Copper-Bearing **Intrauterine Device**

This chapter describes primarily the TCu-380A intrauterine device (for the Levonorgestrel Intrauterine Device, see b. 157).

Key Points for Providers and Clients

- **Long-term pregnancy protection.** Shown to be very effective for 12 years, immediately reversible.
- Inserted into the uterus by a specifically trained provider.
- Little required of the client once the IUD is in place.
- **Bleeding changes are common.** Typically, longer and heavier bleeding and more cramps or pain during monthly bleeding, especially in the first 3 to 6 months.

What Is the Intrauterine Device?

- The copper-bearing intrauterine device (IUD) is a small, flexible plastic frame with copper sleeves or wire around it. A specifically trained health care provider inserts it into a woman's uterus through her vagina and cervix.
- Almost all types of IUDs have one or two strings, or threads, tied to them. The strings hang through the cervix into the vagina.
- Works primarily by causing a chemical change that damages sperm and egg before they can meet.

How Effective?

One of the most effective and long-lasting methods:

- Less than I pregnancy per 100 women using an IUD over the first year (6 to 8 per 1,000 women). This means that 992 to 994 of every 1,000 women using IUDs will not become pregnant.
- A small risk of pregnancy remains beyond the first year of use and continues as long as the woman is using the IUD.
 - Over 10 years of IUD use: About 2 pregnancies per 100 women



 Studies have found that the TCu-380A is effective for 12 years. The TCu-380A is labeled for up to 10 years of use, however. (Providers should follow program guidelines as to when the IUD should be removed.)

Return of fertility after IUD is removed: No delay

Protection against sexually transmitted infections (STIs): None

Side Effects, Health Benefits, Health Risks, and Complications

Side Effects (see Managing Any Problems, p. 149)

Some users report the following:

- Changes in bleeding patterns (especially in the first 3 to 6 months) including:
 - Prolonged and heavy monthly bleeding
 - Irregular bleeding
 - More cramps and pain during monthly bleeding

Known Health Benefits

Helps protect against:

Risks of pregnancy

May help protect against:

 Cancer of the lining of the uterus (endometrial cancer)

Known Health Risks

Uncommon:

 May contribute to anemia if a woman already has low iron blood stores before insertion and the IUD causes heavier monthly bleeding

Rare:

 Pelvic inflammatory disease (PID) may occur if the woman has chlamydia or gonorrhea at the time of IUD insertion

Complications

Rare:

- Puncturing (perforation) of the wall of the uterus by the IUD or an instrument used for insertion. Usually heals without treatment.
- Miscarriage, preterm birth, or infection in the rare case that the woman becomes pregnant with the IUD in place.

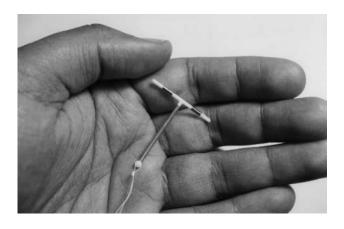
Correcting Misunderstandings (see also Questions and Answers, p. 154)

Intrauterine devices:

- Rarely lead to PID.
- Do not increase the risk of contracting STIs, including HIV.
- Do not increase the risk of miscarriage when a woman becomes pregnant after the IUD is removed.
- Do not make women infertile.
- Do not cause birth defects.
- Do not cause cancer.
- Do not move to the heart or brain.
- Do not cause discomfort or pain for the woman during sex.
- Substantially reduce the risk of ectopic pregnancy.

Why Some Women Say They Like the IUD

- Prevents pregnancy very effectively
- Is long-lasting
- Has no further costs after the IUD is inserted.
- Does not require the user to do anything once the IUD is inserted



Who Can and Cannot Use the **Copper-Bearing IUD**

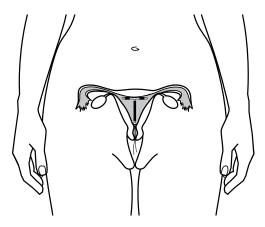
Safe and Suitable for Nearly All Women

Most women can use IUDs safely and effectively, including women who:

- Have or have not had children
- Are not married
- Are of any age, including adolescents and women over 40 years old
- Have just had an abortion or miscarriage (if no evidence of infection)
- Are breastfeeding
- Do hard physical work
- Have had ectopic pregnancy
- Have had pelvic inflammatory disease (PID)
- Have vaginal infections
- Have anemia
- Are infected with HIV or on antiretroviral therapy and doing well (see IUDs for Women With HIV, p. 138)

Women can begin using IUDs:

- Without STI testing
- Without an HIV test
- Without any blood tests or other routine laboratory tests
- Without cervical cancer screening
- Without a breast examination



Medical Eligibility Criteria for

Copper-Bearing IUDs

Ask the client the questions below about known medical conditions. If she answers "no" to all of the questions, then she can have an IUD inserted if she wants. If she answers "yes" to a question, follow the instructions. In some cases she can still have an IUD inserted. These questions also apply to the levonorgestrel IUD (see p. 160).

- Did you give birth more than 48 hours ago but less than 4 weeks ago?
- □ NO □ YES Delay inserting an IUD until 4 or more weeks after childbirth (see Soon after childbirth, p. 140).
- 2. Do you have an infection following childbirth or abortion?
- □ NO □ YES If she currently has infection of the reproductive organs during the first 6 weeks after childbirth (puerperal sepsis) or she just had an abortion-related infection in the uterus (septic abortion), do not insert the IUD. Treat or refer if she is not already receiving care. Help her choose another method or offer a backup method.* After treatment, re-evaluate for IUD use.
- 3. Do you have vaginal bleeding that is unusual for you?
- ☐ NO ☐ YES If she has unexplained vaginal bleeding that suggests pregnancy or an underlying medical condition, use of an IUD could make diagnosis and monitoring of any treatment more difficult. Help her choose a method to use while being evaluated and treated (but not a hormonal IUD, progestinonly injectables, or implants). After treatment, re-evaluate for IUD use.
- 4. Do you have any female conditions or problems (gynecologic or obstetric conditions or problems), such as genital cancer or pelvic tuberculosis? If so, what problems?
- □ NO □ YES Known current cervical, endometrial, or ovarian cancer: gestational trophoblast disease: pelvic tuberculosis: Do not insert an IUD. Treat or refer for care if she is not already receiving care. Help her choose another method. In case of pelvic tuberculosis, re-evaluate for IUD use after treatment.

(Continued on next page)

^{*} Backup methods include abstinence, male and female condoms, spermicides, and withdrawal. Tell her that spermicides and withdrawal are the least effective contraceptive methods. If possible, give her condoms.

Medical Eligibility Criteria for Copper-Bearing IUDs (continued)

5. Do you have AIDS?

□ NO □ YES Do not insert an IUD if she has AIDS unless she is clinically well on antiretroviral therapy. If she is infected with HIV but does not have AIDS, she can use an IUD. If a woman who has an IUD in place develops AIDS, she can keep the IUD (see IUDs for Women With HIV, p. 138).

6. Assess whether she is at very high individual risk for gonorrhea or chlamydia.

Women who have a very high individual likelihood of exposure to gonorrhea or chlamydia should not have an IUD inserted (see Assessing Women for Risk of Sexually Transmitted Infections, p. 138).

7. Assess whether the client might be pregnant.

Ask the client the questions in the pregnancy checklist (see p. 372). If she answers "yes" to any question, she can have an IUD inserted (see also When to Start, p. 140).

For complete classifications, see Medical Eligibility Criteria for Contraceptive Use, p. 324. Be sure to explain the health benefits and risks and the side effects of the method that the client will use. Also, point out any conditions that would make the method inadvisable, when relevant to the client.

Using Clinical Judgment in Special Cases

Usually, a woman with any of the conditions listed below should not have an IUD inserted. In special circumstances, however, when other, more appropriate methods are not available or acceptable to her, a qualified provider who can carefully assess a specific woman's condition and situation may decide that she can use an IUD. The provider needs to consider the severity of her condition and, for most conditions, whether she will have access to follow-up.

- Between 48 hours and 4 weeks since giving birth
- Noncancerous (benign) gestational trophoblast disease
- Current ovarian cancer
- Is at very high individual risk for gonorrhea or chlamydia at the time of insertion
- Has AIDS and is not on antiretroviral therapy and clinically well

Screening Questions for Pelvic Examination Before IUD Insertion

When performing the pelvic examination, asking yourself the questions below helps you check for signs of conditions that would rule out IUD insertion. If the answer to all of the questions is "no," then the client can have an IUD inserted. If the answer to any question is "yes," do not insert an IUD.

For questions I through 5, if the answer is "yes," refer for diagnosis and treatment as appropriate. Help her choose another method and counsel her about condom use if she faces any risk of sexually transmitted infections (STIs). Give her condoms, if possible. If STI or pelvic inflammatory disease (PID) is confirmed and she still wants an IUD, it may be inserted as soon as she finishes treatment, if she is not at risk for reinfection before insertion.

I. Is t	there any type of ulcer on the vulva, vagina, or cervix?
□ NO	☐ YES Possible STI.
	es the client feel pain in her lower abdomen when you ove the cervix?
□ NO	☐ YES Possible PID.
	there tenderness in the uterus, ovaries, or fallopian oes (adnexal tenderness)?
□ NO	☐ YES Possible PID.
4. Is t	here a purulent cervical discharge?
□ NO	☐ YES Possible STI or PID.
5. Do	es the cervix bleed easily when touched?
□ NO	☐ YES Possible STI or cervical cancer.
	there an anatomical abnormality of the uterine cavity at will prevent correct IUD insertion?
□ NO	☐ YES If an anatomical abnormality distorts the uterine cavity, proper IUD placement may not be possible. Help her choose another method.
	ere you unable to determine the size and/or position the uterus?
□ NO	☐ YES Determining the size and position of the uterus before IUD insertion is essential to ensure high placement of the IUD and to minimize risk of perforation. If size and position cannot be determined, do not insert an IUD. Help her choose another method.

Intrauterine Devices for Women With HIV

- Women who are at risk of HIV or are infected with HIV can safely have the IUD inserted.
- Women who have AIDS, are on antiretroviral (ARV) therapy, and are clinically well can safely have the IUD inserted.
- Women who have AIDS but who are not on ARV therapy or who are not clinically well should not have the IUD inserted.
- If a woman develops AIDS while she has an IUD in place, it does not need to be removed.
- IUD users with AIDS should be monitored for pelvic inflammatory disease.
- Urge women to use condoms along with the IUD. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs.

Assessing Women for Risk of **Sexually Transmitted Infections**

A woman who has gonorrhea or chlamydia now should not have an IUD inserted. Having these sexually transmitted infections (STIs) at insertion may increase the risk of pelvic inflammatory disease. These STIs may be difficult to diagnose clinically, however, and reliable laboratory tests are time-consuming, expensive, and often unavailable. Without clinical signs or symptoms and without laboratory testing, the only indication that a woman might already have an STI is whether her behavior or her situation places her at very high individual risk of infection. If this risk for the individual client is very high, she generally should not have an IUD inserted.‡ (Local STI prevalence rates are not a basis for judging individual risk.)

There is no universal set of questions that will determine if a woman is at very high individual risk for gonorrhea and chlamydia. Instead of asking questions, providers can discuss with the client the personal behaviors and the situations in their community that are most likely to expose women to STIs.

Steps to take:

1. Tell the client that a woman who faces a very high individual risk of some STIs usually should not have an IUD inserted.

[‡] In contrast, if a *current* IUD user's situation changes and she finds herself at very high individual risk for gonorrhea or chlamydia, she can keep using her IUD.

2. Ask the woman to consider her own risk and to think about whether she might have an STI. A woman is often the best judge of her own risk.§ She does not have to tell the provider about her behavior or her partner's behavior. Providers can explain possibly risky situations that may place a woman at very high individual risk. The client can think about whether such situations occurred recently (in the past 3 months or so). If so, she may have an STI now and may want to choose a method other than the IUD.

Possibly risky situations include:

- A sexual partner has STI symptoms such as pus coming from his penis, pain or burning during urination, or an open sore in the genital area
- She or a sexual partner was diagnosed with an STI recently
- She has had more than one sexual partner recently
- She has a sexual partner who has had other partners recently

All of these situations pose less risk if a woman or her partner uses condoms consistently and correctly.

Also, a provider can mention other high-risk situations that exist locally.

3. Ask if she thinks she is a good candidate for an IUD or would like to consider other contraceptive methods. If, after considering her individual risk, she thinks she is a good candidate, and she is eligible, provide her with an IUD. If she wants to consider other methods or if you have strong reason to believe that the client is at very high individual risk of infection, help her choose another method.

Note: If she still wants the IUD while at very high individual risk of gonorrhea and chlamydia, and reliable testing is available, a woman who tests negative can have an IUD inserted. A woman who tests positive can have an IUD inserted as soon as she finishes treatment, if she is not at risk of reinfection by the time of insertion.

In special circumstances, if other, more appropriate methods are not available or not acceptable, a health care provider who can carefully assess a specific woman's condition and situation may decide that a woman at very high individual risk can have the IUD inserted even if STI testing is not available. (Depending on the circumstances, the provider may consider presumptively treating her with a full curative dose of antibiotics effective against both gonorrhea and chlamydia and inserting the IUD after she finishes treatment.) Whether or not she receives presumptive treatment, the provider should be sure that the client can return for the follow-up visit, will be carefully checked for infection, and will be treated immediately if needed. She should be asked to return at once if she develops a fever and either lower abdominal pain or abnormal vaginal discharge or both.

[§] Any woman who thinks she might have an STI should seek care immediately.

Providing the Intrauterine Device

When to Start

IMPORTANT: In many cases a woman can start the IUD any time it is reasonably certain she is not pregnant. To be reasonably certain she is not pregnant, use the Pregnancy Checklist (see p. 372).

When to start
Any time of the month
 If she is starting within 12 days after the start of her monthly bleeding, no need for a backup method.
 If it is more than 12 days after the start of her monthly bleeding, she can have the IUD inserted any time it is reasonably certain she is not pregnant. No need for a backup method.
 Immediately, if she has been using the method consistently and correctly or if it is otherwise reasonably certain she is not pregnant. No need to wait for her next monthly bleeding. No need for a backup method.
 If she is switching from injectables, she can have the IUD inserted when the next injection would have been given. No need for a backup method.
 Any time within 48 hours after giving birth (requires a provider with specific training in postpartum insertion).
 If it is more than 48 hours after giving birth, delay IUD insertion until 4 weeks or more after giving birth.
 If her monthly bleeding has not returned, she can have the IUD inserted any time between 4 weeks and 6 months after giving birth. No need for a backup method.
 If her monthly bleeding has returned, she can have the IUD inserted as advised for women having menstrual cycles (see above).

Fully or nearly fully breastfeeding (continued)

More than 6 months after giving birth

- If her monthly bleeding has not returned, she can have the IUD inserted any time it is reasonably certain she is not pregnant. No need for a backup method.
- If her monthly bleeding has returned, she can have the IUD inserted as advised for women having menstrual cycles (see previous page).

Partially breastfeeding or not breastfeeding

More than 4 weeks after giving birth

- If her monthly bleeding has not returned, she can have the IUD inserted if it can be determined that she is not pregnant. No need for a backup method.
- If her monthly bleeding has returned, she can have the IUD inserted as advised for women having menstrual cycles (see previous page).

No monthly bleeding (not related to childbirth or breastfeeding)

 Any time if it can be determined that she is not pregnant. No need for a backup method.

After miscarriage or abortion

- Immediately, if the IUD is inserted within 12 days after first- or second-trimester abortion or miscarriage and if no infection is present. No need for a backup method.
- If it is more than 12 days after first- or secondtrimester miscarriage or abortion and no infection is present, she can have the IUD inserted any time it is reasonably certain she is not pregnant. No need for a backup method.
- If infection is present, treat or refer and help the client choose another method. If she still wants the IUD, it can be inserted after the infection has completely cleared.
- IUD insertion after second-trimester abortion or miscarriage requires specific training. If not specifically trained, delay insertion until at least 4 weeks after miscarriage or abortion.

Woman's situation When to start

For emergency contraception

- Within 5 days after unprotected sex.
- When the time of ovulation can be estimated. she can have an IUD inserted up to 5 days after ovulation. Sometimes this may be more than 5 days after unprotected sex.

After taking emergency contraceptive pills (ECPs)

• The IUD can be inserted on the same day that she takes the ECPs. No need for a backup method.

Preventing Infection at IUD Insertion

Proper insertion technique can help prevent many problems, such as infection, expulsion, and perforation.

- Follow proper infection-prevention procedures.
- Use high-level disinfected or sterile instruments. High-level disinfect by boiling, steaming, or soaking them in disinfectant chemicals.
- Use a new, presterilized IUD that is packaged with its inserter.
- The "no-touch" insertion technique is best. This includes not letting the loaded IUD or uterine sound touch any unsterile surfaces (for example, hands, speculum, vagina, table top). The no-touch technique involves:
 - Loading the IUD into the inserter while the IUD is still in the sterile package, to avoid touching the IUD directly
 - Cleaning the cervix thoroughly with antiseptic before IUD insertion
 - Being careful not to touch the vaginal wall or speculum blades with the uterine sound or loaded IUD inserter
 - Passing both the uterine sound and the loaded IUD inserter only once each through the cervical canal



Giving Advice on Side Effects

IMPORTANT: Thorough counseling about bleeding changes must come before IUD insertion. Counseling about bleeding changes may be the most important help a woman needs to keep using the method.

Describe the most common side effects

- Changes in her bleeding pattern:
 - Prolonged and heavy monthly bleeding
 - Irregular bleeding
 - More cramps and pain during monthly bleeding

Explain about these side effects

- Bleeding changes are not signs of illness.
- Usually become less after the first several months after insertion.
- Client can come back for help if problems bother her.

Inserting the IUD

Talk with the client before the procedure

- Explain the insertion procedure (see p. 144).
- Show her the speculum, tenaculum, and the IUD and inserter in the package.
- Tell her that she will experience some discomfort or cramping during the procedure, and that this is to be expected.
- Ask her to tell you any time that she feels discomfort or pain.
- Ibuprofen (200–400 mg), paracetamol (325– 1000 mg), or other pain reliever may be given 30 minutes before insertion to help reduce cramping and pain. Do not give aspirin, which slows blood clotting.

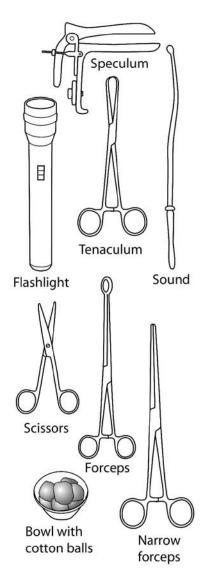
Talk with the client during the procedure

- Tell her what is happening, step by step, and reassure her.
- Alert her before a step that may cause pain or might startle her.
- Ask from time to time if she is feeling pain.

Explaining the Insertion Procedure

A woman who has chosen the IUD needs to know what will happen during insertion. The following description can help explain the procedure to her. Learning IUD insertion requires training and practice under direct supervision. Therefore, this description is a summary and not detailed instructions.

- 1. The provider conducts a pelvic examination to assess eligibility (see Screening Questions for Pelvic Examination Before IUD Insertion, p. 137). The provider first does the bimanual examination and then inserts a speculum into the vagina to inspect the cervix.
- 2. The provider cleans the cervix and vagina with appropriate antiseptic.
- **3.** The provider slowly inserts the tenaculum through the speculum and closes the tenaculum just enough to gently hold the cervix and uterus steady.
- 4. The provider slowly and gently passes the uterine sound through the cervix to measure the depth and position of the uterus.
- 5. The provider loads the IUD into the inserter while both are still in the unopened sterile package.
- 6. The provider slowly and gently inserts the IUD and removes the inserter.
- The provider cuts the strings on the IUD, leaving about 3 centimeters hanging out of the cervix.
- **8.** After the insertion, the woman rests. She remains on the examination table until she feels ready to get dressed.



Supporting the User

Giving Specific Instructions

Expect cramping and pain

- She can expect some cramping and pain for a few days after insertion.
- Suggest ibuprofen (200–400 mg), paracetamol (325-1000 mg), or other pain reliever as needed.
- Also, she can expect some bleeding or spotting immediately after insertion. This may continue for 3 to 6 months.

She can check the strings

 If she wants, she can check her IUD strings from time to time, especially in the first few months and after monthly bleeding, to confirm that her IUD is still in place (see Question 10, p. 156).

Length of pregnancy protection

- Discuss how to remember the date to return.
- Give each woman the following information in writing on a reminder card, like the one shown below, if possible, and explain:
 - The type of IUD she has
 - Date of IUD insertion
 - Month and year when IUD will need to be removed or replaced
 - Where to go if she has problems or questions with her IUD

IUD Reminder Card			
Client's name:			
Type of IUD:			
Date inserted:			
Remove or replace by:	Month: Year:		
If you have any problems or questions, go to:			
(name and location of facility)			

Follow-up visit

 A follow-up visit after her first monthly bleeding or 3 to 6 weeks after IUD insertion is recommended. No woman should be denied an IUD, however, because follow-up would be difficult or not possible.

"Come Back Any Time": Reasons to Return

Assure every client that she is welcome to come back any time—for example, if she has problems, questions, or wants another method; or she has a major change in health status. Also if:

- She thinks the IUD might be out of place. For example, she:
 - Feels the strings are missing.
 - Feels the hard plastic of an IUD that has partially come out.
- She has symptoms of pelvic inflammatory disease (increasing or severe pain in the lower abdomen, pain during sex, unusual vaginal discharge, fever, chills, nausea, and/or vomiting), especially in the first 20 days after insertion.
- She thinks she might be pregnant.

General health advice: Anyone who suddenly feels that something is seriously wrong with her health should immediately seek medical care from a nurse or doctor. Her contraceptive method is most likely not the cause of the condition, but she should tell the nurse or doctor what method she is using.

Helping Continuing Users

Post-Insertion Follow-Up Visit (3 to 6 Weeks)

- 1. Ask how the client is doing with the method and whether she is satisfied. Ask if she has any questions or anything to discuss.
- Ask especially if she is concerned about bleeding changes. Give her any information or help that she needs (see Managing Any Problems, p. 149).
- 3. Ask her if she has:
 - Increasing or severe abdominal pain or pain during sex or urination
 - Unusual vaginal discharge
 - Fever or chills
 - Signs or symptoms of pregnancy (see p. 371 for common signs and symptoms)
 - Not been able to feel strings (if she has checked them)
 - Felt the hard plastic of an IUD that has partially come out

- 4. A routine pelvic examination at the follow-up visit is not required. It may be appropriate in some settings or for some clients, however. Conduct a pelvic examination particularly if the client's answers lead you to suspect:
 - A sexually transmitted infection or pelvic inflammatory disease
 - The IUD has partially or completely come out

Any Visit

- 1. Ask how the client is doing with the method and about bleeding changes (see Post-Insertion Follow-Up Visit, Items 1 and 2, previous page).
- 2. Ask a long-term client if she has had any new health problems. Address problems as appropriate. For new health problems that may require switching methods, see p. 153.
- 3. Ask a long-term client about major life changes that may affect her needs—particularly plans for having children and STI/HIV risk. Follow up as needed.
- 4. Remind her how much longer the IUD will protect her from pregnancy.

Removing the Intrauterine Device

IMPORTANT: Providers must not refuse or delay when a woman asks to have her IUD removed, whatever her reason, whether it is personal or medical. All staff must understand and agree that she must not be pressured or forced to continue using the IUD.

If a woman is finding side effects difficult to tolerate, first discuss the problems she is having (see Managing Any Problems, p. 149). See if she would rather try to manage the problem or to have the IUD removed immediately.

Removing an IUD is usually simple. It can be done any time of the month. Removal may be easier during monthly bleeding, when the cervix is naturally softened. In cases of uterine perforation or if removal is not easy, refer the woman to an experienced clinician who can use an appropriate removal technique.

Explaining the Removal Procedure

Before removing the IUD, explain what will happen during removal:

- 1. The provider inserts a speculum to see the cervix and IUD strings and carefully cleans the cervix and vagina with an antiseptic solution, such as iodine.
- 2. The provider asks the woman to take slow, deep breaths and to relax. The woman should say if she feels pain during the procedure.
- 3. Using narrow forceps, the provider pulls the IUD strings slowly and gently until the IUD comes completely out of the cervix.

Switching From an IUD to Another Method

These guidelines ensure that the client is protected from pregnancy without interruption when switching from a copper-bearing IUD or a hormonal IUD to another method. See also When to Start for each method.

Switching to

When to start

Combined oral contraceptives (COCs), progestin-only pills (POPs), progestin-only injectables, monthly injectables, combined patch, combined vaginal ring, or implants

- If starting during the first 7 days of monthly bleeding (first 5 days for COCs and POPs), start the hormonal method now and remove the IUD. No need for a backup method.
- If starting after the first 7 days of monthly bleeding (after the first 5 days for COCs and POPs) and she has had sex since her last monthly bleeding, start the hormonal method now. It is recommended that the IUD be kept in place until her next monthly bleeding.
- If starting after the first 7 days of monthly bleeding (after the first 5 days for COCs and POPs) and she has not had sex since her last monthly bleeding, the IUD can stay in place and be removed during her next monthly bleeding, or the IUD can be removed and she can use a backup method for the next 7 days (2 days for POPs).

Male or female condoms, spermicides, diaphragms, cervical caps, or withdrawal

Immediately the next time she has sex after the IUD is removed.

Fertility awareness methods

Immediately after the IUD is removed.

Female sterilization

- If starting during the first 7 days of monthly bleeding, remove the IUD and perform the female sterilization procedure. No need for a backup method.
- If starting after the first 7 days of monthly bleeding, perform the sterilization procedure. The IUD can be kept in place until her follow-up visit or her next monthly bleeding. If a follow-up visit is not possible, remove the IUD at the time of sterilization. No need for a backup method.

Switching to When to start Any time **Vasectomy** The woman can keep the IUD for 3 months after her partner's vasectomy to keep preventing pregnancy until the vasectomy is fully effective.

Managing Any Problems

Problems Reported As Side Effects or Complications

May or may not be due to the method.

- Problems with side effects or complications affect women's satisfaction and use of IUDs. They deserve the provider's attention. If the client reports any side effects or complications, listen to her concerns, give her advice, and, if appropriate, treat.
- Offer to help her choose another method—now, if she wishes, or if problems cannot be overcome.

Heavy or prolonged bleeding (twice as much as usual or longer than 8 days)

- Reassure her that many women using IUDs experience heavy or prolonged bleeding. It is generally not harmful and usually becomes less or stops after the first several months of use.
- For modest short-term relief she can try (one at a time):
 - Tranexamic acid (1500 mg) 3 times daily for 3 days, then 1000 mg once daily for 2 days, beginning when heavy bleeding starts.
 - Nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (400 mg) or indomethacin (25 mg) 2 times daily after meals for 5 days, beginning when heavy bleeding starts. Other NSAIDs—except aspirin—also may provide some relief of heavy or prolonged bleeding.
- Provide iron tablets if possible and tell her it is important for her to eat foods containing iron (see Possible anemia, p. 150).
- If heavy or prolonged bleeding continues or starts after several months of normal bleeding or long after the IUD was inserted, or if you suspect that something may be wrong for other reasons, consider underlying conditions unrelated to method use (see Unexplained vaginal bleeding, p. 153).

Irregular bleeding (bleeding at unexpected times that bothers the client)

 Reassure her that many women using IUDs experience irregular bleeding. It is not harmful and usually becomes less or stops after the first several months of use.

- For modest short-term relief she can try NSAIDs such as ibuprofen (400 mg) or indomethacin (25 mg) 2 times daily after meals for 5 days, beginning when irregular bleeding starts.
- If irregular bleeding continues or starts after several months of normal bleeding, or you suspect that something may be wrong for other reasons, consider underlying conditions unrelated to method use (see Unexplained vaginal bleeding, p. 153).

Cramping and pain

- She can expect some cramping and pain for the first day or two after IUD insertion.
- Explain that cramping also is common in the first 3 to 6 months of IUD use, particularly during monthly bleeding. Generally, this is not harmful and usually decreases over time.
- Suggest aspirin (325–650 mg), ibuprofen (200–400 mg), paracetamol (325–1000 mg), or other pain reliever. If she also has heavy or prolonged bleeding, aspirin should not be used because it may increase bleeding.

If cramping continues and occurs outside of monthly bleeding:

- Evaluate for underlying health conditions and treat or refer.
- If no underlying condition is found and cramping is severe, discuss removing the IUD.
 - If the removed IUD looks distorted, or if difficulties during removal suggest that the IUD was out of proper position, explain to the client that she can have a new IUD that may cause less cramping.

Possible anemia

- The copper-bearing IUD may contribute to anemia if a woman already has low iron blood stores before insertion and the IUD causes heavier monthly bleeding.
- Pay special attention to IUD users with any of the following signs and symptoms:
 - Inside of eyelids or underneath fingernails looks pale, pale skin, fatigue or weakness, dizziness, irritability, headache, ringing in the ears, sore tongue, and brittle nails.
 - If blood testing is available, hemoglobin less than 9 g/dl or hematocrit less than 30.
- Provide iron tablets if possible.
- Tell her it is important to eat foods containing iron, such as meat and poultry (especially beef and chicken liver), fish, green leafy vegetables, and legumes (beans, bean curd, lentils, and peas).

Partner can feel IUD strings during sex

- Explain that this happens sometimes when strings are cut too short.
- If partner finds the strings bothersome, describe available options:
 - Strings can be cut even shorter so they are not coming out of the cervical canal. Her partner will not feel the strings, but the woman will no longer be able to check her IUD strings.
 - If the woman wants to be able to check her IUD strings, the IUD can be removed and a new one inserted. (To avoid discomfort, the strings should be cut so that 3 centimeter hang out of the cervix.)

Severe pain in lower abdomen (suspected pelvic inflammatory disease [PID])

- Some common signs and symptoms of PID often also occur with other abdominal conditions, such as ectopic pregnancy. If ectopic pregnancy is ruled out, assess for PID.
- If possible, do abdominal and pelvic examinations (see Signs and Symptoms of Serious Health Conditions, p. 320, for signs from the pelvic examination that would indicate PID).
- If a pelvic examination is not possible, and she has a combination of the following signs and symptoms in addition to lower abdominal pain, suspect PID:
 - Unusual vaginal discharge
 - Fever or chills
 - Pain during sex or urination
 - Bleeding after sex or between monthly bleeding
 - Nausea and vomiting
 - A tender pelvic mass
 - Pain when the abdomen is gently pressed (direct abdominal tenderness) or when gently pressed and then suddenly released (rebound abdominal tenderness)
- Treat PID or immediately refer for treatment:
 - Because of the serious consequences of PID, health care providers should treat all suspected cases, based on the signs and symptoms above. Treatment should be started as soon as possible. Treatment is more effective at preventing long-term complications when appropriate antibiotics are given immediately.
 - Treat for gonorrhea, chlamydia, and anaerobic bacterial infections. Counsel the client about condom use and, if possible, give her condoms.
 - There is no need to remove the IUD if she wants to continue using it. If she wants it removed, take it out after starting antibiotic treatment. (If the IUD is removed, see Switching from an IUD to Another Method, p. 148.)

Severe pain in lower abdomen (suspected ectopic pregnancy)

- Many conditions can cause severe abdominal pain. Be particularly alert for additional signs or symptoms of ectopic pregnancy, which is rare but can be life-threatening (see Question 11, p. 156).
- In the early stages of ectopic pregnancy, symptoms may be absent or mild, but eventually they will become severe. A combination of these signs or symptoms should increase suspicion of ectopic pregnancy:
 - Unusual abdominal pain or tenderness
 - Abnormal vaginal bleeding or no monthly bleeding—especially if this is a change from her usual bleeding pattern
 - Light-headedness or dizziness
 - Fainting
- If ectopic pregnancy or other serious health condition is suspected, refer at once for immediate diagnosis and care. (See Female Sterilization, Managing Ectopic Pregnancy, p. 179, for more on ectopic pregnancies.)
- If the client does not have these additional symptoms or signs, assess for pelvic inflammatory disease (see Severe pain in lower abdomen, p. 151).

Suspected uterine puncturing (perforation)

- If puncturing is suspected at the time of insertion or sounding of the uterus, stop the procedure immediately (and remove the IUD if inserted). Observe the client in the clinic carefully:
 - For the first hour, keep the woman at bed rest and check her vital signs (blood pressure, pulse, respiration, and temperature) every 5 to 10 minutes.
 - If the woman remains stable after one hour, check for signs of intra-abdominal bleeding, such as low hematocrit or hemoglobin, if possible, and her vital signs. Observe for several more hours. If she has no signs or symptoms, she can be sent home, but she should avoid sex for 2 weeks. Help her choose another method.
 - If she has a rapid pulse and falling blood pressure, or new pain or increasing pain around the uterus, refer her to a higher level of care.
 - If uterine perforation is suspected within 6 weeks after insertion or if it is suspected later and is causing symptoms, refer the client for evaluation to a clinician experienced at removing such IUDs (see Question 6, p. 155).

IUD partially comes out (partial expulsion)

 If the IUD partially comes out, remove the IUD. Discuss with the client whether she wants another IUD or a different method. If she wants another IUD, she can have one inserted at any time it is reasonably certain she is not pregnant. If the client does not want to continue using an IUD, help her choose another method.

IUD completely comes out (complete expulsion)

- If the client reports that the IUD came out, discuss with her whether she wants another IUD or a different method. If she wants another IUD, she can have one inserted at any time it is reasonably certain she is not pregnant.
- If complete expulsion is suspected and the client does not know whether the IUD came out, refer for x-ray or ultrasound to assess whether the IUD might have moved to the abdominal cavity. Give her a backup method to use in the meantime.

Missing strings (suggesting possible pregnancy, uterine perforation, or expulsion)

- Ask the client:
 - Whether and when she saw the IUD come out
 - When she last felt the strings
 - When she had her last monthly bleeding
 - If she has any symptoms of pregnancy
 - If she has used a backup method since she noticed the strings were missing
- Always start with minor and safe procedures and be gentle. Check for the strings in the folds of the cervical canal with forceps. About half of missing IUD strings can be found in the cervical canal.
- If strings cannot be located in the cervical canal, either they have gone up into the uterus or the IUD has been expelled unnoticed. Rule out pregnancy before attempting more invasive procedures. Refer for evaluation. Give her a backup method to use in the meantime, in case the IUD came out.

New Problems That May Require Switching Methods

May or may not be due to the method.

Unexplained vaginal bleeding (that suggests a medical condition not related to the method)

- Refer or evaluate by history or pelvic examination. Diagnose and treat as appropriate.
- She can continue using the IUD while her condition is being evaluated.
- If bleeding is caused by sexually transmitted infection or pelvic inflammatory disease, she can continue using the IUD during treatment.

Suspected pregnancy

- Assess for pregnancy, including ectopic pregnancy.
- Explain that an IUD in the uterus during pregnancy increases the risk of preterm delivery or miscarriage, including infected (septic) miscarriage during the first or second trimester, which can be life-threatening.

- If the woman does not want to continue the pregnancy, counsel her according to program guidelines.
- If she continues the pregnancy:
 - Advise her that it is best to remove the IUD.
 - Explain the risks of pregnancy with an IUD in place. Early removal of the IUD reduces these risks, although the removal procedure itself involves a small risk of miscarriage.
 - If she agrees to removal, gently remove the IUD or refer for removal.
 - Explain that she should return at once if she develops any signs of miscarriage or septic miscarriage (vaginal bleeding, cramping, pain, abnormal vaginal discharge, or fever).
 - If she chooses to keep the IUD, her pregnancy should be followed closely by a nurse or doctor. She should see a nurse or doctor at once if she develops any signs of septic miscarriage.
- If the IUD strings cannot be found in the cervical canal and the IUD cannot be safely retrieved, refer for ultrasound, if possible, to determine whether the IUD is still in the uterus. If it is, or if ultrasound is not available, her pregnancy should be followed closely. She should seek care at once if she develops any signs of septic miscarriage.

Questions and Answers About the Intrauterine Device

I. Does the IUD cause pelvic inflammatory disease (PID)?

By itself, the IUD does not cause PID. Gonorrhea and chlamydia are the primary direct causes of PID. IUD insertion when a woman has gonorrhea or chlamydia may lead to PID, however. This does not happen often. When it does, it is most likely to occur in the first 20 days after IUD insertion. It has been estimated that, in a group of clients where STIs are common and screening questions identify half the STI cases, there might be I case of PID in every 666 IUD insertions (or less than 2 per 1,000) (see Assessing Women for Risk of Sexually Transmitted Infections, p. 138).

2. Can young women and older women use IUDs?

Yes. There is no minimum or maximum age limit. An IUD should be removed after menopause has occurred—within 12 months after her last monthly bleeding (see Women Near Menopause, p. 272).

3. If a current IUD user has a sexually transmitted infection (STI) or has become at very high individual risk of becoming infected with an STI, should her IUD be removed?

No. If a woman develops a new STI after her IUD has been inserted, she is not especially at risk of developing PID because of the IUD. She can continue to use the IUD while she is being treated for the STI. Removing the IUD has no benefit and may leave her at risk of unwanted pregnancy. Counsel her on condom use and other strategies to avoid STIs in the future.

4. Does the IUD make a woman infertile?

No. A woman can become pregnant once the IUD is removed just as quickly as a woman who has never used an IUD, although fertility decreases as women get older. Good studies find no increased risk of infertility among women who have used IUDs, including young women and women with no children. Whether or not a woman has an IUD, however, if she develops PID and it is not treated, there is some chance that she will become infertile.

5. Can a woman who has never had a baby use an IUD?

Yes. A woman who has not had children generally can use an IUD, but she should understand that the IUD is more likely to come out because her uterus may be smaller than the uterus of a woman who has given birth.

6. Can the IUD travel from the woman's uterus to other parts of her body, such as her heart or her brain?

The IUD never travels to the heart, brain, or any other part of the body outside the abdomen. The IUD normally stays within the uterus like a seed within a shell. Rarely, the IUD may come through the wall of the uterus into the abdominal cavity. This is most often due to a mistake during insertion. If it is discovered within 6 weeks or so after insertion or if it is causing symptoms at any time, the IUD will need to be removed by laparoscopic or laparotomic surgery. Usually, however, the out-of-place IUD causes no problems and should be left where it is. The woman will need another contraceptive method.

7. Should a woman have a "rest period" after using her IUD for several years or after the IUD reaches its recommended time for removal?

No. This is not necessary, and it could be harmful. Removing the old IUD and immediately inserting a new IUD poses less risk of infection than 2 separate procedures. Also, a woman could become pregnant during a "rest period" before her new IUD is inserted.

8. Should antibiotics be routinely given before IUD insertion?

No, usually not. Most recent research done where STIs are not common suggests that PID risk is low with or without antibiotics. When appropriate questions to screen for STI risk are used and IUD insertion is done with proper infection-prevention procedures (including the no-touch insertion technique), there is little risk of infection. Antibiotics may be considered, however, in areas where STIs are common and STI screening is limited.

9. Must an IUD be inserted only during a woman's monthly bleeding?

No. For a woman having menstrual cycles, an IUD can be inserted at any time during her menstrual cycle if it is reasonably certain that the woman is not pregnant. Inserting the IUD during her monthly bleeding may be a good time because she is not likely to be pregnant, and insertion may be easier. It is not as easy to see signs of infection during monthly bleeding, however.

10. Should a woman be denied an IUD because she does not want to check her IUD strings?

No. A woman should not be denied an IUD because she is unwilling to check the strings. The importance of checking the IUD strings has been overemphasized. It is uncommon for an IUD to come out, and it is rare for it to come out without the woman noticing.

The IUD is most likely to come out during the first few months after IUD insertion, during monthly bleeding, among women who have had an IUD inserted soon after childbirth, a second-trimester abortion, or miscarriage, and among women who have never been pregnant. A woman can check her IUD strings if she wants reassurance that it is still in place. Or, if she does not want to check her strings, she can watch carefully in the first month or so and during monthly bleeding to see if the IUD has come out.

II. Do IUDs increase the risk of ectopic pregnancy?

No. On the contrary, IUDs greatly reduce the risk of ectopic pregnancy. Ectopic pregnancies are rare among IUD users. The rate of ectopic pregnancy among women with IUDs is 12 per 10,000 women per year. The rate of ectopic pregnancy among women in the United States using no contraceptive method is 65 per 10,000 women per year.

On the rare occasions that the IUD fails and pregnancy occurs, 6 to 8 of every 100 of these pregnancies are ectopic. Thus, the great majority of pregnancies after IUD failure are not ectopic. Still, ectopic pregnancy can be life-threatening, so a provider should be aware that ectopic pregnancy is possible if the IUD fails.