



THE
NATIONAL
CAMPAIGN TO
PREVENT TEEN PREGNANCY

CELEBRATING A DECADE OF PROGRESS
IN IMPROVING THE LIVES OF CHILDREN,
YOUTH AND FAMILIES

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Estimating Child Poverty and Single Mother Impacts of Declining Teen Birth Rates by State Methodology Memo -- April 2005

This memo describes the methodology the National Campaign to Prevent Teen Pregnancy used to calculate the impacts on child poverty and living arrangements of children due to declining teen birth rates by state. This methodology builds on the national analysis described in “Steep Decline in Teen Birth Rate Significantly Responsible for Reducing Child Poverty and Single-Parent Families”¹. The National Campaign released a summary of the national analysis called “What If: How Declines in Teen Births Have Reduced Poverty and Increased Child Well-Being”². The National Campaign gratefully acknowledges the patient and expert assistance of researchers Richard Bavier and Wendell Primus in conducting this research. The state-level analysis was made possible with the generous support of the United Health Foundation.

Visit www.teenpregnancy.org/whycare/whatif.asp to find all state fact sheets (and one for the District of Columbia), state press releases, state tables, this methodology memo, a questions and answers document, and related materials. If you wish to cite information from these materials, please use the following:

The National Campaign to Prevent Teen Pregnancy. (2005). *What If: How Declines in Teen Births Have Improved Poverty and Child Well-Being in [enter state name here]*. Washington, DC: Author.

Step 1 – Estimating the Number of Additional Children That Would Have Been Born to Teen Mothers if Birth Rates Had Remained at 1991 Levels

¹ U.S. Congress, Ways and Means Committee-Democrats (2004). *Steep Decline in Teen Birth Rate Significantly Responsible for Reducing Child Poverty and Single-Parent Families*. Washington, DC

² National Campaign to Prevent Teen Pregnancy (2004). *What If: How Declines in Teen Births Have Reduced Poverty and Increased Child Well-Being*. Washington, DC: National Campaign to Prevent Teen Pregnancy

In this step, we applied birth rates from the peak year of 1991 to population counts from 1992 to 2002 to get the number of children who would have been born to teens if birth rates had not fallen. This number was compared to the actual number of births to teens for each year between 1992 and 2002 to get the cumulative number of additional children who would have been born to teenagers if teen birth rates had remained at 1991 levels.

The actual annual number of teen births for each year and birth rates for 1991 were generated based on the National Vital Statistics system from the National Center for Health Statistics. Teen population figures for each year were generated based on data from the Census Bureau.

The calculation was done for each state and the District of Columbia. Calculations were done separately for five mutually-exclusive racial/ethnic groups: Hispanic, non-Hispanic White, non-Hispanic Black, non-Hispanic Asian/Pacific Islander, and non-Hispanic Native American. Hispanic ethnicity and race are collected via separate questions, so within each racial group are individuals indicating they are Hispanic. For our purposes, all individuals who identify as Hispanic – regardless of race – are included in the Hispanic group. For states where the teen population was too small for a given racial/ethnic group to generate a teen birth rate for 1991, we used the national teen birth rate for that population.

However, on the data table posted at www.teenpregnancy.org/whycare/whatif.asp we opted only to show racial/ethnic breakouts for the number of additional children that would have been born to teens for populations where we had actual teen birth rate data rather than national estimates. As a result, the total of additional births includes groups not shown separately.

In some cases, this calculation resulted in a negative number for a particular racial/ethnic group; in other words, there were actually *more* births to teens by 2002 in a state for that group than there would have been if teen birth rates stayed at their 1991 level. This occurred most often with Hispanics, where the teen birth rate increased over the 1991-2002 period in a number of states, compared with decreasing birth rates for other populations. This also occurred in some instances where we used the national rate in lieu of state specific rates for small populations (as explained above). In addition, changes over time have been inconsistent for many states, particularly for smaller population groups. An overall decrease between 1991 and 2002 sometimes masks periods of time when rates were increasing, or vice versa; these inconsistencies can have an effect on the calculation. For example, birth rates for Hispanic teens in Colorado were below the 1991 rate for much of the time period studied here, so that overall fewer children were born to Hispanic teens, but rates increased in the last few years so that overall, between 1991 and 2002 the Hispanic teen birth rate in Colorado increased.

We then summed the numbers for the racial/ethnic group breakouts to get the total number of children that would have been born to teens that is shown on the state fact sheets.

While the National Center for Health Statistics has released preliminary national teen birth rates for 2003, we used 2002 teen birth rates for this analysis because 1) it is the most

recent year for which state-specific birth data are available and 2) the Joint Economic Committee's national estimates were based on 2002 data which were the most recent available at the time their analysis was done.

The total number of additional children who would have been born to teen mothers between 1991 and 2002 is included on the state fact sheet under "Key Findings" and "Actual Numbers" and in Table 2. The figures for specific ethnic/racial groups are included in Table 2.

Step 2 – Estimating the Number of Additional Young Children Who Would be Living In Poverty and the Number Who Would be Living with Single Mothers if Teen Birth Rates Had Remained at 1991 Levels

For this step, we focused on "young children" (defined as children under age 6 in 2002). We looked at a subset of the additional births to teen mothers that would have occurred if birth rates had remained at 1991 levels, specifically the group of children born in the years 1997-2002. Young children accounted for approximately 80 percent of the total number of children who would have been born to teen mothers.

In order to calculate the number of additional young children who would have been living in poverty and with a single mother in 2002 if teen birth rates had remained at 1991 levels, we first adjusted the number of additional teen births downward by about 2%, in order to remove children who would no longer be living by 2002. This adjustment factor reflects information from the June 1995 Current Population Survey (CPS) fertility supplement, which found 98 percent of the number of vital statistics births to teens in that year, and also found that 2 percent of children under age 6 who were born to teens were deceased at the time of the survey.

Next, we calculated the proportion of children born to teen mothers in 1997-2002 currently living in poverty and currently living with a single mother, by state and race/ethnicity, using data from the 2002 American Community Survey (ACS). Children were counted as having been born to a teen mother if their age at the survey, when subtracted from their mothers' age, equals less than 21. An implication of this methodology, however, is that we should only use the poverty rate and living arrangements for young children of teen mothers to children who were actually living with their biological mothers at the time of the ACS survey. According to the 1995 CPS survey, only 87 percent of children born to teen mothers and aged 5 and younger were actually living with their mothers; 2 percent were deceased, 1 percent were institutionalized, and the remaining 10 percent lived with others, such as their grandparents or their biological fathers.

Therefore, the poverty level of young children both to teen mothers was applied to 87 percent of the additional births in each state. For the remaining 11 percent (which factors out 2 percent for deceased children), we assigned the poverty rate for all young children. This is a conservative approach since it is likely that the poverty rate for children born to teen mothers who end up in other living arrangements, is likely still higher than that for all children. To

calculate the proportion living with a single mother, none of the remaining 11 percent were counted as living with a single mother since, based on the 1995 CPS survey, they were in other living arrangements.

The number of additional young children who would be living in poverty or with a single mother are reflected on the state fact sheet under “Actual Numbers” and in Tables 3 and 4.

Step 3 – Estimating the Impact of the Additional Teen Births on the Poverty Rate for Young Children and the Proportion of Young Children Living in Single Mother Households.

From the ACS, we calculated the total number of children and the percent of all young children (under age 6) living in poverty and with a single mother in a state. Next, we added in the hypothetical additional children of teen mothers living in poverty and with a single mother to the totals. From there we calculated what the poverty rate for all young children and the proportion of all young children living with a single mother would have been with these children included, and compared the percentages to the actual percentages.

The impacts on the poverty rate and share of children living with a single mother are included in the state fact sheets under “Key Findings”.

Step 4 – Calculating the Percentage Change in the Number of Young Children Living in Poverty and with a Single Parent, and Ranking States

We calculated the percentage by which the overall number of young children in poverty and living with a single parent (developed in Step 2) would have increased with the additional teen births. We then ranked states according to the percent changes, with the state showing the largest percent change ranked #1 (in other words, where there would have been the biggest percent change in the number of children living in poverty or with a single mother if teen birth rates had not declined). Percent changes were rounded to one decimal point, with rankings based on these rounded figures. States with the same percent improvement were ranked as ties.

The percent changes are included in the State Fact Sheets under “Key Findings” and on Tables 3 and 4. The state rankings are included in Tables 3 and 4.