

Sterilization for Women and Men

- What is sterilization?
- How does tubal occlusion work to prevent pregnancy?
- How effective is female sterilization?
- Does female sterilization protect against sexually transmitted infections?
- Are there risks associated with female sterilization?
- Will I still have menstrual periods after female sterilization?
- How is female sterilization performed?
- How does a vasectomy work to prevent pregnancy?
- How effective is a vasectomy?
- How is a vasectomy done?
- How long does it take for a vasectomy to work?
- What are the benefits and risks of vasectomy?
- Can sterilization be reversed?
- Glossary

What is sterilization?

Sterilization is a permanent method of birth control. Sterilization procedures for women are called **tubal occlusion**. The procedure for men is called **vasectomy**.

How does tubal occlusion work to prevent pregnancy?

Tubal occlusion closes off the *fallopian tubes*. This prevents the *egg* from moving down the fallopian tube to the *uterus* and keeps the *sperm* from reaching the egg.

How effective is female sterilization?

Sterilization is a highly effective way to prevent pregnancy. Fewer than 1 out of 100 women will become pregnant within 1 year of having the procedure. After 10 years, pregnancy rates range from fewer than 1 to fewer than 4 out of 100 women, depending on the type of sterilization method used.

Does female sterilization protect against sexually transmitted infections?

Female sterilization does not protect against **sexually transmitted infections (STIs)**, including **human immunodeficiency virus (HIV)**. A male or female condom should be used to protect against these infections if you are at risk of getting an STI (see FAQ009 How to Prevent Sexually Transmitted Infections).

Are there risks associated with female sterilization?

A risk common to all female sterilization methods is that if pregnancy does occur, there is an increased chance that it will be an **ectopic pregnancy**. However, the risk of ectopic pregnancy occurring in women after tubal sterilization is lower than in women who do not use any birth control. Other risks are specific to the type of procedure.

Will I still have menstrual periods after female sterilization?

Yes, you will stil have menstrual periods after a sterilization procedure.

How is female sterilization performed?

There are three ways that sterilization for women can be performed: 1) *minilaparotomy*, 2) *laparoscopy*, or 3) *hysteroscopy:*

- Minilaparotomy—A small incision is made in the abdomen. The fallopian tubes are brought up through the incision. A small section of each tube is removed, or both tubes can be removed completely. Less often, clips are used to close off the tubes. This approach frequently is used for **postpartum sterilization** (see FAQ052 Postpartum Sterilization).
- Laparoscopy—This is a type of surgical procedure that uses a device called a laparoscope to view the pelvic organs (see FAQ035 Sterilization by Laparoscopy). The fallopian tubes are closed off using instruments passed through the *laparoscope* or with another instrument inserted through a second small incision.
- Hysteroscopy—Hysteroscopic sterilization does not require incisions in the skin. It can be done with local anesthesia in a health care professional's office (see FAQ180 Hysteroscopic Sterilization). Small devices are placed into the openings of the fallopian tubes. The devices cause scar tissue to form that blocks the fallopian tubes. After having the procedure, it takes 3 months for the scar tissue to form. During this time, you must use another form of birth control to prevent pregnancy. A test called hysterosalpingography must be done to ensure that the tubes are blocked before you can use it as your only method of birth control.

How does a vasectomy work to prevent pregnancy?

The **vas deferens** is one of two tubes that carry sperm from the **testes**. In a vasectomy, these tubes are tied, cut, clipped, or sealed to prevent the release of sperm. This prevents a woman's egg from being fertilized with the man's sperm.

How effective is a vasectomy?

The effectiveness of vasectomy in preventing pregnancy after 1 year is slightly higher than that of female sterilization. As with female sterilization, vasectomy does not protect against STIs.

How is a vasectomy done?

One or two small openings are made in the skin of the **scrotum**. Each vas deferens is pulled through the opening until it forms a loop. A small section is cut out of the loop and removed. The two ends are tied and may be sealed with heat. This causes scar tissue to grow and block the tubes. Each vas deferens then is placed back into the scrotum. There also is a "no-scalpel" technique that does not require incisions in the skin. It can be done with local anesthesia in a health care professional's office.

How long does it take for a vasectomy to work?

It takes about 2–4 months for the **semen** to become totally free of sperm. A couple must use another method of birth control or avoid sexual intercourse until a sperm count confirms that no sperm are present. In this test, the number of sperm in a semen sample is counted.

What are the benefits and risks of vasectomy?

Vasectomy generally is considered to be safer than female sterilization and requires only local anesthesia. Also, there is no increased risk of ectopic pregnancy if the vasectomy fails. Risks of vasectomy include minor bleeding and infection. Major complications are rare.

Can sterilization be reversed?

Sterilization is permanent birth control and is not meant to be reversible. Before having the procedure, you (and your partner, if appropriate) must be certain that you do not want children in the future. If you have a sterilization procedure and you change your mind after the operation, you can have surgery to try to reverse it, or **assisted reproductive technology** (ART) can be used to attempt pregnancy. These procedures are expensive and may not be covered by insurance. There also is no guarantee that you will be able to become pregnant afterward.

Glossary

Assisted Reproductive Technology (ART): Treatments or procedures that are done to start a pregnancy. This may include handling eggs and sperm or embryos.

Ectopic Pregnancy: A pregnancy in a place other than the uterus, usually in one of the fallopian tubes.

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

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

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).

Hysterosalpingography: A special X-ray procedure in which a small amount of fluid is placed in the uterus and fallopian tubes to find abnormal changes or see if the tubes are blocked.

Hysteroscopic Sterilization: A sterilization procedure that places small implants in the fallopian tubes. Scar tissue forms around the implants and stops sperm from reaching an egg.

Hysteroscopy: A procedure in which a lighted telescope is inserted into the uterus through the cervix to view the inside of the uterus or perform surgery.

Laparoscope: A thin, lighted telescope that is inserted through a small incision (cut) in the abdomen to view internal organs or to perform surgery.

Laparoscopy: A surgical procedure in which a thin, lighted telescope called a laparoscope is inserted through a small incision (cut) in the abdomen. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

Local Anesthesia: The drugs that stop pain in a part of the body.

Minilaparotomy: A small abdominal cut used for a surgery in which the fallopian tubes are closed off as a form of permanent birth control.

Postpartum Sterilization: A permanent procedure that prevents a woman from becoming pregnant, done soon after the birth of a child.

Scrotum: The external genital sac in the male that contains the testes.

Semen: The fluid made by male sex glands that contains sperm.

Sexually Transmitted Infection (STI): An infection that is 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 testes that can fertilize a female egg.

Sterilization: A permanent method of birth control.

Testes: Paired male organs that make sperm and the male sex hormone testosterone.

Tubal Occlusion: Blocking of the fallopian tubes.

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

Vas Deferens: One of two small tubes that carries sperm from each male testis to the prostate gland.

Vasectomy: A permanent birth control method for men. In this procedure, a portion of the tube that carries sperm is removed.

If you have further questions, contact your obstetrician-gynecologist.

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