



All You Need to Know About Contraception



All women who are sexually active may fall pregnant. How easily this occurs depends on factors such as her age and the frequency of sexual intercourse. However, women may wish not to get pregnant for various reasons such as age, priorities, age gap between children, and other personal reasons.

Statistics have shown that 84% of couples who have regular sex without contraception will get pregnant within a year, and 92% within two years.

In developed countries, half of all pregnancies are unplanned. While many of these may be wanted pregnancies, those that are unwanted may call for difficult decisions to be made. This is preventable through the use of contraception.

How does pregnancy occur?

Pregnancy is the result of fertilisation of a woman's egg by a man's sperm. Each month, in a process called ovulation, an egg is released from a woman's ovary. This egg is picked up by the fallopian tube and travels towards the uterus (womb). The sperm that is deposited near or in the vagina (birth canal) during sex swims through the cervix or neck of the womb, into the womb and then into the fallopian tube. Fertilisation occurs in the tube and the resulting embryo travels into the womb to implant into its lining. At the time of ovulation, the womb lining is thickened in order to receive the embryo. Pregnancy occurs when the embryo has been implanted.

What factors should I consider when choosing a contraceptive method?

There are three areas to consider:

1. Personal factors

- Age
- Existing health conditions
- Social situation
- Cultural background

2. Reproductive status

- Whether you have a regular partner
- Frequency of sexual intercourse
- Reproductive goals

3. The method

- Effectiveness
- Side effects
- Long-term family planning goals
- Convenience



Contraceptive Methods

Subdermal Implant

What is it?

It is a rod the size of a matchstick that is inserted under the skin of the upper forearm, and can be felt just below the skin. It is inserted and removed in the clinic under local anaesthesia by a healthcare professional.



How does it work?

The implant releases a hormone known as progesterone which prevents ovulation, thickens the cervical mucus and thins out the lining of the womb.

Effectiveness

Fewer than one woman in 1,000 will get pregnant over three years.

Advantages

- It can last up to three years and can be removed at anytime, in the clinic.
- Insertion is quick and easy.
- It may help to ease menstrual pain.
- Menstruation usually becomes shorter, lighter or may stop. This may be helpful for women with heavy and/or painful menses.

Disadvantages

- Some women may experience a change in their bleeding pattern that they may not find acceptable.
- Some women may experience temporary hormonal side effects such as acne, decreased libido, mood swings or headaches.
- Its effectiveness may be affected by the use of some medications.
- Rarely, it may be inserted too deep into the arm and may require additional imaging to locate.
- It does not protect against sexually transmitted infections.

Other things to note

- It can be used by breastfeeding mothers.
- Upon insertion and removal, some bruising and minor scarring of the skin may occur.
- There is no delay in the return of fertility upon removal.

Copper Intrauterine Device (IUD)

What is it?

It is a T-shaped plastic device, about the size of a 50-cent coin, with a small amount of copper wrapped around its vertical stem. It is inserted into and removed from the womb by a healthcare professional in the clinic.

How does it work?

The device does not contain hormones. It prevents sperm from reaching the egg and changes the womb's lining so that implantation does not take place. It does not cause abortion.

Effectiveness

Fewer than one woman in 100 will get pregnant over five years.

Advantages

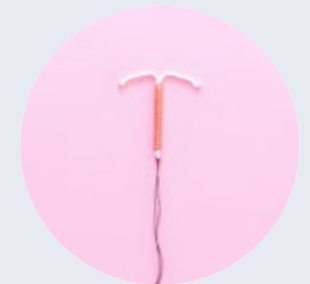
- It is effective immediately upon insertion and can last up to 10 years.
- It can be removed at anytime, in the clinic.
- It can be used in women who are not able to use hormonal contraceptives due to medical reasons.
- Its effectiveness is not affected by the use of other medications.

Disadvantages

- Some women may experience heavier, longer or more painful periods in the initial stages.
- There is a small chance of infection in the first 20 days after insertion.
- It does not protect against sexually transmitted infections.
- Insertion may be uncomfortable for some women.
- Rarely, it can be expelled or perforate the womb, in which case an additional procedure may be required for its removal.
- Should you get pregnant on the copper IUD, there is an increased risk that it may be an ectopic pregnancy.

Other things to note

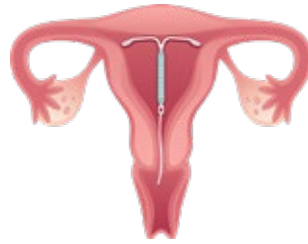
- It can be used by breastfeeding mothers.
- If the insertion is done on women aged 40 years old and above, it can remain in the womb until the woman has reached menopause.
- There is no delay in the return of fertility upon removal.



Intrauterine System (IUS)

What is it?

It is a T-shaped plastic device, about the size of a 50-cent coin, with a small hormone cylinder wrapped around its vertical stem. It is inserted into and removed from the womb by a healthcare professional in the clinic.



How does it work?

It releases a small amount of the hormone, progesterone slowly into the womb. This thickens the cervical mucus, making sperm transport more difficult and thins the womb's lining so that implantation does not take place. It does not cause abortions.

Effectiveness

Fewer than one woman in 100 will get pregnant over five years.

Advantages

- It can last up to five years and can be removed at anytime, in the clinic.
- Menstruation usually becomes shorter, lighter, or may stop. This may be helpful for women with heavy and/or painful menses.
- It can be used as part of hormone replacement therapy in women with menopausal symptoms.
- Its effectiveness is not affected by the use of other medications.

Disadvantages

- Bleeding patterns may be irregular for up to six months after insertion.
- There is a small chance of infection in the first 20 days after insertion.
- Some women may experience temporary hormonal side effects such as acne, decreased libido, mood swings, or headaches.
- Small ovarian cysts may develop.
- Rarely, it can be expelled or perforate the womb, in which case an additional procedure may need to be performed for its removal.
- It does not protect against sexually transmitted infections.
- Insertion may be uncomfortable for some women.
- Should you get pregnant on the IUS, there is an increased risk that it may be an ectopic pregnancy.

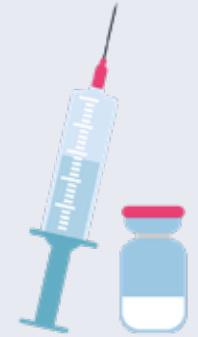
Other things to note

- It can be used by breastfeeding mothers.
- If the insertion is done on women aged 45 years old and above, it can remain in the womb until the woman has reached menopause.
- There is no delay in the return of fertility upon removal.

Progesterone-only Injection

What is it?

It is a form of hormonal contraception administered by injection into the buttock or deltoid muscle every 12 to 13 weeks. It is administered by a healthcare professional in the clinic.



How does it work?

It releases the hormone, progesterone which prevents ovulation, thickens the cervical mucus, making sperm transport more difficult and thins the womb's lining so that implantation does not take place. It does not cause abortion.

Effectiveness

Fewer than four women in 1,000 will get pregnant over two years.

Advantages

- It lasts up to 14 weeks.
- Menstruation usually becomes shorter, lighter or may stop. This may be helpful for women with heavy and/or painful menses. Women with menstrual problems caused by conditions such as endometriosis or fibroids may also benefit from its use.
- It may offer protection against ovarian or endometrial cancer.
- Its effectiveness is not affected by the use of other medications.

Disadvantages

- Bleeding patterns may become irregular.
- It can be associated with small loss of bone density with longer term usage (more than two years).
- It can be associated with weight gain in some individuals.
- Some women may experience temporary hormonal side effects such as acne, decreased libido, mood swings, or headaches.
- It does not protect against sexually transmitted infections.

Other things to note

- It can be used by breastfeeding mothers.
- Women aged 50 years and above are advised to use alternative forms of contraception.
- There can be a delay of up to one year in the return of fertility upon discontinuation.

Combined Pill

What is it?

It is a pill that is taken daily either on a 21-day cycle with a seven-day break, or a continuous 28-day cycle.

How does it work?

It contains two hormones - oestrogen and progestogen. This combination prevents ovulation, thickens the cervical mucus, making sperm transport more difficult and thins the womb's lining so that implantation does not take place.

Effectiveness

Fewer than one woman in 100 will get pregnant over one year.

Advantages

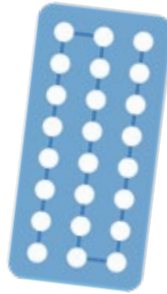
- Menstruation usually becomes more regular, lighter or may stop. This may be helpful for women with heavy and/or painful menses. Women with menstrual problems caused by conditions such as endometriosis or fibroids may also benefit from its use.
- It is suitable for women up to 50 years of age who are healthy and do not smoke.
- It may offer protection against ovarian, endometrial or colon cancer, as well as ovarian cysts.
- It may improve acne.
- It does not cause weight gain.

Disadvantages

- Breakthrough bleeding is common in the first few months of use.
- It cannot be used by women who have a BMI above 35, over 35 years of age who smoke, or have certain medical conditions.
- Its effectiveness may be affected by the use of some medications.
- Missed pills, vomiting or severe diarrhoea can affect its efficiency.
- There is a small risk of serious side effects such as blood clots in the legs/lungs, heart attack or stroke.
- Women who use the combined pill may have a small increased risk of breast cancer, but the overall risk of breast cancer remains very low.
- Some women may experience temporary hormonal side effects such as breast tenderness, nausea, mood swings, or headaches.
- It does not protect against sexually transmitted infections.

Other things to note

- A prescription is required.
- It needs to be taken around the same time daily. It will be considered a missed pill if it is taken more than 12 hours late.
- There is no delay in the return of fertility upon discontinuation.



Contraceptive Patch

What is it?

It is a sticky patch about the size of a large stamp that is changed weekly for three weeks, followed by a seven-day break, before being restarted.

How does it work?

It contains two hormones - oestrogen and progestogen. This combination prevents ovulation, thickens the cervical mucus, making sperm transport more difficult and thins the womb's lining so that implantation does not take place.

Effectiveness

Fewer than one woman in 100 will get pregnant over one year.

Advantages

- Menstruation usually becomes more regular, lighter or may stop. This may be helpful for women with heavy and/or painful menses. Women with menstrual problems caused by conditions such as endometriosis or fibroids may also benefit from its use.
- It is suitable for women up to 50 years of age who are healthy and do not smoke.
- It may offer protection against ovarian, endometrial or colon cancer, as well as ovarian cysts.
- The weekly application may be easier for some women to remember.
- Vomiting or diarrhoea does not affect its efficiency.
- It may improve acne.
- It does not cause weight gain.

Disadvantages

- Breakthrough bleeding is common in the first few months of use.
- It cannot be used for women who have a BMI above 35, over 35 years of age who smoke, or have certain medical conditions.
- There is a small risk of serious side effects, such as blood clots in the legs/lungs, heart attack or stroke.
- Women who use the contraceptive patch may have a small increased risk of breast cancer, but the overall risk of breast cancer remains very low.
- Some women may experience temporary hormonal side effects such as breast tenderness, nausea, mood swings, or headaches.
- It does not protect against sexually transmitted infections.
- It may cause skin irritation.
- Rarely, patch detachment may occur.
- Its effectiveness may be affected by the use of some medications.

Other things to note

- A prescription is required.
- It is visible on the skin.
- There is no delay in the return of fertility upon discontinuation.



Progestogen-only Pill

What is it?

It is a pill that is taken on a daily basis.

How does it work?

It contains the hormone, progestogen which thickens the cervical mucus, making sperm transport more difficult and thins the womb's lining so that implantation does not take place.

Effectiveness

Fewer than one woman in 100 will get pregnant over one year.

Advantages

- It can be used by most women, including those who are overweight, smoke or have medical issues.
- It does not cause weight gain.

Disadvantages

- Menstruation may become irregular or stop completely.
- Some women may experience temporary hormonal side effects such as breast tenderness, acne, mood swings, or headaches.
- Its effectiveness may be affected by the use of some medications.
- Missed pills, vomiting or severe diarrhoea can affect its efficiency.
- It may cause small ovarian cysts.
- It does not protect against sexually transmitted infections.

Other things to note

- A prescription is required.
- It can be used by breastfeeding mothers.
- It needs to be taken around the same time daily. It will be considered a missed pill if it is taken more than 3 hours late.
- There is no delay in the return of fertility upon discontinuation.

Female Sterilisation

What is it?

It is a surgical procedure where the fallopian tubes that connect the ovaries with the womb are blocked or cut.

How does it work?

The procedure prevents sperm from reaching and fertilising the egg.

Effectiveness

Fewer than one woman in 200 will get pregnant.

Advantages

- Contraception is no longer required after the procedure.
- It does not involve the use of hormones.
- It does not affect menstruation.
- It does not cause weight gain.

Disadvantages

- This procedure is carried out under general anaesthesia as a day procedure, where the patient is usually discharged on the same day.
- The operation carries some level of risk.
- Rarely, an ectopic pregnancy can happen.
- It does not protect against sexually transmitted infections.
- It is permanent and irreversible.

Other things to note

- This procedure is not suitable for those who may wish to have children in the future.
- Women under 30 years of age as well as women who opt for this procedure at delivery or abortion may be more likely to experience regret.





Male Sterilisation

- What is it?**
It is a surgical procedure where the tubes (vas deferens) that carry sperm from the testicles to the penis are cut or sealed.
- How does it work?**
The procedure prevents sperm from leaving the body.
- Effectiveness**
Fewer than one in 2,000 male sterilisations fails.
- Advantages**
 - It is usually performed under local anaesthesia.
 - Contraception is no longer required after a semen analysis confirms the absence of sperm.
- Disadvantages**
 - The operation carries some level of risk, including chronic testicular pain.
 - It does not take effect immediately.
 - Some level of discomfort is to be expected after the procedure.
 - It is permanent and not easily reversed.
- Other things to note**
 - This procedure is not suitable for those who may wish to have children in the future.
 - Contraception is still required until a semen analysis confirms the absence of sperm. This can take eight to 12 weeks.

Condom

- What is it?**
It is a piece of latex or plastic that is placed over the penis during sexual intercourse.
- How does it work?**
It prevents sperm from meeting the egg.
- Effectiveness**
Two in 100 women will get pregnant over one year.
- Advantages**
 - It is widely available and there is no need to consult a healthcare professional to use it.
 - There are no side effects.
 - It does not involve the use of hormones.
 - It protects against sexually transmitted infections.
- Disadvantages**
 - It may break or slip off.
 - The male partner will need to withdraw as soon as ejaculation has occurred and before the penis becomes flaccid to prevent semen spills.
- Other things to note**
 - Additional spermicide is not required or recommended.
 - It must be applied before the penis comes into contact with the vagina.
 - There are many different types of condoms and finding a suitable size and shape is important in reducing the risk of failure.
 - Oil-based products can damage the latex and increase the risk of breakage.
 - It does not affect fertility.



Lactational Amenorrhoea Method

- What is it?**
It is a natural birth control technique based on the fact that lactation causes amenorrhea (lack of menstruation).
- How does it work?**
It prevents ovulation if the following conditions are met:
 - Mothers who are fully breastfeeding i.e. no formula feeds or solids, less than 6 months after delivery and whose menstruation have not resumed.
- Effectiveness**
Two in 100 women will get pregnant.
- Advantages**
 - There is no need to consult a healthcare professional.
 - It does not involve the use of hormones.
 - There are no side effects.
- Disadvantages**
 - Efficacy is reduced once solids are introduced to the baby and breastfeeding is reduced.
 - It does not protect against sexually transmitted infections.

Natural Family Planning

- What is it?**
This method uses the tracking of fertility indicators such as basal body temperature, cervical mucus, and length of menstruation to identify the fertile and less fertile days of a woman's menstrual cycle.
- How does it work?**
The tracking of fertility indicators helps to identify the days a woman can have sex without contraception with a reduced risk of pregnancy.
- Effectiveness**
With accurate use, one woman in 100 will get pregnant over one year. Failure rates are lowest when multiple fertility indicators are tracked.
- Advantages**
 - You do not need to consult a healthcare professional.
 - It does not involve the use of hormones.
 - There are no side effects.
- Disadvantages**
 - A level of commitment is required to track the indicators daily.
 - It takes up to six cycles to accurately pinpoint the fertile and less fertile days.
 - There is a need to abstain or use other forms of contraception (e.g. condoms) during the fertile period in order to avoid pregnancy.
 - It does not protect against sexually transmitted infections.
- Other things to note**
 - Efficacy may be reduced for women whose cycles are irregular or less predictable (e.g. after childbirth, miscarriage, or abortion, breastfeeding, or during menopause) and during periods of illness, stress and travel.



Emergency Contraception

What is it?

Also known as the morning after pill, the pills are taken orally and are intended to disrupt or delay ovulation or fertilisation. There are two pill options: levonorgestrel and ulipristal acetate.

Alternatively, copper IUDs can also be used as a form of emergency contraception.



How does it work?

The pills release the hormone progestin which prevents or disrupts ovulation. They should be taken as soon as possible and within three to five days after unprotected sex.

The copper IUD prevents the egg and sperm from meeting. It can be inserted up to five days after unprotected sex or up to five days after the expected date of ovulation.

Effectiveness

Fewer than one woman in 100 will get pregnant.

Advantages

- Levonorgestrel can be used by most women up to three days after unprotected sex.
- Ulipristal acetate can be taken up to five days after unprotected sex.
- Side effects are usually minor and self-limiting.

Disadvantages

- A consultation with a healthcare professional is required.
- Breastfeeding should be avoided for one week after administration of ulipristal acetate.
- Some women may experience a disruption or delay in their next menstrual cycle.
- It does not protect against sexually transmitted infections.

Other things to note

- The pills contain a large dose of hormones and should not be used as a primary method of birth control.
- The pills do not end a pregnancy that has occurred.
- Women who have unprotected sex in the days and weeks after taking the pill are still at risk of becoming pregnant.
- There is no delay in the return of fertility upon discontinuation.

When can I stop using contraception?

If you are under 50 years of age, you should continue with contraception for two years from your last menstruation.

If you are 50 years and over, please continue with contraception for one year from your last menstruation.

Notes

About the National University Centre for Women and Children

National University Centre for Women and Children (NUWoC) is a national university specialist centre that aims to empower women, children and their families to lead healthier lives. We provide comprehensive medical and surgical services ranging from pre-conception to child and maternal health.

NUWoC comprises the Department of Obstetrics & Gynaecology (O&G) and Khoo Teck Puat – National University Children's Medical Institute (KTP-NUCMI) of National University Hospital. It focuses on the right-siting of appropriate services in the community and builds complementary services in National University Health System's (NUHS) centres of excellence

- Ng Teng Fong General Hospital and Alexandra Hospital.

Through a generous gift from the Estate of Khoo Teck Puat, KTP-NUCMI established an integrated outpatient facility with medical, diagnostic and rehabilitation services for children. We are also the only public specialist centre in Singapore that offers paediatric kidney and liver transplant programmes.

For more information about us, visit www.nuh.com.sg/NUWoC

Emergency (24-hr)

Location NUH Main Building, Zone F, Level 1
Contact +65 6772 5000

Women's Clinic – Emerald/Ruby

Location NUH Kent Ridge Wing, Zone D, Level 3, D03-06
Operating Hours 8.30am – 6pm (Mon to Thu), 8.30am – 5.30pm (Fri), 8.30am – 12.30pm (Sat)
Email appointment@nuhs.edu.sg

Women's Clinic – Sapphire

Location NUH Kent Ridge Wing, Zone D, Level 3, D03-03
Operating Hours 8.30am – 6pm (Mon to Thu), 8.30am – 5.30pm (Fri), 8.30am – 12.30pm (Sat)
Email appointment@nuhs.edu.sg

Women's Clinic – Jade [Former Clinic G]

Location NUH Kent Ridge Wing, Zone C, Level 3, C03-02
Operating Hours 8.30am – 6pm (Mon to Thu), 8.30am – 5.30pm (Fri)
Email appointment@nuhs.edu.sg

Fetal Care Centre

Location NUH Kent Ridge Wing, Zone D, Level 3, D03-04
Operating Hours 8am – 5.30pm (Mon to Thu), 8am – 5pm (Fri)
Email appointment@nuhs.edu.sg

Clinic for Human Reproduction

Location NUH Kent Ridge Wing, Zone D, Level 4, D04-02
Operating Hours 8am – 5pm (Mon to Fri), 8.30am – 12.30pm (Sat)

Women's Clinic @ JMC

Location Jurong Medical Centre, Level 2
Operating Hours 8.50am – 11.30pm (Tue & Thu), 2pm – 5pm (Mon & Fri)

Jurong Clinic for Women

Location 130 Jurong Gateway, #01-231
Operating Hours 9am – 12pm, 2pm – 5pm (Mon to Sat), 6pm – 9pm (Mon to Thu)
General Enquiry +65 6665 4277
Appointment Line +65 6908 2222
Email appointment@nuhs.edu.sg

GS @ NTFGH

Location Ng Teng Fong General Hospital, Tower A – Specialist Outpatient Clinics, Level 7
Operating Hours 8.30am – 5.30pm (Mon to Fri), 8.30am – 12.30pm (Sat)
Appointment Line +65 6908 2222
Email appointment@nuhs.edu.sg

Our Patient Care Institutions

National University Hospital

Ng Teng Fong General Hospital &

Jurong Community Hospital

Alexandra Hospital

National University Polyclinics

Jurong Medical Centre

National University Cancer Institute, Singapore

National University Heart Centre, Singapore

National University Centre for Oral Health, Singapore

NUHS Diagnostics

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OneNUHS Hotline: (65) 6908 2222

OneNUHS General Enquiries: contactus@nuhs.edu.sg

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