

Contraceptive methods - Part 3

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Outline and objectives

- Description of the method
- Mechanism of action
- Effectiveness
- Eligibility criteria
- Benefits and side effects
- Interventions for associated effects

Methods

1. Intrauterine devices (IUDs)

- Intrauterine device (IUD) levonorgestrel
- Intrauterine device (IUD): copper containing

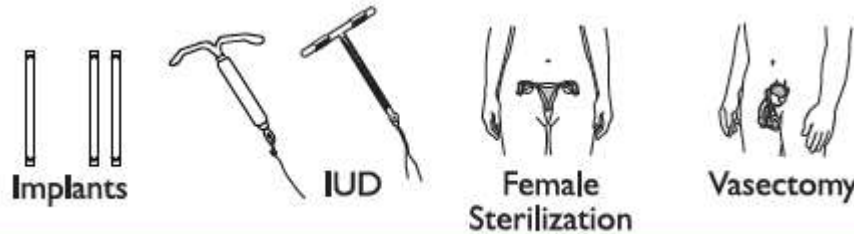
2. Barrier methods

- Male condoms
- Female condoms
- Others: Spermicides, Diaphragm, Cervical caps

Comparing Effectiveness of Family Planning Methods

More effective

Less than 1 pregnancy per 100 women in one year

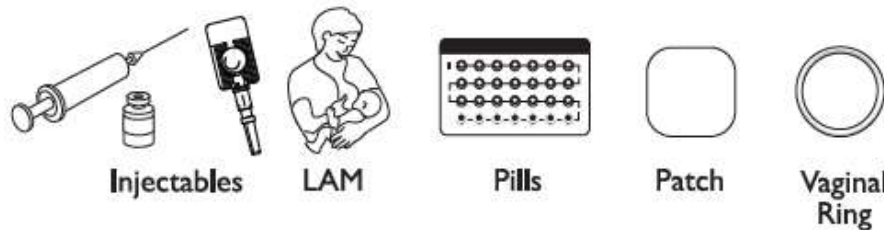


How to make your method more effective

Implants, IUD, female sterilization:

After procedure, little or nothing to do or remember

Vasectomy: Use another method for first 3 months



Injectables: Get repeat injections on time

Lactational Amenorrhea Method (for 6 months):

Breastfeed often, day and night

Pills: Take a pill each day

Patch, ring: Keep in place, change on time



Male condoms, diaphragm: Use correctly every time you have sex

Fertility awareness methods: Abstain or use condoms on fertile days. Standard Days Method and Two-Day Method may be easier to use.

Less effective

About 30 pregnancies per 100 women in one year



Female condoms, withdrawal, spermicides:

Use correctly every time you have sex

Intrauterine devices (IUDs)



LNG-IUD



Copper T 380A

Levonorgestrel intrauterine devices (LNG-IUDs)



LNG-IUD

What are LNG-IUDs



LNG-IUD

- Small plastic devices inserted through the vagina and cervix into the uterus.
- Work by releasing small amounts of levonorgestrel hormone into the uterus which prevent the sperm from fertilizing an egg. This is the same hormone used in some implants and oral contraceptive pills.
- Very effective in preventing pregnancy.
- Long acting and easily reversible. LNG-IUDs can work 3-7 years (depending on type) and can be easily removed by a provider whenever the woman wants.
- Return to fertility is not delayed after an LNG-IUD is removed.

LNG-IUDs: Types and brands

- May be unbranded or may be marketed under names such as **Mirena, Liletta, Avibela, Skyla, Kyleena, and Jaydess**.
- Though they all work the same way, the type and size of inserter and amount of LNG hormone released by the IUD may be different for different LNG-IUD types.
- The size of the LNG-IUD frame and inserter tube for Kyleena, Skyla, and Jaydess are slightly smaller than the Mirena, Avibela, and Liletta.

Similarities: Copper IUDs vs. LNG-IUDs

Both Copper IUDs and LNG-IUDs:

- Are very effective and safe
- Are long acting and reversible
- Return to fertility is not delayed upon removal
- Can be removed anytime the woman wants
- Require trained provider to insert and remove
- Protect against the risks of pregnancy- uterine and ectopic and may protect against endometrial and cervical cancer.
- Can be inserted at any time in the cycle if reasonably sure that woman is not pregnant
- Can be inserted post abortion and postpartum if no evidence of complications

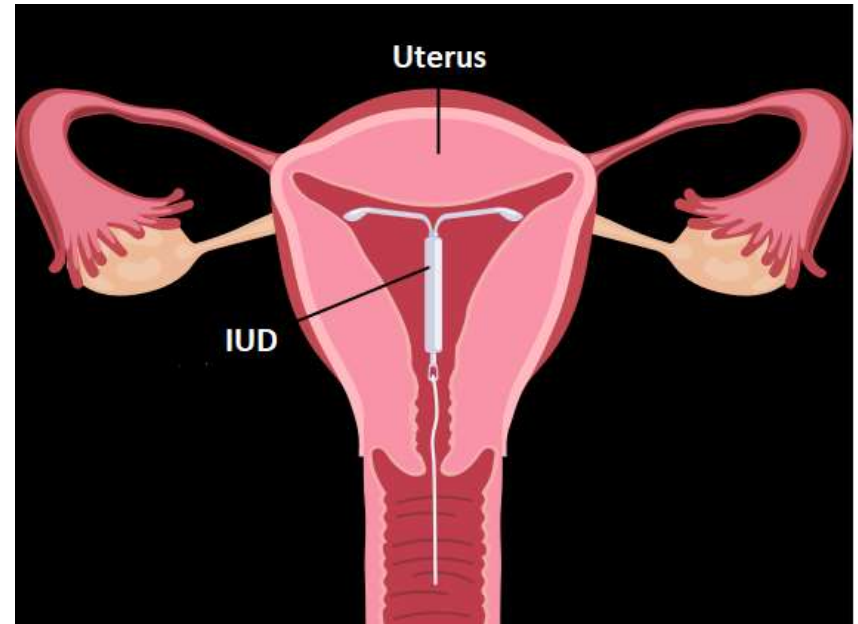
Differences: Copper vs LNG-IUDs

	Copper IUDs	LNG-IUDs
Appearance	T-shaped plastic device with copper sleeves or wire wrapped around them	T-shaped plastic device with the hormone reservoir in the stem of the T frame
Lasts for:	10-12 years depending on brand and national guidelines	3-7 years depending on brand and national guidelines
Effectiveness	Very effective; 6 per 1,000 women using perfectly will become pregnant in the first year.	Very effective; less than 2 per 1,000 women using perfectly will become pregnant in first year.
Hormones	No hormones	Small amounts of the hormone levonorgestrel
Works by	Causes a chemical change that Interferes with sperm motility and prevents sperm and egg from meeting	Thickens cervical mucosa, Interferes with movement of the sperm, so the sperm and the egg do not meet.
Side effects	Changes in bleeding patterns including prolonged and heavy monthly bleeding, more cramps and pain during monthly bleeding.	Changes in bleeding patterns including lighter bleeding, fewer days of bleeding, or no bleeding. Mild systemic side effects such as headaches, breast tenderness.
Additional considerations	<ul style="list-style-type: none"> • May contribute to anemia if woman has low iron stores. • May be more easily available and less expensive than LNG-IUDs. • Can be used as emergency contraception. 	<ul style="list-style-type: none"> • Helps protect against iron-deficiency anemia. • Reduces menstrual cramps, heavy monthly bleeding, and pelvic pain and irregular bleeding from uterine fibroids and endometriosis. • Not used as Emergency Contraception. Must wait for at least 6 days to insert for after taking UPA emergency contraception to avoid drug interaction.

LNG-IUD: Mechanism of action

Prevents fertilization of the egg and sperm by:

- Thickening of cervical mucus
- Interfering with movement of the sperm



Relative effectiveness of LNG IUD to other family planning methods

Method	# of unintended pregnancies among 1,000 women in 1 st year of typical use
Implant	1
Male sterilization	1.5
Female sterilization	5
LNG IUD	7
Copper IUD	8
Lactational amenorrhea	20
Progestin-only injectables	40
Progestin-only pills	70
Combined oral contraceptives	70
Standard-days method	120
Male condom	130
Withdrawal	200
Female condom	210
No method	850

Adapted from Training Resource Package for Family Planning: <https://www.fptraining.org/>

LNG-IUD: Characteristics

Benefits

- Safe and highly effective
- Requires no user action once in place.
- Private
- Long-acting (3-7 years depending on type)
- No delay in return to fertility after removal
- Has health benefits
- No further costs once inserted

Limitations

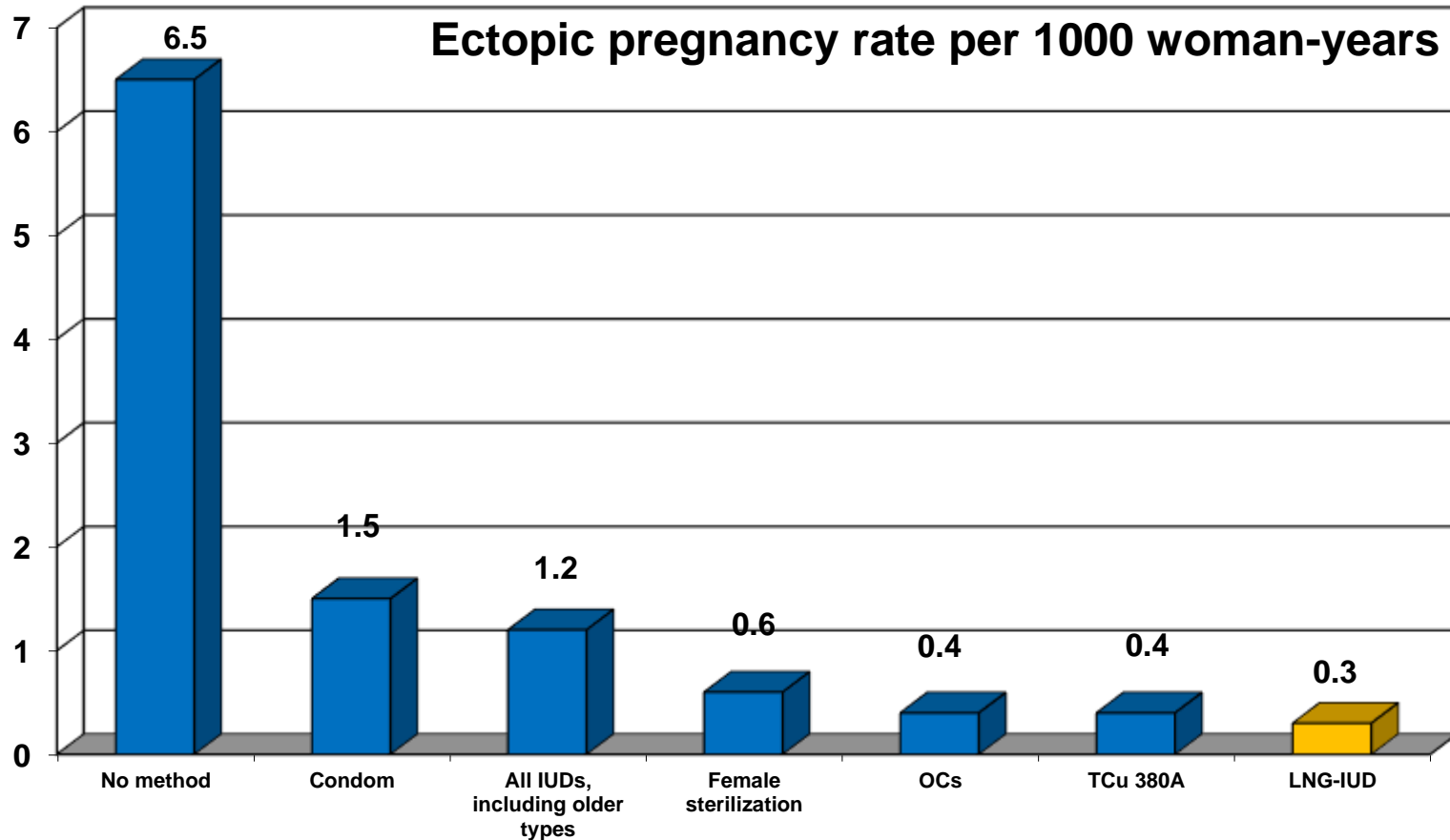
- Trained provider needed to insert and remove
- Requires pelvic exam
- Possible pain or discomfort during insertion
- Have potential side effects
- Complications are rare, but may occur
- Does not protect against STIs/HIV

LNG-IUD: Health benefits

Apart from preventing pregnancy and associated health risks, LNG-IUDs are known to:

- Reduce menstrual cramps, heavy monthly bleeding, and symptoms of endometriosis (Irregular bleeding and pelvic pain)
- Protect against iron-deficiency anemia
- Reduce risk of ectopic pregnancy
 - Rate in LNG-IUD users is 10 ectopic pregnancies in 10,000 women
 - Rate in women using no contraception is 65 ectopic pregnancies in 10,000 women
- May help protect against cervical and endometrial cancer

IUDs Reduce Risk of Ectopic Pregnancy



Source: Sivin, 1991; Bosco-Levy, 2019.

Adapted from Training Resource Package for Family Planning: <https://www.fptraining.org/>

LNG-IUD: Possible side-effects

Most common:

- Changes in bleeding patterns (lighter, irregular, infrequent or no monthly bleeding)

Less common:

- Nausea (upset stomach)
- Tender breasts
- Mood changes or headaches
- Slight weight gain
- Dizziness
- Acne

Side effects are not usually signs of illness and they get better in 3-6 months of insertion.

Who can use LNG-IUDs

Category 1 and 2 examples:

WHO Category	Conditions (selected examples)
Category 1	Post abortion 1 st trimester, smoking (any number of cigarettes), obesity, varicose veins, heavy or prolonged bleeding (initiation only), cervical ectopy, uterine fibroids without distortion of the uterine cavity, endometriosis, irregular bleeding without heavy bleeding, anemia, hypertension with BP of less than 160/100 mmHg,
Category 2	Menarche to <20 years, nulliparous, post abortion 2 nd trimester, elevated blood pressure of $\geq 160/\geq 100$, PID (continuation), vascular disease, diabetes, history of DVT or stroke, migraine with aura (initiation)

Who should not use LNG-IUDs

Category 3 and 4 examples:

WHO Category	Conditions (selected examples)
Category 3	Migraine with aura (continuation), severe cirrhosis, high individual risk of STI (initiation), acute DVT/PE, lupus with positive (or unknown) antiphospholipid antibodies
Category 4	Pregnancy, unexplained vaginal bleeding (initiation prior to evaluation), puerperal sepsis or immediate post-septic abortion, current PID or cervical infection (initiation) Current breast cancer, distorted uterine cavity incompatible with IUD insertion"

LNG-IUD use by women with HIV Infection

WHO Eligibility Criteria		
Condition	Category	
	Initiate	Continue
Asymptomatic or mild HIV clinical disease	2	2
Severe or advanced HIV clinical disease	3	2
High risk of HIV	1	1

- LNG-IUDs are safe for majority of women with HIV, whether or not they are on ARVs
- Initiation not recommended if woman has severe or advanced HIV clinical disease
- Women at high risk of acquiring HIV can use LNG-IUD without restrictions
- Encourage dual method use

LNG-IUD use by postpartum women

WHO Eligibility Criteria	
Characteristic/ Condition	Category
<48 hours, non-breastfeeding	1
<48 hours, breastfeeding	2
≥48 hours to <4 weeks	3
≥4 weeks	1
Puerperal sepsis	4

- Women less than 48 hours postpartum can have LNG-IUD inserted
- Women between 48 hours to 4 weeks postpartum generally should not get LNG IUDs
- No restrictions starting at 4 weeks postpartum
- Women with current puerperal sepsis should not have LNG-IUD inserted

When to start LNG-IUD - 1

<p>Having menstrual cycles or switching from a non-hormonal method</p>	<ul style="list-style-type: none">• If menstrual bleeding started in last 7 days, can insert IUD now. No back up needed• If menstrual bleeding started more than 7 days ago, can insert IUD now if reasonably certain she is not pregnant. No need to wait for next menstrual period. Need a backup method for the first 7 days after insertion.
<p>Switching from a hormonal method, if she has been using method consistently and correctly or otherwise certain not pregnant.</p>	<ul style="list-style-type: none">• If menstrual bleeding started in last 7 days, can insert IUD now. No backup method needed.• If menstrual bleeding started more than 7 days ago, can insert LNG-IUD now. Need a backup method for the first 7 days after insertion.• If switching from an injectable, can have the LNG-IUD inserted when the repeat injection would have been given. No backup method needed.

When to start LNG-IUD - 2

<p>No monthly bleeding (not related to childbirth or breastfeeding)</p>	<ul style="list-style-type: none">• Can be inserted any time if reasonably certain that she is not pregnant. Use a backup method for the first 7 days after insertion.
<p>LNG-IUD can be inserted in first 2 days after you give birth, whether or not you are breastfeeding</p>	<ul style="list-style-type: none">• Can insert within 48 hours after birth (if no postpartum infection). Special training needed.• Can be inserted during a cesarean delivery after removal of placenta and before closure of uterus
<p>More than 2 days but less than 4 weeks after giving birth</p>	<ul style="list-style-type: none">• Between 48 hours and 4 weeks after birth, delay insertion. Offer condoms or another method if she is not fully breastfeeding

When to start LNG-IUD - 3

If not inserted within 2 days after birth, LNG-IUD can be inserted anytime after 4 weeks postpartum, for fully or nearly fully breastfeeding women

- **If monthly bleeding has not returned and less than 6 months postpartum**, can insert IUD anytime. No backup method needed.
- **If monthly bleeding has not returned and more than 6 months postpartum**, can insert IUD anytime if reasonably certain that woman is not pregnant. Use backup method for first 7 days after insertion.
- **If monthly bleeding has returned**, can have LNG-IUD inserted as advised for women having menstrual cycles (as discussed earlier)

If not inserted within 2 days after birth, LNG-IUD can be inserted anytime after 4 weeks postpartum, for women who are partially breastfeeding or not breastfeeding

- **If monthly bleeding has not returned**, insert anytime if it can be determined that she is not pregnant. Use backup method for first 7 days after insertion.
- **If monthly bleeding has returned**, can have LNG-IUD inserted as advised for women having menstrual cycles (as discussed earlier)

When to start LNG-IUD - 4

<p>After an abortion or miscarriage.</p>	<ul style="list-style-type: none">• For medical abortion, LNG-IUD can be inserted at the time of confirmation that abortion is complete or within 7 days. No back up method needed.• For surgical abortion, LNG-IUD may be inserted immediately after the procedure or within 7 days. No backup method needed. In case of an infection, delay insertion until the infection is resolved.• LNG-IUD insertion after second-trimester abortion or miscarriage requires specific training. If trained provider is not available, delay insertion until at least 4 weeks post-abortion. Provide backup method in the interim.
<p>After taking progestin-only, combined, or ulipristal acetate (UPA) emergency contraceptive pills.</p>	<ul style="list-style-type: none">• Can be inserted anytime when it can be determined that she is not pregnant. Give her another contraceptive method to use until she can have the LNG-IUD inserted.• To avoid drug interaction, wait until 6 days after taking UPA-ECPs to insert LNG-IUD.

Correcting rumours and misconceptions about LNG-IUDs

Rumor/Misconception	Reality
Cause pain during sex.	Do not cause pain during sex. Occasionally, a man may feel the strings during sex if the strings are cut very short during insertion.
It prevents pregnancy by causing an abortion.	The mechanism of action of the LNG-IUS is preventing the sperm and egg from meeting and thus preventing pregnancy
Absence of bleeding with LNG-IUD means the woman is no longer fertile.	When the LNG IUD is removed, menstrual bleeding will return and fertility is restored without a delay.
Absence of bleeding is unhealthy. It means dirty blood remains in the body	Bleeding is reduced or absent, because the hormone released by LNG-IUD makes uterine lining thin, so it may not produce bleeding. No dirty blood remains in the uterus. Instead, this helps in preventing anemia
Can move through the body including to heart and brain	LNG-IUDs normally stay within the uterus like a seed within a shell. In very rare cases, during the insertion, the IUD can go through the wall of the uterus into the abdominal cavity.

Correcting rumours and misconceptions about LNG-IUDS

Rumor/Misconception	Reality
Increases risk of ectopic pregnancy	Greatly REDUCES the risk of ectopic pregnancy.
Are only for women who have had children	Can be used by women who have had children and those who have not
Are not safe for adolescents	Can be used by women of any age, including adolescents
An LNG-IUD cannot be inserted immediately postpartum	The LNG-IUD can be inserted by a trained provider immediately after a vaginal delivery (within 10 minutes of delivery of the placenta) or up to 48 hours following vaginal delivery or during a cesarean section.
Increase the risk of getting STIs, including HIV	Do not increase the risk of any STI, including HIV.
Must be inserted during monthly bleeding	Can be inserted at anytime during menstrual cycle when it is reasonably certain that she is not pregnant.

Infertility is linked to STIs, not to IUDs

	IUD use in the past		Chlamydia antibodies	
	No	Yes	No	Yes
Infertile women with tubal occlusion	93.6%	6.4%	61.7%	38.3%
Infertile women without tubal occlusion (controls)	94%	6%	64.6%	35.4%
Pregnant women (controls)	93.2%	6.8%	77.4%	22.6%

Source: Hubacher, 2001.

Adapted from Training Resource Package for Family Planning: <https://www.fptraining.org/>

Complications of LNG IUD

Problem	Risk	Linked to	Reduced through/by
Expulsion	Generally low (about 10 per 100 users over 3 years)	Provider skill; age and parity of woman; timing of insertion	Provider training, supportive supervision
PID	Estimated at approximately 1 in 666 (depending on STI prevalence)	Presence of cervical infections or chlamydia/ gonorrhea at time of insertion	Screening women for risk of STIs prior to insertion
Perforation	Very low, 1 in 1,000 insertions	Provider skills/correct insertion technique; careful pelvic exam to determine size and position of uterus; breastfeeding status and time since delivery	Provider training, supportive supervision

Expulsion rates of LNG IUD are higher for postpartum insertion

Timing of Insertion	Expulsion Rates
Interval (> 4 weeks after delivery)	1.8%
Immediate after cesarean delivery	2.3%
Immediate after vaginal delivery (within 10 minutes)	27.4%
Between 10 min and 4 weeks postpartum	36.8%

Source: Averbach et al., 2020

Signs of possible LNG-IUD complications

Advise client to return immediately in case of:

Signs and symptoms	Possible Cause
Bleeding and severe abdominal cramping within a few days post-insertion	Perforation
Unexplained vaginal bleeding (e.g. after a pattern of bleeding has been established) or pain in every cycle	Partial expulsion, perforation, infection
Fever, chills, unusual/foul-smelling vaginal discharge, low abdominal pain	Infection (PID)
Missing IUD strings, missed period or symptoms of pregnancy	Expulsion, perforation, pregnancy

Managing LNG-IUD side effects or complications: Changes in bleeding patterns

Counseling and reassurance are key

Problem	Action/Management
Irregular bleeding/ spotting	<ul style="list-style-type: none">• Reassure client that this is common and not harmful, usually diminishes after few months
No monthly bleeding	<ul style="list-style-type: none">• Reassure her that many women eventually stop having monthly bleeding when using LNG-IUD and this is not harmful. Blood is not building up inside her. There is no need to lose blood every month.
Heavy or prolonged bleeding	<ul style="list-style-type: none">• Reassure client that this is common and not harmful, usually diminishes after few months• Provide iron tablets

Managing LNG-IUD side effects or complications: Cramping and mild pain

Counseling and reassurance are key

Problem	Action/Management
Cramping and mild pain	<ul style="list-style-type: none">• She can expect cramping and pain in first 1–2 days after insertion• Suggest ibuprofen/paracetamol, other pain reliever (not aspirin if she also has heavy bleeding)• If cramping continues evaluate for other partial expulsion or perforation, or other causes; treat or refer.• If cramping is severe but no underlying condition, discuss removing the LNG-IUD and switching to another method

Managing LNG-IUD side effects or complications: Severe pain in lower abdomen

Severe pain in lower abdomen is rare. Rule out PID, ectopic pregnancy, ovarian cyst, perforation.

- **If ectopic pregnancy is suspected:**
 - Refer immediately.
- **If PID is suspected:**
 - Treat with appropriate antibiotics for gonorrhea, chlamydia and anaerobic bacterial infection.
 - There is no need to remove the LNG-IUD.
- **If ovarian cyst or enlarged ovarian follicles suspected:**
 - Reassure client they usually disappear on their own
 - No need to treat unless they grow abnormally large, twist, or burst
 - Can continue to use LNG-IUD
 - Follow up in 6 weeks to ensure problem resolving

Managing LNG-IUD side effects or complications: Suspected perforation

- If perforation is suspected at a time of insertion, stop procedure immediately, remove all instruments and LNG-IUD if inserted.
- Observe vital signs every 5-10 min for an hour; check for signs of bleeding and shock
 - If rapid pulse, falling blood pressure, or increased pain: refer
 - If stable, observe several more hours and send home
- Provide alternative contraception
 - Advise to avoid sex for 2 weeks
- Follow-up in a week or as needed

Managing LNG-IUD side effects or complications: Missing strings

- Ask the client:
 - Whether and when she saw the LNG-IUD come out
 - When did she have her last monthly bleeding
 - If she has any symptoms of pregnancy
 - If she has used a backup method since she noticed the LNG-IUD come out
- Perform pelvic exam, gently probe for strings in cervical canal
- If cannot locate strings, consider x-ray (if pregnancy can be ruled out) or ultrasound, or refer. Provide a backup method in meantime in case LNG-IUD came out and the woman did not notice.
- Insert another LNG-IUD if expulsion is confirmed and she is not pregnant and still wants to use an LNG-IUD.

Managing LNG-IUD side effects or complications: Suspected pregnancy

When pregnancy is suspected based on absence of bleeding and/or symptoms of pregnancy:

- Assess for pregnancy, including ectopic pregnancy by pregnancy test or other means (e.g. ultrasound).
- If the client is pregnant and wishes to continue the pregnancy:
 - Explain that an IUD in the uterus during pregnancy increases the risk of preterm delivery or miscarriage often complicated with infection
 - If possible, remove the LNG-IUD
- If she chooses to keep the LNG-IUD, advise close follow-up for signs of miscarriage (with or without infection).

LNG-IUDs: Summary

LNG-IUDs:

- Are safe, private, highly effective, convenient, reversible, long lasting, cost-effective, easy to use, and appropriate for the majority of women.
- Offer important health benefits, including (but not limited to) protection from endometrial and cervical cancers, and reduction of menstrual cramping and bleeding.

Providers can ensure safety by:

- Informative counseling
- Careful screening
- Adherence to infection prevention practices
- Proper follow-up

Copper-bearing intrauterine devices (IUDs)



Copper T 380A

What are Copper IUDs?

- Small plastic devices inserted through the vagina and cervix into the uterus.
- Requires no user action.
- Requires a clinically trained provider to properly insert and remove.
- They are:
 - very safe so can be used by most women.
 - very effective.
 - Long acting – up to 12 years – depending on type of device
- A woman can soon become pregnant when IUD is taken out.



Copper T-380A



Multiload 375

Copper IUDs: Types

- Copper IUDs have a small plastic frame with copper sleeves or wire around it
 - TCu-380A, “Copper T” is most widely used copper IUD
 - Multiload 375 is another copper IUD commonly available in some countries



Copper T-380A

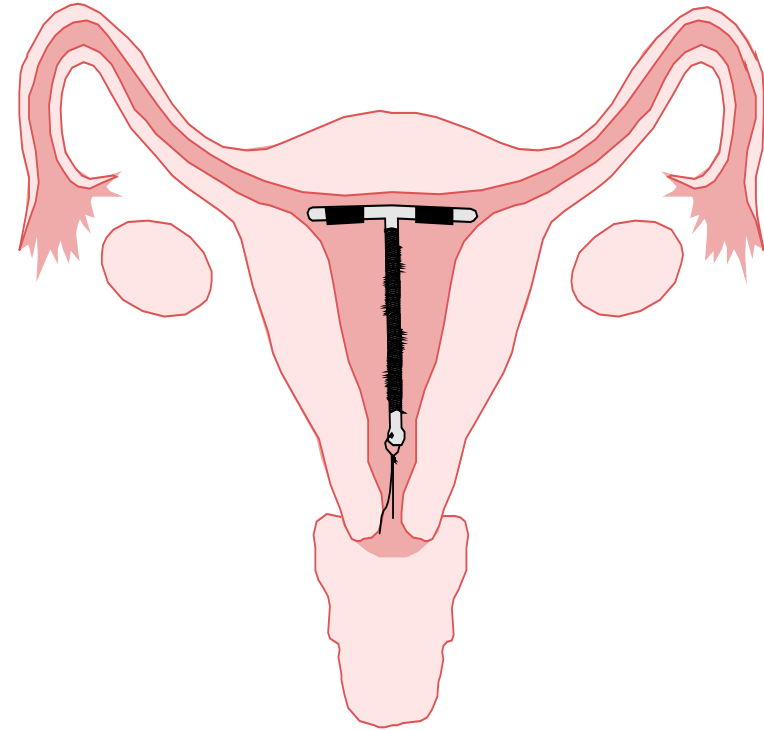


Multiload 375

Copper IUDs: Mechanism of action

Prevents fertilization by:

- Impairing the viability of the sperm
- Interfering with movement of the sperm



Source: Ortiz, 1996

Relative effectiveness of Copper IUDs to other methods

Method	# of unintended pregnancies among 1,000 women in 1 st year of typical use
No method	850
Withdrawal	220
Female condom	210
Male condom	180
Pill	90
Injectable	60
IUD (Copper/ LNG-IUD)	8 / 2
Female sterilization	5
Vasectomy	1.5
Implant	0.5

Source: Trussell J., *Contraceptive Failure in the United States*, Contraception 83 (2011) 397- 404, Elsevier Inc.

Copper IUDs: Characteristics

- Safe and highly effective
- Require no user action
- Long-acting (up to 12 years)
- Rapid return to fertility
- No systemic effects
- Have health benefits
- Trained provider needed to insert and remove
- Require pelvic exam
- Possible pain or discomfort during insertion
- Have potential side effects
- Complications are rare, but may occur
- Do not protect against STIs/HIV

Copper IUDs: Health benefits

IUDs are known to:

- Prevent risks of pregnancy
- Reduce risk of ectopic pregnancy
 - Rate in IUD users is 12 in 10,000
 - Rate in women using no contraception is 65 in 10,000
- May help protect against cervical and endometrial cancer

Copper IUDs: Possible side effects

If a woman chooses this method, she may have some side-effects. They are not usually signs of illness.

After insertion:

- Some cramps for several days
- Some spotting for a few weeks

Other common side-effects:

- Longer and heavier periods
- Bleeding or spotting between periods
- More cramps or pain during periods

***May get less after
a few months***

Who can use Copper IUDs

Category 1 and 2 examples:

WHO Category	Conditions (selected examples)
Category 1	≥20 years, cervical ectopy, uterine fibroids without distortion of the uterine cavity, irregular bleeding without heavy bleeding, breastfeeding, history of or acute DVT/PE
Category 2	Menarche to <20 years, nulliparous, heavy or prolonged bleeding, severe dysmenorrhea, anemia

Who should not use Copper IUDs

Category 3 and 4 examples:

WHO Category	Conditions (selected examples)
Category 3	48 hours to <4 weeks postpartum, ovarian cancer/if initiating use, high individual risk of STI/ if initiating use
Category 4	Pregnancy, unexplained vaginal bleeding (prior to evaluation), current PID or cervical infection, endometrial or cervical cancer/if initiating use

IUD Use by Women with HIV Infection

WHO Eligibility Criteria		
Condition	Category	
	Initiate	Continue
Asymptomatic or mild HIV clinical disease	2	2
Severe or advanced HIV clinical disease	3	2
High risk of HIV	2	2

- IUDs safe for majority of women with HIV, whether or not they are on ARVs
- Initiation not recommended if woman has severe or advanced HIV clinical disease
- Encourage dual method use

IUD use by postpartum women

WHO Eligibility Criteria	
Characteristic/ Condition	Category
<48 hours	1
48 hours to <4 weeks	3
≥4 weeks	1
Puerperal sepsis	4

- Women less than 48 hours postpartum can have copper IUD inserted
- Women 48 hours to 4 weeks postpartum generally should not initiate IUDs
- No restrictions starting at 4 weeks postpartum
- Women with current puerperal sepsis should not have IUD inserted

When to start Copper IUD - 1

IUD can be inserted in first 2 days after birth.

Insertion after childbirth:

- Can insert within 48 hours after birth. Special training needed.
- Between 48 hours and 4 weeks after birth, delay insertion. Offer condoms or another method if she is not fully breastfeeding.
- Can insert after 4 weeks after birth. Must be reasonably certain she is not pregnant.
- If infection, insert after infection has been treated and cured.

It can be started any day of the menstrual cycle if pregnancy can be ruled out

- If menstrual bleeding started in last 12 days, can insert IUD now.
- If menstrual bleeding started more than 12 days ago, can insert IUD now if reasonably certain she is not pregnant. No need to wait for next menstrual period.

When to start Copper IUD - 2

<p>IUD can be inserted if fully or nearly fully breastfeeding less than 6 months after giving birth.</p>	<ul style="list-style-type: none">• An IUD can be inserted anytime from 4 weeks to 6 months after giving birth and menstruation has not returned.
<p>IUD can be inserted after an abortion or miscarriage.</p>	<ul style="list-style-type: none">• Can be inserted immediately or within 12 days after a first- or second-trimester abortion or miscarriage if no infection is present. No need for a backup method.• 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.• If infection, insert after infection has been treated and cured.
<p>IUD can be inserted if switching from another method.</p>	<ul style="list-style-type: none">• Can be inserted immediately, if she has been using the method consistently and correctly or if it is otherwise reasonably certain she is not pregnant.

Copper IUDs: Correcting rumors and misconceptions

IUDs:

- Rarely lead to PID
- Do not increase risk of STIs, including HIV
- Do not work by causing abortion
- Do not make women infertile
- Do not move to the heart or brain
- Do not cause birth defects
- Do not cause pain for woman or man during sex
- Significantly reduce risk of ectopic pregnancy

Complications of Copper IUDs - 1

- Potential complications of IUDs include puncturing of uterus (perforation), pelvic inflammatory disease (PID), and expulsions.
- Biases in early research overstated risks of PID.
- Most research since the 1980s has concluded that serious complications **are rare** with modern IUDs.

Complications of Copper IUDs - 2

Complication	Risk	Linked to	Reduced through/by
Perforation	Very low, 1 in 1,000 insertions	Skill and experience of provider	Supervised training
PID	Estimated at approximately 1 in 666 (depending on STI prevalence)	Mostly due to presence of cervical infections or chlamydia/ gonorrhea at time of insertion	Screening women for risk of STIs; not inserting in women with current STIs; adherence to infection prevention procedures
Expulsion		Provider's skill; age and parity of woman; time since insertion; timing of insertion	

Signs of possible Copper IUD complications

Advise client to return immediately in case of:

- Bleeding and severe abdominal cramping within a few days post-insertion ➡ perforation
- Irregular bleeding or pain every cycle ➡ partial expulsion, perforation
- Fever, unusual vaginal discharge, low abdominal pain ➡ infection
- Missing IUD strings, missed period ➡ expulsion, pregnancy

Managing Copper IUD side effects or complications: Heavy, prolonged or irregular bleeding

Counseling and reassurance are key

Problem	Action/Management
Heavy or prolonged bleeding	<ul style="list-style-type: none">• Reassure client that this is common and not harmful, usually diminishes after few months• For short-term relief offer 5-day course of tranexamic acid or NSAIDs (not aspirin)• Provide iron tablets
Irregular bleeding	<ul style="list-style-type: none">• Reassure client• For short-term relief offer ibuprofen or indomethacin 2 times daily after meals for 5 days

Managing Copper IUD side effects or complications: Cramping and mild pain

Counseling and reassurance are key

Problem	Action/Management
Cramping and mild pain	<ul style="list-style-type: none">• She can expect cramping and pain in first 1–2 days after insertion• Reassure client that this is common in first 3–6 months, not harmful, usually decreases over time• Suggest ibuprofen, other pain reliever (not aspirin if she also has heavy bleeding)• If cramping continues and/or occurs outside of menstruation, evaluate for partial expulsion or perforation, treat or refer• If cramping is severe but no underlying condition, discuss removing the IUD

Managing Copper IUD side effects or complications: Severe pain in lower abdomen

Severe pain in lower abdomen is rare:

- Rule out PID, ectopic pregnancy or perforation.
- If PID is suspected, treat with appropriate antibiotics for gonorrhoea, chlamydia and anaerobic bacterial infection. There is no need to remove the IUD.
- If ectopic pregnancy is suspected, refer immediately.

Managing Copper IUD side effects or complications: Suspected perforation

- Stop procedure immediately, remove IUD
- Observe vital signs every 5-10 min for an hour; check for signs of bleeding
 - If rapid pulse, falling blood pressure, or increased pain: refer
 - If stable, observe several more hours and send home if no signs or symptoms
- Provide alternative contraception
 - Advise avoid sex for 2 weeks
- Follow-up in a week or as needed

Managing Copper IUD side effects or complications: Missing strings

- Determine risk of pregnancy
- Perform pelvic exam, probe for strings in cervical canal
- If cannot locate strings, consider X-ray or ultrasound, or refer
- Give choice of another contraceptive method
- Insert another IUD if expulsion is confirmed and
 - Woman is not pregnant
 - She still wants to use an IUD

Managing Copper IUD side effects or complications: Suspected pregnancy

- Assess for pregnancy, including ectopic pregnancy
- If the client is pregnant and wishes to continue the pregnancy:
 - Explain that an IUD in the uterus during pregnancy increases the risk of preterm delivery or miscarriage
 - If possible, remove the IUD
 - Advise close follow-up for signs of septic miscarriage

Copper IUDs: Summary

Copper IUDs are:

- Safe, highly effective, convenient, reversible, long lasting, cost-effective, easy to use, and appropriate for the majority of women.

Providers can ensure safety by:

- Informative counseling
- Careful screening
- Appropriate infection prevention practices
- Proper follow-up

Barrier methods

Male condoms

Female condoms

Spermicides

Diaphragms

Cervical caps

Male condoms



What are male condoms?

- Effective barrier method that can be used for both prevention of pregnancy and protection against HIV and other sexually transmitted infections (STIs).
- A sheath that fits over a man's erect penis.
- Also called rubbers, “raincoats,” “umbrellas,” skins, prophylactics and preservativos; and known by many different brand names.
- Most made of thin latex rubber.
- Variety of sizes, colors, flavors, and textures are available.



Male condoms: Dual protection

Male (and female) condoms are the *only* FP methods that provide **dual protection**:

- Protection from pregnancy *and*
- Protection from transmission of HIV and other STIs between partners



Relative effectiveness of male condoms compared to other FP methods

Method	# of unintended pregnancies among 1,000 women in 1 st year of typical use
No method	850
Withdrawal	220
Female condom	210
Male condom	180
Pill	90
Injectable	60
IUD (CU-T 380A / LNG-IUS)	8 / 2
Female sterilization	5
Vasectomy	1.5
Implant	0.5

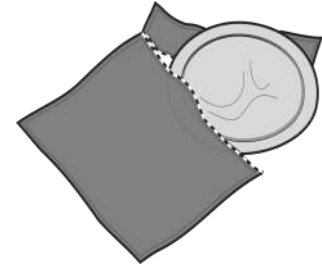
Source: Trussell J., *Contraceptive Failure in the United States*, Contraception 83 (2011) 397- 404, Elsevier Inc.

Male condoms: Effectiveness for preventing HIV

- Correct and consistent use of condoms significantly reduces the risk of HIV infection in men and women.
- When used correctly with every act of sex, condoms **prevent 80 to 95 out of 100 HIV infections** that would have occurred without condoms.

Characteristics of male condoms:

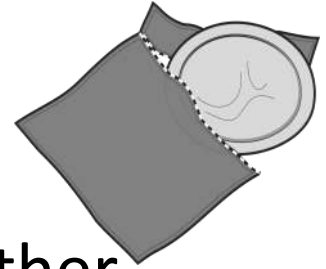
Advantages



- Safe and easy to use
- Widely available
- Effective for preventing pregnancy and STIs when used consistently and correctly
- No hormonal side effects
- Can be used as backup method of contraception
- Can help men with premature ejaculation
- Do not require provider's help
- Protect women from PID, cervical cancer
- Available in a variety of sizes, flavors and textures

Characteristics of male condoms:

Limitations

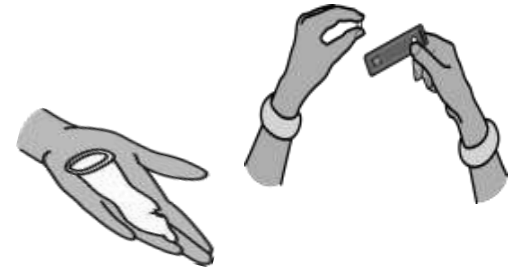


- As commonly used, less effective than many other methods
- Require partner communication and cooperation
- Require motivation to put on before any physical contact occurs
- Latex condoms can be damaged by oil-based lubricants, heat, humidity or light
- May reduce sensation

Male condoms: Managing problems - 1

- **If condom slipped, broke or was not used:**

- Offer emergency contraceptive pills
- Ask about practices, behaviors



- **If difficulty putting on:**

- Ask client to demonstrate, correct errors

- **If difficulty persuading partner to use:**

- Discuss ways to talk about condoms with partner
- Suggest combining condoms with another contraceptive method

Male condoms: Managing problems - 2

- **Mild irritation or mild allergic reaction to condom - itching, redness, rash and/or swelling**
 - Suggest trying another brand of condoms
 - Suggest lubricant or water on the condom
 - If symptoms continue, assess or refer for possible vaginal infection or STI
 - If no infection, may have allergy to latex

Male condoms: Summary

- Safe and easy to use
- Protect from both pregnancy and STIs/HIV
- Female condom can be initiated by woman
- Require partner's cooperation

Female condoms



What is the female condom?

- Effective barrier method that can be used for both prevention of pregnancy and protection against HIV and other sexually transmitted infections (STIs)
- A transparent sheath or lining, that fits loosely inside a woman's vagina:
 - Have flexible rings at both ends
 - One ring at the closed end helps to insert the condom
 - The ring at the open end holds part of the condom outside the vagina
- Made of made of thin, transparent, soft film (latex, polyurethane, and nitrile).



Adapted from Training Resource Package for Family Planning: <https://www.fptraining.org/>

[Family Planning: A Global Handbook for Providers \(3rd Edition, 2018\)](#)

Female Condom: How does it work

- Work by forming a barrier that keeps sperm out of the vagina, preventing pregnancy.
- Also helps to keep infections in semen, on the penis, or in the vagina from infecting the other partner.
- Female (and male) condoms are the only FP methods that provide **dual protection**:
 - Protection from pregnancy *and* protection from transmission of HIV and other STIs between partners



Relative effectiveness of female condoms to other FP methods

Method	# of unintended pregnancies among 1,000 women in 1 st year of typical use
No method	850
Withdrawal	220
Female condom	210
Male condom	180
Pill	90
Injectable	60
IUD (CU-T 380A / LNG-IUS)	8 / 2
Female sterilization	5
Vasectomy	1.5
Implant	0.5

Source: Trussell J., *Contraceptive Failure in the United States*, Contraception 83 (2011) 397- 404, Elsevier Inc.

Characteristics of female condoms: What men and women like

What Women Like:

- Female-controlled
- Soft, moist texture feels more natural than latex male condoms
- Offer STI/HIV protection and pregnancy protection
- Outer ring provides stimulation
- Do not require provider's help

What Men Like:

- Can be inserted in advance
- Are not tight or constricting
- Do not dull sensation
- Can enhance sexual pleasure
- Do not have to be removed immediately

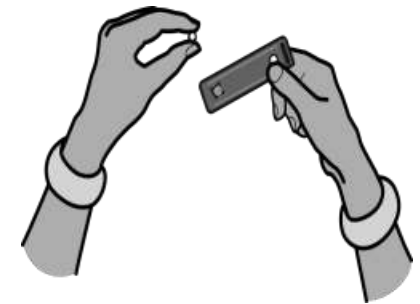
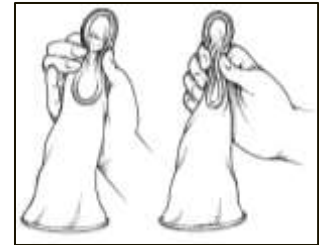
Characteristics of female condoms: What women and men do not like

Limitations:

- May be difficult to insert at first, require practice
- Not as effective as **some** other methods
- More expensive than male condoms
- Less available than male condoms

Female condoms: Managing problems - 1

- **If having trouble inserting:** Ask her to demonstrate, suggest practice
- **If uncomfortable:** Reinsert or reposition
- **If condom squeaks:** Use more lubricant
- **If condoms slips or is not used correctly:** Offer emergency contraceptive pills
- **If difficulty persuading partner:** Discuss ways to negotiate use; offer other contraceptive options



Female condoms: Managing problems - 2

- **Mild irritation in or around the vagina or penis (itching, redness, rash)**
 - Usually goes away on its own
 - Suggest added lubricant inside condom or on penis
 - If symptoms persist, assess and treat for possible vaginal infection or STI

Male and female condoms: Problems that may require switching

- **Woman is using treatment for vaginal infection**
 - Some vaginal medication can damage latex
 - Switch to plastic male condoms or female condoms, or abstain from sex
- **Severe allergic reaction to latex condom (extremely rare)**
 - Stop using latex condoms; treat or refer as appropriate

Female condom: Summary

- Safe and easy to use
- Protect from both pregnancy and STIs/HIV
- Female condom can be initiated by woman
- Require partner's cooperation

Spermicides



What are spermicides?

- Sperm-killing substances inserted deep in the vagina, near the cervix, before sex.
- Examples include: Nonoxynol-9 (most widely used), benzalkonium chloride, chlorhexidine, menfegol, octoxynol-9, and sodium docusate.
- Available in foaming tablets, melting or foaming suppositories, cans of pressurized foam, melting film, jelly, and cream.
 - Jellies, creams, and foam from cans can be used alone, with a diaphragm, or with condoms.
 - Films, suppositories, foaming tablets, or foaming suppositories can be used alone or with condoms.
- Work by causing the membrane of sperm cells to break, killing them or slowing their movement. This keeps sperm from meeting an egg.

How do spermicides work and what do users like?

Mechanism of action

- Work by causing the membrane of sperm cells to break, killing them or slowing their movement. This keeps sperm from meeting an egg.
- They can be started at anytime the client wants.
- Risk of pregnancy is greatest when spermicides are not used with every act of sex.

Why Some Women Say They Like Spermicides

- Are controlled by the woman
- Have no hormonal side effects
- Increase vaginal lubrication
- Can be used without seeing a health care provider
- Can be inserted ahead of time and so do not interrupt sex

Spermicide: Effectiveness

- Depends on the user.
- One of the least effective family planning methods.
- **As commonly used**, about **21 pregnancies per 100 women** using spermicides over the first year. This means that 79 of every 100 women using spermicides will not become pregnant.
- **When used correctly with every act of sex**, about **16 pregnancies per 100 women** using spermicides over the first year.
- No delay in return of fertility after spermicides are stopped.
- Does not offer protection against sexually transmitted infections (STIs).

Frequent use of nonoxynol-9 may increase risk of HIV infection.

Spermicide: Side effects, health benefits and health risks

Side Effects

- Irritation in or around the vagina or penis
- Other possible physical changes:
- Vaginal lesions

Known Health Benefits

- Help protect against risks of pregnancy

Known Health Risks

- Risks of pregnancy

Uncommon:

- Urinary tract infection, especially when using spermicides 2 or more times a day

Rare:

- Frequent use of nonoxynol-9 may increase risk of HIV infection

Spermicide: Correcting misunderstandings

Spermicides:

- Do not reduce vaginal secretions or make women bleed during sex.
- Do not cause cervical cancer or birth defects.
- Do not protect against STIs.
- Do not change men's or women's sex drive or reduce sexual pleasure for most men.
- Do not stop women's monthly bleeding.

Who can and cannot use spermicide?

All women can safely use spermicides except those who:

- Are at high risk for HIV infection
- Have HIV infection

Women who are at high risk for HIV infection or who have HIV should use another method.

Spermicide: Summary

- One of the least effective family planning methods.
- Safe and suitable for nearly all women
- Women who are at high risk for HIV infection or who have HIV should use another method.
- No delay in return of fertility.
- No protection against sexually transmitted infections (STIs).

Diaphragms



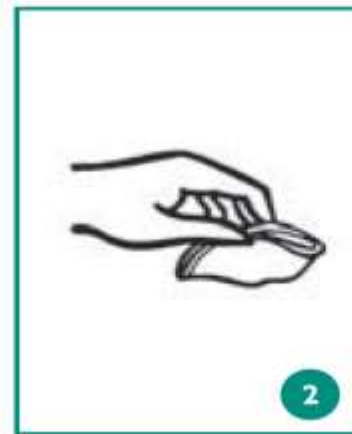
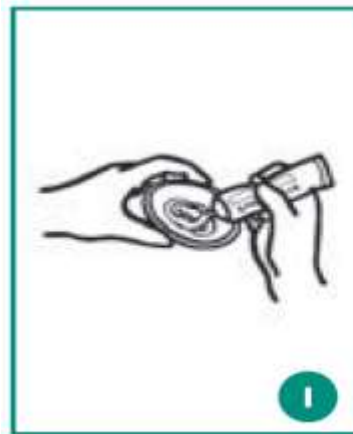
What is the diaphragm?

- A soft latex cup (or plastic / silicone) that covers the cervix.
- The rim contains a firm, flexible spring that keeps the diaphragm in place.
- Used with spermicidal cream, jelly, or foam to improve effectiveness.
- Most diaphragms come in different sizes and require fitting by a specifically trained provider. A one-size-fits-all diaphragm is becoming available.
- It does not require seeing a provider for fitting.



How does the diaphragm work?

- Works by blocking sperm from entering the cervix; spermicide kills or disables sperm.
- Both keep sperm from meeting an egg.
- No delay in return of fertility after use of the diaphragm is stopped.
- Does not provide protection against STIs: *May provide some protection against certain STIs but should not be relied on for STI prevention.*



The diaphragm: Effectiveness

- Depends on the user: Risk of pregnancy is greatest when the diaphragm with spermicide is not used with every act of sex.
- As commonly used, about **17 pregnancies per 100 women** using the diaphragm with spermicide over the first year. This means that 83 of every 100 women using the diaphragm will not become pregnant.
- When used correctly with every act of sex, about **16 pregnancies per 100 women** using the diaphragm with spermicide over the first year.

The diaphragm: Health benefits

Known Health Benefits:

- Help protect against the risks of pregnancy
- May help protect against:
 - Certain STIs (chlamydia, gonorrhea, pelvic inflammatory disease, trichomoniasis)
 - Cervical precancer and cancer

Some women say they like the diaphragm because it:

- Is controlled by the woman
- Has no hormonal side effects
- Can be inserted ahead of time and so does not interrupt sex

The diaphragm: Side effects and health risks

Side Effects:

- Irritation in or around the vagina or penis
- Vaginal lesions

Known Health Risks

Common to uncommon:

- Urinary tract infection
- Uncommon:
- Bacterial vaginosis
- Candidiasis

Rare:

- Frequent use of nonoxynol-9 may increase risk of HIV infection

Extremely rare:

Toxic shock syndrome

Who can and cannot use the diaphragm?

- Nearly all women can use the diaphragm safely and effectively.
- It can be started **at any time.**
 - If the woman has had a full-term delivery or second trimester spontaneous or induced abortion less than 6 weeks ago, give her a backup method to use, if needed, until 6 weeks have passed.
- For a woman switching from another method, suggest that she try the diaphragm for a time while still using her other method so that she can safely gain confidence that she can use the diaphragm correctly.

The diaphragm: Correcting misunderstandings

Diaphragms:

- Do not affect the feeling of sex. A few men report feeling the diaphragm during sex, but most do not.
- Cannot pass through the cervix. They cannot go into the uterus or otherwise get lost in the woman's body.
- Do not cause cervical cancer.

The diaphragm: Summary

- Safe and suitable for nearly all women.
- Controlled by the woman.
- Effectiveness depends on the user; risk of pregnancy is greatest when the diaphragm with spermicide is not used with every act of sex.
- Do not delay the return of fertility.
- May provide some protection against certain STIs.

Cervical caps



What is the cervical cap?

- A soft, deep, latex or plastic rubber cup that snugly covers the cervix.
- It is placed deep in the vagina before sex.
- Comes in different sizes; requires fitting by a specifically trained provider.
- Used together with spermicide to improve effectiveness.
- No delay in return of fertility.
- No protection against sexually transmitted infections.
- Side effects, health benefits, and health risks are same as for diaphragms.



Effectiveness of the cervical cap

Women who have given birth:

- One of the least effective methods, as commonly used.
- **As commonly used, about 32 pregnancies per 100 women** using the cervical cap with spermicide over the first year. This means that 68 of every 100 women using the cervical cap will not become pregnant.
- **When used correctly with every act of sex, about 26 pregnancies per 100 women** using the cervical cap over the first year.

Women who have not given birth:

More effective among these group of women.

- **As commonly used, about 16 pregnancies per 100 women** using the cervical cap with spermicide over the first year. This means that 84 of every 100 women using the cervical cap will not become pregnant.
- **When used correctly with every act of sex, about 9 pregnancies per 100 women** using the cervical cap over the first year.

Effectiveness depends on the user. Risk of pregnancy is greatest when the cervical cap with spermicide is not used with every act of sex.

Pregnancy Checklist

Ask the client questions 1–6. As soon as the client answers “yes” to *any question*, stop and follow the instructions below.

NO		YES
	1 Did your last monthly bleeding start within the past 7 days?*	
	2 Have you abstained from sexual intercourse since your last monthly bleeding, delivery, abortion, or miscarriage?	
	3 Have you been using a reliable contraceptive method consistently and correctly since your last monthly bleeding, delivery, abortion, or miscarriage?	
	4 Have you had a baby in the last 4 weeks?	
	5 Did you have a baby less than 6 months ago, are you fully or nearly-fully breastfeeding, and have you had no monthly bleeding since then?	
	6 Have you had a miscarriage or abortion in the past 7 days?*	

* If the client is planning to use a copper-bearing IUD, the 7-day window is expanded to 12 days.

↑

If the client answered **NO** to *all of the questions*, pregnancy cannot be ruled out using the checklist. Rule out pregnancy by other means.

↑

If the client answered **YES** to *at least one of the questions*, you can be reasonably sure she is not pregnant.

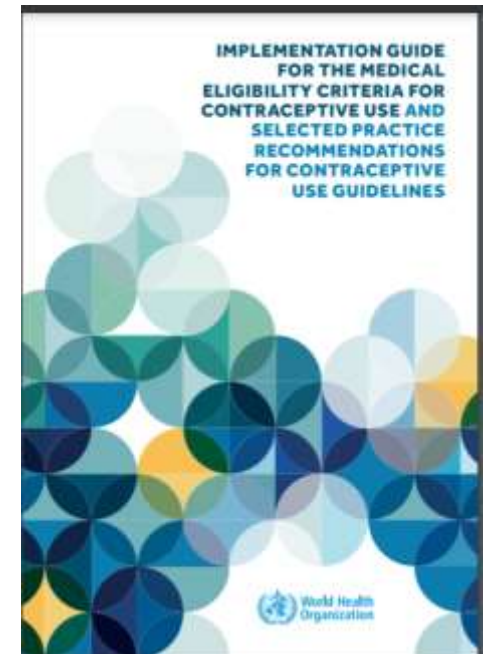
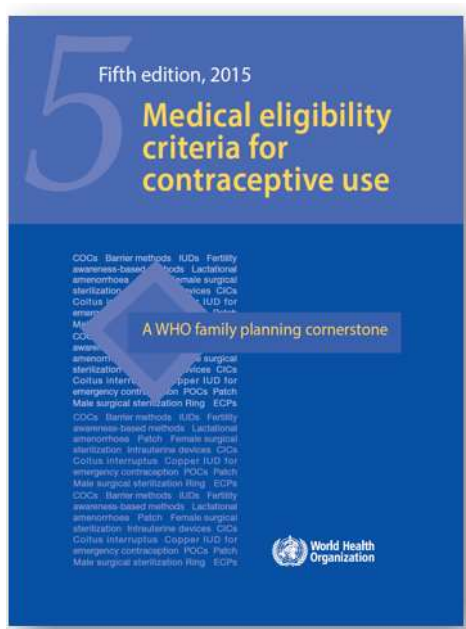
Acknowledgement

This training presentation was adapted from the following resources:

- Training Resource Package for Family Planning
<https://www.fptraining.org/>
- World Health Organization Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP), Knowledge for Health Project. Family Planning: A Global Handbook for Providers (2018 update). Baltimore and Geneva: CCP and WHO; 2018. Available from:
<https://www.fphandbook.org/>

Additional resources

- WHO Medical Eligibility Criteria (MEC) for Contraceptive Use, Fifth edition. WHO, 2015. Available from: http://www.who.int/reproductivehealth/publications/family_planning/MEC-5/en/
- WHO Selected Practice Recommendations for Contraceptive Use (3rd edition 2016). WHO, 2016. Available from: http://www.who.int/reproductivehealth/publications/family_planning/SPR-3/en/
- Implementation Guide for the Medical Eligibility Criteria and Selected Practice Recommendations for Contraceptive Use Guidelines. WHO, 2018. Available from: <http://apps.who.int/iris/bitstream/handle/10665/272758/97892415>



- For all the latest publications on family planning visit: https://www.who.int/reproductivehealth/publications/family_planning/en/