

## Condoms

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Condom use has increased over the last decade. In 1995, approximately one in five (19%) of women aged 15-44 who were using contraception reported relying on their partner's use of condoms as their primary method, up from 13 percent in 1988.<sup>1</sup>

According to government researchers, the growing reliance on condoms suggests a greater concern about sexually transmitted diseases (STDs), including HIV.<sup>1,2</sup> In fact, a leading reason given by both teens and young adults for choosing a particular method of contraception is how well it protects against disease. Approximately two-thirds of the nearly 15 million new cases of STDs each year, including HIV, occur among people under 25.<sup>3</sup> Still, many young people as well as adults who are at risk for STDs do not use condoms consistently.

### Trends in Use

- Condom use among sexually active 9-12<sup>th</sup> graders *increased* over the last decade: 58 percent reported that either they or their partner used a condom the last time they had intercourse in 1999, up from 46 percent in 1991. However, in recent years, the *rate* of increase in condom use has slowed.<sup>4,5</sup>
- Condom use among women "at risk"<sup>6</sup> for pregnancy has also *increased*, with the greatest change occurring among young adults. In 1995, among women aged 20-24, one-quarter (24%) report condom use by their partners as their primary means of contraception, up from 13 percent in 1988.<sup>1</sup>
- Dual method use—using a condom in combination with another method of birth control—remains very limited. However, in recent years, there has been a *slight increase* among women aged 15-44 who use dual methods of contraception: 3 percent in 1995, up from just 1 percent in 1988.<sup>7</sup>
- Fewer than 1 percent of contraceptive users report the female condom as their primary method.<sup>1</sup>

### Consistency of Use

- Among sexually active 15-17-year-olds who *ever* use contraception, 81 percent say they or their partners use condoms "regularly," 16 percent "sometimes."<sup>8</sup>
- Among sexually active 18-44-year-olds, 32 percent say they or their partner use a condom "all" or "most of the time," 16 percent "only sometimes," and 51 percent "never."<sup>9</sup>

### Decision Making

- Teens aged 12-17 say a top priority when choosing a contraceptive method is "how well it prevents pregnancy" (92%) and "how well it protects against HIV/AIDS and other STDs" (88%).<sup>8</sup>

- Most teens consider condoms to be an effective method of protection against disease and pregnancy. However, nearly one-third worry that they are "not too" or "not at all" effective against HIV (29%) or other STDs (33%); 15 percent have concerns about condoms' effectiveness in preventing pregnancy.<sup>8</sup>
- Teens aged 12-17 say they would feel "respected" (87%), "relieved" (86%), and "cared for" (84%) if a partner suggested using a condom. Two-thirds (66%) also say they would be suspicious of their partner's sexual history; half (49%) would be worried about what it might suggest about their own sexual history.<sup>8</sup>
- Ninety percent (90%) of women aged 20-27 rate pregnancy prevention as "very important" when choosing a contraceptive, followed by protection from STDs (78%) and health risks or side effects (77%). Men of the same age give almost equal weight to prevention of pregnancy (86%) and STDs (84%).<sup>10</sup>
- Forty-six percent (46%) of men aged 20-27, and 29 percent of women of the same age, rate condoms as "very good" at preventing pregnancy; 50 percent of men and 46 percent of women say condoms are "very good" at protecting them from STDs.<sup>10</sup>

### Attitudes and Knowledge

- Eighty-five percent (85%) of parents of 7-12<sup>th</sup> graders say it is "important" that their child learn about how to use condoms as part of their sex education.<sup>11</sup>
- Sixty-nine percent (69%) of 15-17-year-olds<sup>12</sup> and 57 percent of adults aged 18 and older<sup>13</sup> think high schools *should* provide students with condoms if they ask for them.
- Teens aged 12-17 say they would be more likely to use condoms if they could get them from vending machines (62%), school nurses' offices (57%), and for free (82%).<sup>14</sup>
- Thirty-six percent (36%) of 15-17-year-olds<sup>12</sup> and 13 percent of adults aged 18 and older<sup>15</sup> want more information about how to use condoms.

### Effectiveness Pregnancy

Researchers calculating the effectiveness of condoms in preventing pregnancy consider both couples who use the method "perfectly," meaning correctly and every time, and those who are "typical" users allowing for inconsistent or incorrect use (see box on Correct and Consistent Use).

If the male condom is used *perfectly*, about 3 percent of women will become pregnant within the first year; if used *typically*, 14 percent of women will become pregnant.<sup>16</sup>

If the female condom is used *perfectly*, about 5 percent of women will become pregnant within the first year; if used *typically*, 21 percent of women will become pregnant.<sup>16</sup>

### **HIV/AIDS and Other STDs**

The leading studies assessing condom effectiveness for reducing the risk of HIV transmission evaluate monogamous couples who are “serodiscordant”—only one partner tests HIV positive at the beginning of the research. To determine effectiveness, the rate of new HIV incidence among couples who always use condoms is compared to the rate among those who never use them.<sup>17</sup>

The effectiveness rate for male condoms for reducing HIV transmission risk is estimated to be as high as 96 percent and as low as 60 percent, depending on the study. An analysis looking at multiple studies of couples who “never” and “always” use condoms produced an *overall* condom effectiveness estimate of 87 percent.<sup>17</sup>

Research is more limited on male condoms’ effectiveness in reducing risk of transmission of STDs other than HIV. But leading public health experts, including the CDC, have concluded that the consistent and correct use of condoms provides the best available means of reducing the risk of other STD transmission for sexually active individuals.<sup>18</sup>

### **Nonoxynol-9**

Some condoms come lubricated with the spermicide nonoxynol-9 (N-9) to provide added protection against pregnancy. Spermicides, such as N-9, are not intended to protect against STDs. In fact, a recent UNAIDS study suggests that frequent use of N-9 may increase risk for HIV infection,<sup>19</sup> prompting public health organizations to evaluate their recommendations regarding use of N-9 alone as well as with condoms. The CDC has reaffirmed that N-9 should *not* be recommended as an effective means of HIV prevention, and that condoms without N-9 may be a better option.<sup>20</sup>

### **Consistent and Correct Condom Use**

Condom effectiveness can be compromised by human factors, often referred to as user error, which can result in non- or incorrect use, breakage, slippage, or leakage. Breakage and leakage can also result from poor manufacture or improper storage. According to the Centers for Disease Control and Prevention (CDC), “consistent” means using a condom every time you have sex. “Correct” use is defined as a seven-step process:

- Using a new condom at each act of intercourse
- Handling the condom carefully to avoid damage from fingernails, teeth, or other sharp objects
- Putting on condom after penis is erect and before any genital contact with partner
- Ensuring that no air is trapped in the tip of the condom
- Ensuring adequate lubrication during intercourse
- Using only water-based lubricants with latex condoms
- Holding condom firmly against the base of the penis during withdrawal and withdraw while penis is still erect to prevent slippage.<sup>18</sup>

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### **National Data Sets on Condom Use**

**Youth Risk Behavior Survey**, conducted every two years by the Centers for Disease Control and Prevention (CDC), monitors risk activities—including sexual behavior—among 9-12<sup>th</sup> graders. Most recent data, 1999.

**National Survey of Family Growth**, conducted roughly every five years by a division of the CDC, measures factors related to the background, family, and fertility experiences of women aged 15-44. Most recent data, 1995.

### **References**

<sup>1</sup> Trussell J and D Kowal, *The Essentials of Contraception*, in Hatcher RA et al., *Contraceptive Technology*, 17<sup>th</sup> edition, 1998, New York: Ardent Media. Data from the National Survey of Family Growth (NSFG).

<sup>2</sup> Piccinino LJ and WD Mosher, *Trends in Contraceptive Use in the United States: 1982-1995*, *Family Planning Perspectives*, Jan/Feb 1998, 30(1). Data from the NSFG.

<sup>3</sup> American Social Health Association/Kaiser Family Foundation, *STDs in America*, 1998.

<sup>4</sup> The Centers for Disease Control and Prevention, *Youth Risk Behavior Trends*, *Youth Risk Behavior Survey*, 1991, 1993, 1995, 1997, and 1999.

<sup>5</sup> The Centers for Disease Control and Prevention, *Youth Risk Behavior Surveillance—United States, 1999*, *Morbidity and Mortality Weekly Report (MMWR)*, June 2000, 49(5).

<sup>6</sup> Defined as women aged 15-44 who have had sex in the past three months—with or without using contraception—and are not trying to become or currently pregnant, are not sterile, or were not interviewed within two months of completing a pregnancy; Trussell J and D Kowal, *The Essentials of Contraception*, in Hatcher RA et al., *Contraceptive Technology*, 17<sup>th</sup> edition, 1998, New York: Ardent Media. Data based on the NSFG.

<sup>7</sup> Bankole A et al., *Determinants of Trends in Condom Use In the United States, 1988-1995*, *Family Planning Perspectives*, Nov/Dec 1999, 31(6). Data based on the NSFG.

<sup>8</sup> Kaiser Family Foundation/*Seventeen Magazine*, *Sex Smarts: Safer sex, condoms and ‘the pill’*, 2000.

<sup>9</sup> Kaiser Family Foundation/*Glamour magazine*, *National Survey of Men and Women on Sexually Transmitted Diseases*, 1998.

<sup>10</sup> Grady WR, *Contraceptive Characteristics: The Perceptions and Priorities of Men and Women*, *Family Planning Perspectives*, July/August 1999, 31(4). Data based on two comparison surveys conducted in 1991 among men and women aged 20-27.

<sup>11</sup> Kaiser Family Foundation, *Sex Education in America: National Survey of Student, Parents, Teachers, and Principals*, 2000.

<sup>12</sup> Kaiser Family Foundation, *National Survey of Teens on HIV/AIDS*, 2000.

<sup>13</sup> Kaiser Family Foundation/ABC Television, *Sex in the 90’s: National Survey of Americans on Sex and Sexual Health*, 1998.

<sup>14</sup> Kaiser Family Foundation/*Seventeen magazine*, *SexSmarts: Attitudes and Experiences with Sexual Healthcare*, 2001.

<sup>15</sup> Kaiser Family Foundation, *National Survey of Americans on HIV/AIDS*, 1997.

<sup>16</sup> The FDA requires that estimates of the risk of pregnancy during both perfect and typical use be included in labeling of all contraceptives marketed in the U.S. This data is taken from the current version of that table, reprinted in Trussell J, *Contraceptive Efficacy of the Male Condom*, in Mindel A, ed., *Condoms*, London: The British Medical Journal, in press.

<sup>17</sup> Davis KR and S Weller, *The effectiveness of condoms in reducing heterosexual transmission of HIV*, *Family Planning Perspectives*, Nov/Dec 1999, 31(6).

<sup>18</sup> CDC, *Barrier Protection Against HIV Infection and Other Sexually Transmitted Diseases*, *MMWR*, August 6, 1993, 42(30).

<sup>19</sup> CDC, *Notice to Readers: CDC statement on study results of product containing nonoxynol-9*. *MMWR* 2000, 49:717 and *Nonoxynol 9: Spermicide fails to protect against HIV infection*, *Contraceptive Technology Update*, 21(10), October 2000, 119.

<sup>20</sup> Gayle, HD, *Dear Colleague letter summarizing findings and implications of the UNAIDS study*, CDC, August 8, 2000.