents were female ages 12-24. Over 250 were pregnant at the time of enrollment. Children ranged from newborns to 4 years old, with 78% of the children under age 1. The majority of those served represented racial/ethnic minorities. Families participating in the program demonstrated significant improvements in specific areas including but not limited to family resilience, graduation rates, breastfeeding, immunizations, car seat use and decreased stress. Teen birth rates in Douglas County, NE decreased since the inception of ESC-TYPP.

Gaston County, North Carolina – Gaston Youth Connected (GYC). Implemented in 2010, Gaston Youth Connected (GYC) is a 5-year project funded by the CDC with the goal to reduce the county's teen pregnancy rate by at least 10% by 2015. The initiative focuses on developing infrastructures in Gaston County to support evidence-based pregnancy prevention strategies, including the integration of youth programs with clinical services. The initiative utilizes a community-driven model to increase protective factors and developmental assets like delayed sexual activity and healthy relationships. The initiative provides technical support to medical providers and clinics to make services and facilities more adolescent friendly.⁹⁸This initiative is exemplary because it is the only one noted to significantly reduce teen pregnancy rates and completely eliminate racial and ethnic disparities. For the first time in history, African American teen pregnancy rates were lower than White teen pregnancy rates.^{99,100}

EyesOpenIowa is a non-profit organization located in Des Moines, Iowa. EyesOpenIowa collaborates with school districts to implement evidence-based sex education curricula through the Working to Institutionalize Sex Education (WISE) initiative. The Douglas County Adolescent Health Project proposed the WISE initiative as a component of the new OPS comprehensive sex education curriculum. EyesOpenIowa also provides age-appropriate, medically-accurate, teen pregnancy prevention education to a myriad of stakeholders (schools, faith based organizations, parents, etc.) through the Community Adolescent Pregnancy Prevention (CAPP) grant.

FEDERALLY QUALIFIED HEALTH CENTERS & TITLE X CLINICS:

The Centers for Disease Control and Prevention (CDC), through the Division of Reproductive Health, launched the Working with Publicly Funded Health Centers to Reduce Teen Pregnancy Among Youth from Vulnerable Populations (DP15-1508) proposal. Through this proposal, 3 organizations were recently funded through a 5-year cooperative agreement to: 1) enhance publicly funded health centers' capacity to provide youth-friendly sexual

and reproductive health services and 2) increase the number of young people accessing sexual and reproductive health services. It is no surprise that the states funded are in high risk geographic areas of the South.

Sexual Health Initiative for Teens North Carolina (SHIFT NC) - Location: Durham, North Carolina.

SHIFT NC received \$650,000 over 5 years to implement “All Together Now: Making Health and Referral Systems Work for Young People” to increase access to and uptake of contraceptive and reproductive health services for young people. SHIFT NC will provide and coordinate technical assistance to increase the youth-friendliness of Durham’s health care system, including Title X providers, federally-qualified health centers, and school-based health centers. SHIFT NC will develop linkage and referral networks to reach youth at highest risk. Durham county public schools, foster care service agencies, and juvenile detention centers are partners for this project.

Mississippi First, Inc. Location: Coahoma, Quitman, and Tunica counties, Mississippi.

Mississippi First, Inc. received funding totaling \$614,600 over 5 years to implement Focused Pregnancy Prevention for Mississippi Teens (Focus4Teens), which includes health center and youth-serving system partners in the Mississippi Delta region. Partners include federally-qualified health centers, Title X clinics, youth serving systems including school districts, mental health centers, and community-based organizations. Focus4Teens will build the capacity of health center partners to provide youth-friendly sexual and reproductive health services and increase access for youth. Referral systems will be developed to link high-risk youths to care and to increase awareness of health services in the community.

Georgia Association for Primary Health Care, Inc. - Chatham County, Georgia.

Georgia Association for Primary Health Care, Inc. (GAPHC) was given \$650,000 over 5 years to implement strategies and activities to reduce teen pregnancy among vulnerable youth. Partners include federally-qualified health centers, Title X clinics, health departments, schools, housing developments, and workforce development programs. The association will work with local partners to increase capacity to provide youth-friendly sexual and reproductive health services, develop referrals systems to increase the number of high risk youth accessing sexual and reproductive health services, and increase community awareness of reproductive health services available in the community¹⁰¹

Charles Drew Community Health Center & One World Health Center- Omaha, NE.

Charles Drew and One World are located in Douglas County, Omaha, NE. Both are federally qualified health centers and offer comprehensive reproductive health services through Title X. They are also recipients of the Adolescent Health Project funds and offer teen-friendly reproductive health services, affordable or free long acting reversible contraceptives (LARCS).

SCHOOL BASED HEALTH CENTERS:

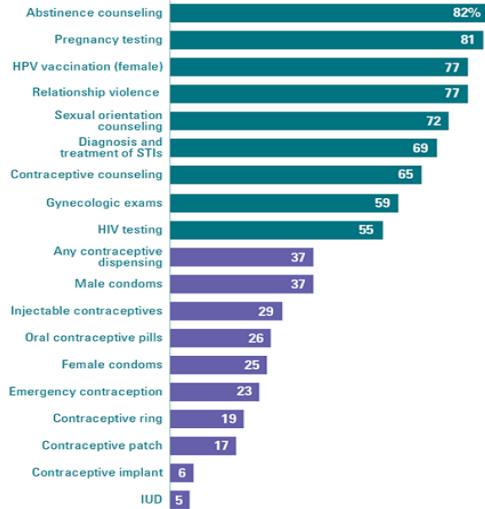
School based health centers (SBHCs) represent an ideal key stakeholder for teen pregnancy prevention. Similar to teen pregnancy prevention from a biological standpoint, the implementation of teen pregnancy prevention efforts at SBHCs are more complex, secondary to national, state and local debates about sexual and reproductive health initiatives and services within school systems. Nonetheless, SBHCs represent critical access points for adolescents given they are located within the physical environment (schools) in which youth spend majority of their time.

SBHCs began in the early 1970s and today over 1,900 SBHCs are operating across the nation on-site at local schools.¹⁰² Most SBHCs are staffed by midlevel providers (nurse practitioners, physician assistants), and are often sponsored by a local health agency, hospital, health department or federally qualified health center, resulting in streamlined continuity of care if referrals are required. Many SBHCs also bill insurance programs including private insurance, Medicaid and CHIP.¹⁰³ Some are even funded by Title X family planning funds or MCH block grants.¹⁰⁴ The majority of SBHCs provide primary care, mental health services, nutrition counseling and dental care. Most

are located in urban (54%) and rural (28%) communities and serve predominately minority and or low-income students. Nearly 83% of SBHCs serve adolescents in grades 6-12.¹⁰⁵

The role of SBHCs in prevention teen pregnancy varies by state, county and district. Research has shown promising results that SBHCs offering comprehensive sexual and reproductive health services such as contraceptive dispersal can reduce teen pregnancy.^{106, 107} In many cases, offering reproductive health care services at SBHCs was associated with youth's delayed initiation of sexual intercourse, decreased number of sexual partners and increased contraceptive use. Adolescent girls with access to SBHCs with a full-spectrum of services were more likely to get reproductive preventive care, use hormonal contraception, and be screened for STIs in comparison to other girls without such services.¹⁰⁸ SBHCs demonstrating success implemented evidence based interventions, increased access to condoms and contraceptives and provided confidential counseling and educational services.¹⁰⁹ Most schools with such SBHCs also provided evidence based, age appropriate comprehensive sex education curricula.^{110, 111} Despite effectiveness, the controversy over teens, sex and contraceptive use prevails and limits the provision of comprehensive sexual and reproductive health services at SBHCs.

School-based health centers provide a broad range of sexual and reproductive health services on-site, but just 37% dispense any contraceptives.



Note: Data are for 2010–2011. Source: School-Based Health Alliance.

Most SBHCs serving adolescents provide some form of sexual and reproductive health services. These services vary but include abstinence and contraceptive counseling (not actual contraceptives), pregnancy testing, HPV vaccinations and on-site testing and treatment for STIs.¹¹² Some also offer programs on sexual orientation and gender identity, sexual assault, rape prevention and counseling, and intimate partner violence. More than half of SBHCs report providing HIV counseling and testing, although an estimated 19% have policies that prohibit HIV testing. SBHCs with limited sexual and reproductive services rely on providing referrals for services off-site. Unfortunately, referrals are less effective than on-site provision of care secondary to social determinants including but not limited to lack of financial resources, transportation confidentiality and, or trust and comfort with other health care providers.¹¹³

To date, only **37% of SBHCs dispense contraceptives** on site to middle or high school students. Only 25% are strictly prohibited from dispensing contraceptives on site by state law. Other SBHCs are prohibited from dispensing contraceptives by local, school or district policies. However, an estimated 10-15% have self-imposed (voluntary) restrictions or are prohibited by their sponsoring organization. Over the past 10 years, the number of SBHCs with state, local, district or sponsoring organization restrictions have declined. However, this has not resulted in substantial increases in the provision of on-site contraceptives.¹¹⁴

A nationally representative survey conducted in 2012 found that 93% of adults and 87% of teens agree that young people should receive strong messages to wait to engage in sexual activity at least until they graduate high school. Majority of **adults (74%) and many teens (49%) agreed teens needed more comprehensive sex education** about abstinence and contraception. 62% of parents of teens indicated that teens should be provided with information about both postponing sex and about birth control or protection for federally funded programs. Both adults and teens encourage teens to delay sexual activity *and* providing teens with comprehensive sex education including contraceptives. In which delaying sex and providing information on contraception is complementary vs. contradictory.



SUPPLEMENT B:
**FEDERAL FUNDING FOR TEEN
PREGNANCY PREVENTION:**

The social and economic costs and consequences of teen pregnancy are expensive. As evidenced above, the State of Nebraska could save and reinvest millions if teen pregnancy and births were further decreased. Teen pregnancy prevention efforts should be designed and tailored for the highest risk populations across the state including older teens (18-19 year olds, racial and ethnic minorities, low income, rural and urban communities). Special high risk populations that warrant specific teen pregnancy prevention efforts include but are not limited to repeat teen parents, foster care, homeless, LGBT and refugee teens.

Multiple funding sources are available for teen pregnancy prevention efforts across the nation from multiple key stakeholders such as foundations, health care organizations, insurance companies and non-profit organizations. The federal government is a key stakeholder that allocates billions of dollars annually to states and local communities to implement teen pregnancy prevention initiatives. These federal dollars have funded many of the “effective” teen pregnancy prevention programs resulting in an overall decline in teen pregnancy, birth and abortion rates since the 1990s. Many of these programs are funded by the U.S Department of Health and Human Services (HHS).

In 2010, **HHS Secretary Kathleen Sebelius** stated: “Teen pregnancy is a serious national problem and we need to use the best science of what works to address it. This investment will help bring evidence-based initiatives to more communities across the country while also testing new approaches so we can expand our toolkit of effective interventions.”¹¹⁵

In 2010, **Director of the Centers for Disease Control (CDC)**, Thomas Frieden MD, MPH stated: “Through our experience, we know that we can prevent teen pregnancies by promoting teen-friendly interventions aimed at both increasing the number of teens who abstain from or delay sexual activity, and increasing the number of sexually active teens who consistently and correctly use effective contraceptive methods. This can be accomplished by involving more teens in evidence-based programs and linking prevention programs to clinical services.”¹¹⁶

The **United States federal government has identified teen pregnancy as a “serious national problem”** and identified evidence-based interventions and approaches to further reduce unintended teen pregnancies across the nation. Furthermore, federal agencies have acknowledged persistent racial/ethnic, geographic and socioeconomic disparities in teen pregnancy, birth and abortion rates. Federal funding is provided by HHS, CDC and other federal entities to prevent teen pregnancy and disparities at the State and local levels. Below are the major federally funded teen pregnancy prevention programs:

Personal Responsibility Education Program (PREP). ¹¹⁷ The Personal Responsibility Education Program (PREP) is funded at \$75 million through the Administration on Children, Youth, and Families through FY 2017. PREP contains five components: (1) state PREP formula grants, (2) competitive PREP grants, (3) Tribal PREP, (4) PREP–Innovative Strategies (PREIS), and (5) funding for training, technical assistance, and evaluation. All states and territories are eligible to apply. In 2014, a total of \$41.1 million in PREP funds was awarded to 45 states, the District of Columbia, Puerto Rico, the Virgin Islands and the Federated States of Micronesia. PREP funds evidence based initiatives that educate adolescents aged 10-19 about how to prevent pregnancy and STIs by teaching both abstinence and contraception. PREP curricula promote developmental assets including at least three of the following topics: healthy relationships, parent-child communication skills, education and employment preparation skills, adolescent development, financial literacy and healthy life skills. States can choose evidence-based programs, depending on state needs, from 35 proven models reviewed by the Department of Health and Human Services. The program also supports pregnant and parenting teens. PREP also provides Tribal PREP Grants on a competitive basis. In 2014, (16) tribes and organizations received funding .

Nebraska received PREP funds in the amount of \$282,627 awarded to the Nebraska Department of Health and Human Services. The Nebraska PREP state grant program supports six public and private entities that provide evidence-based programs to youth with a special focus on racial/ethnic minorities, as well as youth in foster care and the juvenile system.

Personal Responsibility Education Innovative Strategies (PREIS).¹¹⁸ PREP also provides \$10 million annually for competitive Personal Responsibility Innovative Strategies (PREIS) grants to public and private entities to develop, replicate, refine and test innovative strategies to reduce teen and repeat pregnancies. Organizations in 11 states received PREIS funds in 2013 in the form of 5-year cooperative agreements.

Nebraska received PREIS funds in the amount of \$759,039 awarded to Father Flanagan's Boys' Home at Boys Town to implement *Your Health, Your Body, Your Responsibility: Promoting Healthy Behaviors Among Teens in Foster Care*. By adapting the *It's Your Game: Keep It Real* curriculum they aim to reduce teen pregnancy among teens in foster care in Omaha, NE.

Title V State Abstinence Education Grant Program¹²²

The Abstinence Education Program has existed since 1996 and requires a 43% state match. States may use funds for abstinence education, mentoring, counseling or adult supervised activities. States are encouraged to use evidence-based programs and are required to address each point in the eight-point definition of abstinence education. An abstinence educational or motivational program:

- has as its exclusive purpose, teaching the social, psychological, and health gains of abstaining from sexual activity
- teaches abstinence from sexual activity outside of marriage as the expected standard for all school-age children
- teaches that abstinence is the only certain way to avoid out-of-wedlock pregnancy, STDs, and associated health problem
- teaches that a mutually faithful monogamous relationship within marriage is the expected standard of human sexual activity
- teaches that sexual activity outside of marriage is likely to have harmful psychological and physical effects
- teaches that bearing children out-of-wedlock is likely to have harmful consequences for the child, the child's parents, and society
- teaches young people how to reject sexual advances and how alcohol and drug use increases vulnerability to sexual advances
- teaches the importance of attaining self-sufficiency before engaging in sex.

Programs must be medically accurate and focus on youth at high risk of teen pregnancy, including foster care teens, homeless teens, or those residing in geographic areas with high teen birth rates. A total of \$4.5 million in Title V program grants was awarded to 36 states and three territories in 2014. In FY 2012, \$5 million was added for a Competitive Abstinence Education Grant Program which eliminated the evidence based requirement. The funding still requires the eight-point definition for abstinence and must be medical accurate. Ten states received this competitive funding in 2014.

Nebraska received Title V State Abstinence Education Grant funds in the amount of \$221,214 awarded to the Nebraska Department of Health and Human Services. The funds provide funding to serve youth aged 10-14 across six counties targeting African American, Latino and Native American youth as well as youth in the foster care and juvenile justice system.

Teen Pregnancy Prevention Program (TTP).¹¹⁹ Administered by the Office of Adolescent Health, the Teen Pregnancy Prevention Program provides competitive grants to a wide range of agencies and organizations for both evidence-based programs and research and demonstration programs that develop, implement or refine innovative strategies for preventing teen pregnancy. Grants run for five years and includes two "tiers." Tier 1 grants replicate evidence based teen pregnancy prevention supported by OAH. Funded entities choose a program model based on community needs. In 2010, \$75 million was awarded to 75 grantees for tier 1 grants.

Tier 2 grants develop, replicate, and refine new and innovative models to reduce teen pregnancy. In 2010, \$15.2 million was awarded to 19 grantees for tier 2 grants.

Community-Wide Initiatives to Reduce Teen Pregnancy, Centers for Disease Control and Prevention.¹²³

Funded with nearly \$10 million from the Teen Pregnancy Prevention “tier 2” grants described above, the Office of Adolescent Health and the Centers for Disease Control and Prevention awarded competitive grants to eight state and local organizations, and five national organizations, for FY 2011-2015. These entities work together to support community-wide strategies that reduce teen pregnancy by promoting the use of evidence-based programs, educating community leaders, and connecting youth to clinical services.

Pregnancy Assistance Fund.¹²³ In July 2013, the Department of Health and Human Services awarded competitive four-year Pregnancy Assistance Fund grants, totaling \$21.6 million, to 17 states and tribes to support pregnant and parenting teens and women continuing their education. The Pregnancy Assistance Fund offers services to with education completion including high school, and post-secondary educational (community college and undergraduate) degrees. Funds are used to provide health care, housing assistance and other support. Funds may also be used to combat violence against pregnant women.

Adolescent Family Life Program.¹The Adolescent Family Life (AFL) program was enacted as Title XX of the Public Health Service Act in 1981. It is administered by the Office of Adolescent Pregnancy programs in the Department of Health and Human Services (HHS) has two components, the “care” and the “prevention” component. AFL care demonstration projects are required to provide comprehensive health, education, and social services (including life and career planning, job training, safe housing, decision-making and social skills), either directly or through partnerships with other community agencies, and to evaluate new approaches for implementing these services. AFL care projects are based within a variety of settings such as universities, hospitals, schools, public health departments, or community agencies. Many provide home visiting services and all have partnerships with diverse community agencies. The AFL program supports care demonstration projects to develop, test, and evaluate interventions with pregnant and parenting teens, their infants, male partners, and family members in an effort to ameliorate the effects of too-early childbearing for teen parents, their babies, and their families. Care services to parenting adolescents include pre-and post-natal care, nutrition counseling, continuing education, and vocational services.

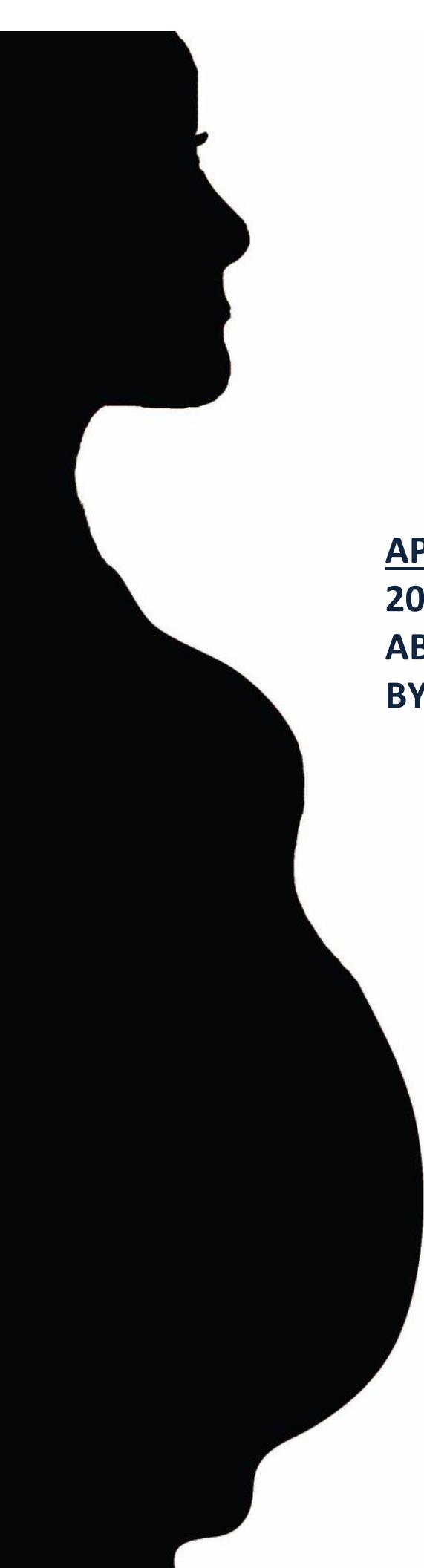
From 1998 to 2009, the AFL appropriation was expended primarily on the prevention component of the AFL program (i.e., services for pre-teens, teens, and their families to promote abstinence from premarital sexual relations) to develop, test, and evaluate pregnancy prevention interventions designed to encourage adolescents to postpone sexual activity and reduce their risks for teen pregnancy and sexually transmitted diseases.

President Obama’s Teen Pregnancy Prevention Initiative (TPPI).¹²⁴ The Center for Disease Control and Prevention (CDC) partnered with the federal Office of the Assistant Secretary for Health (OASH) “to reduce teen pregnancy and address disparities in teen pregnancy and birth rates. The OASH Office of Adolescent Health (OAH) is supporting public and private entities to fund medically accurate and age appropriate evidence-based or innovative program models to reduce teen pregnancy. The purpose of the program is to demonstrate the effectiveness of innovative, multicomponent, communitywide initiatives in reducing rates of teen pregnancy and births in communities with the highest rates, with a focus on reaching African American and Latino/Hispanic youth aged 15–19 years.

In addition, the mission of the CDC’s Division of Adolescent and School Health (DASH) is to prevent the most serious health risks among children, adolescents, and young adults. Such health risks include preventing unintended pregnancies among children, teens, and young adults.

Other Federal Programs. Although there are several federally funded programs that have a pregnancy prevention component and may use their funds to provide pregnancy prevention information and/or contraception services

to teens, they are not mandated by federal law to use any of their funds for teens. These programs include Medicaid Family Planning (Title XIX of the Social Security Act), Title X Family Planning, the Maternal and Child Health block grant (Title V of the Social Security Act), the Temporary Assistance for Needy Families (TANF) block grant (Title IV-A of the Social Security Act), the Title XX Social Services block grant, and several other HHS programs. The services provided by these federal funding sources are primarily targeted to adult women rather than teens, and the programs themselves make no attempt to isolate program expenditures for information and/or contraception services provided to teens.



APPENDIX A:
**2011 US TEEN PREGNANCIES, BIRTHS &
ABORTIONS: NATIONAL AND STATE TRENDS
BY AGE, RACE & ETHNICITY.**

TABLE I.1. Among women aged 15–19, state rankings, by rates of pregnancy, birth and abortion; state rates, by age-group; and state abortion ratios—all according to state of residence, 2011

State	Pregnancy rate*			Birthrate			Abortion rate			Abortion ratio†			
	Rank	15–19	15–17	18–19	Rank	15–19	15–17	18–19	Rank	15–19	15–17	18–19	
Total	na	52	27	89	na	31	14	54	na	14	7	22	30
Alabama	14	59	30	99	9	41	21	70	31	9	5	14	18
Alaska	12	59	23	117	14	36	13	74	13	14	7	26	28
Arizona	18	56	27	99	12	38	19	67	29	9	4	17	20
Arkansas	3	69	33	120	2	50	23	89	38	8	4	12	13
California‡	21	54	28	93	29	29	15	49	7	18	10	30	38
Colorado	32	47	24	79	28	29	14	49	21	11	6	18	28
Connecticut	43	38	20	62	48	16	7	28	9	17	10	26	51
Delaware	10	60	33	95	27	29	14	48	4	23	14	34	44
District of Columbia	na	79	67	87	na	43	34	48	na	25	24	26	37
Florida‡	19	56	27	98	25	30	14	53	6	19	10	31	39
Georgia	11	59	30	101	13	38	19	65	16	13	7	21	25
Hawaii	9	61	29	111	23	30	12	58	3	23	14	38	44
Idaho	39	41	17	77	30	28	11	54	44	6	3	11	18
Illinois	24	51	29	86	24	30	15	51	11	14	9	23	33
Indiana	27	49	22	86	18	35	16	62	42	6	3	11	15
Iowa	42	39	19	65	36	25	12	43	39	8	4	12	23
Kansas	28	48	21	86	16	36	15	64	48	5	3	8	12
Kentucky	15	59	27	103	8	43	20	78	45	6	4	9	12
Louisiana	4	66	31	116	6	46	21	81	25	10	6	17	18
Maine	45	34	16	59	44	21	9	37	34	8	4	14	29
Maryland§	20	55	28	94	38	24	12	42	2	23	12	39	49
Massachusetts	47	33	17	51	49	15	8	23	14	13	7	20	47
Michigan	29	47	22	84	32	28	13	50	15	13	7	22	32
Minnesota	49	31	15	55	45	19	9	34	40	7	4	13	28
Mississippi	2	70	36	117	1	51	26	85	37	8	4	14	14
Missouri	25	51	24	89	20	35	16	61	36	8	4	14	19
Montana	33	47	21	83	26	29	12	53	24	10	6	17	26
Nebraska	41	39	19	67	33	27	13	47	43	6	4	9	18
Nevada	8	62	32	112	15	36	18	66	8	17	9	30	32
New Hampshire§	50	26	12	44	50	14	5	24	32	9	5	14	39
New Jersey	31	47	25	81	46	19	9	34	5	22	13	37	54
New Mexico	1	72	41	117	3	48	26	80	18	12	8	18	20
New York	16	58	32	94	43	21	10	36	1	30	18	46	59
North Carolina	22	53	26	90	19	35	17	60	27	10	5	17	22
North Dakota	40	40	16	68	31	28	11	48	47	6	3	9	17
Ohio	26	49	23	86	22	31	14	56	26	10	5	17	24
Oklahoma	6	65	32	112	4	48	23	84	41	7	4	11	12
Oregon	36	44	21	76	34	26	12	46	20	11	6	19	30
Pennsylvania	35	44	23	71	37	25	13	41	17	13	7	20	33
Rhode Island	38	41	23	61	42	21	13	31	12	14	7	22	40
South Carolina	13	59	31	95	11	39	19	65	22	11	7	15	22
South Dakota	34	46	20	82	21	34	15	60	49	5	2	9	12
Tennessee	17	58	27	104	10	41	19	73	33	8	4	14	17
Texas	5	65	35	111	5	47	26	79	35	8	4	15	15
Utah	46	33	15	58	40	24	11	42	50	4	2	7	15
Vermont	48	32	18	47	47	17	8	26	23	11	7	14	39
Virginia	37	43	19	75	39	24	11	42	19	12	5	22	34
Washington	30	47	23	82	35	25	12	46	10	15	8	25	37
West Virginia	7	63	29	111	7	44	21	77	28	10	4	17	18
Wisconsin	44	34	16	59	41	23	11	41	46	6	3	9	20
Wyoming§	23	52	23	94	17	35	15	64	30	9	4	15	20

*All rates are the number of events per 1,000 women aged 15–19; pregnancy rate includes estimated number of pregnancies ending in miscarriage or stillbirth. †Ratios are the number of abortions divided by the sum of births and abortions. ‡Abortion estimates are based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age nationally. §Abortion estimates are based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age in neighboring states (For Maryland: District of Columbia, Delaware, Pennsylvania, West Virginia, and Virginia; for New Hampshire: Maine, Massachusetts and Vermont; for Wyoming: Colorado, Idaho, Montana, Nebraska, South Dakota and Utah.)

TABLE 1.2. Among women younger than 20, number of pregnancies, births, abortions and fetal losses, by age-group, according to state, 2011

State	Pregnancies*,†				Births				Abortions*				Fetal losses*,‡			
	<15	15–19	15–17	18–19	<15	15–19	15–17	18–19	<15	15–19	15–17	18–19	<15	15–19	15–17	18–19
Total	9,680	552,640	165,810	386,830	3,974	329,772	95,538	234,234	4,460	142,650	46,510	96,140	1,240	80,220	23,760	56,460
Alabama	190	9,490	2,900	6,590	95	6,609	1,983	4,626	70	1,420	480	940	30	1,460	440	1,020
Alaska	20	1,430	350	1,080	6	880	201	679	10	340	100	240	§	210	50	160
Arizona	190	12,340	3,570	8,770	102	8,402	2,462	5,940	60	2,050	560	1,490	30	1,890	550	1,340
Arkansas	110	6,640	1,870	4,770	57	4,845	1,323	3,522	40	750	260	490	20	1,040	290	750
California**	1,320	72,180	22,650	49,530	426	38,303	11,833	26,470	740	23,840	7,680	16,160	160	10,040	3,130	6,910
Colorado	140	7,670	2,310	5,360	67	4,734	1,383	3,351	60	1,810	590	1,220	20	1,130	340	790
Connecticut	90	4,740	1,460	3,280	24	2,020	535	1,485	60	2,110	740	1,360	10	610	180	430
Delaware	50	1,850	560	1,290	13	900	248	652	30	700	240	460	10	250	70	180
District of Columbia	60	1,630	550	1,080	29	879	279	600	20	530	200	330	10	230	80	150
Florida**	600	32,360	9,470	22,890	192	17,125	4,719	12,406	330	10,740	3,460	7,280	70	4,500	1,290	3,210
Georgia	470	20,340	6,160	14,180	179	12,991	3,839	9,152	230	4,320	1,410	2,910	60	3,030	910	2,120
Hawaii	40	2,460	730	1,730	12	1,199	297	902	20	920	340	590	§	330	90	240
Idaho	30	2,270	560	1,720	15	1,584	384	1,200	10	340	90	250	§	350	90	270
Illinois	390	22,660	7,560	15,100	136	13,026	4,091	8,935	210	6,390	2,410	3,980	50	3,240	1,060	2,190
Indiana	170	11,050	3,000	8,050	93	7,917	2,132	5,785	50	1,410	400	1,010	20	1,720	470	1,260
Iowa	50	4,080	1,110	2,970	21	2,665	700	1,965	20	810	250	560	10	610	160	450
Kansas	80	4,730	1,240	3,490	52	3,493	896	2,597	20	490	150	340	10	750	190	550
Kentucky	100	8,250	2,280	5,960	56	6,111	1,629	4,482	30	830	300	530	10	1,310	360	950
Louisiana	230	10,090	2,830	7,260	113	6,970	1,881	5,089	90	1,570	520	1,050	30	1,550	430	1,120
Maine	20	1,420	390	1,030	2	867	226	641	10	350	110	240	§	210	60	150
Maryland††	280	10,830	3,260	7,560	77	4,797	1,397	3,400	170	4,610	1,440	3,170	30	1,420	420	1,000
Massachusetts	80	7,520	2,150	5,370	31	3,478	988	2,490	40	3,040	880	2,160	10	1,000	290	710
Michigan	250	16,500	4,560	11,940	94	9,658	2,582	7,076	130	4,470	1,330	3,130	30	2,380	650	1,730
Minnesota	80	5,620	1,550	4,070	42	3,464	927	2,537	30	1,330	390	930	10	830	220	600
Mississippi	190	7,390	2,220	5,180	97	5,363	1,626	3,737	70	870	240	630	30	1,160	350	810
Missouri	140	10,150	2,790	7,360	61	6,944	1,871	5,073	60	1,650	500	1,160	20	1,550	420	1,130
Montana	10	1,480	390	1,090	7	930	231	699	10	330	100	230	§	220	60	160
Nebraska	30	2,500	700	1,800	14	1,731	459	1,272	10	380	140	250	§	380	110	280
Nevada	70	5,270	1,740	3,530	39	3,073	988	2,085	30	1,440	500	940	10	760	250	510
New Hampshire††	10	1,190	310	880	3	629	142	487	10	400	130	270	§	170	40	120
New Jersey	290	13,470	4,490	8,980	60	5,358	1,567	3,791	200	6,400	2,370	4,030	30	1,710	550	1,160
New Mexico	100	5,110	1,710	3,400	44	3,452	1,110	2,342	50	880	350	540	10	780	260	520
New York	800	38,020	12,240	25,780	180	13,718	3,823	9,895	530	19,600	6,960	12,650	90	4,700	1,460	3,240
North Carolina	320	16,800	4,740	12,060	145	11,070	3,055	8,015	130	3,200	980	2,220	40	2,530	710	1,830
North Dakota	20	920	190	730	12	647	131	516	§	130	30	100	§	140	30	110
Ohio	320	19,180	5,410	13,770	141	12,338	3,344	8,994	140	3,970	1,270	2,700	40	2,870	800	2,070
Oklahoma	120	8,140	2,330	5,810	63	6,025	1,685	4,340	40	830	280	550	20	1,290	360	920
Oregon	50	5,270	1,510	3,760	20	3,134	851	2,283	20	1,370	440	930	10	760	210	550
Pennsylvania	370	18,940	5,630	13,310	151	10,816	3,154	7,662	170	5,420	1,670	3,740	50	2,710	800	1,910
Rhode Island	30	1,610	460	1,150	6	831	251	580	20	560	140	420	§	220	60	160
South Carolina	150	9,070	2,740	6,330	76	6,026	1,685	4,341	50	1,670	650	1,020	20	1,370	400	970
South Dakota	20	1,300	330	980	11	964	245	719	§	130	30	110	§	210	50	150
Tennessee	180	12,120	3,360	8,770	103	8,497	2,291	6,206	50	1,750	550	1,200	30	1,870	510	1,360
Texas	890	59,570	19,280	40,300	587	42,748	14,057	28,691	170	7,520	2,190	5,330	130	9,300	3,030	6,270
Utah	50	3,530	980	2,550	23	2,542	700	1,842	20	440	130	310	10	550	150	400
Vermont	10	710	210	500	3	375	95	280	§	240	80	150	§	100	30	70
Virginia	160	11,450	2,980	8,470	57	6,524	1,709	4,815	90	3,290	840	2,450	20	1,630	430	1,210
Washington	140	10,180	3,010	7,170	49	5,530	1,521	4,009	80	3,220	1,080	2,140	20	1,430	410	1,020
West Virginia	60	3,540	960	2,580	28	2,461	669	1,792	20	540	140	400	10	550	150	400
Wisconsin	110	6,620	1,820	4,800	57	4,504	1,190	3,314	30	1,110	360	750	10	1,010	270	740
Wyoming††	10	920	230	690	3	625	153	472	§	160	50	110	§	140	40	110

* Rounded to the nearest 10. † Includes estimated number of pregnancies ending in miscarriage or stillbirth. ‡Estimated as 20% of births plus 10% of abortions; includes stillbirths. . §≤5 abortions or fetal losses. ** Abortion estimates are based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age nationally. ††Abortion estimates are based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age in neighboring states (For Maryland: District of Columbia, Delaware, Pennsylvania, West Virginia and Virginia; for New Hampshire: Maine, Massachusetts and Vermont; for Wyoming: Colorado, Idaho, Montana, Nebraska, South Dakota and Utah.)

TABLE 1.3. Pregnancy rates among women aged 15–19, by year, according to state

State	Pregnancy rate*							
	1988	1992	1996	2000	2005	2008	2010	2011
Total	112	112	96	84	69	68	58	52
Alabama	111 †	117	103	90	71	73	63	59
Alaska	111 †	112 †	83	75 ‡	65	69	64	59
Arizona	127	132	115	105	90	82	60	56
Arkansas	114	116	106	93	80	82	73	69
California	155 †	158 †	123 †	96 ‡	75 ‡	73 ‡	60 ‡	54 ‡
Colorado	102	112	93	82	69	66	54	47
Connecticut	108	96	85	71	58	56	45	38
Delaware	119 †	119	90	92	76	82	68	60
District of Columbia	211	256	150	123	111	113	90	79
Florida	134 †	125 †	113 †	98 †	78 ‡	73 ‡	60 ‡	56 ‡
Georgia	123	127	107	95	79	78	65	59
Hawaii	134	141	103	93	72	77	65	61
Idaho	73	78	70	62	53	57	47	41
Illinois	113 †	112	104	87	67	69	57	51
Indiana	90	95	87	73	61	59	53	49
Iowa	69 †	67 †	58 †	54	49	51	44	39
Kansas	88	91	79	69	59	63	53	48
Kentucky	97	99	89	75	65	71	62	59
Louisiana	107	108	97	87	67 †	80 †	69	66
Maine	82	71	58	52	43	43	37	34
Maryland	129	119	103	92	66 †	64 †	58 †	55 †
Massachusetts	97	87	77	60	46	43	37	33
Michigan	111	109	88	75	60	58	52	47
Minnesota	69	64	56	50	42	42	36	31
Mississippi	106	122	106	102	83	90	77	70
Missouri	99	100	85	74	62	65	54	51
Montana	73	81	66	60	56	59	53	47
Nebraska	75	71	62	59	48	51	43	39
Nevada	143	144	141	116	94	85	69	62
New Hampshire	88 †	62 †	57 †	47 †	33 †	33 †	28 †	26 †
New Jersey	113	97	97	92	71	62	51	47
New Mexico	125	129	110	103	93	93	80	72
New York	116	119	104	91	76	72	63	58
North Carolina	123	121	103	95	73	73	60	53
North Dakota	58	59	49	41	41	43	42	40
Ohio	97	93	81	74	61	63	54	49
Oklahoma	105 †	100 †	90 †	85	74	80	69	65
Oregon	106	99	90	79	57	61	47	44
Pennsylvania	87	84	68	60	51	56	49	44
Rhode Island	86	94	80	66	56	54	44	41
South Carolina	115	109	94	88	76	77	66	59
South Dakota	69	74	60	54	50	53	47	46
Tennessee	111	112	97	89	77	76	62	58
Texas	117	122	113	101	87	86	73	65
Utah	69	65	58	52	43	48	38	33
Vermont	81	71	60	44	38	39	32	32
Virginia	107	101	87	72	60	56	48	43
Washington	109	108	87	75	59	61	50	47
West Virginia	79 †	86	74	67	60	65	64	63
Wisconsin	75	73	61	55	46	45	39	34
Wyoming	83	81	76	77 §	64 †	68 †	56 †	52 †

*All rates are the number of events per 1,000 women aged 15–19; pregnancy rate includes estimated number of pregnancies ending in fetal loss. †Estimate based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age in neighboring or similar states. ‡Estimate based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age nationally. §Estimate obtained by applying the average of the proportions of abortions obtained by 15–19-year-old women in Wyoming in 1992, 1996 and 1999 to the number of abortions among all women in the state in 2000.

TABLE 1.4. Birthrates among women aged 15–19, by year, according to state

State	Birthrate*							
	1988	1992	1996	2000	2005	2008	2010	2011
Total	53	60	53	48	40	40	34	31
Alabama	63	72	67	61	48	51	44	41
Alaska	57	65	51	49	40	44	38	36
Arizona	69	80	72	67	59	54	42	38
Arkansas	70	75	74	66	59	60	53	50
California	58	73	61	47	39	38	32	29
Colorado	49	58	51	51	42	40	33	29
Connecticut	36	39	37	31	23	23	19	16
Delaware	53	59	54	48	40	38	31	29
District of Columbia	74	107	79	53	42	51	45	43
Florida	63	65	57	51	42	40	32	30
Georgia	69	74	67	62	52	50	42	38
Hawaii	49	54	49	46	37	39	33	30
Idaho	45	52	47	43	36	40	33	28
Illinois	54	63	55	48	39	39	33	30
Indiana	52	59	55	49	42	41	38	35
Iowa	33	41	37	34	31	33	29	25
Kansas	49	56	49	46	40	44	39	36
Kentucky	60	65	61	55	48	53	46	43
Louisiana	68	76	67	62	47	54	48	46
Maine	41	40	32	29	24	25	22	21
Maryland	51	51	46	41	32	33	27	24
Massachusetts	32	38	31	26	20	20	17	15
Michigan	47	57	46	40	32	32	30	28
Minnesota	31	36	32	30	26	26	23	19
Mississippi	73	84	74	70	58	64	55	51
Missouri	55	63	53	49	42	44	37	35
Montana	39	46	39	37	35	39	35	29
Nebraska	37	41	39	38	33	36	31	27
Nevada	65	71	69	62	52	49	39	36
New Hampshire	33	31	28	23	18	19	16	14
New Jersey	39	39	35	32	24	24	20	19
New Mexico	72	80	70	66	61	61	53	48
New York	40	45	40	33	26	26	23	21
North Carolina	61	69	62	59	47	47	38	35
North Dakota	31	37	32	27	27	28	29	28
Ohio	52	58	50	46	38	39	34	31
Oklahoma	62	70	63	60	53	58	50	48
Oregon	48	53	50	43	33	36	28	26
Pennsylvania	41	45	38	34	29	30	27	25
Rhode Island	38	46	39	34	28	28	22	21
South Carolina	65	70	60	58	49	51	43	39
South Dakota	44	48	40	38	37	39	35	34
Tennessee	64	71	64	59	53	52	43	41
Texas	69	78	73	69	61	61	52	47
Utah	44	46	41	38	31	35	28	24
Vermont	33	36	30	23	17	20	18	17
Virginia	46	52	45	41	33	33	27	24
Washington	47	51	46	39	31	33	27	25
West Virginia	50	56	51	46	42	47	45	44
Wisconsin	38	42	37	35	30	30	26	23
Wyoming	48	50	45	42	43	47	39	35

*All rates are the number of births per 1,000 women aged 15–19.

TABLE 1.5. Abortion rates among women aged 15–19, by year, according to state

State	Abortion rate*							
	1988	1992	1996	2000	2005	2008	2010	2011
Total	44	36	29	24	19	18	15	14
Alabama	32 †	28	20	16	12	11	9	9
Alaska	39 †	31 †	20	15 ‡	16	15	17	14
Arizona	41	32	27	22	18	15	9	9
Arkansas	28	24	16	12	9	10	9	8
California	77 †	64 †	45 †	36 ‡	26 ‡	25 ‡	20 ‡	18 ‡
Colorado	40	38	29	19	17	16	13	11
Connecticut	59	45	37	31	27	26	20	17
Delaware	50 †	44	23	31	25	33	28	23
District of Columbia	111	117	50	53	55	47	33	25
Florida	53 †	43 †	40 †	34 †	24 ‡	23 ‡	20 ‡	19 †
Georgia	37	34	25	19	15	17	13	13
Hawaii	68	69	41	35	26	27	24	23
Idaho	18	14	12	10	9	8	7	6
Illinois	43 †	33	34	27	19	20	16	14
Indiana	25	22	19	13	10	8	7	6
Iowa	27 †	16 †	12 †	12	10	10	9	8
Kansas	27	22	18	12	10	9	6	5
Kentucky	22	20	14	8	6	7	6	6
Louisiana	23	15	16	11	10 †	14 †	11	10
Maine	30	21	18	15	12	12	10	8
Maryland	62	53	44	38	25 †	22 †	23 †	23 †
Massachusetts	54	38	36	26	20	17	15	13
Michigan	50	37	29	24	20	18	14	13
Minnesota	29	19	16	13	11	10	8	7
Mississippi	16	20	16	16	11	12	9	8
Missouri	30	22	20	14	11	11	9	8
Montana	24	24	17	15	13	11	10	10
Nebraska	28	20	14	12	8	7	5	6
Nevada	59	54	52	37	29	24	20	17
New Hampshire	44 †	22 †	21 †	17 †	11 †	10 †	9 †	9 †
New Jersey	60	45	50	49	38	30	25	22
New Mexico	35	30	23	22	18	18	15	12
New York	62	60	51	47	41	38	33	30
North Carolina	45	34	26	22	16	14	12	10
North Dakota	19	14	10	8	8	8	7	6
Ohio	31	22	19	17	14	14	12	10
Oklahoma	28 †	15 †	13 †	13	10	9	8	7
Oregon	44	32	27	25	16	16	12	11
Pennsylvania	34	28	20	18	14	18	15	13
Rhode Island	37	35	30	23	20	19	16	14
South Carolina	33	23	20	17	16	14	13	11
South Dakota	15	15	10	7	6	6	4	5
Tennessee	31	24	18	16	12	12	9	8
Texas	31	26	23	17	13	12	10	8
Utah	15	9	8	6	6	6	4	4
Vermont	38	26	22	14	16	13	9	11
Virginia	47	36	30	21	18	15	14	12
Washington	48	43	29	26	20	20	16	15
West Virginia	17 †	16	12	10	8	8	9	10
Wisconsin	27	21	16	12	10	8	7	6
Wyoming	23	20	20	25 §	12 †	10 †	8 †	9 †

*All rates are the number of abortions per 1,000 women aged 15–19. †Estimate based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age in neighboring or similar states. ‡Estimate based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age nationally. §Estimate obtained by applying the average of the proportions of abortions obtained by 15–19-year-old women in Wyoming in 1992, 1996 and 1999 to the number of abortions among all women in the state in 2000.

TABLE 1.6. Abortion ratios among women aged 15–19, by year, according to state

State	Abortion ratio*							
	1988	1992	1996	2000	2005	2008	2010	2011
Total	45	37	35	34	32	31	30	30
Alabama	34 †	28	23	21	20	18	17	18
Alaska	40 †	32 †	28	23 ‡	28	25	31	28
Arizona	37	29	27	24	23	22	18	20
Arkansas	28	24	18	16	13	14	14	13
California	57 †	47 †	43 †	44 ‡	40 ‡	39 ‡	39 ‡	38 ‡
Colorado	45	39	37	27	29	28	27	28
Connecticut	62	53	50	50	54	54	52	51
Delaware	49 †	43	30	40	38	46	48	44
District of Columbia	60	52	38	50	57	48	42	37
Florida	46 †	40 †	41 †	40 †	37 ‡	36 ‡	38 ‡	39 ‡
Georgia	35	32	27	23	22	25	24	25
Hawaii	58	56	45	43	41	41	42	44
Idaho	28	22	21	19	19	17	17	18
Illinois	45 †	34	38	36	33	34	32	33
Indiana	32	28	26	20	19	17	17	15
Iowa	45 †	29 †	24 †	26	25	23	24	23
Kansas	35	28	26	21	19	17	12	12
Kentucky	27	23	18	13	12	12	12	12
Louisiana	25	17	19	16	17 †	21 †	18	18
Maine	42	34	36	34	34	32	32	29
Maryland	55	51	49	48	44 †	41 †	45 †	49 †
Massachusetts	63	50	54	50	50	47	46	47
Michigan	51	40	38	38	38	36	32	32
Minnesota	49	34	33	30	29	27	26	28
Mississippi	18	19	18	19	16	16	14	14
Missouri	36	26	27	23	21	21	19	19
Montana	38	34	31	29	27	23	22	26
Nebraska	43	33	27	25	19	16	15	18
Nevada	48	43	43	37	36	32	34	32
New Hampshire	57 †	42 †	42 †	43 †	38 †	33 †	35 †	39 †
New Jersey	61	54	59	60	61	56	55	54
New Mexico	33	27	24	25	22	22	22	20
New York	61	57	56	58	61	60	59	59
North Carolina	43	33	29	28	25	23	24	22
North Dakota	37	27	24	23	22	22	19	17
Ohio	38	27	27	27	27	26	26	24
Oklahoma	31 †	17 †	17 †	17	16	14	13	12
Oregon	48	38	34	37	33	31	30	30
Pennsylvania	45	38	34	34	33	37	36	33
Rhode Island	49	43	44	41	42	40	42	40
South Carolina	34	25	25	23	25	21	24	22
South Dakota	25	23	21	16	13	12	11	12
Tennessee	33	25	22	21	18	19	18	17
Texas	31	25	24	20	18	16	16	15
Utah	26	17	15	13	16	14	13	15
Vermont	53	42	43	38	47	39	34	39
Virginia	50	41	40	34	35	32	34	34
Washington	50	45	39	40	39	37	37	37
West Virginia	26 †	23	19	17	17	14	17	18
Wisconsin	41	33	30	26	24	21	21	20
Wyoming	33	28	31	37 §	22 †	17 †	17 †	20 †

*Ratios are the number of abortions divided by the sum of births and abortions. †Estimate based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age in neighboring or similar states. ‡Estimate based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age nationally. §Estimate obtained by applying the average of the proportions of abortions obtained by 15–19-year-old women in Wyoming in 1992, 1996 and 1999 to the number of abortions among all women in the state in 2000.

TABLE 1.7. Pregnancy, birth and abortion rates among women aged 15–19, by race and ethnicity, according to state, 2011

State	Pregnancy rate*				Birthrate				Abortion rate			
	Non-Hispanic white	Non-Hispanic black	Non-Hispanic other†	Hispanic	Non-Hispanic white‡	Non-Hispanic black‡	Non-Hispanic other‡,‡	Hispanic	Non-Hispanic white	Non-Hispanic black	Non-Hispanic other†	Hispanic
Total	35	93	33	73	22	47	16	50	8	33	13	13
Alabama	46	79	19	91	34	51	9	71	5	16	8	6
Alaska	u	u	u	u	22	31	57	42	u	u	u	u
Arizona	u	u	u	u	22	42	52	52	u	u	u	u
Arkansas	60	96	44	80	45	66	27	61	6	15	10	6
California	u	u	u	u	13	36	9	43	u	u	u	u
Colorado	32	57	35	80	18	36	12	55	10	12	19	12
Connecticut	u	u	u	u	6	30	4	47	u	u	u	u
Delaware	41	96	19	85	20	44	3	51	16	39	14	22
District of Columbia	7	113	27	100	<1	62	6	61	6	35	19	25
Florida	u	u	u	u	23	48	4	29	u	u	u	u
Georgia	41	78	21	95	29	48	5	58	6	19	14	22
Hawaii	40	66	59	77	25	25	23	52	9	33	29	13
Idaho	34	65	42	69	23	50	28	53	6	4	7	5
Illinois	u	u	u	u	17	56	3	46	u	u	u	u
Indiana	43	82	10	65	31	56	4	48	5	14	4	7
Iowa§	36	89	51	u	21	59	20	58	7	17	21	u
Kansas	38	74	30	91	28	55	15	71	4	7	11	6
Kentucky	u	u	u	77	42	51	6	58	u	u	u	7
Louisiana§	49	88	82	u	35	61	16	52	6	13	53	u
Maine	34	39	23	32	21	28	13	16	8	5	7	12
Maryland	u	u	u	u	15	36	3	45	u	u	u	u
Massachusetts	u	u	u	u	9	22	6	46	u	u	u	u
Michigan	32	104	26	64	20	56	10	46	8	34	12	8
Minnesota	21	75	47	68	13	41	28	48	5	24	12	9
Mississippi	u	u	u	u	41	62	30	45	u	u	u	u
Missouri	42	90	28	67	30	57	7	50	6	20	17	7
Montana	40	u	u	60	24	**	66	39	10	u	u	12
Nebraska	u	u	u	u	19	45	28	65	u	u	u	u
Nevada	u	u	u	u	23	53	8	51	u	u	u	u
New Hampshire	u	u	u	u	13	20	5	28	u	u	u	u
New Jersey	20	111	54	62	6	38	1	41	11	60	47	11
New Mexico	u	u	u	86	28	30	58	58	u	u	u	15
New York	27	122	29	91	13	31	3	39	11	77	23	41
North Carolina	37	74	39	86	25	46	21	63	6	18	12	9
North Dakota	u	u	u	u	20	**	102	66	u	u	u	u
Ohio	u	u	u	u	25	58	6	50	u	u	u	u
Oklahoma	57	82	61	87	41	58	46	69	7	11	5	4
Oregon	37	65	27	72	21	35	12	50	11	22	11	11
Pennsylvania	u	u	u	u	16	53	5	60	u	u	u	u
Rhode Island	u	u	u	u	12	34	21	53	u	u	u	u
South Carolina	46	76	31	87	30	51	13	60	9	13	14	14
South Dakota	30	61	112	94	22	33	87	64	3	19	7	15
Tennessee	49	85	13	85	35	55	6	66	6	18	5	5
Texas	40	74	13	87	27	47	4	66	7	16	7	7
Utah	24	37	29	74	17	24	20	56	4	7	5	6
Vermont	33	30	18	19	17	18	11	6	11	8	4	10
Virginia	32	70	18	56	19	37	3	36	8	23	12	11
Washington	u	u	u	u	19	28	13	55	u	u	u	u
West Virginia	63	87	10	36	45	43	2	23	8	33	7	8
Wisconsin§	27	92	48	70	15	65	26	50	5	13	7	9
Wyoming	u	u	u	u	31	**	46	59	u	u	u	u

*All rates are the number of events per 1,000 women aged 15–19; pregnancy rate includes estimated number of pregnancies ending in miscarriage or stillbirth.

†“Non-Hispanic other” refers to those identifying as races other than black or white, and not identifying as Hispanic. ‡Includes births with ethnicity unknown.

§Pregnancy and abortion rates are for white, black and other, irrespective of Hispanic ethnicity (births used for calculation of pregnancy rate are for comparable race groups without ethnicity). **Rate not calculated because population of women aged 15–19 was less than 500. Note: u=unavailable, or data did not pass quality threshold (see Methodology).

TABLE 1.8. Numbers of pregnancies, births, abortions and fetal losses among women aged 15–19, by race and ethnicity, according to state, 2011

State	Non-Hispanic other				Hispanic				Fetal Losses*,†
	Pregnancies*,‡	Births*§	Abortions*	Fetal Losses*,‡	Pregnancies*,‡	Births*	Abortions*	Fetal Losses*,‡	
Total	21,460	10,451	8,110	2,900	162,370	109,660	27,980	24,730	
Alabama	60	27	20	10	610	471	40	100	
Alaska	u	406	u	u	u	78	u	u	
Arizona	u	981	u	u	u	4,703	u	u	
Arkansas	110	69	30	20	640	493	50	100	
California	u	1,477	u	u	u	28,295	u	u	
Colorado	260	90	140	30	3,600	2,496	550	550	
Connecticut	u	19	u	u	u	1,019	u	u	
Delaware	20	3	20	**	280	166	70	40	
District of Columbia	20	5	20	**	190	112	50	30	
Florida	u	72	u	u	u	4,576	u	u	
Georgia	270	64	170	30	3,120	1,925	740	460	
Hawaii	1,530	592	740	190	420	284	70	60	
Idaho	70	50	10	10	610	465	50	100	
Illinois	u	61	u	u	u	4,123	u	u	
Indiana	50	20	20	10	1,120	820	120	180	
Iowa†	170	58	70	20	u	417	u	u	
Kansas	120	62	40	20	1,240	958	80	200	
Kentucky	u	14	u	u	370	279	40	60	
Louisiana††	330	61	210	40	u	328	u	u	
Maine	30	17	10	**	30	14	10	**	
Maryland	u	39	u	u	u	801	u	u	
Massachusetts	u	90	u	u	u	1,442	u	u	
Michigan	330	134	160	40	1,350	963	180	210	
Minnesota	620	371	160	90	750	533	100	120	
Mississippi	u	50	u	u	u	124	u	u	
Missouri	150	40	90	20	630	468	60	100	
Montana	u	212	u	u	90	57	20	10	
Nebraska	u	63	u	u	u	504	u	u	
Nevada	u	59	u	u	u	1,637	u	u	
New Jersey	1,250	29	1,100	120	3,800	2,528	690	570	
New Mexico	u	514	u	u	3,480	2,341	610	530	
New York	1,460	144	1,170	150	12,660	5,359	5,660	1,640	
North Carolina	490	267	160	70	2,700	1,978	300	430	
North Dakota	u	206	u	u	u	45	u	u	
Ohio	u	50	u	u	u	800	u	u	
Oklahoma	1,130	859	90	180	1,260	1,003	60	210	
Oregon	230	105	90	30	1,520	1,062	230	240	
Pennsylvania	u	74	u	u	u	2,124	u	u	
Rhode Island	u	41	u	u	u	354	u	u	
South Carolina	90	40	40	10	730	503	120	110	
South Dakota	450	348	30	70	100	70	20	20	
Tennessee	60	27	20	10	920	720	50	150	
Texas	470	162	250	60	36,390	27,469	3,120	5,810	
Utah	150	101	20	20	1,230	942	90	200	
Vermont	10	8	**	**	10	4	10	**	
Virginia	280	54	200	30	1,410	916	280	210	
Washington	u	313	u	u	u	1,946	u	u	
West Virginia	10	1	**	**	40	23	10	10	
Wisconsin††	470	229	60	70	1,050	743	140	160	
Wyoming	u	37	u	u	u	124	u	u	

*Rounded to the nearest 10. †Includes estimated number of pregnancies ending in miscarriage or stillbirth. ‡Estimated as 20% of births plus 10% of abortions; includes stillbirths. §Includes births with ethnicity unknown. **Less than five abortions or fetal losses.

††Numbers of pregnancies, abortions and fetal losses are for white, black and other, irrespective of Hispanic ethnicity (births used for calculation of numbers of pregnancies are for comparable race groups without ethnicity). Notes: u=unavailable, or data did not pass quality threshold (see Methodology). 'Non-Hispanic other' refers to those identifying as races other than black or white, and not identifying as Hispanic.

REFERENCES: All websites were last May 2016:

- ¹ United Nations (UN) Population Fund Report 2013: Motherhood in Childhood. <http://www.unfpa.org/publications/state-world-population-2013> (last assessed 2/10/16)
- ² World Health Organization (WHO) Adolescent Pregnancy: <http://www.who.int/mediacentre/factsheets/fs364/en/> (last assessed 2/10/2016)
- ³ Ventura SJ, Hamilton BE. U.S. teenage birth rate resumes decline. NCHS data brief, no 58. Hyattsville, MD: National Center for Health Statistics. 2011. <http://www.cdc.gov/nchs/data/databriefs/db58.pdf>
- ⁴ The National Campaign to Prevent Teen and Unplanned Pregnancy. Nebraska Data. 2015; Available at: <http://thenationalcampaign.org/data/state/nebraska>, 2015.
- ⁵ The National Campaign to Prevent Teen and Unplanned Pregnancy. Teen childbearing cost taxpayers \$9.4 billion in 2010. News Release. December 3, 2013. <http://thenationalcampaign.org/press-release/teen-childbearing-cost-taxpayers-94-billion-2010>.
- ⁶ CDC. *Youth Risk Behavior Surveillance—United States, 2013*. MMWR 2014;63(SS-4).
- ⁷ Nebraska Department of Health and Human Services, Nebraska Department of Education and the University of Nebraska-Lincoln, Bureau of Sociological Research: State of Nebraska: 2013 Youth Risk Behavior Survey Results, January 2014. Preliminary Report http://www.thebedisdead.org/wp-content/uploads/2014/02/Nebraska-2013-YRBS-Report_Preliminary-January-2014.pdf
- ⁸ Santelli J, Lindberg L, Finer L, Singh S. Explaining recent declines in adolescent pregnancy in the United States: the contribution of abstinence and improved contraceptive use. American Journal of Public Health. 2007;97(1):150-6
- ⁹ Santelli, John S., et al. "Changing behavioral risk for pregnancy among high school students in the United States, 1991–2007." *Journal of adolescent health* 45.1 (2009): 25-32.
- ¹⁰ Boonstra HD. What Is Behind the Declines in Teen Pregnancy Rates? *Guttmacher Policy Review* 2014;17(3):15
- ¹¹ Sedgh, Gilda, et al. "Adolescent pregnancy, birth, and abortion rates across countries: levels and recent trends." *Journal of Adolescent Health* 56.2 (2015): 223-230.
- ¹² SmithBattle, Lee. "Moving policies upstream to mitigate the social determinants of early childbearing." *Public Health Nursing* 29.5 (2012): 444-454.
- ¹³ Kost K and Henshaw S, *U.S. Teenage Pregnancies, Births and Abortions, 2010: National and State Trends and Trends by Age, Race and Ethnicity*, 2014,
- ¹⁴ Guttmacher Institute: State Facts about Abortion: Nebraska 2015 <https://www.guttmacher.org/pubs/sfaa/nebraska.html>
- ¹⁵ CDC: Teen Pregnancy & Birthrates 1990: MMRW October 01, 1993 / 42(38);733-737
<http://www.cdc.gov/mmwr/preview/mmwrhtml/00021930.htm>
- ¹⁶ Kost K and Henshaw S, *U.S. Teenage Pregnancies, Births and Abortions, 2010: National and State Trends and Trends by Age, Race and Ethnicity*, 2014,
- ¹⁷ Kost, Kathryn, and Stanley Henshaw. "US teenage pregnancies, births and abortions, 2011: State trends by age, race and ethnicity." 2016
- ¹⁸ Kost, Kathryn, and Stanley Henshaw. "US teenage pregnancies, births and abortions, 2011: State trends by age, race and ethnicity." 2016
- ¹⁹ US Department of Health and Human Services: Office of Adolescent Health: Nebraska Data: <http://www.hhs.gov/ash/oah/adolescent-health-topics/reproductive-health/states/ne.html>
- ²⁰ CDC Social Determinants and Eliminating Disparities in Teen Pregnancy <http://www.cdc.gov/teenpregnancy/prevent-teen-pregnancy/social-determinants-disparities-teen-pregnancy.htm>
- ²¹ Ventura,S. Hamilton, BE *National and State Patterns of Teen Births in the United States, 1940-2013*: National Vital Statistics Reports, 2014;63(4)
- ²² Kearney MS, Levine PB. *Why is the teen birth rate in the United States so high and why does it matter?* 2012.
- ²³ Kost, K. & Henshaw, S. (2014). U.S. teenage pregnancies, births and abortions, 2010: National and state trends and trends by age, race and ethnicity. Guttmacher Institute. <http://www.guttmacher.org/pubs/USTPtrends10.pdf>. and <http://www.childtrends.org/?indicators=teen-pregnancy#sthash.3VuK6xwi.dpuf>
- ²⁴ Brady E. Hamilton, Joyce A. Martin, Michelle J.K. Osterman, Sally C. Curtin, and T.J. Mathews, "Births: Final Data for 2014," *National Vital Statistics Reports*, vol. 64, no. 12, December 23, 2015,
- ²⁵ Childtrends.org "Teen Pregnancy Indicators" <http://www.childtrends.org/?indicators=teen-pregnancy#sthash.3VuK6xwi.dpuf>
- ²⁶ US Census Quick Facts for 2014: Nebraska: <http://www.census.gov/quickfacts/table/PST045215/31>
- ²⁷ The National Campaign to Prevent Teen and Unplanned Pregnancy. Teen childbearing in rural America. *Science Says*. 2013;47.

-
- ²⁸ County Health Rankings: Nebraska Teen Birth Rates
<http://www.countyhealthrankings.org/app/nebraska/2016/measure/factors/14/datasource>
- ²⁹ Penman-Aguilar A, Carter M, Snead MC, Kourtis AP. Socioeconomic disadvantage as a social determinant of teen childbearing in the U.S. *Public Health Rep.* 2013;128(suppl 1):5-22.
- ³⁰ Nebraska Fast Facts: US Census: <http://www.census.gov/quickfacts/table/PST045215/31>
- ³¹ Policy Brief: The Link Between Reducing Teen and Unplanned Pregnancy and Poverty, The National Campaign to Prevent Teen and Unplanned Pregnancy, 2010
- ³² Make it Personal: How Pregnancy Planning and Prevention Help Students Complete College, American Association of Community Colleges, 2012
- ³³ Perper K, Peterson K, Manlove J. *Diploma Attainment Among Teen Mothers. Child Trends, Fact Sheet Publication #2010-01*: Washington, DC:Child Trends; 2010.
- ³⁴ Why it Matters: Teen Childbearing, Education and Economic Wellbeing, The National Campaign to Prevent Teen and Unplanned Pregnancy, 2012
- ³⁵ Annie E. Casey Foundation When Teens Have Sex: Issues and Trends — A KIDS COUNT Special Report The Annie E. Casey Foundation, Baltimore, MD (1999)
- ³⁶ R.L Coley, P.L Chase-Lansdale Adolescent pregnancy and parenthood Am Psychol, 53 (1998), pp. 152–166
- ³⁷ F.F Furstenberg Jr, J Brooks-Gunn, S.P Morgan Adolescent mothers and their children in later life Fam Plann Perspect, 19 (1987), pp. 142–151
- ³⁸ T.L Dukewich, J.G Borkowski, T.L Whitman A longitudinal analysis of maternal abuse potential and developmental delays in children of adolescent mothers Child Abuse Negl, 23 (1999), pp. 405–420
- ³⁹ Why it Matters: Teen Childbearing, Education and Economic Wellbeing, The National Campaign to Prevent Teen and Unplanned Pregnancy, 2012
- ⁴⁰ Federal Poverty Guidelines 2016: <https://www.parkviewmc.com/app/files/public/1484/2016-Poverty-Level-Chart.pdf>
- ⁴¹ Stevens-Simon, Catherine, Lisa Kelly, and Rachael Kulick. "A village would be nice but.... It takes a long-acting contraceptive to prevent repeat adolescent pregnancies." *American journal of preventive medicine* 21.1 (2001): 60-65.
- ⁴² Kost K, Henshaw S. US teenage pregnancies, births and abortions, 2010: National and state trends by age, race and ethnicity. *New York: Guttmacher Institute* 2014
- ⁴³ Centers for Disease Control and Prevention (CDC). "Vital signs: Repeat births among teens—United States, 2007–2010." *MMWR. Morbidity and mortality weekly report* 62.13 (2013): 249.
- ⁴⁴ Carmen Solomen-Fears, Congressional Research Service: Teenage Pregnancy Prevention: Statistics and Programs January 15, 2016 <https://www.fas.org/sgp/crs/misc/RS20301.pdf>
- ⁴⁵ Why it Matters: Teen Childbearing, Single Parenthood, and Father Involvement, The National Campaign to Prevent Teen and Unplanned Pregnancy, 2012
- ⁴⁶ Steward, Alison, Kaye, Kelleen:Why It Matters: Teen Childbearing, Single Parenthood and Father Involvement. National Campaign to Prevent Teen and Unintended Pregnancy October 2012
- ⁴⁷ Abma JC et al., Teenagers in the United States: sexual activity, contraceptive use, and childbearing, National Survey of Family Growth 2006–2008, *Vital and Health Statistics*, 2010, Series 23, No. 30.
- ⁴⁸ Kirby, Douglas, Gina Lepore, and Jennifer Ryan. "Sexual risk and protective factors." *Factors affecting teen sexual behavior, pregnancy, childbearing and sexually transmitted disease: Which are important* (2005).
- ⁴⁹ D Kirby Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy (Summary) National Campaign to Prevent Teen Pregnancy, Washington, DC (2001)
- ⁵⁰ R.F Oman, K McLeroy, S Vesely, et al. An adolescent age group approach to examining youth risk behaviors Am J Health Promot, 16 (2002), pp. 167–176
- ⁵¹ J.S Santelli, R Lowry, N.D Brener, L Robin The association of sexual behaviors with socioeconomic status, family structure, and race/ethnicity among U.S. adolescents Am J Public Health, 90 (2000), pp. 1582–1588
- ⁵² R Blum, T Beuhring, M Shew, et al. The effects of race/ethnicity, income, and family structure on adolescent risk behaviors Am J Public Health, 90 (2000), pp. 1879–1884
- ⁵³ L.L Meschke, S Bartholomae, S.R Zentall Adolescent sexuality and parent-adolescent processes Fam Relat, 49 (1999), pp. 143–154
- ⁵⁴ Thompson, Sanna J., et al. "Runaway and pregnant: risk factors associated with pregnancy in a national sample of runaway/homeless female adolescents." *Journal of Adolescent Health* 43.2 (2008): 125-132.
- ⁵⁵ P.S Karofsky, L Zeng, M.R Kosorok Relationship between adolescent-parental communication and initiation of first intercourse by adolescents J Adolesc Health, 28 (2001), pp. 41–45
- ⁵⁶ P Dittus, J Jaccard Adolescent's perceptions of maternal disapproval of sex: Relationship to sexual outcomes J Adolesc Health, 26 (2000), pp. 268–278

-
- ⁵⁷ Stevens-Simon, Catherine, et al. "Adolescent pregnancy: do expectations affect intentions?." *Journal of Adolescent Health* 37.3 (2005): 243-e15.
- ⁵⁸ Tocce, Kristina M., Jeanelle L. Sheeder, and Stephanie B. Teal. "Rapid repeat pregnancy in adolescents: do immediate postpartum contraceptive implants make a difference?." *American journal of obstetrics and gynecology* 206.6 (2012): 481-e1.
- ⁵⁹ Forrest, Jacqueline Darroch. "Epidemiology of unintended pregnancy and contraceptive use." *American journal of obstetrics and gynecology* 170.5 (1994): 1485-1489.
- ⁶⁰ Hillis, Susan D., et al. "The association between adverse childhood experiences and adolescent pregnancy, long-term psychosocial consequences, and fetal death." *Pediatrics* 113.2 (2004): 320-327.
- ⁶¹ King, Bryn, et al. "A cross-sectional examination of birth rates among adolescent girls in foster care." *Children and Youth Services Review* 36 (2014): 179-186.
- ⁶² Dudley, Taylor I. "Bearing injustice: Foster care, pregnancy prevention, and the law." *Berkeley J. Gender L. & Just.* 28 (2013): 77.
- ⁶³ Lieberman, Lisa D., et al. "Pregnant teens in foster care: Concepts, issues, and challenges in conducting research on vulnerable populations." *Journal of Public Child Welfare* 8.2 (2014): 143-163.
- ⁶⁴ Robertson, Roni Diamant. "The invisibility of adolescent sexual development in foster care: Seriously addressing sexually transmitted infections and access to services." *Children and Youth Services Review* 35.3 (2013): 493-504.
- ⁶⁵ Courtney, Mark E., et al. "Findings from the California Youth Transitions to Adulthood Study (CalYOUTH): Conditions of foster youth at age 17." *Chicago, IL: Chapin Hall at the University of Chicago* (2014).
- ⁶⁶ Ng, A. S., and Kelleen Kaye. "Why it matters: Teen childbearing and child welfare." (2013). The National Campaign to Prevent Teen and Unplanned Pregnancy, 2013
- ⁶⁷ Dworsky, Amy, and Mark E. Courtney. "The risk of teenage pregnancy among transitioning foster youth: Implications for extending state care beyond age 18." *Children and Youth Services Review* 32.10 (2010): 1351-1356.
- ⁶⁸ Thompson, Sanna J., et al. "Runaway and pregnant: risk factors associated with pregnancy in a national sample of runaway/homeless female adolescents." *Journal of Adolescent Health* 43.2 (2008): 125-132.
- ⁶⁹ Spreitzer, Gretchen M., and Scott Sonenshein. "Toward the construct definition of positive deviance." *American Behavioral Scientist* 47.6 (2004): 828-847.
- ⁷⁰ Leffert, Nancy, et al. "Developmental assets: Measurement and prediction of risk behaviors among adolescents." *Applied Developmental Science* 2.4 (1998): 209-230.
- ⁷¹ Vesely, Sara K., et al. "The potential protective effects of youth assets from adolescent sexual risk behaviors." *Journal of Adolescent Health* 34.5 (2004): 356-365.
- ⁷² Leffert, Nancy, et al. "Developmental assets: Measurement and prediction of risk behaviors among adolescents." *Applied Developmental Science* 2.4 (1998): 209-230.
- ⁷³ L Miller, M Gur Religiousness and sexual responsibility in adolescent girls J Adolesc Health, 31 (2002), pp. 401–406
- ⁷⁴ P Scales, N Leffert Developmental Assets: A Synthesis of the Scientific Research on Adolescent Development Search Institute, Minneapolis, MN (1999)
- ⁷⁵ A.C Beal, J Ausiello, J.M Perrin Social influences on health-risk behaviors among minority middle school students J Adolesc Health, 28 (2001), pp. 474–480
- ⁷⁶ C Dilorio, M Kelley, M Hockenberry-Eaton Communication about sexual issues: Mothers, fathers, and friends J Adolesc Health, 24 (1999), pp. 181–189
- ⁷⁷ Jones RK, Finer LB and Singh S, *Characteristics of U.S. Abortion Patients, 2008*, New York: Guttmacher Institute, 2010.
- ⁷⁸ Dauphinee LA, Guttmacher Institute, New York, personal communication, Mar. 23, 2006.
- ⁷⁹ Gootman, Jennifer Appleton, and Jacquelynne Eccles, eds. *Community programs to promote youth development*. National Academies Press, 2002.
- ⁸⁰ D Kirby Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy (Summary) National Campaign to Prevent Teen Pregnancy, Washington, DC (2001)
- ⁸¹ Carnegie Council on Adolescent Development A Matter of Time: Risk and Opportunity in the Non-school Hours Carnegie Corporation of New York, New York (1992)
- ⁸² R Larson Toward a psychology of positive youth development Am Psychol, 55 (2000), pp. 170–183
- ⁸³ N Leffert, P Benson, P Scales, et al. Developmental assets: Measurement and prediction of risk behaviors among adolescents Appl Dev Sci, 2 (1998), pp. 209–230
- ⁸⁴ Catalano RF, Berglund ML, Ryan JAM, et al. Positive Youth Development in the United States. 11-13-0098. U.S. Department of Health and Human Services, National Institute for Child Health and Human Development
- ⁸⁵ Healthy People 2020 <https://www.healthypeople.gov/2020/topics-objectives/topic/Adolescent-Health/objectives>

-
- ⁸⁷ Kirby, Douglas. "Effective approaches to reducing adolescent unprotected sex, pregnancy, and childbearing." *Journal of sex research* 39.1 (2002): 51-57.
- ⁸⁸ Kirby D, Laris BA, Rolleri L. *The Impact of Sex and HIV Education Programs in Schools and Communities on Sexual Behaviors Among Young Adults*. Scotts Valley, CA: ETR Associates; 2006
- ⁸⁹ CDC Website: About Teen Pregnancy CDC Priority: Reducing Teen Pregnancy and Promoting Health Equity Among Youth <http://www.cdc.gov/teenpregnancy/about/index.htm>
- ⁹⁰ U.S. Department of Health and Human Services (HHS), Office of Public Health and Science, Office of Adolescent Health, *Teenage Pregnancy Prevention: Replication of Evidence-based Programs*, Funding Opportunity Announcement and Application Instructions, 2010.
- ⁹¹ Erin Schelar, Kerryand by Race and Ethnicity," *Child Trends, Research Brief no. 2007-23*, October 2007.
- ⁹² Winner, Brooke, et al. "Effectiveness of long-acting reversible contraception." *New England Journal of Medicine* 366.21 (2012): 1998-2007.
- ⁹³ Secura, Gina M., et al. "The Contraceptive CHOICE Project: reducing barriers to long-acting reversible contraception." *American journal of obstetrics and gynecology* 203.2 (2010): 115-e1.
- ⁹⁴ Ricketts, Sue, Greta Klingler, and Renee Schwalberg. "Game Change in Colorado: Widespread Use Of Long-Acting Reversible Contraceptives and Rapid Decline in Births Among Young, Low-Income Women." *Perspectives on Sexual and Reproductive Health* 46.3 (2014): 125-132.
- ⁹⁵ Eisenberg, David, Colleen McNicholas, and Jeffrey F. Peipert. "Cost as a barrier to long-acting reversible contraceptive (LARC) use in adolescents." *Journal of Adolescent Health* 52.4 (2013): S59-S63.
- ⁹⁶ Biggs, M. A., et al. "Did increasing use of highly effective contraception contribute to declining abortions in Iowa?." *Contraception* 91.2 (2015): 167-173.
- ⁹⁷ United Way Milwaukee Teen Pregnancy Prevention website:
<http://www.unitedwaymilwaukee.org/TeenPregnancyPrevention>
And <http://www.jsonline.com/news/milwaukee/milwaukee-teen-pregnancy-rate-drops-50-in-7-years-after-city-efforts-b99126584z1-228951391.html>
- ⁹⁸ Secura, Gina M., et al. "The Contraceptive CHOICE Project: reducing barriers to long-acting reversible contraception." *American journal of obstetrics and gynecology* 203.2 (2010): 115-e1.
- ⁹⁹ Gaston Youth Connected website: <http://gastonyouthconnected.org/> and <http://www.appcnc.org/news-and-publications/press-releases/gaston-county-eliminates-race-disparity>
- ¹⁰⁰ Mestad, Renee, et al. "Acceptance of long-acting reversible contraceptive methods by adolescent participants in the Contraceptive CHOICE Project." *Contraception* 84.5 (2011): 493-498.
- ¹⁰¹ Content source: [Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion](#)
- ¹⁰² Gustafson EM, History and overview of school-based health centers in the US, *Nursing Clinics of North America*, 2005, 40(4):595–606.
- ¹⁰³ Reckling S, *School-Based Health Centers and Patient-Centered Medical Home: Study of Medicaid Policies and Practice*, Washington, DC: School-Based Health Alliance, 2013, <http://www.sbh4all.org/atf/cf/%7BBB241D183-DA6F-443F-9588-3230D027D8DB%7D/PCMH%20Report%20FINAL%20PUBLICATION_10%202024%202013.pdf>
- ¹⁰⁴ U.S. Government Accountability Office (GAO), *School-Based Health Centers: Available Information on Federal Funding*, GAO-11-18R, Washington, DC: GAO, 2010, <http://www.gao.gov/products/GAO-11-18R>
- ¹⁰⁵ Lofink H et al., *2010–2011 Census Report of School-Based Health Centers*, Washington, DC: School-Based Health Alliance, 2013, <http://www.sbh4all.org/wp-content/uploads/2015/02/CensusReport_2010-11CensusReport_7.13.pdf>,.
- ¹⁰⁶ Ricketts, S.A. & Guernsey, B.P. (2006). School-Based Health Centers and the Decline in Black Adolescent Fertility During the 1990s in Denver, Colorado. *American Journal of Public Health*. 96(9): 1590-1592.
- ¹⁰⁷ Koo, H.P., Dunteman, G.H., George, C., Green, Y., et al. (1994). Reducing Adolescent Pregnancy through a School- and Community-Based Intervention: Denmark, South Carolina, Revisited. *Family Planning Perspectives*. 26(5): 206-211.
- ¹⁰⁸ Ethier, K.A., Dittus, P.J., DeRosa, C.J., Chung, E.Q., et al. (2011). School-Based Health Center Access, Reproductive Health Care, and Condom Use Among Sexually Experienced High School Students. *Journal of Adolescent Health*. 48: 562-565.
- ¹⁰⁹ Section of Family Planning and Contraceptive Research, University of Chicago, School-based health centers: implications for adolescent reproductive health, *Policy Brief*, 2013, <<http://familyplanning.uchicago.edu/policy/publications-resources/SBHCs%20abnd%20Reproductive%20Health%20Brief.pdf>>
- ¹¹⁰ Kirby D, *Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases*, Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy, 2007, <https://thenationalcampaign.org/sites/default/files/resource-primary-download/EA2007_full_0.pdf>
- ¹¹¹ Mason-Jones AJ et al., A systematic review of the role of school-based healthcare in adolescent sexual, reproductive, and mental health, *Systematic Reviews*, 2012, doi: 10.1186/2046-4053-1-49, <<http://www.systematicreviewsjournal.com/content/1/1/49/52>>

¹¹² Lofink H et al., *2010–2011 Census Report of School-Based Health Centers*, Washington, DC: School-Based Health Alliance, 2013, <http://www.sbh4all.org/wp-content/uploads/2015/02/CensusReport_2010-11CensusReport_7.13.pdf>,

¹¹³ Section of Family Planning and Contraceptive Research, University of Chicago, School-based health centers: implications for adolescent reproductive health, *Policy Brief*, 2013, <<http://familyplanning.uchicago.edu/policy/publications-resources/SBHCs%20abnd%20Reproductive%20Health%20Brief.pdf>>

¹¹⁴ Mason-Jones AJ et al., A systematic review of the role of school-based healthcare in adolescent sexual, reproductive, and mental health, *Systematic Reviews*, 2012, doi: 10.1186/2046-4053-1-49,

<<http://www.systematicreviewsjournal.com/content/1/1/49/>>

¹¹⁵ U.S. Department of Health and Human Services, *HHS awards evidence-based teen pregnancy prevention grants*, news release, September 30, 2010.

¹¹⁶ Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, Dear Colleague Letter by Thomas R. Frieden, Director, Centers for Disease Control and Prevention, January 14, 2011.

¹¹⁷ U.S. Department of Health and Human Services (HHS), Office of Public Health and Science, Office of Adolescent Health & Administration for Children and Families, Administration on Children, Youth and Families, *Teenage Pregnancy Prevention (TPP): Research and Demonstration Programs and Personal Responsibility Education Program (PREP)*, Funding Opportunity Announcement and Application Instructions, 2010.

¹¹⁸ U.S. Department of Health and Human Services, *Justification of Estimates for Appropriations Committees, HHS, Administration for Children and Families, FY2016*, pp. 403-404. For information on the grantees, see <http://www.acf.hhs.gov/programs/fysb/resource/2014-state-aegp-awards>.

¹¹⁹ U.S. Department of Health and Human Services (HHS), Office of Public Health and Science, Office of Adolescent Health, *Teenage Pregnancy Prevention: Replication of Evidence-based Programs*, Funding Opportunity Announcement and Application Instructions, 2010.