DO YOU KNOW WHAT YOU’RE SPENDING ON TEEN PREGNANCY IN MISSISSIPPI?
Teen pregnancy is a personal issue with enormous social costs. In fact, births to teen mothers in Mississippi cost taxpayers $155 million in 2009. While it might be easy to push teen pregnancy aside as an issue that “doesn’t impact me,” there is considerable evidence that it impacts every person in Mississippi.

Mississippi’s economic health will be impacted until the teen birth rate declines. The lower educational outcomes associated with teen mothers and their children limit the overall skill levels of the state’s workforce. Preventing teen pregnancy will help improve high school completion and make our workforce more competitive and healthier. If policymakers and community leaders make a comprehensive commitment to teen pregnancy prevention in Mississippi, we would see a reduction in many of the issues the state is working hard to address, such as poverty, school failure, delinquency, child abuse and neglect and underemployment.

The good news is that Mississippi doesn’t have to be the state with the highest teen birth rate. Key steps can be taken to reduce the prevalence of teen births across our state. The goals of this report are to describe the economic costs of teen births for every county in Mississippi and provide evidence-based prevention strategies that will help reduce the teen birth rate. These key prevention strategies include:

- Access to “Abstinence-Plus” Sex Education in Public Schools that is Evidence-Based and Medically Accurate
- Access to School Nurses and Youth-Friendly Preventive Health Services
- Access to Educational Opportunities, Community Service, Employment and a Vision for a Positive Future
- Help Parents Succeed in Their Role as Sex Educators

Other states have made substantial progress in reducing teen births, and we know Mississippi is capable of the same progress.

Now is the time for action.
The teen birth rate in Mississippi (64 per 1,000 teens) far exceeds the national average (39 per 1,000 teens).\(^1\)

Mississippi has the highest rates of both chlamydia and gonorrhea in the nation.\(^2\)

76% of Mississippi high school students say they have had sex by the end of the 12th grade.\(^3\)

83.5% of births to women age 19 and younger in 2006 were “unintended.”\(^4\) This high unintended birth rate supports the conclusion that teens need more information on how to make healthy and responsible decisions about relationships, including sexual activity.

Mississippi has the highest child poverty rate in the nation—almost 1 out of every 3 children lived in poverty in 2009.\(^5\) It is not surprising that a state with an exceptionally high poverty rate also has the highest teen birth rate. Research indicates teen births result in a range of negative health and employment-related outcomes,\(^6\) such as:

- The sons of teen mothers are 13% more likely to end up in prison, while teen daughters are 22% more likely to become teen mothers themselves.\(^7\)

- Teen mothers are less likely to complete high school: Only one-third receive a high school diploma.\(^8\)

- The children of teen mothers have lower birth weights,\(^9\) are more likely to perform poorly in school,\(^10\) and are at greater risk of abuse and neglect.\(^11\)

Reducing teen pregnancies is one of the most effective ways to improve child well-being and reduce persistent child poverty.
As states struggle in a challenging budget environment, understanding the broader economic consequences of Mississippi’s high teen birth rate is particularly important. An analysis by the Mississippi Economic Policy Center has revealed that teen births cost Mississippi taxpayers $155 million in 2009. These costs can be attributed to the increase in health care costs related to teen births, lost tax revenue from lower wages among teen parents and their children, incarceration costs of sons of teen parents, and foster care costs. Most of the public sector costs of teen childbearing are associated with the negative consequences for the children of teen mothers, during both their childhood and their young adult years. The impact of public assistance expenditures related to teen births is modest compared to tax revenue losses and the costs of foster care and criminal justice system. For methodology and data sources related to this analysis, please see page 9.

County-level taxpayer costs: For a table describing the teen birth rate and taxpayer costs by county, please see Table 1 at the end of this report.

$155 Million in Context: What Would $155 Million Fund in Mississippi Each Year?

As illustrated above, a conservative estimate of the annual taxpayer cost to Mississippi is $154,895,580. The figures below contextualize $154,895,580.

- $155 million could send 31,624 Mississippians to a 4-year public college/university.
- $155 million could send 41,416 4-year olds (96.7% of all 4-year olds in Mississippi) to pre-kindergarten.
- $155 million could send 84,689 Mississippians to a 2-year public college.
- $155 million could fund the salaries of 3,677 teachers.
- $155 million could fund the salaries of 4,937 firefighters for a year.
- $155 million could fund the salaries of 2,666 registered nurses for a year.
- $155 million could fund the salaries of 3,677 teachers.
Solutions & Examples of Best Practice Initiatives to Reduce the Teen Birth Rate

Solution: Access to “Abstinence-Plus” Sex Education in Public Schools that is Evidence-Based and Medically Accurate

Teens need information on how to make healthy and responsible decisions about relationships, including sexual activity. Public health professionals view evidence-based, medically accurate sex education programs in the school and community setting as one part of the solution to reducing teen pregnancy and STD/HIV rates. These programs rely on fear and shame-based messages to encourage students to remain abstinent, typically include inaccurate or misleading sexual health information and do not provide complete information to young people.

Mississippi now mandates sex education in public schools. A 2011 state law requires school boards in every public school district to adopt an “abstinence-only” or “abstinence-plus” sex education policy by June 2012. Unfortunately, this law does not require school boards to implement an evidence-based, medically accurate sex education curriculum. Nor does the law provide districts any additional funding to start teaching the curriculum they select. However, the Creating Healthy and Responsible Teens (CHART) initiative through Mississippi First and the Bureau of Community and School Health at the Mississippi Department of Health will cover a school district’s cost of implementing an abstinence-plus, evidence-based sex education curriculum. For more information on this initiative, visit http://www.mississippifirst.org/CHART-initiative.

Important Role of Sex Education in School Setting

Births to teens under age 17 account for a disproportionate amount of the economic costs associated with teen childbearing and 76% of Mississippi teens report having had sex by 12th grade. As a result, it is important to reach young people while they are in school. Unfortunately, the state of Mississippi has invested considerable financial resources in pursuing an abstinence-only message. Abstinence-only-until-marriage programs are not evidence-based. These programs rely on fear and shame-based messages to encourage students to remain abstinent, typically include inaccurate or misleading sexual health information and do not provide complete information to young people.
According to the Centers for Disease Control and Prevention (CDC): An evidence-based (also called “science-based”) program is a program that research has shown to be effective in changing at least one of the following behaviors that contribute to early pregnancy, STD, and HIV infection: delaying sexual initiation, reducing the frequency of sexual intercourse, reducing the number of sexual partners, or increasing the use of condoms and other contraceptives. The program was evaluated using a rigorous research design, which includes the following:

1. Using an experimental or quasi-experimental evaluation design.
2. Measuring knowledge, attitude, and behavior.
3. Having an adequate sample size.
4. Collecting data from both groups at three months or later after intervention.
5. Using sound research methods and processes.
6. Replicating in different locations and finding similar evaluation results.
7. Publishing results in a peer-reviewed journal.

For a list of the 28 evidence-based teen pregnancy prevention programs approved for replication by the United States Department of Health and Human Services, visit http://www.hhs.gov/ash/oah/prevention/research/programs/index.html

Solution: Access to School Nurses and Youth-Friendly Preventive Health Services

The prevention of an unintended pregnancy saves taxpayers more money, on average, than the public cost of that pregnancy. Family planning can save tax dollars and improve the health of women and children by reducing unintended pregnancies. There is overwhelming evidence that providing basic health and contraceptive services to low-income women and men, particularly young women, helps prevent unintended pregnancy and childbirth and is cost effective. School nurses play a vital role in helping young people meet these preventive health care needs.

Best Practice Example—Southeast Mississippi Rural Health Initiative (Hattiesburg, Mississippi)

Southeast Mississippi Rural Health Initiative, Inc. (SeMRHI), based in Hattiesburg, Mississippi, operates 13 medical clinics and 1 dental clinic in a 5 county area in southeast Mississippi. In 2010, SeMRHI received a 5-year grant to provide the evidence-based “Making A Difference!” curriculum to 500 adolescents, ages 11-15, in Forrest and Lamar Counties. This program is being implemented in the school-based setting at Hattiesburg Public High and Lamar County public schools, as well as in faith and community-based settings. SeMRHI has a very unique relationship with the Hattiesburg Public School District. SeMRHI has a clinic...
located in the Hattiesburg High School and community clinics located on the campuses of Hattiesburg High and Lillie Burney Elementary Schools. SeMRHI staff offers routine medical care, physicals, and medical and dental screenings for the students of the Hattiesburg Public School District (with parental permission). SeMRHI and the Hattiesburg Public School District share the personnel costs of the two school-based registered nurses who serve the Hattiesburg Public Schools. This is a partnership that has benefited the school district, teachers, community, but most importantly, the students. This type of partnership between a health clinic, a school, and parents is a best practice example of what a community can do to reduce the rate of teen pregnancies and provide necessary health care to children.

**Solution: Develop teen programs that address issues of school involvement, motivation to stay in school and ambition for the future.**

 Teens are less likely to engage in risky behaviors if they have a future full of possibility. In a concrete sense, this includes access to affordable tuition at a college or technical school, opportunities for after school programs and summer jobs, and opportunities to learn from leaders and role models in their community.

**Best Practice Example—Youth Employment Program at Operation Shoestring (Jackson, Mississippi)**

Operation Shoestring’s Youth Employment Program (YEP) works with area businesses and nonprofits to provide “life training” and summer employment for students at Lanier High School in Mississippi. Operation Shoestring’s Youth Employment Program (YEP) works with area businesses and nonprofits to provide “life training” and summer employment for students at Lanier High School in Mississippi.
Jackson, Mississippi. All of the YEP students will interview and be hired by a local organization or business to work for the summer. Recent employers have included the law firm Bradley Arant Boult and Cummings and the University of Mississippi Medical Center. Operation Shoestring strives to remove the constraints that so many young people face – they realize that high school graduation, a college degree and a professional career aren’t just elusive dreams. Through this program, students realize that their future is full of possibility and, as a result, are less likely to engage in risky decisions that undermine their future goals.

**Solution: Help Parents Succeed in their Role as Sex Educators**

Build and sustain parental involvement in school-based and non-school based sex education programs. Teens say that parents most influence their decisions about sex, love and relationships. However, parents are often unsure of how to talk with their teenager about this topic because they did not receive sex education themselves, and thus, may be ill-equipped to educate their own children.

**Best Practice Example—Talking Parents, Healthy Teens**

“Talking Parents, Healthy Teens” is a model parent communication program that consists of eight weekly 1-hour sessions during the parent’s lunch hour at work. Session topics include: building your relationship with your child; adolescent development and new ways of communicating; listening skills for talking about sensitive topics; getting past roadblocks with talking about sex; helping your child make decisions, assertiveness skills, abstinence, and contraception; coping with conflict; supervising your child and how to stay motivated. This program offers an innovative way for parents, in a comfortable setting, to learn how to communicate with their children about sexual health issues. Initial results from evaluations of the program have been positive, with youth feeling more at ease talking with their parents.

For a table describing the teen birth rate and taxpayer costs by county, please see Table 1.
The Teen Birth Rate is calculated by dividing the number of actual teen births (ages 15-19) by the total number of female teens ages 15-19, and multiplying that number by 1,000. It is a more accurate measurement than the teen pregnancy rate because the teen birth rate only includes live births.

Estimated Annual Taxpayer Cost: Please see “Methodology/County-Level Analysis” on pages 9 for an extended explanation of taxpayer cost.

Costs for Mississippi counties were analyzed and provided by the Mississippi Economic Policy Center. Special thanks to Sarah Welker, Policy Analyst at the Mississippi Economic Policy Center, and Charles Woods, 2011 Summer Intern for Mississippi First, for their assistance in calculating this data for the Women's Fund of Mississippi.
Methodology and Calculation Source
In 1997, a collection of nationally recognized researchers joined together to develop an estimate of the net public cost of teen births compared to the cost if mothers had delayed pregnancy beyond teen years. The effort resulted in a model developed by Dr. Rebecca Maynard providing conservative net costs to taxpayers and to society for teen births.25

Maynard’s cost model was recently updated in 2008.26 The updated model now also distinguishes costs between births of teen mothers under age 18 and births to teen mothers age 18 and 19. Maynard’s analysis goes beyond most cost models by estimating taxpayer and societal costs relative to costs had the mother delayed child bearing until age 20 or 21. Maynard averages costs over the first 15 years of parenthood to determine an average cost per year per birth. Based on this model, there are 15 yearly cohorts of teen births during any given year. As a result, in Maynard’s methods, the cost per teen birth is multiplied by 15 cohorts for a total annual cost by county or state.

Costs to Taxpayers
Costs to taxpayers include lost tax revenue based on a teen mother’s and father’s lower wages, lost tax revenue from lower wages of children of teen parents in adulthood, costs for foster care placement for children, public assistance costs (welfare and medical assistance) and costs for incarceration relative to the cost had the mother delayed pregnancy until she was 20 or 21.

The Mississippi Economic Policy Center applied Maynard’s methodology and costs to data on county-level teen births in Mississippi in 2009. Maynard’s cost model was adjusted for inflation to determine the 2009 annual cost to taxpayers for each county and the state overall. Cost figures generated by MEPC are comprehensive of the costs for teen births from mothers 17 years and younger and from mothers age 18 and 19. Data on teen births for 2009 (the most recent year available) come from the Mississippi Department of Health’s Teenage Vital Statistics Data.

The average annual cost to taxpayers per teen birth was $4,010 for mothers age 17 years and younger and $98 for mothers age 18 and 19 years in 2004 dollars. MEPC adjusted Maynard’s costs for inflation to 2009 dollars using the Consumer Price Index resulting in a cost of $4,554 for age 17 years and younger and -$111 for mothers age 18 and 19 years. Multiplying taxpayer costs by the number of teen births per each age group resulted in the net cost of teen births for each county which was then multiplied by 15 per Maynard’s methodology for an overall net taxpayer cost in 2009. In 2009, teen births in Mississippi yielded a net taxpayer cost of $154.9 million.

Occupational Wages and Costs of Tuition and Pre-Kindergarten
Calculations for determining hypothetical investments in Mississippi’s education systems and workforce reflect the use of $154.9 million for a range of salaries, tuitions and pre-kindergarten costs.

Occupational wages of teachers, nurses, firefighters and law enforcement are statewide 2009 average annual wages generated by the Mississippi Department of Employment Security. Wage calculations only include base salary and do not include any related benefits.

Costs of tuition at 2-year colleges and 4-year universities come from The College Board’s “The College Completion Agenda: Tuition, Fees, and Costs”, and reflect 2009 estimates of in-state tuition across public post-secondary institutions. Pre-kindergarten costs are derived from “The State of Preschool 2010: Yearbook,” from the National Institute for Early Education Research. Although a statewide, comprehensive pre-kindergarten program has not been implemented in Mississippi, pre-kindergarten costs come from the National Institute for Early Education Research’s estimated average annual cost of attendance in 2009 for a Mississippi 4-year old if pre-kindergarten were provided.
Endnotes


8. Ibid.


13. Ibid.


21. Ibid.


24. 2009 is the most recent year for which data on Mississippi teen births is available. For birth data, see Mississippi Department of Health Teenage Vital Statistics Data. http://msdh.ms.gov/phs/2009/Summary/teenc09.pdf


A report on the economic costs and common-sense solutions to reduce the teen birth rate.