# Levonorgestrel Intrauterine Device

# **Key Points for Providers and Clients**

- **Long-term pregnancy protection.** Very effective for up to 7 years, depending on the type of LNG-IUD. Immediately reversible.
- Inserted into the uterus by a specifically trained provider.
- Little required of the client once the LNG-IUD is in place.
- Bleeding changes are common but not harmful.
   Typically, lighter and fewer days of bleeding, or infrequent or irregular bleeding.

# What Is the Levonorgestrel Intrauterine Device?

- The levonorgestrel intrauterine device (LNG-IUD) is a T-shaped plastic device that steadily releases a small amount of levonorgestrel each day. (Levonorgestrel is a progestin hormone also used in some contraceptive implants and oral contraceptive pills.)
- A specifically trained health care provider inserts it into a woman's uterus through her vagina and cervix.
- Also called the levonorgestrel-releasing intrauterine system, LNG-IUS, or hormonal IUD.
- Marketed under such brand names as Mirena, Liletta, Levosert, Kyleena, Skyla, and Jaydess. The Kyleena, Skyla, and Jaydess IUDs and their inserters are slightly smaller than the Mirena, Liletta, and Levosert.
- Works by preventing sperm from fertilizing an egg.

# **How Effective?**

One of the most effective and long-lasting methods:

- Less than 1 pregnancy per 100 women using an LNG-IUD over the first year (2 per 1,000 women). This means that 998 of every 1,000 women using LNG-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 LNG-IUD.
  - Over 5 years of use of the Mirena LNG-IUD: Less than 1 pregnancy per 100 women (5 to 8 per 1,000 women).
- Mirena and Kyleena are approved for up to 5 years of use. Research shows that Mirena remains highly effective for 7 years. Levosert and Liletta are approved for up to 4 years of use. Research supports up to 5 years of use of Levosert and Liletta. Skyla and Jaydess are approved for up to 3 years of use.



Return of fertility after LNG-IUD is removed: No delay Protection against sexually transmitted infections (STIs): None

# Side Effects, Health **Benefits, Health Risks,** and Complications

**Side Effects** (see also Managing Any Problems, p. 212)

Some users report the following:

- Most commonly, changes in bleeding patterns,†including:
  - Lighter bleeding and fewer days of bleeding
  - Infrequent bleeding
  - Irregular bleeding
  - No monthly bleeding
  - Prolonged bleeding
- Acne
- Headaches
- Breast tenderness or pain
- Nausea
- Weight gain
- Dizziness
- Mood changes

Bleeding changes are normal and not harmful. If a woman finds them bothersome, counseling and support can help.

Other possible physical changes:

Ovarian cysts

<sup>&</sup>lt;sup>†</sup> For definitions of bleeding patterns, see "vaginal bleeding" in the Glossary.

#### **Known Health Benefits**

Helps protect against:

- Risks of pregnancy
- Iron-deficiency anemia

May help protect against:

- Endometrial cancer
- Cervical cancer

#### Reduces:

- Menstrual cramps
- Heavy monthly bleeding
- Symptoms of endometriosis (pelvic pain, irregular bleeding)
- Risk of ectopic pregnancy

#### Known Health Risks

#### Rare:

 In the short term, PID may occur if the woman has gonorrhea or chlamydia at the time of insertion.

#### **Complications**

#### Rare:

 Puncturing (perforation) of the wall of the uterus by the LNG-IUD or an instrument used for insertion. Usually heals without treatment.

#### Very rare:

 Miscarriage, preterm birth, or infection in the very rare case that the woman becomes pregnant with the LNG-IUD in place.

### **Correcting Misunderstandings**

LNG-IUDs:

- Can be used by women of any age, including adolescents.
- Can be used by women who have had children and those who have not.
- 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 or the man during sex.

#### Why Some Women Say They Like the LNG-IUD

- Prevents pregnancy very effectively
- Makes bleeding lighter and can prevent monthly bleeding for many months (amenorrhea)
- Is long-lasting
- Is private—usually no one else can tell a woman is using contraception (sometimes a partner may feel the strings during sex)
- Has no further costs for supplies after the IUD is inserted
- Does not require the user to do anything once the IUD is inserted

# Who Can and Cannot Use **Levonorgestrel IUDs**

## **Nearly All Women Can Use LNG-IUDs**

LNG-IUDs are safe and effective for nearly all women, including women who:

- Have or have not had children
- Are married or 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.
- Have HIV clinical disease that is mild or with no symptoms, whether or not they are on antiretroviral therapy (see LNG-IUD for Women With HIV, p. 199)

### **Avoid Unnecessary Procedures**

(see Importance of Selected Procedures in Chapter 26 – Family Planning Provision, p. 396)

Women can begin using IUDs:

- Without cervical cancer screening
- Without a breast examination
- Without a blood pressure check

A pelvic examination and an STI risk assessment are essential. When available, a hemoglobin test and laboratory tests for STIs including HIV can contribute to safe and effective use.

#### **Medical Eligibility Criteria for**

# Levonorgestrel IUDs

Ask the client the questions below about known medical conditions. If she answers "no" to all of the questions (and no contraindications are found on pelvic exam; see p. 198), then she can have an LNG-IUD inserted. If she answers "yes" to a question, follow the instructions. In some cases she can still have an LNG-IUD inserted.

#### 1. Did you give birth more than 48 hours ago but less than 4 weeks ago?

☐ YES Delay inserting an LNG-IUD until 4 or more weeks ☐ NO after childbirth (see Soon after childbirth, p. 203).

#### 2. Do you have an infection following childbirth or abortion?

☐ YES If she currently has infection of the reproductive ☐ NO 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 LNG-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 LNG-IUD use.

#### 3. Do you now have a blood clot in the deep veins of your leg or lungs?

□ NO ☐ YES If she was recently diagnosed with a blood clot in legs (affecting deep veins, not superficial veins) or in a lung, and she is not on anticoagulant therapy, help her choose a method without hormones.

### 4. Do you have severe cirrhosis or severe liver tumor?

☐ YES If she reports severe cirrhosis or severe liver tumor □ NO such as liver cancer, do not provide the LNG-IUD. Help her choose a method without hormones.

### 5. Do you have or have you ever had breast cancer?

□ NO TES Do not insert the LNG-IUD. Help her choose a method without hormones.

(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.

#### 6. Are you having 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 LNG-IUD could make diagnosis and monitoring of any treatment more difficult. Help her choose a method to use while being evaluated (but not a copper-bearing IUD, progestin-only injectable, or implant) and, if indicated, treated. After diagnosis/treatment, re-evaluate for IUD use.

#### 7. Do you have any female conditions or problems (gynecologic or obstetric conditions or problems), such as genital cancer, pelvic tuberculosis, or gestational trophoblastic disease?

☐ NO ☐ YES If she has current cervical, endometrial, or ovarian cancer; pelvic tuberculosis; or gestational trophoblastic disease, do not insert an LNG-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 I NG-IUD use after treatment

#### 8. Do you have HIV or AIDS? Do you have any health conditions associated with HIV infection?

☐ YES If a woman has HIV infection with severe or advanced ☐ NO clinical disease, do not insert an LNG-IUD. In contrast, a woman living with HIV who has mild clinical disease or no clinical disease can have an IUD inserted, whether or not she is on antretroviral therapy. (See LNG-IUD for Women With HIV, p. 199.)

#### 9. Assess whether she is at very high individual risk for STIs.

Women who have a very high individual likelihood of STIs should not have an LNG-IUD inserted unless gonorrhea and chlamydia are ruled out by lab tests (see Assessing Women for Risk of Sexually Transmitted Infections, p. 200).

#### 10. Rule out pregnancy.

Ask the client the questions in the Pregnancy Checklist (see inside back cover). If she answers "yes" to any of these questions, you can be reasonably certain that she is not pregnant and she can have an LNG-IUD inserted.

If the Pregnancy Checklist cannot rule out pregnancy, use the job aid Ruling Out Pregnancy before inserting an LNG-IUD.

Also, women should not use LNG-IUDs if they report having systemic lupus erythematosus with positive (or unknown) antiphospholipid antibodies, but are not receiving immunosuppressive treatment. For complete classifications, see Appendix D – Medical Eligibility Criteria for Contraceptive Use.

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 use an LNG-IUD. 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 LNG-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
- Acute blood clot in deep veins of legs or lungs
- Had breast cancer more than 5 years ago, and it has not returned
- Severe cirrhosis or severe liver tumor
- Noncancerous (benign) gestational trophoblast disease
- Has current ovarian cancer
- Is at very high individual risk for STIs at the time of insertion
- Has severe or advanced HIV clinical disease.
- Has systemic lupus erythematosus with positive (or unknown) antiphospholipid antibodies and is not receiving immunosuppressive treatment

### **Screening Questions for Pelvic Examination Before IUD Insertion**

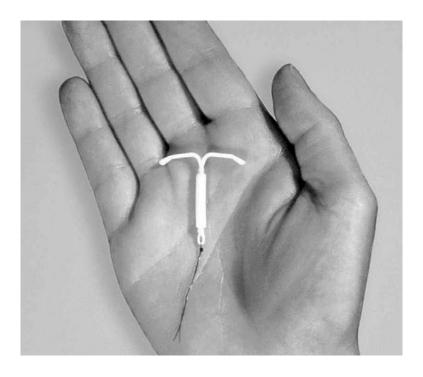
A pelvic examination and STI risk assessment should be done before IUD insertion. (For STI risk assessment, see next page.) When performing the pelvic examination, asking yourself the questions below helps you check for signs of conditions that would rule out IUD insertion. If the answer to all of the 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 1 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 an 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.

1.	Is th	nere any type of ulcer on the vulva, vagina, or cervix?			
	NO	☐ YES Possible STI.			
2.		es the client feel pain in her lower abdomen when move the cervix?			
	NO	☐ YES Possible PID.			
3.		nere tenderness in the uterus, ovaries, or fallopian es (adnexal tenderness)?			
	NO	☐ YES Possible PID.			
4.	ls th	nere a purulent cervical discharge?			
	NO	☐ YES Possible STI or PID.			
5.	5. Does the cervix bleed easily when touched?				
	NO	☐ YES Possible STI or cervical cancer.			
6. Is there an anatomical abnormality of the uterine cavity that will prevent correct IUD placement?					
	NO	☐ YES If an anatomical abnormality distorts the uterine cavity, proper IUD placement may not be possible. Help her choose another method.			
7.		re you unable to determine the size and/or position he 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.			

#### **LNG-IUD** for Women With HIV

- Women living with HIV can safely have an LNG-IUD inserted if they have mild or no clinical disease, whether or not they are on antiretroviral therapy.
- Women who have HIV infection with advanced or severe clinical disease should not have an IUD inserted.
- If a woman becomes infected with HIV while she has an IUD in place, it does not need to be removed.
- An IUD user living with HIV who develops advanced or severe clinical disease can keep the IUD but should be closely monitored for pelvic inflammatory disease.
- Urge women who have HIV or are at risk for HIV to use condoms along with the IUD. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs.
- Women who are at risk of HIV but not infected with HIV can have an IUD inserted. The IUD does not increase the risk of becoming infected with HIV.



### **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 the time of 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 sometimes 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.<sup>‡</sup> (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 STIs. 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 STIs usually should not have an IUD inserted.
- 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, whether or not she has noticed symptoms, and may want to choose a method other than the IUD.
- 3. Ask if she thinks she is a good candidate for an IUD or would like to consider other contraceptive methods, including other longacting 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.

<sup>‡</sup> 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.

<sup>§</sup> Any woman who thinks she might have an STI should seek care immediately.

#### 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

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

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

#### Note:

If she still wants the IUD while at very high individual risk of STIs, and reliable laboratory testing for gonorrhea and chlamydia 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.

# Providing the Levonorgestrel Intrauterine Device

#### When to Start

**IMPORTANT:** In many cases a woman can start the LNG-IUD any time if it is reasonably certain she is not pregnant. To be reasonably certain she is not pregnant, use the Pregnancy Checklist (see inside back cover).

#### Woman's situation When to start

#### Having menstrual cycles or switching from a nonhormonal method

#### Any time of the month

- If she is starting within 7 days after the start of her monthly bleeding, no need for a backup method.
- If it is more than 7 days after the start of her monthly bleeding, she can have the LNG-IUD inserted any time if it is reasonably certain she is not pregnant. She will need a backup method\* for the first 7 days after insertion.

#### **Switching from** a hormonal 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.
- If she is starting within 7 days after the start of her monthly bleeding, no need for a backup method.
- If it is more than 7 days after the start of her monthly bleeding, she will need a backup method\* for the first 7 days after insertion.
- If she is switching from an injectable, she can have the LNG-IUD inserted when the repeat injection would have been given. No need for a backup method.

<sup>\*</sup> 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.

#### Woman's situation When to start

#### Soon after childbirth

(regardless of breastfeeding status)

- Any time within 48 hours after giving birth (requires a provider with specific training in postpartum insertion by hand or using a ring forceps).
- After 48 hours, delay until at least 4 weeks.

#### Fully or nearly fully breastfeeding

#### Less than 6 months after giving birth

- If the LNG-IUD is not inserted within the first 48. hours and her monthly bleeding has not returned, she can have the LNG-IUD inserted any time between 4 weeks and 6 months. No need for a backup method.
- If her monthly bleeding has returned, she can have the LNG-IUD inserted as advised for women. having menstrual cycles (see previous page).

#### More than 6 months since giving birth

- If her monthly bleeding has not returned, she can have the LNG-IUD inserted any time if it is reasonably certain she is not pregnant. She will need a backup method\* for the first 7 days after insertion.
- If her monthly bleeding has returned, she can have the LNG-IUD inserted as advised for women having menstrual cycles (see previous page).

#### Partially breastfeeding or not breastfeeding

### Less than 4 weeks after giving birth

 If the LNG-IUD is not inserted within the first 48. hours, delay insertion until at least 4 weeks after giving birth.

#### More than 4 weeks after giving birth

- If her monthly bleeding has not returned, she can have the LNG-IUD inserted any time if it can be determined that she is not pregnant (see Ruling Out Pregnancy, p. 461). She will need a backup method\* for the first 7 days after insertion.
- If her monthly bleeding has returned, she can have the LNG-IUD inserted as advised for women having menstrual cycles (see previous page).

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#### Woman's situation When to start (continued)

#### No monthly bleeding (not related to childbirth or breastfeeding)

 Any time if it can be determined that she is not pregnant (see Ruling Out Pregnancy, p. 461). She will need a backup method\* for the first 7 days after insertion.

#### **After** miscarriage or abortion

- Immediately, if the LNG-IUD is inserted within 7 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 7 days after first- or secondtrimester miscarriage or abortion and no infection is present, she can have the LNG-IUD inserted any time if it is reasonably certain she is not pregnant. She will need a backup method\* for the first 7 days after insertion.
- If infection is present, treat or refer and help the client choose another method. If she still wants the LNG-IUD, it can be inserted after the infection has completely cleared.
- LNG-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.

After taking progestin-only, combined, or ulipristal acetate (UPA) emergency contraceptive pills (ECPs)

- She can have the LNG IUD inserted when it can be determined that she is not pregnant, for example, after the start of her next monthly bleeding (see Ruling Out Pregnancy, p. 461). Give her a backup method\* or oral contraceptive pills to use until she can have the IUD inserted.
- She should not have the LNG-IUD inserted. in the first 6 days after taking UPA-ECPs. These drugs interact. If the LNG-IUD is inserted sooner, and thus both LNG and UPA are present in the body, one or both may be less effective.

<sup>\*</sup> 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.

#### **Preventing Infection at LNG-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 instruments in disinfectant chemicals.
- Use a new, presterilized LNG-IUD that is packaged with its inserter.
- The "no-touch" insertion technique is safest. 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:
  - 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 antibiotics routinely is generally not recommended for women at low risk of STIs.

## **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 without concern.

#### Describe the most common side effects

- Changes in bleeding patterns:
  - Irregular bleeding followed by lighter bleeding, fewer days of bleeding, infrequent bleeding, and then no monthly bleeding.
- Acne, headaches, breast tenderness and pain, and possibly other side effects.

#### **Explain about** these side effects

- Bleeding changes usually are not signs of illness. Lack of bleeding does not mean pregnancy.
- Bleeding irregularities usually become less within 3 to 6 months after insertion. Many women have no bleeding at all after using the LNG-IUD for a year or two. Other side effects also become less after the first several months following insertion.
- The client can come back for help if side effects bother her or if she has other concerns.

### Inserting the LNG-IUD

#### Talk with the client before the procedure

- Explain the insertion procedure (see next page).
- 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– 1,000 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.

#### Talk with the client after the procedure

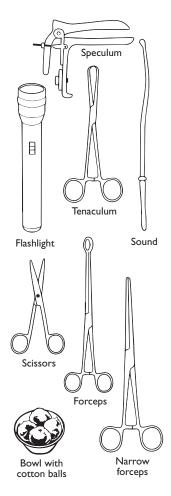
- Ask her how she is doing.
- Tell her that the procedure was successful and that the IUD is in place.
- Tell her that she can rest for a while and then slowly sit up before getting up and dressing.
- Remind her that the two of you will be discussing next steps and follow-up.



#### **Explaining the Insertion Procedure**

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

- 1. The provider uses proper infectionprevention procedures.
- 2. The provider conducts a pelvic examination to determine the position of the uterus and assess eligibility (see Screening Questions for Pelvic Examination Before IUD Insertion, p. 198). The provider first does the bimanual examination and then inserts a speculum into the vagina to inspect the cervix.
- **3.** The provider cleans the cervix and vagina with appropriate antiseptic.
- **4.** The provider slowly inserts the tenaculum through the speculum and closes the tenaculum just enough to gently hold the cervix and uterus steady.
- The provider slowly and gently passes the uterine sound through the cervix to measure the depth of the uterus.
- **6.** The provider slowly and gently passes the inserter through the cervix, releases the LNG-IUD inside the uterine cavity, and removes the inserter.



- 7. 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 New and **Continuing Users**

#### **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 (325–1,000 mg), or other pain reliever as needed.
- Also, she can expect some bleeding or spotting immediately after insertion.

#### Length of pregnancy protection

- Discuss how to remember the date to return for removal or replacement.
- 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 about her IUD.

#### 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.

IUD R	eminder	<sup>r</sup> Card	
Client's name: Type of IUD: Date inserted:			_
Remove or replace by:	Month	Year	
If you have any problem	s or questions, go		

#### How Can a Partner Help?

The client's partner is welcome to participate in counseling and learn about the method and what support he can give to his partner. A male partner can:

- Support a woman's choice of the LNG-IUD
- Show understanding and support if she has side effects
- Use condoms consistently in addition to the IUD if he has an STI/HIV or thinks he may be at risk of an STI/HIV
- Help to remember when the IUD is due for removal



### "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:

- The IUD was expelled or she thinks it may have been expelled from her uterus.
- 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.
- She wants the IUD removed, whatever the reason.

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.

## 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.
- 2. Ask especially if she is concerned about bleeding changes. Give her any information or help that she needs (see Managing Any Problems, below).
- 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
  - Felt the hard plastic of an IUD that has partially come out

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 infection or that the IUD has partially or completely come out.

## **Any Visit**

- 1. Ask how the client is doing with the method and about bleeding changes.
- 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. 216.
- 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.

### **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 support, and, if appropriate, treat. Make sure she understands the advice and agrees.
- Offer to help her choose another method—now, if she wishes, or if problems cannot be overcome.

#### **Irregular bleeding or spotting** (bleeding at unexpected times that bothers the client)

- Reassure her that some women using LNG-IUDs experience irregular bleeding. It is not harmful and usually becomes less or stops after the first several months of use.
- If irregular bleeding starts after several months of no bleeding, or you suspect that something may be wrong for other reasons, consider underlying conditions unrelated to method use (see "Unexplained vaginal bleeding", p. 216).

#### No monthly bleeding

- Reassure her that many women eventually stop having monthly bleeding when using the LNG-IUD, and this is not harmful. There is no need to lose blood every month. It is similar to not having monthly bleeding during pregnancy. She is not pregnant or infertile. Blood is not building up inside her. (Some women are happy to be free from monthly bleeding.)
- If monthly bleeding stops very soon after insertion of the LNG-IUD, assess for pregnancy or other underlying condition.

#### **Heavier or prolonged bleeding** (longer than 8 days)

- Reassure her that some women using LNG-IUDs experience heavier or prolonged bleeding. It is generally not harmful and usually becomes less or stops after the first several months of use.
- Provide iron tablets if possible and tell her it is important for her to eat foods containing iron.
- If heavier or prolonged bleeding continues or starts after several months of no bleeding, or if you suspect that something may be wrong for other reasons, consider underlying conditions unrelated to method use (see "Unexplained vaginal bleeding", p. 216).

#### **Cramping and pain**

- She can expect some cramping and pain for the first day or 2 after IUD insertion.
  - Suggest aspirin (325–650 mg), ibuprofen (200–400 mg), paracetamol (325–1,000 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 beyond the first 2 days, evaluate for partial expulsion or perforation.

#### Acne

- If the client wants to stop using the LNG-IUD because of acne, she can consider switching to COCs. Many women's acne improves with COC use.
- Consider locally available remedies.

#### Ordinary headaches (nonmigrainous)

- Suggest aspirin (325–650 mg), ibuprofen (200–400 mg), paracetamol (325–1,000 mg), or other pain reliever.
- Any headaches that get worse or occur more often during LNG-IUD use should be evaluated.

#### **Breast tenderness**

- Recommend that she wear a supportive bra (including during strenuous activity and sleep).
- Try hot or cold compresses.
- Suggest aspirin (325–650 mg), ibuprofen (200–400 mg), paracetamol (325–1,000 mg), or other pain reliever.
- Consider locally available remedies.

#### Weight change

Review diet and counsel as needed.

#### Nausea or dizziness

Consider locally available remedies.

#### **Mood changes**

- Clients who have serious mood changes such as major depression should be referred for care.
- Consider locally available remedies.

#### Partner can feel IUD strings during sex

- Explain that this happens sometimes when strings are cut too short.
- If her partner finds the strings bothersome, describe and discuss this option:
  - Strings can be cut even shorter so they are not coming out of the cervical canal. Her partner will not feel the strings, but it will make the removal procedure somewhat more difficult (may require a specially trained provider).

#### **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 Appendix B Signs and Symptoms of Serious Health Conditions 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 prevention and treatment of STIs and about condom use. 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, consider emergency contraceptive pills and discuss choosing another method. See Switching From the LNG-IUD to Another Method, p. 218.)
- If the infection does not improve, consider removing the IUD while continuing antibiotics. If the IUD is not removed, antibiotics should still be continued. In both cases the woman's health should be closely monitored.

#### Severe pain in lower abdomen (suspected ovarian cyst)

- Abdominal pain may be due to various problems, such as enlarged ovarian follicles or cysts.
  - A woman can continue to use the LNG-IUD during evaluation and treatment.
  - There is no need to treat enlarged ovarian follicles or cysts unless they
    grow abnormally large, twist, or burst. Reassure the client that they
    usually disappear on their own. To be sure the problem is resolving, see
    the client again in 6 weeks, if possible.

#### 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. The LNG-IUD reduces the risk of ectopic pregnancy, but it does not eliminate the risk altogether (see Question 10 in Chapter 10, p. 190).
- 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 current 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 Managing Ectopic Pregnancy, p. 237, in Chapter 12 – Female Sterilization, 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, previous page).

#### **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 intraabdominal bleeding, such as low hematocrit or hemoglobin or rebound

- on abdominal examination, 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, based on clinical symptoms, within 6 weeks or more after insertion, refer the client for evaluation to a clinician experienced at removing such IUDs (see Question 6 in Chapter 10, p. 189).

#### **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 immediately if 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 if it is reasonably certain she is not pregnant.
- If complete expulsion is suspected (for example, if strings are not found on pelvic exam) and the client does not know whether the IUD came out, refer for ultrasound (or x-ray, if pregnancy can be ruled out) 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,

- Ask the client:
  - Whether and when she saw the IUD come out.
  - When she had her last monthly bleeding
  - If she has any symptoms of pregnancy
  - If she has used a backup method since she noticed that the IUD came out
- 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. Refer for ultrasound (or x-ray, if pregnancy can be ruled out). 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.

# **Heart disease due to blocked or narrowed arteries** (ischemic heart disease)

- A woman who has this condition can safely start the LNG-IUD.
   If, however, the condition develops while she is using the LNG-IUD:
  - Remove the IUD or refer for removal.
  - Help her choose a method without hormones.
  - Refer for diagnosis and care if not already under care.

# **Migraine headaches** (see Identifying Migraine Headaches and Auras, pp. 458–460)

- If she has migraine headaches without aura, she can continue to use the LNG-IUD if she wishes.
- If she develops migraine with aura, remove the LNG-IUD. Help her choose a method without hormones.

Certain serious health conditions (blood clots in deep veins of legs or lungs, breast cancer, gestational trophoblast disease, or pelvic tuberculosis). See Appendix B – Signs and Symptoms of Serious Health Conditions.

- Remove the IUD or refer for removal.
- Give her a backup method to use until the condition is evaluated.
- Refer for diagnosis and care if not already under care.

### Suspected pregnancy

- Assess for pregnancy, including ectopic pregnancy.
- Explain that exposure of the fetus to an LNG-IUD does not increase the
  risk of birth defects. However, 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, a nurse or doctor should follow her pregnancy closely. She should see a nurse or doctor at once if she develops any signs of septic miscarriage.
- If the IUD strings are not visible and cannot be found in the cervical canal, 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.

# **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. 210). Ask 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 (for example, when IUD strings are missing), refer the woman to an experienced clinician who can use an appropriate removal technique.

#### **Explaining the Removal Procedure**

Before removing the IUD, explain to the client 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 the LNG-IUD to Another Method

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

#### Switching to

#### When to start

Hormonal methods: combined oral contraceptives (COCs), progestinonly 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 stay 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).

(Continued on next page)

<sup>\*</sup> 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.

#### Switching to When to start (continued)

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

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

#### Fertility awareness methods

In the cycle that the IUD is removed.

#### **Female** sterilization

- If during the first 7 days of monthly bleeding, remove the IUD and perform the female sterilization procedure. No need for a backup method.
- If after the first 7 days of monthly bleeding, perform the sterilization procedure. Ideally, the IUD should stay 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.

#### **Vasectomy**

- Any time
- The woman can keep the IUD until a test of her partner's semen shows that the vasectomy is working, or for 3 months, when the vasectomy will be fully effective.

# Questions and Answers About the LNG-IUD

See also Questions and Answers About the Copper-Bearing IUD in Chapter 10, pp. 188-190.

#### 1. How is the LNG-IUD different from the copper-bearing IUD?

The LNG-IUD and the copper-bearing IUD are very similar, but they have important differences. Both the LNG-IUD and the copper-bearing IUD are very effective, but the LNG-IUD is slightly more effective. The LNG-IUD has different side effects from those of the copper-bearing IUD. LNG-IUD users usually experience lighter bleeding (regular or irregular) or no bleeding at all, while copper-bearing IUD users usually have regular but sometimes heavier or longer bleeding. In addition, LNG-IUD users may experience hormonal side effects (for example, headaches), which are not side effects of copper-bearing IUDs. The duration of use is shorter—3 or 5 years for the LNG-IUD, depending on brand, versus 12 years for the copper-bearing IUD. Also, the LNG-IUD costs more than the copper-bearing IUD. (See the job aid, Comparing IUDs, p. 452.)

#### 2. How is the LNG-IUD different from other hormonal methods?

The LNG-IUD continuously releases a small amount of hormone into the uterus. Because the hormone is released directly into the uterus, the amount in the bloodstream is lower than with other hormonal methods. Thus, women experience fewer side effects. The LNG-IUD requires no action by the woman once it is inserted, unlike pills that a woman must take every day or injections that a woman must have every 1 to 3 months. The LNG-IUD must be inserted into the uterus, while most other hormonal methods come in the form of pills, injections, or implants under the skin.

#### 3. What are the other benefits of the LNG-IUD, besides contraception?

The LNG-IUD is an effective treatment for heavy monthly blood loss. It is the most effective nonsurgical approach for this condition. Also, the LNG-IUD decreases bleeding for women with fibroids. Reduced blood loss can help women with anemia as well. Additionally, the LNG-IUD may help to treat endometriosis, endometrial hyperplasia, endometrial cancer, and perimenopausal menstrual disturbances.