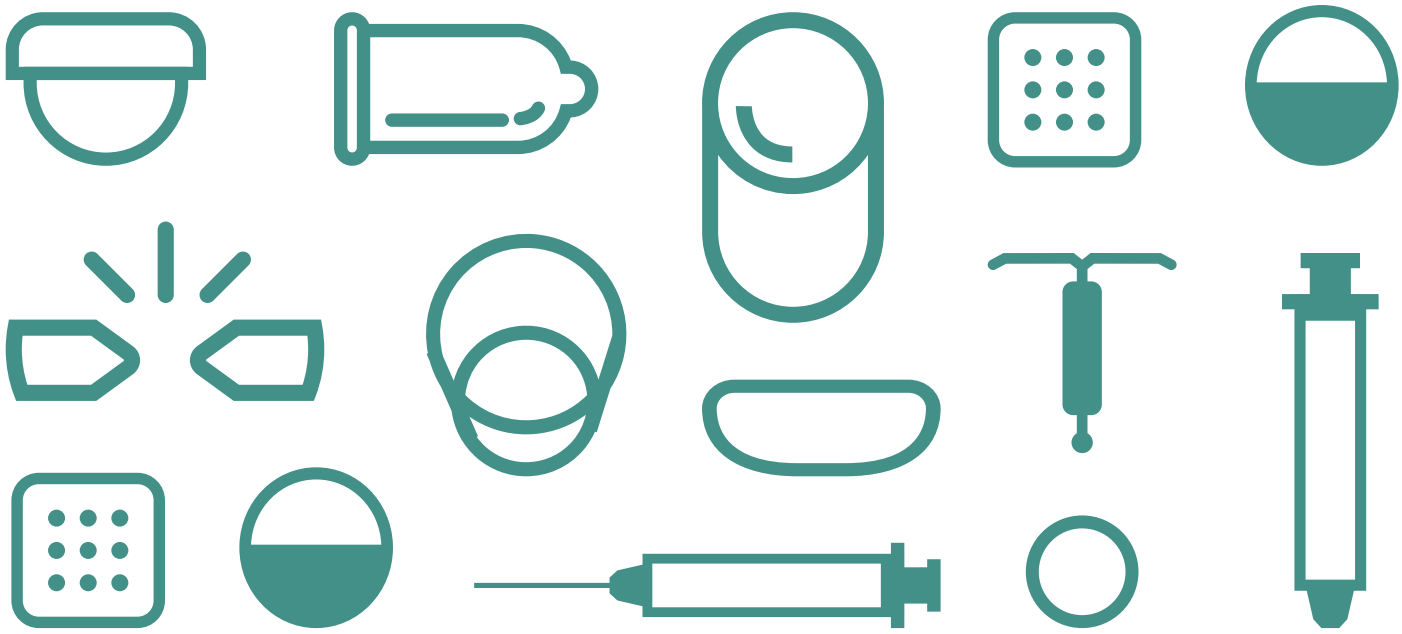
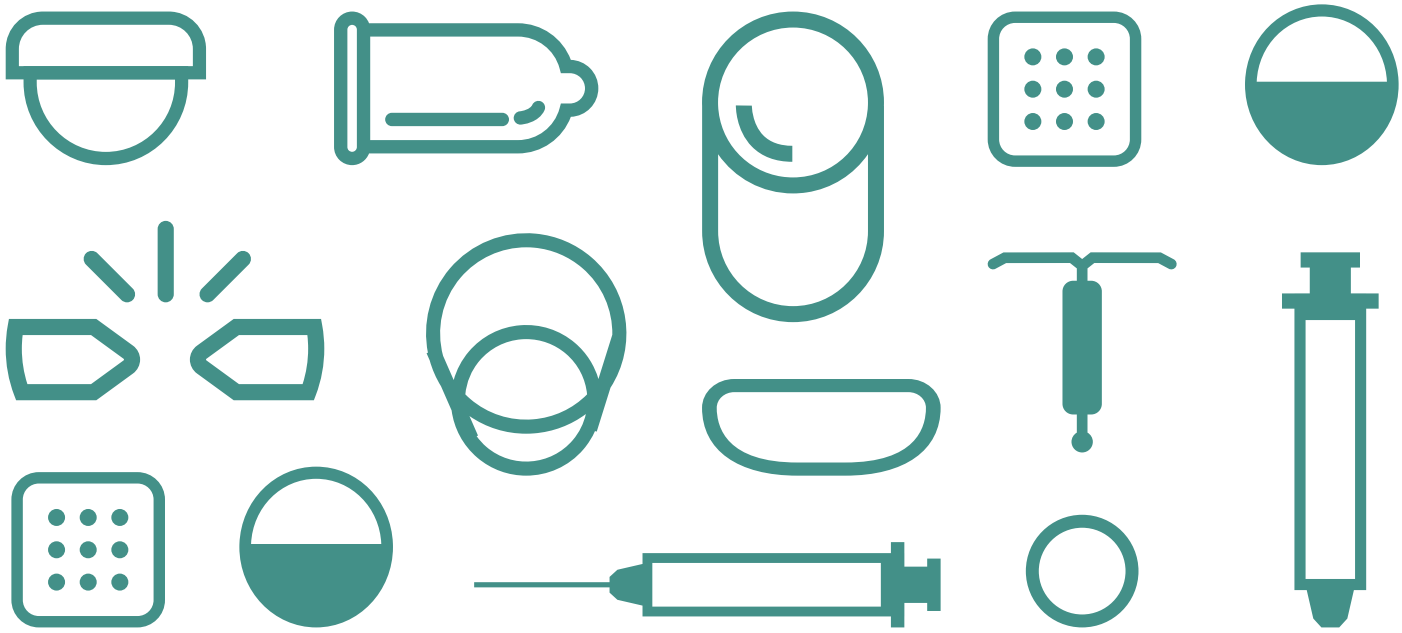


Contraception



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Contraception

Contraception, also known as birth control, is used to prevent pregnancy. There are many different birth control methods to help you and your partner prevent an unplanned pregnancy. You may be starting with a pretty good idea of what you are looking for, or you may not be sure where to start – or which method to choose.

In this section, we review the methods that are available to help you understand the options and help you narrow down the choices. You can always talk over your choices with your health care provider.

*****_These summaries are for information purposes only and are incomplete. When considering contraception, patients should review all potential risks and benefits on a medicine, device or procedure with their health care providers prior to selecting the option that is most appropriate for their needs._

Topics Covered

Emergency Contraception

Hormonal Contraception

Oral Contraceptive Pill
Vaginal Ring
Injectable Contraception
Contraceptive Patch
Intrauterine Contraception (IUC)

Non-Hormonal Contraception

Male Condom
Sponge
Diaphragm
Vasectomy
Intrauterine Contraception (IUC)
Female Condom
Cervical Cap
Spermicides
Tubal Ligation & Tubal Occlusion

Natural Methods

Fertility-Awareness Based Methods
Withdrawal (Coitus interruptus)
Lactational Amenorrhea Method (LAM)
Abstinence

Emergency Contraception

Emergency contraception is not to be used as a regular method of birth control but, if needed, it can help prevent unplanned pregnancies.

If you have had unprotected sex and you already know that you do not want to get pregnant, emergency contraception can help prevent unplanned pregnancies if used as soon as possible.

Some of the reasons that you may consider using emergency contraception include:

- Missed birth control pill, patch, or injection
- No contraception was used
- Non-consensual sexual intercourse (sexual assault)
- The condom slipped, broke, or leaked
- Error in the calculation of the fertility period

Emergency contraception is intended for occasional use only, not as a regular method of birth control.

There are two types of emergency contraception to choose from in Canada:

1. "Morning after pills"

"Morning after pills" are the original method of emergency contraception. In the past, morning after pills were regular birth control pills, taken in higher doses, 12 hours apart. There are better and more effective methods available on the market today, with fewer side effects.

LNG-EC pills (Plan B, Norlevo, Option 2, and Next Choice) all contain a progestin called levonorgestrel. These pills are available in Canadian pharmacies without a prescription. The effectiveness of LNG-EC pills is highest when taken within 24 hours of unprotected sex and declines the later they are taken; but they can be taken up to five days later. LNG-EC pills will not harm the fetus, should it not be able to prevent the pregnancy. A high body weight (a body mass index (BMI) greater than 25) may decrease the effectiveness of these pills, so it is a good idea to speak with a health care professional to make sure these pills are the right choice for you.

A second morning after pill, UPA-EC (Ulipristal acetate 30 mg, ella®), is now available in Canada, currently by prescription only. It is recommended for its greater effectiveness over a longer period of time after unprotected sex (up to 5 days) and appears to be equally as effective for those who have a higher BMI.

2. Copper Intrauterine Device (IUD)

The most effective method of emergency contraception is a copper intrauterine device (IUD), which is inserted by a doctor within 7 days of unprotected intercourse. While currently available by prescription only, the copper IUD provides ongoing secure birth control.

Hormonal Contraception

Hormonal birth control regulates the change in hormone levels during a woman's cycle by using different forms of synthetic hormones that mimic the estrogen and progesterone that is naturally produced in a woman's body.

Topics Covered

Hormonal Contraception

- Oral Contraceptive Pill
- Vaginal Ring
- Injectable Contraception
- Contraceptive Patch
- Intrauterine Contraception (IUC)

Oral Contraceptive Pill

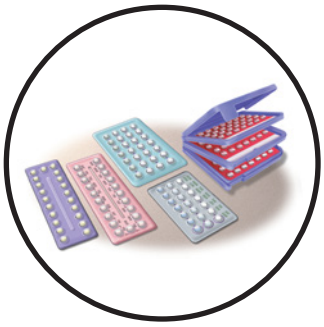
The oral contraceptive pill, also known as birth control pill, is suitable for most healthy women, regardless of age, and can be used long-term. It is one of the world's most prescribed medications – over 100 million women across the globe rely on it. There are two kinds of oral contraceptives, the combined oral contraceptive (COC), which contains both estrogen and progestin, and the progestin-only contraceptive (POP). The Pill is available at pharmacies but requires a prescription.

How does it work?

- The oral contraceptive pill works by preventing the ovary from releasing an egg, thickening the cervical mucus making it difficult for the sperm to reach the egg, and changing the lining of the uterus making implantation difficult.
- The Pill is taken every day, ideally at the same time each day. Traditional pills are set up with pills for three weeks, followed by a pill-free week or a week of placebo pills.
- Newer pill options have adjusted the regimen to provide effective contraception with lower doses of hormones and as little as two days of placebo to minimize hormone fluctuations and side effects.

How effective is it?

- **Typical use failure rate:** 90 of 1000 women during first year of use
- **Perfect use failure rate:** 3 of 1000 women during first year of use



Advantages

+ Highly effective
+ Reversible
+ Does not interfere with sex
+ May reduce or eliminate menstrual flow and cramps
+ Regulates menstrual cycle
+ Decreases premenstrual symptoms

Disadvantages

- Effectiveness may be reduced by other medications
- May cause irregular bleeding or spotting
- May cause breast tenderness, nausea, or headaches
- Must be taken every day, at the same time
- May increase the risk of blood clots, particularly in women who have certain blood disorders or a family history of blood clots
- Does not protect against STIs

There are two kinds of oral contraceptives, the combined oral contraceptive (COC) and the progestin-only contraceptive (POP)

Combined Oral Contraceptive (COC)

Contains both estrogen and progestin

Advantages

+ Decreases acne
+ Decreases body and facial hair growth
+ Reduces the risks of endometrial, ovarian and colon cancers
+ Reduces the risk of fibroids and ovarian cysts
+ May reduce perimenopausal symptoms

Disadvantages

- Should not be used by women over the age of 35 who smoke

Progestin-Only Contraceptive (POP)

Contains progestin only

Advantages

+ May be suitable for women who cannot take estrogen
+ May be suitable for breastfeeding women
+ May be suitable for women over 35 years old who smoke

Disadvantages

- Some women may have hormonal side effects: acne, headaches, breast sensitivity, mood issues, unwanted hair growth

Contraceptive Patch

The contraceptive patch is a contraception method that has been available in Canada since January 2004. It is a 4 x 4 cm beige patch that sticks to a woman's skin and continuously releases the hormones estrogen and progestin into the bloodstream.

How does it work?

- The patch prevents pregnancy primarily by stopping the ovaries from releasing an egg, but it may also thicken the cervical mucus (making it harder for sperm to get into the uterus) and make the uterine lining thin. Its method of action is very similar to the Pill.
- Each patch is worn on the skin for seven days. One patch is worn each week for 3 weeks. The patch should be changed on the same day each week (called the "Patch Change Day"). The fourth week is patch-free, allowing a period to occur. The patch should never be off for more than seven days. Following the seven patch-free days, a new cycle is started when you apply a new patch on your Patch Change Day.
- The patch can be worn on the buttocks, stomach, back or upper arms, but not on the breasts. It may help to change the location a bit each week. The patch should be applied to clean, dry skin. You should not use any creams or lotions near a patch you're already wearing, or where you'll be applying a new one. The patch is very "sticky". You can exercise, shower, swim or go in a sauna or hot tub and it still sticks 98% of the time!

How effective is it?

- **Typical use failure rate:** 90 of 1000 women during first year of use
- **Perfect use failure rate:** 3 of 1000 women during first year of use
- The patch may be a bit less effective in women who weigh more than 90 kg (198 pounds)

Advantages

+ Highly effective, reversible and safe
+ Does not interfere with sex
+ May reduce menstrual flow and cramps
+ Regulates menstrual cycle
+ Decreases premenstrual symptoms
+ Reduces the risks of endometrial, ovarian and colon cancers
+ Reduces the risk of fibroids and ovarian cysts

Disadvantages

- May cause irregular bleeding or spotting
- May cause breast tenderness, nausea, or headaches
- May cause skin irritation
- May be less effective in women who weigh more than 90 kg
- Does not protect against STIs

Vaginal Ring

The vaginal ring is a soft, flexible, clear plastic ring that measures 54 mm in diameter and is inserted into a woman's vagina where it slowly releases the hormones, estrogen and progestin, for three weeks.

How does it work?

- The vaginal ring prevents pregnancy primarily by stopping the ovaries from releasing an egg, but it may also thicken the cervical mucus (making it harder for sperm to get into the uterus) and make the uterine lining thin. Its method of action is very similar to the Pill.
- The ring comes in only one size, and does not need to be in a particular position in the vagina to be effective. It is held in place by the walls of the vagina and a woman usually cannot feel the ring once it is in. The woman inserts and removes the ring herself and most women find this easy to do.
- The ring is worn inside the vagina for three weeks, followed by a one-week ring-free interval allowing a period to occur. At the end of the ring-free week, the woman inserts another ring to begin a new cycle.

How effective is it?

- **Typical use failure rate:** 90 of 1000 women during first year of use
- **Perfect use failure rate:** 3 of 1000 women during first year of use

Advantages

+ Highly effective, reversible and safe
+ May reduce menstrual flow and cramps
+ Regulates menstrual cycle
+ Decreases premenstrual symptoms
+ Reduces the risks of endometrial, ovarian and colon cancers
+ Reduces the risk of fibroids and ovarian cysts
+ Does not have to be remembered each day

Disadvantages

- May cause irregular bleeding or spotting
- May cause breast tenderness, nausea, or headaches
- May cause vaginal irritation, discomfort or discharge
- Requires remembering to change the ring once per month
- Does not protect against STIs

Intrauterine Contraception (IUC)

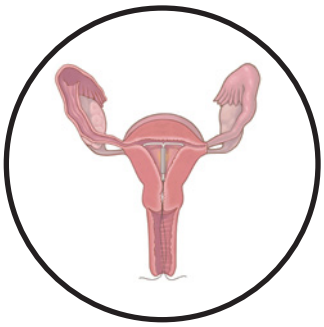
Intrauterine contraceptives (IUCs) are long-acting reversible contraceptive (LARC) methods that are used by over 150 million women worldwide. They are the most effective forms of birth control available. IUCs are small T-shaped devices that are inserted in the uterus by a health care professional in a clinic. There are two types of intrauterine contraception: the Copper intrauterine device (Cu-IUD) and the levonorgestrel-releasing intrauterine system (LNG-IUS), which contains a progestin.

How does it work?

- LNG-IUS: The small cylinder on the IUC contains the hormone levonorgestrel, which is slowly released. The lining of the uterus becomes thinner and the cervical mucus becomes thicker which makes it harder for sperm to enter the uterus.
- The IUC is inserted by a health professional, in a clinic. The procedure is fairly simple, does not require anaesthesia, and only takes a few minutes.
- Depending on the device, the IUC can remain inserted for 3-10 years, before needing to be replaced.

How effective is it?

- **Typical use failure rate:** 2 of 1000 women during first year of use
- **Perfect use failure rate:** 2 of 1000 women during first year of use
- IUCs are one of the most effective methods of contraception available



Advantages

+ Highly effective, reversible and safe
+ Long term, forgettable and invisible
+ Cost-effective
+ May be suitable for women who cannot take estrogen
+ May be suitable for breastfeeding women
+ Reduces risk of endometrial cancer

Disadvantages

- Initially, irregular bleeding or spotting may occur
- Expensive
- Some pain or discomfort during insertion
- Rare risks with the insertion could include infection, perforation of the uterus, or expulsion of the IUC
- Does not protect against STIs

There are two types of intrauterine contraception: the Copper intrauterine device (Cu-IUD) and the levonorgestrel-releasing intrauterine system (LNG-IUS), which contains a progestin.

Levonorgestrel-Releasing Intrauterine System (LNG-IUS)
contains a progestin

Advantages

+ A minimal amount of hormones is absorbed in your blood
+ May reduce menstrual flow and cramps
+ May lead to absence of period
+ Regulates menstrual cycle
+ Improves symptoms of endometriosis

Disadvantages

- Some women may experience hormonal side effects: acne, headaches, breast tenderness, mood issues
- Irregular periods, light or no menstrual periods – which some think of as an advantage, others as a disadvantage

Injectable Contraception

Injectable contraception, also known as the birth control shot, is a highly effective and reversible method of contraception. The injection contains a progestin, but does not contain estrogen. It is administered four times a year, so it may be a good choice for women who have trouble following a daily, weekly, or monthly routine.

How does it work?

- The injection is given by a health-care professional in the muscle – commonly in the upper arm or buttocks, of a woman, every 12 to 13 weeks (four times a year).
- The progestin hormone prevents the ovaries from releasing an egg. It also thickens the cervical mucus making it difficult for sperm to reach the egg and changes the lining of the uterus making implantation difficult.

How effective is it?

- **Typical use failure rate:** 60 of 1000 women during first year of use
- **Perfect use failure rate:** 2 of 1000 women during first year of use
- Injectable contraception is one of the most effective methods of contraception available

Advantages

+ Highly effective and long lasting
+ Reversible
+ Safe, convenient and discreet
+ Does not interfere with sex
+ Effectiveness is not affected by most medications
+ May be suitable for women who cannot take estrogen
+ May be suitable for breastfeeding women
+ May be suitable for women over the age of 35 who smoke
+ Reduces or eliminates periods
+ Reduces menstrual cramps and PMS
+ Reduces the risk of endometrial cancer and fibromas
+ May improve symptoms of endometriosis and chronic pelvic pain
+ May decrease the incidence of seizures in women who have epilepsy

Disadvantages

- Initially, irregular bleeding is the most common side effect
- Less/lighter bleeding, to no periods
- Heavier and more frequent bleeding, including spotting in between periods
- Causes a decrease in bone mineral density which may return to normal when a woman stops using the injection
- May be associated with change of appetite and/or weight gain in some women
- Some women may have hormonal side effects: acne, headaches, breast sensitivity, mood issues/ depression and a change in sex drive
- It can take a longer time to get pregnant after getting your last shot. For some, it can be approximately 6 to 10 months after the last injection for the ovaries to start releasing eggs again
- Must be administered by a health-care professional every 3 months
- Does not protect against STIs

Non-Hormonal Contraception

Non-hormonal birth control can involve creating a barrier between sperm and the egg, changing the chemistry in the reproductive tract or a combination of both methods.

Topics Covered

Non-Hormonal Contraception

- Male Condom
- Female Condom
- Sponge
- Cervical Cap
- Diaphragm
- Spermicides
- Vasectomy
- Tubal Ligation & Tubal Occlusion
- Intrauterine Contraception (IUC)

Male Condom

Male condoms are inexpensive, readily available without a prescription, and used only at the time of sexual activity. They are worn over the penis during sexual intercourse or oral sex and they come in a variety of sizes, thinness, textures, and colours/flavours. They are also available with a wide selection of lubricants on the condom to help enhance sensitivity and pleasure for both partners (i.e. warming/tingling sensations, premium silicone-base, climax-control).

Most condoms are made of latex, but non-latex condoms are also available in polyurethane and polyisoprene. Latex, polyurethane and polyisoprene condoms are also effective for preventing most sexually transmitted infections (STIs).

How does it work?

- The condom is worn over the penis during sexual activity. It should be put on before any skin-to-skin genital contact occurs.
- The condom acts as a physical barrier preventing direct contact between the penis and the vagina. It prevents the exchange of body fluids and also traps the sperm in the condom so it cannot fertilize the egg.
- The condom is thrown away after intercourse. A new one must be used for each repeated act of intercourse.

How effective is it?

- **Typical use failure rate:** 180 of 1000 women during first year of use
- **Perfect use failure rate:** 20 of 1000 women during first year of use

Advantages

+ Widely available without a prescription
+ Inexpensive, safe and effective
+ Protect against most STIs
+ Non-latex options available for those with latex allergies or sensitivities
+ Both partners participate in their use – shared responsibility
+ Hormone-free
+ May decrease the risk of cervical cancer
+ May help the wearer avoid premature ejaculation
+ May be used with other contraception methods to increase their contraceptive effectiveness

Disadvantages

- Must be available at time of sexual activity
- Must be stored and handled properly – be sure to check the expiration date
- May reduce sexual spontaneity
- May slip or break during intercourse
- May reduce sensitivity for either partner
- May interfere with the maintenance of an erection
- People with latex allergies or latex sensitivity cannot use latex condoms, but may be able to use non-latex condoms
- Requires participation of both partners

Female Condom

The female condom is a soft, loose-fitting, seamless nitrile polymer sheath containing two flexible rings, one at each end. It is inserted into the vagina before sex and works by holding in the sperm, preventing it from entering the vagina.

How does it work?

- The female condom is a barrier contraception method, preventing contact between the sperm and the vagina.
- The external ring at the open end of the condom sits outside the vagina, providing some protection. The internal ring at the closed end of the condom is inserted into the vagina and helps to keep it in place.
- The sheath is coated on the inside with a silicone-based lubricant.
- It can be placed in the vagina up to 8 hours before sexual intercourse.
- A new female condom should be used for each repeated act of sexual intercourse.

How effective is it?

- **Typical use failure rate:** 210 of 1000 women during first year of use
- **Perfect use failure rate:** 50 of 1000 women during first year of use

Advantages

+ Protects against both pregnancy and STIs
+ The woman has control and autonomy in placing the condom
+ Can be used by people with latex allergies
+ Can be used with oil-based lubricants
+ Male partner may find it more comfortable and less constricting than male condoms
+ The internal and external rings of the female condom may increase sexual stimulation
+ Available at pharmacies without a prescription

Disadvantages

- Some women may have trouble inserting it correctly
- More expensive than male condoms
- Potential challenges include slippage and breakage
- The rings on the female condom may cause discomfort during sex
- Female condoms maybe noisier than male condoms during sex

Contraceptive Sponge

The contraceptive sponge is a small, disposable, polyurethane foam device that is placed in the vagina. It fits over the cervix to provide a physical barrier to prevent sperm from entering. The sponge also contains a spermicide, which helps to absorb and trap sperm.

How does it work?

- The contraceptive action of the sponge is primarily provided by the spermicide, which is slowly released over a period of 24 hours.
- The spermicide absorbs and traps the sperm and destroys the sperm cell membrane.
- The sponge itself also provides a physical barrier to prevent sperm from entering the cervix.
- The sponge can be inserted into the vagina by the women using it up to 24 hours before intercourse. One side has a concave dimple that fits over the cervix. The other side has a loop to facilitate removal.
- The sponge comes in one size only and is available in pharmacies without a prescription.
- Protection begins immediately when inserted and lasts for 24 hours even with repeated acts of intercourse. It should be left in the vagina for at least 6 hours after the last act of intercourse but should not remain in the vagina for more than 30 hours total.

How effective is it?

- The sponge is less effective for women who have given birth. Effectiveness can be increased by using the sponge in combination with a male condom.
- *Parous women* – women who have given birth
- *Nulliparous women* – women who have not given birth
- **Typical use failure rate - parous women:** 240 of 1000 women during first year of use.
- **Perfect use failure rate - parous women:** 200 of 1000 women during first year of use.
- **Typical use failure rate - nulliparous women:** 120 of 1000 women during first year of use.
- **Perfect use failure rate - nulliparous women:** 90 of 1000 women during first year of use.

Advantages

+ It offers a barrier method and spermicide in one
+ Provides 12-hour protection, and doesn't need to be replaced for repeated sex during this time
+ Enhances the effectiveness of other forms of contraception such as condoms
+ No hormones
+ Available at pharmacies without a prescription

Disadvantages

- Increases the risk of vaginal and cervical irritation orabrasions, which increases the risk of transmission of HIV
- Some women may have trouble inserting it correctly
- Does not protect against STIs
- Higher failure rate compared to other types of contraception

Cervical Cap

The cervical cap is a deep silicone cap that fits against the cervix and prevents sperm and bacteria from entering.

How does it work?

- The cervical cap serves as a physical barrier between sperm and the cervix.
- It should always be used with a gel that immobilizes or kills sperm. The gel forms a physical cellulose barrier in front of the cervix and lowers the pH of the vaginal fluid, thereby inhibiting sperm motility.
- The cap can be inserted into the vagina by the women using it up to 2 hours before having sex.
- The gel should be reapplied, using and applicator, for each repeated act of intercourse or after 2 hours has passed.
- It should be left in the vagina for at least 6 hours after intercourse but should not remain in the vagina for more than 48 hours total.
- Cervical caps can be purchased online or from a pharmacy with a prescription. It should be replaced every year.

How effective is it?

- There is currently no data on the efficacy/ effectiveness of the only cervical cap and gel that is available in Canada. Some preliminary studies have shown that the cervical cap has a higher failure rate compared to other types of contraception.

Advantages

+ No hormones
+ Can be used by women who are breastfeeding
+ Available in three different sizes

Disadvantages

- Higher failure rate compared to other types of contraception
- Increased risk of recurrent urinary tract infections
- Increased risk of toxic shock syndrome
- Some women may have trouble inserting it correctly
- Gel must be reapplied after each act of intercourse
- A poor fit or silicone allergy will prevent some women from using the cap
- Does not protect against STIs

Diaphragm

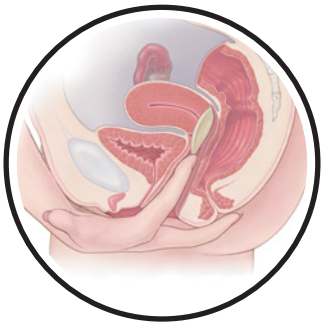
The diaphragm is a cap, made of latex or silicone and nylon, that covers the cervix and prevents sperm and from entering. The diaphragm should always be used with a gel, which is placed inside the diaphragm to immobilize or kill sperm.

How does it work?

- The diaphragm serves as a physical barrier between sperm and the cervix.
- It should always be used with a gel that immobilizes or kills sperm.
- The gel forms a physical cellulose barrier in front of the cervix and lowers the pH of the vaginal fluid, thereby inhibiting sperm motility.
- The diaphragm can be inserted into the vagina by the women using it up to 2 hours before having sex.
- The diaphragm should be left in the vagina for at least 6 hours after intercourse but should not remain in the vagina for more than 24 hours total.
- If there is repeated intercourse within the first 6 hours, more gel should be inserted with an application (the diaphragm should not be removed).

How effective is it?

- Data is lacking on the efficacy/effectiveness of the diaphragm with the gel that is currently available in Canada. Previous studies based on diaphragm use with spermicidal gel (no longer available in Canada) have shown that the diaphragm has a higher failure rate compared to other types of contraception.



Advantages

+ No hormones
+ Can be used by women who are breastfeeding
+ The diagphragm is one size and fits most women
+ Available at pharmacies without a prescription

Disadvantages

- Higher failure rate compared to other types of contraception
- Increased risk of recurrent urinary tract infections
- Increased risk of toxic shock syndrome
- Some women may have trouble inserting it correctly
- Water-based gel must be reapplied after each act of intercourse
- A latex or silicone allergy will prevent some women from using the diaphragm
- Does not protect against STIs

Spermicides

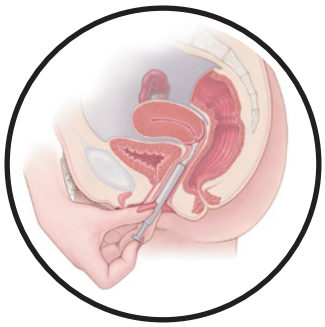
A chemical called nonoxynol-9 comes in the form of cream (only for use with diaphragms), gel, foam, film, or suppository. By inserting spermicide in front of the cervix, in the vagina, it destroys sperm on contact. Spermicides should be used along with another method of contraception, such as a condom, because alone they are not highly effective.

How does it work?

- Nonoxynol-9 is a surfactant that destroys the sperm cell membrane.
- Spermicides are available at pharmacies without a prescription, in the form of cream, gel, foam, film, or suppository.
- Spermicidal film must be inserted into the vagina at least 15 minutes before intercourse. It will melt and disperse. If more than 3 hours have passed before intercourse, another film must be inserted.
- Spermicidal foam is inserted into the vagina using an applicator. It is effective immediately and for up to one hour after insertion. It must be applied again for each act of intercourse.

How effective is it?

- Vaginal spermicides are among the least effective of all contraception options. Failure rates in the first year of use vary from 18% with perfect use to 28% with typical use.
- Spermicides should be used with another barrier method of contraception, such as a diaphragm or sponge.



Advantages

+ No hormones
+ When used with another barrier method, effectiveness increases
+ May also protect against bacterial infections and pelvic inflammatory disease

Disadvantages

- Not highly effective
- Using spermicide can be messy
- Must be inserted right before sex, because it's only effective for one hour
- May irritate the entranceof the vagina or the tip of the penis
- May increase the riskof HIV transmission
- Does not protect against STIs

Vasectomy

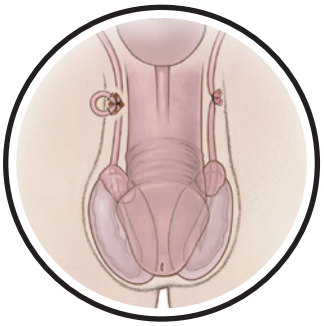
Male sterilization by vasectomy is a permanent surgical procedure to close or block the vas deferens (the tubes that carry sperm to the penis). Since it is permanent, this option is especially for those who have decided that their family is complete or that they don't want to have children. Compared to tubal ligation, vasectomy is safer, more effective, less expensive, and less invasive.

How does it work?

- In a vasectomy procedure, the vas deferens is partially removed or blocked, so that no sperm is released to fertilize the egg.
- Using local anaesthesia, a health professional will reach the vas deferens either by making a small incision on the skin of the scrotum (conventional vasectomy) or by making a small puncture on the skin of the scrotum (no-scalpel vasectomy).
- Another form of contraception is required until a semen analysis shows no sperm.

How effective is it?

- Although vasectomy is highly effective, failures do occur and can occur many years after the procedure. For every 100 women who rely on vasectomy for contraception, 2 women will become pregnant.



Advantages

+ Safe and highly effective
+ Long-lasting – permanent
+ Simple procedure, no follow up required (aside from sperm analysis)
+ Does not interfere with sex
+ No hormones
+ Discreet and cost-effective
+ Does not affect sexual function
+ Less invasive and fewer complications than female sterilization
+ No significant long-term side effects
+ Allows the male partner to assume some responsibility for contraception

Disadvantages

- Permanent and irreversible
- Risk of having regrets later on
- Not effective immediately –must use another contraception method for 3 months and do a follow-up sperm analysis that shows no sperm are present in the semen
- Possible short-term surgery-related complications: pain, bleeding, vasovagal reaction, infection at the incision site, bruising and swelling of the scrotum
- Rarely, the vas deferens could reconnect by themselves
- Does not protect against STIs

Tubal Ligation & Tubal Occlusion

Female sterilization by tubal ligation is a permanent surgical procedure where the two fallopian tubes, which transport the eggs from the ovaries to the uterus, get disconnected. Tubal ligation is considered permanent, because reversal is costly, difficult, and not guaranteed.

Female sterilization by tubal occlusion is a permanent procedure where a micro-insert is placed into each of the fallopian tubes. The micro-inserts work with your body to form a natural barrier that keeps sperm from reaching the eggs, preventing pregnancy.

How does it work?

- There are a few types of one-day surgeries/ procedures for female sterilization, which is performed by a gynaecologist:

Tubal ligation:

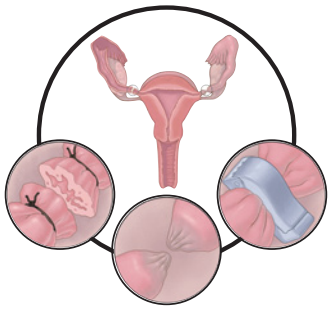
- Laparoscopy – using a general anesthesia, the doctor will make small incisions over the abdomen and either clip, burn or remove the fallopian tubes.
- Abdominally – during a caesarean section, a gynaecologist can access the fallopian tubes to either clip or remove them.

Tubal occlusion:

- Hysteroscopy – using only local anesthesia, a gynaecologist will put micro-inserts in your fallopian tubes through a vaginal approach. It takes 3 months for this method to be effective, at which time a confirmation test (e.g. x-ray, ultrasound) is done to make sure the tubes are fully blocked.

How effective is it?

- Although female sterilization is highly effective, failures do occur and can occur many years after the procedure. Failure rates vary on which technique is used.
- Be sure to review the latest data available with your health care provider before selecting the option that is most appropriate for your needs.



Advantages

+ Safe and highly effective
+ Long-lasting – permanent
+ Simple procedure
+ Does not interfere with sex
+ Does not affect sexual function
+ Discreet and cost-effective
+ No hormones
+ May reduce the risk of ovarian cancer (specific to tubal ligation)
+ No incisions or scars (specific to tubal occlusion with micro-inserts)
+ Can be safely performed in an outpatient setting (specific totubal occlusion with micro-inserts)

Disadvantages

- Permanent and irreversible
- Risk of having regrets later on
- Not effective immediately when micro-inserts are used – must use another contraception method for 3 months and do a follow-up confirmation test (e.g. x-ray, ultrasound) that shows if tubes are fully blocked (specific to tubal occlusion with micro-inserts)
- Possible short-term surgery-related complications: pain, bleeding, infection at the incision site, trauma to adjacent organs in the abdomen
- Possible procedure-related complications during and following the micro-inserts placement: pain, cramping and vaginal bleeding (specific to tubal occlusion with micro-inserts)
- Risk of ectopic pregnancy if failure occurs
- Rarely, risk of not being able to put in the micro-inserts or of them slipping out (specific to tubal occlusion with micro-inserts)
- Follow-up may be required (x-ray) (specific to tubal ligation)
- Rarely, the fallopian tubes could reconnect by themselves (specific to tubal ligation)
- Does not protect against STIs

Intrauterine Contraceptives (IUCs)

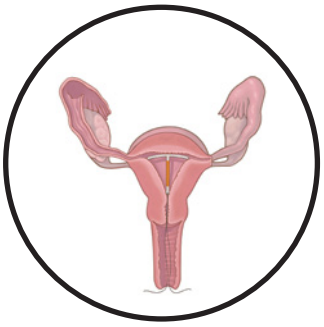
Intrauterine contraceptives (IUCs) are long-acting reversible contraceptive (LARC) methods that are used by over 150 million women worldwide. They are the most effective forms of birth control available. IUCs are small T-shaped devices that are inserted in the uterus by a health care professional in a clinic. There are two types of intrauterine contraception: the Copper intrauterine device (Cu-IUD) and the levonorgestrel-releasing intrauterine system (LNG-IUS), which contains a progestin.

How does it work?

- Cu-IUD: The presence of the foreign body, the IUC itself, creates a hostile environment leading to prevention of a pregnancy.
- The IUC is inserted by a health professional, in a clinic. The procedure is fairly simple, does not require anaesthesia, and only takes a few minutes.
- Depending on the device, the IUC can remain inserted for 3-10 years, before needing to be replaced.

How effective is it?

- **Typical use failure rate:** 8 of 1000 women during first year of use
- **Perfect use failure rate:** 8 of 1000 women during first year of use
- IUCs are one of the most effective methods of contraception available



Advantages

+ Highly effective
+ Reversible, safe and cost-effective
+ Long term, forgettable and invisible
+ May be suitable for women who cannot take estrogen
+ May be suitable for breastfeeding women
+ Reduces risk of endometrial cancer

Disadvantages

- Initially, irregular bleeding or spotting may occur
- Expensive
- Some pain or discomfort during insertion
- Rare risks with the insertion could include infection, perforation of the uterus, or expulsion of the IUC
- Does not protect against STIs

There are two types of intrauterine contraception: the Copper intrauterine device (Cu-IUD) and the levonorgestrel-releasing intrauterine system (LNG-IUS), which contains a progestin.

Copper Intrauterine Device (Cu-IUD)

Advantages

+ May be used as emergency contraception within 7 days of unprotected sex
+ Does not contain hormones

Disadvantages

- May increase menstrual flow and cramps
- May increase pain during periods

Natural Methods

Natural methods of birth control do not involve medications or devices to prevent pregnancy but rather rely on behavioural practices and/or making observations about a woman's body and menstrual cycle.

Topics Covered

Natural Methods

Fertility-Awareness Based Methods
Withdrawal (Coitus interruptus)
Lactational Amenorrhea Method (LAM)
Abstinence

Fertility-Awareness Based Methods

Ovulation is the time during a woman's menstrual cycle when she is most likely to get pregnant. Conception can occur when sexual intercourse takes place during the fertile window, from 5 days before to 1 day following ovulation. Fertility awareness-based methods (FABs) rely upon avoiding unprotected sex during this fertile window.

How does it work?

When using fertility awareness-based methods, the first thing to do is to become familiar with your menstrual cycle. There are several methods to determine when ovulation occurs:

- Measuring your basal body temperature every day and charting it on a special form;
- Checking your urine with an ovulation kit to measure the LH hormone;
- Observing changes in your cervical mucus;
- Using an app to follow the calendar method and track your menstrual cycles and ovulation;
- Or a combination of all of these methods.

Using these methods, you can calculate your fertile window and then avoid having sex during this time.

How effective is it?

24 out of every 100 couples who use fertility awareness-based methods each year will have a pregnancy, based on typical use.

Advantages

+ Safe
+ No side effects
+ Little cost
+ These methods are considered natural
+ No hormones
+ Allows you to learn about your own body

Disadvantages

- This method is the least effective in preventing pregnancy
- Requires a lot of practice to learn how to use this method correctly
- It can be tricky, because not all menstrual cycles are regular
- Can be challenging to avoid sex at certain times
- Requires both partners to be fully committed to using the method
- Does not protect against STIs

Lactational Amenorrhea Method (LAM)

Lactational Amenorrhea Method (LAM) is used by a woman who has just given birth and is exclusively breastfeeding. This method is highly effective for the first six months after childbirth, provided the woman breastfeeds the baby at least every four hours during the day and every six hours through the night, and that her menstrual period has not yet returned. After six months fertility may return at any time.

How does it work?

The hormones that trigger lactation (producing breastmilk) interfere with the release of the hormones that trigger ovulation. The more you nurse your baby, the less likely you are to ovulate.

How effective is it?

About 2 out of 100 women who use continuous breastfeeding will become pregnant in the first six months, based on typical use.

Advantages

+ It is a natural way to prevent pregnancy after giving birth
+ Safe and convenient
+ No cost
+ Breastfeeding has many other advantages for the mother and the baby.

Disadvantages

- Effectiveness is limited to only 6 months following childbirth
- May be difficult for some to exclusively breastfeed and not use any formula
- Breastfeeding may reduce vaginal lubrication when a woman is having sex
- Does not protect against STIs

Withdrawal (Coitus interruptus)

Withdrawal, also known as the pull out method, is an attempt to avoid having any sperm ejaculated into the vagina or on the vulva during sex. The male withdraws his penis from the vagina and away from the external genitalia of the female partner prior to ejaculation. Both partners must be in agreement on this method, and must be prepared to deal with an unplanned pregnancy, which can occur in 1 out of 5 users.

How does it work?

During sex, the male withdraws his penis from the vagina and away from the external genitalia of the female partner prior to ejaculation. It can be difficult and both partners have to be really careful because right before ejaculation, there is some fluid released from the penis that contains sperm.

How effective is it?

Withdrawal is a risky method. About 22 out of 100 women who use the withdrawal method will become pregnant in a year.

Advantages

+ It is considered a natural method
+ Safe and convenient
+ No cost
+ No hormones
+ It is immediate for partners who have entered into a sexual act without having an alternative method
+ No consultation or prescription required

Disadvantages

- It's not easy, it takes a lot of self-control
- It is a risky practice – even if a man pulls out in time, pregnancy can still happen
- Does not protect against STIs

Abstinence

Abstinence refers to not having sex. There are many forms of sexual abstinence, but in terms of using this as a method of contraception, it means avoiding vaginal intercourse. This type of abstinence can be effective for preventing unwanted pregnancy while allowing a couple to be involved in other forms of closeness, but it has a significant failure rate.

How does it work?

Choosing not to have sex may seem to be the most certain way to prevent pregnancy. It takes a very high level of self-control and communication between partners. If abstinence is used as a contraception method, both partners must make sure to avoid any contact between the penis and the vagina and also be cautious not to have the pre-ejaculate or ejaculate, come in close contact with the vagina.

How effective is it?

Total abstinence is theoretically 100% effective in preventing pregnancy. In practice, however, abstinence is not particularly effective. Abstinence education programs have not been found to reduce the risk of unplanned pregnancy, nor reduce STIs. This method is much more effective with older, mature couples and less effective when alcohol or drugs are involved and when there are strong sexual feelings between a couple.

Advantages

+ Theoretically the most effective method of contraception
+ Safe and no cost
+ No side effects

Disadvantages

- Can be challenging over time
- Partners are unprepared if a change of mind suddenly occurs
- Requires both partners to be fully committed to using the method