

Intrauterine Contraceptive devices (IUDs)

What are IUDs?

An intrauterine contraceptive device (IUD) is one of the 'fit and forget' long acting reversible contraceptive methods (LARC's). It is a small device which is fitted inside the uterus by a health practitioner, where it can remain for lengthy periods to prevent pregnancy.

Once inserted IUDs are not felt by the individual. IUDs have fine nylon threads attached to the lower end of them so that when fitted, the threads extend through the cervix (neck of the womb) into the upper vagina. These threads allow the individual to check that the IUD is still in place and allow for easy removal by a health practitioner.



Hormonal IUD

Mirena® and Kyleena® are the brand names for IUDs which release progestogen. They are T-shaped, made of plastic and steadily release small amounts of progestogen directly into the uterus. Kyleena® has a lower dose of progestogen and the device size is smaller than Mirena®. Both are effective for 5 years. Mirena is effective at reducing heavy menstrual bleeding.

Hormonal IUDs work by:

- thickening cervical mucus to prevent sperm penetration
- inhibiting sperm migration to the upper genital tract
- interfering with ovum survival
- causing endometrial changes including atrophy
 - preventing ovulation in some users (ovulation is more likely to be suppressed in early cycles than with longer duration of use).

Side effects:

Irregular and unpredictable bleeding and spotting in first 3-5 months is common.

Hormonal side effects are rare but may include, benign ovarian cysts, headaches, mood changes, weight gain, breast tenderness, loss of libido and acne. These are generally mild and improve with time.

Copper IUD

Copper IUDs are made of plastic and copper. There are 2 types of copper IUDs currently available in Australia, the Copper T and Copper Load. In some circumstances a copper IUD can be inserted up to 5 days after unprotected sex to prevent pregnancy occurring.

Copper IUDs work by:

- inhibiting sperm migration to the upper genital tract
- interfering with ovum survival
- preventing implantation

Side effects:

The frequency of periods should be the same, but blood loss may increase in its amount and the number of bleeding days. Some individuals experience more painful periods.

How effective is an IUD?

All types of IUDs are highly effective.

Of 500 individuals using a copper IUD for 5-10 years, 4 may experience a pregnancy, it is considered to be, 99.5% effective in preventing pregnancy.

The rate of pregnancy with a hormonal IUD is 1 in 500 individuals by the end of the first year. Mirena is 99.9% effective in preventing pregnancy and Kyleena is 99.7% effective.

Advantages of IUDs:

- long acting
- reversible with rapid return to usual fertility when removed
- highly effective
- relatively inexpensive
- may be useful for individuals with medical conditions that affect the absorption of oral medication
- The copper IUD provides an alternative to hormonal contraception
- Mirena and Kyleena have no oestrogen and a much lower dose of progesterone compared to other hormonal options (including minipill), so it's a safe alternative for women who can't have oestrogen, and can be considered for women who do not tolerate other forms of hormonal contraception

Disadvantages of IUDs:

- insertion and removal of the device can only be done by a trained Health Practitioner
- insertion into the uterus requires a procedure which some individuals may find quite uncomfortable
- possible changes in periods/bleeding patterns
- does not protect against sexually transmitted infections (STIs)

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Possible risks:

Abdominal pain

Following insertion, some individuals notice abdominal cramping pain for up to a few weeks.

Perforation

This is a rare but serious complication where an insertion instrument or the IUD device passes through the wall of the uterus during or shortly after insertion and may then require surgery. This may occur in about 1 per 500 insertions. The risk of perforation is further increased when the IUD is inserted in an individual who is breast feeding (six times increased risk) and is within 36 weeks postpartum (three times increased risk).

Expulsion

Sometimes the IUD may partially or completely fall out of the uterus. It occurs in about 5 per 100 insertions and is most common in the first few months following insertion. It is important to regularly check for the threads.

Pelvic Inflammatory disease (PID)

This is a rare complication of IUD insertion, most likely to occur in the first few weeks following the insertion procedure. It occurs in less than 1 per 300 insertions. PID may in some cases lead to infertility.

Miscarriage or ectopic pregnancy

It is very rare to become pregnant while using an IUD. If a pregnancy occurs however, there is an increased risk of a miscarriage or an ectopic pregnancy. An ectopic pregnancy is when the pregnancy develops outside of the uterus.

Ectopic pregnancy is a serious condition and can lead to reduced fertility. In the rare event of a pregnancy occurring with an IUD in place, it is important to see a doctor as soon as possible if you have any reason to suspect you are pregnant, e.g. if there is a change in your usual bleeding pattern or you have unusual abdominal or pelvic pain.

Who can use an IUD?

Most individuals can safely use an IUD. Your health practitioner will review the suitability of the method with you prior to insertion. In assessing your suitability, consideration is given to several important factors:

- current menstrual and bleeding patterns
- unexplained vaginal bleeding (this should be investigated before using an IUD)
- a recent history of a sexually transmitted infection or PID
- uterine or cervical abnormalities
- any history of breast, cervical or uterine cancer

The health practitioner will also review:

- previous pregnancies
- whether you need to have a Cervical Screening Test (CST) and other tests for infection prior to insertion
- any allergies including copper allergy
- the timing of insertion and pain relief needs for the insertion procedure

Prior to IUD insertion

Prior to insertion, a pelvic examination will be performed. Insertion of an IUD involves a procedure. Some individuals find insertion quite uncomfortable. This can be managed with the use of local anaesthetic but occasionally requires a sedative or general anaesthetic.

After the IUD insertion

You will be given details of follow up at the time of the insertion. Generally, you are asked to attend for a follow up visit after insertion and/or any time you have concerns.

You should contact your health practitioner if:

- you feel you may be pregnant. If using a copper IUD, you should contact a health practitioner if you miss a period.
- you experience pelvic pain or tenderness, fever or chills, offensive discharge, or deep pain with intercourse
- you cannot feel the strings or feel the strings have lengthened
- you (or your partner) can feel the hard stem of the IUD

Replacement/Removal

The IUD needs to be replaced with a new device every 5 or 10 years depending on which device is inserted.

It is important to keep a record of the date that replacement is due and to arrange for replacement no later than this date.

The IUD can easily be removed at any time. As fertility can return immediately after removal, it is important to consider alternative methods of contraception before the IUD is removed, if trying to avoid pregnancy.

What are the differences between copper and hormonal IUDs?

While there are many similarities, there are some differences between copper and hormonal IUDs.

Making a choice about which IUD is most suitable for you will be based on your personal preferences, requirements, and medical issues.