American Sexual Behavior:

Trends, Socio-Demographic Differences, and Risk Behavior

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Introduction

Sexual behavior is not only of basic biological importance, but of central social importance. Not only does it perpetuate the human species, but it is the central behavior around which families are formed and defined, a vital aspect of the psychological well-being of individuals, and a component of a variety of social problems. Among current concerns tied in part to sexual behavior are the familial problems of marital harmony and divorce; criminal problems of rape, incest, child molestation, and prostitution; reproductive problems of infertility, sterility, unwanted and mistimed pregnancies, and abortion; and health problems related to sexually transmitted diseases (STDs).

About 17% of adults 18-59 have had an STD and the lifetime infection rate is likely to be over 20% (Laumann, Michael, Gagnon, and Stuart, 1994). Moreover, with the advent of AIDS the medical problem of STDs has taken on increasing urgency (Div. of HIV/AIDS Prevention, 1995 and Yankauer, 1994). Deaths from AIDS rose at a rapid pace in the 1980s and early 1990s. By 1992 AIDS had become the number one cause of death among men 25-44. Only recent improvements in medical treatments have curbed the rising levels of HIV to AIDS conversions and lowered the death rate from AIDS (CDC, 1998; "AIDS Falls," 1998; State and Local, 1998). Most HIV infections have resulted from sexual behavior and heterosexual intercourse is increasingly becoming a mode of transmission ("Heterosexuality," 1994; CDC, 1998).

Because of both the importance of sexual behavior in general and the health crisis of AIDS in particular, we need to arm ourselves with a thorough, scientifically reliable understanding of sexual behavior and especially to study high-risk behavior (Hewitt and Beverley, 1996). In this paper we will outline what is currently known about American sexual behavior. Attention will

¹A 1998 study for the Kaiser Family Foundation by Princeton Survey Research Association indicates that 14% of adults 18-44 who have ever had sexual intercourse have had an STD other than AIDS. For rates among youths see Ellen, Aral, and Madger, 1998.

²This report addresses a number of measurement issues, but does not focus on methodology and measurement error. For recent discussions of the reliability and validity of sexual behavior data see Auster, n.d.; Bachrach, Evans, Ellison, and Stolley, 1992; Biggar and Melbye, 1992; Binson and Catania, 1998; Boekeloo, et al., 1994; Brody, 1995; Brown and Sinclair, 1996; Catania, Binson, Canchola, Pollack, Hauck, and Coates, 1996; Catania, Canchola, and Pollock, 1996; Catania, Gibson, Chitwood, and Coates, 1990; Catania, McDermott, and Pollack, 1986; Catania, Turner, Pierce, Golden, Stocking, Binson, and Mast, 1993; Downey, Ryan, Roffman, and Kilich, 1995; Dunne, Martin, Bailyet, Heath, Bucholz, Madden, and Stalham, 1997; Edelman, 1998; Ellish, Weisman, Celentano, and

focus on 1) trends and 2) socio-demographic differences within the following areas:

- a) Premarital and Adolescent Sexual Activity including Cohabitation and Non-marital Births
- b) Adult and General Sexual Behavior including Extra-marital Relations, Gender of Sexual Partners, Frequency of Sexual Intercourse, and Sexual Inactivity
- c) The Impact of AIDS on Sexual Behavior including Reported Changes in Sexual Behavior, Number of Sexual Partners, Relationships between Sexual Partners, Prostitution, and the Use of Condoms

Premarital and Adolescent Sexual Activity

Premarital sexual intercourse become increasingly common over the last century (Table 1A, see also Hopkins, 1998 and Whitbeck, Simons, and Goldberg, 1996). This increase was not merely the result of the so-called sexual revolution of the 1960s. The change was underway for decades prior to the 1960s and has continued since then. Rates among men were moderately high even from the beginning (61% of men born before 1910 report having had sexual intercourse before marriage) and climbed steadily. Women had low rates of premarital intercourse to begin with (only 12% of those born before 1910 had pre-marital sexual intercourse), but their rates grew more rapidly than those of men and the gap between men and women has narrowed over time. By the 1980s (roughly the 1965-1970 birth cohort) women had almost as much sexual experience as men prior to marriage (in 1988 of those 15-19 60% of men and 51.5% of women had engaged in premarital sex). This increase in premarital sexual experience is confirmed by community studies (Wyatt, Peter, and Guthrie, 1988 and Trocki, 1992) and longitudinal panels (Udry,

Zenilman, 1996; Giami, 1996; Hornsby and Wilcox, 1989; Huygens, Kajura, Seeley, and Barton, 1996; Jasso, 1985 and 1986; Johnson and Delamater, 1976; Kahn, Kalsbeck, and Hofferth, 1988; Karabatsos, 1997; Lauritsen and Swicegood, 1997; Maass and Volpato, 1989; Metzler, et al., 1992; Miller, 1995 & 1996; Morris, 1993; Newcomber and Udry, n.d.; Orr, Fortenberry, and Blythe, 1997; Padian, Aral, Vranizan, and Bolan, 1995; Peterman, 1995; Seal, 1997; Shew, et al., 1997; Smith, 1992a; 1992b; Sonenstein, 1997; Tourangeau, Rasinski, Jobe, Smith, and Pratt, 1997; Tourangeau and Smith, 1996; 1998; Tourangeau, Smith, and Rasinski, 1997; Trivedi and Sabini, 1998; Turner, Rogers, Lindberg, Pleck, and Sonenstein, 1998; Upchurch, et al., 1991; Wadsworth, Johnson, Wellings, and Field, 1998; Weinhardt, et al., 1998; Wiederman, 1997; Zenilman, et al., 1995; and Zimmerman and Langer, 1995.

Bauman, and Morris, 1975).

Then in the early 1990s the century-long increase in the level of premarital and adolescent sexual activity reached a peak and then declined for the first time in decades (Table 1A and Bachrach, 1998; Besharov and Gardiner, 1997; Stossel, 1997; and Peipert, et al., 1997). The decrease appears to be greater for males than females, but both genders show a levelling-off and then some reversal.³

With the increase in levels of premarital sexual intercourse came a fall in the age of first intercourse (Table 1B). In 1970 5% of women age 15 and 32% age 17 were sexually experienced, by 1988 this had grown to 26% at age 15 and 51% at age 17 (see also Kahn, Kalsbeek, and Hofferth, 1988 and Hofferth, Kahn, and Baldwin, 1987). This trend may also have levelled-off and reversed since then, but the evidence is inconclusive (Table 1B and Strunin and Hingson, 1992).

When the increase in levels of premarital sexual intercourse is coupled with the rising age at first marriage, this means that men and women are spending longer and longer periods of their sexual life outside of marriage (Ehrhardt and Wasserheit, 1992; Bachrach and Horn, 1987; Laumann, Gagnon, Michael, and Michaels, 1994). Between 1960 and 1997 the median age at first marriage rose from 22.8 to 26.8 for men and from 20.3 to 25.0 for women. For women the median age of first premarital intercourse in 1960 was about 19.0 (Turner, Miller, and Moses, 1989 and Bachrach and Horn, 1987), meaning on average only a short period of premarital sexual activity. In 1990 the median age at first sex was 16.9 for women (Divs. of Epidemiology and Prevention; Adolescent and School Health; and Reproductive Health, 1992), meaning an average exposure of 8.1 years. For men the period of premarital sexual activity now averages 10.7 years (26.8 - 16.1).

With people spending longer periods engaged in premarital sexual activity the number of lifetime sexual partners has also grown for both men and women (Table 1C). Between the pre-1910 birth cohort and the 1940-49 birth cohort the portion of men with two or more premarital sexual partners rose from 49% to 73%, while for women the gain was from 3% to 26%. This trend continued until recent years. For example, among sexually experienced women ages 15-19 living in metropolitan areas 38% had had 2 or more sexual partners in 1971 while by 1988 this had increased to 61%. More recently there is evidence of a reversal of this trend. On the Youth Risk Behavior Surveys (YRBS) the % of male high school

³Work by Schuster, Bell, and Kanouse, 1996 suggests that precise definitions of sexual intercourse are needed to understand the trends and what sexual activities are occurring. In their sample of 9-12th graders in a Los Angeles County school district, they found that 35% of those who had never had vaginal intercourse had had gential sexual activity in the last year including masturbation with a partner and/or oral and anal sex.

students with 4+ sexual partners declined from 1989 to 1997, but the trend among females is unclear.

Cohabitation

The rise in premarital and adolescent sexual activity, coupled with delays in marriage, has led to more people living together. Since 1970 the rate of living together outside of marriage has increased more than 6 fold, from 1.1% to 7.0% of couples (Table 2). Similarly, the portion of single mothers who were cohabitating grew from 2% in 1970 to 12% in 1995 (London, 1998). While the proportion of couples and adults cohabitating at any one point in time remains small, a large and growing percent live together at some point. Currently over a third of adults in their mid-twenties to mid-thirties cohabited before their first marriage and half of this age group has cohabited at some point in their lives (Table 3A). Cohabitation after and between marriages is even more common. According to the General Social Survey (GSS) among those 25-44 who are in a second marriage, 61% cohabited with their new spouse before marriage (GSS, 1994).

Cohabitation differs little by gender or race. It is higher among younger adults, the divorced and never married, those in urban areas, and among those who attend church less frequently. Current, but not prior cohabitation with ones spouse, is higher among the less educated and those with lower incomes (Table 3B).

Cohabitation is usually a short-term arrangement, typically resulting in either marriage or a break-up after about a year (median duration of 1.3 years) (Thomson and Colella, 1992; Bumpass and Sweet, 1989; Thornton, 1988).

Cohabitation has often been characterized as a trial marriage and about 40% lead to marriage within two years and about 60% eventually culminate in marriage between the cohabiting partners (Bumpass and Sweet, 1989). However, marriages formed after cohabitation are rated as less stable and result in more divorces than marriages not preceded by living together (Axinn and Thornton, 1992; Brown and Booth, 1996; Clarkberg, Stolzenberg, and Waite, 1995; DeMaris and MacDonald, 1993; DeMaris and Rao, 1992; Lillard, Brien, and Waite, n.d.; Popenoe, 1993; and Thomson and Colella, 1992). Cohabitation thus "does not seem to serve very well the function of a trial marriage... (Popenoe, 1993)."

Those who are cohabiting have fewer sexual partners than those who are unmarried and not cohabitating. However, people who are cohabitating have more sexual partners than married couples (Waite and Joyner, 1996). For example on the 1993-94 GSS the married averaged 0.97 partners last year, the never married who were cohabiting had 1.38 partners, and the non-cohabitating, never married had 1.63 partners. That fact coupled with the transitory state of most cohabitations makes living together riskier than marriage when it comes to STDs (Turner, Miller, and Moses, 1989; Kost and Forrest, 1992).

Non-marital Births

With the link between sexual activity and marriage breaking down, the connection between marriage and procreation has also lessened. In the 1960s (and presumably before) when premarital sexual intercourse resulted in conception, the women's pregnancy usually in turn led to a marriage before the child was born (Table 4). Since then, the propensity of unmarried parents to marry before the birth of their child has steadily fallen. By the 1990s less than 25% of women who conceived children before marriage got married before their child's birth.

As a result of the higher level of premarital sexual activity and the decline in marriages after a conception but prior to birth, there has been a large increase in out-of-marriage births (Miller and Heaton, 1991 and Table 5). In 1960 only 5% of all births were to unmarried women. This climbed to 14% by 1975 and 33% by 1994. Then, after over 30 years of increase, the rate leveled-off in 1994-96 at 32-33%.

The trend in the United States has been parallel to changes in culturally similar, advanced industrial nations and not unique to the US. While the percent of births to unmarried mothers climbed from 5% in 1960 to 32% in 1995 in the US, it rose from 5% to 34% in Great Britain, from 4% to 26% in Canada, and from 6% to 37% in France (Statistical Abstract, 1998).

The rate of increase has been much greater for Whites than for Blacks. For Whites the percent of unmarried births has expanded ten-fold from 2.3% of all births in 1960 to 23.7% in 1996, while the Black level grew by just over three-fold from 21.6% in 1960 to 70.4% in 1994. While the Black to White ratio has fallen from a little over 9:1 in 1960 to under to 3:1 in 1990s, the gap between Blacks and Whites rose from 19 percentage points in 1960 to 44-46 percentage points in from 1980 to 1996 (with a peak in 1993). This means that almost a majority of White or Black mothers would have to change their marital status to equal that of the other race. The cumulative difference between Whites and Blacks is further shown by the fact that by ages 30-34 only 23% of never-married, White women have given birth, while 69% of never-married, Black women have had a child (Bachu, 1991 & 1995; Loomis and Landale, 1994).

While both Whites and Blacks have a greater proportion of births occurring outside of marriage, they have achieved the gains through decidedly different paths (Table 5). For Whites the unmarried birth rate (number of births to unmarried women per 1,000 unmarried women ages 15-44) rose throughout the period. It increased more than 4 times from 9 in 1960 to 38 in 1994-95. For Blacks their rate was quite variable over time. It fell from 98 in 1960 to 79 in 1985 before climbing again to 91-93 in 1989-90 - still below their birth rate in the 1960s. In the early-1990s the Black unmarried birth rate then again declined, falling to 76 in 1996.

In addition, there is also a high level of unintended births (Abma et al., 1997 and Williams, 1991). Of women 15-44 in 1995 who

have had a child, 28% reported that they had an unintended birth and this reached 36% for women 40-44. On those with an unintended birth, 80% reported the birth as mistimed and 20% as unwanted.

In brief, over the last century premarital sexual activity become more widespread, sexual initiation started at younger ages, the period of premarital sexual activity lengthened, and the number of premarital sexual partners increased. This expansion in premarital sexual activity in turn led to major increases in cohabitation and unmarried child bearing.

But during the 1990s a small, but historic, reversal of some of these trends occurred. The level of premarital and adolescent sexual activity levelled-off and in some aspects retreated and the proportion of births outside of marriage reached a plateau. These changes are partial rather than across the board (e.g. levels of cohabitation continue to rise) and even those behaviors that have levelled-off or reversed are at near record high rates. But even limited changes to a massive, century-long trend are highly notable and potentially important from a public health perspective.

Adult and General Sexual Behavior

Compared to the amount of information available on premarital and adolescent sexual behavior, until recently there has been little scientifically reliable data on the sexual behavior of adults or of the population in general (Aral, 1994; di Mauro, 1995; Seidman and Rieder, 1994). Moreover, the dearth representative and credible studies has created a vacuum that has been filled by unrepresentative and incredible misinformation from popular magazines, sex gurus, and others. In this section we review what is known about extra-marital relations, sexual orientation, the frequency of sexual intercourse, and sexual inactivity.

Extra-marital Relations

There are probably more scientifically worthless "facts" on extra-marital relations than on any other facet of human behavior. Popular magazines (e.g. Redbook, Psychology Today, Cosmopolitan), advice columnists (Dear Abby and Dr. Joyce Brothers), popsexologists (e.g. Morton Hunt and Shere Hite) have all conducted or reported on "studies" of extra-marital relations. These studies typically find extremely high level of extra-marital activity (Reinisch, Sanders, Ziemba-Davis, 1988; Smith, 1989; Smith, 1991b; and Gibbs, Hamil, and Magruder-Habib, 1991). Hite for example reported that 70% of women married five or more years "are having sex outside of their marriage (Smith, 1988)." They also often claim that extra-marital relations have become much more common over time. Dr. Brothers (1990), for example, claims that 50% of married women now have sex outside of marriage, double the level of a generation ago.

But representative, scientific surveys (Choi, Catania, and Dolcini, 1994; Forste and Tanfer, 1996; Greeley, 1994; Greeley,

Michael, and Smith, 1990; Laumann, Gagnon, Michael, and Michaels, 1994; Leigh, Temple, and Trocki, 1993; Tanfer, 1994; Treas and Giesen, 1996) indicate that extramarital relations are less prevalent than pop and pseudo-scientific accounts contend (Table 6). The best estimates are that about 3-4% of currently married people have a sexual partner besides their spouse in a given year and about 15-17% of ever-married people have had a sexual partner other than their spouse while married (Michael, Laumann, and Gagnon, 1993).

There is little direct and reliable trend information on extra-marital relations before 1988. Since then, levels have not changed. Prior to then there is indirect evidence that extramarital relations may have increased across recent generations. The figure of ever having extra-marital relations rises from 13% among those 18-29 to 21% among those 40-49 (Table 7). It then falls to 8% among those 70 and older. Since these are lifetime rates, one would normally expect them either to increase across age groups or to increase until a plateau is reached (this would be the case if few first-time, extra-marital relations were started among older adults). The drop among those 50 and older suggests that members of birth cohorts before about 1940 were less likely to engage in extra-marital relations than are spouses from more recent generations (Laumann, Gagnon, Michael, and Michaels, 1994; Greeley, 1994).

In terms of current extra-marital relations Table 7 indicates that they are more common among younger adults. This is largely a function of younger adults having been married a shorter period of time. Some recently married people have difficulty adjusting from a premarital pattern of multiple sexual partners to a monogamous partnership and in general recent marriages are more likely to end in divorce than long-term marriages. The rates of extra-marital relations are about twice as high among husbands as among wives (Table 7). Extra-marital relations are also more common among Blacks, those with lower incomes, those who attend church less frequently, those who have been separated or divorced (including those who have remarried), and those who are unhappy with their marriage. It also may be more frequent among residents of large cities, but the overall relationship with community type is statistically significant only for the last 12 months. Finally, extramarital relations in the last year are more likely to occur among the less educated, but the lifetime pattern with education is mixed and unclear.

Gender of Sexual Partners

Few debates have been so contentious as the controversy over the sexual orientation of Americans (Billy, et al., 1993; Stokes and McKirnan, 1993; Michaels, 1997; and Swann, 1993). The gay and lesbian communities have long adopted 10% as the portion of the

population that is homosexual. However, a series of recent national studies (Table 8A) indicate that only about 2-3% of sexually active men and 1-2% of sexually active women are currently engaging in same gender sex. These national American estimates are consistent with figures from local communities in the United States (Trocki, 1992; McQuillan, Ezzati-Rice, Siller, Visscher, and Hurley, 1994; Guterbock, 1993; and Rogers and Turner, 1991), indirect measurements (Aguilar and Hardy, 1991), and statistics from Great Britain, France, Norway, and Denmark (AIDS Investigators, 1992; Johnson, Wadsworth, Wellings, Bradshaw, and Field, 1992; Biggar and Melbye, 1992; Melbye and Biggar, 1992; Sundet, et al., 1988; Sandfort, 1998; and Diamond, 1993) (Table 8B).

Rates of same gender contact increase as the reference period is extended. Recent figures (Table 9) indicate that 3.0% of sexually active males have had a male sexual partner in the last 12 months, 3.9% during the last five years, and 5.9% since age 18 (See also Smith, 1991a and Michael, Laumann, and Gagnon, 1993). As the time frame is lengthened, the % of men with only male partners declines. Over the last 12 months 2.4% are gay and 0.6% are bisexual, over the last five years it is 2.5% gay and 1.4% bisexual, and since age 18 less than 1% are gay and 4%+ bisexual.

⁴We use the term "sexual orientation" as a shorthand to refer to the gender of one's sexual partners. Our usage is based on behavior and not on preference or psychological identification. Similarly, we will use "gays" to refer to men who have had male sexual partners and "lesbians" to refer to women who have had female sexual partners. Unless otherwise indicated these terms will include "bisexuals" (i.e. people who have had both male and female sexual partners). "Homosexuals" refers to men or women who have had same gender sexual partners.

On issues relating to definitions and terminology see Bevier, Chiasson, and Hefferman, 1996; Doll and Beeker, 1996; Gonsiorek and Weinrich, 1991; Michaels, 1997; Rietmeijer, et al., 1998; Kennamer and Bradford, 1998; and Rankow, 1996.

believed that including adolescent behavior would further increase these rates, but firm numerical estimates are not available. For some indication of this see Billy, Tanfer, Grady, and Klepinger, 1993 and Faulkner and Cranston, 1998. However, other surveys of young adult and teenage sexual orientation do not conform this (Ku, Sonenstein, and Pleck, 1993; "Teens Talk," 1994). Spanning the lower and higher estimates, Turner et al. (1997) found that among males 15-19 in 1995 1.5% reported homosexual relations on a paper, self-completion questionnaire, but 5.5% did so on an audio-computer assisted, self-completion questionnaire.

⁶There is more missing data on the adult lifetime figures than for the 1 and 5 year figures. Information on sexual orientation

Most of those who report both male and female sexual partners since age 18 report only opposite gender partners during the last year (Smith, 1991a). Lesbians follow these same patterns.

There is little reliable evidence on whether sexual orientation has changed before the late 1980s. In terms of attitudes levels of approval of homosexuality slightly declined from 1973 to 1991, but then rose notably in 1992-98 (Laumann, Gagnon, Michael, and Michaels, 1994; Smith, 1994; and Davis and Smith, 1998). Since then, no change seems to be occurring in the sexual orientation of the public (Table 9).

Studies of male and female homosexuality both in the United States and Europe regularly find a higher proportion of males are gay than the share of females who are lesbian (Tables 8A & 8B and Spira, Bajos, Ducot, 1994; Wells and Sell, 1990; AIDS, 1992; Johnson, Wadsworth, Wellings and Field, 1994; Sandfort, 1998).

Sexual orientation does not vary much across socio-demographic groups (Table 9). The most distinctive pattern for both gays and

over the last year and five years were used to reduce the missing data. 10.9% have incomplete information, 3.0% have had no sexual partners, 82.1% are heterosexual, and 3.9% bisexual or homosexual. This latter group contains anyone who indicated same gender partners during the last year, last five years, or since age 18. The largest group of incomplete cases are those who reported the number of opposite gender partners, but skipped the same gender question. Close inspection of the incomplete cases on variables such as marital status, number of children ever born, and attitudes towards homosexuality indicates that the missing cases have a profile even more heterosexual than the identified heterosexuals (e.g. more negative towards homosexuality, more like to be/have been married, more likely to have had children). In the figures cited here we exclude the sexually inactive and assign the cases with incomplete information proportional to the known cases. This procedure yields a higher number of homosexual/bisexual identifications than are indicated by the profile of the incomplete cases (Smith, 1996).

⁷For an attempt to use contemporary data to project trends backwards through a cohort model see Rogers and Turner, 1991.

⁸Ku, Sonenstein, and Pleck, 1993 show a decline in homosexual behavior among males 17.5-19 between 1988 and 1991, but question the reliability of their own numbers.

⁹A notable exception is a 1991 United States sample of men 20-39 and women 20-37 that found 2.3% of men and 4.1% of women had a same gender partner in the last 10 years (Tanfer, 1994). This anomalous result may result from their question. They asked people to rate their sexual activity on a five-point scale from exclusively heterosexual to exclusively homosexual.

lesbians is that they are less likely to have married. About 60% of those with a same gender partner during the last 12 months have never been married compared to the 16% of female heterosexuals and 21% of male heterosexuals who have never been married.

Second, gays, but not lesbians, are distinctive in congregating in the largest central cities. About 8.5% of men in large central cities have had a same sex partner in the last year as have 9.6% over the last 5 years and 14.7% since age 18. Rates are lowest outside of metropolitan areas. ¹⁰ Lesbians, like gays, are underrepresented in non-metropolitan areas.

Third, more gays are found in the lower income categories and among Blacks. Race is unrelated to being lesbian (except weakly for the lifetime figures) and low income is only marginally related to being lesbian. This may partly reflect both homosexual activity in prisons and male, homosexual prostitution. Education does not consistently differentiate among homosexuals.

Fourth, lesbians, but not gays, are more common among younger age groups. This could indicate an increase in homosexual activity among women across cohorts (see also Rogers and Turner, 1991).

Finally, lesbians, but not gays, attend church less than heterosexuals. About 3.4% of women who rarely attend church have had a female sexual partner in the last year compared to only 1.3% of those who attend regularly.

Frequency of Sexual Intercourse

There is some evidence that the frequency of intercourse rose from the 1960s to the 1970s (Trussell and Westoff, 1980) and may have declined in the 1980s. Among teenage males 17-19 living in metropolitan areas the rate fell from 59.8 times per year in 1979 to 39.0 in 1988 (Sonenstein, Pleck, and Ku, 1990), but then among all males ages 17.5-19, it rose from 30 to 49 times per year between 1988 and 1991 (Ku, Sonenstein, and Pleck, 1993). Among unmarried women ages 20-29 the rate showed a more modest decline from 59.8 in 1983 to 56.0 in 1988-93 (Tanfer and Cubbins, 1992 and GSS, 1994). However, no meaningful change has been occurring among all adults since 1988. On average adults engage in sex about 61 times per year, a little over once a week (Table 10A).

The overall adult average is relatively uninformative however since the frequency of sexual intercourse varies notably across socio-demographic groups (Table 10B). The factor making the biggest difference is age. Among those 18-29 frequency averages about 84 times per year. This then falls off steadily to 64 times per year for those in their 40s to 9.8 times per year for those 70 and older. Among the married the decline is even more striking, dropping from 112 times per annum for those under 30 to 16 times

¹⁰The concentration of gays in large urban centers also occurs in Europe (AIDS Investigators, 1992 and Johnson, Wadsworth, Wellings, Bradshaw, and Field, 1992).

per annum for those 70 and older. This age related pattern is nearly identical to one shown in the 1988 National Survey of Families and Households (Hughes and Gove, 1992) and is consistent with a large number of other studies (Call, Sprecher, and Schwartz, 1996; Feldman, Goldstein, McKinlay, Hatzichristou, and Krane, 1992; Hawton, Gath, and Day, 1994; Jasso, 1985; Jasso, 1986; Kahn and Udry, 1986; Laumann, Gagnon, Michael, and Michaels, 1994; Leigh, Temple, and Trocki, 1993; Rao and VandenHeuvel, 1995; Tanfer and Cubbins, 1992; Udry, 1980; Udry, Deven, and Coleman, 1982; National Council on the Aging, 1998; and Udry and Morris, 1978).

This decline with age also occurs within marriages. First, the so-called honeymoon effect leads to the highest rates of intercourse among the recently married and those recently married tend to be younger (Greenblat, 1983; James, 1981; James, 1983). Second, biological aging reduces hormonal output and poor health in general and impotency in particular increases with age (Feldman, Goldstein, McKinlay, Hatzichristou, Krane, 1992; Leiblum, 1990; Levy, 1992; McKinlay and Feldman, 1992; Morokoff, 1988; Schiavi, 1990; Schiavi, 1992). As a result, even among couples who rate their marriages as very happy (GSS, 1994) and among those who say they are still "in love" (Greeley, 1991) frequency of intercourse declines with age.

Marital status also influences sexual activity (Table 10B). Frequency is greatest among the currently married (with those remarried slightly exceeding those in their first marriage probably because of the honeymoon effect). The never married and divorced have lower rates, probably because of less continuous and convenient availability of a partner. The widowed have by far the lowest rates, a function of their age as well as their marital status. The edge of the married over the non-married becomes even more apparent when age is taken into consideration. Activity is 25-300% greater among the married compared to the non-married at various ages. Among the marriages (Smith, 1991a; Waite and Joyner, 1996).

Husbands and wives closely agree on the frequency of intercourse in the aggregate and in most paired comparisons of partners (Bachrach, Evans, Ellison, and Stolley, 1992 and Smith, 1992a and 1992b). However, unmarried men and women differ considerably with men reporting more activity than women do (Bachrach, et al., 1992). This is true even if the surplus of widowed females is accounted for.

A multivariate analysis indicates that more sexual intercourse is separately and independently related to a) being younger, b) having been married less than 3 years, and b) rating ones marriage as happier. It is unrelated to gender with controls for these other factors (GSS, 1996).

There are little differences by race, community type, education, or income and these are mostly related to age and/or marital status.

Sexual Inactivity

Sexual inactivity takes on three distinct forms: 1) the period prior to first sexual intercourse, 2) periods of extended inactivity after first intercourse and prior to last intercourse, and 3) the possible period after last intercourse. The first has been dealt with above in the discussion of premarital sexual relations. The latter two are discussed here. They can not be readily separated from one another with the available data.

Sexual inactivity appears to have modestly declined since the early 1980s (Table 11). Both among women of childbearing age and among all adults the proportion not engaging in sex over extended periods (3-12 months) has decreased in the 1990s.

Among adults there is a u-shaped curve with sexual inactivity most frequent among the youngest and oldest adults. Sexual inactivity among the elderly is fairly common and is a function of general aging, poor health, and unavailability of a partner. As we saw in the section on frequency of sexual intercourse, sexual activity decreases markedly with age even when a partner remains available. This is a function of both a reduction in the rate of sexual intercourse among those remaining sexually active and also an increase in the proportion sexually inactive. Among those over 70 61% are not currently sexually active. Among this age group sexual abstinence reaches 33% among the married and among the non-married it hits 92% (Table 11).

Sexual inactivity is much less common among younger adults. Among the currently married only 1.5-3% of those 18-49 are sexually inactive. Almost all of this group either have poorer than average health and/or rate their marriage as unhappy (Smith, 1992; see also Donnelly, 1993 and Edwards and Booth, 1976). While 7% of married couples of all ages are sexually inactive over the last year (GSS, 1998), fully 16% of married couples have not engaged in sexual intercourse in the last four weeks (Donnelly, 1993, see also Dolcini, et al., 1993). Sexual abstinence is much higher among the non-married ranging between 16% and 27% for those under 50.

Most other socio-demographic differences are small and merely reflect underlying differences in age and/or marital status, but sexual inactivity is lower in households with higher incomes.

While there has been long-term and massive increases in all aspects of premarital and adolescent sexual activity, there is little evidence that similar changes in regards to adult or overall sexual behavior have occurred. Moreover, adult sexual behavior appears to be more restrained and traditional than it has commonly been portrayed.

The Impact of AIDS on Sexual Behavior

AIDS is a deadly and infectious disease that has mainly been transmitted through tainted blood products, sexual intercourse, and the sharing of needles by users of illegal injection drugs. With the safeguarding of the blood supply current transmission occurs

largely through sexual intercourse or the sharing of needles with a HIV positive individual. The only means of restricting the spread of the disease is to have people adopt safer sexual and injecting drug use behaviors.

On the one hand, the long latency period of AIDS greatly complicates matters since infected people often are not aware that they are HIV positive and therefore pass the infection on to others. On the other hand, since the mid-1980s over 90% of the public have known that HIV is spread by sexual intercourse and knowledge about AIDS in general has grown over time (Rogers, Singer, and Imperio, 1993 and Singer, Rogers, and Corcoran, 1987). Given the existence of widespread, if imperfect, knowledge about the role of sexual intercourse in spreading AIDS, the question arises whether behavior has been modified in light of the known risk.

Reported Changes in Sexual Behavior

A number of studies have asked people whether they have changed their sexual behavior because of AIDS (Table 12) or have taken steps to avoid AIDS (Table 13). Early surveys in 1986-87 showed that only about 7-11% of adults reported any change. At that time these levels were commonly seen as indicating that people were either not informed about the risk of AIDS or were not reacting responsibly to the risk of AIDS. But the recent studies on sexual orientation, extra-marital relations, and sexual abstinence (Tables 6, 9, and 11) indicate that the number of people at risk was smaller than initially feared. And if relatively fewer people were engaged in risky sexual behavior, it would be understandable that few reported altering their behavior. This was directly supported by a 1987 Gallup question in which 68% reported they had not changed their behavior because they were not at risk. Likewise, the low-level of behavioral change among the married (3-12%) compared to the non-married (17.5-51%) reflects the lower level of risky behavior engaged in by married people (Table 12). Similarly, more change is reported by higher risk groups such as younger adults and Blacks.

Of people reporting a change in sexual behavior because of concern about AIDS, about 45-50% mention reducing their number of sexual partners - including having only one partner and getting married, 20-35% cite the use of condoms, 17-30% indicate they have sex less frequently or abstain completely, 10-30% say they are restricting their partners to people they know well, and less than 10% report they have stopped having sex with bisexual men or injection drug users (asked of women only).

Among all adults a number of sexual changes are reported as having been made to avoid AIDS. Monogamy and/or limiting the number of sexual partners is mentioned by about 20%, 10-12% report using

¹¹On knowledge among adolescents see Kann, et al., 1998.

condoms, and 5-7% practice abstinence (Table 13). 12

Reports of behavioral change have risen somewhat over time, apparently indicating that risky sexual behaviors are increasingly being modified (Table 12) and that more people are taking precautions to avoid AIDS (Table 13)(see also Feinleib and Michael, 1998). However, since these questions have not apparently been asked after 1993, it is unknown if this trend continues. Moreover, because of the nature of retrospective questions on behavioral change both the increased trend and the reports themselves are less than ideal. To reliably track changes due to AIDS, time series monitoring of the relevant risk behaviors are needed. We therefore consider what changes have occurred in sexual behaviors that relate

The indication of an upward trend is problematic because the period since learning about AIDS (most adults learned about AIDS in the mid-1980s, Singer, Rogers, and Corcoran, 1987) has been lengthening. Recall over longer periods is less accurate so the reliability of the reports is lessening over time. In addition, more changes occur over a longer period and attributing those changes to AIDS, or any other event, becomes less certain. Also, the longer period means that the match between current statuses and past changes are less certain. For example, a person married for five years may be reporting on a) changes prior to the marriage, b) the marriage itself as a change, c) changes since the marriage, or d) some combination. Because of these problems, the "have you changed your sexual behavior because of AIDS" questions are less than ideal.

¹²For change data from Sweden and Finland see Herlitz, 1993 and Kontula and Haavio-Mannila, 1994.

¹³The reports are questionable because of problems of recall and attribution. Any question on retrospective change depends on ones ability to accurately report not only what current behavior is, but also what past behavior used to be. Thus retrospective change reports tend to be less reliable because they depend on accurate recall and because they are based on two estimates (present and past). These questions are further problematic because they ask people to associate changes in sexual behavior to AIDS. This involves first accurately recalling that the change came after learning about AIDS and second correctly identifying concern over AIDS as the cause of the change. This second step is particularly difficult since the questions are biased towards having people attribute changes as due to AIDS and since changes are usually multi-causal rather than mono-causal. For example, on the 1991 CBS survey 5% of changers reported they had gotten married or become monogamous because of AIDS. While some marriages have undoubtedly occurred because of AIDS, it is quite possible that AIDS was a minor factor in the decision to get married and may not have led to more or earlier marriages than would have occurred in the normal course of things.

to risk of HIV infection -gay sexual activity, number of partners, familiarity between partners, and condom use. 14

Homosexual Behavior

By the time AIDS was identified, its mode of transmission via sexual intercourse documented, and tests for HIV infection developed, the disease was already widespread among the gay population, especially in San Francisco and New York City. Combined efforts by gay community organizations and public health officials led to the rapid dissemination of knowledge about AIDS and the adoption of safer sex practices by gays. The result was "a dramatic decline in risk practices for HIV transmission...gay men have reduced the number of sex partners, have fewer anonymous sexual have switched from shorter to encounters, longer relationships, and engaged in less anal intercourse or consistently used condoms (Ehrhardt, Yingling, and Warne, 1991)." Of late however, there has been little further increase in safe sex practices among homosexuals and even some back sliding among some who have tired of the diligence and restrictions required by safer sexual practices, among some minority groups, and among younger gays who did not experience the initial onslaught of the epidemic (Catania, Stone, Binson, and Dolcini, 1995; Ehrhardt, 1992; Ehrhardt, Yingling, and Warne, 1991; Goldbaum, Yu, and Wood, 1996; Kalichman, 1996; Osmond, et al., 1994; Ostrow, Beltran, and Joseph, 1994; Carballo-Dieguez and Dolezal, 1996; and Ostrow, Difranceisco, and Kalichman, n.d.). As a result, same gender sexual intercourse among men remains most frequent mode for the transmission of AIDS ("Update," 1995; Levin, 1995; and State and Local, 1997). 15

Number of Partners

While the overall number of sexual partners among all adults has not diminished in recent years (Table 14), some change has been occurring among teenagers and young adults (Table 1C). Among young males the number of partners was probably rising for most of the century until the early 1990s. However, the evidence is somewhat mixed for the 1980s. The mean number of lifetime partners among sexually active males 17-19 in metropolitan areas fell from 7.3 to 6.0 between 1979 and 1988, while among sexually active males ages 17.5-19 the mean number of sexual partners in the last 12 months

¹⁴One sexual risk factor not discussed is type of sexual activity (e.g. vaginal, anal, and oral intercourse). On the comparative risk of these behaviors see Susser, Desvarieux, and Wittkowski, 1998.

¹⁵On male bisexuals see Doll and Beeker, 1996; Ekstrand, Coates, Guydish, Hauck, Collette, and Hulley, 1994 and Stokes, McKirnan, and Burzette, 1993.

rose from 2.0 in 1988 to 2.8 in 1991 (Ku, Sonenstein, and Pleck, 1993). During the 1990s there appears to have been a decline in number of partners. The % of male high school students with a lifetime total of 4 or more partners declined from 31% in 1989 to 16% in 1997 (Table 1C and Divs. Adolescent and School Health and Health Interview Statistics, 1994a, 1994b, 1995). For young females there is less clear evidence that the long-term increase in number of partners reversed in 1990s. The YRBS data indicate year-to-year fluctuation rather than any definite trend. However, the GSS shows that from 1988-1990 to 1991-1996 the mean number of sexual partners during the last 12 months for the 18-24 age group significantly decreased from 2.4 to 1.7 (Smith, 1998).

Even if the reductions in number of partners among teenagers is real, many adolescents are still at risk of AIDS and other STDs because of having multiple partners (Anderson and Dahlberg, 1992; Beckman, Harvey, and Tiersky, 1996; Ku, Sonenstein, and Pleck, 1994; Leigh, Temple, and Trocki, 1993; Luster and Small, 1994; Smith, 1991; Trocki, 1992; and Tubman, Windle, and Windle, 1996).

Whether the possible decline in number of partners accumulated by teenagers and young adults will translate into a lower number of lifetime sexual partners is unknown. If it does, it will reverse an expansion that began several generations ago. We can see evidence of that rise in the figures on number of sexual partners since age 18 (Table 14). The increase in the number of sexual partners from ages 18-29 to 40-59 mostly represents the accumulation of partners over ones lifetime. The sharp drop in cumulative partners for those 60 and older occurs because this age group represents a generation that came to age before the peak in premarital sexual activity described above. That is, this generation had fewer premarital partners, married relatively early, and, as a result, has accumulated a lower number of sexual partners than subsequent generations.

Among adults, having multiple sexual partners during the last year and during the last five years is most strongly associated with being young, unmarried, and male. It is also higher among Blacks, residents of large central cities, those with low incomes and less education, and infrequent church attenders. The adult lifetime figures show a similar pattern except that there is no relationship between income or race and number of sexual partners and the less educated have fewer partners than the better educated. The reversal of the education relations results from less educated, earlier cohorts having fewer partners than more recent and better educated cohorts have had.

Multiple partners are thus found in two main social niches, among young, unmarried adults and adolescents who have not yet "settled down" and among disadvantaged segments of society in

¹⁶On discrepancies between the reports of men and women see Smith, 1992a; Wadsworth, Johnson, Wellings, and Field, 1996; and Wiederman, 1997.

general and among inner-city minorities in particular who also tend to lead less stable and conventionally-ordered lives (Ford and Norris, 1995 and Wagstaff, et al., 1995).

Relationship to Sexual Partners

Risk increases not only with one's number of sexual partners, but also with the casualness and transitoriness of relationships. When it comes to STDs one "sleeps not only with a partner, but with all of that partner's partners." Closer relationships are associated with (but do not guarantee) mutual monogamy, while casual relationships come without any likelihood of exclusivity.

The trends in relationships are mixed and depend on the measure and data set being examined. First, since 1988, the GSS item on relationships to sex partners during the last year shows little change in relationships between sexual partners either among all adults or among unmarried people under 40 (Table 15A). Most people are engaged in close and presumably mutually monogamous relationships as spouses or cohabiting partners, but each year 3-4% of sexual partners are pick-ups, one-night stands, prostitutes (see below), or other casual couplings. In addition, another 4-5% of partners are better known (neighbors, co-workers, long-term acquaintances), but are not considered close friends or regular partners. Second, there was a small, but statistically significant, drop in whether one was in a continuing relationship with ones most recent sexual partner from 92% in 1996 to 90% in 1998 (Table 15A). Finally, across birth cohorts of women relationship with their first sexual partner have become more casual over time (Table 15A). Of those born in 1951-55, 32% were engaged or married to their first sexual partner, 51% were going steady, 16% were less closely involved, and 1% were in other relationship. For those born in 1976-1980, 4% were engaged or married, 73% were going steady, and 23% were less connected.

More casual relationships (pick-ups, prostitutes, and acquaintances) are most prevalent among the young, unmarried, and males. They are also more common among Blacks, residents of large central cities, and those with lower incomes. Similarly having ones last sexual encounter with someone that one did not have an "ongoing relationship" with is more common among men, Blacks, the young, never married, city residents, the less educated, and infrequent church attenders (Table 15). Household income is not related to non-relational sexual encounters. "One-night stands" are equally common for Black and White males, but less frequent for Black females than for White females (Tanfer, 1994). In general, we see that those socio-demographic groups with a high number of partners also tend to have less familiar partners.

Prostitution

At a time when prostitution could be a major avenue for the spread of AIDS into uninfected areas and groups, we know little

about its magnitude or how the situation has been changing. As the National Academy of Sciences' Committee on AIDS Research observed, "(I)nformation about women who work as prostitutes is scant, and knowledge of their clients is sketchier still (Miller, Turner, and Moses, 1990; see also Turner, Miller, and Moses, 1989)."

Because prostitution is an illegal (except in rural Nevada) and socially stigmatized occupation, the amount of reliable information on it is limited. The only time series data come from the arrest records compiled by the FBI (Table 16). They show that the arrest rate climbed from around 30 per 100,000 total population in the early 1970s to a high of 59 in 1982 and 1983. The rate then fell back to the lower 40s by 1988 and has remained at that level since then. Whether this represents shifts in the prevalence of prostitution or variations in law enforcement efforts is unknown.

While the illegality of prostitution is probably the main barrier to accurate counts, estimates are also complicated by the prevalence of many part timers, the continual occupational turnover, and the apparent geographic mobility of prostitutes. There are some more recent and limited studies that have tried to overcome these serious problems and either to estimate the number of prostitutes or of certain types of prostitutes in given localities (Potterat, Woodhouse, Muth, and Muth, 1990; Kanouse, Berry, Duan, Lever, and Richards, 1991; and Leyland, Bernard, McKeganey, 1992) or to measure the proportion of women who have engaged in sex for pay (McQuillan and Ezzati-Rice, Siller, Visscher, and Hurley, 1994, Wyatt, Peters, and Guthrie, 1988; and Brunswick, et al., 1993). In addition, there are recent estimates of what proportion of men have engaged in paid sex.

Although all three of the community, aggregate-estimate studies were carefully done and show a high degree of consistency, all estimates of the number of prostitutes are fraught with uncertainties since they deal with what one study aptly calls a "covert" population. In addition, the Los Angeles and Glasgow estimates are by definition incomplete because they cover only street prostitutes.

		# per 100,000 residents
Glasgow, Scotland 199	O Street Prostitutes	24
Los Angeles Co. 199	O Street Prostitutes	18-26
Colorado Springs 198	5-88 All Prostitutes Full-time Equivalen	26 ts 19

Surveys of general populations of women are equally limited. The studies cover sub-groups in local areas, have very small to medium sample sizes (LA=120, Harlem Panel=187, Dallas=745), use different measures, and show different levels of involvement in

paid sex.

Los Angeles	ca. 1985	Whites 18-36	Engaged in prostitution	8%
Central Harlem Panel	1989-90	Blacks 32-38	Received money of drugs for sex	
Dallas	1989	All 18-54	Received money of drugs for sex since 1978	r 2.2%

In additional, two recent samples provide the first national estimates of the proportion of women involved in paid sex. A 1991 survey of 1,669 women ages 20-37 found that 2.0.% had ever had "oral, anal, or vaginal sex in exchange for money or drugs" (Tanfer, 1994) and the 1991-98 GSS of 5,700 women 18+ indicated that 1.6% of women had "had sex with a person you paid or who paid you for sex" since age 18 (GSS, 1998).

Given the differences in ages and measurements, the Dallas survey and the two national samples are in close agreement. They suggest a much higher rate of female participation than the aggregate counts (on the order of 15-20 times higher), but the two sets of estimates are not directly comparable. (Without information on duration, level of involvement, and related factors the survey estimates can not be converted into point estimates of women engaged in prostitution nor can they separate out occasional participants from full-time professionals.)

In brief, the available studies are extremely limited in number and most are unrepresentative of the United States as a whole (one study of course is not even from the United States). In particular, extrapolations from these few local studies to national estimates could well be wrong, especially if prostitution is heavily concentrated in urban centers. This possibility is supported by the fact that on the 1988-1998 GSSs 0.3% of men living in rural areas reported having sex with a prostitute during the last year, while 2.0% of those living in the 12 largest central cities reported having sex with a prostitute during the last 12 months (Table 17). In addition, the lifetime figures show a similar pattern.

Reports by men on paying for sex indicate that 0.6% of men had a prostitute for a sex partner during the last year (GSS, 1998), 5.9% within the last five years (Wells and Sell, 1990), and 16.3% at some point during the past (GSS, 1998 see also Rubin, 1990; McQuillan, Ezzati-Rice, Siller, Visscher, and Hurley, 1984). 17

¹⁷In addition, for males 15-29 in 1995 0.7% said they had ever had sex with a prostitute on a paper self-completion form, but 2.5% report such behavior on an audio-computer-assisted, self-completion form (Turner, et al., 1998).

Unfortunately, these figures are not consistent. The five-year figures are more than twice what would be expected based on the annual figures.

In addition, comparing the annual rates to estimates of FTE prostitutes (assuming that the above urban rates can be applied nationally) comes to only 9.9 clients per prostitute. ¹⁸ Thus, if the estimates of number of prostitutes are correct, this would suggest that men are underreporting their number of paid sex partners (either by not reporting partners who were prostitutes or reporting them as falling in another category such as casual dates or acquaintances). Alternatively, the number of FTE prostitutes may be overestimated.

Based on the analysis of reported contact with prostitutes during the last year and during one's lifetime (Table 17), sexual activity with prostitutes does not consistently vary by education or age. As one would expect, lifetime contact generally increases with age, but current use is unrelated to age. Lifetime contact is unrelated to education and current use has an irregular relationship. Contact is higher among those living in metropolitan areas, Blacks, those with lower incomes, veterans (probably when in military service), those who attend church less frequently, and those having gone through a divorce (it appears to be especially high among separated men). Among married men paying for sex during the last 12 months is strongly related to low marital happiness.

Use of Condoms

Undoubtedly because of the advent of AIDS and the dissemination of safer sex messages, condom use doubled from the late 1970s/early 1980s to the late 1980s (Table 18)(see also Moran et al., 1990 and Douglas, et al., 1997). From the mid-1960s to the mid-1970s just over a fifth of women used a condom at the time of their first intercourse. By the mid-1980s this had almost doubled to 42%. Similarly, in 1979 21% of teenage males reported using a condom at the time of their most recent intercourse and in 1988 the level increased to 57.5%. Condom use has continued to increase since then (Beckman, Harvey, and Tiersky, 1996; Catania, Binson, Dolcini, Stall, Choi, Pollack, Hudes, Canchola, Phillips,

¹⁸Among legal Nevada brothel workers the median number of customers per month was 69 (presumably counting repeat customers more than once) (Albert, Warner, and Hatcher, 1998). This number is probably higher than averaged by illegal sex workers. On the frequency of repeat customers see Freund, Lee, and Leonard, 1991. See also, Cusick, 1998.

¹⁹For a similar increase among a small group of college women see DeBuono, Zinner, Daamen, and McCormack, 1990. For figures on condom sales in 1983-1988 see Moran, Janes, Peterman, and Stone, 1990.

Moskowitz, and Coates, 1995; Catania, Coates, Peterson, Dolcini, Kegles, Siegel, Golden, and Fullilove, 1993; Catania, Stone, Binson, and Dolcini, 1995; Ford and Norris, 1995; Ku, Sonenstein, and Pleck, 1994; Moore, et al., 1992; Division of Epidemiology and Prevention Research, et al., 1992; Pleck, Sonenstein, and Ku, 1993; Ku, Sonenstein, and Pleck, 1993; Strunin and Hingson, 1992; Piccinino and Mosher, 1998; and Peipert, Domagalski, Boardman, Daamen, McCormack, and Zinner, 1997). For example, the YRBS shows that condom use steadily increased for both males and females in the 1990s and condom use at last intercourse among never married males 15-19 grew by 10 percentage points from 1988 to 1995 (Table 18).

However, while condom use has grown appreciably, it is still far below the general and consistent use called for by safer sex practices (Kost and Forrest, 1992; Pleck, Sonenstein, and Ku, 1991; Potter and Anderson, 1993; Leigh, Morrison, Trocki, and Temple, 1994; Peterson, Catania, Dolcini, and Faigeles, 1993; Sabogal, Faigeles, and Catania, 1993; Grinstead, Faigeles, Binson, and Eversley, 1993; Catania, Coates, Golden, Dolcini, Peterson, Kegeles, Siegel, and Fullilove, 1994; Nguyet, Maheux, Beland, and Pica, 1994; Binson, Dolcini, Pollack, and Catania, 1993 and Douglas, et al., 1997). Among sexually experienced college students in 1995 only 38% reported always using a condom (Douglas, Collins, et al., 1997). Likewise, a 1991 national survey of men 20-39 found that only 26.5% of sexually active men had used a condom during the last four weeks and even among unmarried men with no regular sexual partner only 46% had used a condom during the prior month (Tanfer, Grady, Klepinger, and Billy, 1993, see also, Grady, Klepinger, Billy, and Tanfer, 1993 and Catania, et al, 1992). Similarly, among unmarried women 15-44 in 1990 with 2+ partners in the last 3 months only 16% always used condoms and 39% never did (Mosher and Pratt, 1993). Also, among both men and women 18-24 in 1996 whose most recent sexual partner was not someone they were in an ongoing relationship with only 56% had used a condom (Smith, 1998).

Condom use is higher among socio-demographic groups that have multiple, sexual partners and less committed and on-going relationships with sexual partners. Condoms are used more frequently by Blacks, the young and never married, residents of large cities, those with lower incomes, and those who attend church less regularly (Table 19). Use generally increases with education, but drops off among those with graduate degrees.

Men tend to report greater condom use than do women (especially among teens), but both men and women agree on the trends and general patterns reported here (Divs. of Reproductive Health and Adolescent and School Health, 1992; Leigh, Temple, and Trocki, 1993; Marin, Gomez, and Hearst, 1993; Laumann, Gagnon, Michael, and Michaels, 1994; Leigh, Morrison, Trocki, and Temple, 1994; Douglas, Collins, et al., 1997; and Santelli, et al., 1997). Among adults 21% of men and 18% of women reported using a condom the most recent time they had sex.

Condom use declines among youths and young adults as they age

(Table 19; Sonenstein and Pleck, 1997 and Reitman, et al., 1996). This is believed to be largely because sexual relationships become more established and enduring. However, this connection has not been well-established in the studies to date.

Condom use also varies by status of sexual partner. A 1991 study of Hispanic adults and of non-Hispanic White adults living near Hispanics in the Northeast and Southwest indicated that even among those with two or more sexual partners only about 50% always used a condom with their secondary sexual partner(s) (Marin, Gomez, and Hearst, 1993). In addition, condom use is often notably lower among primary partners (i.e. spouse, cohabiting partner, or regular sexual partner) than among secondary partners (Leigh, Temple, and Trocki, 1993; Marin, Gomez, and Hearst, 1993; Ehrhardt, Yingling, and Warne, 1991; Dolcini, et al., 1993; Lansky, Thomas, and Earp, 1998; Albert, Warner, and Hatcher, 1998; Rietmeijer, et al., 1998; and Miller, Turner, and Moses, 1990. But in contrast see Soskolne, Aral, Magder, Reed, and Bowen, 1987). This increases the chance of spreading AIDS and STDs to one's primary sexual partner.

Summary

Since early in this century the bonds between marriage and sexual activity have been unravelling. More men and women have engaged in premarital sexual intercourse, they have become sexually active at earlier ages, and they have accumulated more sexual partners. While premarital and adolescent sexual activity has grown for both men and women, the largest changes has been in the sexual behavior of women. The expansion of sexual behavior has in turn led to a rise in cohabitation and a surge in non-married births, and contributed to the growth of various public health and social welfare problems (Besharov and Gardiner, 1993).

Rather than being an isolated phenomenon these changes in sexual behavior, living together, and child bearing have been part of broader social changes towards an individualistic rather than a family-center society (Glenn, 1987; Popenoe, 1993; and Smith, 1997) and towards modern rather than traditional roles for women (Firebaugh, 1990 and Simon and Landis, 1989). Moreover, there are suggestive signs that parallel shifts have occurred in other post-industrial societies. As such, the changes in American premarital and adolescent sexual behavior may result from the development of advanced economies, welfare states, and liberal governments in general rather than from any special situation peculiar to America. ²⁰

Of late however this long-term trend has moderated and in a few limited, but key, aspects reversed. First, the increase in premarital and adolescent sexual activity has ended and to some

 $^{^{20}}$ The lowering of the average age of menarche may also contribute to this widespread pattern (Ehrhardt and Wasserheit, 1991).

degree has waned. So far this development doesnot seem to have received much recognition in the mass media or among the public (Stodghill, 1998; Smith, 1998). Second, the portion of nonmarital births has levelled-off (albeit at near record levels). Third, condom use more than doubled during the last 20 years and apparently continues to grow. While there have not been decreases in all forms of risky sexual behavior in all segments of the population, these departures from the long-term trend are notable and may reflect an underlying, nascent shift in social values.

While marriage is no longer the portal into sexual activity for many Americans, it remains an important regulator of sexual behavior and thus a barrier to AIDS and other STDs. Since most married people most of the time engage in sex only with their marriage partner, marriage limits one's total number of sexual partners and reduces the spread of HIV. However, marriage may be less of a barrier than it used to be. The decline in reported rates of ever having had extra-marital relations among those 50 and over does suggest that monogamy may have declined across recent generations. But, on the other hand, there has been no decrease in disapproval of extra-marital relations (Smith, 1990; 1994 and Davis and Smith, 1998), extra-marital relations have not increased since 1988, and "affairs" are much less common than presentations in either pop and pseudo-scientific studies or the entertainment media suggest.

Of course, marriages themselves are also not as enduring as they used to be. The two-and-a-half fold growth of the divorce rate from the 1960s to the early 1980s and its continuation at near historically high levels to the present means that over half of all recent marriages will end in divorce. For most divorced people this means accumulating new sexual partners and especially for those under 50 this often means having multiple sexual partners (Stack, 1992).

Besides marital status sexual behavior is strongly influenced by age. In general, sexual activity diminishes with age with fewer people having multiple partners, less extra-marital sex, frequency of intercourse declining, and sexual abstinence increasing. Cohabitation rates also fall and non-marital births decline with age (ceasing of course for women after menopause).

There are also large differences between Whites and Blacks in their sexual behaviors (Bowser, 1992; Brewster, 1994; Sterk-Elifson, 1992; Kilmarx, et al., 1997; Peterson, Catania, Dolcini, and Faigeles, 1993; Brunswick, et al., 1993; Reitman, et al., 1996; and Quadagno, et al., 1998; but see Wyatt, 1989). Blacks become sexually active at an earlier age, accumulate more sexual partners over their lifetime, have more casual partners, are less likely to marry, have less stable and shorter-term marriages, and have many more children born outside of marriage. Black sexual and childbearing behavior puts African-Americans at greater risk of contracting AIDS and other STDs (and Blacks do have higher HIV and STD infection rates) and contributes to such problems as single-parent families and childhood poverty.

Sexual behavior also varies by community type. Residents of large central cities have more sexual partners, more casual partners (including prostitutes), and more extra-marital relations than those living in rural areas. In addition, probably due to selective migration, gays concentrate in large cities. Overall since risk behaviors (both sexual and injection drug use) are more common in large cities and the HIV virus is more prevalent in these localities, the chances of becoming infected is especially high in large metropolitan areas (Catania, et al., 1992).

Finally, religion exercises a traditional restraint on sexual behavior (Thornton and Camburn, 1989; Seidman, Mosher, and Aral, 1992; Stack and Gundlach, 1992; Tanfer and Schoorl, 1992; Goldscheider and Mosher, 1991; Hogan, Sun, and Cornwell, 1998; and Brewster, Cooksey, Guilkey, and Rindfuss, 1998). Those who attend church regularly are less likely to a) become sexually active, b) have multiple and casual partners, and c) among the married, have sexual partners other than their spouse. Church attendance, like rural residence, imposes traditional restraint on sexual behavior.

Given the deadly nature of AIDS, the near universal knowledge of the disease, and the widespread understanding that it is transmitted through sexual intercourse, its impact on sexual behavior has been limited. The largest changes occured among gays in large metropolitan centers who adopted considerably safer sexual practices. But the on-going spread of AIDS from male-with-male sexual contact indicates the continuing shortcomings in safer sex practices among gays.

Among the heterosexual population the largest change has been the increased use of condoms. However, condom use is incomplete and haphazard with condoms being used much less consistently than called for by safer sex standards. In addition, the small decreases in the number of partners among adolescents and youths may also results from the AIDS epidemic. But most people still have numerous premarital sexual partners and many sexual partners represent casual and short-term relationships. Moreover, it is unclear whether the somewhat moderated number of teens and young adults involved with multiple partners will lead to a reduction the lifetime number of partners. The continuingly high level with multiple partners and the sporadic, if improved, use of condoms means that millions continue to expose themselves each year to the risk of AIDS and other STDs (Smith, 1991b; Anderson and Dahlberg, 1992; and Dolcini et al, 1993). In addition, the level of nonmarried births remains at near-record levels and the % of all births that are unplanned also remains high.

In sum, contemporary patterns of sexual behavior are a source of considerable public policy concern relating to AIDS and STDs, child-bearing and child-raising, and many other public health and social problems.

Table 1

Premarital Intercourse and Adolescent Sexual Activity

A. Sexual Experience

% ever having pre-marital, heterosexual partner among ever-married
Birth
Cohorts

	Men	Women
Before 1910	60.8	12.3
1910-1919	73.9	28.6
1920-1929	79.7	31.4
1930-1939	87.2	40.9
1940-1949	89.5	62.9

Source: Turner, Miller, and Moses, 1989 and Klassen, Williams, Levitt, Rudkin-Miniot, Miller, and Gunjal, 1989

% ever virgins at marriage: Ever married

Birth Cohorts	Men	Women
1933-42	21.9	54.4
1943-52	15.4	28.9
1953-62	13.5	20.0
1963-74	16.3	20.1

Source: Laumann, Gagnon, Michael, and Michaels, 1994

% having sex with spouse before marriage: Ever married

Birth Cohorts	Men	Women
1933-42 1943-53	32.6 48.6	30.7 51.1
1953-62	56.3	55.9
1963-74	69.8	57.7

Source: Laumann, Gagnon, Michael, and Michaels, 1994

Table 1 (continued)

% ever having premarital sex: Women, 15-19

	All	Whites	Blacks
1970	28.6	26.7	46.0
1975	36.4	35.4	50.8
1980	42.0	41.4	58.1
1985	44.1	43.1	55.4
1988	51.5	50.6	58.8

Source: Divs. of Vital Statistics & STD/HIV Prevention, 1991

% ever having premarital sex: Women 15-19 in metropolitan areas

1971	30.3	26.4	53.7
1976	43.4	38.3	66.3
1979	49.8	46.6	66.2
1982	44.9	43.3	53.6

Source: Hofferth, Kahn, and Baldwin, 1987 (NSYW+NSFG82)

% ever having premarital sex: Women 15-19

1971	31.7	39.0	51.2
1976	39.0	36.2	56.1
1979	43.4	40.8	61.6
1982	45.2	43.1	56.5

Source: Hoffert, Kahn, and Baldwin, 1987 (NSFG82)

% ever having premarital sex: Males 17-19 in Metropolitan Areas

1979	65.7	64.5	71.1
1988	75.5	73.0	87.7

Source: Sonenstein, Pleck, and Ku, 1989

% ever having sex with female: Never-married males, age 17.5-19

1988 75.0 1991 78.6

Source: Ku, Sonenstein, and Pleck, 1993

Table 1 (continued)

% ever having sex: High school students

	All	Whites	Blacks	Men	Women
1989	59				
1990	54.2	51.6	72.3	60.8	48.0
1991	54.1	50.0	81.4	57.4	50.8
1993	53.0	48.4	79.7	55.6	50.2
1995	53.1	48.9	73.4	54.0	52.1
1997	48.4	43.6	72.7	48.8	47.7

Source: Moore, et al., 1992 and Divs. of Epidemiology and Prevention; Adolescent and School Hlth.; Reproductive Hlth., 1992; "Youth Risk Behavior Survey," 1995; and Div. of Adolescent and School Health, 1995; Division of Adolescent and School Health, et al., 1998; Kann, et al., 1998; and Warren, et al., 1998.

% sexually active: Women, 15-19

1985	44.7
1990	51.3
1995	51.1

Source: Hogan, Sun, and Cornwell, 1998

% ever had sex: Females, 15-19

1970	29
1975	36
1982	47
1988	53
1990	55
1995	50

Source: Moore, Driscoll, and Lindberg, 1998

% ever had sex with female: Males, 15-19

1988 60.4 1995 55.2

Source: Sonenstein, Ku, Lindberg, Turner, and Pleck, 1998

Table 1 (continued)

% sexually active during last 3 months: High school students

	All	Males	Females
1990	39.4	42.5	36.4
1991	37.4	36.8	38.2
1993	37.5	37.5	37.5
1995	37.9	35.5	40.4
1997	34.8	33.4	36.5

Source: Div, of Adolescent and School Health, et al., 1998 and Warren, et al., 1997

% with sex partners before age 18, Adults in 1992

Birth Cohorts	Men	Women
1933-42	41.5	18.5
1943-52	47.6	20.3
1953-62	53.3	41.2
1963-74	60.3	52.8

Source: Laumann, Gagnon, Michael, and Michaels, 1994

% ever having sex: High school students

1994 41-42

Source: "Teens Talk," 1994

% ever had sexual intercourse: College Students, 18-24

1995 79.5

Source: Douglas, Collins, et al., 1997

% ever had sexual intercourse with Female, Males, 15-19

1995 68.1-63.9

Note: First number is from self-completion using paper. Second

number is from audio-computer assisted, self-completion.

Source: Turner, et al., 1998

% ever had sexual intercourse: Ages 13-18

All Males Females

1997 31 36 26

Source: National Survey of Teens, 1998

Table 1 (continued)

B. Sexual Experience by Age

% reporting premarital, heterosexual intercourse by ages 16 and 18

Birth	Men		Women	1
Cohorts	16	18	16	18
Pre-1900	24.0	36.8	2.7	3.3
1900-1909 1910-1919	23.9 28.7	40.2 51.3	4.8 6.3	6.5 9.6
1920-1929	45.0	66.1	4.9	12.4
1930-1939	47.4	69.1	10.0	21.0
1940-1949	50.2	76.6	19.1	37.2

Source: Klassen, et al., 1989

% reporting premarital intercourse by ages 16/18, women in 1982

Birth Cohorts	16	18
1938-40	7.4	23.0
1941-43	7.4	22.7
1944-46	7.1	22.6
1947-49	10.1	29.3
1950-52	6.6	26.9
1953-55	14.5	43.1
1956-58	17.9	45.5
1959-61	18.9	46.4
1962-64	23.1	54.0

Source: Hofferth, Kahn, and Baldwin, 1987

% sexually experienced at ages 15 and 17, Women

	15	17
1970	4.6	32.3
1975	9.8	36.6
1980	16.7	35.5
1985	20.0	41.7
1988	25.6	51.0

Source: Divs. of Vital Statistics & STD/HIV Prevention, 1991

Table 1 (continued)

Median Age at First Intercourse: High School Students

	All	Males	Females
1990	16.4	16.0	16.8
1991	16.5	16.3	16.6
1993	16.4	16.3	16.6
1995	16.5	16.4	16.5

Source: Warren, et al., 1997

% sexually experienced by grade level: High School Students

	9th	10th	11th	12th
1997	38.0	42.5	49.7	60.9

Source: Kann, et al., 1998

% sexually experienced at ages 15 and 17, teenagers in 1986

	15	17
Males	35	61
Females	22	53

Source: Taylor, Kagay, and Leichenko, 1986

% sexual experienced by ages 15-19, ages 19-27 in 1984

	Males	Females
15	17.5	6.6
16	29.5	14.5
17	49.0	30.2
18	65.4	47.2
19	78.7	65.7

Source: Marsiglio and Mott, 1986

% having had sexual intercourse by ages 12-18, Male Teens in 1988

12	5.4
13	11.0
14	21.1
15	37.8
16	57.5
17	67.5
18	79.0

Source: Sonenstein, Pleck, and Ku, 1990

Table 1 (continued)

% having had sexual intercourse by ages 12-17: Teens 12-17 in 1990

	Men	Women
12	5	0
13	6	3
14	24	3
15	29	37
16	48	48
17	67	56

Source: Leigh, Morrison, Trocki, and Temple, 1994

% ever had sexual intercourse by grades: High School Students, 1993

	Men	Women
9th 10th 11th 12th	43.5 47.4 59.5 70.2	31.6 44.9 55.1 66.3
All	55.6	50.2

Source: "Youth Risk Behavior Survey," 1995

% ever had sexual intercourse, Ages 14-21

	14-17	14-19	14-21	18-21
1992	43.4	45.4	63.0	81.7

Source: Divs. of Adolescent and School Health and Health Interview Statistics, 1994a and 1994b

% ever had sex, Females, 15-44: 1995

All	89.3
15	22.1
16	38.0
17	51.1
18	65.4
19	75.5
20-24	88.6
25-29	95.9
30-44	98.2

Source: Abma, et al., 1997

Table 1 (continued)

% ever had sex, Females, 15-19: 1995

All	52
15	25
16	39
17	42
18	66
19	77

Source: Moore, Driscoll, and Lindberg, 1998

Mean age at first sexual intercourse, Women

	All	Whites	Blacks
1965-69	19.0	19.2	17.7
1970-74	18.6	18.8	17.0
1975-79	18.2	18.3	16.9

Source: Bachrach and Horn, 1987

Mean age at first sexual intercourse: Males 17.5-19

1988	15.4
1991	15.2

Source: Ku, Sonenstein, and Pleck, 1993

Mean Age at First Intercourse, Women 15-44 in 1995

All	17.8
20-24	16.6
25-29 30-34	17.5
35-39	17.8 18.0
40-44	18.6

Note: Based on women who ever had intercourse after menarche.

Source: Abma, et al., 1997

Table 1 (continued)

C. Number of Sexual Partners

% of ever-married with two or more heterosexual partners before first marriage

Birth Cohorts	Men	Women
Pre-1910	49.2	3.3
1910-1919	61.2	8.5
1920-1929	70.1	11.8
1930-1939	72.9	16.5
1940-1949	72.6	25.8

Source: Turner, Miller, and Moses, 1989 and Klassen, Williams, Levitt, Rudkin-Miniot, Miller, and Gunjal, 1989

Lifetime Total Number of Sexual Partners among Sexually Active Women, 15-19 in Metropolitan Areas

	1	2-3	4-5	6+
1971	62%	25	7	7
1976	53%	28	9	11
1979	49%	35	8	8
1988	39%	31	17	14

Source: Kost and Forrest, 1992

Mean Number of Total Lifetime Sexual Partners among Sexually Active Men 17-19 in Metropolitan Areas

1979	7.3
1988	6.0
Prob.	sig.

Source: Sonenstein, Pleck, and Ku, 1991

Number of Sexual Partners in Last 12 Months among Sexually Experienced: Men 17.5-19

	Mean	% 5+ Partners
1988 1991	2.0 2.8	6.3 10.7
Prob.	<.05	<.01

Source: Ku, Sonenstein, and Pleck, 1993

Table 1 (continued)

% with 2+ and 4+ Sexual Partners in Lifetime, High School Students

		2+		4+
	All	Men	Women	All Men Women
1989	40.1	46.7	33.4	23.6 31.1 16.0
1990	36.3	43.6	29.4	19.0 26.7 11.8
1991	35			18.7 23.4 13.8
1993				18.8 22.3 15.0
1995				17.8 20.9 14.4
1997				16.0 17.6 14.1

Source: Anderson, Kann, Holtzman, Arday, Truman, and Kolbe, 1990; Moore, et al., 1992 and Divs. of Epidemiology and Prevention; Adolescent and School Health; and Reproductive Health, 1992; Holtzman, Lowry, Kann, Collins, and Kolbe, 1994; "Youth Risk Behavior Survey," 1995; Div. of Adolescent and School Health, 1995; Div. of Adolescent and School Health, 1998; Warren, et al., 1997

% with 4+ sex partners, Ages 14-21

	1992
14-17	13.3
14-19	15.9
14-21	63.0
18-21	41.3

Sources: Divs. of Adolescent and School Health and Health Interview Statistics, 1994a and 1994b

% with 4+ sex partners, High School Students

	1993
9th 10th 11th 12th	10.9 15.9 19.9 27.0
All	18.8

Source: Div. of Adolescent and School Health, 1995

Table 1 (continued)

Mean Number of Lifetime Sexual Partners, High School Students

1994

All 1.1 Sexual Experienced 2.7

Source: "Teens Talk," 1994

% with 6+ lifetime sex partners: College students, 19-24

1995

25.7

Source: Douglas, Collins, et al., 1997

% 5+ Female sexual partners, Males, 15-19

1995 15.8-18.8

Note: First number is from self-completion using paper. Second number is from audio-computer assisted, self-completion.

Source: Turner, et al., 1998

% with 4+ lifetime sexual partners: 13-18

1997

All 7 Males 11 Female 3

Source: National Survey of Teens, 1997

% with various number of sexual partners during last 12 months, Females in Midwestern state in grades 7-12, 1992-96

0 72.5% 1 14.8 2 5.2 3 2.9 4+ 4.7

Source: Luster and Small, 1997

Table 2
Trends in Cohabitation

% for whom first union was cohabitation: Ever in union

Birth Cohorts	Men	Women
1933-42	16.4	6.9
1943-52	30.3	21.8
1953-62	53.1	42.4
1963-74	65.7	64.0

Source: Laumann, Gagnon, Michael, and Michaels, 1994

Cohabitators as % of ...

	All Couples	All Households	All Adults
1960 1970 1975 1977	1.1 1.1 1.8 2.0	0.8 0.8 1.2 1.3	
1978	2.3	1.5	
1980	3.1	2.0	
1981 1982	3.5 3.6	2.2 2.2	
1983	3.6	2.3	
1984	3.8	2.3	
1985	3.7	2.3	2 Г
1986 1987	4.1 4.3	2.5 2.6	3.5 4.0
1988	4.7	2.8	1.0
1989	5.0	3.0	
1990	5.1	3.1	
1991 1992	5.4 5.8	3.2 3.5	
1993	6.1	3.6	4.2
1994	6.3	3.8	4.3
1995	6.3	3.7	
1996 1997	6.8 7.0	4.0 4.1	6.0
1998	7.0	 	6.4

Sources: Glick and Spanier, 1980; Spanier, 1983; Thornton, 1988; Current Population Surveys, 1987-1997; GSS, 1998

Table 2 (continued)

% cohabited with present spouse before marriage

1988 23.4 1994 28.0

Source: GSS, 1994^a

% Currently % Ever Cohabited % Cohabited prior
Cohabiting to First Marriage

Women, 15-44

 1988
 5
 34
 25

 1995
 7
 41
 24

Source: see Table 3 and Abma, et al., 1997.

The General Social Surveys (GSSs) of the National Opinion Research Center, University of Chicago are full-probability, in-person surveys of adults living in households in the United States. They have included a self-completion form on sexual behavior since 1988. Sample sizes are 1988=1390, 1989=1401, 1990=1173, 1991=1296, 1993=1492, 1994=2791, 1996=2657, and 1998=2585. For more details see Davis and Smith, 1998. Unless figures are broken down by year, all GSSs have been pooled together to cover all years.

Table 3
Levels of Cohabitation

A. By Age Groups

	% Currently Cohabiting	% Ever Cohabited	% Cohabited prior to First Marriage		
All Adult	s 4	25	17		
19-24 25-29 30-34 35-39 40-44 45-49 50-59	8 8 6 4 4 3 1	25 42 45 35 28 20 14 6	24 36 36 22 14 7 5 2		
Source: B	umpass and Swe	eet, 1989			
All Women 15-44	in 1988, 5	34	25		
15-19 20-24 25-29 30-34 35-39 40-44		8 32 45 45 38 26	8 30 39 33 24 12		
Source: London, 1991; Forrest and Singh, 1990					
All Women 15-44	in 1995, 7	41	24		
15-19 20-24 25-29 30-34 35-39 40-44	4 11 10 8 5 4	9 38 49 51 50 43	2 17 30 34 31 23		

Source: NCHS, 1997

Table 3 (continued)

B. Socio-demographic Groups

	Currently Cohabiting (1993-98)	% cohabited with present spouse (1988,94)
Gender Men Women	5.9 4.9	27.4 24.3
Prob.	.021	ns
Race Whites Blacks	5.2 6.0	25.1 32.3
Prob.	ns	ns
Age 18-29 30-39 40-49 50-59 60-69 70+	9.4 7.6 4.3 2.4 2.1 0.8	43.7 43.7 25.1 10.3 5.9 5.7
Prob.	.000	.000
Marital Status Married Widowed Divorced Separated Never Married Remarried	0.7 2.9 16.2 8.4 12.3 1.4	19.4 49.6
Prob.	.000	.000
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100 Other Urban Rural	5.4 6.3 4.0 6.4 5.2 4.0	28.4 36.1 25.8 27.1 23.2 21.0
Prob.	.012	.007

Table 3 (continued)

C	Currently ohabiting 1993-98)	% cohabited with present spouse (1988,94)
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree		24.2 26.9 29.5 22.2 26.0
Prob.	.001	ns
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	9.1 7.6 8.0 5.5 4.2 2.1 2.2	26.4 24.5 27.6 30.2 23.8 26.2 13.5
Prob.	.000	ns
Church Attendance Rarely Occasionally Regularly	8.0 4.6 2.4	37.5 27.9 12.4
Prob.	.000	.000

Source: GSS, 1998

Table 4

Marital Status at Time of Conception and Birth of Child

A. CPS Retrospective Study, First Births

	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89
Not married at birth	12.7	14.5	17.8	22.3	24.4	28.5
Married at birth; not at conception	13.9	15.7	14.5	11.1	11.1	10.4
Married at birth and conception	73.4	69.8	67.7	66.6	64.6	61.1
% of first births con- ceived befo marriage, b born after marriage	re ut	52.0	44.9	33.2	31.3	26.6ª
aRow 2/(Row 1	1 + Row 2)				
Source: Bach	u, 1991					
B. Natality	Surveys,	First Bir	ths			
		1964-	66	1972	198	80
Not married	at birth	14.6		19.0	25	.1
Not married ception; ma at birth		18.9		10.0	12	. 3
Married at b conception	irth and	66.6		70.9	62	.6
<pre>% of first b conceived b but born af marriage Source: Vent</pre>	efore, ter,	56.6		34.4	32	. 9

Table 4 (continued)

C. National Survey of Family Growth (NSFG) Retrospective Reports

<pre>% of children conceived before, but born after, marriage</pre>	Before 1973	1973-1981	1982-1988
All	47.7	30.0	23.7
Whites Blacks	64.2 20.9	43.3 10.1	37.7 6.9

Source: Bachrach, Stolley, and London, 1992

% of children conceived before, but born after, marriage

Before 1980 1980-1984 1985-1989 1990-1995

44.5 36.9 26.2 23.6

Source: Abma, et al., 1997

Table 5

Trends in Out-of-Marriage Births

	% of All Births to Unmarried Mothers		Birth Ra Unmarrie	tes for d Mothers
1960 1965 1970 1975 1980 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996	5.3 7.7 10.7 14.2 18.4 22.0 23.4 24.5 25.7 27.1 28.0 29.5 30.1 31.0 32.6 32.2 32.4		21 23 26 24 29 32 34 36 38 41 43 45 45 45 46	.5 .5 .4 .8 .3 .1 .6 .8 .8 .2 .2 .2
	Whites	Blacks	Whites	Blacks
1960 1965 1970 1975 1980 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996	2.3 4.0 5.7 7.3 11.0 14.5 15.7 16.7 17.7 19.0 20.1 21.8 22.6 23.6 25.4 25.3 25.7	21.6 ^b 26.3 37.6 48.8 55.2 60.1 61.2 62.2 63.5 64.5 65.2 67.9 68.1 68.7 70.4 69.9 69.8	9.2 11.6 13.9 12.4 17.6 21.8 23.2 24.6 26.6 29.9 31.8 34.6 35.2 35.9 38.3 37.5	98.3 ^b 97.6 95.5 84.2 81.4 78.8 80.9 84.7 88.9 93.1 93.9 89.5 86.5 84.0 82.1 75.9

 $^{^{\}mathrm{a}}\mathrm{Number}$ to births to unmarried women per 1,000 unmarried women age 15-44.

Source: Statistical Abstracts

bIn 1960 and 1965 figures are for non-Whites. This slightly underestimates the rate for Blacks only.

Table 6

Trends in Extra-Marital Sexual Relations

% Having Sexual Relations
with Person other than Spouse
during Last 12 Months
(Currently Married)

% Ever Having Sexual
Relations with Person
Other than Spouse
While Married
(Ever Married)

	All	Men	Women	All	Men	Women
1988	3.9	5.0	2.8			
1989	3.6	5.8	1.7			
1990	3.8	5.3	2.3			
1991	4.4	5.4	3.4	14.6	21.3	10.0
1993	2.9	4.1	1.9	16.3	21.0	12.8
1994	2.4	3.6	1.3	15.4	21.2	11.0
1996	3.8	5.2	2.5	17.8	22.1	14.4
1998	3.6	4.9	2.5	16.5	20.8	13.4
Prob.	ns	ns	ns	ns	ns	.036

Source: GSS, 1998

% reporting extramarital sexual relations: Ever married

Birth Cohorts	Men	Women
1933-42 1943-52	37.0 31.4	12.4 19.9
1953-62	20.5	14.5
1963-74	7.1	11.7

Source: Laumann, Gagnon, Michael, and Michaels, 1994

% reporting extramarital sexual relations in last 12 months: Currently Married, 18-75

	Men	Women
1990/91	2.9	1.5

Source: Choi, Catania, and Dolcini, 1994

Table 7

Extra-Marital Sexual Relations by Socio-demographic Groups

with Perso	Sexual Relations on other than Spouse st 12 Months y Married)	<pre>% Ever Having Sexual Relations with Person Other than Spouse While Married (Ever Married)</pre>
Gender Men Women	4.8 2.2	21.3 12.5
Prob.	.000	.000
Race Whites Blacks	3.0 8.3	15.5 23.0
Prob.	.000	.000
Age 18-29 30-39 40-49 50-59 60-69 70+	6.7 3.1 4.4 3.1 0.8 1.1	12.6 14.5 20.7 20.0 16.3 8.3
Prob.	.000	.000
Marital Status Married Widowed Divorced Separated Never Married Remarried	3.0 4.7	10.2 10.6 30.9 39.7 22.3
Prob.	.000	.000
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100 Other Urban Rural	5.2 3.9 3.2 2.7 3.7 2.5	17.9 18.7 14.8 16.8 16.0 14.4
Prob.	.044	.075

Table 7 (continued)

<pre>% Having Sexual Relations</pre>		
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	5.1 3.4 3.3 2.3 3.2	14.4 17.4 16.0 13.8 17.6
Prob.	.003	.009
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	6.4 5.6 3.7 2.8 3.4 2.8 2.4	19.2 18.1 17.5 17.5 14.9 16.7 9.8
Prob.	.000	.001
Church Attendance Rarely Occasionally Regularly	3.8 4.3 2.1	20.9 16.4 10.3
Prob.	.000	.000
Marital Satisfaction Very Happy Pretty Happy Not Too Happy	n 2.4 4.4 15.2	10.2 17.5 27.2
Prob.	.000	.000
Source: GSS, 1998		

Table 8A

A Summary of Estimates of the Percent of Adult Americans with Same Gender Sexual Partners

A. Men

Dates	Ages/ Group	Level	Definition
1970	21+	1.6-2.0	1+ male sexual partners in last 12 months
1985	18+	3.7	"sexually attracted to members of your own sex" + volunteered responses of attracted to both opposite and same sex or bisexual
1987	18-44	6	homosexual or bisexual orientation ^a
1988	16-54	4.4-6.2	1+ male sexual partners in last 5 years ^b
1988-98	18+	3.0	1+ male sexual partners in last 12 months (sexually active)
		3.9	1+ male sexual partners in last 5 years (sexually active)
1990a	18+	1	identifies as "gay" c
1990-91	18-49	6.5	1+ male sexual partners in last 5 years
1991	20-39	2.3	1+ male sexual partners in last 10
		1.1	years (sexually active only) Only male sexual partners in last 10 years (sexually active only)
1992a	18-59	2.7	1+ male sexual partners in last 12 months
		4.1	1+ male sexual partners in last 5
		6.4	years 1+ male sexual partners since puberty
1992b	Voters	3.3	Self-identified as "Gay/lesbian/bisexual" ^d

Table 8 (continued)

B. Women

1988	16-54	2.9-3.6	1+ female sexual partners in last 5 years ^b
1988-98	18+	2.0	1+ female sexual partners in last 12 months (sexually active) 1+ female sexual partners in last 5 years (sexually active)
1992a	18-59	1.3 2.2 3.5	1+ female sexual partners in the last 12 months 1+ female sexual partners in the last 5 years 1+ female sexual partners since puberty
1992b	Voters	2.3	Self-identified as "Gay/lesbian/bisexual" ^d

1990b

Notes:

C. Men and Women

18+

^aPeter D. Hart Research Associates (9/87) "How would you define your sexuality - are you homosexual, bisexual, or heterosexual in your orientation?"

Sexual orientation not heterosexual

2

The lower estimate is reported in Taylor, 1993 and the higher estimate in Sell, Wells, and Wypij, 1995.

^cPeter D. Hart Research Associates (4/90) "And for statistical purposes only, could you tell me whether or not you are gay?" (men only)

dFrom VRS presidential exit poll.

Sources:

1970: Rogers and Turner, 1991; 1985: Harry, 1990; 1987: Hart Survey - see notes; 1988: Taylor, 1993 and Sell, Wells, and Wypij, 1995; 1988-96: Davis and Smith, 1998 and see Table 9; 1990a: Hart Survey - see notes; 1990b: Leigh, Temple, and Trocki, 1993; 1990-91: Binson, Michaels, Stall, Coates, Gagnon, and Catania, 1995; 1991: Billy, et al., 1993; and 1992a: Laumann, Gagnon, Michael, and Michaels, 1994 and Michaels, 1997; 1992b: Edelman, 1993.

Table 8B

A Summary of Estimates of the Percent of Adult Europeans with Same Gender Sexual Partners

A. Men	_	_		
	Ever	Las Five	t Year Three	s One
Great Britain	3.6	1.4		1.1
France	4.1	1.4		1.1
Denmark	2.7			
Norway	3.5		0.9	
Belguim	6.1			1.6
The Netherlands ^a	13.4			6.3
B. Women				
Great Britain	1.7	0.6		0.4
France	2.6	0.4		0.3
Denmark	3.4- 4.3			
Norway	3.0		0.9	
Belguim	2.4			0.7
The Netherlands	4.7			0.6

Great Britain: Ages 16-59 in 1990-91 (Johnson, Wadsworth, Wellings, and Field, 1994 and Michael, Wadsworth, Feinleib, Johnson, Laumann, and Wellings, 1998)

France: ages 18-69 in 1991-92 (AIDS Investigators, 1993) Denmark: Ages 18-59 in 1989 (Melbye and Biggar, 1992)

Norway: ages 18-60 in 1987 (Sundet, et al., 1988)

Belguim: ages 18-49 in 1993 (Sandfort, 1998)

The Netherlands: ages 18-49 in 1989 (Sandfort, 1998)

^aThe rates are much higher in the Netherlands because broader criteria were used, e.g. "Have you ever had sexual contact with a boy or man? By sexual contact we mean at least masturbation or jacking off."

Table 9

Gender of Sexual Partners (Sexually active only)

A. Trends

Last 12 Months

	Same G Men	ender Women	Both Men	Genders Women	Opposite Men	Gender Women
1988 1989 1990 1991 1993 1994 1996	2.3% 1.4% 1.1% 2.0% 1.8% 2.1% 3.5% 3.3%	0.2% 1.2% 0.5% 0.3% 1.8% 2.1% 2.1% 2.3%	0.3 0.9 0.7 0.3 0.5 0.6	0.0 0.4 0.0 0.1 0.4 0.4 0.9	97.4 98.3 98.0 97.3 97.9 97.5 96.0 95.5	99.8 98.4 99.5 99.6 97.8 97.5 97.0
Prob.	.038	.001				
			Last	5 Years		
	Same G Men	ender Women	Both Men	Genders Women	Opposite Men	Gender Women
1991 1993 1994 1996 1998	2.1% 1.6% 2.4% 3.1% 2.7%	0.5% 1.2% 1.8% 2.0% 1.9%	1.8 0.6 1.2 1.9	0.7 1.4 1.3 1.5	96.1 97.8 96.3 94.9 95.9	98.8 97.4 96.9 96.4 96.6
Prob.	.280	.284				

B. Distributions by Reference Periods

	Last 12 Months	Last 5 Years	Since Age 18
	Men Women	Men Women	Men Women
Same Gender	2.4 1.5	2.5 1.6	F 0 4 6
Both Genders	0.6 0.5	1.4 1.3	5.9 4.6
No Same Gender	97.0 98.0	96.0 97.0	96.1 95.4

Source: GSS, 1998

Table 9 (continued)

C1. Socio-demographic Differences Among Men

% with Same Gender Partner

Race	Last 12 Months	Last 5 Years	Since Age 18
Whites	2.7	3.7	5.4
Blacks	5.3	6.3	10.0
Prob.	.003	.018	.000
1.00			
Age 18-29	3.5	4.6	6.2
30-39	3.6	4.7	6.0
40-49	2.8	3.9	5.6
50-59	2.4	3.0	5.5
60-69	1.9	2.4	6.2
70+	1.7	3.2	5.4
Prob.	.101	.152	.000
1100.	.101	• 102	
Marital Status			
Married	1.3	1.5	3.7
Widowed Divorced	7.7 3.0	7.6 3.7	8.3 6.0
Separated	4.0	5.3	6.4
Never Married		10.2	11.2
Remarried	0.8	1.8	3.3
_ 1	0.00	0.00	0.00
Prob.	.000	.000	.000
Community Type			
Top 12 Central		9.6	14.7
Cities			
Top 100 Centra	1 5.6	6.7	8.3
Cities Suburbs of Top	12 26	3.7	5.5
Suburbs of Top		3.5	5.9
Other Urban	1.9	2.4	4.2
Rural	1.5	3.1	4.0
Prob.	.000	.000	.000
PIOD.	.000	.000	.000
Education			
Less than High			
School	3.1	4.1	5.6
High School Gr		3.7 3.5	5.9 4.9
Assoc. Col. De Bachelor's Deg	_	3.5 5.0	6.2
Graduate Degre		3.7	6.4
Prob.	.004	.150	.012

Table 9 (continued)

% with Same Gender (Male) Partner

	Last 12 Months	Last 5 Years	Since Age 18
Household Inco Less than \$10, \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	000 6.1 4.6 4.0 2.2	8.6 5.6 5.7 2.9 3.7 1.5	9.4 8.2 6.9 5.5 5.0 3.3 4.8
Prob.	.000	.000	.000
Church Attenda Rarely Occasionally Regularly	2.7 2.5 3.0	4.1 3.5 4.2	5.9 5.6 6.2
Prob.	.722	.873	.000
C2. Socio-demo	graphic Differen	ces Among Women	
Race Whites Blacks	2.1 1.8	2.8 2.7	4.3 6.2
Prob.	.956	.805	.041
Age 18-29 30-39 40-49 50-59 60-69 70+	2.6 2.1 2.5 0.8 1.4 0.5	4.2 3.0 3.4 1.0 1.7 2.4	5.7 5.6 5.2 2.4 2.8 2.1
Prob.	.005	.000	.000
Marital Status Married Widowed Divorced Separated Never Married Remarried	0.8 2.9 3.8 2.7 5.2 1.0	1.5 2.9 4.9 4.2 6.6 1.6	2.7 2.5 6.5 8.4 8.6 3.7
Prob.	.000	.000	.000

Table 9 (continued)
% with Same Gender Partner

Las	st 12 Months	Last 5 Years	Since Age 18
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 10 Other Urban Rural		2.9 3.5 4.0 3.5 2.3 1.3	6.1 6.3 5.7 5.4 3.4 3.1
Prob.	.026	.028	.002
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	e 2.7	4.2 2.7 3.6 2.1 4.7	5.8 4.1 4.4 4.0 7.8
Prob.	.336	.135	.001
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	3.2 2.5 2.8 1.8 1.4 1.6	4.9 3.3 4.1 3.0 2.2 2.0 2.5	6.5 5.6 5.8 4.3 3.1 3.7
Prob.	.042	.006	.026
Church Attendance Rarely Occasionally Regularly	3.4 1.3 1.3	4.7 2.2 2.1	6.6 4.3 2.9
Prob.	.000	.000	.000

Table 10

Frequency of Sexual Intercourse

(Mean number of times per year)

A. Trends	l Adults
1989 1990 1991 1993 1994 1996	59.5 61.4 60.9 61.4 59.6 65.3
Prob.	.036
Source: GSS, 1998	
	les 17.5-19 cually active)
1988 1991	30.0 49.1
Prob.	<.001
Source: Ku, Sonensteir	n, and Pleck, 1993
Married	l Couples, 19+
1987-88	76.3
Source: Call, Sprecher	r, and Schwartz, 1995
B. Socio-demographic G	Froups
Gender Men Women	65.5 57.5
Prob.	.000
Race Whites Blacks	60.9 62.7
Prob.	.340

Table 10 (continued)

Age 18-29 30-39 40-49 50-59 60-69 70+	Mean Number per Year 82.6 78.6 63.6 47.4 27.4 9.8
Prob.	.000
Marital Status Married Widowed Divorced Separated Never Married Remarried	66.1 11.6 56.3 68.9 58.6 73.9
Prob.	.000
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100 Other Urban Rural	58.2 61.2 61.4 65.0 60.5 59.6
Prob.	.112
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	51.2 63.7 71.5 61.5 53.2
Prob.	.000

Table 10 (continued)

Mean	Number
per	Year

Household Income	
Less than \$10,000	55.0
\$10,000-19,999	59.8
\$20,000-29,999	62.8
\$30,000-39,999	65.1
\$40,000-59,999	63.9
\$60,000+	64.1
Refused	49.2
Prob.	.000

Church Attendance

Rarely	66.6
Occasionally	62.9
Regularly	50.6
Prob.	.000

Marital Satisfaction (currently married)

Very happy	73.6
Pretty happy	59.4
Not to happy	51.1

Prob. .000

Source: GSS, 1998

Table 10 (continued)

Married	Mean Number per year
18-29 30-39 40-49 50-59 60-69 70+	111.6 85.7 69.2 53.8 32.5 16.2
Prob.	.000
Not Married	
18-29 30-39 40-49 50-59 60-69 70+	69.1 65.6 49.8 31.2 15.7 2.6
Prob.	.000
Men	
18-29 30-39 40-49 50-59 60-69 70+	82.2 79.6 67.6 56.9 37.6 15.8
Prob.	.000
Women	
18-29 30-39 40-49 50-59 60-69 70+	82.9 77.8 60.3 39.6 19.7 5.4
Prob.	.000
Source: GSS, 1998	

Table 11 Sexual Inactivity

A. Trends

	Never Had Sex	No Recent Sex	Total
1982	13.6	5.9	19.5
1988	11.5	6.9	18.4
1995	10.7	6.2	16.9

Source: Mosher, 1990 and Abma, et al., 1997

% with No Sex Partner during Last 12 Months, All Adults

1988 1989 1990 1991 1993 1994 1996 1998	19.8 19.0 16.3 18.4 17.4 18.4 15.1
1998	17.4

Prob. .003

Source: GSS, 1998

B. Socio-demographic Groups (% with No Sex Partner, Last 12 Months)

Gender Men 13.2 Women 21.1 Prob. .000 Race .000 Whites 17.5 Blacks 18.1 Prob. .519

Table 11 (continued)

% with No Sex Partner during Last 12 Months

Age 18-29 30-39 40-49 50-59 60-69 70+	13.1 6.3 9.5 17.5 30.7 60.6
Prob.	.000
Marital Status Married Widowed Divorced Separated Never Married Remarried	7.1 77.0 27.7 17.7 24.6 5.5
Prob.	.000
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100 Other Urban Rural	20.6 19.1 15.2 16.0 17.5 18.4
Prob.	.000
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	29.6 16.4 11.8 13.2 11.8
Prob.	.000

Table 11 (continued)

% Not Sexually Active

Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	33.9 24.1 17.6 13.0 11.1 7.5 23.6
Prob.	.000
Church Attendance Rarely Occasionally Regularly	15.2 15.1 23.7
Prob.	.000
Married 18-29 30-39 40-49 50-59 60-69	1.5 1.2 2.6 6.9 14.0 33.0
Prob.	.000
Not Married 18-29 30-39 40-49 50-59 60-69	18.7 15.8 26.7 45.6 71.5 91.6
Prob.	.000
Men 18-29 30-39 40-49 50-59 60-69 70+	14.5 6.5 6.9 11.1 16.4 43.7
Prob.	.000

Table 11 (continued)

% Not Sexually Active

Women 18-29 30-39 40-49 50-59 60-69 70+	11.9 6.0 11.6 22.9 41.4 72.3
Prob.	.000

Source: GSS, 1998

Table 12

Reported Changes in Sexual Behavior due to AIDS

NBC: Since you became aware of AIDS, have you changed your sexual behavior in any way?

	1/86	1/87
Yes	7.3%	7.4%
No	92.4	92.1
Not sure	0.3	0.5
	(1598)	(800)

CBS: What about you personally? Have you changed your sexual habits because you worried about getting AIDS?

	10/86
Yes No No Opinion	11.5% 86.0 2.6 (823)

Gallup: Which of these statements applies to you:

	10/87	11/91
Because of the risk of AIDS, I have changed my behavior	11%	14%
Because of the risk of AIDS, I am seriously thinking of changing my behavior	3	2
Despite the risk of AIDS, I have not changed my behavior	15	8
I do not need to change my behavior	68	75
Don't Know	3	3
	(1569)	(1002)

Table 12 (continued)

NSFG^a: To keep people from catching diseases such as genital herpes, chlamydia, or AIDS, doctors have suggested several changes people change make in their sexual behavior. In which of the ways shown on card 27, if any, have you changed your sexual behavior? [Card 27 - A. Stopped having sexual intercourse? B. Stopped having other types of sexual relations? C. Don't have sex as often? D. Stopped having sex with more than one man? E. Stopped having sex with men I don't know well? F. Stopped having sex with men who are bisexual? G. Stopped having sex with men who use needles to take drugs (or) Have made no changes.] Which of these changes, if any have you made since you first heard about AIDS?

	Women, 15-44	Sexually Experienced Only		
Made Change Since AIDS				
1988	13.3%	15.0% (8450)		
1988		14.4%		
1990		}(2832) 18.0%		

^aMcNally and Mosher, 1991 and Mosher and Pratt, 1993

CBS: Some people say they changed things about their sexual behavior in order to reduce their chances of getting AIDS. Have you changed your sexual habits because you are worried about getting AIDS?

	1/89	6/91 ^b	11/91 ^c
Yes No No Answer/DK	19% 78 3	20% 77 3	23% 75 2
	(594)	(1424)	(1709)

Dmits "things about" and uses "afraid of" instead of "worried about."

^cLos Angeles Times. Omits "things about" and uses "afraid of" instead of "worried about."

Table 12 (continued)

NORC: Have you made any kinds of change in your sexual behavior because of AIDS? (18-59)

		1992	
	All	Men	Women
Yes	29.7 (3148)	35.1	25.4

Source: Laumann, Gagnon, Michael, and Michael, 1994

% change in sexual behavior due to AIDS by marital status c

]	NBC (1/87)	Gallup(10/	/87) NSFG ^d (1988)	CBS (6/91)	NORC ^e (1992)
Married	2.9	6.8	3	8	12.0
Not married	17.5	19.0	31	43	
Never marri	ed 24.0	21.7			52.4
Divorced	8.2	27.4			
Separated	* * *	* * *			}47.0
Widowed	5.0	2.7			•

^{***=}too few cases ---=not available

^cBecause of differences in wordings, these figures are not directly comparable.

^dSexually active women, 15-44.

^eAges 18-59.

Table 13

Avoiding AIDS

Do you take any special steps or precautions to avoid catching AIDS, or not?

	Harris	Harris	PSRA
	1/1985	11/1987	11-12/1992
Yes	41%	49%	60%
No	57	0	39
Not Sure	2	1	1
	(1256)	(1250)	(1250)

Table 13 (continued)

CBS/NYT: Is there anything in particular you have done to avoid getting AIDS?

ABC/WP & Roper: Is there anything you yourself are doing to avoid exposing yourself to AIDS?

	ABC/WP C 9/85	BS/NYT 9/85	CBS/NY' 10/86	T ABC/WP 3/87		ABC/WP 6/90	CBS/NYT 6/93
Yes No Don't Know	22% 77 1	13% 85 2	18% 80 1	37% 63 	43% 53 4	54% 45 1	49% 49 2
(1347)	(1512)	(7	52) (323) (1	511)	(1017)	(1020)
What is that?							
Cut down on set	x- 2	1		3		1	
Avoided oral sex	*			*		1	
Avoided anal sex				*		1	
Avoided prostitutes				*		1	
Avoided homo- sexual sex Avoid kissing	 	1	1	 		 	
Limited number sex partners Monogamy Abstained	of 1 2 *	 	* 3 1	3 7 3		10 12 5	19 ^a 7
Used condomsb	*		1	4		10	12
Knew sexual his tory of part-ners° Slept only with partners who	 h	2	3	1		1	
tested negati [.] for HIV				1		1	

Note: Multiple responses allowed. It is not known how many reported one or more sexually related precautions. All categories explicitly relating to sexual behavior are listed above. Some sexual activity

Table 13 (continued)

may also be referred under vague categories like "Change lifestyle" and "Avoid homosexuals." Different surveys used different coding schemes for responses so the comparisons are approximate only.

*=less than 0.5%

NORC: Have you made any kind of changes in your sexual behavior because of AIDS? IF SO: What have you changed?

	1992
Any Change	29%
Used condoms more frequently	9
Monogamy Abstinence Fewer partners More careful in selecting partners Get to know partners Less frequent sex	8 3 3 8/ 8
More careful (unspecified) Other	2 8

Source: Feinleib and Michael, 1998 Note: Multiple responses allowed.

^aThe absence of a Monogamy category in the 1993 CBS/NYT survey probably explains the increase of responses coded under the Limited sexual partners category.

b"Use condoms/Practice safe sex" in 1993 CBS/NYT survey.

^c"Careful who date" in 1985 CBS/NYT survey; "Practice care with people dating" and "Select sex partners more carefully" in 1986 CBS/NYT survey.

Table 14

Number of Sexual Partners

A. Trends

% with total number of lifetime sexual partners among high school students

	2+	4+
1989	40	24
1990		19
1991	35	19
1993		19
Prob.	<.05	<.05 ^a

Source: Moore, et al., 1992 and Divs. of Epidemiology and Prevention; Adolescent and School Health; Reproductive Health, 1992; and "Youth Risk Behavior Survey," 1995. probability test for 1989-1991 only.

Table 14 (continued)

% with 4+ sex partners, Ages 14-21

	1992
14-17	13.3
14-19	15.9
14-21	63.0
18-21	41.3

Sources: Divs. of Adolescent and School Health and Health Interview Statistics, 1994a and 1994b

% with 4+ Male Lifetime Sexual Partners, Sexually Experienced Women 15 - 44

1988	43.1
1990	47.1
1995	46.9-49.2

Note: Higher figured based on self-completion form. Lower number should be more comparable to earlier figures.

Source: Mosher and Pratt, 1993 and Abma, et al., 1997

Table 14 (continued)

 $\mbox{\ensuremath{\mbox{\$}}}$ with 4+ male sex partners in last 12 months, Unmarried Women, 15-44 in 1995

	Interview	Self- Completion
All	3.3	8.6
15-29 20-24 25-29 30-34 35-39 40-44	3.7 4.6 2.9 2.9 2.7 1.2	7.4 11.2 9.0 8.7 8.3 5.7
Source:	Abma, et a	al., 1997
Last 12	months, Ad	dults

	None	1	2	3	4	5-9	10-19	20+	Mean
1988 1989 1990 1991 1993 1994 1996 1998	19.8 19.0 16.3 18.4 17.4 18.4 15.1 17.4	67.2 68.7 71.4 71.2 72.0 70.6 72.2 70.7	5.0 6.3 5.6 5.9 5.6 6.0 6.1	3.2 3.0 2.6 1.9 2.1 2.4 3.2 2.2	1.8 1.3 1.6 0.8 1.4 1.1 1.6	2.0 1.6 1.7 1.4 1.3 1.2 1.3	0.6 0.1 0.1 0.3 0.2 0.2 0.3	0.5 0.1 0.6 0.1 0.1 0.1 0.2	1.49 1.14 1.58 1.12 1.12 1.09 1.28 1.24
Prob.					.000				
Last 5 Ye	ars, Ad	ults							
1991 1993 1994 1996 1998	11.3 12.6 11.1 10.0 11.2	60.3 59.0 59.4 57.8 59.0	8.3 8.5 8.6 10.2 9.2	6.7 6.5 7.2 7.2 6.0	3.3 4.5 4.1 4.7 4.7	6.0 6.2 6.4 6.4 5.7	2.7 2.0 1.8 2.2 2.0	1.5 0.8 1.4 1.2 0.9	2.70 2.42 2.79 2.83 2.50

Source: GSS, 1998

Prob.

.281

Table 14 (continued)

Since Age 18, Adults

Moan	Mumbor	o f	C032110]	Partners
Mean	number	OT	Sexual	Partners

1989	6.8-7.2 ^a
1990	6.5-7.0
1991	7.4-8.1
1993	7.4-8.0
1994	8.4-9.0
1996	8.9-9.5
1998	7.5-7.8
Prob.	.006011

Source: GSS, 1998

several different techniques were used to handle item non-response. The above figures represent the low and high estimates based on how missing data are estimated.

Number of Sexual Partners

B. Socio-demographic Groups

% with 2+ Sex Partners

	Last 12 Months	Last 5 Years
Gender Men Women	16.9 9.4	37.0 24.7
Prob.	.000	.000
Race Whites Blacks	11.0 21.6	28.3 44.4
Prob.	.000	.000
Age 18-29 30-39 40-49 50-59 60-69 70+	26.7 13.1 9.0 5.5 2.7 1.0	61.8 34.3 23.1 14.7 8.2 4.0
Prob.	.000	.000

Table 14 (continued)

% with 2+ Sex Partners

Last	12 Months	Last 5 Years
Marital Status Married Widowed Divorced Separated Never Married Remarried	2.9 3.2 23.5 31.7 31.8 4.5	12.0 10.8 56.2 56.9 63.1 21.0
Prob.	.000	.000
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100 Other Urban Rural	18.6 15.4 11.1 11.5 11.6 8.3	41.0 37.0 28.8 31.1 27.9 22.2
Prob.	.000	.000
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	13.2 13.1 12.4 9.8 7.4	27.2 32.6 33.6 28.3 20.3
Prob.	.000	.000
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	19.8 16.7 13.8 10.5 7.7 8.8 8.9	45.5 39.7 36.6 31.5 23.2 20.6 18.7
Prob.	.000	.000

Table 14 (continued)

% with 2+ Sex Partners

Last	12 Months	Las	t 5 Years
Church Attendance Rarely Occasionally Regularly	16.6 13.2 4.9		39.5 32.1 14.6
Prob.	.000		.000
Source: GSS, 1998			
	Mean Number of	Sexual Partners	Since Age 18 ^b
Gender Men Women		12.4 4.0	
Prob.		.000	
Race Whites Blacks		7.7 8.3	
Prob.		.329	
Age 18-29 30-39 40-49 50-59 60-69 70+		6.0 8.3 9.9 10.0 6.5 4.2	
Prob.		.000	
Marital Status Married Widowed Divorced Separated Never Married Remarried		5.0 3.9 13.6 10.3 8.7 12.0	
Prob.		.000	

Table 14 (continued)

Mean Number of Sexual Partners Since Age 18^b

Community Type Top 12 Central	
Cities Top 100 Central	8.8
Cities Suburbs of Top 12	9.9 7.4
Suburbs of Top 120 Other Urban	9.3 7.0
Rural	5.6
Prob.	.000
Education Less than High	
School	5.9
High School Grad. Assoc. Col. Degree	7.8 9.1
Bachelor's Degree Graduate Degree	8.5 9.3
Prob.	.000
Household Income	
Household Income Less than \$10,000 \$10,000-19,999	7.5 8.0
Household Income Less than \$10,000	7.5
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999	7.5 8.0 7.6 8.4 8.0
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999	7.5 8.0 7.6 8.4
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+	7.5 8.0 7.6 8.4 8.0 8.1
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused Prob. Church Attendance	7.5 8.0 7.6 8.4 8.0 8.1 6.0
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused Prob. Church Attendance Rarely Occasionally	7.5 8.0 7.6 8.4 8.0 8.1 6.0 .350
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused Prob. Church Attendance Rarely	7.5 8.0 7.6 8.4 8.0 8.1 6.0

Source: GSS, 1998

boa the several estimating procedures utilized, the one used for these figures minimizes the amount of missing data. The relationships report here are very similar to those found by two alternative methods.

Table 15
Relationship with Sex Partners

A. Trends

% Whose Least Familiar Sexual Partner During the Last 12 Months was... 1988 1989 1990 1991 1993 1994 1996 1998 Paid Partner/ 3.1% 3.5% 3.4% 3.9 3.7% 3.5% 4.3% Pick-up Not Regular Partner, Unspecified 1.9 1.8 1.6 1.9 1.4 2.1 1.5 2.6 2.4 Acquaintance 2.9 2.6 2.6 2.2 2.3 3.7 3.0 5.3 5.3 4.8 3.5 4.4 4.9 Friend 5.2 3.9 67.7 Regular Partner 65.9 67.1 67.9 70.1 70.5 69.2 68.6 0.6 0.7 1.2 1.4 Unspecified 0.6 1.8 1.4 0.9 No Sex Partner 19.8 19.0 16.3 18.3 17.4 18.4 15.1 17.4 Prob. .000 % in "On-going

Prob. .004

92.3 89.9

B. Socio-demographic Groups

Relationship"

% with Paid/Pick-up+ Acquaintance Gender Men 10.1 Women 3.4 Prob. .000 Race 6.1 Whites Blacks 8.7 Prob. .000 Age 18 - 2914.8 30 - 397.0 40 - 494.2 50-59 3.0 60-69 0.9 70 +0.5 .000 Prob.

Table 15 (continued)

% with Paid/Pick-up+ Acquaintance

Marital Status Married Widowed Divorced Separated Never Married Remarried	1.3 1.1 12.3 15.5 18.3 1.7
Prob.	.000
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100 Other Urban Rural	9.1 8.4 5.8 6.3 6.0 4.8
Prob.	.000
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	5.6 7.0 7.1 5.9 4.4
Prob.	.000
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	9.6 9.0 7.7 5.5 4.4 4.6 4.1
Prob.	.000

Table 15 (continued)

% with
Paid/Pick-up+
Acquaintance

Church Attendance

Rarely	9.5
Occasionally	6.4
Regularly	2.3
Prob.	.000

Notes: a) People with more than one partner are classified according to the partner least familiar to them.

b) The categories used above are defined as follows:
Paid Partner/Pick-up: "Person you paid or paid you for sex" or
"Casual date or pick-up"

Not Partner: Not a Partner (see below), other information missing. Acquaintance: "Neighbor, co-worker, or long-term acquaintance"

Friend: "Close personal friend"

Partner: "Husband or wife or regular sexual partner"

Unspecified: all information missing

No Sex Partner: No sex partners reported

c) Based on an analysis of the two categories with missing information (Not Partner, Unspecified and Unspecified), these two groups were placed along the closeness continuum according to where they on average fit. For example, Not Partner, Unspecified represented fairly distant relationships that fall between Paid/Pickups and Acquaintances.

Source: GSS, 1998

II. In an "On-going Relationship" with Most Recent Sexual Partner

% in On-going Relationship

All	91.1
Gender Men Women	88.2 93.6
Prob.	.000
Race Whites Blacks	91.7 87.0
Prob.	.000

Table 15 (continued)

% in On-going Relationship

Age 18-29 30-39 40-49 50-59 60-69 70+	86.0 91.7 93.9 92.5 93.4 91.1
Prob.	.004
Marital Status Married Widowed Divorced Separated Never Married Remarried Prob.	95.4 91.1 90.3 89.3 79.9 96.1
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100 Other Urban Rural	85.8 87.1 92.9 93.9 92.3 90.4
Prob.	.000
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	83.3 91.6 95.1 91.6 97.0
Prob.	.000

Table 15 (continued)

% in On-going Relationship

Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	85.9 88.1 89.2 92.3 93.6 94.5 90.8
Prob.	.078
Church Attendance Rarely Occasionally Regularly	88.9 91.9 93.4
Prob.	.000

Source: GSS, 1998

C. Other

Relationship to Partner at First Voluntary Intercourse

	Just Met	Just Friends	Went Ou Once in a While		En- gaged	Married	Other
All Women	2.5%	9.4	8.3	61.0	6.2	12.2	0.4
15-19 20-24 25-29 30-34 35-39	2.8% 3.5% 2.5% 1.9% 2.9%	10.5 10.2 10.0 9.3 9.4	9.7 8.3 8.5 9.4 8.2	72.7 69.4 63.8 61.9 56.4	2.8 2.9 5.1 6.5 7.5	1.5 5.4 9.9 10.5 15.2	0.1 0.4 0.3 0.5 0.5
40-44	1.6%	8.1	6.6	50.8	9.4	23.0	0.7

Source: Abma, et al., 1997

Table 16

Trends in Arrests for Prostitution and Commercialized Vice

(Arrests per 100,000 population)

1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1988 1989 1990 1991 1992 1993	32.5 34.0 27.9 29.2 39.8 28.0 33.4 40.4 43.4 40.6 41.2 48.1 59.3 59.4 49.1 49.8 49.1 49.8 49.9 41.7 44.3 47.1 42.9 40.9 41.5 41.8
1996	42.7

Source: FBI, 1996

Table 17
Paid Sexual Partners (Men)

A. Trends

% Е	ver Paid for Sex	% Paid for Sex in Last Year
1988 1989 1990 1991 1993 1994 1996 1998 Prob.	 17.8 17.0 16.3 16.9 14.2 NS	0.5 0.3 0.4 1.2 0.5 0.5 0.5 0.7
B. Socio-demograph	nic Differences	in Use of Prostitutes
Race Whites Blacks	15.5 22.7	0.4 1.9
Prob.	.000	.000
Age 18-29 30-39 40-49 50-59 60-69 70+	7.5 14.4 19.9 22.7 24.3 17.6	0.7 0.6 0.6 0.4 0.5 0.0
Prob.	.000	.391
Marital Status Married Widowed Divorced Separated Never Married Remarried	13.3 21.6 25.1 26.3 12.7 23.4	0.3 0.3 1.3 3.2 1.1 0.1
Prob.	.000	.000

Table 17 (continued)

% Ev	er Paid for Sex	% Paid for Sex in Last Year
Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100 Other Urban Rural	19.5 13.7 12.6	2.0 0.7 0.8 0.5 0.3
Prob.	.000	.003
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	13.1 17.1 19.4 15.8 15.1	1.1 0.3 1.5 0.8 0.1
Prob.	.064	.003
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	13.5 19.9 15.4 17.0 18.5 14.1	2.2 1.2 0.5 0.3 0.4 0.1
Prob.	.019	.000
Church Attendance Rarely Occasionally Regularly	18.8 15.8 11.8	0.7 0.7 0.2
Prob.	.000	.133
Veteran Status Served in Military Did not Serve	37.1 12.4	0.8 0.5
Prob.	.000	.467

Table 17 (continued)

	% Ever Paid for Sex	% Paid for Sex in Last Year
Marital Satisfa (currently mar		
Very happy	14.3	0.0
Pretty happy	18.7	0.3
Not to happy	16.1	4.8
Prob.	.011	.000

Source: GSS, 1998

Table 18

Trends in Condom Use

- A. Most Recent Sexual Intercourse
- % Using Condom at Most Recent Intercourse, Sexually Active Males 17-19 in Metropolitan Areas

	1979	1988
All	21.1	57.5
Non-Blacks Blacks	20.5 23.2	56.5 62.0

Source: Sonenstein, Pleck, and Ku, 1989; Sonenstein, Ku, and Pleck, 1997

% Using Condom at Most Recent Intercourse, Sexually Active Males, 17.5-19

1988	1991
53.0	55.9

Source: Ku, Sonenstein, and Pleck, 1993

% Using Condom at Most Recent Intercourse among Sexually Active
High School Students

	1990	1991	1993	1995	1997
All	45	46.2	52.8	54.4	56.8
Men	49	54.5	59.2	60.5	62.5
Women	40	38.0	46.0	48.6	50.8

Source: Moore, et al., 1992 and Divs. of Epidemiology and Prevention; Adolescent and School Health; Reproductive Health, 1992; Div. of Adolescent and School Health, 1995 & 1998.

% Using Condoms among Never-Married, Sexually Experienced Males, 15-19, at Last Sexual Intercourse

1988 56.9 1995 67.0

Source: Sonenstein, Ku, Lindberg, Turner, and Pleck, 1998

Table 18 (continued)

% Using Condom During Last Sexual Intercourse, Adults 18+

1996 1998

20.4 18.7

Prob. .146

Source: GSS, 1998

Use of Condom with Most Recent Sexual Partner among Males 15-19 in 1988, Reinterviewed in 1990/91

	% Used Condom First Time	% Used Condom Most Recent Time	
17-18	59.1	54.7	
19-20	55.6	42.4	
21-22	45.8	34.9	

Source: Ku, Sonenstein, and Pleck, 1994; Sonenstein, Ku, and Pleck, 1997

% Using Condom During Most Recent Intercourse among Sexual Active Teens, 12-17

	1990
All	57
Males	67
Females	47

Source: Leigh, Morrison, Trocki, and Temple, 1994

% Using Condom During Most Recent Sexual Intercourse, Ages 14-21

	14-17		14-21	18-21	
1992	58.6	58.3	43.5	38.9	

Sources: Divs. of Adolescent and School Health and Health Interview Statistics, 1994a and 1994b

Table 18 (continued)

% Using Condom During Vaginal Intercourse at Last Sexual Event, Adults 18-59

Adults 10-39	1992
All	16.3
Men Women	18.0 15.0

Source: Laumann, Gagnon, Michael, and Michael, 1994

% Using Condom at Last Intercourse: Never-Married, 14-22

	199	92
	Women	Men
All	43.9	56.9
14-15 16 17 18	52.2 53.8 49.0 43.8	73.2 57.9 66.1 52.8
19	43.2	56.8
20	35.5	47.4
21-22	36.2	50.9

Note: These exclude some uses of condoms along with other contraceptives. Total condom could have been as high as 47.1% for women and 59.4% for men.

% Using Condom during Last Sexual Intercourse: College Students, 18-24

1995

37.7

Source: Douglas, Collins, et al., 1997

% Using Condom during Last Sexual Intercourse with Female: Males, 15-19

1995 64.4-64.0

Note: First number is from self-completion using paper. Second number is from audio-computer assisted, self-completion. Source: Turner, et al., 1998

Table 18 (continued)

B. First Sexual Intercourse

% Using Condom at First Premarital Intercourse, Women 15-44 in 1988

Date of First Sexual Intercourse

	1965-69	1970-74	1975-79	1980-82	1983-88
All	24.0	21.0	22.0	26.7	41.8
Non-Hispanic Whites Non-Hispanic	24.6	22.8	23.7	27.7	45.4
Blacks	24.7	17.0	24.3	29.2	32.4

Source: Mosher and McNally, 1991

% using Condom at First, Premarital Voluntary Intercourse, Women 15-44 in 1995

Date of First Sexual Intercourse

All	Pre-1980	1980-84	1985-89	1990-95	
29.2	18.3	25.1	36.4	54.3	

% Using Condom at First Sex, Females, 15-44

1975	18
1988	36
1995	54

Source: Moore, Driscoll, and Lindberg, 1998

% Using Condom at First Intercourse, High School Students

1994

63-65%

Source: "Teens Talk," 1994

% Using Condom at First Voluntary Sex, Females, 15-19

1995

66%

Source: Moore, Driscoll, and Lindberg, 1998

Table 18 (continued)

C. Misc. Recent Usage

1988 1991

All 51.0 54.7

Source: Ku, Sonenstein, and Pleck, 1993

Condom Use Among Heterosexuals with Multiple Partners, 18-49

% Always Using Condoms
 Main Secondary
Partner Partner

Wave 1 (1990-91) 21 24 Wave 2 (1991-92) 22 33

Source: Catania, Coates, Peterson, et al., 1993

% Using Condoms for Every Sexual Intercourse during Last 12 Months among Never-Married, Sexually Experienced Males, 15-19

1988 33.1 1995 45.0

Source: Sonenstein, Ku, Lindberg, Turner, and Pleck, 1998

Source: Santelli, et al., 1997

% Using Condom as Main Current Method of Contraception: Women, 15-44
All 15-29 20-24 25-29 30-34 35-39 40-44

1982	12	21	11	11	12	12	11
1988	15	33	15	16	12	12	11
1995	20	37	26	24	18	17	12

Source: Piccinino and Mosher, 1998

Table 18 (continued)

% Using Condoms for Contraception or STDs in Past Three Months Among the Sexually Active, Women 15-44

	Never	Some	Always
All	78.1	12.3	9.6
Married Unmarried	87.5 59.5	6.1 24.6	6.4 15.8

Source: Mosher and Pratt, 1993

% Using Condom during Last 4 Weeks: Males

	1991
17.5-19 20-24	52 39
25-29	33
30-34	21
35-39	17

Note: For those under 25, based on only those sexually active in

last four weeks.

Source: Sonenstein, Ku, and Pleck, 1997

%Using Condoms Alone or With other Methods: Women, 15-44

	1995
All 15-19 20-24 25-29 30-34 35-39	23.4 46.1 33.7 27.6 20.5
40-44	12.8

Source: Piccinino and Mosher, 1998

Table 19

Condom Use During Most Recent Sexual Intercourse by Socio-demographic Groups

% Using Condom

All	19.6
Gender Men Women	21.2 18.2
Prob.	.009
Race Whites Blacks	17.7 32.8
Prob.	.000
Age 18-29 30-39 40-49 50-59 60-69 70+	35.3 22.1 15.0 10.8 10.3 6.3
Prob.	.000
Marital Status Married Widowed Divorced Separated Never Married Remarried	12.0 12.1 22.5 24.4 43.9 6.3
Prob.	.000

Table 19 (continued)

% Using Condom

Community Type Top 12 Central Cities Top 100 Central Cities Suburbs of Top 12 Suburbs of Top 100	33.5 24.7 19.2 19.7
Other Urban Rural	16.3 15.1
Prob.	.000
Education Less than High School High School Grad. Assoc. Col. Degree Bachelor's Degree Graduate Degree	16.5 20.1 20.9 21.8 14.6
Prob.	.011
Household Income Less than \$10,000 \$10,000-19,999 \$20,000-29,999 \$30,000-39,999 \$40,000-59,999 \$60,000+ Refused	31.3 22.4 20.2 19.1 16.7 14.9 20.2
Prob.	.000
Church Attendance Rarely Occasionally Regularly	21.9 20.4 14.1
Prob.	.000

Source: GSS, 1998

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