

KIDS COUNT Indicator Brief

Reducing the Teen Birth Rate

July 2009

The Annie E. Casey Foundation
701 St. Paul Street
Baltimore, MD 21202
www.aecf.org
www.kidscount.org

KIDS COUNT Indicator Brief Reducing the Teen Birth Rate

Teen childbearing affects young people at both ends of childhood. When teens have children, their own health may be jeopardized and their chances to build productive lives are often diminished. Compared to women who postpone childbearing until they are older, teenage mothers are more likely to drop out of school and to live in poverty. At the same time, their babies are more likely than other children to be born at a low birth weight, face health problems and developmental delays, perform poorly in school, and experience abuse or neglect. As they grow older, these children are more likely to drop out of school, become teen parents themselves, and experience homelessness, juvenile delinquency, and incarceration (East et al., 2007; Healthy Teen Network, 2009). In all of these ways, teenage childbearing exacts a high cost from both individuals and society at large.

In 2006, the teen birth rate for 15- to 19-year-olds reached 42 per 1,000 teens, having increased for the first time in 14 years (KIDS COUNT Data Center, 2009). State-by-state data shows an increase in teen births in 41 states and the District of Columbia from 2005 to 2006, with the highest rates occurring in the South and Southwest (KIDS COUNT Data Center, 2009). During the same period, the teen birth rate increased in every racial/ethnic group with the exception of whites and Asians/Pacific Islanders. The largest increase (4.8 percent) occurred among African American teens, followed by teens who identified as American Indian and Native Alaskan (3.8 percent), and Latino (1.2 percent) (KIDS COUNT Data Center, 2009).

Recent data show that the U.S. continues to report the highest rates of teen childbearing among developed nations. In 2006, the birth rate among American teens aged 15 to 19 was one and a half times greater than in the United Kingdom, which has Europe's highest teen birth rate, three times greater than in Canada, seven times greater than in Denmark and Sweden, and eight times greater than in Japan (United Nations Statistics Division, 2006).

There is no single explanation for the rise in teen births. Researchers point to several key factors. First, they cite a trend toward earlier puberty for girls (with African American girls reaching puberty nearly year sooner, on average, than their white peers) (Herman-Giddens et al., 2004). Earlier maturation has been associated with earlier sexual activity. Second, teens are more sexually active. A 2007 survey by the Centers for Disease Control and Prevention (Youth Risk Behavior Surveillance System) reflects a rise in teen sexual activity since 2000 (after a decline during the 1990s). And third, teens are less likely to use contraceptives. The same survey showed a decline in the percentage of teens who reported using a condom the last time they had sex (Centers for Disease Control and Prevention, 2008a).

Other contributing factors include a lessening of the stigma associated with teen birth, (reflecting a rise in the birth rate for unmarried women of all ages and the highly

publicized pregnancies of several celebrity teens), and diminished educational and career opportunities as a result of changing economic conditions (National Campaign to Prevent Teen and Unplanned Pregnancy, 2009). Some observers cite a redirection of public attention and resources to issues considered more pressing, following years of downtrend in the teen pregnancy rate. They urge policymakers to reject complacency. Reinvigorated prevention efforts can build on past experience as well as more recent insights into effective strategies (Holcombe et al., 2009).

This *KIDS COUNT Indicator Brief* describes six strategies that can contribute to preventing teen pregnancy. Many of the ideas outlined below have been adapted from the strategies endorsed by the National Campaign to Prevent Teen and Unplanned Pregnancy.

- **Reinvigorate prevention efforts, intensifying the focus on underlying causes**
- **Help parents succeed in their role as sex educators**
- **Broaden the scope of pregnancy prevention efforts and address shifting social norms about pregnancy and parenting among unmarried women**
- **Help adults provide accurate, clear and consistent information about how to reduce risk-taking behaviors**
- **Create community-wide action plans for teen pregnancy prevention, including adolescent health services**
- **Give young people a credible vision of a positive future that takes into account current economic realities**

- **Reinvigorate prevention efforts, intensifying the focus on underlying causes**
Most prevention efforts focus on young people's decision-making and behavior. But researchers say that reducing teen pregnancy also requires attention to broad social and environmental factors. While teen pregnancy takes place in all kinds of communities, teens who give birth are more likely to come from disadvantaged families and neighborhoods. Some researchers believe that factors associated with low-income households, including low educational attainment, lack of employment, and single parenthood, are more influential than poverty itself. For example, studies show a strong link between being the child of a teen parent and becoming a teen parent, particularly in African American communities, and indicate that despite common perceptions, 20 percent of teen mothers drop out of school prior to becoming pregnant (Advocates for Youth, 2009).

The rates of teen pregnancy and childbearing are affected by many factors, including ethnicity, family income, neighborhood effects, and exposure to media. While pregnancy occurs among teenage girls of every ethnicity, race, socioeconomic status and geographic location, those from low-income families are significantly more likely to give birth (Advocates for Youth, 2009). Overall, about half of teen pregnancies result in births (Lindsay, 2009).

Neighborhood effects matter as well. Early onset of sexual activity, unprotected sex, and teen pregnancy are more likely in communities with high levels of social disorganization

(indicated by high residential turnover and a high proportion of female-headed households living in poverty) (Cubbin et al., 2005). Teens who have recently moved are about one-third more likely than non-movers to begin having sex (U.S. Department of Health & Human Services, 2008). Teenage sexual activity can also be affected by exposure to sexual content in the media (music, movies, television and magazines), especially among white adolescents. In contrast, the sexual behavior of African American teens was less influenced by the media and more influenced by their parents' expectations and their friends' sexual activity (Brown et al., 2006).

Use strategies that are science-based and carefully targeted. There are many ways to address teen pregnancy. Focus on those strategies that have been shown to prevent the specific teen pregnancy and sexual risk behaviors that are most prevalent in your community, that are designed for youth similar in age, ethnicity, and gender to those you hope to reach; and that have led to outcomes similar to those you want to achieve. Guidelines for choosing, using, and evaluating science-based teen pregnancy strategies are available from the Centers for Disease Control and Prevention (Centers for Disease Control and Prevention, 2008b, available at <http://www.cdc.gov/reproductivehealth/AdolescentReproHealth/PDF/LittlePSBA-GTO.pdf>).

Focus attention and resources on those teens who are at greatest risk of becoming pregnant. Researchers consistently report that teens residing in low-income communities with high percentages of single-mother households are at higher risk for early pregnancy. Girls whose mothers gave birth as a teen and/or whose sisters had a child during adolescence are particularly susceptible to becoming pregnant as teenagers (East et al., 2007).

Consider protective factors as well as risk factors. Poverty is a key risk factor, but efforts to prevent teen pregnancy need to look beyond a neighborhood's economic status. Strong social networks and institutions can help to buffer teens from the effects of poverty (Cubbin et al., 2005). Researchers have found that in Latino communities with enduring social networks, particularly communities with strong links to countries of origin, teens may be protected from the negative impact of poverty and may have lower birth rates than found in the general Latino population (Denner et al., 2001). Employment prospects and positive adult models can also make a difference. The likelihood of teenage childbearing is lowest in neighborhoods that are home to many managerial or professional workers. One study found that white teens in our nation's largest cities are almost 100 times less likely to give birth when they live in neighborhoods where the proportion of high-status workers is high (7.5 percent) than those where the proportion is low (3.5 percent) (Gephart, 1997).

The Annie E. Casey Foundation's (AECF) Plain Talk Initiative found that, in addition to bolstering parents' ability to talk with their children about reducing sexual risk-taking, reinforcing a community's kinship ties and friendship networks can help to combat teenage pregnancy. In immigrant communities, sturdy family bonds and a strong cultural orientation appear to be protective factors. High-risk behaviors such as early sexual

activity and unprotected sex increase with the length of residence in the U.S. or from one generation to the next (Hernandez & Charney, 1998).

As welfare legislation is reauthorized, sustain the emphasis on preventing teen pregnancy. To varying degrees, states have used Temporary Aid to Needy Families (TANF) funds to support efforts to prevent teen pregnancy. By law, state plans are expected to give “special emphasis” to teen pregnancy prevention. Moreover, welfare legislation also requires the federal government to ensure that at least one fourth of the nation’s communities have pregnancy prevention programs. Given recent evidence that high-quality programs can reduce the teen pregnancy rate, this emphasis should continue.

- **Help parents succeed in their role as sex educators**

Common sense and research converge on the critical role that parents play in protecting their teens from early sexual activity and pregnancy. Studies consistently show that teenagers—boys and girls alike—who have strong emotional attachments to their parents and are closely supervised by them are much less likely to become sexually active at an early age and far more likely to use contraception on a consistent basis. Of the young people who participated in the National Campaign to Prevent Teen and Unplanned Pregnancy’s most recent annual survey about teen pregnancy, 47 percent said that their parents have the most influences on their sexual decision-making (Albert, 2007). Another recent study of the effect of family connectedness on sexual risk-taking among high school students attending alternative high schools concluded that close relationships with parents also have a strong positive impact among high-risk teens (Markham et al., 2007).

Build and sustain ongoing parental involvement in all pregnancy prevention programs. As with sex education efforts in general, there is little evidence that short-term or episodic educational programs for adolescents and their families produce the sustained effects that are needed to make a difference throughout the teen years. While short-term parent involvement does increase parent-child communication and lessen some of the discomfort families feel about discussing sexuality, these positive effects dissipate over time.

Provide community-based adult education geared to teen pregnancy prevention. Many parents are willing or eager to talk with their teenage children about sexuality, but need help learning how to do so effectively and confidently. Even when they are well informed, many parents find it awkward to speak candidly with their teens about sexuality. Research shows that ongoing community education programs such as AECF’s Plain Talk can help to empower parents and provide them with accurate information (Summerville & Canova, 2006). Another promising approach is to hold ongoing lunch-hour workshops for parents of teens at their places of work (Center for Disease Control and Prevention, 2006). Such opportunities can be important because both teens and adults have gaps in their understanding of human anatomy and sexuality, sexually transmitted diseases (STDs), and the proper use of contraceptives.

Gear family support programs to parents of teens. These kinds of programs can help parents and teens keep the lines of communication open. When evaluators looked at the

impact of the Plain Talk initiative, they found that adolescents who talk to adults know more about birth control, are more likely to know where to get contraceptives, and feel more comfortable about using them. They are also more likely to act responsibly and, in the long run, are less likely to get pregnant or contract STDs.

- **Broaden the scope of pregnancy prevention efforts**

When prevention efforts are too narrowly focused, they miss opportunities to avert pregnancies. Programs and policies aimed at preventing teen pregnancy need to consider younger children as well as adolescents, males as well as females, other risk-taking behaviors as well as early sexual activity, and subsequent pregnancies as well as first pregnancies.

Incorporate insights from brain research into prevention efforts. Advances in neuroscience have contributed to a greater understanding of the adolescent brain and its role in mediating risk-taking behaviors. Recent studies show that the impulsivity and risk-taking behaviors more common to the teenage years are linked to a particular brain region—the orbitofrontal cortex—which does not reach maturity until early adulthood (Galvan et al., 2006). In response to these kinds of findings, a growing number of experts are urging a shift in emphasis from simply preventing pregnancy to promoting a wide range of healthy behaviors and helping teens develop good decision-making skills. This more positive approach is being implemented in various forms by schools, community centers, faith-based organizations, and health care providers.

Direct pregnancy prevention efforts to both males and females. Like young women, young men are vulnerable to poor outcomes when they create unwanted or too-early pregnancies. Today, there is widespread recognition that efforts to combat teen pregnancy need to focus on both sexes. Most states now sponsor one or more initiatives to help prevent unwanted or too-early fatherhood. These efforts take a variety of approaches, from creating school curricula geared to preventing unwanted fatherhood, to enforcing statutory rape laws, to working with incarcerated youth. Some programs use mentoring or peer education to promote responsible fatherhood. The Anne E. Casey Foundation’s (AECF) research points to the fact that, to be successful, fatherhood initiatives must link fathers with the full range of family supports, and social services available to them in their communities (AECF, 2005).

Focus on a wide spectrum of risk-taking behaviors, not just sex. Many experts believe that, compared with sex education alone, programs that also focus on behaviors other than sex may be as effective and perhaps even more successful. Substance abuse is a key concern since teens who drink or use drugs are more likely to have sex, to begin having sex at a younger age, to have more partners and to forego the use of contraceptives (Johnston et al., 2007).

Begin prevention efforts well before the teen years. A noteworthy long-term effect of high-quality early childhood education for at-risk children is a greater likelihood of high school graduation and few problem behaviors as teens (Reynolds et al., 2001). Expanded

resources for inner-city schools at all grade levels may reduce risk-taking behavior at all ages.

Focus on preventing both first-time and subsequent pregnancies. Most efforts to prevent rapid second births to teens have been unsuccessful (Black et al. 2006). This is worrisome, considering that in 2005, 82,000 babies were born to teens who already had another child, representing 19.4 percent of all births to teenagers (KIDS COUNT Data Center, 2009). Rates of rapid second births among low-income black adolescent mothers are particularly problematic, ranging from 20 to 50 percent (Black et al., 2006). In one study, researchers found that depression was associated with subsequent pregnancies among African American teen mothers (Barnet et al., 2008). Programs for preventing second pregnancies need to focus on a wide range of issues and services, including health, mental health and social services, child care, transportation, education support, and job training.

- **Help adults provide accurate, clear, and consistent information about how to reduce risk-taking behaviors.**

Compared with previous generations, today's Americans are, on average, reaching puberty earlier and getting married later. The "window of opportunity" for teen pregnancy and single parenthood has widened. At the same time, teens' physical maturation is out of sync with their emotional and cognitive development. To manage this "maturity gap" and make responsible decisions, teens need accurate information, trustworthy guidance, and realistic approaches. They need clear, unambiguous messages from adults about responsible decision-making in general as well as the importance of protected sex for those who are sexually active.

Focus on sex education and relationship education programs that have proven successful. There is a large and growing body of research on effective sex education. The best programs focus less on reproductive biology and more on teaching adolescents the skills they need to handle relationships, resist peer pressure, make good decisions, and negotiate difficult situations. Studies consistently show that teens are eager for clear and accurate information, want their parents to be involved and would welcome portrayals of teen pregnancy in the media that more accurately reflect current realities (National Campaign to Prevent Teen and Unplanned Pregnancy, 2009).

Learn from other countries. Lessons in pregnancy prevention may be gleaned from the experience of countries where adolescents are just as likely to be sexually active, but are less likely to become pregnant. Research points to three differences in the sexual behavior of American teens that affect both their rate of unintended pregnancy and sexually transmitted diseases: They have lower rates of contraceptive use, tend to have shorter relationships and more sexual partners than teens in other developed countries (Gutmacher Institute, 2006). Some observers suggest that a more realistic, positive attitude toward adolescent sexuality creates a setting in which teens are more likely to obtain and use contraception. Studies point out that for adolescents, information about and access to effective contraception are not sufficient if they are emotionally unwilling to think of themselves as sexually active or to make conscious decisions about their

sexual behavior. Similarly, some researchers suggest that when schools and other institutions do not acknowledge teenagers as “sexual beings” or adopt abstinence-only approaches, teens are deprived of the opportunities they need to access information and make informed decisions (Barton, 2007).

Several factors appear to contribute to lower rates of teen pregnancy and childbearing in England, Australia, Germany, France, Japan, and the Netherlands, including mandatory sexuality education, easy access to contraception and other forms of reproductive health care, social acceptance of adolescent sexual expression, and government support for information programs and services (Advocates for Youth, 2008; Berne & Huberman, 1999). Parental and societal expectations also play a key role in lower birth rates for teens in other developed countries, where teens are exposed to strong messages about the need to delay having children until they have finished school, have stable employment, and are in long-term committed relationships (Guttmacher Institute, 2006).

Provide sex education that is informative, timely, and realistic. Some form of sex education is available in approximately two thirds of American high schools, but it is often too little—focusing narrowly on the biology of reproduction—and too late—starting after sex has already been initiated. Between 1995 and 2002, the number of teens who took part in sex education classes that provided instruction about contraception declined significantly while the number of teens who received “abstinence-only information rose dramatically. This was particularly true for African American teens. These trends challenge the fact that the vast majority of Americans support sex education programs for adolescents that combine these approaches by encouraging them to delay sexual activity but present clear and accurate information about birth control (Guttmacher Institute, 2006). Evaluations of sex and HIV education programs have found that various program models—particularly those offering a comprehensive approach to sex education that includes contraception—can reduce sexual risk-taking and pregnancy. Outside the classroom, health providers who address teens’ sexual behavior during office or clinic visits can also help to prevent pregnancy.

Use research findings to correct misinformation about pregnancy and prevention. Effective education efforts not only present new information; they also systematically uncover and correct misunderstandings. This is especially important in the realm of sex education. For example, research shows that many teens are under the erroneous impression that birth control is dangerous, or that side effects they experienced with one method will inevitably occur with other methods (Lemay et al., 2006).

Ensure that sex education programs are ongoing throughout adolescence. Sex education programs need to be sustained in order to reinforce their message. There is little educational value to a single presentation or an isolated curriculum unit. Teens tend to get increasingly lax about using condoms as they move through the high school years. Condom use also tends to decrease over time from first to most recent occurrence of sexual intercourse. These tendencies need to be countered with steady and sustained emphasis on safety and responsibility.

Rethink the focus on abstinence-only programs. The 1996 overhaul of the nation's welfare system led to increased federal emphasis on abstinence-only education. To date, evaluation studies of such programs have not found significant impacts on sexual behavior or prevention of teen pregnancy. National statistics do, however, indicate a significant decline between 1995 and 2002 in the percentage of women reporting having received formal contraceptive education (Moore, 2009). In response to these and other studies, many prominent health professional groups, among them the American Medical Association, the American Academy of Pediatrics, the Society of Adolescent Medicine, and the American Psychological Association, have voiced ethical concerns about government support for abstinence-only programs. In addition, as of early 2009, 23 states and the District of Columbia declined to apply for the annual abstinence education grants available to them from the federal government (Boonstra, 2009).

- **Create community-wide plans of action for teen pregnancy prevention, including adolescent reproductive health services.**

Nearly all teens know that sexual intercourse can lead to pregnancy and STDs, and most know that condoms provide protection and can be obtained in stores. Given that most teen pregnancies are unintended, it is clear that sex education alone is not sufficient. Sex education is most effective in preventing teen pregnancy when it occurs in the context of multifaceted community-based programs that foster close relationships with staff and also provide youth development and health services.

Make contraception available, accessible, and convenient to teens. A sexually active teenager who does not use contraceptives has a 90 percent chance of becoming pregnant within one year (Guttmacher Institute, 1999). While most Americans believe that teens should refrain from having sex, most also say that sexually active teenagers should have access to contraception. Research, experience, and common sense point to the wisdom of providing adolescent reproductive health services at sites that are convenient to teens, such as at school or a mall, offered during non-school hours, confidential, and at a low-cost or free. Some studies say that improving clinics' community outreach can increase adolescent use of medical providers and improve contraceptive use. Condom distribution in schools, on the other hand, has not been shown to increase their use since condoms are readily available elsewhere. For teens in low-income communities, federal family planning programs have proven to be extremely effective. Since 1970, subsidized family planning services have been available through federally funded family planning clinics (Title X) and Medicaid (Title XIX).

Address sexual abuse, which is a frequent factor in teen pregnancy. Child and adolescent sexual abuse is a risk factor for teen pregnancy in two ways. First, sexual abuse is associated with teen pregnancy, with up to two-thirds of pregnant teens reporting histories of abuse and 42 percent of sexually active girls under age 15 stating that their first sexual experience was nonconsensual. Second, coercive sex appears to play a greater role in teen pregnancy than has been commonly recognized (Logan et al., 2007). According to a variety of studies, among girls who have had sex, the younger the girl, the more likely she is to report having had sex either involuntarily or with consent low on the "wantedness" scale. Since more than half of infants born to teen mothers are fathered by

men older than age 18, a possible approach to preventing teen pregnancy is to pursue and prosecute older men who prey on younger females (Bernard & Knitzer, 1999).

Stress peer involvement in pregnancy prevention programs. A key finding of research on teen pregnancy is the power of social norms, especially when young people are strongly connected to the people who express or model those norms (Kirby, 2001). Families are the most important influence on teens, but the peer culture has a strong impact as well. Teen pregnancy prevention programs must therefore take into account both the impact of peer culture and teens' misperceptions of other teens' experience. Several studies have shown that a prominent influence on girls' sexual activity is the belief that *other* girls were sexually active during the previous year. Yet, research shows that both boys and girls overestimate the extent of their peers' sexual activity. Community-based programs that have genuine youth involvement represent the most effective, long-term, and powerful approach to real, sustained changes in teen behavior.

Set specific short-term goals. Over the long term, a key to preventing teen pregnancy is reorienting peer culture. An intervention that begins by affecting behavior in modest ways may produce changes that snowball into bigger long-term effects. In this way, specific short-term reduction goals—such as delaying sexual initiation, increasing condom use, and/or decreasing an individual's number of sexual partners—hold promise for affecting large-scale demographic indicators such as a change in birth or pregnancy rates.

Design programs that respect cultural diversity and the characteristics of specific communities. In a diverse culture, it is unrealistic to think that individuals or groups will agree on a single approach to pregnancy prevention. The particular population and the political will of a community must be recognized and considered when designing pregnancy prevention programs. For example, history has shown that, in some communities or areas, attempting to establish a school-based health center or condom-distribution program may simply be too divisive. According to the National Campaign to Prevent Teen and Unplanned Pregnancy, "It is unrealistic to think that individuals or groups will always be able to put aside their deeply held beliefs on this issue and agree on one single way to reduce teen pregnancy. Often the best strategy is "unity of goal, but tolerance for a diversity of means." (National Campaign to Prevent Teen Pregnancy, 2001, p. 2).

In this spirit, the Annie E. Casey's Plain Talk Initiative provides a model for culturally sensitive community-oriented projects. In San Diego's "Hablando Claro" (Plain Talk's arm for Spanish-speaking communities), the "Vecino a Vecino" (neighbor to neighbor) program of home-based workshops helps adults learn how to talk to their children about sexuality and pregnancy. Plain Talk Seattle, located in a neighborhood in which 40 percent of the residents are Asian or Pacific Islanders, formed links with the local PTAs, organizations in which everyone shares a common interest. Working with principals, teachers, health educators, and school nurses, the program has helped community members organize around issues that are related to, but also go beyond, the problem of teen pregnancy, encouraging them to be local advocates for better education and health

services for youth. Plain Talk New Orleans, with its “Walkers and Talkers” peer outreach workers, takes an African American community organizing approach to pregnancy prevention. Its central focus is strengthening family structure by means of projects in which sexuality is only one topic among many of concern to the African American community.

- **Give young people a credible vision of a positive future.**

Young people need to be able to imagine the broader range of experiences and opportunities that may be open to them if they delay childbearing and parenting. They need help acquiring good decision-making, communication and work skills that prepare them for the adult world. One study found that at-risk teens became resilient in spite of economic stressors when they were taught to envision a more positive future by setting higher expectations for themselves and developing self-confidence (Aronowitz, 2005).

Develop teen programs that address issues of school involvement, motivation to stay in school, and ambition for the future. Young people need clear connections and pathways to college and/or jobs that give them hope and a reason to stay in school and avoid pregnancy. Too many teenagers become parents either because they cannot envision another positive direction for their lives, or because they lack the concrete education or employment goals and opportunities that would encourage them to delay parenthood. At the same time, in recent decades, the U.S. has lost most of its low-skilled, high-paying manufacturing jobs and recession has cost many lower-skilled individuals both jobs and job opportunities. These conditions create a vicious cycle of poverty and hopelessness for teens and the children of teens.

Design teen programs that promote youth development. Many factors influence the teen pregnancy rate. To be effective, teen pregnancy prevention programs must be comprehensive in scope. The youth development approach is an example of a comprehensive model. Programs based on the youth development model differ from more traditional programs in that they are comprehensive and provide ongoing support for adults; focus on creating opportunities for young people; and emphasize the development of skills—particularly decision-making skills—that enable young people to seize opportunities. Youth development programs are typically long-term, intensive and emphasize building relationships between participants and the adults in the community and the program. The Children’s Aid Society Carrera Adolescent Pregnancy Prevention Program (www.stopteenpregnancy.com) is an example of a successful youth development program.

Support “service learning” programs. Service learning programs that include youth mentoring and structured community service, often as part of an academic program, have been shown to reduce the pregnancy rate of participants, at least while they are in the program. Programs offering vocational education that offer few support services do not seem to be as effective. To date, the most valuable programs, especially for young people at risk, are those that offer a rich combination of education, mentoring, support services and employment opportunities. Case in point: Evaluations of the Teen Outreach Program, which was designed to prevent risk behaviors among teens by engaging them in

structured community service that is closely linked with school curricula focusing on future life options and relationship decisions, found that participating students were significantly less likely to fail courses, be suspended from school, or get pregnant (Child Trends, 2007).

Pursue high school reform strategies that focus on the full range of developmental tasks faced by adolescents. High school reform efforts have focused on preparing young people for 21st century workplaces, but they have not sufficiently addressed the emotional, social, and ethical challenges of today's world. They also have not dealt adequately with health issues in a society where many young men and women are engaging in sex sooner and have greater exposure to drugs and violence than they once did. In particular, there is a need for stronger links between education and health. Health organizations need help becoming more "adolescent-friendly," and schools need help linking up with health agencies and other human services. Finally, additional evaluations of "adolescent-friendly" health services are needed to determine best practices (Tylee et al., 2007).

Support both public service and communication campaigns aimed at preventing teenage pregnancy/childbearing and media advocacy campaigns that encourage responsible portrayals of sexuality in television, movies, and other mass media. Today's adolescents receive a steady barrage of sexual images in popular culture, from advertisements to movies to song lyrics. Teen sexuality itself has become deeply rooted in popular culture, along with the tendency to sexualize the portrayal of youths at younger and younger ages. Adolescents' exposure to sexual content on television has been found to have an impact on teen pregnancy. A recent study by the Rand Corporation, for example, found that approximately 25 percent of 12- to 17-year-olds who viewed the most sexual content on television were involved in a pregnancy, while the same was true for only 12 percent of those whose television viewing involved the least sexual content (Chandra et al., 2008). Communities and families need to organize and support advocacy campaigns that encourage responsible portrayals of sexuality in the media and send messages to teens about responsibility and decision-making.

The rising birth rate among 15- to 19-year-olds serves as a powerful reminder of the importance of sustained attention to teen pregnancy in particular and the needs of teenagers in general. After 14 years of steady progress, a great deal is known about how to prevent teen childbearing. More intensive and creative efforts are needed to return to the progress in reducing the teen pregnancy rate made prior to 2005. While numerous private and public initiatives continue to devote significant energy and resources to preventing teen pregnancy, reaching that goal will require policies and programs that address the underlying causes of teen pregnancy, consider both risk and protective factors, and promote healthy behaviors and decision-making, with leadership from parents, educators, healthcare providers, policymakers, community organizations, faith-based organizations, and teenagers themselves.

References

- Advocates for Youth. 2009. *The facts: Adolescent childbearing and educational and economic attainment*, 2009. Accessed at www.advocatesforyouth.org/PUBLICATIONS/factsheet/fsadlchd.htm
- Advocates for Youth. 2008. *The facts: Adolescent sexual health in Europe and the U.S.—Why the difference?* Accessed at www.advocatesforyouth.org/index.php?option=com_content&task=view&id=419&Itemid=177.
- Albert B. 2007. *With one voice: America's adults and teens sound off about teen pregnancy*. National Campaign to Prevent teen and unplanned pregnancy.
- Annie E. Casey Foundation. 2005. *Promoting responsible fatherhood*. Accessed at www.aecf.org/KnowledgeCenter/Publications.aspx?pubguid={F9B246DA-1103-4B2C-872A-051A7553DC2F}.
- Annie E. Casey Foundation. 1999. *Plain Talk: The story of a community-based strategy to reduce teen pregnancy*. Accessed at www.aecf.org/MajorInitiatives/PlainTalk.aspx.
- Aronowitz, T. 2005. The role of envisioning the future in the development of resilience among at-risk youth. *Public Health Nursing* 22(3):200-08.
- Barnet, B., Liu, J., DeVoe, M. 2008. Depressive symptoms and rapid subsequent pregnancy in adolescent mothers. *Archives of Pediatric and Adolescent Medicine* 162(3):246-52.
- Barton, C. 2007. Whispers in the walls: Unspoken words in the public school fortress. *American Journal of Sexuality Education* 2(1):21-37.
- Bernard, S.N. & Knitzer, J.. 1999. *Map and track: State incentives to encourage responsible fatherhood*. National Center for Children in Poverty.
- Berne, L. & Huberman, B. 1999. *European approaches to adolescent sexual behavior and responsibility*. Advocates for Youth.
- Black, M.M., Bentley, M.E., Papas, M.A., Oberlander, S., Teti, L.O., McNary, S., Le, K., O'Connell, M. 2006. Trial of a home-based mentoring program delaying second births among adolescent mothers: A randomized, controlled trial. *Pediatrics* 118:1087-1099.
- Boonstra, H. 2009. Advocates call for a new approach after the era of “abstinence-only” sex education. *Guttmacher Policy Review* 12(1):6-11.

Brown, J.D., L'Engle, K.L., Pardun, C.J., Guo, G., Kenneavy, K. 2006. Sexy media matter: Exposure to sexual content in music, movies, television, and magazines predicts black and white adolescents' sexual behavior. *Pediatrics* 117(4):1018-27.

Centers for Disease Control and Prevention. 2008a. Youth risk behavior surveillance—United States, 2007. *Morbidity and Mortality Weekly Report* 57(SS-4).

Centers for Disease Control and Prevention. 2008b. *10 steps to promoting science-based approaches (PSBA) to teen pregnancy prevention using getting to outcomes (GTO), A summary.*

Centers for Disease Control and Prevention National Center for Health Statistics. 2007. *Teen birth rate rises for first time in 15 years.* Accessed at www.Centers for Disease Control and Prevention.gov/nchs/pressroom/07newsreleases/teenbirth.htm.

Centers for Disease Control and Prevention/Prevention Research Centers. 2006. *Talking parents, healthy teens: Evaluation study.* Accessed at www.Centers for Disease Control and Prevention.gov/prc/research-projects/core-projects/talking-parent.

Chandra, A., Martino, S.C., Collins, R.L., Elliott, M.N., Berry, S.H., Kanouse, D.E., Miu, A. 2008. Does watching sex on television predict teen pregnancy? Findings from a national longitudinal survey of youth. *Pediatrics* 122:1047-54.

Child Trends. 2007. *Teen Outreach Program.* Accessed at www.childtrends.org/Lifecourse/programs/TeenOutReachProgram.htm.

Cubbin, C., Santelli, J., Brindis, C.D., Braverman, P. 2005. Neighborhood context and sexual behaviors among adolescents: Findings from the National Longitudinal Study of Adolescent Health. *Perspectives on Sexual and Reproductive Health* 37(3):125-34.

Denner, J., Kirby, D., Coyle, K., Brindis, C. 2001. The protective role of social capital and cultural norms in Latino communities: A study of adolescent births. *Hispanic Journal of Behavioral Sciences* 23(1):3-21.

East, P.L., Reyes B.T. 2007. Horn EJ. Association between adolescent pregnancy and a family history of teenage births. *Perspectives on Sexual and Reproductive Health*, 39(2):108-15.

Galvan, A., Hare, T.A., Parra, C.E., Penn, J., Voss, H., Glover, G., Casey, B.J. 2006. Earlier development of the accumbens relative to the orbitofrontal cortex might underlie risk-taking behavior in adolescents. *The Journal of Neuroscience* 26(25):6885-92.

Gephart, M.A.. 1997. Neighborhoods and communities as contexts for development. In J Brooks-Gunn, GJ Duncan, and JL Albers, eds. *Neighborhood poverty: Context and consequences for children*, 1:1-43.

Guttmacher Institute. 2006. *Sex education: Needs, programs and policies*. Accessed at www.guttmacher.org/presentations/ed_slides.html.

Guttmacher Institute. 1999. *Teen sex and pregnancy*. Accessed at www.guttmacher.org/pubs/fb_teen_sex.html.

Healthy Teen Network. 2009. *Fast facts: Unique needs of children born to teen parents*. Accessed at www.healthyteennetwork.org/index.asp?Type=B_BASIC&SEC={3EEAA079-A14B-482D-B17D-895AD0CEBFE4}&DE={199D3A2F-063E-41DB-BEBE-F492E22A2709}.

Herman-Giddens, M.E., Kaplowitz, P.B. & Wasserman, R. 2004. Navigating the recent articles on girls' puberty in *Pediatrics*: What do we know and where do we go from here? *Pediatrics* 113:911-917.

Hernandez DJ & Charney E, eds. 1998. *From generation to generation: The health and well-being of children in immigrant families*. National Academy Press.

Holcombe, E., Peterson, K. & Manlove, J. (2009). Ten reasons to still keep the focus on teen childbearing. *Child Trends Research Brief*, March.

Johnston, L.D., O'Malley, P.M., Bachman, J.G., Schulenberg, J.E. 2007. *Monitoring the future: National results on adolescent drug use: Overview of key findings 2006*. National Institute on Drug Abuse.

KIDS COUNT Data Center. 2009. Accessed at <http://datacenter.kidscount.org>.

Kirby D. 2001. Understanding what works and what doesn't in reducing adolescent sexual risk-taking. *Family Planning Perspectives* 33(6):276-81.

Lemay, C., Cashman, S., Elfenbein, D., Felice, M. 2006. Adolescent mothers' attitudes toward contraceptive use before and after pregnancy. *Journal of Pediatric and Adolescent Gynecology* 20(4):233-40.

Lindsay, D. 2009. *Child poverty and inequality: Securing a better future for America's children*. New York: Oxford University Press.

Logan, C., Holcombe, E., Ryan, S., Manlove, J., Moore, K. 2007. Childhood sexual abuse and teen pregnancy: A white paper. Child Trends, Inc. Accessed at www.thenationalcampaign.org/resources/pdf/childhood.pdf.

Markham, C.M., Tortolero, S.R., Escobar-Chaves, S.L., Parcel, G.S., Harrist, R., Addy R.C. 2007. Family connectedness and sexual risk-taking among urban youth attending alternative high schools. *Perspectives on sexual and reproductive health* (35)4:174-79.

Martin, J.A., Hamilton, B.E., Sutton, P.D., Ventura, S.J., Menacker, F., Kirmeyer, S., and Mathews, T.J. 2009. Births: Final Data for 2006. Centers for Disease Control and Prevention National Vital Statistics Reports 57(7).

Moore, K.A. 2009. *Teen births: Examining the recent increase*. Child Trends Research Brief, March.

National Campaign to Prevent Teen Pregnancy. 2001. *Halfway there: A prescription for continued progress in preventing teen pregnancy*. Washington, DC: Author.

National Campaign to Prevent Teen and Unplanned Pregnancy. 2009. *National Campaign analysis: Preliminary 2007 teen birth data*. Accessed at www.thenationalcampaign.org/resources/birthdata/analysis.aspx.

National Campaign to Prevent Teen and Unplanned Pregnancy. *Why it matters: Teen pregnancy, substance use, and other risky behaviors*. Accessed at www.thenationalcampaign.org/why-it-matters/pdf/risky_behaviors.pdf.

Reynolds, A.J., Temple, J.A., Robertson, D.L., Mann, E.A.. 2001. Long-term effects of an early childhood intervention on educational achievement and juvenile arrest. *Journal of the American Medical Association* 285(18).

Summerville, G. and Canova, K. 2006. *The power of Plain Talk: Exploring one program's influence on the adolescent reproductive health field*. Annie E. Casey Foundation; Public/Private Ventures.

Tylee, A., Haller, D.M., Graham, T., Churchill, R., Sand, L.A.. 2007. Youth-friendly primary-care services: How are we doing and what more needs to be done? *The Lancet* 369:1565-72.

United Nations Statistics Division. 2006. *Demographic yearbook 2006*.

U.S. Department of Health and Human Services/Public Health Service. November 2008. Progress review? Family planning. Accessed at <http://www.healthypeople.gov/Data/2010prog/focus09/default.htm>.

Online resources

The National Campaign to Prevent Teen and Unplanned Pregnancy

www.thenationalcampaign.org

Child Trends

www.childtrends.org

Resource Center for Adolescent Pregnancy Prevention

www.etr.org/recapp

Advocates for Youth

www.advocatesforyouth.org

Plain Talk National Replication Center

www.plaintalk.org

Guttmacher Institute

www.Guttmacher.org