Intrauterine Device (IUD)

Brown Health Services Patient Education Series

What is an IUD?

It is a highly safe and effective form of long-acting reversible contraception (LARC). A small plastic T-shaped device is inserted into the uterus by a medical provider with special training. There are currently 3 types of IUDs available in the United States. The ParaGard is a plastic T wrapped with copper wire and may be left in place for up to 12 years. The Mirena is a plastic T which slowly releases a hormone called progesterone (levonorgestrel) and may be left in place for up to 5 years. Skyla was introduced in 2013. Like Mirena it releases levonorgestrel, but it is a little smaller, the dosage of hormone is lower, and the device can be left in place for up to 3 years. It was designed for insertion in younger women who have never given birth, but can be used in any woman. Below is a chart of the current IUD options available.

IUD	Length of time can be used
Paragard (no hormone)	10-12 years
Mirena 52 mg levonorgestrel	5-7 years
Skyla 13.5 mg levonorgestrel	3 years
Liletta 52 mg levonorgestrel	4 years
Kyleena 19.5 mg levonorgestrel	5 years

How does the IUD work?

It isn't precisely known how IUDs prevent pregnancy but the general idea is that they prevent the sperm from fertilizing ova (eggs). The IUD is a foreign body which creates an environment not hospitable to sperm. The Paragard releases copper ions which impair sperm function. In addition, the Mirena and Skyla release progestin which causes thickening of cervical mucus which blocks movement of the sperm, thins the lining of the uterus, and ovulation may be suppressed due to the systemic effect of the hormone.

How effective are IUDs?

All five IUDs prevent more than 99 out of 100 pregnancies in a year, making them one of the most highly effective methods of birth control.

Advantages

- Good safety record
- Alternative to birth control pills for women who can't take estrogen (history of blood clots or some types of migraines)
- Cost-effective over time
- Convenient and private
- Long-term protection which can be reversed easily
- Decreased bleeding and cramps with levonorgestrel types; can be used as a treatment for conditions which cause heavy bleeding (fibroid tumors or bleeding disorders)
- Can be placed at the end of a pregnancy (termination, miscarriage, or delivery)
- Paragard can be placed immediately after unprotected intercourse as a form of emergency contraception
- Decreased risk of endometrial cancer
- Decreased ectopic(tubal) pregnancy

Disadvantages

 Office procedure for insertion can be uncomfortable with cramping and pain immediately following insertion. Taking 4 tablets (800 mg) of ibuprofen that day may help.

- Increased menstrual cramps and bleeding for some women with the Paragard.
- Irregular bleeding with the Mirena and Skyla, particularly at first. Some women will stop having periods with these IUDs, which is safe, but may not be desirable for some women. Mirena has a higher rate of amenorrhea than Skyla.
- Very small risk of perforation of the uterus
- Expulsion of the IUD (2-10% in the first year: Increased in women less than 20, women who haven't had children, who are postpartum, or who have severe cramps or heavy bleeding; 30% chance of expulsion with previous expulsion.)
- Small risk of infection
- Progestin side effects in some women with Mirena or Skyla. Most of the progestin effect is local rather than systemic and is reduced over time. But some women experience breast changes, moodiness, and acne.
- Paragard has no hormonal benefits. Some women who have had decreased cramps, bleeding, or acne on oral contraceptives may find that these symptoms worsen.

Who should not use an IUD?

The choice to use an IUD is a decision you will make after discussion with your provider. The following are some conditions which may be contraindications to the insertion of an IUD.

- Pregnancy
- Active pelvic infection (cervicitis, PID)
- Allergy to copper or Wilson's disease (Paragard)
- Allergy to levonorgestrel (Mirena or Skyla)
- Unexplained vaginal bleeding
- Anemia due to heavy periods (Paragard)

Past concerns about IUDs

There are many lingering misconceptions about this form of birth control. One is that IUDs are dangerous, causing infection and infertility. A type of IUD called the Dalkon Shield was removed from the market in the 1980s. It caused serious infections due to a design flaw. Reviews of the medical literature point to a very low risk of infection or infertility among current IUD users. Another misconception is that the IUD is only for women who have given birth. We now know that the IUD can be inserted and used safely by women of all ages who have never given birth.

How do I get an IUD?

An IUD is inserted in a medical providers' office or at Planned Parenthood of RI. It is a brief procedure, taking less than ½ hour. We do not insert IUDs here at Health Services, but we can help you find a provider in the community. This procedure is covered by most insurances but you should check with your own insurance carrier first.