

INCOMPLETE AND VERY ROUGH DRAFT.

**Raising Responsible and Resourceful Youth:
Teens and their Families in the 21st Century**

Abstract

This report—prepared for a White House Conference on American Teenagers—focuses on the opportunities and challenges facing American young people. The report highlights demographic changes in the population of teens and their families occurring over the past century. Many trends have been positive; teens generally face fewer health risks and greater economic opportunities than ever before. Teens today are far better educated than were their predecessors. Other trends are cause for concern to teens and their families. Many of the greatest risks facing teens are the consequence of their own behavior and the behavior of those around them. High rates of teen pregnancy and teen smoking are among trends that present serious risks to the current and future welfare of American teens.

An important focus of our paper is the potential for parents to have a positive role in influencing constructive behavior and protecting teens from serious danger. Data described in this report indicate that teens who have a strong relationship with their parents—built on spending time together—are more likely to do well in school and to refrain from smoking or taking drugs, and are less likely to become pregnant or be involved in violent incidents [check]. Parents make a good investment when they take time to retain a strong connection with their children.

1. Introduction

Considerable public attention has been focused on the extraordinary importance of direct parental involvement in the intellectual and social development of infants and young children. In 1997 the "White House Conference on Early Childhood Development and Learning: What New Research on the Brain Tells Us About our Youngest Children" increased national awareness of the role parents play in the development of pre-school children. Similarly, there is broad agreement on the importance of high-quality education outside the home for children as they grow older. Recent public opinion polls, for instance, rate education policy as the most important factor in the upcoming presidential election. And as we discuss later in this report, the focus on education is justified; the economic value of becoming well educated has never been higher.

The 2000 White House Conference on American Teenagers calls attention to an aspect of the development of young people that sometimes receives less attention: the role of continued parental involvement in the lives of their teenage children. This topic is of clear relevance to today's families. Societal changes over the past century—especially the expanding role of women in the labor force and broad changes in family structure—have contributed to an environment in which many parents find it difficult to spend time with their children. Research suggests, though, that parents make a good investment when they take time to establish a close bond with their teenage children. A strong parent-child bond is an important factor in successful and healthy development of teens.

Our report begins by examining demographic and economic changes among teens and their families over the past one hundred years, and by highlighting the ways in which these changes have created additional challenges to teens and parents in finding time to spend together. We turn next to a series of issues and trends important to teens and their families—including discussions of trends in teens' education, work for pay, volunteer activity, nutrition, threat of violence and high-risk behavior. In the concluding section of the paper we turn to evidence concerning the link between the parent-teen relationship and behavioral outcomes of the teen.

Many of the youth-focused trends we discuss are positive. Teenagers are staying in school longer and many are more involved in community service. The prevalence of many harmful or destructive behaviors among teens is on the decline—including youth violence, teenage pregnancy, and drinking. There are many challenges facing today's teens. An important theme of our report is that parents play an important part in working with their teen children in meeting these challenges; young people who have a close parent-child bond are most likely to avoid dangerous and destructive behavior. There is also a role for the broader community and for public policy in providing an environment in which America's youth can flourish.

2. The Changing Lives of Teens and their Families Over the Past Century

A conference on teens in the year 2000 seems an appropriate occasion to reflect on significant changes that have occurred over the past century, many of which have led to greatly expanded possibilities for America's youth. Teens today face fewer health risks and greater economic opportunities than ever before. They are more likely to complete high school and attend college than were young people in previous generations. Minority and female teens

especially are far more likely to become full participants in the economic prosperity of our era. In 1900, many African American teens were children of former slaves, and levels of education for these youth were extremely low. Few young women could anticipate working outside their own homes or farms. Female teens in 1900 would be women in their thirties before the 19th Amendment was adopted, granting them the right to vote.

In 1900, the United States had a very young population; more than 2 in 5 US residents were under the age of 20, and more than 1 in 5—about 15.6 million individuals—were age 10 to 19. Our population is now aging compared to the turn of the century—today about 1 in 7 Americans are age 10 to 19—but the number of youth in the United States has continued to increase, to 21.8 million by 1950 and to 39.3 million by 1999. These 20.1 million young men and 19.1 million young women are a racially and ethnically diverse group, more so than the population in general. And the diversity of the population can be expected to increase over the coming decades (see Chart 1). Most of today's teens were born in the United States, but a sizable number—about 6 percent—are immigrants, predominantly from Mexico, Asia, and the Caribbean. The increasing racial and ethnic diversity of young people in the US underscores the importance for America's future of our ability to provide opportunities for all Americans to make substantial contributions in the labor market and to society more generally.

The lives of today's young people are far different than 100 years ago. Statistics for families generally highlight one important difference: In 1900, roughly 4 in 5 children lived in two-parent families on a farm or in a two-parent non-farm family in which the father worked in the market and the mother worked at home. In contrast, today fewer than 2 percent of children live on farms and less than one quarter of children live in households in which the father is the breadwinner and mother is a homemaker.

Young people today enjoy far better prospects for a long and healthy life than did their predecessors. In this century, improved sanitation has dramatically reduced typhoid and cholera in the United States, and the widespread use of vaccines has eliminated smallpox and polio. Death rates from coronary disease have declined by more than 50 percent in just the past three decades. In 1900 the life expectancy of a white 15 year-old was 62 and of a black 15 year-old was just 54. Over the last 100 years, the racial disparity has narrowed, and life expectancy had increased dramatically, to 78 for white 15 year-olds and to about 73 for black 15 year-olds. (See Table 1 for these and other indicators for teens and their families.)

Today's young people also enjoy greater economic prosperity and far more conveniences. At the turn of the last century fewer than 10 percent of dwellings had electricity, and only a very few wealthy families had automobiles. Now most households have autos, nearly all homes (over 95 percent as of 1998) have a television, and over 40 percent of them have home computers. In 1900 there were fewer than 2 phones per 100 people in the US. Now over two-thirds of US households have *cellular* phones. Over the past century income per capita has increased eight-fold. And this income can today acquire a vast array of goods and services that were simply unavailable in the past: from antibiotics and airline flights to CDs and video games.

Hand in hand with increasing prosperity has been a dramatic increase in the level of education of America's youth. In 1900 only about 10 percent of teens age 14 to 17 were enrolled

One hundred years ago, and even fifty years ago, virtually all foreign-born residents of the US were white. Today this fraction is about 67 percent.

See the 2000 *Economic Report of the President* for sources. Current numbers based on 1998 statistics.

in school. Among individuals born in 1880 (who were 19 or 20 at the beginning of the century), for both white women and men the median level of education was only about 8, and among black women and men fewer than half had 5 years of education. As recently as 1940, only 41 percent of whites and 12 percent of African Americans completed high school. By 1998, 88 percent of both groups graduated from high school. America's high school graduation class increased from only about 66,000 in 1900 to well over 2 million per year in the 1990s. As we discuss below, there have also been substantial increases in the proportion of young people, especially women, going on to college and graduate school.

Two additional trends that shaped the American family were dramatic changes in female labor force participation and an increasing diversity of the family structure. In 1900 only 20 percent of women worked for pay, while in 1999 about 60 percent of women over age 16 were in the labor force (employed or looking for work). There have also been important shifts in rates of childbearing among single women, and in the prevalence divorce. In combination, these trends have created big changes in the American family. The "traditional" one-breadwinner, one-homemaker married couples have been declining as a share of all families, from 67 percent in 1952 to 27 percent in 1999.

One positive aspect of the transformation of American society over the past 100 years is the expansion of economic opportunities for women. In 1900 job opportunities for women were severely limited: only a fifth of women worked for pay, and those who did were mainly single and poor. In the early 1900s about 47 percent of female workers worked in agriculture or manufacturing and 29 percent more as private household workers. It is estimated that in 1890, over 90 percent of African American female workers worked as servants or agricultural workers. Although there are still substantial gender differences in some occupations, female representation in many key professions has increased substantially over the last fifty years. For example, in 1950 only 3.5 percent of lawyers and 6.1 percent of physicians were women. These proportions have increased to 28.8 percent and 24.5 percent, respectively. And these trends are likely to continue; a higher fraction of young women than men now go to college, and the female share of enrollment in professional schools has been rising and exceeded 40 percent by 1996.

The trends in female integration into the labor force signal to today's young women a great broadening of opportunities for their own future success. In combination with the increasing prevalence of one-parent families, though, the integration of women into the labor force has contributed to a serious "time crunch" for many American families. Families in the 21st century face a big challenge in finding time to spend together. In section 4 of this report we return to this issue, and discuss evidence highlighting the value to teens when family members do find ways of remaining connected to one another. First, though, we turn in section 3 to a few of the current trends and issues that affect today's teens.

3. Key Recent Trends for America's Teens

The goal of this section is to highlight—in series of short sub-sections—a number of trends that are important to American teens. Much of what can be said about youth is positive: there are positive developments to report in youth-related trends in education, volunteerism, and

High school completion statistics are for the cohort of young people who are just past the years when they would generally be in school: 25 to 29 year-olds. See the 2000 *Economic Report of the President* for details.

many indicators of high-risk teen behavior. Our focus on high-risk behaviors in some of the discussion below does not stem from the intention of presenting a one-sided view of America's youth. Rather, the intention is to highlight the fact that in general many threats to teen well-being are social and behavioral; these are important factors that can be affected by teens themselves in interaction their families and with society more generally.

3.1. Trends in Education for Teens

One hundred years ago formal education was a far less important job qualification for most workers than it is now. Over the past 100 years, well over half of workers were occupied in farming, forestry, or fishing or as laborers, fabricators, or operators. Now fewer than 1 in 7 workers are in these occupations. At the same time, there has been a huge increase in managerial, professional, technical, sales, and administrative support occupations. This evolution in the labor market from one based on strong backs to one based on strong minds has both caused and been caused by substantial improvements in educational attainment. The change in levels of education is a significant feature of twentieth century America. And the increasing value of education is of great important to today's teens, who are making investments in their own human capital that will affect their welfare for the remainder of their lives.

Chart 2 [4-2 in the ERP] provides one major indicator of the dramatically increasing levels of education: high school completion rates for cohorts of young adults (25 to 29 year-olds) who are likely to be out of school. The chart shows a strong increase in high school completion for whites and especially African Americans over the past 60 years. The historically large gap between the races in the high school completion largely disappeared by 1998, with both groups having a high school completion rate just short of 90 percent. Hispanics have not made the same gains, however, and the proportion of this population that had completed high school (which includes those Hispanics who immigrated as adults) was only 63 percent in 1998.

Of course, high school completion is hardly the only important indicator about trends in education for America's teens. The challenge for students and schools is developing the increased skill and achievement levels necessary to succeed in the marketplace and to participate more fully in American life in general. Fortunately, high school teens today are taking more courses in core academic subjects than did their counterparts in the early 1980s, and the courses they are taking are more challenging. For example, a higher percentage of high school graduates are completing algebra and higher-level mathematics courses, as well as courses in biology, chemistry, and physics, than in the 1980s. The proportion of students taking college advance placement examinations has also increased dramatically, from 50 twelfth-graders out of every thousand in 1984 to 131 per thousand in 1997.

Although measuring educational progress is difficult, test scores may be indicative, and in fact there has recently been some good news about trends in teens' achievement as measured by data from the National Assessment of Educational Progress (NAEP). In mathematics, for example, between 1990 and 1996, the fraction of 8th graders performing at or above the "basic" achievement level increased from 52 to 62 percent of students, and for 12th graders the fraction increased from 58 percent to 69 percent of students. Progress was also found in science achievement levels, relative to the early 1980s, though there was little change in reading

[What do we want to say about this? Talk about the President's proposed Hispanic Education Action Plan?]

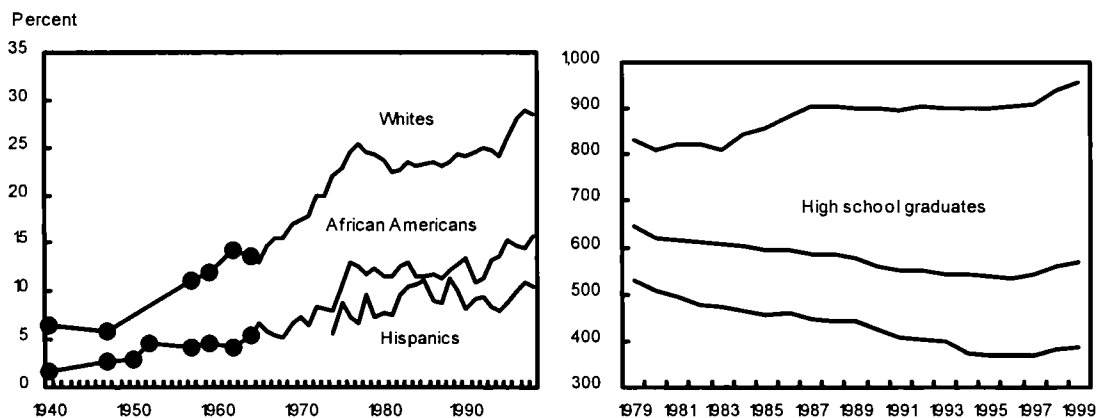
performance from 1971 through 1996. In addition, improvement can be seen in the scores on the Scholastic Assessment Test (SAT, a test typically taken by college-bound high school juniors and seniors). Between 1976 and 1995, the combined verbal and mathematics scores of African Americans climbed by over 50 points, while those of white students remained roughly stable. Observed trends in SAT scores are particularly impressive given that the proportion of high school graduates taking the test has increased by about a fourth since the early 1970s.

Evidence suggests that the importance of teens' acquiring a solid education is increasing in terms of future labor market success. Research shows that among individuals with a high school education (but no further college education), those with greater mastery of basic math and reading subsequently have higher earnings. And, importantly, this relationship between skills and wages has grown stronger over recent years. [from ERP p. 136. Need cite, a little more discussion of evidence.]

3.2. Going to College in an Increasingly High-Tech World

Even as youth have been completing high school at increasing rates, shifts in the economy have created rising demand for workers who have attained yet higher levels of education. The result is that a high school diploma alone is no longer a ticket to the middle class.

**College Completion Rates of 25- to 29-Year-Olds
by Race and Ethnicity**



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art 3 provides indirect but striking evidence about the rising demand for workers with higher levels of education. Between 1979 and 1999 the median weekly wages (adjusted for inflation) of comparable male college graduate full-time workers age 25 and over increased by 15 percent. Despite recent improvements in wages, the median real wage of men with only a high school diploma fell by 12 percent over this period. For those with less than a high school degree, real wages declined by 27 percent. As a result of these trends the wage gap between college graduates and high school graduates increased from 29 percent in 1979 to 68 percent in 1999, and the gap between college graduates and those without a high school degree increased from 57 percent in 1979 to 147 percent in 1999.

These wage trends underscore the importance to today's teens of completing high school and making a successful transition to higher education. As indicated in Chart 4, college completion rates have indeed increased dramatically over the past six decades. Women are now continuing on to college in record numbers; by 1995 more women aged 18 to 24 were enrolled in

college than men. However, unlike high school completion rates, the racial and ethnic gap in college graduation remains large.

Recent research shows that the disparity in college enrollment is closely related to family income. Table 2 reproduces results by Thomas Kane, indicating for the high school class of 1992 the fraction of students by income group who enrolled in post-secondary school within 20 months of graduation.

Table 2. Percentage of Students From Families In Each Income Quintile Enrolling in Post-Secondary Schools Within 20 Months of High School Graduation

Parental Income Quintile	Total	Vocational, Technical	2-Year College	4-Year College
Top	90	5	19	66
Second	79	6	25	48
Third	70	7	25	38
Bottom	60	10	22	28

The vast majority (90 percent) of students whose parents were in the top quartile of the income distribution was pursuing post-secondary education, most of them in four-year colleges. By way of comparison, just 60 percent of students whose parents were in the bottom quartile of the income distribution were enrolled in post-secondary education and more than half of these young people were in vocation or technical schools or in two-year colleges. Kane's research suggests that some of these differences stem from differences in youths' preparedness for college and in family attitudes toward education, rather than financial barriers. Still, Kane concludes that, "Much of the difference in college attendance by parental income remains, even after controlling for non-financial explanations for going to work directly out of college."

Once students have completed their formal education, young people face a rapidly changing workplace, typified by fields such as information technology (IT). These changes afford significant opportunities for those with the appropriate skills, but also present a challenge—that no group of young people is left behind. A recently released report by the Office of Technology Policy indicates a striking digital divide in the IT work force, with women, Blacks, and Hispanics significantly underrepresented in this rapidly growing, highly-paid sector. This divide stems in part from underrepresentation in the educational pipeline. As we have noted, young women now attend college at rates as high as young men. However, they are far less likely to earn degrees in science and engineering than are men. For racial and ethnic minorities the situation is the reverse: among college freshman in 1996, the proportions planning to earn bachelor degrees in science and engineering were at least as high for blacks, Hispanics, and Native Americans as for whites (and somewhat higher for Asians). The significant underrepresentation of blacks and Hispanics in IT professions instead stems from the generally lower rates at which these young people attend college.

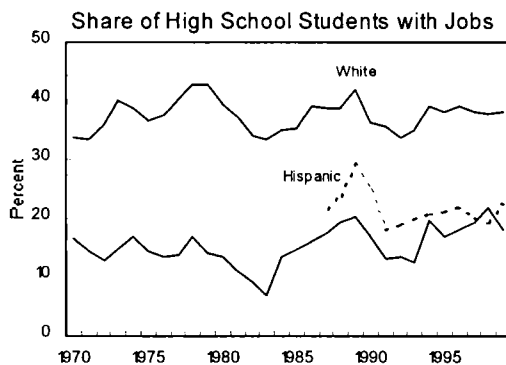
Thomas J. Kane, "Rethinking The Way Americans Pay For College," *The Milken Institute Review*, Third Quarter 1999.

"The Digital Work Force: Building Infotech Skills at the Speed of Innovation," U.S. Department of Commerce, Office of Technology Policy, June 1999.

Teens, their families, and the broader community clearly face a serious challenge in finding ways to insure that more young people have college access. Educational outreach programs designed to motivate and support students from low-income families can be effective in increasing prospects for higher education and subsequent employment. An evaluation of Upward Bound, a federally funded program to help high school students attend college, found that students in the program were four times more likely to earn a college degree than other students from similar backgrounds. [Need cite, from ERP.] Along with interventions such as Upward Bound, the federal government can play a large role by ensuring adequate funding for scholarship and loan programs for higher education and thereby help more young people take advantage of strong demand for college-educated and high-tech workers.

3.3. *Teens Working While in School*

[Need to get cites for this section from Mike.]



As we have noted, one hundred years ago the large majority of even mid-teen youth (14 to 17) were no longer in school and were expected to be productive in their homes, farms or in the labor market. Today, 90 percent of teens in this age group are still in school, but many teens are in addition actively involved in the labor market. Some teens, as young as 16 and 17 are facing the major challenges in making the transition to a career. More typically, many of today's youth combine school with a job.

Working may provide important lessons for young people about responsibility, punctuality, dealing with people, and money management, while increasing self-esteem and independence. In turn, these traits may lead to increased rates of employment and higher wages in the years following high school. However, work can create conflicts with schooling by taking away time from other valuable activities, such as studying and sleeping.

Approximately 3.3 million young people are both enrolled in high school and employed in the labor market. This figure represents about a third of the 9.9 million high school students ages 16 and above (up to a maximum of age 24). Of those employed, only about 6 percent report working full-time. While employment rates have been fairly constant over time, there are fairly substantial differences between racial and ethnic groups (see Chart 5). Part of these differences may be explained by the differences in unemployment across the groups. The unemployment rate for white youths who are enrolled in high school is currently 13.4 percent. The rate for

Recent strength of the labor market has helped. Although unemployment rates are generally high for teens, and very high especially for minority teens, recently teen unemployment rates have declined. [Need statistics.] Also ... [Job Core has been shown to be effective in increasing prospects for 16 and 17 year-olds.]

African Americans and Hispanics is about 24 percent. When high school students are interviewed directly, about 80 percent report that they have held a job at some point during their junior or senior years of high school. Half of all working 15- to 17-year olds have jobs in the retail sector (restaurants, fast-food outlets, grocery stores, and other retail stores).

Researchers have examined the effect of work on a number of outcomes. The direct effect of high school employment is difficult to identify because the decision to work is correlated with many other observed and unobserved factors. For example, factors such as motivation, work effort, and parental support may be associated with both the decision to work as a teenager and subsequent educational and employment outcomes. Nonetheless, some conclusions have emerged.

Subsequent educational attainment. There is little consensus among researchers about the effect of working while in school on subsequent educational attainment, as measured by school performance (grades), grade completion, and persistence in school. However, a number of studies have found that if harmful effects exist, they result from working many hours per week. One recent study that controls for unobserved factors found that extensive employment during the school year had a negative impact on academic performance, especially that of racial minorities.

Vocational development and occupational attainment. Researchers have found that students who work in school also tend to have greater future job market success, as measured by better employment prospects or higher wages. However, a recent study that carefully controls for the complicated selection issues found that the future economic returns to working in school (both high school and college) are probably more modest than those found in previous research.

Health and safety. It has been estimated that each year about 100,000 young people seek treatment in hospital emergency departments for work-related injuries. The rate of injury per hour worked appears almost twice as high for children and adolescents as for adults—about 4.9 injured per 100 full-time equivalent workers among adolescents, compared with 2.8 for all workers. The most common nonfatal injuries observed among working young people are lacerations, sprains and strains, contusions, burns, and fractures.

In sum, while the general evidence is mixed, one clear lesson is that young people who work while in school are best off if they do so in moderation. (Evidence suggests that summer employment does not carry the same potential for detrimental impact as does work during the school year.) Health and safety issues are also an important concern.

3.4. Teens and Community Service

Research has shown that young people do better on almost every level when they have meaningful involvement in useful and necessary tasks. Moreover, some experts argue that a *lack* of meaningful involvement is a critical issue for many teens today. Sociologist Stephanie Coontz, for example, concludes that, “What many young people have lost are clear paths for gaining experience doing responsible, socially necessary work, either in or out of the home, and for moving away from parental supervision without losing contact with adults” (Coontz 199X).

The growing emphasis on community service among school-aged youth in this country has begun to make important strides toward providing teens with more meaningful involvement and counteracting the “rolelessness” Coontz describes. At both the local and nation level, community service has attracted increasing attention as way to enrich the lives of young people

while building stronger communities. Research on the effects of participating in community service, discussed below, show that teens benefit on many fronts from this involvement.

Teen service to the community is not new. In fact, survey evidence suggests that the percentage of American high school seniors who participated in "community affairs or volunteer work" in any given year was relatively stable from the mid-1970s through the early 1990s (Youniss and Yates 1997). Another study found that the percentage of 12- through 17-year-olds who volunteered in 1995 was similar to the percentage who volunteered in 1991 (Hodgkinson and Weitzman 1997). What *is* new is the growing emphasis by schools on community service and, in particular, "service learning"—curriculum-based community service that integrates classroom instruction with community service activities. In 1983-84, for example, 27 percent of high schools offered community service opportunities to their students and only 9 percent offered service-learning. By 1998-99, these figures had risen dramatically to 83 percent and 46 percent, respectively (NCES 1999). These trends have the potential to make community service a more valuable experience for teens.

Recent data on school-related community service comes from the Department of Education's *National Student Service-Learning and Community Service Survey* (NCES 1999). It shows that, in 1998-99, 77 percent of middle schools and 83 percent of high schools had students participating in community service activities recognized by and/or arranged through the school. A somewhat smaller percentage, 71 percent for both middle and high schools, reported arranging community service opportunities for their students. Moreover, 38 percent of middle schools and 46 percent of high schools had students participating in service learning. National data are not available on the prevalence of community service graduation requirements, but anecdotal evidence points to an upward trend. Cities such as Chicago, Washington, D.C., and Louisville, Kentucky, have recently implemented community service requirements for graduation, while Maryland has begun the first state-wide requirement.

Efforts to encourage volunteering have also come from the national level. In 1993, President Clinton outlined a vision for a national service program that would allow young people to serve their country while earning funds for a college education. The result is AmeriCorps, which brings together people of different racial, ethnic and economic backgrounds to solve community problems. Since the program's inception 5 years ago, over 150,000 AmeriCorps members aged 17 and over have served as tutors, mentors, conservationists, disaster-relief workers, and other roles. Today there are more than 350 AmeriCorps programs nationwide serving an estimated 4,000 communities.

Research on the effects of community service on young volunteers, while somewhat limited, seems promising. Two of the most carefully evaluated community service programs are the Teen Outreach Program (TOP) and the Valued Youth Program (VYP). Both programs had sizable positive effects on participants. TOP, offered to middle and high school students at 237 sites across the United States and Canada, combined volunteer community service opportunities with classroom discussions about life options. Results from a random assignment evaluation, based on seven years of follow-up data, show that participants had a 5 percent lower rate of course failure in school, an 8 percent lower rate of school suspension, a 33 percent lower rate of pregnancy, and a 50 percent lower rate of school dropout, compared to the control group. VYP, on the other hand, was focused on middle school students and was designed to show at-risk youth that they were valued by having them tutor younger children. Results after two years, based on a random assignment evaluation, show that the program increased tutors' reading

grades and substantially cut dropout rates: Only 1 percent of tutors had dropped out by the end of the second year of the program, while 12 percent of students in the control group dropped out. Studies of other community service programs, including those focused on service-learning, have also shown positive effects, but few have been evaluated as rigorously as TOP and VYP. [May modify that ending based on phone meeting set up 4/20 to discuss these findings with Joe Allen, UVA.]

3.5. *Nutrition*

In an environment in which teens and their families are constantly being pulled different directions, it is important for them to remember the importance of eating well. Poor nutrition among teens is a serious problem. Poor nutrition can damage teens' health, with results persisting into adulthood. Also, eating patterns established by young people transfer to adulthood. Poor eating—especially excess consumption of fats and insufficient consumption of fruits and vegetables—has been linked to cancer and heart disease later in life. Research by the USDA Center for Nutrition Policy indicates that a substantial fraction of 13 to 18 year-old youths have a “poor diet” (20 percent) or a diet that “needs improvement” (74 percent). These researchers found that the quality of diets for teens is lower than for younger children, and that this decline in diet quality is linked to declining consumption of fruit and milk.

One potential factor in poor nutrition for teens is food insecurity—uncertainty about the source of one's next meal. Detailed analysis by Jay Bhattacharya and Janet Currie suggest that food insecurity is indeed a problem for a small fraction of America's teens, 5.5 percent by their estimate, and they find that food insecurity is more common among low-income teens. However, they fail to find a strong relationship between insecurity and measured nutritional deficiencies among teens. The nutritional problems for American teens are not a lack of food but rather because of choices made by many teens and their families. [Put in stuff about nutrition and TV watching.] As Bhattacharya and Currie conclude that the best hope for improving teen nutrition is thus “broad-based policies designed to alter the composition of the diet.” Such policies would continue efforts to provide education and information (e.g., through nutrition labeling) or be based on the direct provision of healthy food (as in the revised school lunch program).

3.6. *Suicide, Accidental Deaths, and Homicide: The Role of Guns*

Harm to teens often stems from their own behavior and the behavior of those around them. The most visible and distressing example concerns suicide and homicide. In 1997, suicide and homicide were the second and third leading causes of death among teens after accidents (check). Although both suicide and homicide are fairly rare events for teens (around 1 per

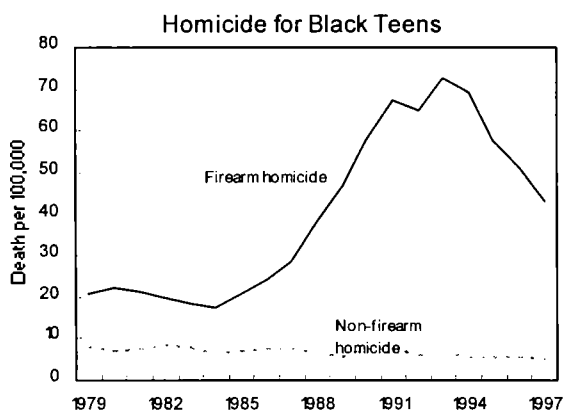
A good source for many statistics about children and young is www.ChildStats.gov. Statistics about nutrition listed here can be found at that site.

Bhattacharya, Jay, and Janet Currie, “Youths at Nutritional Risk: Malnourished or Misnourished?” forthcoming in Jonathan Gruber, editor, *An Economic Analysis of Risky Behavior Among Youths*. NBER Monograph, University of Chicago Press.

In 1997, there were 2,601 homicides and 1,802 suicides among teens aged 15 to 19. Male teens composed 85 percent of homicide victims and 83 percent of suicide victims. Black teens were slightly less likely to commit

10,000 teens per year), many of these deaths may be preventable. It is thus vitally important to look at recent trends in teen violence and their proximate causes, and to search for strategies that will reduce the number of such tragedies.

As with many of the issues we discuss in this report, there are numerous facets to this issue that cannot be treated in a page or two. Here we focus on one extremely important, policy-relevant factor—the role of guns. Guns are far and away the most common means of fatal teen violence, used in 85% of teen homicides and 63% of teen suicides. Moreover, changes in gun availability and gun possession are closely tied to recent teen homicide and suicide trends, in particular the sharp rise gun-related deaths among teens that began in the mid-1980s. Although the patterns presented below apply to the teen population at large, the following discussion of mortality trends focuses primarily on black teens because this group has been most affected by the increase in gun-related deaths.



Blumstein and Cork (1996) link the dissemination of guns into the hands of American teenagers and young adults in the late 1980s with the advent and growth of the crack trade. Crack cocaine first arrived in large cities like Miami, Los Angeles, and New York in about 1983. After remaining fairly constant from 1975 through 1984, drug arrest rates among non-white juveniles more than doubled from 1985 to 1989. Guns were carried by teens directly involved in drug markets, but possession became far broader as other teens acquired a gun in reaction to this trend—for perceived self-protection or as a status symbol. This period saw a dramatic proliferation of guns: domestic production of pistols, the type of gun most commonly traced to teens by law enforcement, more than tripled to 2.3 million units in 1993. Consistent with this presumed increase in teen gun possession in the late 1980s, juvenile arrest rates for weapons law violations more than doubled from the mid-1980s to the early 1990s.

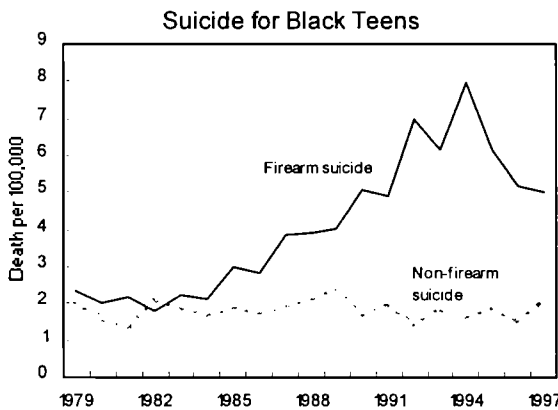
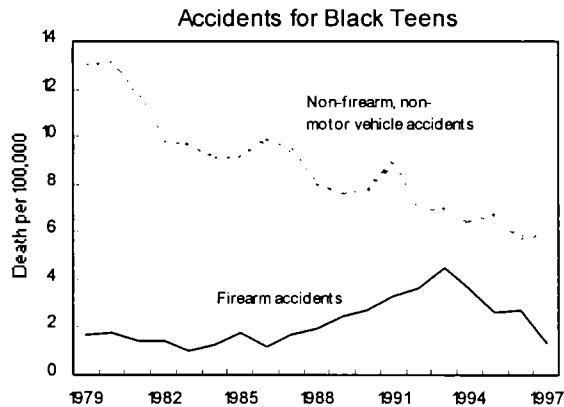
suicide than white teens (7.1 per 100,000 vs. 10.0 per 100,000) while black teens are substantially more likely to be homicide victims than white teens (48.4 per 100,000 vs. 7.0 per 100,000). Source: Center for Disease Control.

Recent reports have shown that although such fatal tragedies are especially rare in America's schools, recent highly visible tragedies have created a false public perception about the likelihood of homicide occurring in schools. See, "School House Hype: Two Years Later", Justice Policy Institute/Children's Law Center, April, 2000.

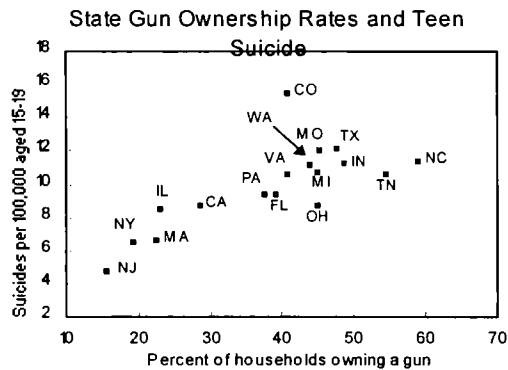
Blumstein, A. and Cork, D., "Linking Gun Availability to Youth Gun Violence", *Law and Contemporary Problems*, Winter 1996.

Blumstein and Cork cite a 1993 study by [getting cite from OEOB library] conducted in center-city schools in which 22 percent of students possessed guns, with 68 percent citing protection as the main reason.

"Kids and Guns", U.S. Department of Justice, March 2000.



Blumstein and Cork point to a mid-1980s increase in teenage gun possession as a factor in several trends, the most disturbing of which is the rapid rise in deaths among black teens due to gun homicide (see Chart 6). There are two competing explanations for the sharp rise in homicides. First, the rise in gun possession may have directly increased the lethality of confrontations among teens. Second, there may have simply been an increase in teens' inclination toward violence. If the latter explanation were the predominant influence we might expect to observe an increase in both gun and non-gun homicide. In fact, non-gun homicide victimization among black teens remained roughly constant through the 1980s. Trends in black teen suicide and black teen accidental death show a similar pattern: increased gun fatalities in the early 1990s with no contemporaneous corresponding increase in non-firearm mortality rates. The rate of fatal gun accidents was more than four times as high in 1993 as in 1983 (see Chart 7) and the rate of teen gun suicides increased rapidly in the mid-1980s. Non-gun suicide rate and accidental deaths so no such upward trend. Again, evidence is consistent with a causal effect of gun possession on mortality.



A cross-state comparison of gun suicide and gun accident rates among all teens provides additional support to the idea that gun access increases suicides. Because guns are an especially lethal means of suicide, suicide attempts (which are often impulsive) are more likely to be successful when guns are present. In states where more households have guns, teen suicide rates are much higher (see Chart 8, which presents statistics for the 17 large states for which there are ownership data). Importantly, this relationship holds because gun-related teenage suicide is higher in states with high gun ownership; non-gun teen suicides are unaffected by gun ownership. As an alternative approach, we can also make a comparison using an index of gun availability developed by Philip Cook. In the four states with the highest levels of gun availability, the teen suicide rate is twice the rate in the four states with the lowest gun availability. Fatal gun accidents occurred more than *ten times* as often among teens in the top four gun index states.

By the mid-1990s gun-related death rates were declining from historic peaks for both black teens and teens generally. It is important to understand why. One explanation consistent with the analysis we have presented here is that gun possession in more recent cohorts of teenagers is lower than in their immediate predecessors. Policies that are effective in reducing the gun access and gun possession by teens should reinforce the recent downward trend in teen mortality.

3.7. Adolescent Pregnancy and Births

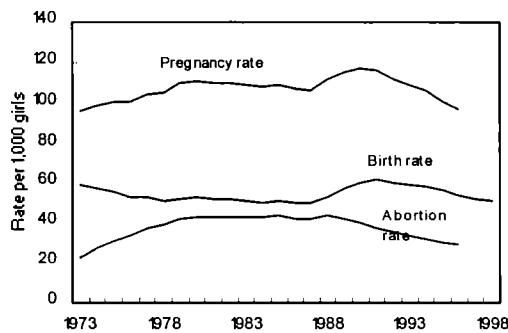
Social scientists and policy makers alike are deeply concerned about the high level of adolescent births in the United States. The most recent trends have in fact been encouraging. The overall birth rate to teens age 15-19 declined by 18 percent from 1991 to 1998 and teen birth rates have fallen in every State and across ethnic and racial groups. For a subset of teens, girls ages 15 to 17, the birth rate, 30 births for every 1,000 teen girls in 1998, was the lowest rate in

This analysis was prepared using: Smith, T. and Martos, L., "Attitudes Towards and Experiences With Guns: A State-level Perspective," National Opinion Research Center, December.

Gun availability in each state is estimated at the average of the percentage of homicides and suicides that are firearm related. This index, created by Philip Cook, is used to designate states with the highest average gun levels (Louisiana, Alabama, Mississippi, and Kentucky) and lowest average gun levels (Hawaii, Massachusetts, Rhode Island, and New Jersey) for 1988-1997. Analysis using this index follows Miller, M., Azrael, D., and Hemenway, D. "Firearm Availability and Unintentional Firearm Deaths, Suicide, and Homicide Among 5-14 Year-Olds" (forthcoming).

President Clinton identified teenage childbearing as [need quote and cite]. An example of recent contributions about the causes and effects of teenage childbearing is *Kids Having Kids* [cite].

four decades. In addition, teen pregnancy rates for this group are at the lowest level since 1976, the earliest year for which data are available. More generally, the teen pregnancy rate decreased by approximately 16 percent between 1991 and 1996 (the latest year available). The abortion rate declined by 22 percent over the same period, and the share of pregnancies ending in abortion fell. (See Chart 9 for recent trends.)



The large majority of births to teens are to unmarried young women. To put this in historical perspective, in 1930-34, among teens (age 15 to 19) having their first child, about 15 percent of young women were unmarried. The corresponding number for teens in 1990-94 was 75 percent. In 1998, 78 percent of all teen births were to unmarried young women.

Despite recent reductions in teen pregnancy and childbearing, teen birth rates are very high compared to other countries. Among concerns surrounding this high rate is that in the US adolescent childbearing has been tied to a number of negative outcomes for both the mother and the child. A recently published series of studies on teen parenthood found that roughly four-fifths of teen mothers end up on welfare. The children were found to have poorer health outcomes and were 50 percent more likely to be of low birthweight. In addition, the sons of adolescent mothers were found to be 2.7 times as likely to be incarcerated as the sons of mothers who delayed pregnancy, and the daughters of adolescent mothers were one-third more likely to become teen mothers themselves. [From ERP, need cites.]

Moreover, despite positive news about generally declining teen pregnancy and birth rates, evidence about a recent upturn in sexual activity among girls under the age of 15 highlights the serious challenge facing teens, their families and their communities. In particular, data from the National Survey of Family Growth shows that in 1988, 11 percent of teen girls under the age of 15 had had sex. In 1995, this fraction had increased to 19 percent.

As we discussed below, there is evidence that parents can play an important role in teens' decisions about having sex at young ages. Teens who have a strong attachment to their parents are less likely to be sexually active and less likely to become pregnant. [Check.] The web site www.teenpregnancy.org gives considerable additional information about the seriousness of the

A recently published study compiled data on adolescent birthrates for 46 developed countries over recent decades, and gathered abortion and pregnancy rates for a subset of these countries [cite]. The range in the pregnancy rates across these countries in the mid-1990s is very wide, from a low of 12 births per 1,000 adolescent females in the Netherlands to a higher levels, near 80 per 1,000, in Bulgaria and the United States. Western European and other developing countries generally have lower teen pregnancy rates than eastern European countries and the United States. Over the early 1990s adolescent pregnancy rates declined in nearly all of the reporting countries. International comparisons of adolescent birth and abortion rate data reveal a similar pattern.

problem of teen pregnancy and the issue of who suffers the consequence, as well as information for teens and their families about preventing teen pregnancy (see the web site's "facts and stats," which provides citations). Among the points emphasized are:

- Most adults (95 percent) and teens (85 percent) believe it is important that society give the strong message to school-age young people to abstain from sex until they are out of high school. Still, most adults believe that sexually active teens should have access to contraceptives.
- Many teens rate their parents rate high as a preferred and trustworthy source of information about contraception. About half of teens say their parents are a reliable source for such information, compared to 12 percent who say a friend.
- A majority of sexually active teens—both boys and girls—say that they wished they had waited.

1.8. *Smoking.*

4.1 million young people under the age of 18 are smokers. It has been estimated that every day more than 3000 American youth become regular smokers, about one third of whom will die prematurely as a result. If this trend continues, more than 5 million young people living today will die prematurely.

In 1998, 9 percent of 8th graders, 16 percent of 10th graders, and 22 percent of 12th graders reported smoking daily in the previous 30 days. For all three groups, rates of smoking generally increased from 1992, though from 1997 to 1998 there were declines for the older two groups (and a flat trend for the 8th graders). Over the longer term, the incidence of youth smoking declined between the mid-1970s and the early 1990s, prior to the recent upswing. The recent increase contrasts with the continued steady decline in adult smoking rates and has resulted in a youth smoking rate that is nearly twice that of adults. The high rate of smoking among young people is particularly troubling because smoking by youth is strongly linked to smoking as an adult. Indeed, young smokers tend to greatly underestimate the likelihood that they will be able to quit as adults. Among high school seniors who smoked, 56 percent said that they would not be smoking five years later, but in fact only 31 percent quit.

A recent study by Jonathan Gruber and Jonathan Zinman analyzing the most recent available data from the Monitoring the Future (MTF) survey shows that while adult smoking tends to be concentrated among those in low socioeconomic status groups, youth smoking is more diffuse. The single most important determinant of smoking is race, with black youth smoking rates much lower than white youth smoking rates. Youth smoking is more likely in the suburbs than in either the city or rural areas and it is positively correlated with parental education. It is also more likely, however, among those with worse academic performance, those

Department of Health and Human Services (1994). *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*. Washington, D.C.: U.S. Government Printing Office.

Jonathan Gruber and Jonathan Zinman, "Youth Smoking in the U.S.: Evidence and Implications," forthcoming in Jonathan Gruber, editor, *An Economic Analysis of Risky Behavior Among Youths*. NBER Monograph, University of Chicago Press.

who miss more school, and those who do not plan to go to college. The study provides direct evidence that more hours worked by the teen and more income lead to smoking among high school seniors. The authors speculate that many of the observed correlations reflect unmeasured aspects of income.

In trying to explain why youth smoking has increased in the 1990s, it is natural to ask about the role of changes in background factors. For the most part, these factors appear not to have been particularly important. Smoking has risen among “advantaged” youth relative to disadvantaged youth, particularly in the 1990s. Nevertheless, these relative changes are swamped by the general increases in smoking rates across all groups. These increases in smoking have also been accompanied by increases in the use of other substances such as alcohol and marijuana. Some evidence suggests that use of other substances may be complementary to smoking, so that the rise in smoking induced an increase in the use of other substances as well. However, the correlation was much tighter in the 1990s than in earlier periods, suggesting the possibility that teen tastes shifted toward substance use generally in the 1990s.

A final factor that may help explain the rise in teen smoking in the 1990s is the price of cigarettes. The role of cigarette price is particularly intriguing from the standpoint of public policy, since prices are much more likely to be under the control of policy than background characteristics. Gruber and Zinman estimate that for high school seniors, a 10 percent increase in price would reduce the proportion of youth who smoke about 6½ percent and the total number of cigarettes smoked by about 13 percent. Overall, the researchers’ work suggests that the decline in cigarette prices over the early and mid-1990s led to about one third of the increase in smoking among high school seniors. Curiously, the price increase does not appear to explain trends for younger teen smokers. However, restrictions on access to cigarette purchases did seem to lower the quantity of cigarettes smoked by younger teens.

4. The Importance of the Parent-Teen Relationship

In section 2 of this report we emphasized some of the general societal trends over the past century that have led to current busy lives that many American families lead. A recent Council of Economic Advisers report shows that the upward trend in labor market activity among parents has been substantial over the past few decades: for two-parent families with children under 18 annual hours of paid work increased by 497 hours (18 percent) from 1969 to 1996; for single parent households they increased by 297 hours (28 percent). These changes in parents’ hours of paid work generally reflect increases by wives and by single parents, rather than by husbands.

The increasing parental time spent in the workplace and in commuting to work puts a substantial squeeze on families to find time for other important activities, including time for parents to spend with children. Suzanne Bianchi (2000) points out that many parents have been resourceful in finding time to spend with children. She discusses one study that shows hours per day mothers spent in care of family members actually changed very little from 1925 to 1975. And she cites her own research, comparing mothers’ time with children in 1965 and 1998, which indicates that even with the increase in single parenting and market work by mothers, mothers

This study cited by Bianchi is by Bryant and Zick (1996). These authors point out that in 1925 many women not in paid work nonetheless worked long hours on farms or on difficult domestic chores. (Because of data limitations, the analysis is restricted to white, two-parent families.)

are spending as much time with their children now as in 1965. There is also evidence of modest increases in time spent with children by married fathers.

Though Bianchi reminds us that the difficulty families often face in finding time for family and work is not a new phenomenon, she also emphasizes that coping with the time crunch is clearly a serious challenge. In the context of our report this issue is prominent because parental time spent with teenage children represents an important investment in the well being of young Americans.

A substantial literature on development of adolescents emphasizes that teens' own decisions and behaviors are critical for their present well-being and their future. Our report emphasizes, for instance, the growing importance of educational choices teens make. The economic advantage of gaining a strong education and building basic skills has never been higher, and the relative cost of falling behind is also increasing. Similarly, much of the risk to teens' health is the result of the behavior of teens as well as those around them. The leading causes of death among teens are accidents, suicide, and homicide. And the future health and economic status of teens is greatly affected by decisions they make while they are young, including sexual behavior and the decision to start smoking. It is thus understandable that parents are deeply concerned about ways of encouraging their teens to make good decisions and about protecting them from threats to that harm their present and future welfare.

Researchers tell us that, in fact, a teen's family environment makes a real difference. One recent research report published in the *Journal of the American Medical Association* by Michael Resnick and co-authors highlights the key importance of parents' involvement in their teenage children's lives for a host of important outcomes. Using a large and detailed data set, the National Longitudinal Study on Adolescent Health ("Add Health" data, collected from several thousand adolescents in grades 7 to 12), the authors of the report examined a variety of issues, including the role of parents in affecting teen behavior.

Among the many important findings emerging from this research is the importance of the family context for behaviors of teens. Having controlled for socioeconomic differences in teens' families, the authors identify a number of factors of family life—including "Parent and Family Connectedness," "Parent/Adolescent Activities," and "Parental Presence"—that emerge as "protective factors" for teens. Teens who have relatively higher parental involvement in their lives are protected from emotional stress, suicide thoughts or attempts, violence, and substance abuse, and are less likely to become sexually involved at young ages.

Here we present additional analysis from the public use version of the Add Health data that underscores some of the key and interesting findings that are emerging from this important research. We find that the data provide evidence suggesting a key role for parents in many of their teen children's decisions, including many of the behaviors highlighted in the previous section of our report.

Our interest is in examining the relationship between various teen outcomes of

See Michael Resnick, et al., "Protecting Adolescents From Harm: Findings From the National Longitudinal Study on Adolescent Health," *Journal of the American Medical Association*, September 1997. An accessible summary of many of the study's findings can be found in Robert Blum and Peggy Rinehart, "Reducing the Risk: Connections That Make a Difference in the Lives of Youth," Division of General Pediatrics and Adolescent Health, University of Minnesota.

One key disadvantage of the public-use version of the data is that only about half of the sample has been released. Thus the analysis presented here is generally based on around 6000 observations.

interest—like school performance or smoking behavior—with a range of measures of parental involvement with the teen—like how much time parents spend with their teen or how close the teen feels to parents. In conducting this analysis, we use statistical procedures that control for differences in teen outcomes that arise on the basis of age, sex, family structure, and poverty status. Our strategy is to first divide our sample into 24 demographic groups, and then conduct a series of regression analyses in which the dependant variable is the teen outcome and the independent variables are a parental involvement variable along with 24 indicator variables controlling for demographic group of the teen. The resulting estimate can be interpreted as the average relationship between the parent variable and teen outcome across the demographic groups.

[We are currently generating statistics for this section. We anticipate that we will have a two-page write-up of a number of interesting findings showing teens do better on a number of dimensions—higher grades in school, lower rates of sexual activity among young teens, lower suicidal ideation, fewer violent altercations, etc.—when they eat meals with a parent, have close parent-teen relationships, or are involved in more activities together with a parent.]

We divide our sample into 3 age groupings (14 and younger, 15 to 16, and 17 and older), 2 sexes, 2 basic family structures (teens who live with two parents, and other families), and 2 poverty groupings (households in which one or more parent receives welfare, and other households). This 3 by 2 by 2 by 2 design gives 24 distinct demographic groups. For example, one group would be “13-14 year-old boys who live with two parents neither of whom receive welfare.” Our use the extensive interaction design conditions on only on differences on the teen outcome variable that arise because of age, for example, but for age effects that vary by sex or by poverty status. Or, as another example, allows for the possibility that the average effect of family structure on the teen outcome variable differs by age and gender. The estimates of the coefficients on the demographic variables may be of independent interest but we focus here strictly on the estimated effects of the parental involvement variables.

* source: Haver Census data & Historical Stats book p.A119-134 for year 1900						
Cohort Size						overall
Overall					0	20.6%
	1900	1950	1990	1999	10	0.0%
total population (K)	75,995	151,868	249,440	272,878	20	0.0%
under 20	44.3%				30	0.0%
age 10-14	10.6%	7.4%	6.9%	7.2%	40	0.0%
age 15-19	9.9%	7.0%	7.1%	7.2%	50	14.4%
age 10-19	20.6%	14.4%	14.0%	14.4%	51	14.2%
					52	14.3%
Male					53	14.6%
	1900	1950	1990	1999	54	14.8%
total population (K)	38,816	75,449	121,624	133,352	55	14.9%
age 10-14	10.5%	7.6%	7.2%	7.5%	56	14.9%
age 15-19	9.7%	7.0%	7.5%	7.6%	57	15.6%
age 10-19	20.2%	14.6%	14.7%	15.1%	58	16.0%
					59	16.4%
Female					60	16.8%
	1900	1950	1990	1999	61	17.2%
total population (K)	37,178	76,419	127,815	139,526	62	17.6%
age 10-14	10.8%	7.2%	6.6%	6.8%	63	17.8%
age 15-19	10.2%	6.9%	6.8%	6.9%	64	18.2%
age 10-19	21.0%	14.1%	13.3%	13.7%	65	18.6%
					66	19.1%
					67	19.1%
					68	19.3%
					69	19.5%
					70	19.7%
					71	19.7%
					72	19.7%
					73	19.7%
					74	19.6%
					75	19.4%
					76	19.1%
					77	18.6%
					78	18.2%
					79	17.7%
					80	17.3%
					81	16.9%
					82	16.4%
					83	15.9%
					84	15.4%
					85	15.0%
					86	14.7%
					87	14.5%
					88	14.3%
					89	14.2%
					90	14.0%
					91	13.8%
					92	13.8%
					93	13.9%
					94	14.0%
					95	14.1%
					96	14.2%
					97	14.3%
					98	14.3%
					99	14.4%
					100	0.0%

male	female
20.2%	21.0%
0.0%	0.0%
0.0%	0.0%
0.0%	0.0%
0.0%	0.0%
14.6%	14.1%
14.5%	14.0%
14.6%	14.0%
14.9%	14.3%
15.1%	14.5%
15.2%	14.6%
15.2%	14.6%
16.0%	15.3%
16.4%	15.7%
16.9%	16.0%
17.2%	16.4%
17.7%	16.7%
18.1%	17.1%
18.3%	17.3%
18.7%	17.6%
19.2%	18.0%
19.7%	18.4%
19.8%	18.4%
20.1%	18.6%
20.3%	18.7%
20.5%	18.9%
20.6%	18.9%
20.6%	19.0%
20.6%	18.9%
20.5%	18.8%
20.3%	18.6%
20.0%	18.3%
19.5%	17.8%
19.0%	17.4%
18.6%	16.9%
18.2%	16.5%
17.8%	16.1%
17.3%	15.7%
16.7%	15.2%
16.2%	14.7%
15.8%	14.3%
15.4%	14.0%
15.2%	13.8%
15.0%	13.6%
14.9%	13.5%
14.7%	13.3%
14.6%	13.2%
14.5%	13.2%
14.6%	13.2%
14.7%	13.3%
14.8%	13.4%
14.9%	13.5%
15.0%	13.6%
15.1%	13.7%
15.1%	13.7%
0.0%	0.0%

Cohort Size						* Based on the July numbers for each ye	
Total	(thousands)					50 100	POP
							Resident Population: Total (thous)
	1900	1950	1990	1999	DESC		
total population	75995	151868	249440	272820	SOURCE	CEN	
under 20	33681				50		151868
age 10-14	8080	11213	17191	19554	51		153982
age 15-19	7556	10603	17763	19758	52		156393
age 10-19	15636	21816	34954	39312	53		158956
					54		161884
Male					55		165069
	1900	1950	1990	1999	56		168088
total population	38,816	75,449	121,624	133,315	57		171187
age 10-14	4,083	5,707	8,806	10,015	58		174149
age 15-19	3,750	5,309	9,114	10,156	59		177135
age 10-19	7,833	11,016	17,920	20,171	60		179979
					61		182992
Female					62		185771
	1900	1950	1990	1999	63		188483
total population	37,178	76,419	127,815	139,505	64		191141
age 10-14	3,997	5,506	8,385	9,540	65		193526
age 15-19	3,806	5,294	8,649	9,601	66		195576
age 10-19	7,803	10,800	17,034	19,141	67		197457
					68		199399
* source: Census website & Historical Stats book p A119-134					69		201385
** 1999 population based on Jan 13, 2000 numbers from					70		203984
http://www.census.gov/population/www/projections/natdet.html					71		206827
*** 1950 #s based on Haver data					72		209284
					73		211357
					74		213342
					75		215465
					76		217563
					77		219760
					78		222095
					79		224567
					80		227225
					81		229466
					82		231664
					83		233792
					84		235825
					85		237924
					86		240133
					87		242289
					88		244499
					89		246819
					90		249440
					91		252127
					92		254995
					93		257746
					94		260289
					95		262765
					96		265190
					97		267744
					98		270299
					99		272878
					100		0

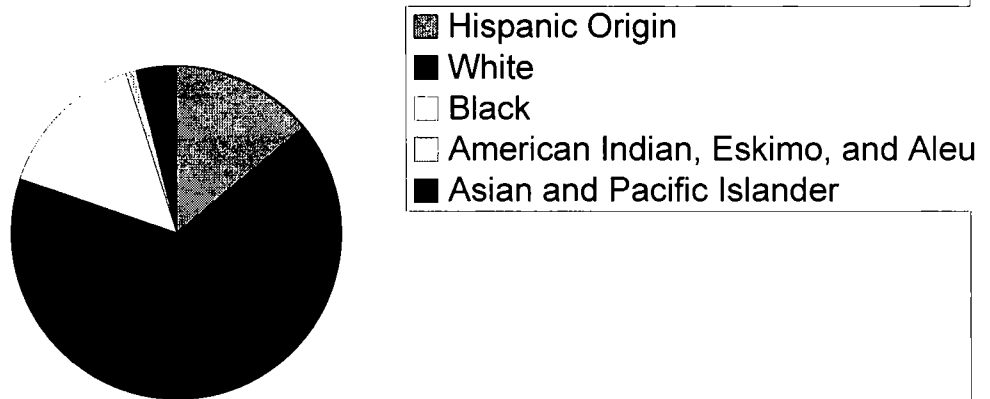
POP10	POP15	POPM	POPM10	POPM15	POPF	POPF10	POPF15		percentage
Resident Population: 10-14 Years (thous)	Resident Population: 15-19 Years (thous)	Resident Male Population: Total (thous)	Resident Male Population: 10-14 Years (thous)	Resident Male Population: 15-19 Years (thous)	Resident Female Population: Total (thous)	Resident Female Population: 10-14 Years (thous)	Resident Female Population: 15-19 Years (thous)		overall
CEN	CEN	CEN	CEN	CEN	CEN	CEN	CEN		
11213	10603	75449	5707	5309	76419	5506	5294		14.4%
11500	10438	76211	5850	5198	77771	5650	5239		14.2%
11962	10415	77219	6090	5180	79174	5872	5235		14.3%
12671	10572	78394	6453	5265	80562	6218	5307		14.6%
13191	10775	79837	6716	5365	82047	6475	5409		14.8%
13638	10895	81507	6944	5415	83563	6694	5481		14.9%
13918	11193	82970	7085	5566	85119	6833	5627		14.9%
15045	11656	84456	7658	5814	86731	7387	5842		15.6%
15546	12391	85876	7910	6206	88273	7636	6185		16.0%
16220	12916	87305	8249	6481	89830	7971	6436		16.4%
16925	13326	88632	8602	6687	91347	8323	6639		16.8%
17835	13643	90045	9065	6848	92948	8771	6794		17.2%
17794	14830	91304	9045	7454	94467	8749	7376		17.6%
18128	15406	92548	9217	7759	95935	8911	7647		17.8%
18547	16155	93774	9433	8147	97367	9114	8008		18.2%
19049	16922	94835	9692	8536	98690	9357	8386		18.6%
19478	17813	95640	9913	8970	99937	9565	8842		19.1%
19963	17791	96313	10163	8954	101144	9800	8836		19.1%
20357	18191	97125	10367	9177	102275	9990	9013		19.3%
20641	18622	98000	10513	9387	103384	10128	9234		19.5%
20853	19231	99291	10622	9714	104692	10230	9517		19.7%
21095	19715	100738	10749	9975	106089	10346	9740		19.7%
21099	20224	101984	10752	10236	107300	10347	9988		19.7%
21030	20646	102962	10720	10453	108396	10310	10193		19.7%
20911	20978	103890	10668	10629	109451	10243	10349		19.6%
20646	21223	104876	10534	10757	110589	10112	10465		19.4%
20088	21478	105859	10251	10896	111704	9837	10582		19.1%
19504	21477	106880	9954	10895	112880	9550	10581		18.6%
18920	21435	107963	9657	10881	114132	9262	10555		18.2%
18445	21348	109132	9414	10850	115436	9031	10498		17.7%
18236	21111	110399	9313	10730	116826	8923	10381		17.3%
18300	20541	111503	9352	10445	117963	8949	10096		16.9%
18145	19962	112579	9277	10153	119085	8867	9809		16.4%
17869	19388	113647	9139	9873	120145	8730	9515		15.9%
17450	18931	114670	8930	9643	121155	8520	9287		15.4%
17027	18727	115730	8719	9553	122194	8309	9174		15.0%
16474	18813	116865	8435	9607	123268	8039	9206		14.7%
16377	18698	117961	8390	9559	124328	7987	9139		14.5%
16496	18496	119086	8453	9467	125413	8043	9029		14.3%
16797	18133	120278	8606	9293	126542	8191	8840		14.2%
17191	17763	121624	8806	9114	127815	8385	8649		14.0%
17676	17232	122943	9056	8844	129184	8620	8388		13.8%
18099	17178	124404	9273	8823	130590	8826	8354		13.8%
18505	17373	125767	9481	8927	131979	9024	8446		13.9%
18713	17740	127028	9586	9118	133261	9127	8622		14.0%
18849	18200	128272	9656	9357	134493	9194	8843		14.1%
19001	18704	129483	9733	9617	135707	9268	9087		14.2%
19091	19140	130760	9778	9841	136984	9312	9299		14.3%
19242	19539	132046	9855	10046	138252	9387	9494		14.3%
19554	19762	133352	10015	10159	139526	9540	9603		14.4%
0	0	0	0	0	0	0	0		0.0%

male	female
14.6%	14.1%
14.5%	14.0%
14.6%	14.0%
14.9%	14.3%
15.1%	14.5%
15.2%	14.6%
15.2%	14.6%
16.0%	15.3%
16.4%	15.7%
16.9%	16.0%
17.2%	16.4%
17.7%	16.7%
18.1%	17.1%
18.3%	17.3%
18.7%	17.6%
19.2%	18.0%
19.7%	18.4%
19.8%	18.4%
20.1%	18.6%
20.3%	18.7%
20.5%	18.9%
20.6%	18.9%
20.6%	19.0%
20.6%	18.9%
20.5%	18.8%
20.3%	18.6%
20.0%	18.3%
19.5%	17.8%
19.0%	17.4%
18.6%	16.9%
18.2%	16.5%
17.8%	16.1%
17.3%	15.7%
16.7%	15.2%
16.2%	14.7%
15.8%	14.3%
15.4%	14.0%
15.2%	13.8%
15.0%	13.6%
14.9%	13.5%
14.7%	13.3%
14.6%	13.2%
14.5%	13.2%
14.6%	13.2%
14.7%	13.3%
14.8%	13.4%
14.9%	13.5%
15.0%	13.6%
15.1%	13.7%
15.1%	13.7%
0.0%	0.0%

Source: **Table 11**; National Vital Statistics Report, Vol. 47, Dec 13, 1999 (see table 1 as well)

(http://?????)					
	Life expectancy for 15-year-olds				
period	Overall	Male	Female	White	Black
1900-1902	61.81	61.06	62.6	62.01	54.04
1949-51	70.91	68.56	73.52	71.65	64.73
1989-91	76.38	72.91	79.73	76.99	70.86
1997	77.3	74.4	80.1	77.8	72.5
There are some data comparability issue:					
* Alaska and Hawaii not included prior to 1959					
** data prior to 1929 are for death-registration states only					

Ethnicity Breakdown of Teenagers (10-19) 1999



Source: Census Table NP-D1-A, see fact-binder http://www.census.gov/population/www/projections/natdet-D1A.html											
Projection, in thousands, resident population (Census MIDDLE international migration series)							Percentages		10-19 group more diverse than population overa		
Non-Hispanic by Race							Non-Hispanic by Race				
1-Jul-99	Overall	Hispanic Origin	White	Black	American Indian, Eskimo, and Aleut	Asian and Pacific Islander	1-Jul-99	Hispanic Origin	White	Black	
total population	272820	31356	196079	33107	2024	10253	total population	11.5	71.9	12.1	
age 10-14	19554	2739	12917	2926	207	765	age 10-14	14.0	66.1	15.0	
age 15-19	19758	2782	13122	2892	195	766	age 15-19	14.1	66.4	14.6	
age 10-19	39312	5521	26039	5818	402	1531	age 10-19	14.0	66.2	14.8	
Non-Hispanic by Race							Non-Hispanic by Race				
2025	Overall	Hispanic Origin	White	Black	American Indian, Eskimo, and Aleut	Asian and Pacific Islander	2025	Hispanic Origin	White	Black	
total population	337815	61433	209340	43528	2668	20846	total population	18.2	62.0	12.9	
age 10-14	22289	5286	12123	3156	222	1502	age 10-14	23.7	54.4	14.2	
age 15-19	22203	5207	12081	3217	218	1481	age 15-19	23.5	54.4	14.5	
age 10-19	44492	10493	24204	6373	440	2983	age 10-19	23.6	54.4	14.3	
Non-Hispanic by Race							Non-Hispanic by Race				
2050	Overall	Hispanic Origin	White	Black	American Indian, Eskimo, and Aleut	Asian and Pacific Islander	2050	Hispanic Origin	White	Black	
total population	403687	98229	212991	53466	3241	35760	total population	24.3	52.8	13.2	
age 10-14	26503	7895	12267	3558	242	2541	age 10-14	29.8	46.3	13.4	
age 15-19	26715	7818	12491	3677	239	2489	age 15-19	29.3	46.8	13.8	
age 10-19	53218	15713	24758	7235	481	5030	age 10-19	29.5	46.5	13.6	

American Indian, Eskimo, and Aleut	Asian and Pacific Islander						
0.7	3.8						
1.1	3.9						
1.0	3.9						
1.0	3.9						
American Indian, Eskimo, and Aleut	Asian and Pacific Islander						
0.8	6.2						
1.0	6.7						
1.0	6.7						
1.0	6.7						
American Indian, Eskimo, and Aleut	Asian and Pacific Islander						
0.8	8.9						
0.9	9.6						
0.9	9.3						
0.9	9.5						

[illegible]

				58 99	PVUN18	PVUN18A	PVUN18B	PVUN18H	PVUN18W
				DESC	Below Poverty Level: Under 18 yrs: All Races (Thous)	Below Poverty Level: Under 18 yrs: Asian/Pacific Islander (Thous)	Below Poverty Level: Under 18 yrs: Black (Thous)	Below Poverty Level: Under 18 yrs: Hispanic Origin (Thous)	Below Poverty Level: Under 18 yrs: White (Thous)
				SOURCE	CEN	CEN	CEN	CEN	CEN
				58	0	0	0	0	0
				59	17552	0	0	0	0
				60	17634	0	0	0	0
				61	16909	0	0	0	0
				62	16963	0	0	0	0
				63	16005	0	0	0	0
				64	16051	0	0	0	0
				65	14676	0	0	0	0
				66	12389	0	0	0	0
				67	11656	0	0	0	0
				68	10954	0	0	0	0
				69	9691	0	0	0	0
				70	10440	0	0	0	0
				71	10551	0	0	0	0
				72	10284	0	0	0	0
				73	9642	0	0	0	0
				74	10156	0	3755	0	6223
				75	11104	0	3925	0	6927
				76	10273	0	3787	1443	6189
				77	10288	0	3888	1422	6097
				78	9931	0	3830	1384	5831
				79	10377	0	3833	1535	6193
				80	11543	0	3961	1749	7181
				81	12505	0	4237	1925	7785
				82	13647	0	4472	2181	8678
				83	13911	0	4398	2312	8862
				84	13420	0	4413	2376	8472
				85	13010	0	4157	2606	8253
				86	12876	0	4148	2507	8209
				87	12843	455	4385	2670	7788
				88	12455	474	4296	2631	7435
				89	12590	392	4375	2603	7599
				90	13431	374	4550	2865	8232
				91	14341	360	4755	3094	8848
				92	15294	363	5106	3637	9399
				93	15727	375	5125	3873	9752
				94	15289	318	4906	4075	9346
				95	14665	564	4761	4080	8981
				96	14463	571	4519	4237	9044
				97	14113	628	4225	3972	8990
				98	13467	564	4151	3837	8443
				99	0	0	0	0	0

PVUN18P	PVUN18AP	PVUN18BP	PVUN18HP	PVUN18WP
Below Poverty Level: Under 18 yrs: Percent of All Races (%)	Below Poverty Level: Under 18 yrs: % of Asians/Pacific Islanders (%)	Below Poverty Level: Under 18 yrs: Percent of Blacks (%)	Below Poverty Level: Under 18 yrs: Percent of Hispanic Origin (%)	Below Poverty Level: Under 18 yrs: Percent of Whites (%)
CEN	CEN	CEN	CEN	CEN
0.0	0.0	0.0	0.0	0.0
27.3	0.0	0.0	0.0	0.0
26.9	0.0	0.0	0.0	0.0
25.6	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0
23.1	0.0	0.0	0.0	0.0
23.0	0.0	0.0	0.0	0.0
21.0	0.0	0.0	0.0	0.0
17.6	0.0	0.0	0.0	0.0
16.6	0.0	0.0	0.0	0.0
15.6	0.0	0.0	0.0	0.0
14.0	0.0	0.0	0.0	0.0
15.1	0.0	0.0	0.0	0.0
15.3	0.0	0.0	0.0	0.0
15.1	0.0	0.0	0.0	0.0
14.4	0.0	0.0	0.0	0.0
15.4	0.0	39.8	0.0	11.2
17.1	0.0	41.7	0.0	12.7
16.0	0.0	40.6	30.2	11.6
16.2	0.0	41.8	28.3	11.6
15.9	0.0	41.5	27.6	11.3
16.4	0.0	41.2	28.0	11.8
18.3	0.0	42.3	33.2	13.9
20.0	0.0	45.2	35.9	15.2
21.9	0.0	47.6	39.5	17.0
22.3	0.0	46.7	38.1	17.5
21.5	0.0	46.6	39.2	16.7
20.7	0.0	43.6	40.3	16.2
20.5	0.0	43.1	37.7	16.1
20.3	23.5	45.1	39.3	15.3
19.5	24.1	43.5	37.6	14.5
19.6	19.8	43.7	36.2	14.8
20.6	17.6	44.8	38.4	15.9
21.8	17.5	45.9	40.4	16.8
22.3	16.4	46.6	40.0	17.4
22.7	18.2	46.1	40.9	17.8
21.8	18.3	43.8	41.5	16.9
20.8	19.5	41.9	40.0	16.2
20.5	19.5	39.9	40.3	16.3
19.9	20.3	37.2	36.8	16.1
18.9	18.0	36.7	34.4	15.1
0.0	0.0	0.0	0.0	0.0

Item	1900	1950	1998		
Families with Children by Type					
Both Parents	NA	92.6	72.7		Census table m-1
Mother Only	NA	6.3	22.1		
Father Only	NA	1.1	5.2		
Living Arrangements of children by family status					
Two-parent farm family	41	17.0	----		Less than 2% and included in nonfarm totals
Two-parent nonfarm family					
Father breadwinner, mother homemaker	43	56.0	24.0		
Dual earner	2	13.0	44.0		
Single-parent	9.00	8.00	28.00		
Not living with parent	5.00	6.00	4.00		
Average Number of Children In Families	NA	2.2	1.9		Census table m-3
Life Expectancy for 15 Year-Olds					
Males	61.1	68.6	73.9		1998 data are 1996 data. NVSR v
Females	62.6	73.5	79.8		1900, 1950 are from unknown table
Percent of Population Ever Married 15-19					
Males	1.18	3.32	1.44		1900, 1950 from hist stx
Females	11.32	17.08	3.25		1998 from census marital status an
Women Who Ever Bore Children 15-19			9.3		
Birth Rate for Women 15-19		81.6	51.1		1950 from natl's fax to sean, 1998
Annual High School Dropout Rate			4.4		
Males	NA	3.7	4.3		
Females	NA	3.9	4.6		
Victims of Violent Crimes (16-19)	NA	8.17	12.05		from unknown table
Percent 18-24 Enrolled In College					
Males	2.30	33.1	34.5		census table a-5
Females		19.2	38.6		1900 from hist stx % who are residents-doesn't match 1950
Average SAT Verbal Score		431.0	428.0		
Average SAT Math Score		472.0	482.0		
Average number of days attended per pupil	99	157.9	160.8 (1980)		table 39 digest of ed stx
Percent of enrolled pupils attending daily	68.6	88.7	90.1 (1980)		table 39 digest of ed stx
Percent of Population 14-17 enrolled in School					
Total		83.7	96.6		table 6 digest of ed stx
Male		84.4			hist stx pg 37
Female		82.3			
White		86.4			
African American		82.3			
Percent of Population 18-24 High School Graduates					
Male			77.7		census table a-5
Female			83.6		
Percent of Population 25-29 with High School Diploma					
Total	6.3	52.8	87.4		1950, 1998 table 8 digest of ed stx
White		56.3	92.9		1900 stat from hist stx for 17 yr old
African American		23.6	86.9		(as of July 1st)
Percent of Population 25-29 with 4 or more years of college					
Total	1.9	7.7	27.8		1950, 1998 table 8 digest of ed stx
White		8.2	32.6		1900 hist stx p 386- degrees conferred differs from 1950 stat
African American		2.8	14.2		
Foreign-born as percent of population 10-19	6.5	0.8	6		1900, 1950 these numbers refer to virtually all foreign born residents w and 98% in 1950.)

Item	1900	1950	1998		
Living arrangements of children by family status					
Two-parent farm family	41.0	17.0	----		Less than 2% and included in nonfarm
Two-parent nonfarm family					totals
Father breadwinner, mother homemaker	43.0	56.0	24.0		
Dual earner	2.0	13.0	44.0		
Single-parent	9.0	8.0	28.0		
Not living with parent	5.0	6.0	4.0		
Average number of children in families	NA	2.2	1.9		Census table m-3
Average household size (persons)	4.8	3.4	2.6		erp
Households with seven or more people (percent)	20.4	4.9	1.2		erp
Foreign-born as percent of population 10-19	6.5	0.8	6		1900, 1950 these numbers refer to w virtually all foreign born residents we and 98% in 1950.)
Life expectancy for 15 year-olds					
Males	61.1	68.6	73.9		1998 data are 1996 data. NVSR v47
Females	62.6	73.5	79.8		1900, 1950 are from vital stx of the U
Black males	53.3	58.7	67.6		1950 numbers for black are 1940 da
Black females	54.8	61.1	75.5		
White males	61.3	69.2	74.6		
White females	62.8	74.4	80.3		
Birth rate for women aged 15-19	NA	81.6	51.1		1950 from nchs fax to sean, 1998 fro
Population aged 15-19 ever married (percent)					
Males	1.2	3.3	1.4		1900, 1950 from hist stx
Females	11.3	17.1	3.3		1998 from census marital status and
Victims of violent crimes (16-19)	NA	8.17	12.05		from unknown table
Average SAT Verbal Score	NA	431	428		
Average SAT Math Score	NA	472	482		
Average number of days attended per pupil	99.0	157.9	160.8		table 39 digest of ed stx 1998 data is 1980 data
Percent of enrolled pupils attending daily	68.6	88.7	90.1		
Population aged 14-17 enrolled in school (percent)					
Total		83.7	96.6		table 6 digest of ed stx
Male		84.4			hist stx pg 37
Female		82.3			
White		86.4			
African American		82.3			
Population aged 18-24 enrolled in college (percent)					
Males	} 2.3	33.1	34.5		census table a-5
Females		19.2	38.6		1900 from hist stx % who are residents doesn't match 1950
Population aged 25-29 with high school diploma (percent)					
Total	6.3	52.8	87.4		1950, 1998 table 8 digest of ed stx
White		56.3	92.9		1900 stat from hist stx for 17 yr olds
African American		23.6	86.9		(as of July 1st)
Population aged 25-29 with 4 or more years of college (percent)					
Total	1.9	7.7	27.8		1950, 1998 table 8 digest of ed stx
White		8.2	32.6		1900 hist stx p 386- degrees conferr
African American		2.8	14.2		differs from 1950 stat
Annual High School Dropout Rate			4.4		
Males	NA	3.7	4.3		
Females	NA	3.9	4.6		
Labor force participation of women (percent)	20.0	33.9	60.0		erp

Item	1900	1950	1998
Living arrangements of children by family status (percent)			
Two-parent farm family	41	17	---
Two-parent nonfarm family			
Father breadwinner, mother homemaker	43	56	24
Dual earner	2	13	44
Single-parent	9	8	28
Not living with parent	5	6	4
Labor force participation of women (percent)	20.0	33.9	60.0
Average household size (persons)	4.8	3.4	2.6
Households with seven or more people (percent)	20.4	4.9	1.2
Foreign-born as percent of population 10-19	6.5	0.8	6
Life expectancy for 15 year-olds			
Black males	53.3	58.7	67.6
Black females	54.8	61.1	75.5
White males	61.3	69.2	74.6
White females	62.8	74.4	80.3
Birth rate for women aged 15-19 ₂	---	81.6	51.1
Population aged 15-19 ever married (percent)			
Males	1.2	3.3	1.4
Females	11.3	17.1	3.3
Victims of violent crimes (16-19) ₃	---	8.17	12.05
Average SAT Verbal Score ₄	---	431	428
Average SAT Math Score ₄	---	472	482
Average number of days attended per pupils	99.0	157.9	160.8
Percent of enrolled pupils attending daily ₅	68.6	88.7	90.1
Population aged 14-17 enrolled in school (percent)	---	83.7	96.6
Population aged 18-24 enrolled in college (percent) ₆			
Males	} 2.3	33.1	34.5
Females		19.2	38.6
Population aged 25-29 with high school diploma (percent)	6.3	52.8	87.4
Population aged 25-29 with 4 or more years of college (percent)	1.9	7.7	27.8
(1) The data for 1900 and 1950 refer to whites only. In these years virtually all foreign born residents were white (99% in 1900 and 98% in 1950). (2) Live births per 1,000 women in age category. (3) Victimization per 1,000 16-19 year olds.			
(4) 1950 number is 1975-1976 data. Violent crime includes homicide, rape, robbery, and assault.			
Most recent data is for 1994. 1950 statistic is 1973 data			
(5) 1998 number is 1980 data, estimated by NCES.			
(6) 1900 number is percent residents (??)			
(7) 1900 number is percent of persons 17 years old as of July 1st.			
(8) 1900 number is degrees conferred per 1,000 23 year olds.			

Item	1900	1950	1998
Households With Children By Type			
Both Parents	(1)	92.6	7.3
Mother Only	(1)	6.3	2.2
Father Only	(1)	1.1	5.2
Average Number of Children In Household	(1)	2.2	1.9
Life Expectancy at 15 Years			
Males	46.1	53.6	58.9
Females	47.6	58.5	64.8
Percent of Population Ever Married 15-19			
Males	5.17	2.91	2.02
Females	9.50	1.44	3.75
Women Who Ever Bore Children 15-19	12.1	8.3	11.6
High School Graduates Enrolled In College		33.7	45.3
Males		44.7	44.4
Females		25.1	46.2
Average SAT Verbal Score		431.0	428.0
Average SAT Math Score		472.0	482.0
Annual High School Dropout Rate		5.2	4.4
Males	(1)	5.1	4.3
Females	(1)	5.2	4.6
Victims of Violent Crimes	(1)	16.35	23.33
Drug Use			
Alcohol Use			
Cigarette Use			
(1) No data available			

Table 1. American Families and Teens, Then and Now

	1900	1950	1998
Trends in the American Family			
Living arrangements of children by family status (percent)			
Two-parent farm family	41	17	----
Two-parent nonfarm family			
Father breadwinner, mother homemaker	43	56	24
Dual earner	2	13	44
Single-parent	9	8	28
Not living with parent	5	6	4
Labor force participation of women (percent)	20.0	33.9	60.0
Average household size (persons)	4.8	3.4	2.6
Households with seven or more people (percent)	20.4	4.9	1.2
Trends for American Youth			
Foreign-born as percent of population 10-19	6.5	0.8	6.0
Life expectancy for 15 year-olds			
Black males	53.3	58.7	67.6
Black females	54.8	61.1	75.5
White males	61.3	69.2	74.6
White females	62.8	74.4	80.3
Birth rate for women aged 15-19 ²	---	81.6	51.1
Population aged 15-19 ever married (percent)			
Males	1.2	3.3	1.4
Females	11.3	17.1	3.3
Victims of violent crimes (16-19) ³	---	8.2	12.1
Average SAT Verbal Score ⁴	---	431	428
Average SAT Math Score ⁴	---	472	482
Average number of days attended per pupils ⁵	99.0	157.9	160.8
Percent of enrolled pupils attending daily ⁵	68.6	88.7	90.1
Population aged 14-17 enrolled in school (percent)	10.2	76.1	92.8
Population aged 18-24 enrolled in college (percent) ⁶			
Males	2.3	33.1	34.5
Females		19.2	38.6
Population aged 25-29 with high school diploma (percent)	6.3	52.8	87.4
Population aged 25-29 with 4 or more years of college (percent)	1.9	7.7	27.8

(1) The data for 1900 and 1950 refer to whites only. In these years virtually all foreign born residents were white (99% in 1900 and 98% in 1950). (2) Live births per 1,000 women in age category. (3) Victimization per 1,000 16-19 year olds. (4) 1950 number is 1975-1976 data. Violent crime includes homicide, rape, robbery, and assault. Most recent data is for 1994. 1950 statistic is 1973 data. (5) 1998 number is 1980 data, estimated by NCES. (6) 1900 number is percent residents (??) (7) 1900 number is high school graduates as a percent of persons 17 years old as of July 1st. (8) 1900 number is degrees conferred per 1,000 23 year olds.

Table X. Teen Outcomes by Age Related to Parental Involvement

	Age < 14	15-16	17-19
Percent of Teens who Smoked in the Last 30 Days			
Teens who do not eat dinner with a parent 5 days a week.	24.0	34.1	40.6
Teens who eat dinner with a parent at least 5 days a week.	14.8	25.2	27.6
Percentage point difference in outcome:	9.1*	8.8*	13.0*
Difference after statistical controls:	8.5*	8.3*	12.0*
Teens who are not close to their mother and/or father.	34.4	41.9	40.9
Teens who are close to their mother and/or father.	15.0	25.5	23.7
Percentage point difference in outcome:	19.3*	16.4*	11.1*
Difference after statistical controls:	18.0*	15.2*	10.4*
Percent of Teens who Drink More Than Monthly			
Teens who do not eat dinner with a parent 5 days a week.	13.2	23.6	30.7
Teens who eat dinner with a parent at least 5 days a week.	6.8	13.9	25.8
Percentage point difference in outcome:	6.4*	9.6*	4.9*
Difference after statistical controls:	6.3*	9.1*	4.3*
Teens who are not close to their mother and/or father.	18.3	29.3	32.2
Teens who are close to their mother and/or father.	7.2	15.0	27.8
Percentage point difference in outcome:	11.0*	14.3*	4.4
Difference after statistical controls:	10.9*	14.4*	4.1
Percent of Teens who Ever Used Marijuana			
Teens who do not eat dinner with a parent 5 days a week.	19.6	38.8	43.8
Teens who eat dinner with a parent at least 5 days a week.	11.9	22.8	28.7
Percentage point difference in outcome:	7.6*	16.0*	15.1*
Difference after statistical controls:	6.7*	14.0*	14.1*

Teens who are not close to their mother and/or father.	30.9	50.1	49.1
Teens who are close to their mother and/or father.	11.8	24.1	34.4

Percentage point difference in outcome:	19.1*	26.0*	14.7*
Difference after statistical controls:	17.1*	24.3*	13.7*

	Age <14	14-15	17-19
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Percent of Teens who Lie to Parents

Teens who do not eat dinner with a parent 5 days a week.	55.1	62.1	59.9
Teens who eat dinner with a parent at least 5 days a week.	40.5	52.6	51.6

Percentage point difference in outcome:	14.7*	9.5*	8.3*
Difference after statistical controls:	13.3*	9.2*	8.9*

Teens who are not close to their mother and/or father.	72.1	75.7	71.8
Teens who are close to their mother and/or father.	40.9	51.6	52.3

Percentage point difference in outcome:	31.2*	24.1*	19.6*
Difference after statistical controls:	29.8*	22.9*	20.1*

Percent of Teens who Have Been in a Serious Fight

Teens who do not eat dinner with a parent 5 days a week.	40.5	41.3	28.7
Teens who eat dinner with a parent at least 5 days a week.	33.8	29.3	24.9

Percentage point difference in outcome:	6.7*	12.0*	3.9
Difference after statistical controls:	7.0*	10.5*	2.5

Teens who are not close to their mother and/or father.	45.0	43.6	34.4
Teens who are close to their mother and/or father.	34.3	31.6	24.3

Percentage point difference in outcome:	10.7*	12.0*	9.1*
Difference after statistical controls:	11.4*	11.5*	8.8*

Percent of Teens Who Have Been Suspended from School

Teens who do not eat dinner with a parent 5 days a week.	29.6	33.9	31.4
Teens who eat dinner with a parent at least 5 days a week.	20.6	24.0	25.5

Percentage point difference in outcome:	9.0*	9.9*	5.9*
Difference after statistical controls:	7.5*	7.3*	3.7
Teens who are not close to their mother and/or father.	33.9	38.1	37.9
Teens who are close to their mother and/or father.	21.5	25.3	26.7
Percentage point difference in outcome:	12.4*	12.8*	11.3*
Difference after statistical controls:	7.8*	11.5*	9.7*

	Age < 14	15-16	17-19
School Performance: Self-Report Grade Point Average			
Teens who eat dinner with a parent at least 5 days a week.	3.06	2.93	2.99
Teens who do <i>not</i> eat dinner with a parent 5 days a week.	2.84	2.79	2.81
Difference in average GPA:	0.23*	0.14*	0.18*
Difference after statistical controls:	0.20*	0.10*	0.13*
Teens who are close to their mother and/or father.	3.03	2.91	2.95
Teens who are <i>not</i> close to their mother and/or father.	2.80	2.73	2.66
Difference in average GPA:	0.23*	0.18*	0.30*
Difference after statistical controls:	0.18*	0.11*	0.24*
Percent of Teens Who Have Ever Had Sex			
Teens who do <i>not</i> eat dinner with a parent 5 days a week.	22.3	50.3	68.2
Teens who eat dinner with a parent at least 5 days a week.	11.9	31.7	49.1
Percentage point difference in outcome:	10.3*	18.6*	19.0*
Difference after statistical controls:	8.8*	15.1*	17.4*
Teens who are <i>not</i> close to their mother and/or father.	27.5	54.7	70.8
Teens who are close to their mother and/or father.	12.9	35.2	57.6
Percentage point difference in outcome:	14.6*	19.5*	13.2*
Difference after statistical controls:	10.4*	15.4*	10.7*

Percent of Teens Who Think About Suicide

Teens who do <i>not</i> eat dinner with a parent 5 days a week.	16.6	18.5	14.8
Teens who eat dinner with a parent at least 5 days a week.	8.6	11.1	12.5
Percentage point difference in outcome:	8.0*	7.4*	2.3
Difference after statistical controls:	8.0*	7.1*	2.3
Teens who are <i>not</i> close to their mother and/or father.	27.1	31.2	24.2
Teens who are close to their mother and/or father.	8.7	10.0	11.1
Percentage point difference in outcome:	18.4*	21.2*	13.2*
Difference after statistical controls:	18.0*	21.0*	13.2*

	Age < 14	15-16	17-19
Percent of Teens Who Report Having Attempted Suicide			
Teens who do not eat dinner with a parent 5 days a week.	4.5	3.0	2.8
Teens who eat dinner with a parent at least 5 days a week.	1.8	1.5	1.5
Percentage difference in outcome:	2.7*	1.4*	0.7
Difference after statistical controls:	2.7*	1.4*	0.8
Teens who are not close to their mother and/or father.	5.4	4.4	4.0
Teens who are close to their mother and/or father.	2.3	1.6	0.9
Percentage difference in outcome:	3.1*	2.4*	3.1*
Difference after statistical controls:	3.0*	2.8*	3.1*

DRAFT.

4. The Importance of the Parent-Teen Relationship

In section 2 of this report we emphasized some of the general societal trends over the past century that have led to current busy lives that many American families lead. A recent Council of Economic Advisers report shows that the upward trend in labor market activity among parents has been substantial over the past few decades: for two-parent families with children under 18 annual hours of paid work increased by 497 hours (18 percent) from 1969 to 1996; for single parent households they increased by 297 hours (28 percent). These changes in parents' hours of paid work generally reflect increases by wives and by single parents, rather than by husbands.

The increasing parental time spent in the workplace and in commuting to work puts a substantial squeeze on families to find time for other important activities, including time for parents to spend with children. Suzanne Bianchi (2000) points out that many parents have been resourceful in finding time to spend with children. She discusses one study that shows hours per day mothers spent in care of family members actually changed very little from 1925 to 1975. And she cites her own research, comparing mothers' time with children in 1965 and 1998, which indicates that even with the increase in single parenting and market work by mothers, mothers are spending as much time with their children now as in 1965. There is also evidence of modest increases in time spent with children by married fathers.

Though Bianchi reminds us that the difficulty families often face in finding time for family and work is not a new phenomenon, she also emphasizes that coping with the time crunch is clearly a serious challenge. In the context of our report this issue is prominent because parental time spent with teenage children represents an important investment in the well-being of these young Americans.

Teens' own decisions and behaviors are critical for their present well-being and their future. Our report emphasizes, for instance, the growing importance of educational choices teens make. The economic advantage of gaining a strong education and building basic skills has never been higher; the relative cost of falling behind is increasing. Similarly, much of the risk to teens' health is the result of the behavior of teens as well as those around them. The leading causes of death among teens are accidents, homicide, and suicide. And the future health and economic status of teens is greatly affected by decisions they make while they are young, including sexual behavior and the decision to start smoking. It is thus understandable that parents are deeply concerned about ways of encouraging their teens to make good decisions and about protecting them from threats to that harm their present and future welfare.

Researchers tell us that, in fact, a teen's family environment makes a real difference. There is, of course, a large literature on the role of parenting in the outcomes of children generally. One recent research report published in the *Journal of the American Medical Association* by Michael Resnick and co-authors highlights the key importance of parents'

This study cited by Bianchi is by Bryant and Zick (1996). These authors point out that in 1925 many women not in paid work nonetheless worked long hours on farms or on difficult domestic chores. (Because of data limitations, the analysis is restricted to white, two-parent families.)

[Need cite here. Look at Patterson, Gerald, B. D. DeBaryshe, and E. Ramsey (1989), "A Developmental Perspective on Antisocial Behavior," *American Psychologist*, 1989.]

involvement in their teenage children specifically, focusing on a host of important outcomes. Using a large and detailed data set, the National Longitudinal Study on Adolescent Health ("Add Health" data, collected from several thousand adolescents in grades 7 to 12), the authors of the report examined a variety of issues. Among the many important findings emerging from this research is the importance of the family context for behaviors of teens. Having controlled for socioeconomic differences in teens' families, the authors identify a number of factors of family life—including "Parent and Family Connectedness," "Parent/Adolescent Activities," and "Parental Presence"—that emerge as "protective factors" for teens. Teens who have relatively higher parental involvement in their lives are protected from emotional stress, suicide thoughts or attempts, violence, and substance abuse, and are less likely to become sexually involved at young ages.

Here we present additional analysis from the public-use version of the Add Health data that underscores some of the key and interesting findings that are emerging from this important research. We find that the data provide evidence consistent with parents having a key role in many of their teen children's behaviors, including many highlighted in the previous section of our report.

Our interest is in examining the relationship between various teen outcomes—like school performance or smoking behavior—with two simple measures of parental involvement, parents eating dinner with the teen and a measure of perceived parent/child closeness. The "eating dinner together" variable, although a crude summary measure of parent-teen interaction, has the virtue that it reflects a visible pattern of *behavior* on the parent and teen child. The "parental closeness" variable, in contrast, may reflect more accurately an important psychological construct concerning the connection between the teen and parent(s), but is based solely on the teens' *perceptions*.

With busy and oftentimes inflexible schedules of both teens and parents, arranging to eat evening meals together may be difficult or impossible. For others it may simply not be a high priority. In any event, the Add Health data indicate that about 74 percent of kids 12 to 14 had in the previous week had 5 or more evening meals with a parent. This declined to 61 percent for teens age 15 or 16, and to 42 percent for teens age 17 to 19. Certainly, some parents who do not eat evenings meals with their teens find other occasions to maintain a connection with their kids. On average though, eating dinner together proves to be a "summary statistic" highly correlated our other indicator of teens' connection with their parents, and it is has a strong relationship with a number of measures of teen behavioral outcomes.

Our second indicator of parental involvement in teens' lives is a very simple measure of the teens' perceived relationships with their mother and/or father. In the Add Health survey, the

See Michael Resnick, et al., "Protecting Adolescents From Harm: Findings From the National Longitudinal Study on Adolescent Health," *Journal of the American Medical Association*, September 1997. An accessible summary of many of the study's findings can be found in Robert Blum and Peggy Rinehart, "Reducing the Risk: Connections That Make a Difference in the Lives of Youth," Division of General Pediatrics and Adolescent Health, University of Minnesota.

One key disadvantage of the public-use version of the data is that only about half of the sample has been released. Thus the analysis presented here is generally based on around 6000 [check] observations.

The Add Health data include a very small number of 11 year-olds and 20 and 21 year-olds. These are excluded from the sample. Our sample generally includes xx 12 year-olds, xx 13 year-olds, xx 14 year-olds, xx 15 year-olds, xx 16 year-olds, xx 17 year-olds, xx 18 year-olds, and xx 19 year-olds.

teens are asked about their level of agreement with the following three statements for their mother and father:

- (1) “Most of the time, your mother [father] is warm and loving toward you.”
- (2) “You are satisfied with the way your mother [father] and you communicate with each other.”
- (3) “Overall, you are satisfied with your relationship with your mother [father].”

We construct a very simple measure of teens’ closeness to their parent(s) using responses to these statements. Teens are said to be “close” to their mother and/or father when they indicate “Strongly Agree” or “Agree” to all three of the statements listed above for at least one parent. In our sample, 89 percent of teens age 12 to 14, 81 percent of teens age 15 to 16, and 83 percent of teens age 17 to 19 are “close” to either their mother or father (or both) using this measure.

Smoking. The first of the teen behaviors we examine is smoking. In the Add Health data 17 percent of 12 to 14 year-olds, 29 percent of 15 and 16 year-olds, and 35 percent of 17 to 19 year olds indicate that they smoked within the last 30 days. The first panel of Table X shows that there are big differences in these rates among teens who eat dinner with parents regularly and those who do not. For example, among teens 14 or younger, 24.0 percent of those who do *not* eat with a parent smoke compared with 14.8 percent who do eat with a parent. The third line of the table gives the *difference* in these smoking rates, 9.1 percentage points. (The difference between 24.0 and 14.8 isn’t 9.1 exactly; the discrepancy is due to rounding.) The asterisk indicates that this estimated difference is statistically significant at the 0.05 level.

One concern is that statistical result might in part be due to gender or family background. To address this issue we estimate a regression model (a linear probability model) in which teen smoking is taken to be the dependent variable and independent variables are the “eating dinner together” variable along with variables controlling for sex, family structure, and poverty status. In the case of smoking among teens 14 or younger, the difference after controlling for these factors, 8.5 percentage points, is only slightly lower than the difference in the absence of controls. Again the asterisk indicates statistical significance.

Results are similar for the middle teen group, 15 to 16 year-olds, and for teens 17 and older. Teens who eat dinner with a parent are much less likely to smoke than other teens, and these statistically significant differences do change much when we control for gender and family background.

Turning to the “closeness variable,” we notice that the pattern is much the same. Teens who indicate that they are close to their parent—who feel loved, are able to communicate with a parent, and are satisfied with their relationship with a parent—are much less likely to smoke.

Drinking and Marijuana Use. In the Add Health data, teens indicated they drink more than monthly in the following percentages: 9 percent of 12 to 14 year-olds, 18 percent of 15 and 16 year-olds, and 29 percent of 17 to 19 year-olds. Rates of marijuana use (measured by having “ever used” marijuana) were: 14 percent of 12 to 14 year-olds, 29 percent of 15 and 16 year-olds, and 37 percent of 17 to 19 year-olds. The analysis in Table X indicates that these behaviors are on average less likely among teens who eat dinner with parents and among those who are close to parents. In some cases, the differences are quite large. For example, 12 to 14 year-olds who

Our control variables are gender, two basic family structures (teens who live with two parents, and other families), a poverty measure (households in which one or more parent receives welfare, and other households).

regularly eat dinner with a parent are only about half as likely to drink as similar teens that don't.

Lying to Parents, Getting into Fights, and Getting Suspended from School. Most parents would like to be able to trust their teen children. They also want their teens to stay out of potentially dangerous fights and to avoid situations where disciplinary action at school is necessary. Statistics listed on the second page of Table X indicate that teens who eat dinner with a parent and who report being close to a parent have lower rates of all of these behaviors.

School Performance. In the Add Health data, teens are asked about their grades in four key subjects, xx, xx, xx, and xx. By assigning a 4.0 for an A, 3.0 for a B, 2.0 for a C, and 1.0 for a lower grade, we calculated each teen's grade point average for these subjects. Our analysis indicates that grades are generally significantly higher for teens who eat dinner with a parent or who are close to a parent.

Sex. Not surprisingly, the fraction of teens who report having had sexual intercourse varies substantially in the sample. In these data, 15 percent of 12 to 14 year-olds, 39 percent of 15 and 16 year-olds, and 60 percent of 17 to 19 year-olds have had sex. In the youngest age group, teens who eat dinner regularly with a parent are about half as likely to have had sex as other teens their age, and those who are close to a parent are less than half as likely to have had sex. Similar patterns pertain for older teens as well.

Thoughts of Suicide and Reported Suicide Attempts. One of the most important signs of distress in teens is suicidal thoughts or suicide attempts. In the Add Health data, substantial numbers of teens reported thinking about suicide and actually attempting suicide. The proportions who think about suicide are: 10.8 percent for 12 to 14 year-olds, 14.0 percent for 15 and 16 year-olds, and 13.8 percent for 17 to 19 year-olds. The percentages who reported having attempted suicide [over what time frame?] were 2.6 percent for the youngest group, 2.1 percent for the middle group, and 1.5 percent for older teens. The statistics listed in Table X indicate that younger teens who eat with their parents are much less likely than other teens to think about suicide. And for all teens there are very big differences in suicidal thoughts and in suicide attempts between teens who feel close to parents and those who do not.

[Need to discuss causality.]

Table X. Teen Outcomes by Age Related to Parental Involvement

	Age 12-14	15-16	17-19
Percent of Teens who Smoked in the Last 30 Days			
Teens who do not eat dinner with a parent 5 days a week.	24.0	34.1	40.6
Teens who eat dinner with a parent at least 5 days a week.	14.8	25.2	27.6
Percentage point difference in outcome:	9.1*	8.8*	13.0*
Difference after statistical controls:	8.5*	8.3*	12.0*
Teens who are not close to their mother and/or father.	34.4	41.9	40.9
Teens who are close to their mother and/or father.	15.0	25.5	23.7
Percentage point difference in outcome:	19.3*	16.4*	11.1*
Difference after statistical controls:	18.0*	15.2*	10.4*
Percent of Teens who Drink More Than Monthly			
Teens who do not eat dinner with a parent 5 days a week.	13.2	23.6	30.7
Teens who eat dinner with a parent at least 5 days a week.	6.8	13.9	25.8
Percentage point difference in outcome:	6.4*	9.6*	4.9*
Difference after statistical controls:	6.3*	9.1*	4.3*
Teens who are not close to their mother and/or father.	18.3	29.3	32.2
Teens who are close to their mother and/or father.	7.2	15.0	27.8
Percentage point difference in outcome:	11.0*	14.3*	4.4
Difference after statistical controls:	10.9*	14.4*	4.1
Percent of Teens who Ever Used Marijuana			
Teens who do not eat dinner with a parent 5 days a week.	19.6	38.8	43.8
Teens who eat dinner with a parent at least 5 days a week.	11.9	22.8	28.7
Percentage point difference in outcome:	7.6*	16.0*	15.1*
Difference after statistical controls:	6.7*	14.0*	14.1*

Teens who are not close to their mother and/or father.	30.9	50.1	49.1
Teens who are close to their mother and/or father.	11.8	24.1	34.4
Percentage point difference in outcome:	19.1*	26.0*	14.7*
Difference after statistical controls:	17.1*	24.3*	13.7*

Age 12-14 15-16 17-19

Percent of Teens who Lie to Parents

Teens who do not eat dinner with a parent 5 days a week.	55.1	62.1	59.9
Teens who eat dinner with a parent at least 5 days a week.	40.5	52.6	51.6
Percentage point difference in outcome:	14.7*	9.5*	8.3*
Difference after statistical controls:	13.3*	9.2*	8.9*

Teens who are not close to their mother and/or father.	72.1	75.7	71.8
Teens who are close to their mother and/or father.	40.9	51.6	52.3
Percentage point difference in outcome:	31.2*	24.1*	19.6*
Difference after statistical controls:	29.8*	22.9*	20.1*

Percent of Teens who Have Been in a Serious Fight

Teens who do not eat dinner with a parent 5 days a week.	40.5	41.3	28.7
Teens who eat dinner with a parent at least 5 days a week.	33.8	29.3	24.9
Percentage point difference in outcome:	6.7*	12.0*	3.9
Difference after statistical controls:	7.0*	10.5*	2.5

Teens who are not close to their mother and/or father.	45.0	43.6	34.4
Teens who are close to their mother and/or father.	34.3	31.6	24.3
Percentage point difference in outcome:	10.7*	12.0*	9.1*
Difference after statistical controls:	11.4*	11.5*	8.8*

Percent of Teens Who Have Been Suspended from School

Teens who do not eat dinner with a parent 5 days a week.	29.6	33.9	31.4
Teens who eat dinner with a parent at least 5 days a week.	20.6	24.0	25.5

Percentage point difference in outcome:	9.0*	9.9*	5.9*
Difference after statistical controls:	7.5*	7.3*	3.7
Teens who are not close to their mother and/or father.	33.9	38.1	37.9
Teens who are close to their mother and/or father.	21.5	25.3	26.7
Percentage point difference in outcome:	12.4*	12.8*	11.3*
Difference after statistical controls:	7.8*	11.5*	9.7*

	Age 12-14	15-16	17-19
School Performance: Self-Report Grade Point Average			
Teens who eat dinner with a parent at least 5 days a week.	3.06	2.93	2.99
Teens who do <i>not</i> eat dinner with a parent 5 days a week.	2.84	2.79	2.81
Difference in average GPA:	0.23*	0.14*	0.18*
Difference after statistical controls:	0.20*	0.10*	0.13*
Teens who are close to their mother and/or father.	3.03	2.91	2.95
Teens who are <i>not</i> close to their mother and/or father.	2.80	2.73	2.66
Difference in average GPA:	0.23*	0.18*	0.30*
Difference after statistical controls:	0.18*	0.11*	0.24*
Percent of Teens Who Have Ever Had Sex			
Teens who do <i>not</i> eat dinner with a parent 5 days a week.	22.3	50.3	68.2
Teens who eat dinner with a parent at least 5 days a week.	11.9	31.7	49.1
Percentage point difference in outcome:	10.3*	18.6*	19.0*
Difference after statistical controls:	8.8*	15.1*	17.4*
Teens who are <i>not</i> close to their mother and/or father.	27.5	54.7	70.8
Teens who are close to their mother and/or father.	12.9	35.2	57.6
Percentage point difference in outcome:	14.6*	19.5*	13.2*
Difference after statistical controls:	10.4*	15.4*	10.7*

Table X. Teen Outcomes by Age Related to Parental Involvement

	Age < 14	15-16	17-19
Percent of Teens who Smoked in the Last 30 Days			
Teens who do not eat dinner with a parent 5 days a week.	24.0	34.1	40.6
Teens who eat dinner with a parent at least 5 days a week.	14.8	25.2	27.6
Percentage point difference in outcome:	9.1*	8.8*	13.0*
Difference after statistical controls:	8.5*	8.3*	12.0*
Teens who are not close to their mother and/or father.	34.4	41.9	40.9
Teens who are close to their mother and/or father.	15.0	25.5	23.7
Percentage point difference in outcome:	19.3*	16.4*	11.1*
Difference after statistical controls:	18.0*	15.2*	10.4*
Percent of Teens who Drink More Than Monthly			
Teens who do not eat dinner with a parent 5 days a week.	13.2	23.6	30.7
Teens who eat dinner with a parent at least 5 days a week.	6.8	13.9	25.8
Percentage point difference in outcome:	6.4*	9.6*	4.9*
Difference after statistical controls:	6.3*	9.1*	4.3*
Teens who are not close to their mother and/or father.	18.3	29.3	32.2
Teens who are close to their mother and/or father.	7.2	15.0	27.8
Percentage point difference in outcome:	11.0*	14.3*	4.4
Difference after statistical controls:	10.9*	14.4*	4.1
Percent of Teens who Ever Used Marijuana			
Teens who do not eat dinner with a parent 5 days a week.	19.6	38.8	43.8
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Percentage point difference in outcome:	7.6*	16.0*	15.1*
Difference after statistical controls:	6.7*	14.0*	14.1*

Teens who are not close to their mother and/or father.	30.9	50.1	49.1
Teens who are close to their mother and/or father.	11.8	24.1	34.4
Percentage point difference in outcome:	19.1*	26.0*	14.7*
Difference after statistical controls:	17.1*	24.3*	13.7*

	Age <14	14-15	17-19
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Percent of Teens who Lie to Parents

Teens who do not eat dinner with a parent 5 days a week.	55.1	62.1	59.9
Teens who eat dinner with a parent at least 5 days a week.	40.5	52.6	51.6
Percentage point difference in outcome:	14.7*	9.5*	8.3*
Difference after statistical controls:	13.3*	9.2*	8.9*

Teens who are not close to their mother and/or father.	72.1	75.7	71.8
Teens who are close to their mother and/or father.	40.9	51.6	52.3
Percentage point difference in outcome:	31.2*	24.1*	19.6*
Difference after statistical controls:	29.8*	22.9*	20.1*

Percent of Teens who Have Been in a Serious Fight

Teens who do not eat dinner with a parent 5 days a week.	40.5	41.3	28.7
Teens who eat dinner with a parent at least 5 days a week.	33.8	29.3	24.9
Percentage point difference in outcome:	6.7*	12.0*	3.9
Difference after statistical controls:	7.0*	10.5*	2.5

Teens who are not close to their mother and/or father.	45.0	43.6	34.4
Teens who are close to their mother and/or father.	34.3	31.6	24.3
Percentage point difference in outcome:	10.7*	12.0*	9.1*
Difference after statistical controls:	11.4*	11.5*	8.8*

Percent of Teens Who Have Been Suspended from School

Teens who do not eat dinner with a parent 5 days a week.	29.6	33.9	31.4
Teens who eat dinner with a parent at least 5 days a week.	20.6	24.0	25.5

Percentage point difference in outcome:	9.0*	9.9*	5.9*
Difference after statistical controls:	7.5*	7.3*	3.7
Teens who are not close to their mother and/or father.	33.9	38.1	37.9
Teens who are close to their mother and/or father.	21.5	25.3	26.7
Percentage point difference in outcome:	12.4*	12.8*	11.3*
Difference after statistical controls:	7.8*	11.5*	9.7*

	Age < 14	15-16	17-19
School Performance: Self-Report Grade Point Average			
Teens who eat dinner with a parent at least 5 days a week.	3.06	2.93	2.99
Teens who do <i>not</i> eat dinner with a parent 5 days a week.	2.84	2.79	2.81
Difference in average GPA:	0.23*	0.14*	0.18*
Difference after statistical controls:	0.20*	0.10*	0.13*
Teens who are close to their mother and/or father.	3.03	2.91	2.95
Teens who are <i>not</i> close to their mother and/or father.	2.80	2.73	2.66
Difference in average GPA:	0.23*	0.18*	0.30*
Difference after statistical controls:	0.18*	0.11*	0.24*
Percent of Teens Who Have Ever Had Sex			
Teens who do <i>not</i> eat dinner with a parent 5 days a week.	22.3	50.3	68.2
Teens who eat dinner with a parent at least 5 days a week.	11.9	31.7	49.1
Percentage point difference in outcome:	10.3*	18.6*	19.0*
Difference after statistical controls:	8.8*	15.1*	17.4*
Teens who are <i>not</i> close to their mother and/or father.	27.5	54.7	70.8
Teens who are close to their mother and/or father.	12.9	35.2	57.6
Percentage point difference in outcome:	14.6*	19.5*	13.2*
Difference after statistical controls:	10.4*	15.4*	10.7*

Percent of Teens Who Think About Suicide

Teens who do <i>not</i> eat dinner with a parent 5 days a week.	16.6	18.5	14.8
Teens who eat dinner with a parent at least 5 days a week.	8.6	11.1	12.5
Percentage point difference in outcome:	8.0*	7.4*	2.3
Difference after statistical controls:	8.0*	7.1*	2.3
Teens who are <i>not</i> close to their mother and/or father.	27.1	31.2	24.2
Teens who are close to their mother and/or father.	8.7	10.0	11.1
Percentage point difference in outcome:	18.4*	21.2*	13.2*
Difference after statistical controls:	18.0*	21.0*	13.2*

	Age < 14	15-16	17-19
Percent of Teens Who Report Having Attempted Suicide			
Teens who do not eat dinner with a parent 5 days a week.	4.5	3.0	2.8
Teens who eat dinner with a parent at least 5 days a week.	1.8	1.5	1.5
Percentage difference in outcome:	2.7*	1.4*	0.7
Difference after statistical controls:	2.7*	1.4*	0.8
Teens who are not close to their mother and/or father.	5.4	4.4	4.0
Teens who are close to their mother and/or father.	2.3	1.6	0.9
Percentage difference in outcome:	3.1*	2.4*	3.1*
Difference after statistical controls:	3.0*	2.8*	3.1*

DRAFT.

4. The Importance of the Parent-Teen Relationship

In section 2 of this report we emphasized some of the general societal trends over the past century that have led to current busy lives that many American families lead. A recent Council of Economic Advisers report shows that the upward trend in labor market activity among parents has been substantial over the past few decades: for two-parent families with children under 18 annual hours of paid work increased by 497 hours (18 percent) from 1969 to 1996; for single parent households they increased by 297 hours (28 percent). These changes in parents' hours of paid work generally reflect increases by wives and by single parents, rather than by husbands.

The increasing parental time spent in the workplace and in commuting to work puts a substantial squeeze on families to find time for other important activities, including time for parents to spend with children. Suzanne Bianchi (2000) points out that many parents have been resourceful in finding time to spend with children. She discusses one study that shows hours per day mothers spent in care of family members actually changed very little from 1925 to 1975. And she cites her own research, comparing mothers' time with children in 1965 and 1998, which indicates that even with the increase in single parenting and market work by mothers, mothers are spending as much time with their children now as in 1965. There is also evidence of modest increases in time spent with children by married fathers.

Though Bianchi reminds us that the difficulty families often face in finding time for family and work is not a new phenomenon, she also emphasizes that coping with the time crunch is clearly a serious challenge. In the context of our report this issue is prominent because parental time spent with teenage children represents an important investment in the well-being of these young Americans.

Teens' own decisions and behaviors are critical for their present well-being and their future. Our report emphasizes, for instance, the growing importance of educational choices teens make. The economic advantage of gaining a strong education and building basic skills has never been higher; the relative cost of falling behind is increasing. Similarly, much of the risk to teens' health is the result of the behavior of teens as well as those around them. The leading causes of death among teens are accidents, homicide, and suicide. And the future health and economic status of teens is greatly affected by decisions they make while they are young, including sexual behavior and the decision to start smoking. It is thus understandable that parents are deeply concerned about ways of encouraging their teens to make good decisions and about protecting them from threats to that harm their present and future welfare.

Researchers tell us that, in fact, a teen's family environment makes a real difference. There is, of course, a large literature on the role of parenting in the outcomes of children generally. One recent research report published in the *Journal of the American Medical Association* by Michael Resnick and co-authors highlights the key importance of parents'

This study cited by Bianchi is by Bryant and Zick (1996). These authors point out that in 1925 many women not in paid work nonetheless worked long hours on farms or on difficult domestic chores. (Because of data limitations, the analysis is restricted to white, two-parent families.)

[Need cite here. Look at Patterson, Gerald, B. D. DeBaryshe, and E. Ramsey (1989), "A Developmental Perspective on Antisocial Behavior," *American Psychologist*, 1989.]

involvement in their teenage children specifically, focusing on a host of important outcomes. Using a large and detailed data set, the National Longitudinal Study on Adolescent Health (“Add Health” data, collected from several thousand adolescents in grades 7 to 12), the authors of the report examined a variety of issues. Among the many important findings emerging from this research is the importance of the family context for behaviors of teens. Having controlled for socioeconomic differences in teens’ families, the authors identify a number of factors of family life—including “Parent and Family Connectedness,” “Parent/Adolescent Activities,” and “Parental Presence”—that emerge as “protective factors” for teens. Teens who have relatively higher parental involvement in their lives are protected from emotional stress, suicide thoughts or attempts, violence, and substance abuse, and are less likely to become sexually involved at young ages.

Here we present additional analysis from the public-use version of the Add Health data that underscores some of the key and interesting findings that are emerging from this important research. We find that the data provide evidence consistent with parents having a key role in many of their teen children’s behaviors, including many highlighted in the previous section of our report.

Our interest is in examining the relationship between various teen outcomes—like school performance or smoking behavior—with two simple measures of parental involvement, parents eating dinner with the teen and a measure of perceived parent/child closeness. The “eating dinner together” variable, although a crude summary measure of parent-teen interaction, has the virtue that it reflects a visible pattern of *behavior* on the parent and teen child. The “parental closeness” variable, in contrast, may reflect more accurately an important psychological construct concerning the connection between the teen and parent(s), but is based solely on the teens’ *perceptions*.

With busy and oftentimes inflexible schedules of both teens and parents, arranging to eat evening meals together may be difficult or impossible. For others it may simply not be a high priority. In any event, the Add Health data indicate that about 74 percent of kids 12 to 14 had in the previous week had 5 or more evening meals with a parent. This declined to 61 percent for teens age 15 or 16, and to 42 percent for teens age 17 to 19. Certainly, some parents who do not eat evenings meals with their teens find other occasions to maintain a connection with their kids. On average though, eating dinner together proves to be a “summary statistic” highly correlated our other indicator of teens’ connection with their parents, and it is has a strong relationship with a number of measures of teen behavioral outcomes.

Our second indicator of parental involvement in teens’ lives is a very simple measure of the teens’ perceived relationships with their mother and/or father. In the Add Health survey, the

See Michael Resnick, et al., “Protecting Adolescents From Harm: Findings From the National Longitudinal Study on Adolescent Health,” *Journal of the American Medical Association*, September 1997. An accessible summary of many of the study’s findings can be found in Robert Blum and Peggy Rinehart, “Reducing the Risk: Connections That Make a Difference in the Lives of Youth,” Division of General Pediatrics and Adolescent Health, University of Minnesota.

One key disadvantage of the public-use version of the data is that only about half of the sample has been released. Thus the analysis presented here is generally based on around 6000 [check] observations.

The Add Health data include a very small number of 11 year-olds and 20 and 21 year-olds. These are excluded from the sample. Our sample generally includes xx 12 year-olds, xx 13 year-olds, xx 14 year-olds, xx 15 year-olds, xx 16 year-olds, xx 17 year-olds, xx 18 year-olds, and xx 19 year-olds.

teens are asked about their level of agreement with the following three statements for their mother and father:

- (1) "Most of the time, your mother [father] is warm and loving toward you."
- (2) "You are satisfied with the way your mother [father] and you communicate with each other."
- (3) "Overall, you are satisfied with your relationship with your mother [father]."

We construct a very simple measure of teens' closeness to their parent(s) using responses to these statements. Teens are said to be "close" to their mother and/or father when they indicate "Strongly Agree" or "Agree" to all three of the statements listed above for at least one parent. In our sample, 89 percent of teens age 12 to 14, 81 percent of teens age 15 to 16, and 83 percent of teens age 17 to 19 are "close" to either their mother or father (or both) using this measure.

Smoking. The first of the teen behaviors we examine is smoking. In the Add Health data 17 percent of 12 to 14 year-olds, 29 percent of 15 and 16 year-olds, and 35 percent of 17 to 19 year olds indicate that they smoked within the last 30 days. The first panel of Table X shows that there are big differences in these rates among teens who eat dinner with parents regularly and those who do not. For example, among teens 14 or younger, 24.0 percent of those who do *not* eat with a parent smoke compared with 14.8 percent who do eat with a parent. The third line of the table gives the *difference* in these smoking rates, 9.1 percentage points. (The difference between 24.0 and 14.8 isn't 9.1 exactly; the discrepancy is due to rounding.) The asterisk indicates that this estimated difference is statistically significant at the 0.05 level.

One concern is that statistical result might in part be due to gender or family background. To address this issue we estimate a regression model (a linear probability model) in which teen smoking is taken to be the dependent variable and independent variables are the "eating dinner together" variable along with variables controlling for sex, family structure, and poverty status. In the case of smoking among teens 14 or younger, the difference after controlling for these factors, 8.5 percentage points, is only slightly lower than the difference in the absence of controls. Again the asterisk indicates statistical significance.

Results are similar for the middle teen group, 15 to 16 year-olds, and for teens 17 and older. Teens who eat dinner with a parent are much less likely to smoke than other teens, and these statistically significant differences do change much when we control for gender and family background.

Turning to the "closeness variable," we notice that the pattern is much the same. Teens who indicate that they are close to their parent—who feel loved, are able to communicate with a parent, and are satisfied with their relationship with a parent—are much less likely to smoke.

Drinking and Marijuana Use. In the Add Health data, teens indicated they drink more than monthly in the following percentages: 9 percent of 12 to 14 year-olds, 18 percent of 15 and 16 year-olds, and 29 percent of 17 to 19 year-olds. Rates of marijuana use (measured by having "ever used" marijuana) were: 14 percent of 12 to 14 year-olds, 29 percent of 15 and 16 year-olds, and 37 percent of 17 to 19 year-olds. The analysis in Table X indicates that these behaviors are on average less likely among teens who eat dinner with parents and among those who are close to parents. In some cases, the differences are quite large. For example, 12 to 14 year-olds who

Our control variables are gender, two basic family structures (teens who live with two parents, and other families), a poverty measure (households in which one or more parent receives welfare, and other households).

regularly eat dinner with a parent are only about half as likely to drink as similar teens that don't.

Lying to Parents, Getting into Fights, and Getting Suspended from School. Most parents would like to be able to trust their teen children. They also want their teens to stay out of potentially dangerous fights and to avoid situations where disciplinary action at school is necessary. Statistics listed on the second page of Table X indicate that teens who eat dinner with a parent and who report being close to a parent have lower rates of all of these behaviors.

School Performance. In the Add Health data, teens are asked about their grades in four key subjects, xx, xx, xx, and xx. By assigning a 4.0 for an A, 3.0 for a B, 2.0 for a C, and 1.0 for a lower grade, we calculated each teen's grade point average for these subjects. Our analysis indicates that grades are generally significantly higher for teens who eat dinner with a parent or who are close to a parent.

Sex. Not surprisingly, the fraction of teens who report having had sexual intercourse varies substantially in the sample. In these data, 15 percent of 12 to 14 year-olds, 39 percent of 15 and 16 year-olds, and 60 percent of 17 to 19 year-olds have had sex. In the youngest age group, teens who eat dinner regularly with a parent are about half as likely to have had sex as other teens their age, and those who are close to a parent are less than half as likely to have had sex. Similar patterns pertain for older teens as well.

Thoughts of Suicide and Reported Suicide Attempts. One of the most important signs of distress in teens is suicidal thoughts or suicide attempts. In the Add Health data, substantial numbers of teens reported thinking about suicide and actually attempting suicide. The proportions who think about suicide are: 10.8 percent for 12 to 14 year-olds, 14.0 percent for 15 and 16 year-olds, and 13.8 percent for 17 to 19 year-olds. The percentages who reported having attempted suicide [over what time frame?] were 2.6 percent for the youngest group, 2.1 percent for the middle group, and 1.5 percent for older teens. The statistics listed in Table X indicate that younger teens who eat with their parents are much less likely than other teens to think about suicide. And for all teens there are very big differences in suicidal thoughts and in suicide attempts between teens who feel close to parents and those who do not.

[Need to discuss causality.]

Table X. Teen Outcomes by Age Related to Parental Involvement

	Age 12-14	15-16	17-19
Percent of Teens who Smoked in the Last 30 Days			
Teens who do not eat dinner with a parent 5 days a week.	24.0	34.1	40.6
Teens who eat dinner with a parent at least 5 days a week.	14.8	25.2	27.6
Percentage point difference in outcome:	9.1*	8.8*	13.0*
Difference after statistical controls:	8.5*	8.3*	12.0*
Percent of Teens who Drink More Than Monthly			
Teens who do not eat dinner with a parent 5 days a week.	13.2	23.6	30.7
Teens who eat dinner with a parent at least 5 days a week.	6.8	13.9	25.8
Percentage point difference in outcome:	6.4*	9.6*	4.9*
Difference after statistical controls:	6.3*	9.1*	4.3*
Teens who are not close to their mother and/or father.	18.3	29.3	32.2
Teens who are close to their mother and/or father.	7.2	15.0	27.8
Percentage point difference in outcome:	11.0*	14.3*	4.4
Difference after statistical controls:	10.9*	14.4*	4.1
Percent of Teens who Ever Used Marijuana			
Teens who do not eat dinner with a parent 5 days a week.	19.6	38.8	43.8
Teens who eat dinner with a parent at least 5 days a week.	11.9	22.8	28.7
Percentage point difference in outcome:	7.6*	16.0*	15.1*
Difference after statistical controls:	6.7*	14.0*	14.1*

Teens who are not close to their mother and/or father.	30.9	50.1	49.1
Teens who are close to their mother and/or father.	11.8	24.1	34.4
Percentage point difference in outcome:	19.1*	26.0*	14.7*
Difference after statistical controls:	17.1*	24.3*	13.7*

Age 12-14 15-16 17-19

Percent of Teens who Lie to Parents

Teens who do not eat dinner with a parent 5 days a week.	55.1	62.1	59.9
Teens who eat dinner with a parent at least 5 days a week.	40.5	52.6	51.6
Percentage point difference in outcome:	14.7*	9.5*	8.3*
Difference after statistical controls:	13.3*	9.2*	8.9*

Teens who are not close to their mother and/or father.	72.1	75.7	71.8
Teens who are close to their mother and/or father.	40.9	51.6	52.3
Percentage point difference in outcome:	31.2*	24.1*	19.6*
Difference after statistical controls:	29.8*	22.9*	20.1*

Percent of Teens who Have Been in a Serious Fight

Teens who do not eat dinner with a parent 5 days a week.	40.5	41.3	28.7
Teens who eat dinner with a parent at least 5 days a week.	33.8	29.3	24.9
Percentage point difference in outcome:	6.7*	12.0*	3.9
Difference after statistical controls:	7.0*	10.5*	2.5

Teens who are not close to their mother and/or father.	45.0	43.6	34.4
Teens who are close to their mother and/or father.	34.3	31.6	24.3
Percentage point difference in outcome:	10.7*	12.0*	9.1*
Difference after statistical controls:	11.4*	11.5*	8.8*

Percent of Teens Who Have Been Suspended from School

Teens who do not eat dinner with a parent 5 days a week.	29.6	33.9	31.4
Teens who eat dinner with a parent at least 5 days a week.	20.6	24.0	25.5

Percentage point difference in outcome:	9.0*	9.9*	5.9*
Difference after statistical controls:	7.5*	7.3*	3.7
Teens who are not close to their mother and/or father.	33.9	38.1	37.9
Teens who are close to their mother and/or father.	21.5	25.3	26.7
Percentage point difference in outcome:	12.4*	12.8*	11.3*
Difference after statistical controls:	7.8*	11.5*	9.7*

	Age 12-14	15-16	17-19
School Performance: Self-Report Grade Point Average			
Teens who eat dinner with a parent at least 5 days a week.	3.06	2.93	2.99
Teens who do <i>not</i> eat dinner with a parent 5 days a week.	2.84	2.79	2.81
Difference in average GPA:	0.23*	0.14*	0.18*
Difference after statistical controls:	0.20*	0.10*	0.13*
Teens who are close to their mother and/or father.	3.03	2.91	2.95
Teens who are <i>not</i> close to their mother and/or father.	2.80	2.73	2.66
Difference in average GPA:	0.23*	0.18*	0.30*
Difference after statistical controls:	0.18*	0.11*	0.24*
Percent of Teens Who Have Ever Had Sex			
Teens who do <i>not</i> eat dinner with a parent 5 days a week.	22.3	50.3	68.2
Teens who eat dinner with a parent at least 5 days a week.	11.9	31.7	49.1
Percentage point difference in outcome:	10.3*	18.6*	19.0*
Difference after statistical controls:	8.8*	15.1*	17.4*
Teens who are <i>not</i> close to their mother and/or father.	27.5	54.7	70.8
Teens who are close to their mother and/or father.	12.9	35.2	57.6
Percentage point difference in outcome:	14.6*	19.5*	13.2*
Difference after statistical controls:	10.4*	15.4*	10.7*

Percent of Teens Who Think About Suicide

Teens who do <i>not</i> eat dinner with a parent 5 days a week.	16.6	18.5	14.8
Teens who eat dinner with a parent at least 5 days a week.	8.6	11.1	12.5
Percentage point difference in outcome:	8.0*	7.4*	2.3
Difference after statistical controls:	8.0*	7.1*	2.3
Teens who are <i>not</i> close to their mother and/or father.	27.1	31.2	24.2
Teens who are close to their mother and/or father.	8.7	10.0	11.1
Percentage point difference in outcome:	18.4*	21.2*	13.2*
Difference after statistical controls:	18.0*	21.0*	13.2*

	Age 12-14	15-16	17-19
Percent of Teens Who Report Having Attempted Suicide			
Teens who do not eat dinner with a parent 5 days a week.	4.5	3.0	2.8
Teens who eat dinner with a parent at least 5 days a week.	1.8	1.5	1.5
Percentage difference in outcome:	2.7*	1.4*	0.7
Difference after statistical controls:	2.7*	1.4*	0.8
Teens who are not close to their mother and/or father.	5.4	4.4	4.0
Teens who are close to their mother and/or father.	2.3	1.6	0.9
Percentage difference in outcome:	3.1*	2.4*	3.1*
Difference after statistical controls:	3.0*	2.8*	3.1*

All statistics are CEA estimates from the public-use version of the Add Health data. Data are for students in grades 7 to 12. 11 year-olds and those over age 19 are have been excluded from the analysis. For all analyses that have “statistical controls,” the conditioning variables are gender, poverty status, and family structure (see text).