#### Comparing State Trends in U.S. Teen Birth Rates: 1981 - 2008

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### **Introduction & Background**

Unintended teenage pregnancy, abortion and childbearing remain significant problems in the United States (US). Although pregnancy and birth rates have declined markedly since 1957, the US still has one of the highest teen pregnancy rates of any western industrialized nation (72 per 1000 women ages 15-19 years in 2006) [1, 2], and most of these pregnancies (82%) are unintended [3]. The resulting teen childbearing is associated with adverse health and social outcomes for both teen mothers and their children [4, 5].

Several studies have examined recent trends in teen pregnancy and birth rates. For example, Ventura, Mathews and Hamilton (2001) analyzed trends in the average US teen birth rate from 1940 – 2000 and the percent decline in teen birth rates at the state level between 1990 and 2000 [6]. They found that state specific rates declined significantly among 15-19 year olds, most sharply among black teenagers, with a much slower rate of decline among Hispanics. Colen, Geronimus and Phipps (2006) also explored the decline in birth rates between 1990 and 1999 and found that among African American young women 15-24, but not among white women of the same age, decreases in state unemployment rates were significantly related to fertility decline [7]. In a similar study, Yang and Gaydos (2010) examined state teen birth rates and policy changes from 2000 to 2006 [8]. They found that state Medicaid family planning waivers were associated with lower teen birth rates for younger and older teens and white and black teens, and state policies favoring abstinence-only programs were associated with higher teen birth rates for both white and black teens and younger teens. Other recent studies have examined cross sectional associations between teen birth rates and racial/ ethnic composition, social factors (such as conservative religious attitudes and social capital), and government policy (such as abstinence education) [9-11].

However, while recent research on teen childbearing documents important trends and suggests that both demographic and social characteristics of states and state policies can have a strong relationship with teen pregnancies and births, they suffer from several limitations. First, they typically examine small number of years in either the 1990s or early 2000s, a period of significant decline in the rates of teen births. Second, many of these analyses of teen childbearing are cross-sectional and cannot disentangle the effects of demographic characteristics that remain relatively constant over time from the effects of state policies that may change more quickly over time. Others focus on only national trends or on trends in a limited number of states. Finally, among the limited number of studies that examine trends in all 50 states, few analyze state-level trends in teen births within racial/ethnic groups. Given the significant and persistent disparities between racial/groups in national teen birth rates [6], state-level analyses of teen birth rates by race/ethnicity are warranted.

Hence, this study seeks to address some of the limitations of previous analyses by examining trends in teen childbearing by race/ethnicity in all 50 states and the District of Columbia (DC) between 1981 and 2008. Expanding the period of analysis back to the 1980s will enable more critical and comprehensive comparisons between states in their rates of proportional change over time. In addition, as far as we are aware, no studies to date have analyzed patterns and correlations in race/ethnicity-specific state teen birth rates over this nearly 30-year period. In exploring state differences in trends over time in teen births, we anticipate that state variations are influenced by both national trends and by state health and social policies, such as sexuality education and access to contraception. Our initial work— in this paper—focuses on calculating and comparing these state rates by race and ethnicity over time.

#### Methods

#### Data Sources & Quality

*Birth Data:* All birth data come from the National Center for Health Statistics' (NCHS) National Vital Statistics System (NVSS), which provides annual, public-use files containing birth data from the standardized birth forms used in all 50 states and the District of Columbia. For years 1981- 2004, we used the complete files of birth micro-data available on the NVSS website [12]. Beginning in 2005, geographic identifiers were stripped from the full NVSS datasets available for download, so for 2005-2008, birth data was accessed via VitalStats, the online, interactive NVSS data tool [13]. Prior to 1985, the birth data provided by some states were based on a 50% sample of birth certificates; hence sample weights were used in these analyses. In addition, prior to 1993, data on Hispanic ethnicity were not uniformly collected on birth certificates in all states. In 1981, Hispanic birth data were available in 22 states; by 1989 this number had increased to 47 states and DC, with only New Hampshire, Oklahoma, and Louisiana missing Hispanic data. Thus, we examined trends both by race (i.e., white and black) and by race/ethnicity (Hispanic, non-Hispanic black and non-Hispanic white).

*Population Data:* Population data used in the rate calculations represent the most recently updated estimates available from the US Census Bureau. For 1981 – 1989, we used the intercensal Historical Annual Time Series Estimates by Age, Sex, Race, and Hispanic Origin [14]. For 1990 – 2008, we used the Vintage 2009 Bridged-Race Population Estimates developed via a collaboration between NCHS and the US Census Bureau [15]. These population estimates are intercensal for 1990 – 1999 and postcensal for years 2000 – 2008 [15].

*Abortion Data:* Data on the number of abortions were provided by the Guttmacher Institute [16], which since the 1970s has developed estimates of the number and characteristics of women obtaining abortions in the US. In future analyses, abortion data will be used to calculate pregnancy rates and to identify how changes in abortion have influenced changes in birth rates. Guttmacher derives abortion estimates using data from two sources: its own periodic survey of all identifiable abortion providers and data reported to the Center for Disease Control's (CDC) Abortion Surveillance System [17]. Unlike the collection and reporting of birth data, which is standardized across states, the reporting of abortion data to the CDC varies considerably [17, 18]. Not only do all states not require abortion reporting, but also, among those that do, there are variations in the types of providers that are required to report and the specific information they must provide. Thus, we selected the Guttmacher datasets for our analyses because they represent the most complete state-level data on teen abortions. However, even these data have significant limitations—they only available for selected years (1984, 1985, 1988, 1991, 1992, 1996, 1999, 2000, and 2005), and data on race and ethnicity are not available for teens in each state.

#### Analyses

Analyses of the birth data by state, age, race, and sex were conducted using Stata version 11.2. The birth totals, abortion totals, and population estimates were then imported into Excel 2010, which was used to perform all rate calculations. Annual total birth rates among 15 - 19 year-olds were calculated for the US and each state between 1981 and 2008. Between 1981 and 1984, when birth data in some states were based on a 50% sample of birth certificates, appropriate sample weights were applied in analyses.

In addition, we calculated both race-specific and race/ethnicity-specific birth rates among 15 – 19 year-olds for the US and each state between 1981 and 2008. Prior to 1993, the first year in which data on Hispanic ethnicity were collected on birth certificates in all 50 states and DC, rates among white non-Hispanic, black non-Hispanic, and Hispanic teens were calculated for every year in which Hispanic data were available in a particular state. This resulted in twenty-two states that have race/ethnicity-specific rates spanning the entire 1981 – 2008 time frame, including most states with large Hispanic populations, such as California, Texas, Florida, New York, New Mexico, and Arizona. For the years in which certain states did not collect information on Hispanic ethnicity in their birth data, we calculated race-specific rates for blacks and whites regardless of ethnicity. We also calculated race-specific rates in later years in order to calculate proportional changes in states that did not have earlier data on Hispanic ethnicity.

Birth rates for each year were then plotted in four different graphs for each state in order to compare trends over time in state teen birth rates to national trends: one for whites, one for blacks, another for Hispanics, and one for all racial/ethnic groups. In addition, trend lines for each state's total rate and race/ethnicity-specific rates were plotted on one graph per state in order to examine racial/ethnic disparities in rates and trends within states. Based on the patterns that emerged in these plots, we calculated rates of change for the US and each state for time periods in which there were significant increases or decreases in birth rates: 1986 – 1991, 1991 – 2005, and 1981 -2008. Proportional changes in race-specific rates were calculated for all states; changes in race/ethnicity-specific rates were calculated for all states that collected birth data on Hispanic ethnicity during these time frames.

Finally, in order to examine whether changes in the numbers of teen abortions over time might help explain changes over time in teen childbearing, in subsequent analyses we will calculate teen abortion rates for every year in which abortion data was available between 1981 and 2008: 1984, 1985, 1988, 1991, 1992, 1996, 1999, 2000, and 2005. We will then analyze proportional changes in abortion rates between 1985 - 1991, 1991 - 2005, and 1984 - 2005. Given that abortions taking place in a particular year most often affect births in the following year, we will compare the proportional changes in abortion rates in these periods to changes in birth rates between 1986 - 1992, 1992 - 2006, and 1985 - 2006. Because the data provided by

states on teen abortions varies considerably, state-level data is not available by either race/ethnicity or race in all 50 states for each of these time periods. Thus, our analyses of state teen abortion rates will be limited to the total rates for each state.

## Results

Several major patterns emerged in our analyses. First, consistent with previous findings [6], there was an overall decline in national rates of teen births between 1981 and 2008, even when controlling for race/ethnicity (Figure 1). However, the direction of trends varied within these years. In the early to mid 1980s, teen birth rates in the US were relatively stable; they then increased substantially across the nation in the late 1980s before decreasing steadily in the 1990s (Figure 1).

For the country as a whole and across all 50 states and DC, there were significant racial/ethnic disparities in teen birth rates, with both black and Hispanic rates being much higher than those of whites (Figure 1, Table 1). Changes over time in teen birth rates also varied by race and ethnicity. While the national teen birth rates of whites, blacks, and Hispanics all increased between 1986 and 1991 (Figure 1), the increases among blacks and Hispanics were much greater than the increases among whites. After 1991, declines for black teens were larger than declines for white or Hispanic teens (Figure 1).

Our results demonstrated that great variation exists among the states in two key dimensions: 1) *rates* of teen childbearing and 2) *proportional changes over time* in teen birth rates. For example, in 2008 the birth rate for Mississippi (65.9 births per 1000 15-19 year old women) was nearly 3.5 times larger than the birth rate for New Hampshire (19.0 per 1000 15-19 year old women) (Table 1). Considerable differences in state rates persisted even when controlling for race/ethnicity. For example, in 2008, the teen birth rate in Arkansas among white non-Hispanic teens (52.9 per 1000) was nearly 6.5 times the rate among white non-Hispanic teens in New Jersey (8.2 per 1000) (Table 1).

The black and white birth rates of many states closely paralleled the national rates. That is, when the national rates increased, the individual state rates also increased; when the national rates decreased, the individual states decreased – all by roughly the same proportional amount. However, some states diverged from national trends. For example, the teen birth rate in Utah declined by 2% between 1986 and 1991 (Table 2), in sharp contrast to the increases, many of them dramatic, experienced during this period in every other state in the country. Similarly, between 1981 and 2008, the birth rates among white teens declined in every state except for Mississippi, where there was a 2% increase (Table 2). Furthermore, Missouri, Minnesota, Michigan, Ohio, and DC all experienced dramatic spikes in their black teen birth rates in the late 1980s that were much larger than the national increases in black rates during these years (Table 2).

Even when states mirrored national trends, they varied, often considerably, from one another in their proportional changes in teen birth rates over time. For example, between 1981 and 2008, rates of teen childbearing declined 47% in Utah, but only 12% in Nevada (Table 2).

These variations between states were evident even within narrower time frames and when controlling for race/ethnicity. For example, between 1986 and 1991, when birth rates were increasing across the US, rates among black teens increased by 47% in Michigan and 40% in Massachusetts, but only by 15% in New York and 11% in Connecticut (Table 2). Similarly, among white teens, birth rates in Iowa increased by 28%, which was the fourth highest increase among whites during this period. Yet in neighboring Wisconsin, white teens only experienced a 7% increase, which was among the lowest in the nation (Table 2).

Furthermore, there were sizable disparities *within* states among racial and ethnic groups in the proportional changes in their birth rates. For example, New Mexico experienced a 52% increase in its non-Hispanic black teen birth rate between 1986 and 1991, which was the 5<sup>th</sup> highest increase in the nation; however, among non-Hispanic whites during the same period, the state had only a 5% percent increase, which was the 5<sup>th</sup> lowest of all states. During these same years, six other states and DC had disparities between whites and blacks of more than 20 percentage points in their proportional increases in teen birth rates (Table 2).

Another pattern that emerged in our findings was that many of the states that experienced the most significant declines in their birth rates between 1991 and 2005 were the same states that experienced the greatest increases in the late 1980s. In fact, six of the ten areas that had the greatest proportional increases in their teen birth rates between 1986 and 1991—California, Michigan, Illinois, Massachusetts, Connecticut, and DC—also were among the ten areas with the greatest proportional decreases in their rates between 1991 and 2005 (Table 2). Continuing the trend reversal in the 1990s, while the teen birth rates among both blacks and whites decreased, the proportional decreases were greater among blacks in all but eight states.

Finally, largely because of the reversal in trends in state teen birth rates between the late 1980s and the 1990s, the apparent success of states in reducing their rates of teen childbearing over time varied considerably depending on the baseline year selected for trend analysis. For example, in 1991, Texas and California, two large states with significant minority populations and sizeable and rapidly growing Hispanic populations, both had sizeable rates of teen fertility (78.4 in Texas and 73.8 in California). Between 1991 and 2008, the birth rate declined by 46% in California but only by 19% in Texas. That is, California was much more successful in reducing its teen birth rate than was Texas during this period. However, between 1986 and 1991, California's teen birth increased by 39%, while the rate in Texas only increased by 13%. Thus, California fared far *worse* than Texas during these years. Overall, between 1981 and 2008, California's teen birth rate reduced by 28%, which, while still better than the 16% decline in Texas, makes its relative success appear much smaller.

#### Discussion

The results of this analysis demonstrate the importance of examining trends in teen births in a longer time frame. Because 1991 was a year in which teen birth rates peaked in most states, previous studies that calculated rates of proportional decline beginning in the early 1990s may have made both trends within states and variations among them appear more dramatic than if an earlier baseline year had been selected. In fact, especially among blacks, many of the states that were most successful in in reducing their rates of teen childbearing in the1990s—such as

California, Michigan, Illinois, Massachusetts, and Connecticut—were among those that experienced the most dramatic increases their birth rates in the late 1980s. This is puzzling and warrants further study on how state characteristics, policies, or other state-level phenomena might be associated with these fluctuations in teen birth rates over time.

During the last 50 years, the federal government and all state governments have implemented policies and programs to reduce unintended pregnancy, use of abortion and childbearing. State policies towards teen pregnancy prevention vary widely, with states such as California providing comprehensive sexuality education and publicly-supported reproductive health services, while states such as Texas have embraced abstinence education and moved to implement parental consent requirements for reproductive health care for minor adolescents [9]. While several previous studies have explored the impact of such factors on teen pregnancy and childbearing [10, 11, 19], the vast majority of these analyses have been both recent and crosssectional, which, as this study demonstrates, provides only a limited understanding of variation over time among states. Thus, further analyses of the variations in proportional changes in teen birth rates between 1981 and 2008 are needed. In the next steps of our investigation, we plan to analyze the statistical significance of the changes in state rates and whether there were regional patterns in where significant changes occurred. Better understanding of the distribution, significance, and scope of these changes will aid us in subsequent explorations of the state-level factors that may have caused these patterns.

Our analyses also suggest that race/ethnicity is a significant factor shaping both variations in state teen birth rates and proportional changes in those rates over time. Importantly, between 1981 and 2008, rates among black teens declined most dramatically, while changes in rates among Hispanic teen rates were often modest. However, the lack of Hispanic birth data in 1980s in many states combined with rapidly growing Hispanic populations in the 1990s and 2000s limit both the analyses of trends in teen births among Hispanics and the conclusions that can be drawn from these analyses. Future research on trends by race/ethnicity needs to examine heterogeneity among states in Hispanic ethnicity, including countries of origin, recent immigration, and changes in socioeconomic status among blacks and whites. We intend to conduct further analyses of the states that did and did not exhibit these racial disparities in proportional rates of change in order to determine if there are associations between these states in terms of geography, state characteristics, or state policies.

Our preliminary examination of abortion rates suggests that some proportion of the increase in teen birth rates between 1986 and 1991 may have resulted from a decline in abortion rates. Most of the states with the largest decreases in teen abortions between 1985 and 1991 were not among the states with the largest increases in teen births between 1986 and 1992, but patterns varied by state. In future research we intend to examine teen pregnancy rates and correlations between state teen birth and abortion rates; however, analyses of the impact of abortion will be constrained by the limited availability of state- and race/ethnicity-specific data on teen abortions.

In sum, examining state trends in teen births in a longer time frame challenges previous thinking about mechanisms by which certain states have been more or less successful in decreasing teen childbearing. Further examining these trends by race/ethnicity also provides

important clues to identifying these mechanisms. These preliminary analyses demonstrate that there are several patterns in state teen birth rates that we do not fully understand. Hence, we plan to further investigate these important variations because understanding them may help us reduce rates of teen childbearing in the future.

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# US Teen Birth Rates, by Race/Ethnicity: 1981-2008



#### Table 1: U.S. Teen Birth Rates by Race & Race/Ethnicity for Selected Years

		1981					1986						1991					
	White NH	Black NH	Hispanic	White	Black	Total	White NH	Black NH	Hispanic	White	Black	Total	White NH	Black NH	Hispanic	White	Black	Total
Alabama				64.9	50.5	96.2				47.4	94.1	61.9	56.7	109.3	47.5	56.6	109.0	73.6
Alaska				65.4	58.2	86.0				42.1	71.4	52.9	51.6	89.2	82.6	53.3	87.0	66.0
Arizona	49.8	114.1	99.8	66.6	61.3	111.6	48.3	113.0	101.6	61.9	107.4	66.7	53.4	136.6	125.8	76.4	124.7	79.7
Arkansas	58.3	107.3	33.4	71.5	60.0	114.2	57.8	117.6	40.3	58.3	117.5	70.5	66.8	125.5	69.1	66.8	125.2	79.5
California	40.2	83.8	83.6	54.5	52.7	85.5	35.4	92.2	81.4	52.5	87.5	53.1	42.9	104.7	118.9	78.4	97.1	73.8
Colorado	43.7	82.2	88.4	52.4	51.3	79.6	36.7	91.8	83.2	44.7	88.8	46.8	40.3	126.7	117.9	55.2	121.8	58.3
Connecticut				30.5	24.4	86.7				24.3	88.2	31.0	20.3	103.0	129.2	32.7	97.7	40.1
Delaware				49.5	34.5	110.0				34.9	112.1	50.0	36.9	137.6	114.9	40.1	135.2	60.4
District of Columbia				67.9	13.9	80.7	3.9	82.9	89.0	13.6	85.8	68.7	6.0	150.8	106.0	8.2	148.6	109.6
Florida	43.0	118.6	40.2	57.3	42.9	117.2	44.1	120.4	40.4	43.8	118.3	58.1	50.6	132.5	58.3	52.1	129.7	67.9
Georgia	50.7	100.7	30.3	67.3	51.4	100.1	52.6	97.2	30.5	52.6	96.6	66.5	55.1	117.7	81.0	56.0	116.9	76.0
Hawaii	37.0	143.8	115.7	50.9	38.5	142.9	33.6	92.3	88.3	35.2	90.0	47.1	37.7	72.2	114.2	40.0	73.4	59.2
Idaho				58.3	58.4	58.3				43.3	36.4	44.8	48.9	59.3	122.2	53.8	57.7	53.9
Illinois	35.1	115.7	83.2	53.5	40.0	115.3	29.8	116.4	71.9	35.0	115.7	49.6	36.7	147.9	100.7	45.5	146.5	64.5
Indiana	47.8	101.9	54.7	53.5	48.7	101.8	43.7	105.7	48.4	44.6	105.5	50.0	53.0	129.5	63.1	53.3	128.4	60.4
lowa				40.9	39.5	108.6				31.4	100.9	33.0	39.4	135.5	81.2	40.1	135.2	42.5
Kansas	49.8	108.5	85.0	57.7	53.4	110.3	42.8	114.5	62.2	46.2	113.3	51.2	46.9	133.5	96.4	49.7	130.9	55.4
Kentucky				67.2	64.4	99.1				58.2	96.9	61.1	65.0	115.1	26.9	64.8	114.6	68.8
Louisiana				74.2	57.1	104.7				48.0	104.2	68.0	53.0	116.4	24.8	52.1	115.7	76.0
Maine	43.4	41.4	44.9	45.3	45.0	53.3	40.9	37.7	28.1	41.7	35.5	41.7	43.5	38.7	41.4	43.4	36.8	43.5
Maryland				43.9	32.6	74.3				32.2	80.5	45.7	36.2	97.8	42.8	36.4	96.5	54.1
Massachusetts				27.9	25.4	63.8				25.3	67.9	28.7	25.2	97.2	129.0	33.0	94.9	37.5
Michigan				43.1	36.2	83.6				35.2	90.0	44.0	41.0	133.2	89.3	42.9	131.9	58.9
Minnesota				35.2	32.0	100.8				25.3	116.2	29.8	29.1	163.3	101.2	30.5	160.5	37.3
Mississippi	51.2	114.1	21.3	81.0	54.3	116.0	47.5	103.8	10.0	48.2	103.4	72.2	59.3	116.7	23.5	59.1	116.3	85.3
Missouri				55.4	47.6	109.1	_			43.7	115.4	53.0	51.3	148.7	65.4	51.5	148.0	64.4
Montana				50.2	43.0	71.4				36.1	27.4	42.3	38.5	75.8	77.4	39.4	68.5	46.8
Nebraska	38.2	113.9	83.4	44.2	40.7	112.4	30.6	114.7	70.9	32.8	113.9	36.9	34.6	135.9	100.4	36.9	134.3	42.4
Nevada	50.4	124.1	70.4	59.5	53.1	122.5	47.7	137.1	48.3	48.3	134.0	56.2	60.8	141.2	107.6	69.2	136.7	74.5
New Hampshire				33.4	33.4	47.6				30.7	34.4	30.7				33.5	23.5	33.1
New Jersey	17.6	87.2	66.5	33.1	22.7	86.4	16.8	92.6	66.5	23.3	89.6	34.4	18.3	106.4	81.9	28.7	101.1	41.3
New Mexico	63.3	93.8	71.7	71.5	64.2	89.2	48.7	70.2	84.5	67.3	64.6	70.5	51.2	107.0	99.6	77.8	98.5	79.5
New York	21.5	72.5	66.1	35.2	27.6	70.5	20.6	76.3	66.6	28.5	70.1	36.2	25.9	87.7	85.4	38.7	77.1	45.5
North Carolina				56.1	43.6	86.7				43.8	86.5	55.8	52.5	110.4	88.6	53.3	109.8	70.0
North Dakota	36.0	123.5	108.9	41.9	38.0	120.5	27.3	51.5	61.9	28.8	49.0	34.7	28.4	60.3	48.0	28.6	56.5	35.5
Ohio	43.6	93.6	55.4	50.4	44.7	93.1	40.7	101.6	61.3	41.9	101.3	49.0	49.0	136.3	81.8	49.7	135.2	60.5
Oklahoma				77.6	71.6	115.4				58.5	104.7	64.6	61.7	129.8	90.3	63.4	128.4	72.1
Oregon				51.2	50.0	96.3				42.7	83.7	43.3	49.4	117.5	125.0	54.1	112.4	54.8
Pennsylvania				40.3	34.3	89.6				31.8	105.1	39.6	33.0	135.2	125.6	36.0	132.2	46.7
Rhode Island				33.7	30.1	94.3				31.7	89.8	35.1	33.1	146.3	106.6	38.8	118.8	44.7
South Carolina				64.3	47.9	91.9				44.7	89.4	60.9	54.3	103.2	60.0	54.5	102.8	72.5
South Dakota				50.5	42.5	166.7				31.6	158.5	42.9	35.4	57.7	49.2	35.5	57.7	47.6
Tennessee				62.8	54.1	97.6	49.4	101.6	12.2	50.1	101.0	59.8	62.0	127.9	42.7	61.8	127.3	74.8
Texas	56.9	106.7	99.9	75.2	70.6	105.4	48.8	103.8	95.8	65.4	101.5	69.7	49.7	118.9	108.5	74.0	115.5	78.4
Utah	62.9	73.1	113.4	65.6	65.6	73.9	45.8	57.9	96.1	48.5	58.1	49.1	44.2	48.2	101.3	47.5	50.7	48.0
Vermont	02.0		110.1	41.4	41.0	25.0	15.0	57.5	50.1	34.8	0.0	34.4	39.7	35.1	101.5	39.4	32.5	39.2
Virginia				41.4	37.8	77.1				34.8	83.7	45.3	40.7	98.5	60.4	41.5	97.5	53.4
Washington				47.0	45.3	81.5				41.9	88.7	44.3	46.8	98.9	121.3	52.5	96.1	53.4
West Virginia				63.0	63.2	62.7				52.5	62.1	52.6	57.6	82.6	25.6	57.4	82.8	58.0
Wisconsin				39.4	34.4	123.1				29.6	149.5	37.7	30.0	180.8	25.6 91.7	31.7	82.8 179.9	43.7
Wyoming	74.0	72.7	116.5	59.4 79.4	78.3	71.0	46.4	82.2	68.1	48.3	81.8	49.6	49.9	59.3	77.4	52.0	64.5	43.7 54.3
Total US	40.5	98.2	81.6	52.2	44.7	94.4	37.5	99.7	79.5	48.3	95.6	49.6	49.9	118.2	104.6	52.0	114.8	61.8

#### Table 1 (cont.): U.S. Teen Birth Rates by Race & Race/Ethnicity for Selected Years

			20	05			1		20	08		
	White NH	Black NH	Hispanic	White	Black	Total	White NH	Black NH	Hispanic	White	Black	Total
Alabama	39.0	61.8	162.9	43.7	61.5	49.4	41.8	65.5	137.7	46.6	65.2	52.6
Alaska	26.7	39.9	73.2	27.9	39.5	40.2	28.9	35.1	47.9	29.9	37.9	45.4
Arizona	28.8	60.8	102.9	59.7	59.1	60.0	29.7	58.0	88.0	56.4	54.9	56.5
Arkansas	50.1	79.6	119.5	55.0	79.1	59.4	52.9	80.7	89.9	56.1	80.2	60.9
California	16.2	41.4	67.9	44.3	40.2	39.8	16.3	45.3	63.9	43.7	43.4	39.5
Colorado	22.0	52.8	105.3	42.6	51.7	42.4	22.7	50.8	93.0	41.2	53.0	41.2
Connecticut	10.9	43.1	73.9	20.7	42.5	23.2	8.8	43.0	74.6	19.7	43.3	22.4
Delaware	24.1	63.4	133.9	34.0	62.9	41.3	23.8	62.2	111.4	33.2	61.9	40.4
District of Columbia	0.7	57.0	80.3	4.2	63.2	41.4	4.1	65.8	110.0	23.3	67.0	50.3
Florida	30.0	64.8	60.9	36.1	71.2	43.7	29.6	64.6	53.7	35.3	67.8	42.3
Georgia	37.2	62.9	137.6	47.5	62.3	52.0	34.3	62.9	119.2	42.7	65.6	50.6
Hawaii	25.3	18.2	102.2	33.2	22.6	38.8	32.3	22.4	91.2	36.4	28.0	42.7
Idaho	29.0	18.1	95.0	36.2	24.3	36.6	30.5	53.4	95.1	38.7	47.2	39.7
Illinois	19.8	73.1	79.2	32.0	71.9	38.6	20.3	74.0	71.6	31.8	72.7	38.7
Indiana	36.1	75.5	99.2	39.7	74.4	43.1	36.2	72.5	84.0	39.2	72.5	42.7
lowa	25.9	78.3	107.1	29.3	76.2	31.2	27.9	80.5	98.8	31.2	81.5	33.4
Kansas	31.6	70.7	98.1	37.9	74.0	40.6	34.2	75.5	107.3	42.5	76.7	45.2
Kentucky	45.9	61.5	131.3	47.7	62.9	49.0	51.0	69.8	106.8	52.3	70.8	54.0
Louisiana	36.0	67.3	42.8	36.3	67.0	48.9	40.0	74.0	73.8	41.9	73.7	54.7
Maine	24.7	36.5	21.7	24.7	34.5	24.6	24.8	37.9	33.7	25.0	37.1	25.4
Maryland	18.6	49.6	83.4	22.6	52.3	32.3	18.3	51.2	78.0	24.5	51.4	33.1
Massachusetts	12.5	37.9	65.3	18.0	42.1	20.0	12.0	35.8	64.4	17.8	42.8	19.9
Michigan	23.6	63.5	72.7	26.3	62.8	32.6	22.6	65.7	70.4	25.4	65.7	33.0
Minnesota	16.9	70.0	94.9	19.4	77.5	25.6	17.1	72.1	88.7	20.2	73.6	26.6
Mississippi	44.9	75.9	81.3	46.4	75.6	23.0 59.6	52.0	80.4	101.7	54.5	79.9	65.9
Missouri	35.7	69.6	93.5	37.7	69.9	42.3	37.2	74.7	80.9	39.2	74.2	44.4
Montana	26.5	29.7	50.8	27.3	29.2	42.5	31.4	35.8	50.3	31.8	33.7	39.2
Nebraska	20.5	75.2	116.8	28.6	81.8	33.0	23.5	74.2	117.3	31.8	84.0	35.2
Nevada	32.0	70.6	92.2	53.4	68.8	53.7	33.1	66.9	81.4	53.0	64.2	52.5
			38.7						49.3			19.0
New Hampshire	17.2	30.6		17.8 19.9	28.4	17.9	18.2	19.5		19.1	26.5	
New Jersey New Mexico	8.7 31.5	48.6 44.6	64.2 85.3	19.9 65.6	51.2 36.0	24.7 63.5	8.2 32.3	50.8 35.0	61.8	19.5 65.6	53.8 35.5	24.7 64.7
		44.6 39.4	85.3 55.3	22.0		25.7		35.0	84.7	23.2	35.5	25.6
New York	13.8				43.4		13.8		54.1	23.2 42.1		
North Carolina	32.0	61.9	149.4	42.1	61.5	47.7	32.8	64.5	120.2		63.8	48.4
North Dakota	19.3	26.4	62.3	20.3	24.7	26.5	18.3	45.2	75.2	19.1	54.7	27.7
Ohio	31.2	74.5	79.9	32.4	76.4	38.8	32.1	77.0	77.9	33.3	78.6	40.4
Oklahoma	43.9	68.9	101.1	49.8	68.6	53.9	49.2	71.3	100.1	55.5	70.1	60.2
Oregon	24.7	45.0	93.1	33.4	43.7	33.2	26.7	49.5	91.6	36.0	49.5	36.2
Pennsylvania	19.1	67.0	97.5	22.2	74.7	29.5	20.2	67.8	92.0	23.0	77.2	31.0
Rhode Island	16.7	54.3	79.7	25.9	49.5	28.6	16.1	57.2	74.9	25.6	52.7	28.6
South Carolina	37.1	62.4	139.9	39.9	66.2	49.6	38.9	69.7	116.0	42.8	70.8	53.1
South Dakota	24.4	51.1	78.7	25.5	47.0	36.6	24.4	34.1	108.0	26.7	31.5	38.8
Tennessee	44.4	75.6	161.7	47.1	81.6	54.5	44.0	75.9	132.3	47.5	77.3	54.3
Texas	33.6	64.6	97.5	64.2	64.7	62.3	33.7	64.9	96.1	65.0	66.6	63.2
Utah	22.1	47.7	95.4	30.0	44.7	30.3	23.4	39.0	109.0	34.3	36.4	34.6
Vermont	18.5	21.4	12.1	18.4	20.2	18.3	20.4	43.5	19.6	20.4	43.5	20.5
Virginia	23.8	51.7	82.3	28.5	51.9	33.7	23.7	50.9	70.1	28.3	50.5	33.0
Washington	23.3	39.8	93.3	30.5	46.9	31.9	24.5	42.4	92.4	33.5	48.4	34.3
West Virginia	42.7	55.6	27.9	42.6	54.6	42.9	49.1	44.6	32.7	48.9	43.9	48.2
Wisconsin	18.9	94.1	83.9	22.6	92.1	29.8	18.5	88.7	84.2	22.8	87.3	30.4
Wyoming	36.7	18.5	101.3	42.1	35.0	43.9	42.5	32.7	97.5	47.2	39.5	48.8
Total US	25.9	60.7	80.9	36.9	61.8	40.4	26.7	62.4	76.7	37.7	63.0	41.3

		1986	- 1991			1991 ·	2005	1981 - 2008				
	White	Black			White	Black			White	Black		
	White NH	Black NH	Hispanic	Total	White NH	Black NH	Hispanic	Total	White NH	Black NH	Hispanic	Tota
Alabama	19%	16%		19%	-31%	-43%	243%	-33%	-8%	-32%		-19%
Alaska	27%	22%		25%	-48%	-55%	-11%	-39%	-49%	-56%		-31%
Arizona	11%	21%	24%	19%	-46%	-55%	-18%	-25%	-40%	-49%	-12%	-15%
Arkansas	15%	7%	71%	13%	-25%	-37%	73%	-25%	-9%	-25%	169%	-15%
California	21%	14%	46%	39%	-62%	-60%	-43%	-46%	-59%	-46%	-24%	-27%
Colorado	10%	38%	42%	25%	-46%	-58%	-11%	-27%	-48%	-38%	5%	-21%
Connecticut	35%	11%		29%	-46%	-58%	-43%	-42%	-20%	-33%		-26%
Delaware	15%	21%		21%	-35%	-54%	17%	-32%	-19%	-50%		-19%
District of Columbia	52%	82%	19%	60%	-88%	-62%	-24%	-62%	-4%	-44%		-26%
lorida	15%	10%	44%	17%	-41%	-51%	4%	-36%	-31%	-46%	34%	-26%
Georgia	5%	21%	166%	14%	-33%	-47%	70%	-32%	-32%	-38%	294%	-25%
lawaii	12%	-22%	29%	26%	-33%	-75%	-10%	-34%	-13%	-84%	-21%	-16%
daho	24%	59%		20%	-41%	-70%	-22%	-32%	-34%	-19%		-32%
llinois	24%	27%	40%	30%	-46%	-51%	-21%	-40%	-42%	-36%	-14%	-28%
ndiana	21%	23%	30%	21%	-32%	-42%	57%	-29%	-24%	-29%	54%	-20%
owa	28%	34%		29%	-34%	-42%	32%	-27%	-21%	-25%		-18%
(ansas	9%	17%	55%	8%	-33%	-47%	2%	-27%	-31%	-30%	26%	-22%
Kentucky	11%	18%	5576	12%	-29%	-47%	388%	-29%	-19%	-29%	2070	-20%
ouisiana	9%	11%		12%	-32%	-42%	73%	-36%	-27%	-30%		-26%
Vaine	6%	2%	47%	4%	-43%	-42/8	-48%	-44%	-43%	-30%	-25%	-44%
Maryland	13%	20%	4770	18%	-49%	-49%	95%	-40%	-25%	-31%	-2378	-44/0
•				30%			-49%	-40%	-23%			-23%
Massachusetts	30%	40% 47%		30% 34%	-51% -43%	-61%	-49% -19%		-30%	-33%		-29%
Aichigan	22%					-52%		-45%		-21%		
Ainnesota	21%	38%	1050/	25%	-42%	-57%	-6%	-31%	-37%	-27%	0700/	-24%
Aississippi	25%	12%	135%	18%	-24%	-35%	246%	-30%	2%	-30%	378%	-19%
Aissouri	18%	28%		22%	-30%	-53%	43%	-34%	-18%	-32%		-20%
Aontana	9%	150%		11%	-31%	-61%	-34%	-26%	-26%	-53%		-22%
lebraska	13%	18%	42%	15%	-36%	-45%	16%	-22%	-39%	-35%	41%	-19%
levada	27%	3%	123%	33%	-47%	-50%	-14%	-28%	-34%	-46%	16%	-12%
New Hampshire	9%	-32%		8%	-47%	21%		-46%	-43%	-44%		-43%
lew Jersey	9%	15%	23%	20%	-53%	-54%	-22%	-40%	-53%	-42%	-7%	-25%
lew Mexico	5%	52%	18%	13%	-38%	-58%	-14%	-20%	-49%	-63%	18%	-10%
lew York	26%	15%	28%	26%	-47%	-55%	-35%	-44%	-36%	-46%	-18%	-27%
North Carolina	22%	27%		25%	-39%	-44%	69%	-32%	-3%	-26%		-14%
North Dakota	4%	17%	-22%	3%	-32%	-56%	30%	-25%	-49%	-63%	-31%	-34%
Dhio	20%	34%	34%	24%	-36%	-45%	-2%	-36%	-26%	-18%	41%	-20%
Oklahoma	8%	23%		12%	-29%	-47%	12%	-25%	-22%	-39%		-22%
Dregon	27%	34%		27%	-50%	-62%	-26%	-39%	-28%	-49%		-29%
Pennsylvania	13%	26%		18%	-42%	-50%	-22%	-37%	-33%	-14%		-23%
Rhode Island	22%	32%		27%	-50%	-63%	-25%	-36%	-15%	-44%		-15%
South Carolina	22%	15%		19%	-32%	-40%	133%	-32%	-11%	-23%		-17%
outh Dakota	12%	-64%		11%	-31%	-12%	60%	-23%	-37%	-81%		-23%
ennessee	25%	26%	249%	25%	-28%	-41%	278%	-27%	-12%	-21%		-14%
exas	2%	15%	13%	13%	-33%	-46%	-10%	-21%	-41%	-39%	-4%	-16%
Itah	-3%	-17%	5%	-2%	-50%	-1%	-6%	-37%	-63%	-47%	-4%	-47%
/ermont	13%	N/A	5,0	14%	-53%	-39%	22%	-53%	-50%	74%	.,.	-51%
/irginia	19%	17%		14%	-42%	-48%	36%	-37%	-25%	-35%		-29%
Vashington	25%	8%		21%	-42%	-48% -60%	-23%	-37% -41%	-25%	-35% -41%		-29%
Vest Virginia	9%	33%		10%	-26%	-33%	9%	-26%	-23%	-30%		-23%
Wisconsin	7%	20%		16%	-37%	-48%	-9%	-32%	-34%	-29%	4.504	-23%
Vyoming	8%	-21%	14%	10%	-26%	-69%	31%	-19%	-43%	-55%	-16%	-39%
Fotal US	16%	19%	32%	23%	-40%	-49%	-23%	-35%	-34%	-36%	-6%	-21%

Table 2: Percent Change in U.S. Teen Birth Rates by Race & Race/Ethnicity for Selected Periods

Red font = Percent changes by race (i.e., white and black)

Black font = Percent changes by race/ethnicity (i.e., white non-Hispanic and black non-Hispanic)