

Barrier Methods of Birth Control: Spermicide, Condom, Sponge, Diaphragm, and Cervical Cap

Frequently Asked Questions

Overview

What are barrier methods of birth control?

Barrier methods of birth control act as barriers to keep [sperm](#) from reaching the [egg](#) . Some barrier methods also protect against [sexually transmitted infections \(STIs\)](#) . A few barrier methods ([spermicide](#) , condom, and sponge) can be bought in most drugstores. Others (diaphragm and cervical cap) must be prescribed by a health care professional.

How effective are barrier methods of birth control in preventing pregnancy?

Barrier methods are not as effective at preventing pregnancy as other birth control methods, such as the birth control implant, injection, or [intrauterine device \(IUD\)](#) . Out of 100 women per year, 18 to 28 women will become pregnant when using barrier methods. (Read [Effectiveness of Birth Control Methods](#).)

Barrier methods work best when they are used correctly every time you have sex. Even one act of sex without using a barrier method can result in pregnancy. If your barrier method breaks or becomes dislodged during sex, or if you forget or are unable to use it,

you may want to consider [emergency contraception \(EC\)](#) . (Read [Emergency Contraception](#).)

Spermicide

What is spermicide?

Spermicide is a chemical that inactivates sperm. Most spermicides in the United States contain a chemical called [nonoxynol-9](#) . Spermicide can be used alone or with all other barrier methods except the sponge, which already contains a spermicide.

How do you use spermicide?

When used alone, a spermicide should be inserted into the [vagina](#) close to the [cervix](#) . There are different kinds of spermicides available:

- **Foam**—Foams are inserted into the vagina with an applicator (like a tampon applicator) that comes with it.
- **Cream or gel**—Creams and gels are inserted into the vagina with an included applicator.
- **Suppository**—Suppositories are solid pellets that melt after they are inserted into the vagina.
- **Film**—Films are thin sheets that you insert with your fingers close to the cervix.

You need to wait 10 to 15 minutes after insertion for the spermicide to become effective. Read the label carefully to see how long before sex you need to insert the spermicide into your vagina.

Keep in mind that spermicides are effective for only 1 hour after they are inserted. If more than 1 hour goes by, you need to reinsert the spermicide. You must reinsert spermicide for each act of sex. Do not douche or try to remove the spermicide for at least 6 hours after insertion.

What are the benefits of using spermicide?

- Spermicides are easy to use and can be bought in many stores.
- They cost less to use than other birth control methods.

- They have no effect on your natural [hormones](#) .
- Spermicides do not affect milk supply if you are breastfeeding.

What are the possible risks and side effects?

- Spermicides can cause vaginal burning and irritation. Some people are allergic to spermicide and may have a reaction.
- Spermicides that contain nonoxynol-9 do not protect against STIs, including infection with [human immunodeficiency virus \(HIV\)](#) , and may increase the risk of getting HIV from an infected partner if used many times a day. Spermicides should only be used if you have only one sexual partner and both of you are at low risk of HIV infection.

What should I know about spermicide and HIV?

Nonoxynol-9 (N-9) is a chemical found in all spermicides sold in the United States. Frequent use of N-9 may cause changes in the vagina and rectum that increase the risk of getting HIV from an infected partner.

You should only use a spermicide for birth control—by itself or with another barrier method—if you are at low risk of HIV infection. You are at high risk of HIV infection if you

- have had more than one sexual partner since your last HIV test or a sexual partner who has had more than one partner since the partner's last HIV test
- have been diagnosed with an STI in the past year
- have a history of exchanging sex for money or drugs, or of injected drug use
- have had a past or present partner who is HIV positive or who injects drugs
- have a history of invasive cervical cancer
- live in an area where there is a high rate of HIV infection
- are entering a detention facility

Condoms

What are condoms?

A condom acts as a physical barrier that prevents sperm from entering the [uterus](#) and reaching an egg. Two types are available:

1. A male condom is a thin sheath made of latex (rubber), polyurethane (plastic), or natural (animal) membrane that is worn over the erect [penis](#) during sex. Latex and polyurethane condoms provide the best protection against many STIs, including HIV.
2. A female condom is a thin plastic pouch that lines the vagina. It is held in place by a closed inner ring at the cervix and an outer ring at the opening of the vagina. It provides some protection against STIs.

Of all the birth control methods available, the male condom provides the best protection against STIs. Condoms are not as good as other methods in preventing pregnancy. Using both a condom and another method, such as a spermicide, is the best way to protect against pregnancy and STIs.

Spermicide should be put into the vagina, not on the condom. Some condoms are sold already coated with spermicide, but it is only a small amount. They may not be any better in preventing pregnancy than a condom used without spermicide. Read “What should I know about spermicide and HIV?” above for a warning about using spermicide.

How do you use condoms?

Male condom:

- Place the rolled-up condom over the tip of the erect penis with the rolled side facing out.
- Hold the end of the condom to allow a little extra space at the tip. Then unroll the condom over the penis.
- Right after ejaculation, grasp the condom around the base of the penis as it is withdrawn to prevent it from slipping off. Throw the condom away. Never reuse a condom.

Female condom:

- Squeeze the inner ring between your fingers and insert it into the vagina as far as possible. Push the inner ring up until it is just behind the pubic bone.
- About an inch of the open end should be outside your body.
- Right after ejaculation, twist the outer ring closed, and pull the pouch out gently. Throw the condom away. Do not reuse it.

Both types of condoms can tear or leak. If this happens, consider using [emergency contraception](#). Do not use a male and female condom together because it may cause them to tear.

Condoms should be used with a lubricant to prevent them from tearing or breaking and to reduce irritation. Throw condoms away after use.

Avoid carrying condoms in the back pocket of your pants or in a wallet. Heat and friction may damage condoms.

How do you use lubricant with condoms?

You can put lubricant on the condom or inside or around your vagina. Use only water-based or silicone lubricants with latex condoms. Oil-based lubricants, such as baby oil, hand lotions, petroleum jelly, and coconut oil, can weaken the latex and increase the risk that the condom will break. If you are at risk of HIV infection, make sure the lubricant does not contain a spermicide. (Read “What should I know about spermicide and HIV?” above.)

What are the benefits, risks, and side effects of using condoms?

Benefits:

- Condoms cost less than other birth control methods and can be bought in many stores.
- They have no effect on your natural hormones.
- They can be used immediately after childbirth. They do not affect milk supply if you are breastfeeding.
- Latex and polyurethane condoms provide the best available protection against STIs.
- The female condom can be inserted up to 8 hours before sex.

Possible risks and side effects:

- Some people are allergic to latex or polyurethane and may have a reaction.

Sponge

What is the sponge?

The sponge is a round device made of soft foam that contains spermicide. It is inserted into the vagina to cover the cervix and keeps sperm from entering the uterus. The spermicide also inactivates sperm.

The sponge does not protect against STIs, including HIV. You should use a condom in addition to the sponge for protection against STIs.

The sponge is less effective in women who have given birth. If you want to use the sponge after having a baby, you should wait 6 weeks after giving birth until the uterus and cervix have returned to their normal size.

How do you use the sponge?

There are three basic steps for use of the sponge:

1. Wet the sponge with clean water and squeeze it gently. The spermicide is active when the sponge is completely wet.
2. Squeeze the sides of the sponge upward and away from the loop on the bottom. Insert the sponge as far back into your vagina as you can.
3. Let go of the sponge. It will unfold and cover your cervix. Check its position with your finger. You should be able to feel the loop.

The sponge can be put in up to 24 hours before sex and should be left in place for at least 6 hours after sex. The sponge should be worn for no longer than 30 hours total. If you have sex again in this time frame, you do not have to replace the sponge.

To remove the sponge, grasp the loop and slowly pull the sponge out. Throw the sponge away after use.

What are the benefits of using the sponge?

- It can be bought in many stores.
- It has no effect on a your natural hormones.
- Each sponge contains enough spermicide for repeated acts of sex during a 24-hour period.
- It does not affect milk supply if you are breastfeeding.

What are the possible risks and side effects?

- The spermicide in the sponge can increase the risk of getting HIV from an infected partner. You should use the sponge only if you have one sexual partner and both of you are at low risk of HIV infection. (Read “What should I know about spermicide and HIV?” above.)
- Use of the sponge may cause vaginal burning and irritation from the spermicide. Some people are allergic to spermicide or to the polyurethane or sulfites found in the sponge and may have a reaction.
- Getting [toxic shock syndrome](#) when using the sponge is rare, but it has occurred in a few women. Do not use the sponge during your menstrual period, if you gave birth less than 6 weeks ago, or if you have had toxic shock syndrome before from a tampon or a sponge. Do not wear the sponge for more than 30 hours total.

Diaphragm

What is the diaphragm?

The diaphragm is a small, dome-shaped device made of silicone or latex that fits inside the vagina and covers the cervix. It must be used with spermicide. There are two types of diaphragms. Both diaphragms are available by prescription only:

1. Individually sized diaphragm, which must be fitted by a health care professional. If you gain or lose 10 pounds, have a baby, or have surgery on your abdomen or pelvis,

you should be refitted because the size and shape of your cervix and vagina may change.

2. One-size diaphragm, which fits most women.

Diaphragms do not protect against STIs, including HIV. A male or female condom should be used with the diaphragm to provide STI protection.

If you want to use a diaphragm after having a baby, you should wait 6 weeks after giving birth to use a diaphragm, until the uterus and cervix return to normal size.

How do you use the diaphragm?

There are three basic steps for use of a diaphragm:

1. Apply spermicidal gel around the rim and inside the dome of the diaphragm (the side that will face or be in contact with the cervix).
2. Squeeze the rim or sides of the diaphragm between your fingers. Insert the diaphragm into your vagina. Tuck the front rim of the diaphragm up as far as it will comfortably go. The front part of the rim should be up behind the pubic bone.
3. Reach inside your vagina with your longest finger to check that your cervix is completely covered by the diaphragm. The cervix feels something like the tip of your nose. Be sure to check the diaphragm's placement after sex. If the diaphragm has moved, consider taking [emergency contraception](#).

The diaphragm must remain in place for 6 hours after sex, but for no more than 24 hours total. If you have sex again within this time frame, apply more spermicide with an applicator high up in the vagina without removing the diaphragm. You then need to wait another 6 hours before taking out the diaphragm.

To remove the diaphragm, pull gently on the front rim. To wash the diaphragm, use mild soap and water. Rinse the soap off well, dry the diaphragm, and put it back in its case.

The diaphragm should be checked frequently for holes by holding it up to the light. Latex diaphragms should be replaced about every 2 years. Silicone diaphragms may last longer. The one-size diaphragm lasts about 5 years.

How do you use lubricant with diaphragms?

If you want to use lubricant with your diaphragm, read the instructions carefully about what types of lubricants are recommended. With latex diaphragms, use only water-based or silicone-based lubricants. Oil-based lubricants can weaken the latex. The “one-size” diaphragm should only be used with a water-based lubricant.

What are the benefits of using the diaphragm?

- It has no effect on your natural hormones.
- It does not affect milk supply if you are breastfeeding.
- It can be inserted hours before sex. For the exact number of hours, read your diaphragm’s instructions.

What are the possible risks and side effects?

- The spermicide used with the diaphragm can increase the risk of getting HIV from an infected partner. You should use the diaphragm only if you have one sexual partner and both of you are at low risk of HIV infection. (Read “What should I know about spermicide and HIV?” above.)
- Use of the diaphragm and spermicide may cause vaginal burning and irritation from the spermicide. Some people are allergic to spermicide or latex and may have a reaction.
- Use of a diaphragm and spermicide may increase the risk of [urinary tract infection \(UTI\)](#) . If the infection recurs, your diaphragm may be too large or too small. Or you may need to switch to another form of birth control.
- Toxic shock syndrome has occurred from use of the diaphragm. To reduce the risk, do not leave the diaphragm in for more than 24 hours.

Cervical Cap

What is the cervical cap?

The cervical cap is a small plastic dome that fits tightly over the cervix and stays in place by suction. It acts as a barrier to keep sperm from entering the uterus. It should be

used with a spermicide. A health care professional must fit and prescribe the cap. The type available in the United States comes in three sizes.

The cap does not protect against STIs, including HIV. A male or female condom should be used with the cervical cap to provide STI protection.

How do you use the cervical cap?

There are three basic steps to inserting a cervical cap:

1. Apply spermicidal gel inside the groove between the rim and the dome of the cap, in the bowl of the cap, and on the outer dome of the cap.
2. Squeeze the cap between your fingers with the inside of the bowl facing up. Insert the cap into the vagina with the long brim entering first. Press the cap onto your cervix until it is completely covered.
3. Check to see if your cervix is covered before and after each act of sex. To do this, press on the dome of the cap. If the cap has moved, consider taking [emergency contraception](#).

The cap should be left in place for 6 hours after sex but no more than 48 hours total. If you have sex more than once within this time frame, you do not need to reapply the spermicide.

To remove the cap, rotate it in any direction. Push your finger gently against the dome to break the suction and gently pull the removal strap.

Care for the cervical cap is similar to care for the diaphragm. It must be checked frequently for wear or holes. It should be replaced yearly.

Refitting may be needed after having a baby or after weight gain or loss. The cervical cap is less effective in women who have given birth. You should wait 6 weeks after giving birth to use the cap, until the uterus and cervix return to normal size.

What are the benefits of using the cervical cap?

- It has no effect on your natural hormones.
- It does not affect milk supply if you are breastfeeding.

- It can be inserted up to 40 hours before sex.

What are the possible risks and side effects?

- The spermicide used with the cervical cap can increase the risk of getting HIV from an infected partner. You should use the cervical cap only if you have one sexual partner and both of you are at low risk of HIV infection. (Read “What should I know about spermicide and HIV?” above.)
- Use of the cap may cause vaginal irritation or odor.
- To avoid an increased risk of infection and toxic shock syndrome, the cervical cap should not be used during your menstrual period.

Glossary

Cervix: The lower, narrow end of the uterus at the top of the vagina.

Egg: The female reproductive cell made in and released from the ovaries. Also called the ovum.

Emergency Contraception (EC): Methods that are used to prevent pregnancy after a woman has had sex without birth control, after the method has failed, or after a rape.

Hormones: Substances made in the body that control the function of cells or organs.

Human Immunodeficiency Virus (HIV): A virus that attacks certain cells of the body’s immune system. If left untreated, HIV can cause acquired immunodeficiency syndrome (AIDS).

Intrauterine Device (IUD): A small device that is inserted and left inside the uterus to prevent pregnancy.

Nonoxynol-9: A chemical that inactivates sperm. It is found in most spermicides.

Penis: The male sex organ.

Sexually Transmitted Infections (STIs): Infections that are spread by sexual contact. Infections include chlamydia, gonorrhea, human papillomavirus (HPV), herpes, syphilis, and human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Sperm: A cell made in the male testicles that can fertilize a female egg.

Spermicide: A chemical (cream, gel, foam) that inactivates sperm.

Toxic Shock Syndrome: A severe illness caused by a bacterial infection. It can be caused by leaving a tampon in the vagina too long.

Urinary Tract Infection (UTI): An infection in any part of the urinary system, including the kidneys, bladder, or urethra.

Uterus: A muscular organ in the female pelvis. During pregnancy, this organ holds and nourishes the fetus. Also called the womb.

Vagina: A tube-like structure surrounded by muscles. The vagina leads from the uterus to the outside of the body.

If you have further questions, contact your ob-gyn.

Don't have an ob-gyn? [Learn how to find a doctor near you.](#)

FAQ022

Last updated: April 2022

Last reviewed: November 2023

Copyright 2024 by the American College of Obstetricians and Gynecologists. All rights reserved. Read [copyright and permissions information](#).

This information is designed as an educational aid for the public. It offers current information and opinions related to women's health. It is not intended as a statement of the standard of care. It does

not explain all of the proper treatments or methods of care. It is not a substitute for the advice of a physician. Read [ACOG's complete disclaimer](#).

About ACOG

Disclaimer

Contact Us

How to Find an Ob-Gyn



Copyright 2024 American College of Obstetricians and Gynecologists

Privacy Statement

|

Terms and Conditions of Use