Mirena®
Levonorgestrel-releasing Intrauterine System (IUS)/Device (IUD)/Contraceptive (IUC)

Patient Information

Mirena® has been safely used by women in Europe since 1991 and in the United States since 2000. Mirena® (levonorgestrel-releasing intrauterine system) is a small, ‘T’-shaped frame made of soft, flexible plastic and continuously releases a very small amount of levonorgestrel (one of the hormones commonly found in the Pill). The daily dose of levonorgestrel is about 10% that of an oral contraceptive containing 150 mcg levonorgestrel, and the mean plasma concentration is only 5%. Mirena® has an array of contraceptive actions: thickening of the cervical mucus, inhibiting sperm survival and motility, suppression of the endometrium, and for some women, anovulation due to systemic absorption of levonorgestrel. **One week after** Mirena® has been inserted; pregnancy is prevented for 5 full years. Less than 1/100 women become pregnant each year while using Mirena®.

Many negative ideas about the IUD were developed because of the Dalkon Shield; the Dalkon Shield was an IUD introduced in 1970 and recalled in 1975. It was associated with a significant incidence of pelvic inflammatory disease (PID) and infertility. The Dalkon Shield contained multifilament threads which were believed to transmit bacteria into the uterus and fallopian tubes. Today, two IUDs are approved for use in the United States; both are monofilament threads that minimized the risk for bacteria transmission.

**Advantages of Mirena®:**
- Highly effective contraceptive beginning 1 week after insertion
- Long-lasting (5 years, but can be removed earlier if desired)
- Convenient
- Low risk of side effects
- Well-liked by users
- Cost-effective
- Reversible (immediate return to fertility after removal)
- Decrease of menstrual blood loss (overall blood loss drops ~90%, 20% of women stop bleeding altogether)
- As part of hormone replacement therapy for menopausal women

**You should not use Mirena® if you:**
- might be pregnant
- currently have pelvic inflammatory disease (PID); have had PID in the past 3 months; have a history of recurrent pelvic infections
- have a history of a uterine infection after a pregnancy or abortion in the past 3 months
- have an infection in your cervix (cervicitis)
- have cancer of the uterus, cervix, or breast
- have unexplained vaginal or uterine bleeding
- are allergic to anything in Mirena®

**What is the process for obtaining an IUD?**
Mirena® is inserted and removed by a clinician during a clinic appointment. You will need at least 2 appointments. During the initial appointment your clinician will determine if you are a good candidate for Mirena® and a detailed consent will be reviewed, STD and pregnancy screen will be completed if indicated. Another appointment will be needed for the actual insertion.

**How is Mirena® placed in the uterus?**
Your healthcare provider will check the position of your uterus and then insert an instrument (“sound”) through the cervix to determine the length of your uterus, after which the IUD will be inserted. The exam, preparation and insertion will take an average of 30 minutes. Many people notice cramping (similar to severe menstrual cramps) when the sound instrument is inserted through the cervix. The intensity of the cramps varies according to each person’s pain tolerance and cervix sensitivity. Some women notice transient symptoms such as: feeling faint, nauseated, or dizzy.
How do I know if Mirena® is in place?
Once Mirena® has been inserted, your provider will teach you how to check for the two thin threads which extend from your cervix into the upper vaginal area. Locating the threads is an indication that the IUD is in place. The threads should be checked by you at least once per month. Do not pull on the threads, this may cause pain and may dislodge the IUD. If you cannot feel the threads, you must use condoms or abstain and return to the clinic for an exam to determine if the IUD is in place.

What side effects can I expect with Mirena®?
- All contraceptive methods have side effects. Mirena® side effects may include: irregular bleeding or spotting for the first 3-6 months; some women have heavier periods during this time. After this adjustment period, the number of bleeding days is likely to decrease and your periods may stop altogether. 20% of women stop having periods after 1 year of Mirena® use. About 10% of women using Mirena® develop cysts on the ovary; these cysts usually disappear within a month or two, though occasionally they can cause pain and may require surgery.
- Because the Mirena® contains the hormone levonorgestrel, other side effects may include: acne, breast tenderness, headaches or moodiness.
- Other side effects include: pain during sex, increased vaginal discharge.

Complications related to Mirena® use may include:
- Pelvic inflammatory disease (PID): The IUD itself does not increase the risk of PID, however PID may occur if infection is present during insertion or you are participating in sexual activity which increases your risk of a sexually transmitted infection (STI) exposure. Women with multiple sex partners or who are having sex with men who have other sex partners, have an increased risk of STI and PID. Condom use will reduce the risk of contracting an STI or PID.
- Difficult removals: Occasionally Mirena® may be hard to remove because it is lodged in the uterine wall. Surgery may be needed to remove Mirena®.
- Perforation: Perforation (Mirena® goes through the wall of the uterus) may rarely occur during IUD placement. If perforation occurs, the uterine wall often heals without surgery or complications.
- Expulsion: Mirena® may partially or completely fall out of the uterus (expulsion). Women who have never been pregnant are more likely to expel Mirena® than women who have been pregnant before.
- Pregnancy: Rarely, pregnancy occurs with the IUD in place. If you are pregnant with an IUD in place it is more likely to be an ectopic/tubal pregnancy. Early evaluation by your health care provider is necessary.

When should I call my healthcare provider?
- think you are pregnant
- have pelvic pain or pain during sex
- have unusual vaginal discharge
- have unexplained fever
- might be exposed to sexually transmitted infection (STI)
- develop very severe or migraine headaches
- have yellowing of the skin or whites of the eyes as these may be signs of liver problems
- have a stroke or heart attack
- cannot feel Mirena®’s threads or can feel the threads are much longer than usual
- can feel any other part of the Mirena® besides the threads (e.g. feel plastic at cervix)
- if you or your partner become HIV positive
- have severe or prolonged vaginal bleeding

The IUD does not protect against sexually transmitted diseases
The IUD is very effective in preventing pregnancy but it does not protect you from STIs. Using condoms will reduce your risk of STIs such as herpes, chlamydia, gonorrhea, HIV, etc.

Check our website: www.uhs.berkeley.edu.
If you experience problems with the IUD, www.uhs.berkeley.edu or call 642-2000 for an appointment, or call the Clinic Nurse at 643-7197.
If you have an urgent need, go the Urgent Care Clinic during clinic hours; after hours, if you have SHIP insurance, go to Alta Bates Medical Center. Call your medical provider if you do not have SHIP.