

# Contraceptive methods

## Part 2 - Progestogen-only contraceptives

**Raqibat Idris, MBBS, DO, MPH**

Geneva Foundation for Medical Education and Research



# Outline and objectives

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

# Methods

## **Progestogen-only contraceptives**

1. Progestogen-only pills (POPs)
2. Progestogen-only injectable contraceptives (POIs)
3. Progestogen-only implants
4. Progesterone-Releasing Vaginal Ring

# Comparing Effectiveness of Family Planning Methods

## More effective

Less than 1 pregnancy per 100 women in one year

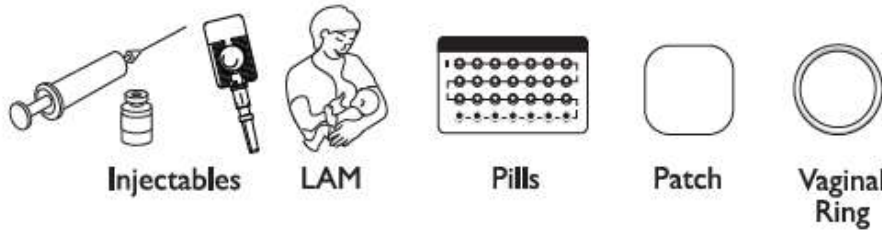


## How to make your method more effective

### 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

# Progestin-only pills (POPS)



# What are POPS? Content and types

POPs are pills that contain very low doses of a progestin like the natural hormone progesterone in a woman's body. They are also called "minipills" and progestin-only oral contraceptives.

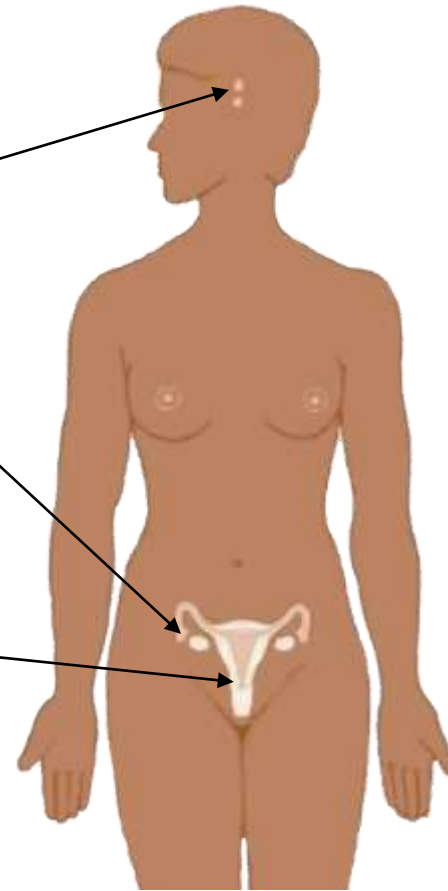
## Traits and types

<b>Content</b>	Only one hormone, progestin. Do NOT contain estrogen. Sometimes called the "mini-pill"
<b>Types</b>	Common: norethistrone (norethindrone), levonorgestrel, desogestrel, Less Common: etynodial diacetate, lynestrenol  Have similar effectiveness, safety, characteristics, and eligibility criteria
<b>Pills per pack</b>	28: all active pills 35: all active pills (no break between packs)

# POPs: Mechanism of Action

Suppresses  
hormones  
responsible for  
ovulation

Thickens  
cervical mucus to  
block sperm



***POPs have no effect on an existing pregnancy.***

# Relative effectiveness of POPs compared with other FP methods

Method	# of unintended pregnancies among 1,000 women in 1 <sup>st</sup> year of typical use
No method	850
Withdrawal	220
Female condom	210
Male condom	180
Pill (COCs and POPs)	80 (COCs) 70 (POPs alone) 10 (POPs and breastfeeding)
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. with POP+BF addition from Family Planning: A Global Handbook for Providers

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



# POPs: Characteristics

- Require taking one pill, every day, with no break between packs, and at the same time every day, especially if not breastfeeding
- Very effective when used correctly, especially for breastfeeding women
- Safe for breastfeeding women and their babies
- Bleeding changes are common but not harmful.
- Can be stopped at any time
- No delay in return to fertility
- Controlled by the woman
- Do not interfere with sex
- Very few health risks
- Do not provide protection from STIs/HIV
- Have some potential side effects

# Breastfeeding and POPs

## **POPs have no effect on:**

- Onset or duration of lactation
- Quantity or quality of breast milk
- Health and development of infant

***POPs can be taken immediately after delivery by both breastfeeding and non-breastfeeding women.***

# POPs vs. COCs: Advantages

- All pills the same-no pill color changes or days without pill taking
- May be taken by women who cannot use estrogen
- May be taken by breastfeeding women
- Lower risk of complications such as stroke and blood clots
- No impact on quality or quantity of milk for breastfeeding moms

# POPs vs. COCs: Disadvantages

- For non-breastfeeding women:
  - POPs are not as effective as COCs and other hormonal methods
  - More likely to have menstrual bleeding changes (irregular, more frequent, or heavier bleeding) than women on COCs
  - More likely to develop ovarian follicles than on COCs, though these usually go away on their own.
- Both need to be taken every day, but it is more important to take POPs at exactly the same time each day, especially for non-breastfeeding women.
- POPs do not increase the risk of ovarian and endometrial cancers but not reduce the risk. COCs reduce the risk of ovarian and endometrial cancers.

# POP side effects

Common (when not breastfeeding):

- irregular bleeding or spotting (bleeding at unexpected times)
- heavy or prolonged bleeding (twice as much as usual or longer than 8 days)
- no monthly bleeding

Less common:

- nausea
- headache
- tender breasts,
- dizziness
- abdominal pain

***Many women do not have any side-effects. Side-effects often go away after a few months and are not harmful.***

# POPs are safe for nearly all women

- Almost all women can use POPs safely, including women who:
  - Are breastfeeding (starting immediately after birth)
  - Have or have not had children
  - Are not married
  - Are of any age, including adolescents and women over 40 years old
  - Have just had an abortion, miscarriage, or ectopic pregnancy
  - Smoke (no matter their age or the number of cigarettes)
  - Have anemia now or had it in the past
  - Have varicose veins
  - Have an STI or HIV, whether or not they are on antiretroviral therapy
- Most health conditions do not affect safe and effective use of POPs

# Who can use POPs

Category 1 and 2 examples:

WHO Category	Conditions (selected examples)
<b>Category 1</b>	menarche to >45 yrs; nulliparous; breastfeeding $\geq 6$ weeks to $\geq 6$ months postpartum; postpartum non-breastfeeding <21 days; post-abortion (any trimester); smoking (any age or number of cigarettes; obesity; headaches including migraines; varicose veins; cervical cancer; endometriosis; hepatitis; thyroid disease; anemia; sickle cell disease; elevated BP
<b>Category 2</b>	breastfeeding <6 weeks postpartum; past ectopic pregnancy; migraines with aura; history of DVT/PE; unexplained vaginal bleeding; gall bladder disease; diabetes; elevated BP systolic $\geq 160$ or diastolic $\geq 100$ mm Hg; some HIV meds

# Who should generally not use POPs

Category 3 and 4 examples:

WHO Category	Conditions (selected examples)
Category 3	<b>Rheumatic Diseases:</b> <ul style="list-style-type: none"><li>• Lupus with positive or unknown antiphospholipid antibodies</li></ul>
	<b>Vascular conditions:</b> <ul style="list-style-type: none"><li>• Acute DVT/PE</li></ul>
	<b>Gastrointestinal conditions:</b> <ul style="list-style-type: none"><li>• Severe cirrhosis</li><li>• Liver tumors</li></ul>
	<b>Drug interactions:</b> <ul style="list-style-type: none"><li>• Use of rifampicin, rifabutin, anticonvulsants</li></ul>
Category 4	<b>Breast cancer:</b> current or within 5 yrs



# POP use by women with HIV

WHO Eligibility Criteria	
Condition	Category
At high risk of HIV	1
Asymptomatic or mild HIV clinical disease	1
Severe or advanced HIV clinical disease	1
ARV therapy with NRTIs	1
ARV therapy with NNRTIs- Etravirine and Rilpivirine)	1
ARV therapy with NNRTIs- Efavirenz and Nevirapine	2
ARV therapy with protease inhibitors (PIs)	2

- Women with HIV can use without restrictions
- Women on all ARVs can use POPs safely
- Condom use should be encouraged in addition to POPs

# POP use by postpartum women

WHO Eligibility Criteria	
Condition	Category
Non-breastfeeding <21 days	1
Non-breastfeeding ≥ 21 days	1
Breastfeeding <6 weeks postpartum	2
Breastfeeding >6 weeks and < 6 months	1
Breastfeeding ≥6 months	1

- Breastfeeding and non-breastfeeding women may initiate POPs at any time postpartum

# When to start POPs - 1

- Anytime you are reasonably certain the woman is not pregnant.
- Pregnancy can be ruled out if the woman meets one of the following criteria:
  - Started monthly bleeding within the past 7 days
  - Is breastfeeding fully, has no menses and baby is less than 6 months old
  - Has abstained from intercourse since last menses or delivery
  - Had a baby in the past 4 weeks
  - Had a miscarriage or an abortion in the past 7 days
  - Is using a reliable contraceptive method consistently and correctly
- If none of the above apply, pregnancy can be ruled out by pregnancy test, pelvic exam, or waiting until next menses.

# When to start POPs - 2

## Having menstrual cycles:

- If starting during the first 5 days of the menstrual cycle, no backup method needed
- After day 5 of her cycle, rule out pregnancy and abstain from sex or use backup method for the next 2 days

## Amenorrhoeic (not having menstrual cycles):

- Initiate at any time after ruling out pregnancy and abstain from sex or use backup method for the next 2 days

# When to start POPs - 3

## Postpartum and breastfeeding:

- **<6 weeks postpartum:** Can initiate any time postpartum. If she is fully or nearly fully breastfeeding, no backup method needed.
- **6 weeks to 6 months postpartum and menstrual cycles have not returned:** Can initiate at any time. If she is fully or nearly fully breastfeeding, no backup method is needed.
- **More than 6 weeks postpartum and cycles have returned:** Follow POP initiation for women having menstrual cycles.

## Postpartum and not breastfeeding:

- **<21 days postpartum:** POPs can be started, no additional backup method needed.
- **21 or more days postpartum and menstrual cycles have not returned:** Rule out pregnancy and abstain from sex or use a backup method for the next 2 days.
- **Menstrual cycles have returned:** Follow POP initiation for women having menstrual cycles.

# When to Start POPs - 4

## After miscarriage or abortion:

- If within 7 days after miscarriage or abortion, no backup method needed.
- If more than 7 days after, rule out pregnancy, use backup method for 2 days.

## Switching from hormonal method:

- If using method correctly and consistently or she is reasonably sure she is not pregnant, may start immediately, no backup method needed (with injectables, initiate within reinjection window).

## Switching from nonhormonal method other than IUD:

- If starting within 5 days of start of menstrual cycle, may start immediately and no backup method needed.
- If starting after day 5 of cycle, rule out pregnancy and use backup method for 2 days.

# When to start POPs - 5

## Switching from the IUD (including levonorgestrel-releasing IUD):

- **Within 5 days after start of menstrual bleeding:**
  - Initiate POPs, no backup method necessary
- **More than 5 days since the start of menstrual bleeding:**
  - Sexually active during this cycle: Recommend client remove IUD at time of next menses and initiate POPs at that time
  - Not sexually active in this cycle: Remove IUD, initiate POPs, and abstain from sex or use a backup method for next two days, or initiate POPs and remove IUD at next cycle
- **Amenorrhoeic:**
  - Initiate as for other amenorrhoeic women

# POPs: Instructions for missed pills

## Late taking a pill?

- Take it as soon as you remember

## 3 or more hours late taking a pill and are having monthly bleeding regularly:

- Take a missed pill as soon as possible.
- Continue to take one pill every day.
- Use a backup method for next 2 days.
- If client has had sex in last 5 days, can consider emergency contraception (ECP).

## 3 or more hours late taking a pill and are breastfeeding and monthly bleeding has not returned:

- Take a missed pill as soon as possible.
- Continue to take one pill every day.
- No extra protection necessary.

## Severe vomiting or diarrhea

- If she vomits within 2 hours after taking a pill, she should take another pill from her pack as soon as possible and keep taking pills as usual



# Correcting rumors and misconceptions about POPs

- Breastfeeding women can safely use POPs, no matter how recently she gave birth.
- A woman can continue taking POPs even after she stops breastfeeding.
- Women of any age can take POPs.
- POPs do not cause birth defects or multiple births or disrupt an existing pregnancy.
- POPs do not cause cancer.
- POPs do not change a woman's mood or sex drive.
- POPs do not cause ectopic pregnancies- they actually reduce the risk of ectopic pregnancy.
- Women can get pregnant quickly after stopping POPs.
- It is okay to have not to have a period while taking POPs, and does not mean a woman is pregnant.

# Management of POP side effects - 1

*Counseling and reassurance are key.*

Problem	Action/Management	
Ordinary headaches	Reassure client: usually diminish over time; take painkillers	If side effects persist and are unacceptable to client: if possible, switch mini-pill formulations or switch to another method
Nausea and vomiting	Take pills with food or at bedtime	
Breast tenderness	Recommend supportive bra; suggest pain reliever; hot/cold compresses; if breastfeeding evaluate for engorgement, blocked ducts and treat	

# Management of POP side effects - 2

***Counseling and reassurance are key.***

<b>Problem</b>	<b>Action/Management</b>	
Pain in lower abdomen	Reassure client these are likely ovarian cysts or follicles, which are usually mild and go away on their own. Have client come back in 6 weeks if possible.	If severe pain in lower abdomen persists or is extremely severe, refer for care and diagnosis.
Changes in mood or sex drive	Discuss changes in client's life that could affect her mood or sex drive, including changes with the relationship with her partner. Support as appropriate. Refer if concerned about major depression or other serious mood changes. Consider locally available remedies.	

# Management of POP side effects: Bleeding changes - 1

<b>Problem</b>	<b>Action/Management</b>	
Irregular bleeding	Reassure client it is not harmful and often stops after first several months: reinforce correct pill taking and review missed pill instructions; ask about other drugs that may interact with POPs; administer short course of non-steroidal anti-inflammatory drugs.	If side effects persist and are unacceptable to client: if possible, switch pill formulations
Amenorrhea	Reassure client. If she has been taking her pills, she is probably not pregnant. Offer or refer her for a pregnancy test if she is still concerned. No medical treatment necessary.	or offer another method.

# Management of POP side effects: Bleeding changes - 2

Problem	Action/Management	
Heavy or prolonged bleeding	Reassure client it is usually not harmful and often becomes less or stops after first several months: administer short course of non-steroidal anti-inflammatory drugs; eat foods rich in iron and/or take iron tablets to prevent anemia. If does not improve or starts after several months of normal bleeding on POPs, or there are additional symptoms, refer for further evaluation.	If side effects persist and are unacceptable to client: if possible, switch pill formulations or offer another method.

# Problems that may require stopping POPs or switching to another method - 1

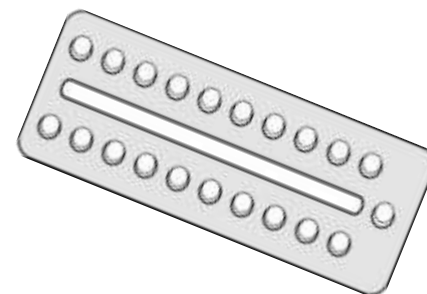
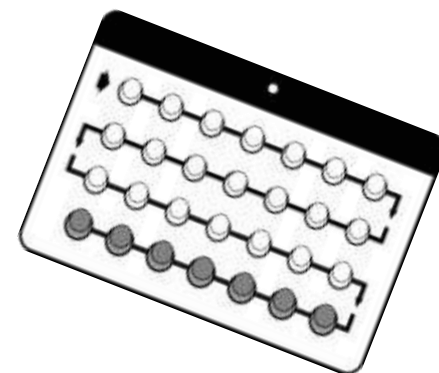
Problem	Action
Unexplained vaginal bleeding	<ul style="list-style-type: none"><li>• Refer or evaluate by history and pelvic exam</li><li>• Diagnose and treat as appropriate</li><li>• If an STI or PID is diagnosed, the client may continue using POPs during treatment</li></ul>
Migraines	<ul style="list-style-type: none"><li>• If the client develops migraines without aura she can continue to use POPs if she wishes.</li><li>• If she has migraine aura, stop POPs. Help the client choose a method without hormones.</li></ul>
Heart disease due to blocked or narrowed arteries or stroke	<ul style="list-style-type: none"><li>• A woman who has these already can safely start POP.</li><li>• If these conditions develop after she starts using POPs she should stop POPs and choose a method without hormones.</li><li>• Refer for diagnosis and care</li></ul>

# Problems that may require stopping POPs or Switching to another method - 2

<b>Problem</b>	<b>Action</b>
Suspected blood clots in deep veins of legs or lungs, liver disease, or breast cancer	<ul style="list-style-type: none"><li>• Tell the client to stop taking POPs</li><li>• Give the client a backup method to use</li><li>• Refer for diagnosis and care</li></ul>
Starting treatment with anti- convulsants or rifampicin or rifabutin.	<ul style="list-style-type: none"><li>• These drugs make POPs less effective</li><li>• Advise the client to consider other contraceptive methods (long-term) or use a backup method (short-term).</li></ul>
Suspected pregnancy	<ul style="list-style-type: none"><li>• Assess for pregnancy</li><li>• If confirmed, tell the client to stop taking POPs</li><li>• There are no known risks to a fetus conceived while a woman is taking POPs</li></ul>

# POPs: Summary

- Safe for almost all women, including breastfeeding women
- Effective if used consistently and correctly
- Fertility returns without a delay
- Screening and counseling are essential





# Progestin-only injectable contraceptives



# What are progestin-only injectables?

- Injectable contraceptives containing a progestin like the natural hormone progesterone
- Administered by injection into the muscle (intramuscular injection) or just under the skin (subcutaneous injection).
- The hormone is released slowly into the bloodstream.
- Different from monthly injectables which contain both estrogen and progestin.



# Types of progestin-only injectables



- DMPA (depot medroxyprogesterone acetate)
  - Given either **into the muscle** (DMPA-IM, known as “the shot,” “the jab,” the injection, Depo, Depo-Provera, and Petogen or **under the skin** (DMPA-SC, under the name Sayana Press and in prefilled single-dose disposable hypodermic syringes as depo-subQ provera 104.)
  - **Injection every 3 months (13 weeks)**



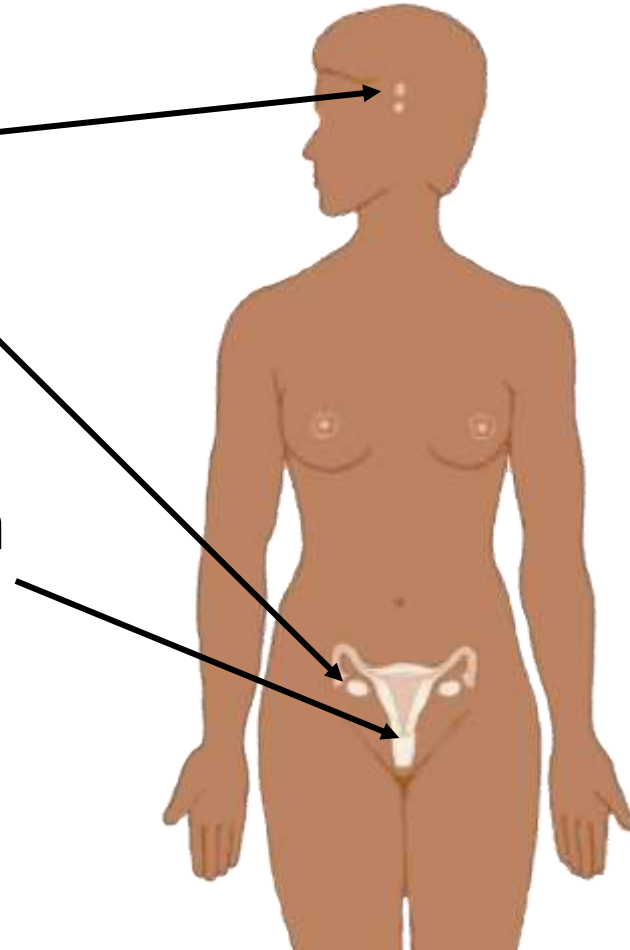
- NET-EN (norethisterone enanthate), also called Noristerat, Norigest, and Syngestal
  - **Injection every 2 months (8 weeks)**
- Have similar effectiveness, safety, characteristics and eligibility criteria

# Progestin-only injectables: Mechanism of action

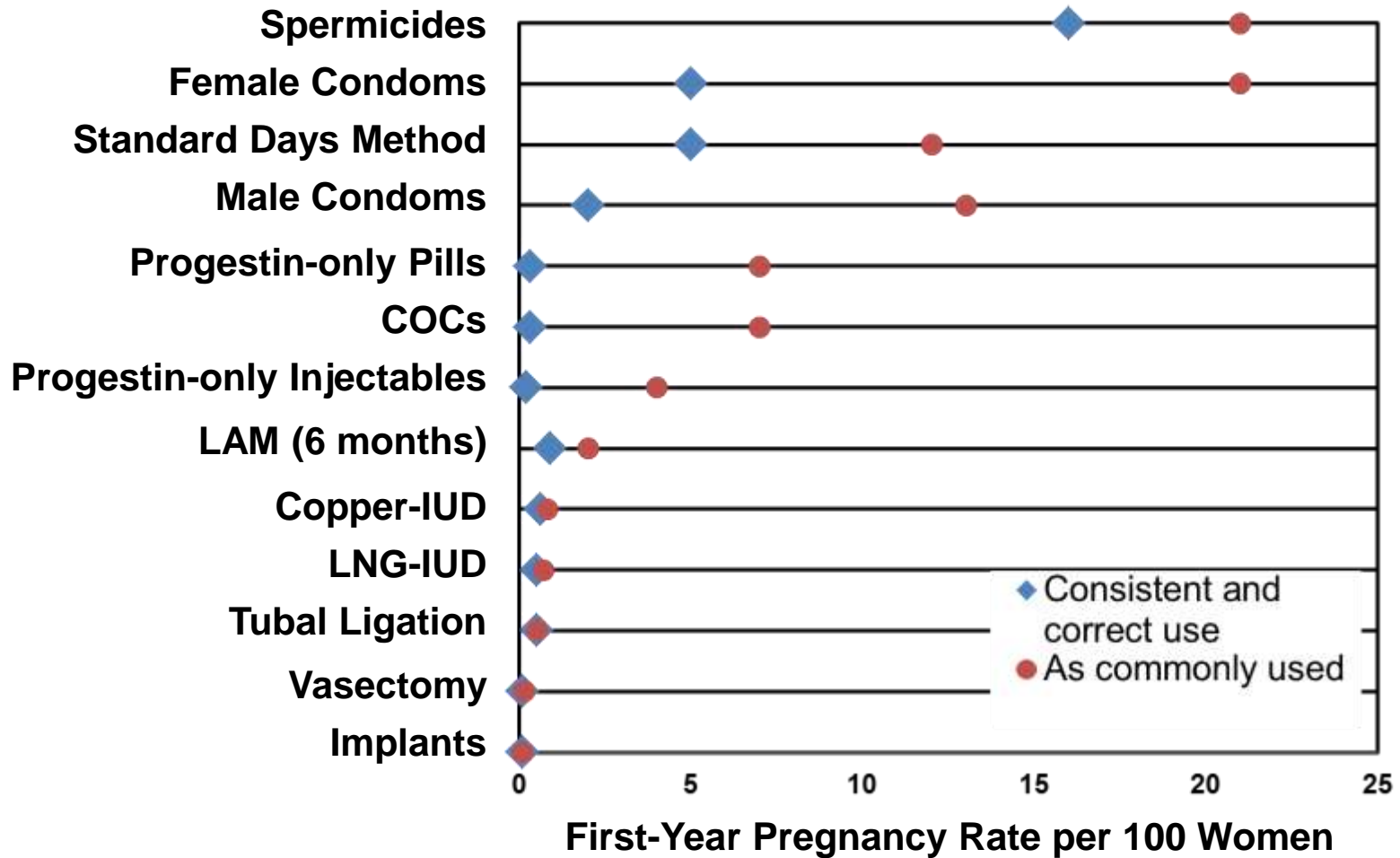
Suppress hormones  
responsible for  
ovulation

Thicken cervical  
mucus to block sperm

Note: Do not disrupt  
existing pregnancy



# Progestin-only injectables: Effectiveness



# Characteristics of progestin-only injectables

- Safe and very effective
- Easy to use; requires no daily routine
- Long-lasting and reversible
- Can be discontinued without provider's help
- Can be provided outside of clinics
- Can be used by breastfeeding women
- Use can be private
- Does not interfere with sex
- Can be used by breastfeeding women
- Provide non-contraceptive health benefits
- Have side effects
- Cause delay in return to fertility
- Effectiveness depends on user getting injections regularly
- Provide no protection from STIs/HIV

# Progestin-only injectables: Side effects

## Possible side effects include:

- Prolonged or heavy bleeding irregular bleeding or spotting – most common
- Weight gain – common, about 1–2 kg per year

## Less common

- Headaches
- Dizziness
- Amenorrhea (no menses)
- Abdominal bloating and discomfort
- Changes in mood
- Less sex drive

***Many women experience no side effects but about one third of users discontinue in the first year due to side effects.***

# Comparing DMPA and NET-EN side effects

- No significant difference in:
  - Proportion of clients who experienced vaginal bleeding/spotting events
  - Duration of vaginal bleeding/spotting events at 12 and 24 months
  - Changes in body weight
  - Changes in blood pressure
  - Frequency of discontinuation at 12 months
  - Reasons for discontinuation
- Occurrence of amenorrhea 21% higher for DMPA



# Progestin-only injectables: Health benefits

- Help protect against:
  - Risks of pregnancy
  - Endometrial cancer
  - Uterine fibroids
- May help protect against symptomatic pelvic inflammatory disease (PID) and iron-deficiency anemia
- Reduce sickle cell crises in women with sickle cell anemia
- Reduce symptoms of endometriosis (pelvic pain, irregular bleeding)

# Injectables and risk of breast cancer

- No effect on overall risk of breast cancer
- Older studies found a somewhat increased risk during first 5 years of use
  - May be due to detection bias or accelerated growth of pre-existing tumors
- Recent large study found no increased risk in current or past DMPA users regardless of age and duration of use
- Little research has been done on NET-EN

# Effect of DMPA on bone density

- DMPA users have lower bone density than non-users
- Women initiating DMPA use as adults regain most lost bone
- Long-term effect in adolescents unknown
  - Concerns about reaching peak bone mass
  - Long-term studies are needed
  - Generally acceptable to use

# Infant exposure to DMPA/NET-EN during breastfeeding

DMPA and NET-EN have no effect on:

- Onset or duration of lactation
- Quantity or quality of breast milk
- Health and development of infant

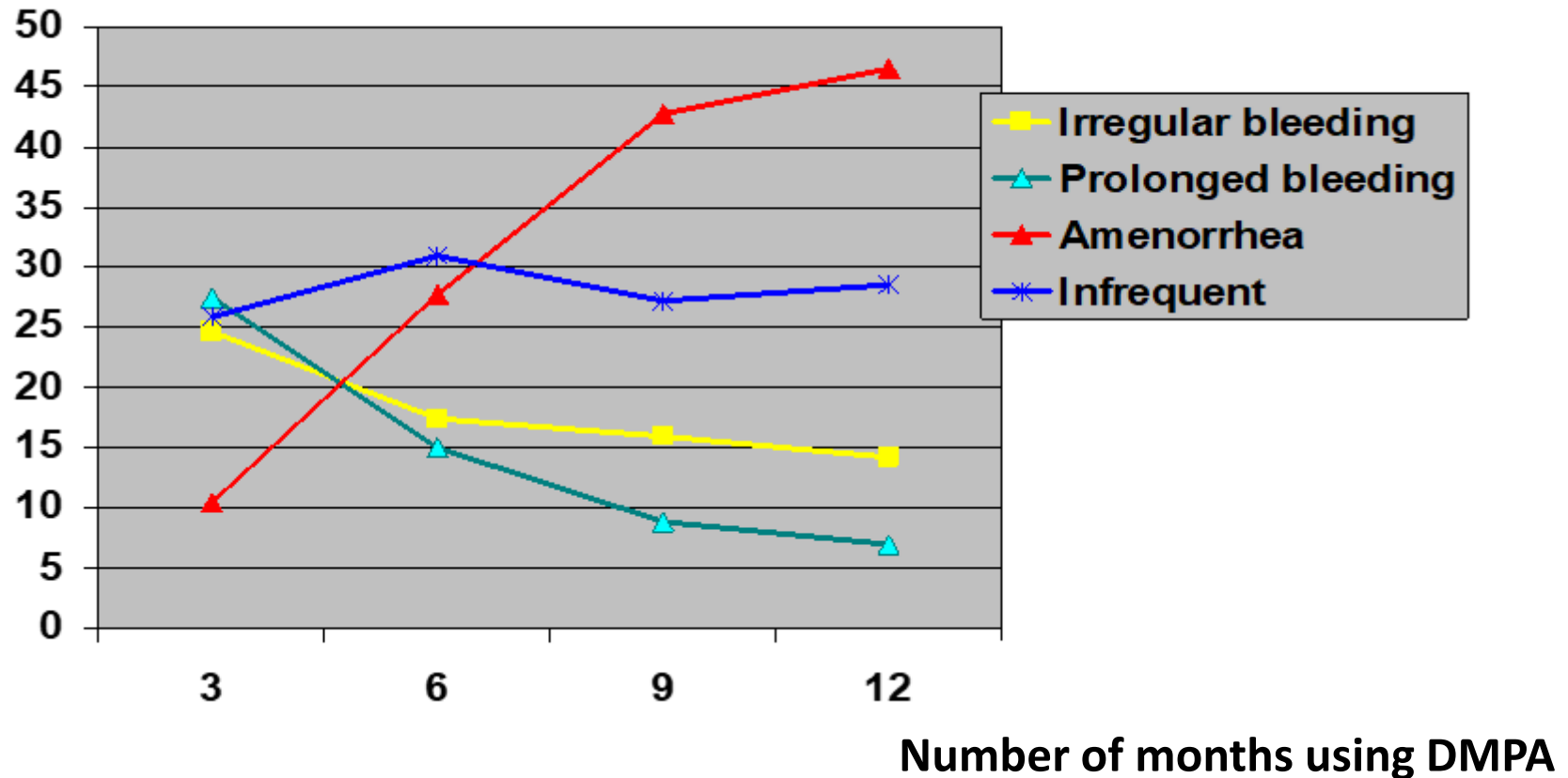
***Initiation before 6 weeks postpartum is generally not recommended. (WHO/MEC)***

# Injectables: Return to fertility

- Return to fertility depends on how fast a woman fully metabolizes the injectable
- On average, women become pregnant 9–10 months after their last injection of DMPA
- Length of time injectable was used makes no difference

# DMPA: Menstrual bleeding changes

Percent of users experiencing bleeding changes



# Who can use DMPA or NET-EN

## Category 1 examples:

WHO Category	Conditions (selected examples)
<b>Category 1</b>	<p>Age 18-45 years; any parity (including nulliparous); smoking (any amount, any age); breastfeeding after 6 weeks postpartum; postabortion; and acute or chronic hepatitis.</p> <p><b>NET-EN:</b> Obesity of more than 30 kg/m<sup>2</sup> body mass index in women younger than 18 years of age.</p> <p><b>DMPA:</b> Women who are using certain types of ARVs (non-nucleoside reverse transcriptase inhibitors or ritonavir-boosted protease inhibitors).</p> <p><b>DMPA:</b> Women using specific anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, or oxcarbazepine).</p>

# Who Can Use DMPA or NET-EN

## Category 2 examples:

WHO Category	Conditions (selected examples)
<b>Category 2</b>	<p>Age &lt;18 years or &gt;45; mild hypertension (BP &lt;159/99 mmHg); non-vascular diabetes; prolonged or heavy bleeding patterns; and history of DVT.</p> <p><b>DMPA:</b> Obesity of more than 30 kg/m<sup>2</sup> body mass index in women younger than 18 years of age.</p> <p><b>NET-EN:</b> Women who are using certain types of ARVs (non-nucleoside reverse transcriptase inhibitors or ritonavir-boosted protease inhibitors).</p> <p><b>NET-EN:</b> Women using specific anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, or oxcarbazepine).</p>



# Who Should not use DMPA and NET-EN

Category 3 and 4 examples:

WHO Category	Conditions (selected examples)
Category 3	Breastfeeding before 6 weeks postpartum, severe hypertension ( $\geq 160/\geq 100$ mmHg), unexplained vaginal bleeding (before evaluation) acute DVT/PE, complicated diabetes, severe liver disease
Category 4	Current breast cancer

# Injectables use by women with HIV and AIDS

WHO Eligibility Criteria	
Condition	Category
HIV-infected	1
AIDS	1
ARV therapy	1 or 2

- Women with HIV or AIDS can use without restrictions
- Injectable dose provides wide margin of effectiveness
- Return for injections on time if on any type of ARV treatment
- Encourage dual method use

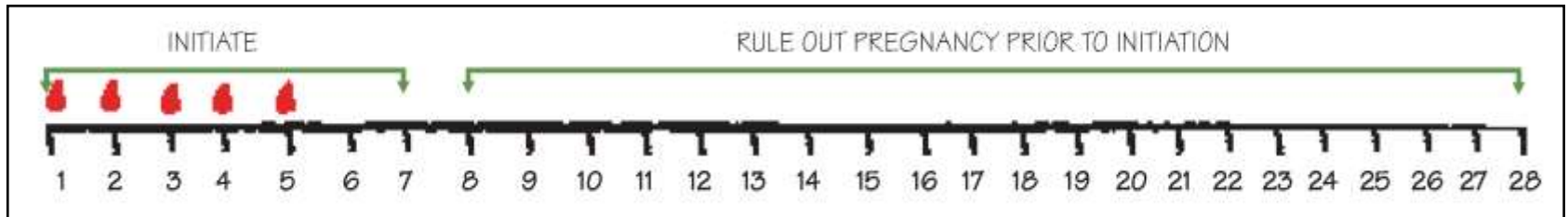
# Injectables use by postpartum women

WHO Eligibility Criteria	
Characteristic/ Condition	Category
Non-breastfeeding	1
Breastfeeding <6 weeks	3
Breastfeeding ≥6 weeks	1

- Non-breastfeeding women can initiate immediately postpartum
- Breastfeeding women
  - Generally should not use injectables before 6 weeks postpartum
  - No restrictions after 6 weeks postpartum

# When to start injectables - 1

Anytime – if you are sure woman is not pregnant. May be started without a pelvic exam or routine lab tests, without cervical cancer screening, and without a breast exam.



During the first seven days after your client's period starts you can assume that she is not pregnant.

You can give an injection now. There is no need for her to abstain or use condoms.

After day eight of her cycle, you must rule out pregnancy before giving an injection.

If she is not pregnant, give the injection and tell her to abstain from sex or use condoms for the next seven days.

# When to start injectables - 2

## Postpartum:

- If breastfeeding: wait 6 weeks
- If not breastfeeding: anytime within 4 weeks after delivery (after 4 weeks, rule out pregnancy)

## After miscarriage or abortion:

- anytime within 7 days  
(after day 7 rule out pregnancy)

## When switching from another method:

- start immediately

# Injectables: Correcting rumors and misunderstandings

## Progestin-only injectables:

- Can stop monthly bleeding, but this is not harmful
  - Blood is not building up inside the woman
  - It is similar to not having menses during pregnancy
  - Usually not a sign of pregnancy
- Do not cause an abortion/disrupt an existing pregnancy
- Do not make women infertile

# Management of side effects of injectables: Bleeding changes - 1

***Counseling and reassurance are key.***

<b>Problem</b>	<b>Action/Management</b>	
Irregular bleeding (spotting or light bleeding at unexpected times that bothers the client)	<ul style="list-style-type: none"><li>• Reassure client that this is common and not harmful</li><li>• Recommend a 5-day course of mefenamic acid (500 mg 2 times per day after meals)</li><li>• Or 40 mg valdecoxib daily for 5 days, beginning when irregular bleeding starts</li></ul>	If side effects persist and are unacceptable to the client, help her choose another method
Amenorrhea	<ul style="list-style-type: none"><li>• Reassure client: no medical treatment necessary</li></ul>	

# Management of side effects: Bleeding changes - 2

<b>Problem</b>	<b>Action/Management</b>
Heavy or prolonged bleeding (twice as much as usual or longer than 8 days)	<ul style="list-style-type: none"><li>• Reassure client that this is common, not harmful</li><li>• Recommend 5-day course of mefenamic acid (500 mg 2 times per day after meals); or 40 mg valdecoxib daily for 5 days; or COCs daily for 21 days; beginning when heavy bleeding starts</li><li>• Suggest iron tablets and foods high in iron to prevent anemia</li><li>• Consider underlying conditions if heavy bleeding continues or starts after several months</li><li>• If bleeding becomes a health threat, or if the woman wants, help her choose another method</li></ul>



# Management of other side effects of injectables

<b>Problem</b>	<b>Action/Management</b>
Common headaches, dizziness	<ul style="list-style-type: none"><li>• Reassure and suggest pain relievers; evaluate headaches that worsened after starting injectables.</li><li>• Dizziness: consider local remedies.</li></ul>
Abdominal bloating/ discomfort	<ul style="list-style-type: none"><li>• Reassure; suggest local remedies.</li><li>• Refer for care if abdominal pain is severe.</li></ul>
Changes in mood or sex drive	<ul style="list-style-type: none"><li>• Ask about changes in life that could affect mood or sex drive, including relationship changes.</li><li>• Give support as appropriate.</li><li>• For serious mood changes, refer for care.</li></ul>
Weight gain	<ul style="list-style-type: none"><li>• Review diet and counsel as needed.</li></ul>

# Problems that may require switching from injectables to another method

<b>Problem</b>	<b>Action/Management</b>
Unexplained vaginal bleeding	<ul style="list-style-type: none"><li>• Refer or evaluate by history and pelvic exam.</li><li>• If an STI is diagnosed, she can continue using injectables during treatment.</li><li>• If no cause can be found, consider stopping injectables to make diagnosis easier.</li></ul>
Migraines	<ul style="list-style-type: none"><li>• If client has migraines without aura, she can continue to use injectables.</li><li>• If she has migraine aura, do not give the injection. Help her choose a method without hormones.</li></ul>
Certain serious health conditions	<ul style="list-style-type: none"><li>• Do not give next injection.</li><li>• Give client backup method to use until condition is evaluated.</li><li>• Refer for diagnosis and treatment..</li></ul>

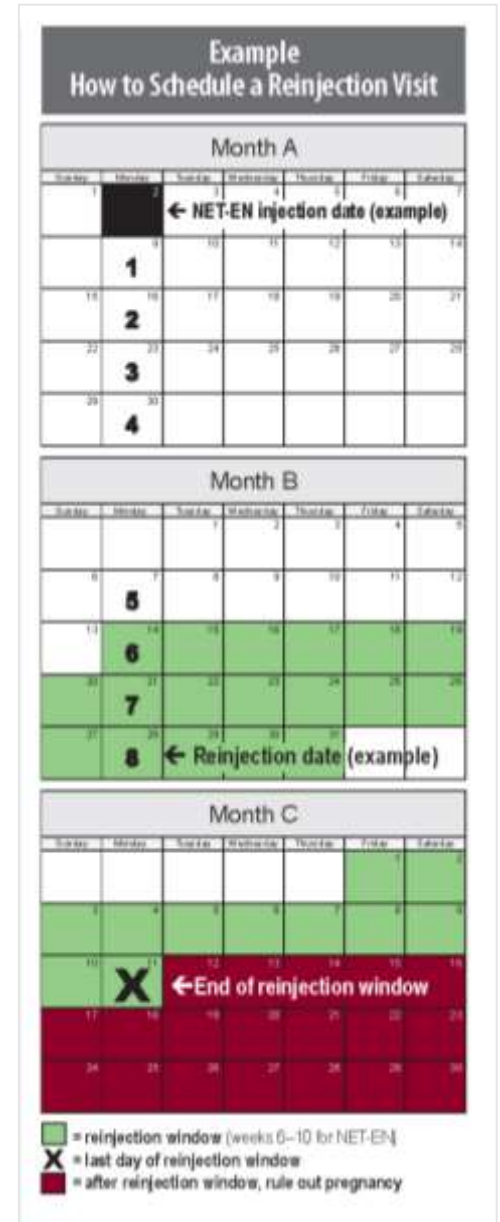
# DMPA Injection Schedule

- **150 mg DMPA**
- Injection **every 13 weeks** (or 3 months)
- Can be up to **2 weeks early** or **4 weeks late**



# NET-EN Injection Schedule

- **200mg NET-EN**
- Injection **every 8 weeks** (every 2 months)
- Can be up to **2 weeks early or 2 weeks late**



# Progestin-only injectables: Managing late injections

- Rule out pregnancy using one of following:
  - Option 1: Modified pregnancy checklist
  - Option 2: Pregnancy test
  - Option 3: Bimanual pelvic exam for comparison at follow-up
  - Option 4: Abdominal exam
- Assess if returning within reinjection window may remain a problem, if yes, discuss other method options

# Progestin-only injectables: Summary

- Safe and highly effective
- Easy to use
- Most women can use
- Bleeding changes may be a concern for some women
- Can be provided in both clinical and non-clinical settings
- Need appropriate counseling

# Contraceptive implants



# What are implants?



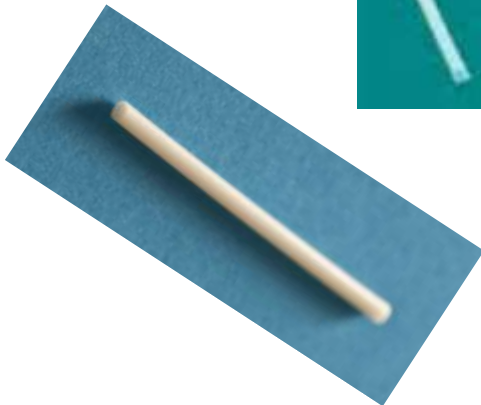
Progestin-filled rods (each about the size of a match stick) that are inserted under the skin

- **Jadelle:** 2-rod system, effective for 5 years
- **Levonplant (Sino-implant (II)):** 2-rod system, Labelled for up to 4 years of use.
- **Implanon NXT (Nexplanon):** 1-rod system, labelled for up to 3 years of use (*a recent study shows it may be highly effective for 5 years*).



**Implants are:**

- **Safe to use**
- **Very effective**
- **Long lasting - 3 to 5 years depending on type**



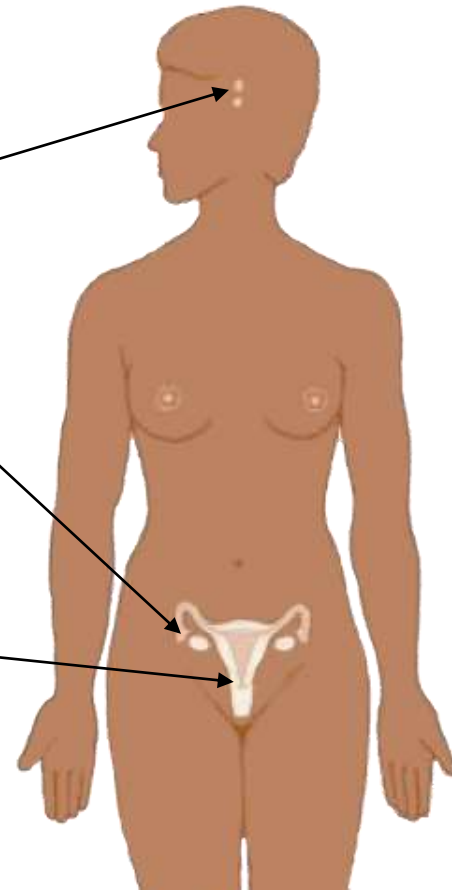


# Implants: Mechanism of action

Implants work in two ways:

Suppresses hormones responsible for ovulation

Thickens cervical mucus to block sperm



***Implants have no effect on an existing pregnancy.***

# Relative effectiveness of implants to other FP methods

Method	# of unintended pregnancies among 1,000 women in 1 <sup>st</sup> year of typical use
No method	850
Withdrawal	200
Female condom	210
Male condom	130
Pill COCs and POPs	70
Injectable	40
IUD (CU-T 380A / LNG-IUS)	8 / 7
Female sterilization	5
Vasectomy	1.5
<b>Implant</b>	<b>1-6</b>

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

# Implants: Characteristics

## Benefits

- Very safe and 99.95% effective
- Easy to use
- Fertility returns without delay when removed
- Can be used by breastfeeding women
- Offers non contraceptive health benefits

## Limitations

- Have side effects
- Requires a minor procedure to insert and remove
- Cannot be initiated and discontinued without a trained provider.
- Provide no protection from STIs/HIV

# Implants: Health benefits

- Reduced risk of symptomatic pelvic inflammatory disease (PID)
- May help protect against iron-deficiency anemia
- Reduced risk of ectopic pregnancy
  - 6 per 100,000 in implant users
  - 650 per 100,000 in women using no contraception

# Possible side effects of implants 1

## Some users report changes in bleeding patterns:

### First several months:

- Lighter bleeding and fewer days of bleeding
- Prolonged bleeding
- Irregular bleeding
- Infrequent bleeding
- No monthly bleeding

### After about one year:

- Lighter bleeding and fewer days of bleeding
- Irregular bleeding
- Infrequent bleeding
- No monthly bleeding

*\*Implanon NXT users are more likely to have infrequent or no monthly bleeding than irregular bleeding.*

# Possible side effects of implants - 2

- Headaches
- Breast tenderness
- Lower abdominal pain
- Acne (can improve or worsen)
- Weight change
- Dizziness
- Mood changes
- Nausea, nervousness

# Complications from implants

## Complications from implants are rare and may include:

- Infection at insertion site
  - If occurs, most likely within the first 2 months
- Difficult removal
  - Rare if inserted properly and removed by a trained provider
- Expulsions
  - Rare; most occur within first 4 months after insertion.
- Found in another place in the body e.g in a blood vessel
  - Extremely rare: due to improper insertion

# Implants are safe for nearly all women

**Almost all women can use implants safely, including women who:**

- Have or have not had children
  - Are married or not married
  - Are of any age including adolescents and women over 40 years old
  - Are infected with HIV
  - Are breastfeeding
  - Have just had an abortion, miscarriage or ectopic pregnancy
  - Have anemia now or in the past
  - Have varicose veins
  - Smoke cigarettes, regardless of woman's age or number of cigarettes smoked
- **Most health conditions do not affect safe and effective use of implants.**
  - **Many women who cannot use methods that contain estrogen can safely use implants.**



# Who can start implants

Category 1 and 2 examples:

*Implants are safe for nearly all women.*

WHO Category	Conditions (selected examples)
<b>Category 1</b>	Adolescents, post-abortion, postpartum in non-breastfeeding women, heavy smokers, women being treated for high blood pressure, valvular heart disease, endometriosis, endometrial or ovarian cancer, thyroid disorders, mild liver disease
<b>Category 2</b>	Breastfeeding <6 weeks postpartum, multiple risk factors for cardiovascular disease, blood pressure $\geq 160/100$ , history of blood clots in legs or lungs, diabetes with vascular complications, heavy or prolonged vaginal bleeding patterns

# Who should not start implants

## Category 3 and 4

*A small number of women may not be able to use implants.*

WHO Category	Conditions (selected examples)
Category 3	Acute blood clots in deep veins of legs or lungs; unexplained vaginal bleeding; history of breast cancer; severe liver disease; most liver tumors; and certain cases of systemic lupus. <i>Continuation only:</i> ischemic heart disease, stroke, migraine with aura.
Category 4	Current breast cancer

# Implant use by women with HIV

WHO Eligibility Criteria	
Condition	Category
Asymptomatic or mild HIV clinical disease	1
Severe or advanced HIV clinical disease	1
ARV therapy with NRTIs and integrase inhibitors	1
ARV therapy with NNRTIs and PIs	2

- Women with HIV or AIDS can use without restrictions
- Women on ARV therapy can generally use implants
- Counsel that some ARVs, particularly efavirenz, can reduce implant effectiveness somewhat.
- Dual method use should be encouraged for women taking Efavirenz

# Implant use by postpartum women

WHO Eligibility Criteria	
Condition	Category
Non-breastfeeding	1
Breastfeeding < 6 weeks	2
Breastfeeding ≥ 6 weeks	1

Breastfeeding and non-breastfeeding women can start the use of implants anytime starting immediately postpartum.

# When to start implants - 1

- Anytime a provider is reasonably certain a woman is not pregnant.
- Pregnancy can be ruled out if any of these situations apply:
  - Is fully breastfeeding, has no menses, and baby is between 6 weeks and 6 months old
  - Abstained from intercourse since last menses or delivery
  - Had a baby in the past 4 weeks (if not breastfeeding)
  - Started monthly bleeding within the past 7 days
  - Had a miscarriage or abortion in the past 7 days
  - Is using a reliable contraceptive method consistently and correctly
- If none of the above apply, pregnancy can be ruled out by pregnancy test, pelvic exam, or by waiting till next menses.

# When to start implants- 2

- First 7 days of menstrual cycle, no backup method needed.
- After 7<sup>th</sup> day of menstrual cycle, rule out pregnancy and use backup method for 7 days.
- **Postpartum**
  - Menses has not returned
    - Fully breastfeeding and <6 months postpartum **OR** not breastfeeding and <4 weeks postpartum: Insert anytime, no backup needed
    - Fully breastfeeding and >6 months postpartum **OR** partially breastfeeding **OR** not breastfeeding and >4 weeks postpartum: Rule out pregnancy and use backup method for 7 days
  - Menses has returned (breastfeeding **AND** non-breastfeeding): As advised for women having menstrual cycles

# When to start implants – 3

- **Post abortion or miscarriage:**
- **Surgical abortion:**
  - Immediately; without backup if within 7 days.
  - If more than 7 days, rule out pregnancy and use a backup method for 7 days after insertion.
- **For women undergoing medical abortion:**
  - Implants can be inserted along with the first pill of the medical abortion regimen.
- **Switching from a hormonal method:** immediately if it was used consistently and correctly
  - Injectable users can have implants inserted within the reinjection window; without backup
  - No need to wait for next menses

# When to start implants - 4

- **After using emergency contraceptive pills (ECPs):**
  - **Progestin-only or combined ECPs**
    - Implants can be inserted on same day ECPs taken, use a backup method for first 7 days
  - **Ulipristal acetate ECPs (UPA-ECPs)**
    - Interaction between UPA-ECPs and implants that may make one or both less effective
    - Implants can be inserted on the 6<sup>th</sup> day after taking UPA-ECPs
    - Use a backup method from the time she takes UPA-ECPs until 7 days after implant inserted



# Implants: Correcting rumors and misunderstandings

- Implants stop working once they are removed. Their hormones do not remain in a woman's body.
- They can stop monthly bleeding, but this is not harmful. It is similar to not having monthly bleeding during pregnancy. Blood is not building up inside the woman.
- **Implants:**
  - **Do not make women infertile**
  - **Do not move to other parts of the body**
  - **Significantly reduce a woman's risk for ectopic pregnancy**

# Management of implant side effects: Bleeding changes

*Counseling and reassurance are key*

<b>Problem</b>	<b>Action/Management</b>	
Irregular, heavy or prolonged bleeding	<ul style="list-style-type: none"><li>• Reassure the client that this is common and not harmful</li><li>• Recommend a 5-day course of ibuprofen (up to 800 mg 3 times per day for 5 days) when bleeding starts</li><li>• If no relief, offer COCs for 3 weeks</li><li>• If bleeding is heavy, iron tablets may prevent anemia</li></ul>	If side effects persist and are unacceptable help client choose another method
Amenorrhea	<ul style="list-style-type: none"><li>• Reassure client</li><li>• Rule out pregnancy if soon after implant insertion</li></ul>	

# Management of implant side effects: Non-menstrual problems

<b>Problem</b>	<b>Action/Management</b>	
Common headache	<ul style="list-style-type: none"><li>• Reassure and suggest painkillers; evaluate headaches that worsened since implant initiation</li></ul>	If side effects persist and are unacceptable to the client, counsel about alternative hormonal or non-hormonal methods
Mild abdominal pain	<ul style="list-style-type: none"><li>• Reassure; suggest pain-killers; follow-up if needed</li></ul>	
Breast tenderness	<ul style="list-style-type: none"><li>• Recommend a supportive bra, compresses, or painkillers</li></ul>	
Weight change	<ul style="list-style-type: none"><li>• Review healthy eating habits and exercise</li></ul>	

# Management of implant side effects: Problems related to insertion

<b>Problem</b>	<b>Action/Management</b>
Pain after insertion or removal	<ul style="list-style-type: none"><li>• Check that the bandage or gauze is not too tight; replace bandage; avoid pressing on site</li><li>• Give painkillers for a few days</li></ul>
Infection	<ul style="list-style-type: none"><li>• Clean the infected area</li><li>• Give oral antibiotics for 7–10 days</li><li>• Remove implants if no improvement</li></ul>
Abscess	<ul style="list-style-type: none"><li>• Clean, cut open, and drain the abscess</li><li>• Treat the wound</li><li>• Give antibiotics for 7–10 days</li><li>• Remove implants if no improvement</li></ul>
Expulsion or partial expulsion	<ul style="list-style-type: none"><li>• Expulsion or partial expulsion of the implants often follows an infection</li><li>• Ask the client to return for follow-up care if she notices an implant coming out</li></ul>

# Problems that may require switching from implants to another method - 1

<b>Problem</b>	<b>Action/Management</b>
Unexplained vaginal bleeding	<ul style="list-style-type: none"><li>• Refer or evaluate by history and pelvic exam</li><li>• If an STI is diagnosed, treat with implants in place</li><li>• If no cause can be found, consider removing implants to make diagnosis easier</li></ul>
Migraines with aura	<ul style="list-style-type: none"><li>• If the client develops migraines with aura after implants are inserted, the implants should be removed ( category 3)</li><li>• Help client choose a method without hormones</li></ul>
Blood clots, liver or breast cancer	<ul style="list-style-type: none"><li>• Remove implants</li><li>• Help client choose a method without hormones</li><li>• Treat or refer to a specialist for treatment</li></ul>

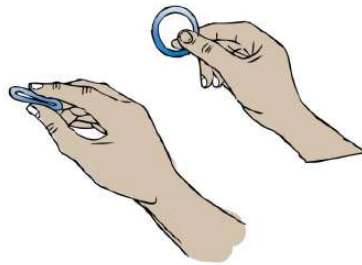
# Problems that may require switching from implants to another method - 2

<b>Problem</b>	<b>Action/Management</b>
Heart disease due to blocked or narrowed arteries (ischemic heart disease)	<p>A woman who has one of these conditions can safely start implants. If however the condition develops while she is using implants:</p> <ul style="list-style-type: none"><li>• Remove the implants or refer for removal</li><li>• Help her choose a method without hormones</li><li>• Refer for diagnosis and care if not already under care</li></ul>

# Implants: Summary

- Implants are an option that fulfills an unmet need of contraception for many women
- Provides long-term protection
- Safe and easy to use
- Highly effective and readily reversible
- Appropriate for most women, including young and nulliparous
- Little is required of the client once the implant is in place
- Irregular bleeding patterns may be a problem for some women
- Thorough counseling is essential

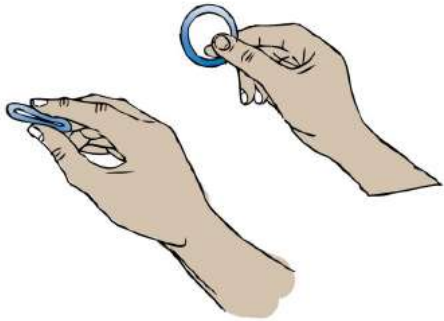
# Progesterone vaginal ring (PVR)





# What is the progesterone vaginal ring?

**Contraceptive method for postpartum women who breastfeed at least 4 times per day**



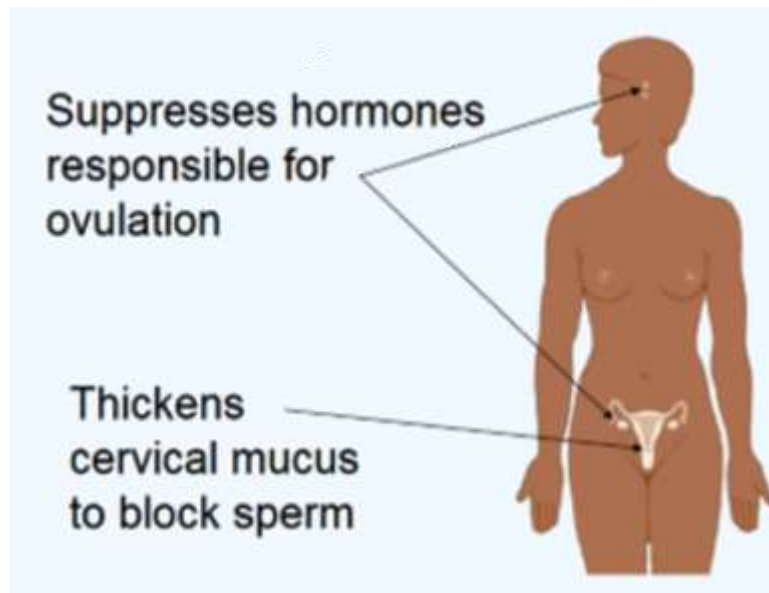
Smooth, soft, flexible, silicone ring containing natural progesterone



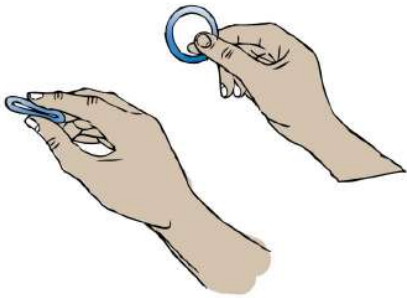
Easily inserted and removed from the vagina by the woman

# How does PVR work? - 1

The PVR delivers 10mg of progesterone locally in the vagina, which works in two ways:



# How does PVR work? - 2



- Breastfeeding naturally interferes with the hormones that cause ovulation. PVR's progesterone reinforces this and **suppresses ovulation**.
- Progesterone extends postpartum amenorrhea: **lack of menstruation**.
- Must **continue breastfeeding *at least 4 times a day***.
- Progesterone creates a mucus around the cervix, **blocking sperm** from reaching egg.

# Relative effectiveness of PVR compared to other methods

Family Planning Method	First Year Pregnancy Rate
No method	85
Spermicides	16
Diaphragm with spermicide	16
Standard Days Method	5
Male condoms	2
<b>PVR</b>	<b>1.5</b>
Female Sterilization	0.5
Copper IUD	0.6
Progestin-only pills	0.3
Progestin-only Injectables	0.2
Implants	0.1

# Who can use PVR?

- Women **who are** 4 weeks after childbirth and **whose** menses have not returned
  - Women **who are** breastfeeding ***at least*** 4 times a day
  - Baby is less than 1 year old
  - **Women who are not** pregnant
  - No other health conditions

# How to use PVR?

- The woman inserts the ring high in her vaginal canal.
- Each ring is effective up to 3 months and she should leave it in the vagina for the entire time.
- After 3 months, the woman easily removes the ring and inserts a new one.
- She can use this method successively up to 1 year (4 rings in 1 year).
- The ring can be left in vagina during intercourse or removed for ***no more than 2 hours***.

# PVR: Side effects

## ***Normal Possible Side Effects:***

- **Changes in bleeding patterns:**
  - Spotting
  - Irregular bleeding
  - No menstrual bleeding
- **Mild cramping**
- **Breast tenderness**

## ***Rare Possible Side Effects (return to clinic if experience):***

- Severe pain
- Unusual, bad smelling discharge
- Genital lesions

# PVR: Health benefits

- Reduced number of unintended pregnancies
- Improved birth spacing
- Increased breastfeeding rates
- **This leads to better child nutrition and decreasing maternal and newborn mortality rates.**



# PVR: Advantages and disadvantages

## Advantages

- Safe for mother and baby
- 98.5% effective
- Easy to use
- No effect on breastfeeding
- Fertility returns without delay when removed
- Safe for a woman living with HIV/AIDS, even if she takes antiretroviral medicines

## Disadvantages

- Partner may be able to feel the ring
- Only for up to one year
- Removal for over two hours reduces efficacy
- Provides no protection from sexually transmitted infections, including HIV
- Has some side effects

# Who can use the PVR?

## *Women who can use the PVR are:*

- Breastfeeding at least 4 times a day
- PVR is safe for nearly all women including those who:
  - Smoke cigarettes
  - Are not married
  - Have anemia now or have had it in the past
  - Are of any age, including adolescents and women over 40 years old
  - Have varicose veins
  - Are infected with HIV (on antiretroviral therapy or not)
- **Most health conditions do not affect safe and effective use of the PVR.**
- **Many women who cannot use methods that contain estrogen can safely use the PVR.**

# Who cannot use the PVR?

## Women who cannot use the PVR are:

<b>Less than 4 weeks postpartum</b>	<ul style="list-style-type: none"><li>• Ask her to come back when baby is 4 weeks old.</li></ul>
<b>Over 12 weeks postpartum</b>	<ul style="list-style-type: none"><li>• Ask her to choose a different method.</li></ul>
<b>Breastfeeding less than 4 times a day</b>	<ul style="list-style-type: none"><li>• Urge her to keep breastfeeding and to return for the PVR when she is breastfeeding at least 4 times a day.</li></ul>
<b>May be pregnant</b>	<ul style="list-style-type: none"><li>• If in doubt, use pregnancy checklist or perform pregnancy test if available at your facility.</li></ul>
<b>Some other serious health conditions</b>	<ul style="list-style-type: none"><li>• Currently have genital or urinary tract infection (can start PVR after remedied or treatment started).</li><li>• Pelvic Inflammatory Disease or Salpingitis since delivery.</li><li>• History of: uterine disease (endometrial or cervical), uterine abnormalities, migraine with symptoms, recurrent urinary tract infections, ectopic pregnancy, pelvic surgery, breast cancer, deep venous thrombosis, thromboembolic disorders, incomplete involution of the uterus after birth, pulmonary edema, liver damage or illness, presence of an IUD, STI, sensitivity to silicone.</li></ul>

# When to start the PVR?

- **When a provider is reasonably certain a woman is not pregnant.**

Pregnancy can be ruled out if any of these situations apply:

- Is fully breastfeeding, has no menses, and baby is between 4 weeks and 6 months old
  - Abstained from intercourse since last menses or delivery
  - Pregnancy checklist from the MEC and FP Handbook indicates she is not pregnant
  - Negative pregnancy test if a pregnancy test is available
- **If the woman is between 4–12 weeks postpartum**
  - **Consistently breastfeeding at least 4 times a day**

 **If all the above are true, the woman can start immediately!**

# Common rumors and misunderstandings about the PVR

Rumor	Correct
The PVR keeps working after it is removed, and so the woman will have trouble getting pregnant.	The PVR stops working once it is removed. Its hormone do not remain in a woman's body.
PVR stops monthly bleeding, and blood is building up inside the woman.	The PVR prevents monthly bleeding, but this is not harmful. It is similar to not having monthly bleeding during pregnancy. Blood is not building up inside the woman.
PVR makes a woman infertile.	The PVR does not make women infertile once she stops using it.
PVR moves to other parts of the body.	The PVR does not move to other parts of the body. It will remain in the vagina.

# Management of PVR side effects

*Counseling and reassurance are key.*

<b>Problem</b>	<b>Action/Management</b>
Spotting or Irregular Bleeding	<ul style="list-style-type: none"><li>• Reassure the client that this is common and not harmful.</li></ul>
Amenorrhea	<ul style="list-style-type: none"><li>• Reassure client that this is common and not harmful.</li></ul>
Mild Cramping	<ul style="list-style-type: none"><li>• Reassure client that this is common and not harmful.</li><li>• Suggest pain medication.</li></ul>
Breast Tenderness	<ul style="list-style-type: none"><li>• Reassure client that this is common and not harmful.</li><li>• Recommend a supportive bra or compresses.</li></ul>

# Problems that may require switching from PVR to another method

Problem	Action/Management
Unexplained vaginal bleeding	<ul style="list-style-type: none"><li>• Remove the PVR</li><li>• Refer or evaluate by history and pelvic exam</li><li>• If an STI is diagnosed, treat with PVRs in place</li><li>• If no cause can be found, consider removing PVRs to make diagnosis easier</li></ul>
Migraines	<ul style="list-style-type: none"><li>• If the client develops migraines with aura after PVRs are inserted, the PVRs should be removed</li><li>• Help client choose a method without hormones</li></ul>
Blood clots, liver or heart disease, stroke, or breast cancer	<ul style="list-style-type: none"><li>• Remove PVRs</li><li>• Help client choose a method without hormones</li><li>• Treat or refer to a specialist for treatment</li></ul>
Heart disease due to blocked or narrowed arteries (ischemic heart disease)	<p>A woman who has one of these conditions can safely start PVRs. If, however the condition develops while she is using PVRs:</p> <ul style="list-style-type: none"><li>• Remove the PVRs or refer for removal</li><li>• Help her choose a method without hormones</li><li>• Refer for diagnosis and care if not already under care</li></ul>
Suspected pregnancy	<ul style="list-style-type: none"><li>• Assess for pregnancy, including ectopic pregnancy</li><li>• Remove the PVRs or refer for removal if she will carry the pregnancy to term</li><li>• There are no known risks to a fetus conceived while a woman has PVRs in place</li></ul>

# PVR: Summary

## The PVR:

- A new option that fulfills an unmet need for many women
- Effective protection from unintended pregnancy when used correctly
- Safe for baby and mother
- Used by a new mother beginning 4 weeks after birth, if she is breastfeeding her baby at least 4 times per day and will continue to do so
- Each ring effective for 3 months; replaced up to 3 times
- Easy to use—inserted and removed by the woman
- Very few side effects, generally mild



# 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.

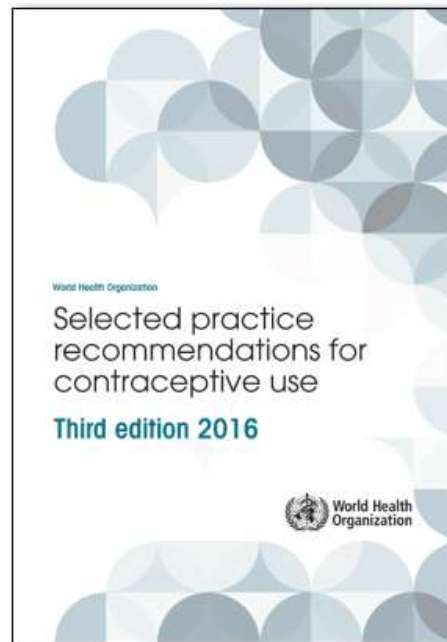
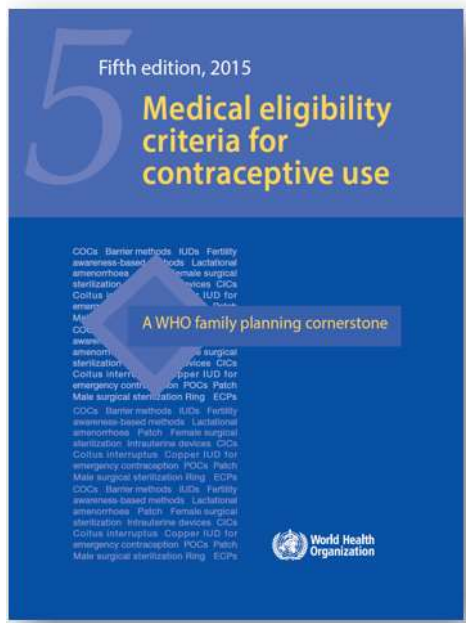
# Acknowledgement

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: <https://www.who.int/publications/i/item/9789241549158>
- WHO Selected Practice Recommendations for Contraceptive Use (3rd edition 2016). WHO, 2016. Available from: <https://www.who.int/publications/i/item/9789241565400>
- 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/10665/272758/9789241513579-eng.pdf?ua=1>



- For all the latest publications on contraception visit: <https://www.who.int/health-topics/contraception>