Intrauterine contraception (IUC), also referred to as an intrauterine device (IUD) or intrauterine system (IUS), is a long-acting, reversible contraceptive method that involves the placement of a small, flexible, T-shaped device inside the uterus.

"Set It & Forget It" - What types of IUC are available?

Four types of IUC are available in the US: three are LNG IUS (brand names Mirena®, Skyla™, and Liletta®), and the fourth is Copper T 380A (brand name ParaGard®), which is composed of copper and contains no hormones. All four are extremely effective at preventing pregnancy and are rapidly reversible. The table compares these four types of IUC available in the United States.

<table>
<thead>
<tr>
<th></th>
<th>Copper T 380A</th>
<th>LNG IUS</th>
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</thead>
<tbody>
<tr>
<td><strong>Brand Name</strong></td>
<td>ParaGard</td>
<td>Mirena</td>
</tr>
<tr>
<td><strong>Duration of approved use</strong></td>
<td>10 years</td>
<td>5 years</td>
</tr>
<tr>
<td><strong>Efficacy</strong></td>
<td>&gt; 99%</td>
<td>&gt; 99%</td>
</tr>
<tr>
<td><strong>Size of device</strong></td>
<td>32 mm horizontally and 36 mm vertically</td>
<td>32 mm both horizontally and vertically</td>
</tr>
<tr>
<td><strong>Most common side effects</strong></td>
<td>Menstrual bleeding alterations (heavier and longer period); Cramping after insertion and/or during periods; Painful sexual intercourse; Urticarial allergic skin reaction; Vaginitis; Device expulsion</td>
<td>Menstrual bleeding alterations (spotting and lighter periods); Cramping after insertion; Abdominal or pelvic pain; Ovarian cysts; Headache or migraine; Acne; Depressed or altered mood; Device expulsion</td>
</tr>
<tr>
<td><strong>Effect on bleeding patterns</strong></td>
<td>Often, increased amount and duration of bleeding; approximately 50% increase in blood loss</td>
<td>Unpredictable, with frequent light bleeding for the first three months. By three to six months, usually dramatically reduced bleeding. Amenorrhea in about one-third of users after 12 months</td>
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<tr>
<td><strong>Special Benefits</strong></td>
<td>Can be used as emergency contraception—prevents pregnancy when inserted up to 5 days after unprotected sex; Contains no hormones—good contraceptive choice for women who cannot or prefer not to use estrogen; Can use while breastfeeding; No pill to take</td>
<td>Can use while breastfeeding; No pill to take daily; May reduce period cramps and make period lighter; Good contraceptive choice for women who cannot or prefer not to use estrogen</td>
</tr>
</tbody>
</table>
How does IUC work?
A large body of evidence demonstrates that IUC prevents pregnancy by preventing fertilization.¹

- The **Copper T IUD** causes an immune response that creates a hostile environment for sperm, thereby preventing fertilization of an ovum.¹ It appears that the device also affects the function and viability of gametes, reducing the chance of survival of any embryo that is formed before it reaches the uterus.¹

- The **LNG IUS** also causes an inflammatory reaction that creates a hostile environment for sperm. In addition, it appears to thicken cervical mucus and inhibit sperm motility and function.²

How effective is IUC at preventing pregnancy?
The Copper T IUD is effective immediately after insertion and has a failure rate of 0.8 percent with typical use. Mirena is effective seven days after insertion and has a failure rate of 0.2 percent with typical use.³ Like Mirena, Skyla is effective seven days after insertion. The failure rate of Skyla in a clinical trial was 0.9 percent.⁴

Is IUC an option for nulliparous women?
IUC can be used safely in women who have not had a child. The use of IUC will not increase the risk of infertility in these women.

Does the use of IUC increase the risk of sexually transmitted infections, pelvic inflammatory disease, or infertility?
Patients should be counseled that IUC does not protect against sexually transmitted infections (STIs) or pelvic inflammatory disease (PID). IUC poses no increased risk of STIs (or PID-associated infertility) beyond the first month of use, during which there is a slight increased risk of infection due to bacteria introduced into the uterus during IUC insertion.¹⁴ Providers can consider obtaining gonorrhea and chlamydia cultures at the time of IUC insertion for women at risk of STIs. If results are positive, antibiotic treatment should be started, but there is usually no need to remove the device.¹⁵ Providers should encourage patients to use condoms for STI protection.

How can I obtain training on IUC insertion and removal?
Face-to-face training on IUC insertion and removal is available at locations across the country. Check your local chapter of reproductive health professional groups, such as the Association of Reproductive Health Professionals, the American Congress of Obstetricians and Gynecologists, or Planned Parenthood, for training opportunities. In addition, [Contraceptive Technology](#) offers training workshops at its conferences.
References


