

# Condom Effectiveness

When used consistently and correctly, latex condoms are highly effective in preventing the sexual transmission of HIV (during vaginal, oral, or anal intercourse).<sup>1,2</sup> Latex condoms are also effective in preventing pregnancy<sup>3</sup> and several sexually transmitted infections (STIs).<sup>2,4</sup> Using condoms lowers women's risk of developing cervical cancer, a disease associated with HPV.<sup>2</sup> Consistent use of condoms can also help people clear HPV infection and/or reduce their risk of re-infection.<sup>4,5</sup>

## Condoms Are Highly Effective in Preventing HIV Infection.

- Sexual transmission of HIV occurs when infected semen, vaginal, or other body fluids contact mucosal surfaces, such as the male urethra, the vagina, or cervix.<sup>2</sup> According to the Centers for Disease Control & Prevention (CDC), a number of carefully conducted studies, employing rigorous methods and measures, have demonstrated that consistent condom use is *highly effective* in preventing HIV transmission.<sup>1,2</sup>
- In a two-year study of sero-discordant couples (in which one partner was HIV-positive and one was HIV-negative), no uninfected partner became infected among couples using condoms correctly and consistently at every act of vaginal or anal sex versus 10 percent of those using condoms inconsistently.<sup>1,6</sup>
- In a similar two-year study, two percent of uninfected partners who used condoms consistently became HIV-infected versus 12 percent among those who used condoms inconsistently or not at all.<sup>1</sup>
- A recent study of declining HIV prevalence in Uganda found *no* evidence that abstinence or monogamy had contributed to the decline. Findings identified the increased use of condoms in casual relationships as important in Uganda's declining HIV infection rates.<sup>7</sup>

## Condoms Are Effective in Preventing Some STIs.

- Gonorrhea, chlamydia, and trichomoniasis are transmitted when infected semen or vaginal fluids contact mucosal surfaces. Because condoms block the discharge of semen or protect the male urethra against exposure to vaginal secretions, condoms provide a greater level of protection against these STIs.<sup>2</sup>
- Condoms also provide some protection against genital ulcer STIs—such as genital herpes, syphilis, and chancroid—which are transmitted through contact with mucosal surfaces *or* infected skin.<sup>2,4</sup> Because these STIs may be transmitted across surfaces not covered or protected by the condom, condoms provide a lesser degree of protection against them.<sup>2</sup>

## Condoms Are Effective in Reducing Risk for HPV and Cervical Cancer.

- Almost all cases of cervical cancer are caused by HPV.<sup>8</sup> While *at least* 3.1 million women in the United States are newly infected each year with HPV,<sup>9</sup> perhaps as many as 40,000 develop non-invasive cervical cancer and less than 11,000 develop invasive cervical cancer.<sup>10</sup>
- Regular Pap smears can detect precancerous conditions long before cervical cancer develops or becomes invasive, permitting women and their doctors to prevent cervical cancer.<sup>10</sup>
- In a 28-month study of 123 college women, researchers found that sexually active women who used condoms consistently were significantly less likely to contract HPV than were women who had not used condoms.<sup>11</sup>
- In a study among 148 women already diagnosed with a pre-cancerous cervical condition and their male partners, 53 percent of women who used condoms had normal cervical findings at two consecutive follow-ups, versus 35 percent of women who did not use condoms. In the same study, 23 percent of women who used condoms cleared HPV from their system (as shown by HPV testing) compared to four percent of women who did not use condoms.<sup>5</sup>
- In one study, men who used condoms consistently and correctly had reduced risk for penile infection with HPV.<sup>12</sup> Another study showed that men who consistently used condoms had a lower incidence of anal HPV infection than did inconsistent or non-users.<sup>13</sup> In one study, men who consistently used condoms showed a faster regression in penile HPV lesions than did men who did not use condoms.<sup>14</sup>

## Condoms Are Effective in Preventing Unintended or Unwanted Pregnancy.

- In one year, only two of every 100 couples who use condoms consistently and correctly will experience an unintended pregnancy—two pregnancies arising from an estimated 8,300 acts of sexual intercourse, for a 0.02 percent per-condom pregnancy rate.<sup>3</sup>
- In one year with perfect use (meaning couples use condoms consistently and correctly at every act of sex), 98 percent of women relying on male condoms will remain pregnancy free. With typical use, 85 percent relying on male condoms will remain pregnancy free.<sup>3</sup>
- In one year with perfect use, 95 percent of women relying on the female condom will remain pregnancy free. With typical use, 79 percent relying on female condoms will remain pregnancy free.<sup>3</sup>
- By comparison, only 15 percent of women using no method of contraception in a year will remain pregnancy free.<sup>3</sup>

## Condoms Are Effective Barriers.

- The condom—latex or polyurethane, male or female—is the only technology available to prevent the sexual transmission of HIV.<sup>15</sup>
- Laboratory studies show that latex condoms provide an essentially impermeable barrier to particles the size of HIV and other STI pathogens.<sup>2</sup> Studies show that polyurethane condoms also provide effective barriers against sperm, bacteria, and viruses such as HIV.<sup>1</sup>
- Several studies clearly show that condom breakage rates in this country are less than two percent. Most of the breakage and slippage is likely due to incorrect use rather than to the condoms' quality.<sup>1</sup>

## Condom Availability Programs Increase Condom Use among Sexually Active Teens.

- Condom availability programs reduce the barriers—financial, logistical, and social—that deter sexually active teens from using condoms.<sup>16</sup> They operate in locations (such as schools and teen clinics) where adolescents congregate; make condoms available at low or no cost to teens; and provide condoms in ways that minimize teens' discomfort about obtaining condoms.
- Studies show that condom availability programs encourage sexually active teens to use condoms more often and more consistently than do their sexually active peers who are without condom availability programs.<sup>17,18, 19,20</sup>
- Studies show that condom availability programs *do not* encourage teens to initiate sex and do not cause sexually active teens to have sex more often or with more partners.<sup>17,18,19,20</sup>
- The American Academy of Pediatrics,<sup>21</sup> American College of Obstetricians & Gynecologists,<sup>16</sup> American Medical Association,<sup>22</sup> and Institute of Medicine<sup>23</sup> all support communities' making condoms available to teens. In addition, CDC has included condom availability among an array of effective approaches to reducing HIV and other STIs.<sup>20</sup>

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Written by Sue Alford  
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