

THE RIGHT START FOR NEVADA'S NEWBORNS

Issue #2

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Nevada KIDS COUNT collects, analyzes, and distributes the best available data measuring the educational, social, economic, and physical well-being of children and youth in Nevada. Its major vehicle for the dissemination of data is the *Nevada KIDS COUNT Data Book*. The first *Data Book*, published in 1996, highlighted 1995 data on several child well-being indicators. The most current *Data Book*, released in March 2003, highlighted mostly 2001 data on many of the same indicators reported in the first *Data Book*.

This issue brief examines maternal and infant health indicators from the first and most current *Data Books*, thereby providing trend data on important indicators which affect the well-being of Nevada children. Specifically, it provides data from birth certificates released by the Nevada Department of Human Resources, and discussion on trends for the following indicators:

- ❖ teen births
- ❖ teen births to mothers with low educational attainment
- ❖ births to unmarried teen mothers
- ❖ repeat teen births
- ❖ late or no prenatal care
- ❖ smoking during pregnancy
- ❖ low-birthweight (LBW) births to mothers 17 and under.

Maternal and infant health indicators were chosen because the current data portray Nevada in an unpleasant light. For example, between 1999 and 2001, the average teen birth rate in Nevada was 33.2 per 1,000 females ages 15 to 17. The Annie E. Casey Foundation in its *2002 KIDS COUNT Data Book* ranked Nevada 41st in the nation on teen births in 1999. Nevada also ranked poorly on prenatal care. According to the Department of Health and Human Services, in 2001, Nevada had the second highest percentage (7.4 percent) in the nation of mothers with late (beginning in the third trimester) or no prenatal care (DHHS, 2002).

Furthermore, it is important to track maternal and infant health indicators “because they are all related in some way to the life prospects of a newborn” (Wertheimer et al., 2002). Or, as Dr. William O’Hare of the Annie E. Casey Foundation phrases it, “The conditions at the time of a child’s birth are often an indicator of how that child will fare later in life” (“US Makes Uneven Progress,” 2002).

This issue brief answers the question: Did Nevada improve on maternal and infant health indicators from 1995 to 2001? Specifically, did the teen birth rate and the percent of low-birthweight babies decline, and did the percent of mothers receiving prenatal care increase? Data on the maternal and health indicators are presented for the

state of Nevada and, in some cases, for Clark County, Washoe County, and Rest of State. (The rural counties were combined due to their small populations and designated Rest of State. This geography represents 13.5 percent of the state population. The urban areas of Clark and Washoe counties represent 69.9 and 16.6 percents, respectively, of the state population.)

Teen Births

Pregnancy can create risks for young teens. Research shows that teen mothers are less likely to finish high school (Maynard, 1996). The youngest teen mothers, less than 15 years of age, are more likely to deliver a LBW baby than older teens (DHHS, 2002).

According to the Department of Health and Human Services, the U.S. teen birth rate fell from 26.9 births per 1,000 mothers ages 15 to 17 in 2000 to 24.7 in 2001, an 8 percent decrease (DHHS, 2003). This one-year decrease is indicative of almost a decade-long decrease in teen births. The teen birth rate decreased 34 percent from 1990 to 2001.

The decrease in the teen birth rate has been attributed to several factors, including the increased use of condoms during first

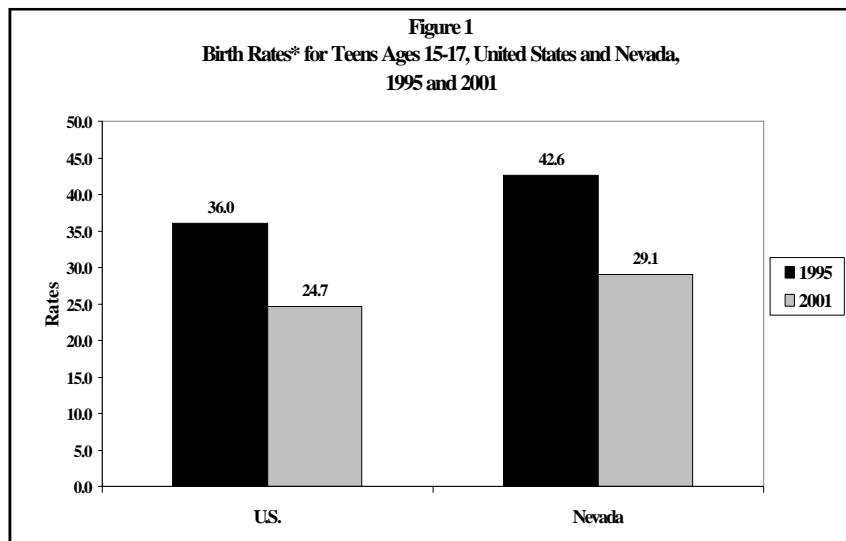
Table 1
Trends in Maternal and Infant Health, Nevada Residents: 1995 and 2001

| Indicator | 1995 Percent or Rate | 2001 Percent or Rate |
|------------------------------------|----------------------|----------------------|
| Births to mothers (ages 15-17) (%) | 4.9% | 3.9% |
| Teen birth rate* | 42.6 | 29.1 |
| Clark County | 45.2 | 30.4 |
| Washoe County | 39.9 | 29.2 |
| Rest of State | 36.0 | 22.6 |
| Unmarried teen birth rate* | 31.8 | 22.4 |
| Clark County | 34.9 | 23.3 |
| Washoe County | 30.9 | 24.5 |
| Rest of State | 21.6 | 16.1 |
| Marital status (%) | | |
| Married | 34.6% | 13.8% |
| Unmarried | 53.9% | 77.1% |
| Unknown | 11.5% | 9.1% |
| Repeat births to teens (%) | 11.6% | 12.0% |
| Less than 12th grade education (%) | 91.2% | 87.4% |
| Late or no prenatal care (%) | 43.0% | 44.4% |
| Smoked during pregnancy (%) | 14.3% | 9.7% |
| Low birthweight (%) | 9.8% | 9.1% |

*CBER calculations from Nevada Department of Human Resources data.

Note: Percentages do not take into account other unknowns unless otherwise indicated.

Source: Nevada Department of Human Resources, Health Division, Bureau of Health Planning and Statistics.



*Live births per 1,000 teens.

Source: "Trends in Pregnancies and Pregnancy Rates by Outcome: Estimates for the United States, 1976-1996," "Revised Birth and Fertility Rates for the United States, 2000 and 2001," CBER calculations from Nevada Department of Human Resources data, Health Division, Bureau of Health Planning and Statistics.

intercourse; the use of new long-acting contraceptives such as injectables which have low failure rates; and change in attitudes towards premarital sex (The Alan Guttmacher Institute, 1999).

Table 2
Frequency Distribution of Births to Mothers Ages 15-17 by Race/Ethnicity, Nevada: 1995 and 2001

| Race/Ethnicity | 1995 % | 2001 % |
|------------------------|--------------|--------------|
| Asian/Pacific Islander | 2.0 | 3.0 |
| Black/African American | 16.0 | 15.2 |
| Hispanic | 32.7 | 46.8 |
| Native American | 1.8 | 1.9 |
| White | 46.9 | 31.6 |
| Other/Unknown | 0.6 | 1.5 |
| TOTAL | 100.0 | 100.0 |

Source: Nevada Department of Human Resources, Health Division, Bureau of Health Planning and Statistics, 1995 and 2001.

Table 3
Teen Birth Rates in Nevada by Race/Ethnicity: 1995 and 2001

| Race/Ethnicity | 1995 | | 2001 | |
|--------------------------|--------------|-------------|--------------|-------------|
| | # Births | Rate | # Births | Rate |
| Asian/Pacific Islander | 24 | 15.2 | 36 | 16.3 |
| Black (African American) | 196 | 72.3 | 184 | 49.9 |
| Hispanic | 402 | 60.6 | 569 | 50.3 |
| Native American | 22 | 40.4 | 23 | 32.2 |
| White | 577 | 28.2 | 384 | 16.1 |
| Other | 7 | -- | 18 | -- |
| TOTAL | 1,228 | 42.6 | 1,214 | 29.1 |

*Live births per 1,000 teens.

Source: CBER calculations from Nevada Department of Human Resources, Health Division, Bureau of Health Planning and Statistics.

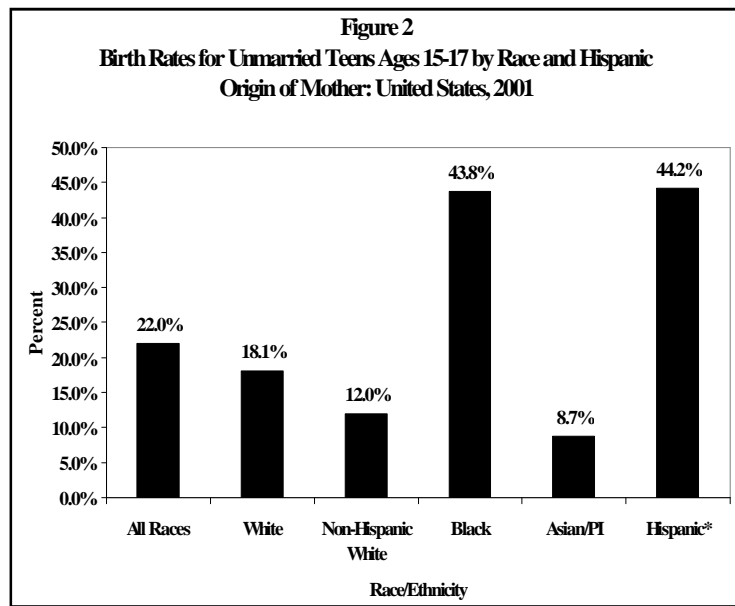
Table 4
Frequency Distribution of Births to Mothers Less Than 17 Years of Age by Region, Nevada: 1995 and 2001

| Total births (<17 years) | 1995 % | 2001 % |
|--------------------------|--------------|--------------|
| Clark County | 69.8 | 73.1 |
| Washoe County | 15.8 | 15.7 |
| Rest of State | 14.4 | 11.2 |
| TOTAL | 100.0 | 100.0 |

Source: Nevada Department of Human Resources, Health Division, Bureau of Health Planning and Statistics, 1995 and 2001.

Trend Data for Nevada

- ❖ The percent of teen births dropped from 4.9 in 1995 to 3.9 in 2001. See Table 1.
- ❖ Similar to the national trend in teen birth rates, Nevada's birth rate for teens ages 15-17 decreased by about 32 percent, from 42.6 in 1995 to 29.1 in 2001. The U.S. teen birth rate decreased by about 31 percent.
- ❖ Hispanics saw a significant increase in the percentage of births to mothers ages 15-17 from 1995 to 2001, from 32.7 to 46.8 percent. See Table 2. This increase is not surprising considering the Hispanic female population ages 15-17 in Nevada, according to the state demographer, jumped from 6,632 to 11,292, a 41.3 percent increase over that time period (Hardcastle, 2003). More importantly, the Hispanic birth rate declined from 60.6 to 50.3. The rates dropped for all racial/ethnic groups, with the exception of Asians/Pacific Islanders. See Table 3.
- ❖ Clark County saw an increase in the percentage of births to mothers less than 17 years of age; whereas Washoe County and the Rest of State experienced a decrease. See Table 4. Considering Clark County's population increased from 1,040,688 in 1995 to 1,498,274 in 2002 (a 31 percent increase) this is not surprising (*Las Vegas Perspective*, 1996, 2002).



*Includes all persons of Hispanic origin of any race.

Source: Department of Health and Human Services, Centers for Disease Control and Prevention, 2003, "Revised Birth and Fertility Rates for the United States, 2000 and 2001," *National Vital Statistics Reports*.

Unmarried Teen Birth Rate

The Fragile Families and Child Wellbeing Study follows about 5,000 parents and their new births from 16 U.S. cities over a four-year period to obtain information on what the researchers label "fragile families" or unmarried parents and their children. The findings from interviews with the unwed mothers within 48 hours of giving birth are summarized in a baseline report. Some of the findings reveal that 51 percent of the parents live together, the majority live either below or just barely above the poverty line, 23 percent of the mothers smoked during their pregnancy, 10 percent of the mothers had LBW babies, and 77 percent of the mothers received prenatal care in the first trimester (McLanahan, 2003).

The U.S. unmarried teen birth rate for teens ages 15 to 17, similar to the teen birth rate, decreased 7.6 percent, from 29.6 in 1990 to 22.0 in 2001 (DHHS, 2003). Contrary to public perception, the birth rate for unmarried women was highest for ages 20 to 24 (71.2), not for teens (DHHS, 2003).

Hispanics had the highest U.S. unmarried teen birth rate (44.2), Asians or Pacific Islanders, the lowest (8.7) (DHHS, 2003). Remarkably, the unmarried birth rate for black teens fell from 78.8 in 1990 to 43.8 in 2001.

Trend Data for Nevada

- ❖ In 1995, the unmarried teen birth rate in Nevada was 31.8, in 2001 the rate decreased to 22.4.
- ❖ All three regions of the state experienced a decrease.

Births to Teens Already Mothers

As would be expected, repeat births are more likely among older teens than among younger teens. The 2002 Census data show that the rate of second-child births to 15- to 17-year-olds was 24.0, less than half that (57.2) of 18- to 19-year-olds (DHHS, 2003).

Repeat births to teens decreased over the past decade. In 1990, 37.5 percent of the births to teens ages 15-17 were second- and higher-order births. The percentage fell to 25.3 in 2001 (DHHS, 2002). A plausible explanation

for fewer repeat births was the increased use in contraceptives by young females (DHHS, *Trends in the Well-Being*, 2002).

Researchers found that teens who were already mothers were less likely to have another child if they “were enrolled in a gifted class prior to the first birth, did not drop out either prior to or after the first birth, lived with a parent or on their own with their baby, rather than with a boyfriend, husband or other adult; and if they managed to receive a high school diploma or GED” (Moore et al., 1998).

Trend Data for Nevada

❖ In 1995, 11.6 percent of teens ages 15-17 who gave birth were already mothers. By 2001, the percentage had increased slightly to 12.0.

Teen Smoking during Pregnancy

The Department of Health and Human Services reports that in 2001, 14.4 percent of teen mothers were smokers. More than three times as many white mothers smoked than black mothers (18.5 versus 5.4 percent) (DHHS, 2002).

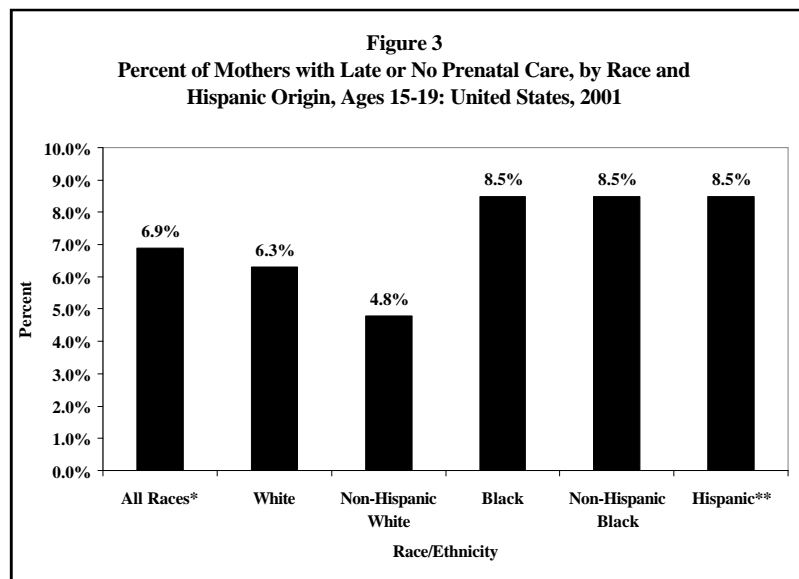
Tobacco smoking during pregnancy is known to have deleterious effects on pregnancy outcomes and on the health of a child (DHHS, 2002). Research shows that mothers who smoked during pregnancy were more likely to have children with more behavioral problems (Wakschlag et al., 1997), to have a low-birthweight baby (DHHS, 2001), and to have an ectopic pregnancy (Castles et al., 1999) than mothers who did not smoke.

Trend Data for Nevada

❖ In 1995, 14.3 percent of mothers ages 15-17 smoked during their pregnancy. This figure decreased to 9.7 percent in 2001.

Prenatal Care

Prenatal care increases the likelihood that mothers will have healthy babies. It is also helpful in reducing risk factors to the mother, such as anemia and poor weight gain (Lopez-Dawson, 2000). It is particularly important that teens receive prenatal care because the nutritional habits of teens may not be conducive to the nutritional needs of pregnancy (Lopez-Dawson, 2000).



*Includes all races other than white and black and origin not stated.

**Includes all persons of Hispanic origin of any race.

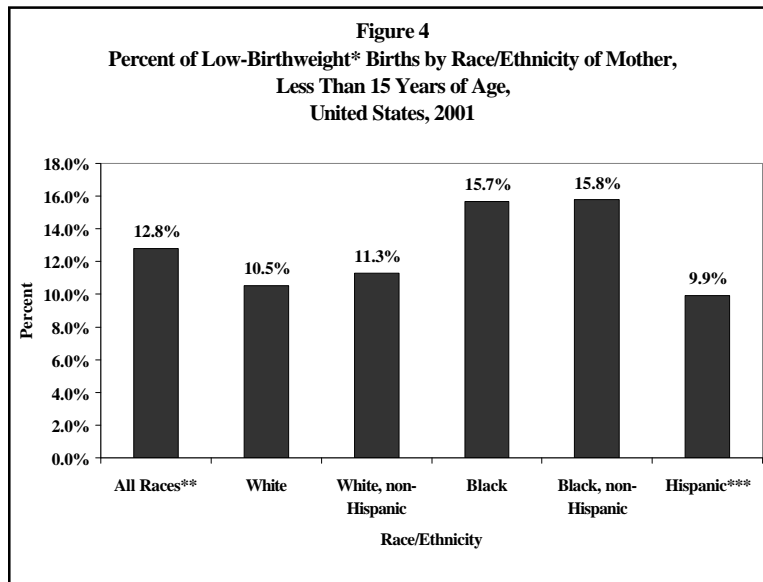
Source: Department of Health and Human Services, 2002, “Births: Final Data for 2001,” *National Vital Statistics Reports*, Vol. 51, No. 2, Table 33.

A study of 49 pregnant teens revealed that teens who sought prenatal care during their first trimester of pregnancy were more likely to have had adequate family support and more knowledge about pregnancy than teens who had delayed care (Lee and Grubbs, 1995).

According to the Department of Health and Human Services (2002), the District of

Columbia had the highest percentage of mothers with late (beginning in the third trimester) or no prenatal care in 2001, followed by Nevada (7.9 and 7.4 percents, respectively) (DHHS, 2002).

Figure 3 shows the percentage of mothers ages 15-19 with late or no prenatal care by race and Hispanic origin in the United States.

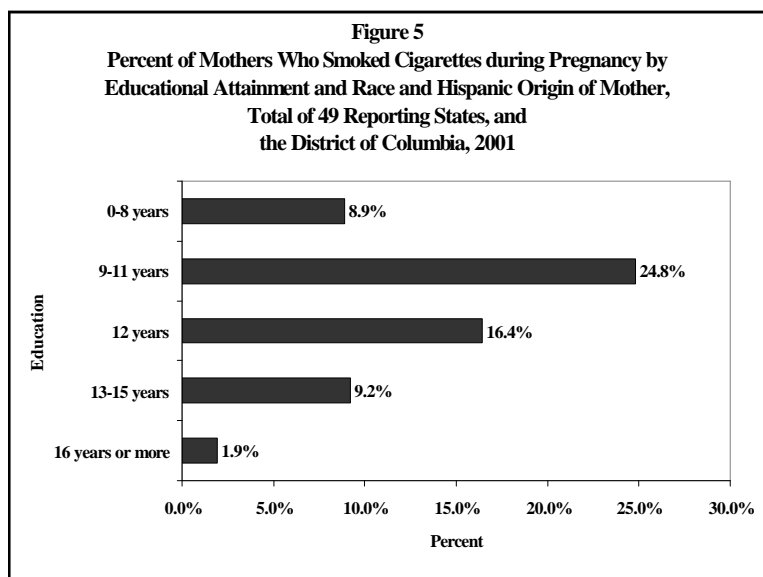


*Less than 2,500 grams.

**Includes races other than white and black and origin not stated.

***Includes all persons of Hispanic origin of any race.

Source: Department of Health and Human Services, 2002, "Births: Final Data for 2001," *National Vital Statistics Reports*, Vol. 51, No. 2, Table 45.



Note: Excludes data for California which did not require reporting of tobacco use during pregnancy.

Source: Department of Health and Human Services, 2002, "Births: Final Data for 2001," *National Vital Statistics Reports*, Vol. 51, No. 2.

Blacks, non-Hispanic blacks, and Hispanics were the most likely to have received late or no prenatal care.

Trend Data for Nevada

- ❖ In 1995, 35.6 percent of teen mothers ages 15-17 lacked adequate prenatal care, meaning no care or care beginning in the second or third trimester. The corresponding percentage for 2001 was 38.3, a slight increase from 1995.

Low-Birthweight (LBW) Babies

In 2001, the U.S. LBW rate was 7.7 percent, up slightly from 7.6 percent in 2000 (DHHS, et al., 2002). Two age groups were the most at risk for delivering a LBW baby: mothers less than 15 years of age and mothers 45 years of age and older (12.8 and 20.5 percents, respectively) (DHHS, 2002). Of the racial/ethnic groups, blacks had the highest LBW rate (see Figure 4 on p. 6).

Trend Data for Nevada

- ❖ In 1995, 9.8 percent of births to teens ages 15-17 were LBW, by 2001 the percentage had decreased to 9.1.
- ❖ The percentage of LBW babies to teens less than 17 years of age for Clark and Rest of State increased over the trend period, but decreased for Washoe County.

Births to Teen Mothers with Low-Educational Attainment

Mothers with 9 to 11 years of education are more than twice as likely to have an infant die than mothers with 16 years of education or more (rate: 9.5 versus 4.3) (DHHS, 2002). Smoking during pregnancy is also associated with a mother's educational attainment (DHHS, 2002). Mothers who completed 9 to 11 years of education were 12 times more likely to smoke as mothers who completed 16 or more years (see Figure 5 on p. 6).

Nevada Trends

- ❖ In 1995, 91.2 percent of teen mothers ages 15 to 17 had less than a 12-year education. In 2001, the percentage dropped to 87.4.

Discussion

Comparing data from the first *Nevada KIDS COUNT Data Book* and the most current *Data Book*, Nevada improved on five maternal and infant health indicators: the teen birth rate, the unmarried teen birth rate, the percent of teens who smoked during pregnancy, the percent of LBW babies to teens, and the percent of teen mothers with less than a 12th grade education. The percent of repeat births to teens and the percent of teens receiving late or no prenatal care remained about the same.

The effect of one indicator upon another was not investigated in this brief, however, based on the smoking literature, the assumption can be made that the decrease in smoking by teens during pregnancy may be a contributing factor to the decrease in LBW babies.

Nevada's Teen Pregnancy Prevention Action Plan states that Nevada's goal was to decrease the teen pregnancy rate to 35 per 1,000 by 2005 (Nevada State Health Division). It appears this goal has been surpassed. The Annie E. Casey Foundation, however, in its 2002 *KIDS COUNT Data Book* ranked Nevada 41st among the states on this indicator. It's clear that the issue of teen pregnancy in Nevada is not easily going to go away, regardless of the attention given to it. In a paper which reviewed research and interventions related to adolescent sexual behavior, pregnancy, and parenthood, the authors concluded that there is not a lack of opinions about or programs to reduce teen pregnancy. "What is in short supply is objective, empirical evidence identifying

programs and policies that reduce pregnancy and childbearing among teenagers, the components of the program or policy that are effective, and the populations among whom particular approaches have impacts” (Moore, et al., 2003, p. 8).

The maternal and infant indicators presented in this issue brief can have long-term effects on the mother and child (Kids Count in Michigan, 2000). Smoking during pregnancy, as previously mentioned, can cause LBW babies, which may result in future health problems in children, such as asthma. Teen mothers who do not marry are more likely to be poor than married mothers. The list of adverse outcomes resulting from early childbearing is long, and the estimated cost to society is high—\$15 billion (Maynard, 1997).

References

- 1) The Alan Guttmacher Institute, December 1999, “Why Has the Pregnancy Rate Among Sexually Experienced Teenagers Declined?” *Occasional Report No. 1.*, by Jacqueline E. Darroch and Susheela Singh, available online at: http://www.agi-usa.org/pubs/or_teens_preg_decline.pdf (accessed 4/24/03).
- 2) The Annie E. Casey Foundation, *The Right Start for America’s Newborns: A Decade of City and State Trends (1990-1999)*, Working Paper, by Richard Wertheimer, William O’Hare, Tara Croan, Justin Jager, Melissa Long, and Megan Reynolds.
- 3) Castles, A., E. K. Adams, C.L. Melvin, C. Kelsch, and M. L. Boulton, 1999, “Effects of Smoking during Pregnancy: Five Meta-analyses, *American Journal of Preventive Medicine*, 16(3):208-215.
- 4) Centers for Disease Control, “Tobacco Use and Reproductive Outcomes—Fact Sheet,” from *Woman and Smoking: A Report of the Surgeon General-2001*, available online at: http://www.cdc.gov/tobacco/sgr/sgr_forwomen/factsheet_outcomes.htm accessed 4/15/03.
- 5) Department of Health and Human Services, Centers for Disease Control and Prevention, December 18, 2002, “Births: Final Data for 2001,” *National Vital Statistics Reports*, by Joyce A. Martin, Brady E. Hamilton, Stephanie J. Ventura, Fay Menacker, Melissa M. Park, and Paul D. Sutton, 51(2), available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr51/nvsr51_02.pdf (accessed 4/21/03).
- 6) Department of Health and Human Services, Centers for Disease Control and Prevention, February 6, 2003. “Revised Birth and Fertility Rates for the United States, 2000 and 2001,” *National Vital Statistics Reports*, by Stephanie J. Ventura, Brady E. Hamilton, and Paul D. Sutton, 51(4), available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr51/nvsr51_04.pdf (accessed 4/21/03).
- 7) Department of Health and Human Services, 2001, *Women and Smoking: A Report of the Surgeon General*, Rockville, MD: U.S. Office of the Surgeon General, Washington, DC.
- 8) Department of Health and Human Services, Ja. 2000, Ventura, Stephanie J., William D. Mosher, Sally C. Curtin, Joyce C. Abma, and Stanley Henshaw, “Trends in Pregnancies and Pregnancy Rates by Outcome: Estimates for the United States, 1976-1996,” *Vital and Health Statistics*, National Center for Health Statistics, 21 (56), available online at: http://www.cdc.gov/nchs/data/series/sr_21/sr21_056.pdf (accessed 4/25/03).
- 9) Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2002, *Trends in the Well-Being of America’s Children & Youth 2002*, Westat.
- 10) Hardcastle, Jeff, state demographer, electronic correspondence, April 23, 24, 2003.
- 11) Kids Count in Michigan, 2000, *The Right Start in Michigan’s Largest Cities: The Status of Mothers and Babies in Michigan’s 28 Largest Cities*.
- 12) Lee, S. H. and L. M. Grubbs, 1995, “Pregnant Teenagers’ Reasons for Seeking or Delaying Prenatal Care, *Clinical Nursing Research*, 4(1):38-49.
- 13) Lopez-Dawson, Ana, June 2000, “Teen Pregnancy: Babies Having Babies,” *International Journal of Childbirth Education*, 08878625, 15(2), available online at: <http://web15.ejpn.net.com/citation.asp?b=1&..99+sm+KS+b+ss+SO+7578&cf=1&fr=11&m=15> (accessed 4/17/03).

14) Manlove, J., C. Mariner, and A. Romano, 1998, "Postponing Second Teen Births in the 1990s: Longitudinal Analyses of National Data," Washington, DC, Child Trends, Inc. cited in "Repeat Teen Births," by Kristin Anderson Moore, Jennifer Manlove, and Lauren Connon, Welfare Reform Academy, University of Maryland School of Public Affairs, Preventing Second Births to Teenage Mothers Conference, available online at: <<http://www.welfareacademy.org/conf/papers/moorepap.cfm>> (accessed 4/16/03).

15) Maynard, R.A., ed., (1997), "Kids Having Kids: Economic Costs and Social Consequences of Teen Pregnancy," Washington, D.C.: The Urban Institute.

16) McLanahan, Sara, Irwin Garfinkel, Nancy Reichman, Julien Teitler, Marcia Carlson, and Christina Norland Audigier, 2003, "The Fragile Families and Child Well Being Study: Baseline National Report," available online at: <http://crcw.princeton.edu/fragilefamilies/nationalreport.pdf> (accessed 4/23/03).

17) Metropolitan Research Association, *Las Vegas Perspective*, 1996, 2002.

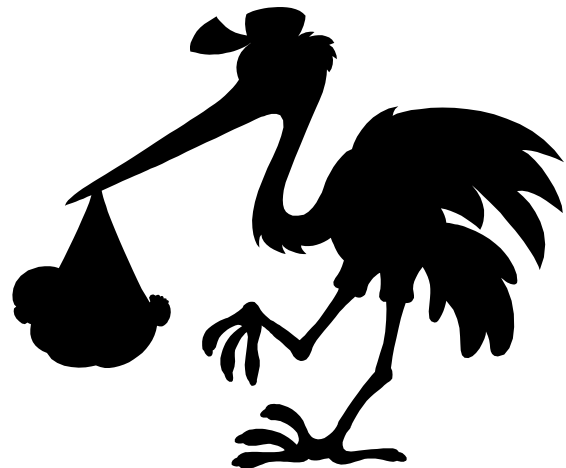
18) Moore, Kristin A., Brent C. Miller, Barbara W. Sugland, Donna Ruane Morrison, Dana A. Gleib, and Connie Blumenthal, "Beginning Too Soon: Adolescent Sexual Behavior, Pregnancy and Parenthood: A Review of Research and Interventions," available online at: <http://aspe.os.dhhs.gov/hsp/cyp/xsteesex.htm> (accessed 4/17/03).

19) Nevada State Health Division, Department of Human Resources, *Teen Pregnancy Prevention in Nevada Meeting the Challenge of the New Millennium: A Plan for Action: 2000-2005*.

20) Wakschlag, Lauren S., Benjamin B. Lahey, Rolf Loeber, Stephanie M. Green, Rachel A. Gordon, and Bennett L. Leventhal, 1997, "Smoking during Pregnancy Increases Conduct Disorders," *Archives General Psychiatry*, 54:670-676.

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