



# Costs of Teen Childbearing: Consequences for the Children

The public sector costs of teen childbearing detailed below are divided into costs for those aged 17 and younger at the time of a birth and costs associated with births to those aged 18-19. Readers will note that the net costs to younger mothers are far greater than the net costs to older mothers despite the fact that they account for only about one-third of all teen births. This is due, in part, to the fact that the delay for younger mothers to age 20-21 is longer than the delay for the older mothers and also because the teen mothers aged 18-19 are more mature at the time of the birth. As a result, the net effects of a teen birth are much greater for young teen mothers than for the older teen mothers.

## Health and Medical Care

### Young Teen Mothers – Age 17 and Younger

Research about the health status of the children of young teen mothers presents a complex picture. As of the late 1980s, children of teen mothers had poorer health (self-reported) than the children of older mothers (Wolfe and Perozek), but a more recent examination based on a 2002 study using the Medical Expenditure Panel Survey (MEPS) finds little or no difference in self-reported health status (Wolfe and McHugh). This newer study finds that children of young teen mothers are slightly more likely to have a chronic medical condition, but less

Figure 2: Health Care Costs of a First Birth to a Teen Mother Compared to a First Birth at Age 20-21  
All Costs in Billions of 2004 Dollars

OUTCOME MEASURES	1st Birth at Age 17 or Younger	1st Birth at Age 18-19	1st Birth Age 19 and Younger
Health Care Costs - Children	\$0.95	\$0.98	\$1.92

likely to report an acute condition.<sup>4</sup> Also, their mothers are about as likely to report that their children are in “excellent” health and no more likely to report “fair or poor” health. It is clear that children of young teen mothers are less likely to see a medical provider than the children of older mothers.

At young ages (0-4), annual health expenditures are 25-40 percent larger for children of teen mothers 17 and younger than for the children of mothers who were age 20 or 21 at first birth, but from ages 4-7, health expenditures are considerably less than for the other children. On average, from age 1-14, the children of teen mothers 17 and younger receive less health care spending than the children of aged 20-21 mothers, but the difference is not particularly large (Wolfe and McHugh). In general, it is unclear whether the differences reflect genuine differences in health or differences in utilization of the health care system. It is difficult, therefore, to conclude whether the lower health care expenditures are a good or bad thing for the children involved.

Publicly-provided health care through Medicaid, State Children’s Health Insurance Program (SCHIP)<sup>5</sup>, Civilian Health and Medical Program of the Uniformed Services in the United States (CHAMPUS), and Medicare (for disabled children) is an important resource for children of mothers of all ages, but children of younger mothers rely on these sources of health care more heavily. From ages 1-14, 60 percent of the health care of children of young teen mothers is provided through these sources, compared to 50 percent for children of mothers who were 20 or 21 at first birth. About three-quarters of health care expenses for pre-school children of young teen mothers are provided through these programs. The average child of a young teen mother uses almost \$145 more in publicly-provided health care annually than the child of a woman who had her first birth at age 20 or 21.

Based on the new estimates of the net impact of a mother’s age at birth on public sector health costs per child, the corresponding total annual costs to federal, state, and local taxpayers in 2004 for children from birth to age 14 are estimated to be \$950 million.

## Older Teen Mothers – Age 18 and 19

From birth to age 14, children of older teen mothers are, on average, about as healthy as the children of non-teen mothers, according to a recent analysis of 2002 data (Wolfe and McHugh). Similar to the young teen mothers, older teen mothers are slightly more likely to report a chronic medical condition that their child has, but less likely to report an acute condition. These mothers are also about as likely to report that their children are in “excellent” health and are no more likely to report “fair or poor” health. The only exception seems to be for children from birth to age 3, where the children of older teen mothers are considerably less likely to be in excellent health and more likely to have a chronic condition compared to children of mothers aged 20-21.

Average total health expenditures for infants of older teen mothers confirm this health disparity: expenditures for infants (0-1 year) are 75 percent higher than for infants of non-teen mothers. Surprisingly, this expenditure pattern does not persist and as a result, from ages one to 14, these children have average annual health expenditures that are only slightly higher than for the children of mothers who have a first birth at age 20 or 21. As always, health expenditure differences may reflect differences in access and utilization as well as differences in health.

The children of older teen mothers actually receive a larger share of their health expenditures through public programs than do the children of younger teen mothers or the children of non-teen

4 The definition of acute and chronic conditions are from the Wolfe and McHugh paper, and are grouped from individually reported conditions using ACG/ADG software which maps International Classification of Diseases (ICD-9) codes into groups based on the need for specialty care, severity, and chronicity. Refer to the paper for more information.

5 Most publicly provided healthcare for children is provided through Medicaid and SCHIP.

mothers. Sixty-three percent of their health expenditures are paid for by public programs, primarily Medicaid and SCHIP, compared to 50 percent for children of mothers who were 20 or 21 at first birth and 60 percent for the children of younger teen mothers. Eighty-four percent of health care expenses for children ages 0-1 of teen mothers aged 18-19 are provided through these programs.

Like the children of young teen mothers, the children of teen mothers 18– 19-years-old have about 0.25 fewer medical visits in an average year, after controlling for other risk factors such as the underlying health status of the children themselves. This is a difference of about 10-15 percent compared to otherwise similar children of mothers aged 20-21. Their total health expenditures are slightly higher than those of the children of mothers aged 20-21 after controlling for health-related risk factors, and the cost for public healthcare services for children of teen mothers aged 18-19 is approximately \$110 more per child per year compared to the cost for children of non-teen mothers.

Based on this increased cost per child, the total annual increase in medical care costs for children born to 18-19-year-olds is estimated to be \$980 million.

## Child Welfare Services

### Young Teen Mothers – Age 17 and Younger

In 2004, 532,000 children were in foster care and nearly 5.5 million children were referred to state and local authorities for suspicion of abuse

and neglect. According to an Urban Institute study of federal, state, and local spending on child welfare, total federal spending on programs to support foster care, adoption, and other activities amounted to \$11.6 billion; state and local spending added another \$11.6 billion (Scarcella et al). Most of this—probably 90 percent or more—was spent on foster care, adoption, and related services.

The best estimate of the impact of teen child-bearing on abuse and neglect and on foster care is based on information from Illinois, where a state database allows researchers to examine all births and link them to administrative records of incidents of abuse/neglect or foster care placement. Goerge and Harden have examined the impact of a teen birth on these outcomes for children born between 1989 and 1998. Having a child placed in foster care is a relatively rare event. However, young teen mothers were 2.2 times more likely (3.12 percent vs. 1.44 percent) to have a child placed in foster care during the first five years after a birth compared to women who had a first birth at age 20-21. They were also twice as likely to have a reported case of abuse or neglect as women who had a first birth at age 20-21— almost one in ten children of young teen mothers were reported for abuse or neglect, compared to one in 20 for children of mothers aged 20-21. After controlling for a number of other risk factors that also affect these outcomes, delaying a birth from age 17 or earlier to age 20-21 would lower the foster care placement rate for these women’s children by a third, while instances of abuse and neglect would fall by almost 40 percent.

Figure 3: Child Welfare Costs of a First Birth to a Teen Mother Compared to a First Birth at Age 20-21

All Costs in Billions of 2004 Dollars

OUTCOME MEASURES	1st Birth at Age 17 or Younger	1st Birth at Age 18-19	1st Birth Age 19 and Younger
Foster Care / Child Protective Services	\$1.84	\$0.46	\$2.30

If the foster care placement and abuse and neglect rates for children born to mothers 17 and younger were as low as the rates for children born to mothers aged 20-21, the overall foster care placement rate would fall by more than 13 percent and cases of abuse and neglect would drop by 13 percent. This is a measure of the gross impact of a teen birth. Based on the net effects of an early birth, a delay in age at first birth to age 20 or 21 would reduce the foster care placement rate for all families by 8 percent and cases of abuse and neglect by almost 11 percent. In this instance, gross and net effects are not too different.

The demographic characteristics of the Illinois child population are quite similar to those of children across the United States. Therefore, it is likely that the relationship that holds in Illinois between a mother's age at first birth and foster care placements and abuse/neglect reports also holds elsewhere. Applying these figures to national data suggests that costs would fall by \$3.6 billion annually if teen mothers had the same foster care rate and abuse/neglect rate as mothers who delayed childbearing until 20-21. This is an estimate of the gross child welfare and foster care costs of teen births. The net effect estimates suggest that successfully delaying first births to age 20-21 would reduce the number of children in foster care by about 45,000 and the number of incidents of abuse or neglect by almost 600,000 annually. Annual total costs for foster care, adoption, and associated child welfare programs would fall by \$1.8 billion if young teen mothers delayed their first birth to age 20 or 21.<sup>6</sup>

### **Older Teen Mothers – Age 18 and 19**

Children born to mothers aged 18-19 at first birth are one-third more likely to be in foster care and 39 percent more likely to have a report of abuse or neglect during the first five years after birth than children born to mothers aged 20 or 21. After adjusting for a variety of risk factors, children

of mothers aged 18-19 at first birth are 13 percent more likely to be in foster care and 24 percent more likely to be the subject of a report of abuse or neglect than otherwise similar children born to mothers aged 20-21.

If the foster care placement and abuse and neglect rates for children born to older teen mothers were as low as the rates for women who had a first birth at age 20 or 21, total foster costs would decrease by approximately \$1 billion annually. The net effect estimates indicate that the number of children in foster care would fall by nearly 13,000 and the number of children reported for abuse or neglect would fall by 284,000 if these women delayed their first births to age 20 or 21. Total child welfare costs would fall by \$460 million if these young women delayed their first births to age 20 or 21.<sup>7</sup>

## **Education and Earnings**

### **Young Teen Mothers – Age 17 and Younger**

Children of young teen mothers are far more likely to drop out of high school than are children born to later childbearers (Haveman, Wolfe, and Peterson; Hoffman and Scher). Of children born to teen mothers in the mid-1970s and early 1980s, only 66 percent earned their high school diploma by age 22, compared with 81 percent of the comparison group of children of women who had a first birth at age 20 or 21 (Hoffman and Scher). Although a part of the difference in high school graduation rates can be explained by background differences between the two groups, the impact of a mother's age at birth remains sizeable. Recent estimates show that about half of the difference in graduation rates is due to the difference in the timing of a first birth. That is, if these teen mothers had delayed their first birth to age 20-21, their children's high school graduation rate would rise to 73 percent, an increase of ten percent (Hoffman and Scher).

6 Both the gross and net cost estimates include the impact of a delay in age at first birth on the total number of children born to a teen mother. See the appendix for further details.

7 This estimate also takes account of the impact of a delay in age at first birth on total fertility.

**Figure 4: Lost Tax Revenue Costs For Adult Children of a Mother with a First Birth as a Teen Compared to Adult Children of a Mother with a First Birth at Age 20-21**  
All Costs in Billions of 2004 Dollars

<b>OUTCOME MEASURES</b>	<b>1st Birth at Age 17 or Younger</b>	<b>1st Birth at Age 18-19</b>	<b>1st Birth Age 19 and Younger</b>
<b>Income &amp; Sales Taxes (Children over their career)</b>	<b>\$2.26</b>	<b>\$0.63</b>	<b>\$2.89</b>

Children of young teen mothers end up completing an average of 0.8 fewer years of education than children of mothers who first gave birth at age 20-21. After adjusting for other risk factors, the children of young teen mothers complete an average of about a quarter of a year less education. Put another way, one quarter of the children of teen mothers—35,000 adolescents—each obtain one less year of education.

Not surprisingly, reduced educational attainment affects the earning capacity of these children throughout their adult lives. Economists have widely noted the increased importance of schooling in the labor market of the 1990s and early 2000s (Katz and Autor). Average earnings differences between more educated and less educated workers are at historic highs. This means that the negative impact of a mother’s age at birth on the educational attainment of her children is likely to be more costly than in the past. Using information on the average earnings of workers with a high school or college degree along with the net impact of a mother’s age at birth on children’s educational attainment, researchers estimate that an early teen birth reduces the average earnings of the children by \$810 per year or almost \$35,000 over a career<sup>8</sup> (Maynard and Hoffman). Based on the 140,761 births in 2004 to young teen mothers (17 and younger), this is equivalent to lost earnings equal to \$4.9 billion.

How much does this lower educational attainment cost the public sector in the form of lower tax

revenues? Based on the tax rates that apply in a typical state and on federal income tax rates, the \$4.9 billion earnings loss reduces taxes paid by the children of young teen mothers by just over \$1.14 billion annually. This loss applies to each child of a teen mother. Adjusting further for the total births a typical teen mother has over the first fifteen years after her first birth yields an annual tax loss of about \$2.3 billion annually. These lower tax revenues are a substantial cost to federal, state, and local taxpayers.

### **Older Teen Mothers – Age 18 and 19**

The children of older teen mothers are also less likely to graduate from high school than are children born to later childbearers (Haveman, Wolfe, and Peterson; Hoffman and Scher). However, these differences are relatively small – about 3.5 percentage points (77.5% vs. 80.9%). Most of the gross effect is due to risk factors other than being the child of an older teen mother (Hoffman and Scher). Recent estimates suggest that high school graduation rates for these children would increase by one percentage point if their mothers delayed their first births to age 20-21.

Children of older teen mothers end up receiving about half a year less total education than children of mothers who had a first birth at age 20-21. After adjusting for other risk factors, there is only a very small difference in educational attainment (Hoffman and Scher). Applying this small differ-

8 This is defined as 43 years, from age 22 through age 65.

ence to the average benefit of a year of additional education yields a total lost earnings equal to \$1.1 billion for the 281,282 children of older teen mothers. The tax loss due to these lower earnings is approximately \$260 million, based on typical tax rates. Further adjusting for the average number of children older teen mothers will have over their lifetime increases the total tax loss to \$630 million.

## Incarceration

### Young Teen Mothers – Age 17 and Younger

The sons of adolescent mothers are 2.2 times more likely to spend time in prison than the sons of mothers who delayed childbearing until their early twenties (Scher and Hoffman; Grogger). Data are not available to measure the likelihood of incarceration for the daughters of teen mothers.<sup>9</sup> Nearly 14 percent of the sons of adolescent mothers have been in prison by their late-30s, compared to six percent of the sons of mothers aged 20-21.<sup>10</sup> By that same age, the son of a teen mother had spent an average of 0.57 years in prison, more than 2.5 times longer than the average prison time of the sons of women who had a first birth at age 20-21.

The net impact of a mother’s age at birth on a son’s incarceration is smaller than these gross dif-

ferences. Based on a very conservative estimate, delaying a teen birth to age 20-21 would reduce the probability of a son’s incarceration by 10.6 percent and reduce the average years spent incarcerated by 13.4 percent. In turn, this would reduce the total prison population by approximately 4.0 percent. A less conservative, but still reasonable, estimate is that the probability of incarceration would fall by 31 percent and years of incarceration would fall by 38 percent if a young woman delayed her first birth from age 17 or younger to age 20-21. This would result in a decline in the total state prison population of 11.2 percent.<sup>11</sup>

How much does this elevated risk of incarceration cost taxpayers? In 2004, a total of 1.2 million males were in state prisons. Total public sector costs to build and maintain prisons were approximately \$29 billion, almost all of which was the responsibility of the states. If the incarceration rates for the sons of teen mothers were as low as the rates for the sons of mothers age 20-21, prison costs would fall by \$5.3 billion annually, representing a decline in the prison population of 220,000 persons. This is an estimate of the gross cost of a teen birth. The net cost is smaller than this. Based on the analysis above and incorporating the effects of delay in age at first birth on total fertility, early adolescent childbearing in and of itself costs U.S. taxpayers a minimum of \$1.9 billion each year for incarceration,

**Figure 5: Incarceration Costs for Adult Sons of a Teen Mother Compared to Sons of a Mother with a First Birth at Age 20-21**  
All Costs in Billions of 2004 Dollars

<b>OUTCOME MEASURES</b>	<b>1st Birth at Age 17 or Younger</b>	<b>1st Birth at Age 18-19</b>	<b>1st Birth Age 19 and Younger</b>
<b>Incarceration of Young Men</b>	<b>\$1.90</b>	<b>\$0.17</b>	<b>\$2.07</b>

9 Incarceration rates for women are too low to determine whether having a teen mother is a risk factor. In 2004, 92,000 women were in state prisons, accounting for less than seven percent of all prisoners.  
 10 This proportion measures whether the sons were in prison at a particular point in a year and it therefore misses short prison terms altogether. While the true percentage of sons who were ever in prison is certainly larger than the ones reported here, the increased relative risk associated with having a teen mother is still valid.  
 11 This analysis does not capture the costs for incarceration in federal prisons since there are many fewer prisoners in federal prisons.

using the very conservative measure, and possibly as much as \$4.2 billion (using the less conservative measure). This represents a decline in the number of prisoners ranging from 100,000 to nearly 175,000.

This cost estimate is almost certainly an underestimate of the total impact of a mother's age at birth on public sector correctional system costs because it does not include some obvious related costs. For example, costs associated with the juvenile justice system are not included, because national estimates of the net impact of a teen birth on the risk of involvement with this system are currently unavailable. One older study estimated that the annual average cost of incarcerating a juvenile for one year is between \$35,000 to \$64,000 (ACLU); a more recent study found that New York City spent \$358 a day (or more than \$130,000 on an annual basis) to detain a juvenile offender (Roy-Stevens). Since sons of young teen mothers are more likely to use the adult correctional system, it is very likely that they are similarly more likely to use the juvenile correctional system, but the quantitative magnitude is unknown. Moreover, in addition to the measurable incarceration costs, criminal activity has other negative effects such as damage to property, injury to people, and a decrease in the quality of residential and neighborhood life. There are, unfortunately, no estimates of the net impact of teen childbearing on these areas and thus there are no available cost estimates.

### Older Teen Mothers – Age 18 and 19

Sons of mothers who were age 18 or 19 at their birth also have an elevated risk of spending time in prison. They are 40 percent more likely to ever have been in prison and they spend, on average, about 30 percent more time in prison through age 40 than the sons of mothers who delayed childbearing until their early twenties (Scher and Hoffman). Controlling for other risk factors, a delay in their mother's age at their birth to 20-21 would reduce their likelihood of incarceration by 5.8 percent and reduce their average years of incarceration by 6.7 percent. That translates into a decrease in the

prison population of more than 7,000 and a reduction in public sector costs of \$175 million.

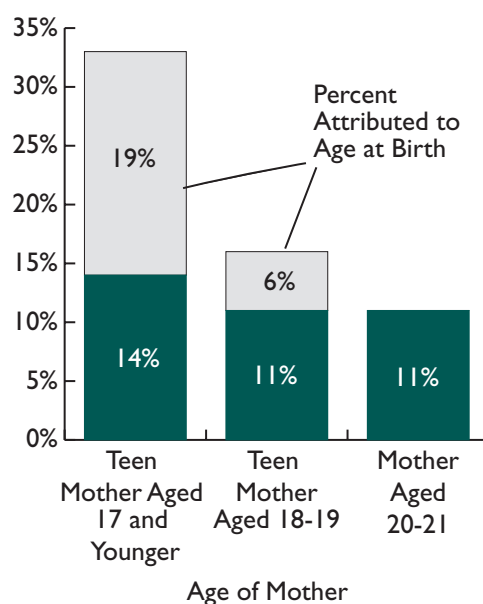
## Adolescent Mothers from One Generation to the Next

### Young Teen Mothers – Age 17 and Younger

The daughters of adolescent mothers are far more likely than those born to older mothers to become teen mothers themselves. Nearly one-third of the daughters of young teen mothers had their first child as a teenager, compared to 11 percent of those whose mothers had a first birth at age 20-21 (Hoffman and Scher). Being the daughter of a teen mother has a strong net effect, even after accounting for other risk factors such as family background and academic ability. If a young woman's mother had delayed her own first birth to age 20-21, her daughter's risk of having a birth as a teen would fall by almost 60 percent, from one-third to just 14

Figure 6: Daughters who Have a Teen Pregnancy

#### Daughters of Teen Mothers Compared to Daughters of Mothers Age 20-21



percent. This is a particularly powerful effect—a potential decrease in the number of teen births by more than 27,000 annually.

### **Older Teen Mothers – Age 18 and 19**

The daughters of teen mothers aged 18-19 are also far more likely than daughters born to mothers aged 20-21 to become teen mothers themselves. Nearly 17 percent of the daughters of these teen mothers had their own first birth as a teenager compared to 11 percent of those whose mothers had a first birth at age 20-21. Being the daughter of a teen mother has a strong net effect, even after accounting for other risk factors such as family background and academic ability. If a young woman's mother had delayed her own first birth to

age 20-21, her daughter's risk of having a teen birth would fall by one-third, from 17 percent to 11 percent. This is a strong effect—a potential decrease in the number of teen births of more than 16,000 annually.

There are no available estimates of the costs associated with these additional teen births, although they are likely to be considerable. It is probable that these new teen mothers will have lower incomes resulting in lost tax revenues and that their children—the grandchildren of the original teen mother—may experience some of the same problems as their own mothers, the first generation children. When teen births are repeated from generation to generation, the costs accumulate substantially.