

cbas Fact Sheet

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Frequently Asked Questions about Cervical Barriers



Diaphragms

Cervical barriers (CBs) are safe, effective, woman-controlled contraceptives that prevent pregnancy by covering the cervix. Research is underway to see if they can also protect women against HIV and other sexually transmitted infections. This fact sheet provides an overview of CBs and the current and potential advantages offered by these methods.



Cervical caps

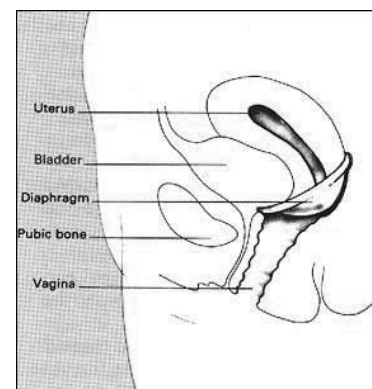
What are cervical barriers (CBs)?

Diaphragms and cervical caps are soft latex or silicone barriers that cover the cervix. The diaphragm is a shallow, dome-shaped cup with a flexible rim. It fits into the vagina and over the cervix. The cervical cap is thimble-shaped and smaller than the diaphragm. It fits snugly onto the cervix. Both diaphragms and cervical caps (used with spermicide) are approved worldwide for pregnancy prevention. They are available from health care professionals.

How do they prevent pregnancy?

Diaphragms and caps prevent conception in two ways:

1. They cover the cervix and prevent sperm from entering the uterus.
2. They hold spermicide near the cervix, immobilizing sperm at the entrance to the uterus.



How effective are cervical barriers?

Cervical barriers can be a very effective means of pregnancy prevention, but effectiveness depends on correct and consistent use.

- With perfect use, the diaphragm (used with spermicide) compares well with other barrier methods, like condoms, and is 94 percent effective with perfect use. With typical use, the diaphragm is about 84 percent effective.
- For nulliparous women (those who have not given vaginal birth), the cervical cap (used with spermicide) is 91 percent effective with perfect use, and 84 percent effective with typical use. Effectiveness of the cervical cap decreases for parous women; with perfect use, it is 74 percent effective, and with typical use it is 68 percent effective¹.

How safe are cervical barriers?

Cervical barriers are very safe, and users report few side effects. The primary safety concerns with use of CBs are toxic shock syndrome (TSS) and urinary tract infections (UTIs). TSS is very rare, and the risk of occurrence is reduced when diaphragms are removed as recommended.² Historically, the connection between diaphragm use and UTIs has been attributed to the diaphragm's pressure on the urethra. New evidence suggests that the nonoxynol-9 used with a diaphragm, rather than the diaphragm itself, could be the main cause of diaphragm-related UTIs.³

¹ Trussell J. Contraceptive efficacy. In Hatcher RA, Trussell J, Stewart F, Nelson A, Cates W, Guest F, Kowal D. *Contraceptive Technology: Eighteenth Revised Edition*. New York, NY: Ardent Media, 2004.

² Baehler E, Dillon W, Cumbo, T, Lee R. 1982. Prolonged use of a diaphragm and toxic shock syndrome. *Fertility and Sterility*; 38(2): 248-50.

³ Handley, MA, Reingold AL, Shiboski S, Padan NS. 2002. Incidence of acute urinary tract infection in young women and use of male condoms with and without nonoxynol-9 spermicides. *Epidemiology*;13(4): 431-6.



About CBAS

The Cervical Barrier

Advancement Society (CBAS) aims to raise the profile of cervical barrier methods both for preventing pregnancy and potentially HIV and other sexually transmitted infections.

CBAS membership is free and open to all who are interested in joining. Sign up on the CBAS website.

www.cervicalbarriers.org



Cervical barrier methods

Learn more about female-controlled dual protection

Cervical barriers

www.cervicalbarriers.org

Microbicides

www.global-campaign.org

www.microbicide.org

Female condom

www.femalecondom.org

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How many women use diaphragms and do they like the method?

Although the FDA has approved the use of diaphragms for pregnancy prevention, and generations of women have successfully used them in the past, only 2 percent of contracepting women in the U.S. use diaphragms, compared to 27 percent who use oral contraceptive pills. Diaphragm use by contracepting women has declined markedly in recent years.⁴ People's misperceptions and lack of knowledge about diaphragms, and health care provider bias toward certain methods all contribute to low usage rates. However, research shows that women who use the diaphragm as a contraceptive method find it acceptable and easy to use.⁵

What does "dual protection" mean?

When a device offers dual protection, it protects against pregnancy *and* prevents or reduces the transmission of HIV and other sexually transmitted infections (STIs).

Do cervical barriers offer protection against HIV and other STIs?

Cervical barriers have proven contraceptive benefits, and new data suggest that they may also offer some protection against HIV/STIs.⁶

There are several biologic mechanisms that may make the cervix more vulnerable to HIV/STIs than other areas of the reproductive tract. First, the cervix is the primary site of infection for many STIs, including gonorrhea, chlamydia, and human papilloma virus (HPV). Second, the cervix is covered by only one layer of delicate cells, which are damaged more easily than the thicker cell lining of the vagina. Third, recent evidence suggests that the cervix has a high concentration of HIV receptor and co-receptor sites. Furthermore, the cervix is the entryway to the upper genital tract, and covering the cervix may also protect these areas from infection.

Although to date there have been no published results from prospective, randomized trials of cervical barriers for the prevention of STIs, observational studies of the diaphragm used with spermicide indicate that there may be a reduction in pelvic inflammatory disease, cervical neoplasia, chlamydia, and gonorrhea among diaphragm users. Ongoing trials include a randomized, controlled trial of the diaphragm (used with Replens® gel) for HIV prevention being conducted in South Africa and Zimbabwe and another such trial of the diaphragm for preventing chlamydia and gonorrhea among sex workers in the Dominican Republic.

What are the advantages of using cervical barriers for dual protection?

Cervical barriers offer promise as a potential method for dual protection because they:

- Are woman-initiated and woman-controlled,
- Are reusable and durable,
- Need not interrupt sexual activity, and
- May be used without a partner's knowledge.

Other methods, such as microbicides and female condoms, share many of these desirable characteristics, and expanding options for women will help protect them from HIV and other STIs.

⁴ Piccinino, LJ and Mosher, WD. 1998. Trends in contraceptive use in the United States: 1982-1995. *Family Planning Perspectives*, 30(1): 4-10 & 46.

⁵ Bulut, A, *et al.* Assessing the acceptability of the diaphragm among low-income women in Columbia, Philippines and Turkey. *Contraception*, 2001, 63(5): 267-275.

⁶ Moench T, Chipato T, Padian N. 2001. Preventing disease by protecting the cervix: the unexplored promise of internal vaginal barrier devices. *AIDS*, 15(13):1595-1602.