

Chapter 6

INTRAUTERINE DEVICES:

TCu380 Intrauterine Device and

WHAT ARE INTRAUTERINE DEVICES (IUDs)?

- An IUD is a small plastic device inserted into a woman's uterine cavity to prevent pregnancy.
- It releases copper or a hormone.
- Almost all IUDs have one or two strings or nylon threads tied to the plastic frame. The strings hang through the cervical opening into the vagina.
- In the Philippines, two types of IUD are available:
 - Copper T380 (TCu) is the IUD currently used in the Philippine Family Planning Program. It is a T-shaped plastic device with a copper coil wrapped around its stem and copper bands around its arms. The device releases copper to prevent fertilization. It has a two-stranded monofilament tail. This type of IUD is effective for 12 years.
 - Hormone-releasing IUDs (e.g., levonorgestrel-releasing IUS or Mirena) are made of plastic and steadily release small amounts of progesterone. This type of IUD is of limited availability locally and is effective for five years.



TCu 380 INTRAUTERINE DEVICE

HOW EFFECTIVE ARE IUDs?

- IUDs are 99.4% effective with perfect use and 99.2% effective with typical use.
- These rates indicate that 992 to 994 of every 1,000 women who use IUDs over the first year will not become pregnant.

WHAT ARE THE ADVANTAGES OF USING THE TCu IUD?

- Highly effective
- Very safe
- Local action
- Has no effect on the amount or quality of breast milk
- Low cost
- Does not interfere with sexual intercourse
- One time application
- Immediate return to fertility upon removal
- Can be inserted immediately after childbirth or after abortion
- Can be easily inserted or removed by a trained provider
- Long-lasting effectiveness (12 years)

WHAT ARE THE DISADVANTAGES OF USING THE TCu IUD?

- Adverse effects
 - Pain and cramping

- Long and heavy menstrual bleeding
 - Menstrual irregularities
- Device may be expelled, possibly without the client knowing it (especially for postpartum insertions)
- Requires a pelvic examination prior to insertion
- Requires a trained health service provider for insertion and removal
- Does not protect against sexually transmitted infections (STIs)
- Requires regular self-checking of IUD strings during the first year of use

TCu 380 INTRAUTERINE DEVICE

HOW EFFECTIVE ARE IUDs?

- IUDs are 99.4% effective with perfect use and 99.2% effective with typical use.
- These rates indicate that 992 to 994 of every 1,000 women who use IUDs over the first year will not become pregnant.

WHAT ARE THE ADVANTAGES OF USING THE TCu IUD?

- Highly effective
- Very safe
- Local action
- Has no effect on the amount or quality of breast milk
- Low cost
- Does not interfere with sexual intercourse
- One time application
- Immediate return to fertility upon removal
- Can be inserted immediately after childbirth or after abortion
- Can be easily inserted or removed by a trained provider
- Long-lasting effectiveness (12 years)

WHAT ARE THE DISADVANTAGES OF USING THE TCu IUD?

- Adverse effects
 - Pain and cramping
 - Long and heavy menstrual bleeding
 - Menstrual irregularities
- Device may be expelled, possibly without the client knowing it (especially for postpartum insertions)
- Requires a pelvic examination prior to insertion
- Requires a trained health service provider for insertion and removal
- Does not protect against sexually transmitted infections (STIs)
 - Requires regular self-checking of IUD strings during the first year of use

HOW DOES THE TCu IUD WORK?

The TCu 380A IUD prevents pregnancy by a combination of the following mechanisms of action:

- Inhibition of fertilization
- Inhibition of sperm transport into the upper genital tract
- Inhibition of ovum transport

WHO CAN USE THE METHOD?

The IUD is suited for clients who want a long-acting, effective, reversible method of contraception (LARC).

Table 14. MEC categories for IUD	
Category 1: Use the method without restriction.	
<ul style="list-style-type: none">• Women more than 20 years old	<ul style="list-style-type: none">• Superficial venous thrombosis
<ul style="list-style-type: none">• Women who have given birth• Immediate postpartum women	<ul style="list-style-type: none">• Any type of headache• Epilepsy
<ul style="list-style-type: none">• Post-abortion in the first trimester• History of high blood pressure during pregnancy	<ul style="list-style-type: none">• Depressive disorders• Women with irregular but not heavy vaginal bleeding
<ul style="list-style-type: none">• History of pelvic surgery• Women who smoke at any age• Body mass index of more than or equal to 30 kg/m²	<ul style="list-style-type: none">• Any breast disease• Hypertension of all classifications• Uterine fibroids that do not distort the uterine anatomy
<ul style="list-style-type: none">• Uncomplicated valvular heart disease• Past ectopic pregnancy	<ul style="list-style-type: none">• History of PID and with subsequent pregnancy• Schistosomiasis
<ul style="list-style-type: none">• DVT/PE• Known thrombogenic mutations• Women diagnosed with systemic lupus erythematosus but with no risk factors• Current and history of ischemic heart disease, stroke, or hyperlipidemia• Diagnosed with benign ovarian tumor, cervical ectropion, or cervical intraepithelial neoplasia	<ul style="list-style-type: none">• Malaria• Non-pelvic tuberculosis• Any endocrine condition, such as diabetes or thyroid disorders• Any gall bladder disease, hepatitis, cirrhosis, liver tumors, or history of cholestasis• Current intake of any anticonvulsant or antimicrobial

Category 2: Generally use the method but with more than usual follow-up.

- Menarche to 20 years old
- Women who have not given birth
- Post-abortion in the second trimester
- Complicated valvular heart disease
- Women diagnosed with systemic lupus erythematosus and on immunosuppressive treatment
- Women with heavy or prolonged vaginal bleeding, endometriosis, or severe dysmenorrhea
- Among women with anatomical abnormalities that interfere with IUD insertion (e.g., cervical laceration or stenosis)
- Initiation of the method in women with past PID and no subsequent pregnancy
- Other STIs (excluding gonorrhea, chlamydial, and HIV) and vaginitis
- High risk of HIV
- Initiation of the method in women who are HIV-infected
- Women with AIDS but on anti-retroviral therapy
- Currently on anti-retroviral therapy
- Anemias such as thalassemia, sickle cell disease, or iron-deficiency anemia

WHO CANNOT USE THE METHOD?

Category 3: Do not use the method unless no other appropriate method is available under close supervision.

- 48 hours to 4 weeks after childbirth
- Women diagnosed with systemic lupus erythematosus and with severe thrombocytopenia
- Women with gestational trophoblastic disease but decreased or undetectable beta-hCG levels
- Women with ovarian cancer
- Very high likelihood of exposure to gonorrhea or chlamydial infection
- Women with AIDS

Category 4: Do NOT use the method.

- During pregnancy
 - Puerperal sepsis
- Immediate post-septic abortion
 - Initiation of method in clients with unexplained vaginal bleeding before evaluation
- Women with gestational trophoblastic disease
 - Initiation of method in clients with cervical or endometrial cancer
- Among women with anatomical abnormalities that distort the uterine cavity (e.g., fibroids)
 - Current PID
- Initiation of method in clients with current purulent cervicitis, chlamydial infection, or gonorrhea
- Initiation of method in clients with pelvic tuberculosis

HOW IS THE IUD USED?

I. Timing of IUD insertion

For women having menstrual cycles

- Any time during menstrual bleeding.
- Any other time at the client’s convenience, provided that the client is certainly not pregnant.
- Clients starting within 12 days after the start of their monthly bleeding do not need a backup method.

For amenorrheic (non-postpartum) women

- Any time, provided that the client is certainly not pregnant. No need for a backup method.

After childbirth (postpartum)

- Within 10 minutes after delivery of placenta or within 48 hours after childbirth.
- Copper IUD is not usually recommended for women more than 48 hours to less than four weeks postpartum, unless other more appropriate methods are available.
- IUD insertion is delayed until four weeks or more after giving birth.
- **Special training is required for immediate portpartum insertion.**

Evidence suggests that the immediate postpartum insertion of IUDs is generally safe and effective, although a recent trial has suggested that the occurrence rate of expulsion is higher in women who had immediate insertion than in those who had delayed insertion.

Post-abortion

- Any time within 12 days after first- or second-trimester abortion or miscarriage if no infection is present. No need for a backup method.
- Any time after more than 12 days of first- or second-trimester miscarriage or abortion if no infection is present, provided that the client is certainly not pregnant. No need for a backup method.
- Clients with infections must be referred to a specialist or be assisted in choosing another method. Clients who still prefer IUDs are inserted with the device once the infection has completely cleared.

- Immediate post-abortion IUD insertion or miscarriage requires specific training. If the healthcare provider is not specifically trained, IUD insertion is delayed until at least four weeks after miscarriage or abortion.

In general, contraceptive efficacy is high, and PID and perforations are rare. Although the risk of spontaneous expulsion of an IUD is greater in this setting than in interval insertions, this potential disadvantage may be outweighed by the convenience of providing highly effective contraception with completion of abortion in one sitting.

For women switching from another method

- May use immediately, provided that the client is using the current method consistently and correctly or is certainly not pregnant. No need to wait for the client's next monthly bleeding. No need for a backup method.
- Clients switching from injectables can be inserted with the IUD when the next injection would have been given. No need for a backup method.

Fully or nearly fully breastfeeding: less than six months after giving birth

- Between four weeks and six months after giving birth for clients who are still waiting for their monthly bleeding to return. No need for a backup method.
- The protocol for clients whose monthly bleeding has returned is the same as that for clients who are having menstrual cycles (see previous page).



Fully or nearly fully breastfeeding: more than six months after giving birth

- Any time for clients whose monthly bleeding has not returned, provided that they are certain that they are not pregnant. No need for a backup method.
- The protocol for clients whose monthly bleeding has returned is the same as that for clients who are having menstrual cycles.

Partially breastfeeding or not breastfeeding

- IUD insertion is NOT usually recommended for women less than four weeks postpartum unless inserted less than 48 hours after childbirth.
- After four weeks postpartum: the IUD can be inserted any time for clients whose monthly bleeding has not returned, provided that the client is certainly not pregnant. No need for a backup method.
- The protocol for clients whose monthly bleeding has returned is the same as that for clients who are having menstrual cycles.

II. Pelvic examination prior to IUD insertion

A bimanual pelvic examination and STI screening must be done prior to IUD insertion. Performing a pelvic examination will allow the health provider to check for signs of PID or abnormal uterine anatomy.

- Active PID, STI, or anatomical abnormalities resulting in distorted uterus are contraindications of IUD insertion. The PID must be treated before the IUD may be inserted. While she is being treated or if she is at risk for possible STI, recommend the use of condoms and/or alternative FP methods. In the event that there is abnormal uterine anatomy, other FP methods should be offered.
- The following signs are suggestive of PID, STI, or abnormal uterine cavity. If these signs are



observed, IUD insertion should be deferred.

- 0 Any type of ulcer on the vulva, vagina or cervix (possible STI)
- 0 Lower abdominal tenderness when the cervix is moved (possible PID)
- 0 Tenderness while palpating for the uterus, ovaries, or fallopian tubes (possible PID)
- 0 Purulent cervical discharge (possible STI or PID)
- 0 Bleeding of the cervix when touched (possible STI or cervical cancer)
- 0 Anatomical abnormality of the uterine cavity preventing the proper IUD insertion
- 0 Difficulty in determining the size and/or position of the uterus that prevents proper IUD insertion

III. Inserting the IUD

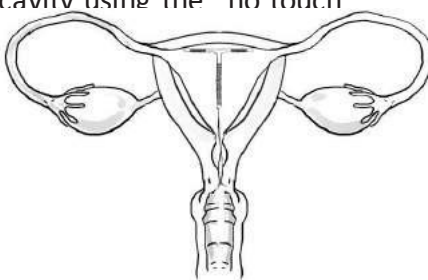
- Only a provider who has undergone comprehensive IUD training and practice under direct supervision is allowed to perform IUD insertion.
- The IUD must be placed correctly (high fundal position) while minimizing the client's discomfort and the risk of uterine perforation.

For interval clients

- 0 Explain the insertion procedure.
- 0 Show the client the IUD and inserter in the package.
- 0 Tell the client that she will experience some discomfort or cramping during the procedure.
- 0 Ask the client to disclose any feeling of discomfort or pain any time.
Ibuprofen (200 mg–400 mg), paracetamol (325 mg–1000 mg), or other pain relievers may be given 30 minutes before insertion to help reduce cramping and pain. Do not give aspirin because it slows blood clotting.
- 0 Talk with the client during the procedure.
 - Guide the client through the procedure in a step-by-step manner and reassure her. Alert the client before a step that may cause pain or might startle her.
 - Ask regularly if the client feels any pain.
- 0 Clients of IUD insertion must be informed of the insertion procedures.

Below is a summary of the procedures that can be used in explaining IUD insertion to a client. Perform all steps carefully.

1. Follow proper infection prevention measures.
2. Perform bimanual pelvic examination to determine the position of the uterus.
3. Insert speculum to inspect the vagina and cervix to ensure the absence of any infection.
4. Disinfect the vagina and cervical opening with antiseptic solutions, such as povidone-iodine.
5. Place the tenaculum at the anterior lip of the cervix (2 and 10 o'clock), and gently pull the cervix to stabilize and align the uterine cavity.
6. Measure the depth of the uterine cavity (6 cm to 8 cm) using a uterine sound.
7. Adjust the depth gauge of the IUD inserter for proper placement into the uterine cavity using the "no touch" technique.
8. Load the IUD into the inserter while both are still in package.
9. Slowly and gently insert inserter.
10. Cut the strings on the IUD, leaving about 3 cm hanging out of the cervix.
11. After the insertion, allow the client to rest on the examination table until she feels



ready to get dressed.

12. Do not provide routine antibiotics to IUD users.
13. Provide post-insertion instructions.
14. Ensure that the client is informed of the following:
 - Type of IUD inserted
 - When to have the device removed or replaced
 - Expected side effects, such as cramping, heavier menstrual flow, or bleeding between menses.
15. Inform the client of the following ways to check the IUD.
 - a. Wash hands.
 - b. Sit in a squatting position.
 - c. Ask the client to insert one or two fingers inside the vagina as far as she can until she feels the string.
 - d. Ask the client to determine if the strings have changed in length, which may denote expulsion.
 - e. Tell the client not to pull the strings to avoid IUD displacement.
16. Inform the client of the following periods to check the IUD strings.
 - After each menses when the probability of expulsion is high
 - After noticing any of the following possible symptoms of serious problems:
 - Missed menstrual period, other signs of pregnancy, or an expelled IUD
 - IUD string that seems to be missing or IUD that
 - seems to have been partially or completely expelled.

This symptom is determined by the client by feeling something hard (plastic device) in her vagina or cervix.

Preventing Infection at IUD Insertion

1. Follow proper infection prevention procedures.
2. Disinfect instruments by boiling, steaming, or soaking them in disinfectant chemicals.
3. Use a new IUD that is packaged with its inserter.
4. Follow the “no-touch” insertion technique, which includes not letting the loaded IUD or uterine sound touch any unsterile surfaces (e.g., hands, speculum, vagina, and table top). This technique involves the following:
 - Loading the IUD into the inserter while the IUD is still in the sterile package to avoid touching the IUD directly
 - Passing both the uterine sound and the loaded IUD inserter only once through the cervical canal without touching the vaginal wall

For postpartum clients

- Postplacental: After a normal, vaginal delivery, within 10 minutes after placental expulsion
- Intracesarean: During a cesarean procedure before suturing of the uterine incision
- Immediate postpartum: Postplacental and within 48 hours after childbirth before discharge from the health facility

These clients should undergo FP counseling. Particularly, pregnant women are best counseled during their prenatal visits. All IUD clients must be asked to sign a consent form before the insertion procedure.

Regardless of the insertion timing (postplacental or immediate postpartum), the forceps insertion technique is recommended. The relevant steps are described below.

1. Palpate the uterus to evaluate the height of the fundus and its contraction, and massage the uterus, if necessary, to promote steady contraction.

The size of the uterus must be assessed to anticipate if the strings are likely to protrude through the cervix after insertion.

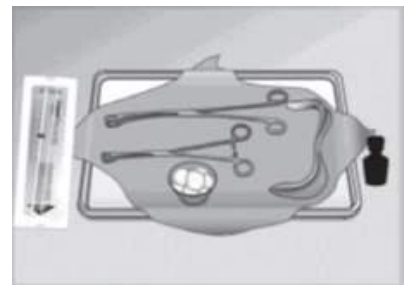
2. Ensure that the client's buttocks are at the very end of the table (with or without leg supports).

At the preparatory level, the IUD service

provider, who may also be the attendant at

childbirth, should confirm that correct sterile instruments, supplies, and light

sources are available for immediate postplacental (instrumental) insertion. The service provider should obtain a PPIUD kit/tray and a sterile IUD while keeping the package sealed until immediately prior to insertion.



3. Manage labor and delivery (including using a partograph and performing active management of third stage of labor [AMTSL]) and perform a second screening to confirm the absence of the following delivery-related conditions that preclude IUD insertion:

- Rupture of membranes for greater than 18 hours
- Chorioamnionitis
- Unresolved postpartum hemorrhage
- Genital trauma

If any of these conditions exist, explain to the client that now is not a safe time for IUD insertion and that she may be re-evaluated at six weeks postpartum.

4. If insertion is performed by the same provider who assisted birth, the provider must wear the same pair of high-level disinfected (HLD) or sterile gloves for insertion, provided that the gloves are not contaminated.

Alternatively, if insertion is performed by a provider different from the one who assisted birth, ensure that AMTSL has been completed, and then perform hand hygiene by wearing HLD or sterile gloves.

5. Inspect perineum, labia, and vaginal walls for lacerations. Lacerations should be repaired after IUD insertion unless

uncontrolled bleeding occurs, which should be

6. Confirm that the woman is ready to have the IUD inserted. Answer any questions she has and provide reassurance if needed.



7. Open the PPIUD kit/tray. Ensure that the IUD

is kept to the side of

sterile draped area. Place a dry, sterile cloth on the woman's

abdomen.

8. Gently insert a Simms speculum, and visualize the cervix by depressing

the posterior wall of the vagina. Clean the cervix and vagina with antiseptic solution two times using a separate swab each time.

9. Gently grasp the anterior lip of the cervix with the ring forceps. The speculum may be removed at this time, if necessary. Leave the forceps aside, still attached to the cervix.

10. Open the sterile package of IUD from the bottom by pulling back the plastic cover approximately one-third of the way. The dominant hand must be used to remove the plunger rod, inserter tube, and card from the package.



11. Use the dominant hand to hold placental or Kelly forceps (or any long forceps) to grasp the IUD inside the sterile package. Hold the IUD by the edge, and prevent the strings from entangling in the forceps.
12. Gently lift the anterior lip of the cervix using ring forceps.
13. Gently insert and slowly advance the IUD (this step overlaps with Step 14).
 - While avoiding touching the walls of the vagina, insert the placental forceps holding the IUD through the cervix into the lower uterine cavity.
 - Gently move the IUD further into the uterus toward the point where a slight resistance is felt against the back wall of the lower segment of the uterus.
 - Keeping placental forceps firmly closed, lower the ring forceps, and gently remove them from the cervix; leave them on a sterile towel.
14. “Elevate” the uterus (this step overlaps with Steps 13 and 15).

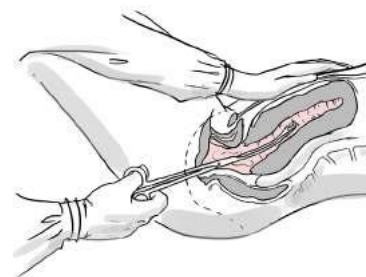
Place the base of the non-dominant hand on the lower part of the uterus (midline, just above pubic bone with fingers toward fundus), and gently push the uterus upward at the abdomen to extend the lower uterine segment.

This maneuver will help straighten the lower uterine segment for ease of IUD insertion.

15. Pass the IUD through the lower uterine segment angle (this step overlaps with Step 14).

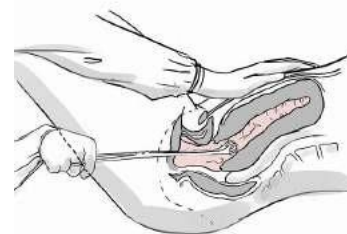
- Keeping forceps closed, gently move the IUD upward toward the uterine fundus in an angle toward the umbilicus.
- Lower the dominant hand (hand holding placental forceps) to enable the forceps to easily pass the lower uterine angle and follow the contour of the uterine cavity.

Avoid perforating the uterus by not using undue force in advancing the Kelly placental forceps bearing the IUD.



16. Continue gently advancing the forceps until the uterine fundus is reached, that is, when the provider feels a resistance. Confirm with the abdominal hand that the IUD has reached the fundus by feeling the uterus through the abdominal wall.
17. While continuing to stabilize the uterus, open the forceps, tilting them slightly toward the midline to release the IUD at the fundus.

18. Keeping the forceps slightly open, slowly remove them from the uterine cavity by sweeping the forceps to the sidewall of the uterus and sliding the instrument alongside the wall of the uterus. Avoid dislodging the IUD or catching the IUD strings as the forceps are removed.



19. Stabilize the uterus until the forceps are completely withdrawn. Examine the cervix to see if any portion of the IUD or strings are visible or protruding from the cervix. If the IUD or strings are seen protruding from the cervix, remove the IUD using the same forceps used for the first insertion; position the same IUD in the forceps inside the sterile package and reinsert.
20. Repair any lacerations (episiotomy) as necessary.

Intracerean Insertion

- Compared with immediate postplacental vaginal insertion, postplacental placement during a

cesarean section is associated with lower expulsion rates.(60) This association is due to the fact that the device is placed in the uterine cavity under direct vision either with the use of forceps or the gloved hand of the surgeon prior to closure of the uterine incision. Notably, the

rate of reported perforations in the postpartum period is very low.



- As a precaution, the service provider should review the recent labor and delivery experience of the client, i.e., whether or not the client experienced prolonged ruptured membranes (> 18 hours), prolonged labor, and/or extensive genital trauma, because these conditions can predispose the client to postpartum infection. In such situations, the client who wants to use an IUD should have the insertion deferred until the earliest postpartum visit (e.g., four weeks), during which she can be assessed and have the insertion once infection has been ruled out. The client should be counseled to practice the LAM or to use another FP method of her choosing until she can return for insertion. IUD insertion in the presence of postpartum sepsis may substantially worsen the condition.
- After the delivery of the placenta, the surgeon shall perform the following:
 - a. Massage the uterus until the bleeding subsides; make sure that no tissue is left in the uterine cavity.
 - b. Place the IUD at the uterine fundus manually or with a grasping instrument.
 - c. Before suturing the uterine incision, place the strings in the lower uterine segment near the internal os.
 - d. Close the uterine incision and the abdomen.

Immediate Postpartum Insertion

This procedure is safe and effective. The expulsion rate for postplacental insertion is higher than that for interval insertion but lower than that for immediate

postpartum. Nevertheless, immediate insertion after delivery has the following advantages:

- Assurance that the client is not pregnant.
- Women have a high motivation for accepting contraception immediately after delivery.
- Healthcare facilities provide a convenient setting for IUD insertion, particularly with the government's promotion of facility-based delivery.
- Trained attendants are present in the facility.
- Gives women protection from pregnancy without affecting breastfeeding.
- Women who may have difficulty accessing medical care would benefit from receiving a highly effective method of contraception where care is already established.
- There may be less pain during insertion in the postpartum period.

For these reasons, good FP counseling should be provided during antenatal visits or before the client’s confinement for childbirth. FP should be part and parcel of the health education sessions being given to would-be mothers.

WHAT ARE THE POTENTIAL COMPLICATIONS AND MANAGEMENT PROCEDURES OF IUDs?

Prolonged or heavy bleeding

Characterize the bleeding:

- o Prolonged bleeding—more than eight days
- o Heavy bleeding—twice as long or twice as much as the usual menses
- o For bleeding of more than three months:
 - Examine possible complications or other conditions (e.g., infection, tumor, or hormonal dysfunctions) that are unrelated to IUD.
 - Check for anemia. If present, recommend iron supplementation. If bleeding has no gynecologic cause, the following is the recommended management:
 - Non-steroidal anti-inflammatory drugs, such as ibuprofen (400 mg) or indomethacin (25 mg), should be taken twice daily after meals for five days, beginning when irregular bleeding starts, to achieve modest short-term relief.
 - Tranexamic acid (1500 mg) should be taken thrice daily for three days and then 1000 mg once daily for two days, beginning when heavy bleeding starts.
 - Iron tablets may be taken.

Cramping

- Cramping is common within the first three to six months of IUD use. This symptom eventually disappears.
- If mild cramping occurs only around the time of menses and no other abnormality is observed, reassure the client, and give her a pain reliever (paracetamol or mefenamic acid).
- If cramping is severe or continuous for more than three months, examine the client for other problems, such as partially expelled IUD or infection. If no problem is noted and the client wishes to continue using the IUD, give her a pain reliever.
- If cramping is severe and occurs between menses and is unacceptable to the client, remove the IUD.



Missing string

- If the string is not visible during checkup and the device is not found inside the uterus, the IUD may have been expelled unnoticed.
- Check for a history of IUD expulsion.
- Determine the risk of pregnancy, and ask the client the following:
 - o When she last menstruated
 - o When she last felt the string
 - o If she noticed any signs that she may be pregnant
- Perform a pelvic exam to determine if the strings are high in the cervix or hidden by a fold of the vagina, and check for signs of pregnancy.
- If pregnancy is suspected, refer the client to a physician who will do the necessary tests or examinations.
- If pregnancy has been ruled out, confirm expulsion, offer the client a backup contraception, and ask her to return during her next menses.
- Upon her return during menses and the strings are still not visible, sound the uterus to determine if the device is still inside. If so, explore the uterus and cervix to remove the strings.
- If the string could not be found, refer the client for an ultrasound to locate the IUD. If the result

is negative, the device may have been expelled unnoticed. Discuss reinsertion, or advise the use of another contraceptive method.

Pregnancy with IUD

- If the client is pregnant, rule out ectopic pregnancy, and refer the client to a specialist immediately. Ectopic pregnancy is life-threatening and requires emergency treatment.
- If IUD strings are visible,
 - Explain that the IUD must be removed to avoid risk of infection, miscarriage, or premature birth.
 - Remove the IUD gently by pulling the strings.
- If strings are not visible,
 - Perform an ultrasound to determine the location of the device.
 - If the device had not been expelled and is not accessible, do not attempt to remove it. Consider the case a high-risk pregnancy, and refer the client to a physician to closely monitor signs of a possible complication.
 - Inform the client of the risks, and advise her to seek immediate care for heavy bleeding, cramping, pain, abnormal vaginal discharge, or fever.

Pelvic inflammatory disease

Pelvic infection associated with IUD use may occur when the insertion is performed under unsanitary conditions or when the IUD is inserted in the presence of an undiagnosed STI. It may also develop later in women at risk of STIs. The usual symptoms of PID are vaginal discharge, pelvic pain or tenderness, abnormal bleeding, chills, and fever, but the infection can be silent.

- Refer the client to a doctor who will diagnose and treat the PID with the appropriate antibiotics. The immediate removal of the IUD is unnecessary.
- If the client does not want to keep the IUD, remove the device after the start of antibiotic treatment.
- If the infection does not improve, remove the IUD, and continue the antibiotics.
- Facilitate the treatment and counseling of the sexual partner.
- Counsel the client about condom use and, if possible, give her condoms.
- Treatment of serious cases requires hospitalization and possibly surgical intervention.
- Counsel the client to use an alternative method of contraception that prevents STI/HIV/AIDS transmission such as condom.

Uterine perforation

- Perforation is rare and usually occurs at the time of insertion.
- It occurs when the IUD is not inserted in the correct direction of the uterine cavity or when the length of the uterine cavity is not correctly determined. The risk of perforation is increased by forceful insertion or sounding.

Careful insertion by a trained provider is important. According to the WHO, the probability of perforation at the time of insertion is 1 in 1,000 cases

- Signs of perforation
 - Sharp pain during insertion
 - Loss of resistance to upward pressure of inserter or uterine sound
 - Signs of hemorrhage, which is a rare but serious complication (falling blood pressure and rising pulse rate) that requires emergency surgical procedure
 - May be asymptomatic

- If perforation occurs during insertion, perform the following:
 - Stop the procedure, and refer the client to a gynecologist or surgeon, if necessary.
 - Perforation can be confirmed by x-ray (if the client is not pregnant) or ultrasound.
 - In the absence of any sign of hemorrhage, provide alternative contraception, and refer the client immediately.
 - Follow up with the client after one week.

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 the client wants another IUD, she can have one inserted at any time, provided that she is certain that she is not pregnant.
- If the client does not want to continue using an IUD, assist her in choosing another contraceptive method.

Partner can feel IUD strings during sex

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

The use of IUDs is associated with some side effects and is not free from complications. Thus, the client must be instructed to return to the health facility for consultation when she experiences any of the associated side effects and complications or if she has new concerns.

A client who is not satisfied after treatment and counseling must be informed of the possibility of removing the IUD and replacing it with another contraceptive method.

WHAT ARE THE INDICATIONS FOR IUD REMOVAL? WHEN AND HOW SHOULD THE IUD BE REMOVED?

When the client requests for or develops medical conditions that require IUD removal, the provider should not refuse or delay the removal. Staff members must not pressure or force the client to continue using the IUD and instead offer her alternative FP methods. Some of the reasons for IUD removal include the following:

- Presence of side effects especially pain and bleeding, which are intolerable to the client
- Medical reasons
 - Pregnancy, if threads are visible
 - Acute PID (endometritis or salpingitis) if necessary and after antibiotics have been started for at least 24 hours
 - Perforation of the uterus or cervix or IUD translocation
 - Partial expulsion
 - Abnormal, heavy bleeding that puts the client's health at risk

When to remove the TCu IUD

- When the effective life span of the IUD has been reached. Recommend the replacement of copper IUDs at the end of the 12th year of use.

- At menopause (at least one year after the last period).
- Any time during the menstrual cycle.

How to remove the TCU IUD

1. Follow proper infection prevention procedures.
2. Insert the speculum to visualize the cervix and the IUD strings.
3. Grasp the strings with forceps.
4. Pull IUD strings slowly and gently.

The client must be informed of these steps before the removal procedure. If removal is not easy or the thread is not visible but the device has been shown to be in utero, have the IUD removed using alligator forceps or Novak's curette (an IUD hook) by a trained health provider.

What happens when IUD is removed

The IUD is a reversible means of contraception. Most women who discontinue IUD use to become pregnant conceive as rapidly as a non-IUD user. Sufficient evidence indicates that no relation exists between the duration of IUD use and the return to fertility.



IF SWITCHING FROM AN IUD TO ANOTHER CONTRACEPTIVE METHOD IS DESIRED, WHEN CAN THE OTHER METHOD BE STARTED?

The following guidelines (2) 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	<ul style="list-style-type: none">• If starting during the first seven days of monthly bleeding (first five 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 seven days of monthly bleeding (after the first five days for COCs and POPs) and the client has had sex since her last monthly bleeding, start the hormonal method now. The IUD should be kept in place until the client’s next monthly bleeding.• If starting after the first seven days of monthly bleeding (after the first five days for COCs and POPs) and the client has not had sex since her last monthly bleeding, the IUD can stay in place and be removed during her next monthly bleeding. Alternatively, the IUD can be removed, and a backup method can be used.
Male or female condoms,	<ul style="list-style-type: none">• Immediately the next time she has sex after the IUD is removed.
spermicides, diaphragms, cervical caps, or withdrawal	<ul style="list-style-type: none">• Immediately after the IUD is removed.
Fertility awareness-based methods	<ul style="list-style-type: none">• If starting during the first seven days of monthly bleeding, remove the IUD, and perform the female sterilization procedure. No need for a backup method.• If starting after the first seven days of monthly bleeding,
Female sterilization	<ul style="list-style-type: none">perform the sterilization procedure.• The IUD can be kept in place until the client’s follow-up visit or 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.

Male sterilization

- Any time
- The client can keep the IUD for three months after her partner's vasectomy to prevent pregnancy until the vasectomy is fully effective.

Backup methods include abstinence, male and female condoms, spermicides, and withdrawal. Inform the client that spermicides and withdrawal are the least effective contraceptive methods. If possible, give condoms to the client.

WHEN SHOULD THE FOLLOW-UP VISIT BE SCHEDULED?

A follow-up visit after the client's first monthly bleeding or three to six weeks after IUD insertion is recommended. No client should be denied an IUD because follow-up would be difficult or not possible. Follow-up visits after insertion may be done because of the following reasons:

- Routine yearly checkup as part of good health practice
- Any time the client has questions, concerns, or finds unusual signs and symptoms, which may suggest the following possible adverse effects/ complications:
 - Fever, chills, or unusual vaginal discharge, which can indicate an infection
 - Severe bleeding or abdominal cramping especially in the first month after insertion, which can indicate an infection
 - Irregular bleeding and/or pain in any cycle, which can indicate dislocation or perforation
- When removal/replacement of the device is due

A routine pelvic examination during the follow-up visit is not required. However, this examination may be appropriate in some settings or for some clients. Conduct a pelvic examination, particularly if the evaluation suggests the following:

- An STI or PID
- Partial or complete removal of the IUD

WHAT COUNSELING TIPS CAN BE PROVIDED FOR THOSE WHO PLAN OR CHOOSE TO USE AN IUD?

Discuss the following specific issues in detail during the counseling sessions:

- Characteristics of IUDs
- Client's current and future risk for STIs
- Effectiveness and mechanism of IUD
- Insertion and removal procedures
- Instructions for use and follow-up visit
- Possible side effects and complications
- How to check the strings



- Warning signs of complications that require immediate return to the clinic or referral (PAINS)

P: period is late

A: abdominal pain during intercourse **I:** infection

N: not feeling well **S:** string is missing

WHAT ARE THE COMMONLY ASKED QUESTIONS ABOUT IUDs?(2)

1. Does the IUD cause PID?

- By itself, the IUD does not cause PID. Gonorrhea and chlamydia are the primary direct causes of PID. However, IUD insertion when a woman has gonorrhea or chlamydia may lead to PID. This condition is not common.

When it does happen, it is most likely to occur in the first 20 days after IUD insertion. In a group of clients where STIs are common and screening questions identify half the STI cases, 1 case of PID may be reported in every 666 IUD insertions (or less than 2 per 1,000).

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, i.e., 12 months after the client's last monthly bleeding.

3. If a current IUD user has an 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. Studies show no increased risk of infertility among women who have used IUDs, including young women and women with no children. However, a woman who develops PID and is not treated, whether or not this woman has an IUD, is at risk for infertility.

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

- Yes. A woman who has not had children can generally use an IUD, but she should understand that the IUD is more likely to be expelled 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. In rare instances, the IUD may come through the wall of the uterus into the abdominal cavity. This condition is usually caused by a mistake during insertion. If it is discovered within six weeks or so after insertion or if it is causing symptoms at any time, the IUD must be removed by laparoscopic surgery or laparotomy. However, an out-of-place IUD usually causes no problems and should be left where it is. The client 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. A "rest period" is not necessary. Removing the old IUD and immediately inserting a new one pose less risk of infection than two separate procedures. In addition, 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. The risk of infection is minimal 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). However, antibiotics may be considered 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. An IUD can be inserted at any time to a woman having menstrual cycles during her menstrual cycle, provided that she is certainly 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. However, signs of infection are difficult to detect during monthly bleeding.

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. IUD expulsion is uncommon, especially with the woman not 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. Alternatively, she can watch carefully in the first month or so and during monthly bleeding to see if the IUD has come out.

11. Do IUDs increase the risk of ectopic pregnancy?

- No. 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.
- On the rare occasions that the IUD fails and pregnancy occurs, 6 to 8 of every 100 of these pregnancies are ectopic. Thus, a great majority of pregnancies after IUD failure are not ectopic. Nevertheless, ectopic pregnancy can be life threatening. Thus, a provider should be aware that ectopic pregnancy is possible after IUD failure.

