

# What You Should Know About Barrier Forms of Birth Control

**T**hey are the oldest forms of birth control in the world. Barrier forms of birth control—methods that prevent pregnancy by physically blocking sperm and egg from getting together—have important advantages. They are generally very safe, and they are easily reversed if you decide that you want to become pregnant.

But they also have a few downsides. For example, they require advance planning, and they have to be used properly and every time if they are to be effective. No one method of birth control is best for every woman. But depending on your situation, one of the barrier methods might be exactly right for you.

Barrier methods are the most widely used forms of birth control throughout the world. Several barrier methods are available, including the condom, spermicide, diaphragm, cervical cap, shield, and sponge. Might one of them be right for you? Read more about each to find out. Then talk with your doctor or nurse.

## Male Condoms

Male condoms are thin sheaths, usually made of latex, that are placed on the erect penis immediately before having sex. When used properly, they are 89% effective. That means that if 100 couples used condoms for a year, 11 unintended pregnancies would occur. When condoms are used with a spermicide, their effectiveness rate rises to about 95%.

In addition to protecting you from pregnancy, latex condoms also provide the best protection available (except for not having sex at all) from

sexually transmitted infections (STIs) like human immunodeficiency virus and gonorrhea. At 25 cents to \$1 each, condoms are inexpensive.\* They are also widely available, and you don't need a doctor's prescription to get them.

## Female Condoms

The female condom is a loose pouch that is similar in shape to the male condom, but has two flexible rings (one at either end). The ring at the closed end is used to insert the condom into the vagina and hold it in place. The outer ring stays outside the vagina to protect part of the external genitals. The female condom can be inserted up to 24 hours before having sex, but it can also be inserted right before. Each condom is intended to be used only once. When used properly, the female condom is 79% effective. In other words, 21 out of 100 women will become pregnant while using it each year.

Female condoms may provide some protection against STIs, but they do not provide as much protection as the male condom. They cost between \$3 and \$5 each and are available at drug stores without a prescription.



*Several barrier methods are available, including the condom, spermicide, diaphragm, cervical cap, shield, and sponge.*

\*All costs listed in this handout are approximate and may vary by brand.

## Barrier Forms of Birth Control

### Spermicide Alone

Spermicides contain a sperm-killing chemical called nonoxynol-9. They are available in several forms, including foams, creams, jellies, and suppositories. Spermicides need to be placed into the vagina at least 10 minutes before having sex. One application usually works for about an hour, but you need to apply the spermicide again if you

have sex again, even if less than an hour has passed. Most spermicides have to be left in place for at least 6 to 8 hours.

The effectiveness of spermicides is very variable, at between 50% and 80%. That means that between 20 and 50 women out of 100 will become pregnant while using them each year. The effectiveness of spermicides is increased when they are used

along with the diaphragm, cervical cap, shield, or sponge (each of which is intended to be used only with spermicide). Spermicides cost between \$1 and \$1.50 per application, depending on brand. You can buy spermicide in drug stores without a prescription.

*The diaphragm, cervical cap, and shield are reusable barriers, intended for use with spermicide, that block the cervix and stop sperm from penetrating it.*

### Diaphragm, Cervical Cap, and Shield With Spermicide

The diaphragm, cervical cap, and shield are reusable barriers, intended for use with spermicide, that block the cervix and stop sperm from penetrating it. Each is shaped a bit differently. The diaphragm is a dome-shaped cup with a flexible rim, while the cervical cap is shaped like a thimble. The shield is a dome-shaped cup with a one-way valve that creates suction to help the cup fit snugly against the cervix; it also has a loop attached to it to make inserting and removing it easier. The shield comes in only one size. The diaphragm and cap come in several sizes, so they must be fitted for you by a doctor or nurse. All of these methods are available only by prescription.

To use these methods, you fill them with spermicide and then insert them into the vagina. They must be left in place for 6 to 8 hours after having sex, and they should be removed within 24 hours for the diaphragm and 48 hours for the cap or shield. (Leaving these devices in place for longer than the recommended time may place you at risk for developing toxic shock syndrome [TSS], a rare but serious infection.) With the diaphragm and shield, you have to apply additional spermicide each time you have sex during each period of insertion. The cap does not require reapplication of spermicide.

The diaphragm is about 83% effective, so about 17 out of every 100 women will become pregnant each year while wearing one. The cap is 77% to 83% effective; in other words, between 17 and 23 women out of 100 will get pregnant during 1 year of use of the cap. The shield has an effectiveness rate of 85%, which means that 15 women out of 100 will become pregnant during 1 year's use.

The diaphragm itself costs between \$30 and \$50, while the cap and shield cost between \$65 and \$70. These methods are generally believed to offer no protection against STIs.

### Sponge With Spermicide

The sponge is a polyurethane disc containing the spermicide nonoxynol-9; it has a loop on one side for easy removal. (The sponge was removed from the market in the United States in 1995 because of problems at the manufacturing plant, but it was reapproved by the US Food and Drug Administration in 2005). Before having sex, you wet the sponge and place it loop-side down into the vagina so that it covers the cervix. It offers pregnancy protection for up to 24 hours without additional spermicide. You have to leave it in place for at least 6 hours after having sex, and it must be removed within 30 hours of insertion to avoid the risk of TSS. Each sponge should be used only once. They cost about \$10 for a package of three sponges.

### Resources

- The National Women's Health Information Center <http://www.WomensHealth.gov>
- The Mayo Clinic <http://www.mayoclinic.com>
- The American College of Obstetricians and Gynecologists <http://www.acog.org>
- The US Food and Drug Administration <http://www.fda.gov>

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*This Patient Handout was prepared by Nancy Morgan Andrella, RN, using materials from Nelson AL, Hien Le MH. Modern male condoms: Not your father's rubbers. The Female Patient. 2007;32(5):59-64; the American College of Obstetricians and Gynecologists Web site; the Medical College of Wisconsin Web site; the Mayo Clinic Web site; the National Women's Health Information Center Web site; and the US Food and Drug Administration Web site.*