

# Condom Effectiveness

Latex condoms, when used consistently and correctly during vaginal, oral, or anal intercourse, are highly effective in preventing the sexual transmission of HIV.<sup>1,2</sup> Latex and polyurethane condoms are also effective in preventing pregnancy and sexually transmitted infections (STIs).<sup>1</sup> Condom use is also associated with lower rates of cervical cancer, a disease associated with human papillomavirus (HPV).<sup>2</sup>

## Condoms Are Highly Effective in Preventing HIV Infection.

- 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>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 sexual intercourse (vaginal or anal).<sup>1</sup> In another study, two percent of such partners became infected after using condoms consistently over two years. Among couples who used condoms inconsistently, 10 and 12 percent of uninfected partners, respectively, became infected.<sup>1,3</sup>
- HIV is transmitted when infected semen or other body fluids contact mucosal surfaces, such as the male urethra, the vagina, cervix, or anus. Laboratory studies show that latex condoms provide an essentially impermeable barrier to particles the size of HIV pathogens.<sup>2</sup> Studies show that polyurethane condoms, including the female condom, are also effective barriers against sperm, bacteria, and viruses such as HIV.<sup>1</sup>
- The condom—latex or polyurethane, male or female—is the only technology currently available to prevent HIV transmission during sexual intercourse with an infected partner.<sup>1,4</sup>

## Condoms Are Effective in Preventing Most STIs.

- Gonorrhea, chlamydia, and trichomoniasis are transmitted when infected semen or vaginal or other body fluids contact mucosal surfaces. Condoms provide a great level of protection against these STIs because they protect both partners against exposure to the other's body fluids.<sup>2</sup>
- Condoms also provide protection against STIs—such as genital herpes, syphilis, chancroid, and human papillomavirus (HPV)—which are transmitted primarily through contact with infected skin or with mucosal surfaces. Because these STIs may be transmitted by contact with surfaces not covered or protected by the condom, condoms provide a lesser degree of protection against them.<sup>2</sup>
- While the effectiveness of condoms in preventing HPV infection is unknown, condom use is associated with lower rates of cervical cancer—an HPV-associated disease.<sup>2</sup>
- Experts assert that most epidemiological studies of condoms' effectiveness to prevent STIs other than HIV are characterized by methodological limitations that cause results to vary widely. Experts say that this indicates that more research is needed and *not* that latex condoms do not work.<sup>2</sup>

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

- With typical use, 14 percent of women relying only on the male condom, and 21 percent relying only on the female condom, will experience unintended pregnancy within one year. With perfect use (meaning couples make no errors in the way they use the condoms and also use condoms consistently at every act of sexual intercourse), only five percent of women relying on the male condom, and three percent on the female condom, will experience unintended pregnancy within one year.<sup>5</sup>
- By comparison, 85 percent of women relying on no method of contraception will experience pregnancy within one year.<sup>5</sup>

### References

- <sup>1</sup> Centers for Disease Control & Prevention. *Condoms and Their Use in Preventing HIV Infection and Other STDs*. Atlanta, GA: Author, 1999.
- <sup>2</sup> Centers for Disease Control & Prevention. *Male Latex Condoms and Sexually Transmitted Diseases*. Atlanta, GA: Author, 2002. [[www.cdc.gov/hiv/pubs/facts/condoms.htm](http://www.cdc.gov/hiv/pubs/facts/condoms.htm)]
- <sup>3</sup> de Vincenzi I *et al.* A longitudinal study of human immunodeficiency virus transmission by heterosexual partners. *New Engl J Med* 1994; 331:341-46.
- <sup>4</sup> Chaya N, Amen KA. *Condoms Count*. Washington, DC: Population Action International, 2002.
- <sup>5</sup> Hatcher RA *et al.*, ed. *Contraceptive Technology*, 17<sup>th</sup> rev. ed. New York: Ardent Media, 1998.