Contraceptive methods
Part 1 - Combined hormonal contraceptives

Raqibat Idris, MBBS, DO, MPH

Geneva Foundation for Medical Education and Research

Outline and objectives

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

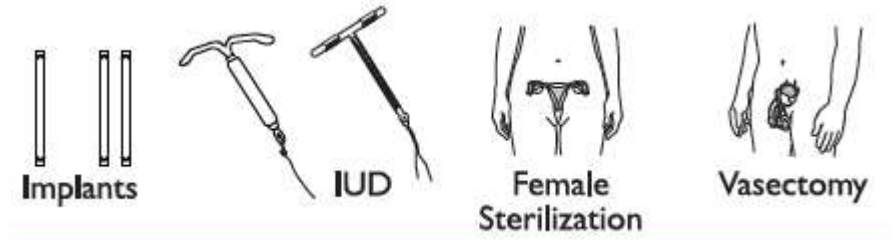
Methods

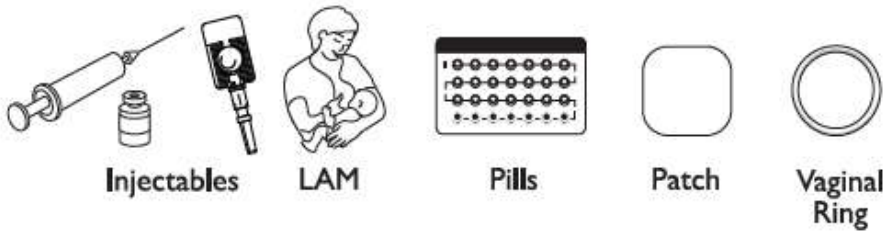
Combined hormonal contraceptives

1. Combined oral contraceptives (COCs)
2. Combined injectable contraceptives (CICs)
3. Combined contraceptive patch
4. Combined contraceptive vaginal ring (CVR)

Comparing Effectiveness of Family Planning Methods

More effective
Less than 1 pregnancy per 100 women in one year





Less effective
About 30 pregnancies 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.

Female condoms, withdrawal, spermicides: Use correctly every time you have sex

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined oral contraceptive pills (COCS)

What are COCs? Traits and types

COCs are pills that contain low doses of 2 hormones, a progestin and an estrogen like the natural hormones progesterone and estrogen in a woman's body. They are also called "the Pill," low-dose combined pills, OCPs, and OCs.

Traits and types

Content	Combination of two hormones: estrogen and progestin
Phasic	Monophasic, biphasic, triphasic
Dose	Low-dose: 30-35 µg of estrogen (common), 20 µg or less (rare in most places)
Pills per pack	21: all active pills (7-day break between packs)
	28: 21 active + 7 inactive pills (no break between packs)

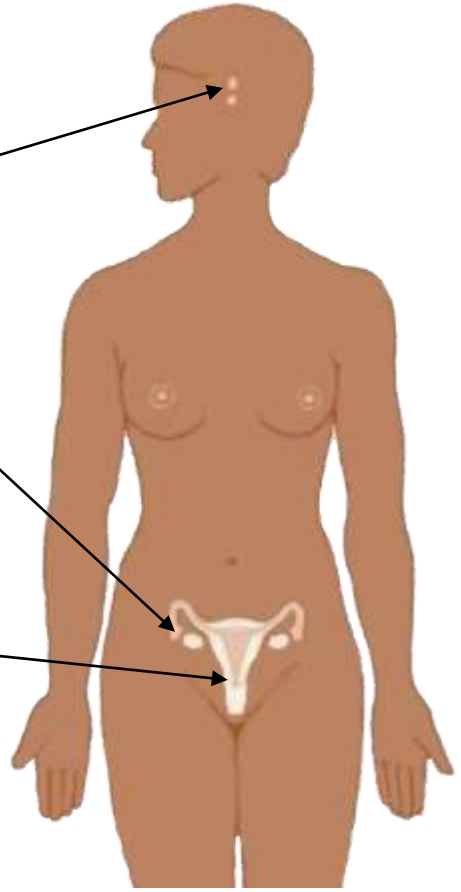
Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Table adapted from Training Resource Package for Family Planning: https://www.fptraining.org/

COCs: Mechanism of action

Suppresses hormones responsible for ovulation

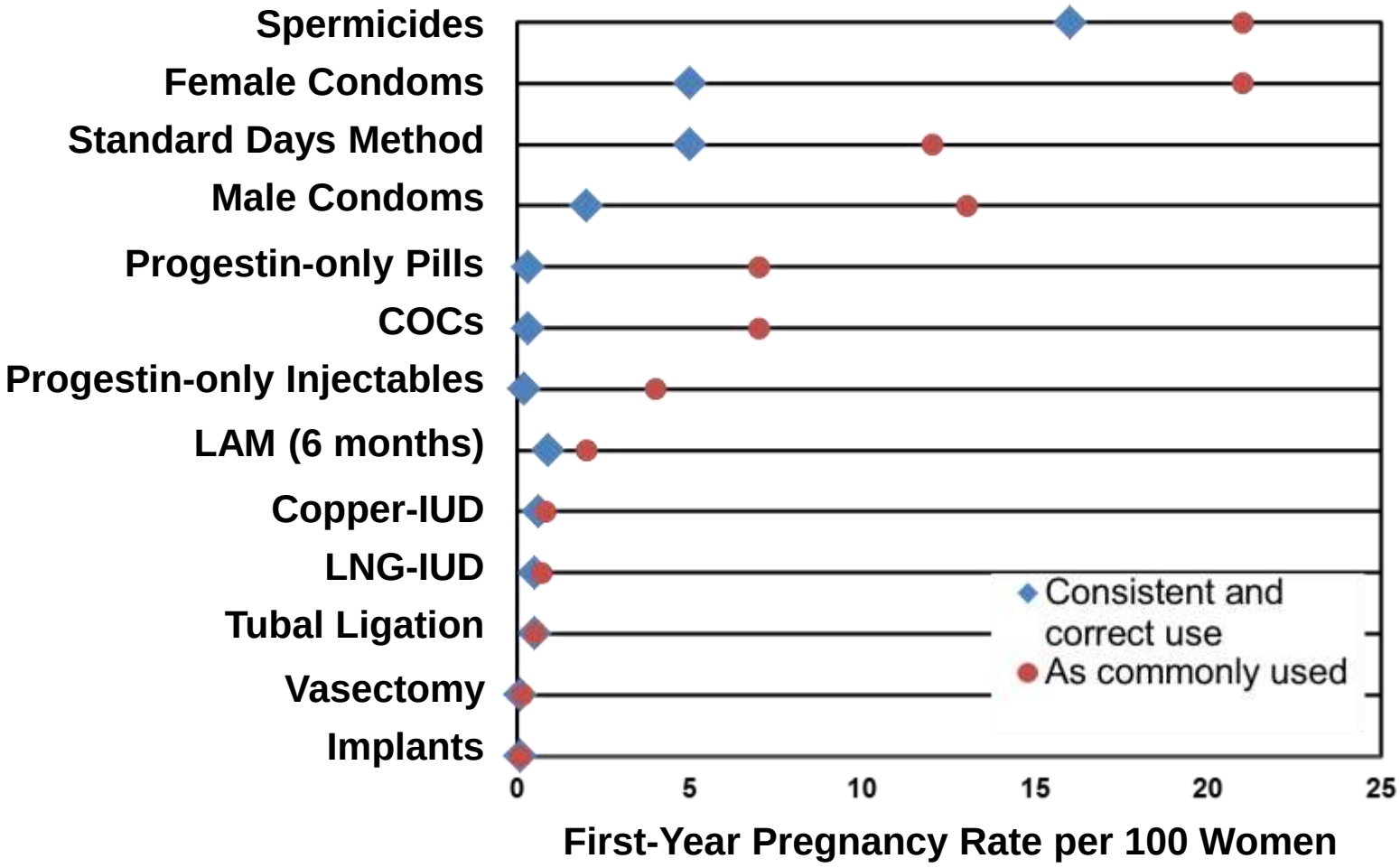
Thickens cervical mucus to block sperm



COCs have no effect on an existing pregnancy.

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

Combined oral contraceptives (COCs): Effectiveness



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

COCs: Characteristics

- Most women can safely use the pill
- Safe and more than 99% effective if used correctly
- Can be stopped at any time
- No delay in return to fertility
- Are controlled by the woman
- Do not interfere with sex
- Have health benefits

- Less effective when not used correctly (91%)
- Require taking a pill every day
- Do not provide protection from STIs/HIV
- Have side effects
- Have some health risks (rare)

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

COCs: Health benefits

Menstrual

- Decreased amount of flow and fewer days of bleeding; no bleeding (less common)
- Regular, predictable menstrual cycles
- Reduced pain and cramps during menses
- Reduced pain at time of ovulation

Others

- **Protection from** Risks of pregnancy, ovarian cancer and endometrial cancer and symptomatic PID
- **Reduced risk of** ovarian cysts and iron-deficiency anemia
- Decreased symptoms of endometriosis (pelvic pain, irregular bleeding)
- Decreased symptoms of polycystic ovarian syndrome (irregular bleeding, acne, excess hair on face or body)

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

No overall increase in breast cancer risk for COC users

Analysis of a large number of studies:

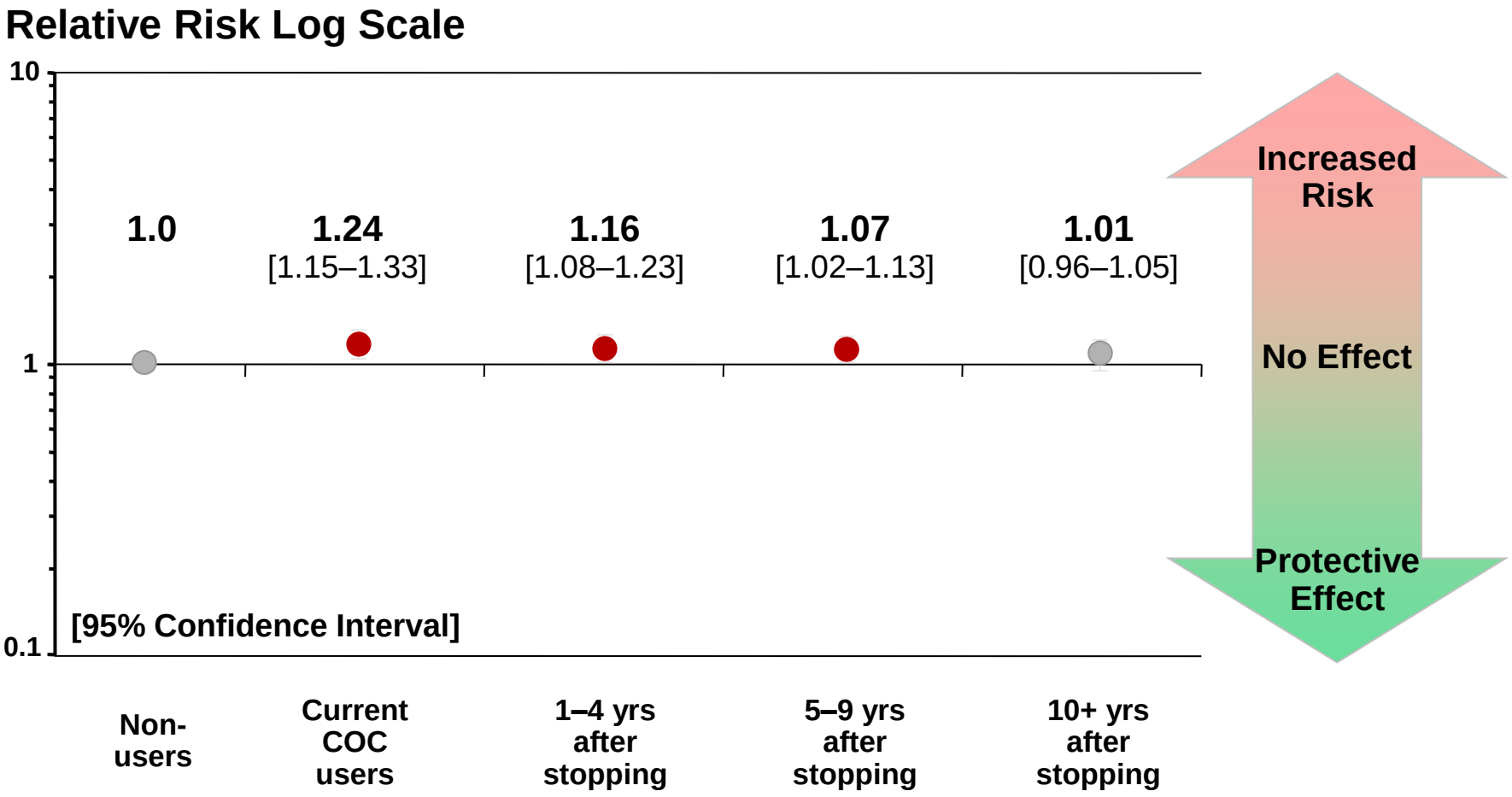
- No overall increase in breast cancer risk among women who had ever used COCs
- Current use and use within past 10 years: very slight increase in risk
  - May be due to early diagnosis or accelerated growth of pre-existing tumors

More recent study:

- No increase in breast cancer risk regardless of age, estrogen dose, ethnicity, or family history of breast cancer

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

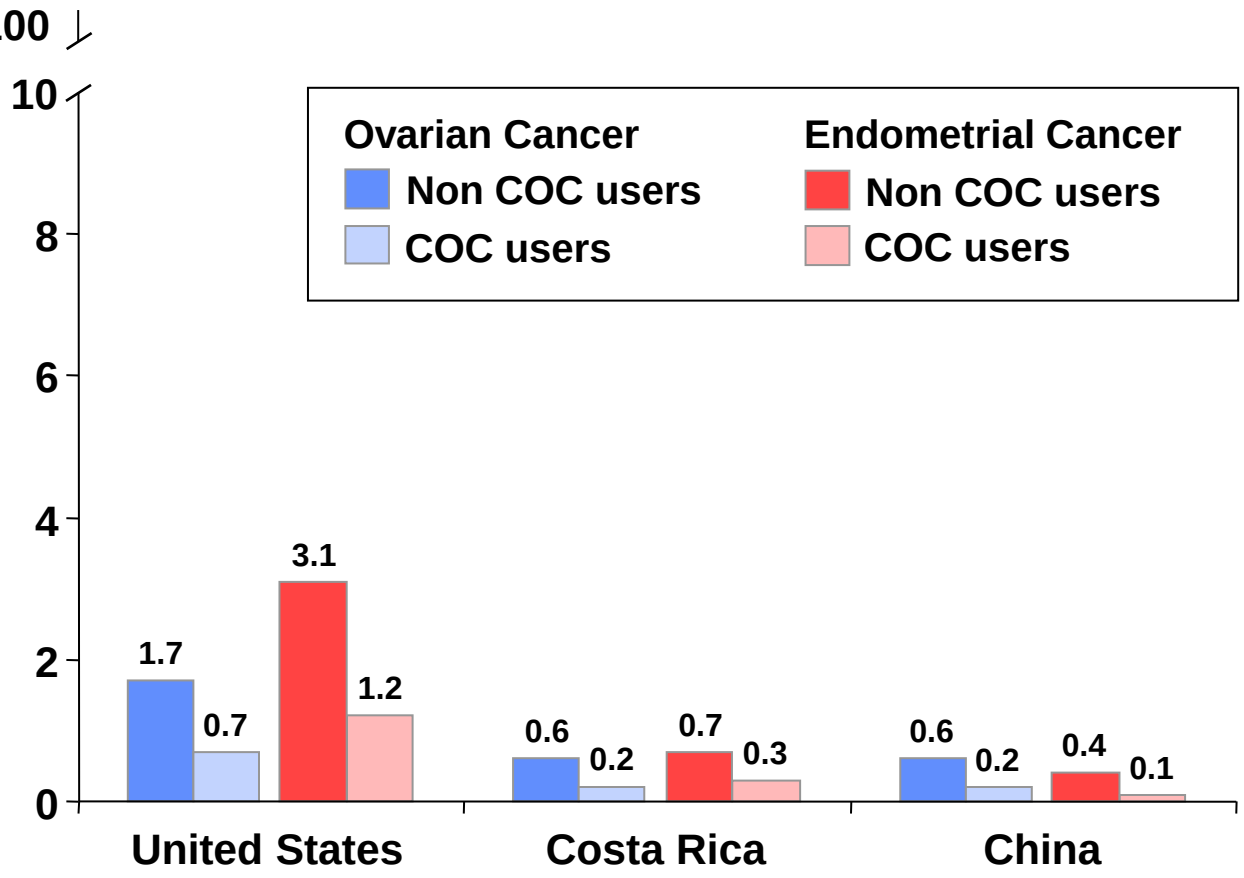
Relative risk for breast cancer among COC users and non-users



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

Protective effect of COC use on ovarian and endometrial cancer

Lifetime risk of acquiring ovarian or endometrial cancer after 8+ years of COC use
Number per 100 women



Reduces risk by more than 50%

Protection develops after 12 months of use and is present for at least 15 years

Source: Petitti and Porterfield, 1992; CASH Study 1987.

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

COCs and cervical cancer

- Cervical cancer is caused by certain types of human papillomavirus (HPV).
- Some increase in risk among women with HPV and others who use COCs more than 5 years.
  - Risk of cervical cancer goes back to baseline after 10 years of non-use
- Cervical cancer rates in women of reproductive age are low. Risk of cervical cancer at this age group is low compared to mortality and morbidities associated with pregnancy.

COC users should follow the same cervical cancer screening schedule as other women.

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

COCs: Risk of blood clots is limited

- **COCs may slightly increase risk of blood clots:**
  - Stroke
  - Heart attack
  - Deep vein thrombosis
  - Pulmonary embolism
- **Risk is concentrated among women who have additional risk factors, such as:**
  - Hypertension
  - Diabetes
  - Smoking

Stop COCs immediately if a blood clot develops.

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

COC users and risk of blood clots

Estimates of venous thromboembolism per 100,000 woman-years

	Incidence	Relative Risk
Young women in the general population	4–5	1
Low-dose COCs	12–20	3–4
High-dose COCs	24–50	6–10
Pregnant women	48–60	12

Pregnancy presents a higher risk of blood clots than do COCs.

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

COC users and risk of heart attack

Estimated number of heart attacks per million woman-years

Characteristic	Age 20-24	Age 30-34	Age 40-44
Healthy non-COC user	0.14	1.7	21.3
Healthy COC user	0.34	4.2	53.2
COC user who smokes	1.6	20.4	255
COC user with ↑ BP	2.0	25.5	319

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

COC side effects

- Nausea (upset stomach)- most common
- Changes in bleeding patterns (lighter, irregular, infrequent or no monthly bleeding)
- Mood changes or headaches
- Tender breasts
- Dizziness
- Slight weight gain or loss

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

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

Who can use COCS

Category 1 and 2 examples:

WHO Category	Conditions (selected examples)
Category 1	menarche to 39 yrs; nulliparous; endometriosis; endometrial or ovarian cancer; uterine fibroids; family history of breast cancer; varicose veins; irregular, heavy, or prolonged bleeding; anemia; STI/PID; hepatitis (chronic/carrier)
Category 2	≥40 yrs; breastfeeding ≥6 months postpartum; superficial venous thrombosis; dyslipidaemias without other cardiovascular risk factors; uncomplicated diabetes; cervical cancer; unexplained vaginal bleeding; undiagnosed breast mass

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

Who should generally not use COCs

Category 3 Examples:

WHO Category	Conditions (selected examples)
Category 3	**Postpartum:** • Breastfeeding between 6 weeks and 6 months • Non-breastfeeding and less than 3 weeks if no additional risk factors for deep vein blood clots (VTE) • Non-breastfeeding 3-6 weeks with additional risk of VTE
	Vascular conditions: • Hypertension (history of or BP 140-159/90–99) • Migraine without aura (older than 35 yrs)
	Gastrointestinal conditions: • Symptomatic gall bladder disease (current and medically-treated)
	Drug interactions: • Use of seizure medications or rifampicin or rifabutin

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

Who should not use COCs

Category 4 Examples:

WHO Category	Conditions (selected examples)
Category 4	**Breastfeeding:** <6 weeks postpartum
	Non-Breastfeeding: <3 weeks with risk factors for VTE
	Smoking: ≥15 cigarettes/day and ≥ 35 yrs old
	Vascular conditions: • Hypertension (≥160/≥100) • Migraines with aura • Ischemic heart disease or stroke • Diabetes with vascular complications • Deep venous thrombosis (history or acute) • Pulmonary embolism (history or acute)
	Liver conditions: • Acute hepatitis • Severe liver disease and most liver tumors
	Breast cancer: current or within 5 yrs

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

COC use by women with HIV

WHO Eligibility Criteria	
Condition	**Category**
HIV-infected	1
AIDS	1
ARV therapy (which does not contain ritonavir)	2
Ritonavir/ ritonavir-boosted PIs (as part of ARV regimen)	3

- Women with HIV or AIDS can use without restrictions
- Women on ARVs can use COCs safely
- Should not be used by women who take medications for seizures or rifampacin or rifabutin for tuberculosis (may reduce effectiveness of COCs)
- Using low-dose COCs is appropriate
- Condom use should be encouraged in addition to COCs

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

COC use by postpartum women

WHO Eligibility Criteria	
Condition	**Category**
Non-breastfeeding <3 weeks	3
Breastfeeding <6 weeks	4
Breastfeeding >6 weeks and < 6 months	3
Breastfeeding ≥6 months	2

- Non-breastfeeding women should not initiate COCs before 3 weeks postpartum (3-6 weeks postpartum with VTE risk factors)
- Breastfeeding women
  - Should not use COCs before 6 weeks postpartum
  - Should not use COCs from 6 weeks to 6 months postpartum unless no other method is available
  - Can generally initiate COCs at 6 months postpartum

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

When to start COCs - *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

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

When to start COCs - *2*

- 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 use backup method for the next 7 days
- **Postpartum**
  - Not breastfeeding: May start 3 to 6 weeks after giving birth, depending on presence of risk factors for blood clots
  - Breastfeeding: May start 6 months after giving birth

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

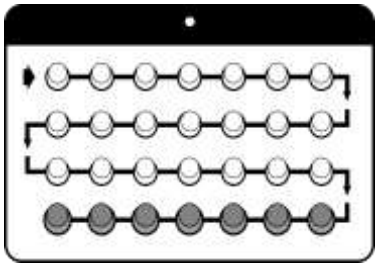
When to start COCs - *3*

- After miscarriage or abortion
  - Immediately, if within 7 days after first- or second-trimester miscarriage or abortion, no backup method needed
  - If more than 7 days after, rule out pregnancy, use backup method for 7 days
- Switching from hormonal method
  - May start immediately, no backup method needed (with injectables, initiate within reinjection window)
- Switching from non-hormonal method
  - If starting within 5 days of start of menstrual cycle, no backup method needed
  - If starting after day 5 of cycle, use backup method for 7 days
- After using emergency contraceptive pills
  - Initiate immediately after taking progestin-only ECPs, use backup method for 7 days
  - After taking ulipristal acetate (UPA) ECPs she can start or restart COCs on the 6th day after taking UPA EPs

Adapted from Training Resource Package for Family Planning: https://www.fptraining.org/
Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

How to take COCs

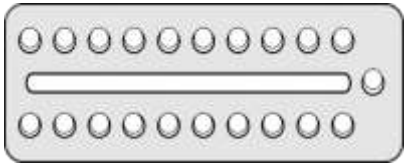
Take one pill each day, by mouth.



28-pill pack

If you use the 28-pill pack:

- No waiting between packs.
- Once you have finished all the pills in the pack, start new pack on the next day.



21-pill pack

If you use the 21-pill pack:

- 7 days of no pills
- Once you have finished all the pills in the pack, wait 7 days before starting new pack. For example: If you finish the old pack on Saturday, take the first pill of the new pack on the *following* Sunday.

Waiting too long between packs greatly increases risk of pregnancy.

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

COCs: Missed pills instructions

Miss 1 or 2 active pills in a row or start a pack 1 or 2 days late:

Always take a pill as soon as possible.

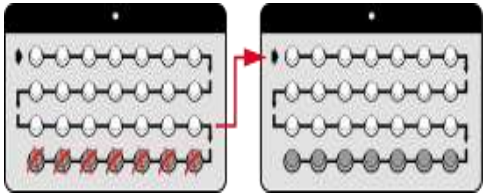
Continue to take one pill every day.

No need for additional protection.

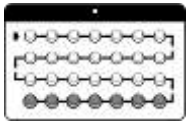
Miss 3 or more active pills in a row or start a pack 3 or more days late:

- Take a pill as soon as possible, continue taking 1 pill each day, and use condoms or avoid sex for next 7 days. If she had sex in the past 5 days, she can consider ECPs.

- If these pills missed in week 3, ALSO skip the inactive pills in a 28-pill pack and start a new pack



- If the inactive pills are missed, throw away the missed pills and continue taking pills 1 each day




Adapted from Training Resource Package for Family Planning: https://www.fptraining.org/
Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

COCs: Correcting rumors and misconceptions

COCs:

- Do not build up in a woman's body. Women do not need a "rest" from taking COCs.
- Must be taken every day, whether or not a woman has sex that day.
- Do not make women infertile.
- Do not cause birth defects or multiple births.
- Do not change women's sexual behavior.
- Do not collect in the stomach. Instead, the pill dissolves each day.
- Do not disrupt an existing pregnancy.

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

Management of COC side effects

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 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	

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

Management of COC side effects: Bleeding changes

Problem	Action/Management	
Irregular bleeding	Reassure client: reinforce correct pill taking and review missed pill instructions; ask about other drugs that may interact with COCs; administer short course of non-steroidal anti-inflammatory drugs	If side effects persist and are unacceptable to client: if possible, switch pill formulations or offer another method.
Amenorrhea	Reassure client: no medical treatment necessary.	

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

When to return: Warning signs of rare COC complications

- Severe, constant pain in belly, chest, or legs
- Very bad headaches
- A bright spot in your vision before bad headaches
- Yellow skin or eyes

Advise to stop taking COCs, use a backup method, and see a health care provider.

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

Problems that may require stopping COCs or switching to another method - *1*

Problem	Action
Unexplained vaginal bleeding	• Refer or evaluate by history and pelvic exam • Diagnose and treat as appropriate • If an STI or PID is diagnosed, the client may continue using COCs during treatment
Migraines	• If the client develops migraines with or without aura, or her migraine headaches worsen, stop COC use • Help the client choose a method without estrogen
Circumstances that keep her from walking for one week or more	Tell the client she should: • Tell her doctors she is using COCs • Stop taking COCs and use a backup method • Restart COCs 2 weeks after she can move about

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

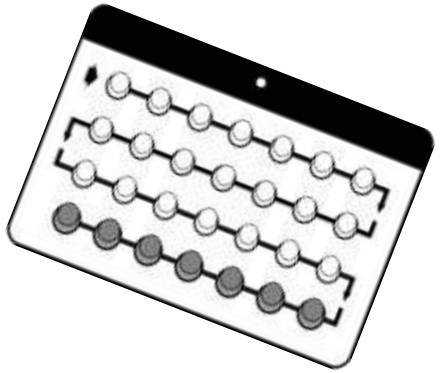
Problems that may require stopping COCS or switching to another method - *2*

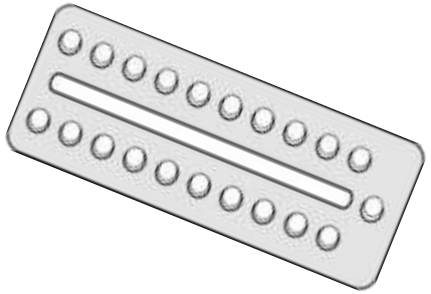
Problem	Action
Starting treatment with anti- convulsants or rifampicin, rifabutin, or ritonavir	• These drugs make COCs less effective; COCs may make lamotrigine less effective. • Advise the client to consider other contraceptive methods (except progestin-only pills).
Blood clots, heart or liver disease, stroke, or breast cancer	• Tell the client to stop COC use • Give the client a backup method to use • Refer for diagnosis and care
Suspected pregnancy	• Assess for pregnancy • If confirmed, tell the client to stop taking COCs • There are no known risks to a fetus conceived while a woman is taking COCs

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

COCs: Summary

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





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

Combined injectable contraceptives (monthly injectables)

What are monthly injectables?

- Monthly injectables or combined injectable contraceptives contain 2 hormones, a progestin and an estrogen, like the natural hormones progesterone and estrogen in a woman's body.

(Combined oral contraceptives also contain these 2 types of hormones.)

- They are also called combined injectable contraceptives, CICs, the injection.

They are available as:

1. Medroxyprogesterone acetate (MPA) 25mg + estradiol cypionate
   Cyclofem, Ciclofemina, Ciclofem, Cyclo-Provera, Lunella, Lunelle, Novafem, Feminena
2. Norethisterone enanthate (NET-EN) 50 mg + estradiol valerate
   Mesigyna, Norigynon

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: Mechanism of action and effectiveness

Mechanism of action

- Like COCs, monthly injectables work primarily by preventing the release of eggs from the ovaries (ovulation).

Effectiveness

- As commonly used, about 3 pregnancies per 100 women using monthly injectables over the first year. This means that 97 of every 100 women using injectables will not become pregnant.
- Less than 1 pregnancy per 100 women using monthly injectables over the first year (5 per 10,000 women), when women receive their injections on time.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Characteristics of monthly injectables

COCs:

- Do not require daily action by the user
- Can be used privately
- Injections can be stopped at any time
- Good for spacing births

- Slightly delayed return to fertility (An average of about 5 months, one month longer than with most other methods)
- No protection against sexually transmitted infections or HIV

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: Differences from progestin-only injectables

Compared to progestin-only injectables DMPA or NET-EN, monthly injectables:

- Contain estrogen as well progestins, that is, combined methods.
- Contain less progestin
- More regular bleeding, fewer bleeding disturbances.
- Require a monthly injection, whereas NET-EN is injected every 2 months and DMPA, every 3 months..

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: Side effects

- Changes in bleeding patterns
  - Lighter bleeding, fewer days of bleeding
  - Irregular bleeding
  - Infrequent bleeding
  - Prolonged bleeding
  - Amenorrhea (no monthly bleed)
- Weight gain
- Headaches
- Dizziness
- Breast tenderness

Bleeding changes are normal and not harmful.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: Health risks and benefits

- Safe and suitable for nearly all women
- Long-term studies are limited
- Benefits and risks similar to those of COCs
  - Less effect on blood pressure, blood clotting, lipid metabolism, and liver function

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Who can and cannot use monthly injectables

Nearly all women can use monthly injectables safely and effectively, including women who:

- Have or have not had children
- Are married or are not married
- Are of any age, including adolescents and women over 40 years old
- Have just had an abortion or miscarriage
- Smoke any number of cigarettes daily and are under 35 years old
- Smoke fewer than 15 cigarettes daily and are over 35 years old
- Have anemia now or had anemia in the past
- Have varicose veins
- Are living with HIV, whether or not on antiretroviral therapy

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

When to start monthly injectables - *1*

A woman can start injectables any time she wants if it is reasonably certain she is not pregnant (use the Pregnancy Checklist). There is no need for pregnancy test, any blood tests, other routine laboratory tests, pelvic examination, cervical screening or breast examination.

Having monthly bleeding:

- Within 7 days after the start of monthly bleeding, it can be assumed she is not pregnant. Start injection and no need for a backup method.
- If after 7 days after the start of her monthly bleeding, rule out pregnancy before giving injection, use a backup method for 7 days.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

When to start monthly injectables - *2*

Postpartum:

- If breastfeeding fully or nearly fully: wait 6 months
- If breastfeeding partially: wait 6 weeks
- If not breastfeeding: anytime within 4 weeks after delivery on days 21- 28 (if additional risk for VTE, wait until 6 weeks), no need for backup (after 4 weeks, rule out pregnancy and use backup methods for 7 days).

After miscarriage or abortion: anytime within 7 days
(after day 7 rule out pregnancy and use a backup method for 7 days).

When switching from another method: start immediately if reasonably certain she is not pregnant. No need for a backup method. If switching from another injectable, give the new injectable when the repeat injection would have been given.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

When to start monthly injectables - *3*

After taking emergency contraceptive pills (ECPs):

- Progestin-only or combined ECPs:
  - Start or restart injectables on same day as taking the ECPs or anytime after ruling out pregnancy. Use a backup method for 7 days after the injection.

- After taking ulipristal acetate (UPA) ECPs:
  - Start or restart injectables on the 6th day after taking UPA-ECPs or anytime after the 6th day after ruling out pregnancy. Use a back up method from the day of taking UPA-ECPs until 7 days after the injection.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

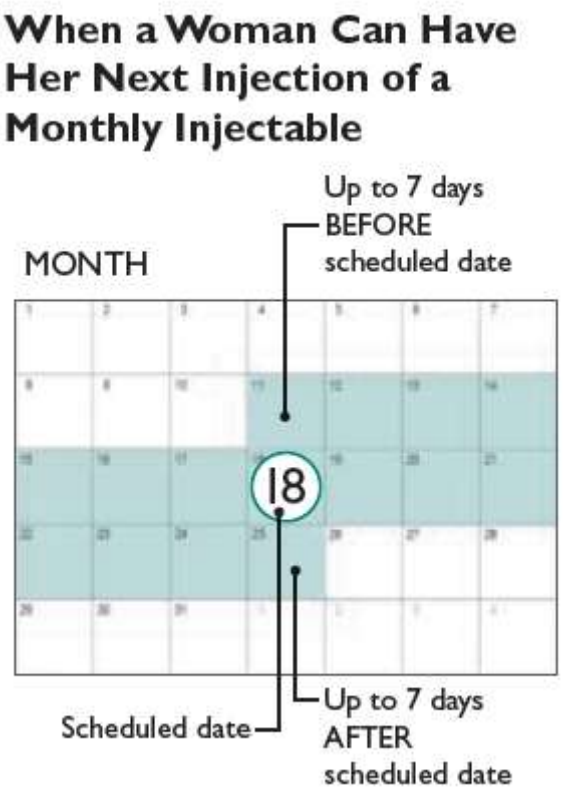
Monthly injectables: Managing late injections

Less than 7 days late for a repeat injection:

- Give next injection. No need for tests, evaluation, or a backup method.

More than 7 days:

- Give next injection if she has not had sex 7 days after the injection was due or she has used a backup method or taken ECPs if she had. Use a backup method for 7 days after the injection.
- If not, rule out pregnancy before giving the next injection.



Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: Correcting misconceptions

Monthly injectables:

- Can stop monthly bleeding, but this is not harmful; blood does not build up inside the woman
- Do not make women infertile
- Do not cause early menopause
- Do not cause birth defects or multiple births
- Do not cause itching
- Do not change women's sexual behaviour

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: Management of side effects

Problem	Action/Management
Irregular bleeding	• Reassure her that many women using monthly injectables experience irregular bleeding. It is not harmful and usually becomes less or stops after the first few months of use. • For modest short-term relief, suggest 800 mg ibuprofen 3 times daily after meals for 5 days, or other nonsteroidal anti-inflammatory drug (NSAID), beginning when irregular bleeding starts.
Heavy or prolonged bleeding	• Reassure; suggest NSAID beginning when heavy bleeding. • To help prevent anemia, suggest iron tablets and tell her eating of foods containing iron.
No monthly bleeding	• Reassure, this not harmful. It is similar to not having monthly bleeding during pregnancy. She is not pregnant or infertile. Blood is not building up inside her.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: Management of side effects

Problem	Action/Management
Weight gain	• Review diet and counsel as needed.
Ordinary headaches (nonmigrainous)	• Reassure and suggest pain relievers; evaluate headaches that worsened after starting injectables.
Breast tenderness	• Recommend that she wear a supportive bra (including during strenuous activity and sleep). • Try hot or cold compresses. • Suggest aspirin (325–650 mg), ibuprofen (200–400 mg), paracetamol (325–1000 mg), or other pain reliever. • Consider locally available remedies.
Dizziness	• Consider locally available remedies.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: New problems that may require switching methods

Problem	Action/Management
Unexplained vaginal bleeding (that suggests a medical condition not related to the method)	• Refer or evaluate by history and pelvic examination. Diagnose and treat as appropriate. • She can continue using monthly injectables while her condition is being evaluated. • If bleeding is caused by sexually transmitted infection or pelvic inflammatory disease, she can continue using monthly injectables during treatment.
Migraine headaches	• Regardless of her age, a woman who develops migraine headaches, with or without aura, or whose migraine headaches become worse while using monthly injectables, should stop using injectables. • Help her choose a method without estrogen.
Starting treatment with lamotrigine	• Combined hormonal methods, including monthly injectables, can make lamotrigine less effective. Unless she can use a different medication for seizures than lamotrigine, help her choose a method without estrogen.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: New problems that may require switching methods

Problem	Action/Management
Circumstances that will keep her from walking for one week or more	• If she will be unable to move about for several weeks, she should: – Tell her doctors that she is using monthly injectables. – Stop injections one month before scheduled surgery, if possible, and use a backup method during this period. – Restart monthly injectables 2 weeks after she can move about again.
Certain serious health conditions including suspected heart or liver disease	• Do not give the next injection. • Give her a backup method to use until the condition is evaluated. • Refer for diagnosis and care if not already under care.
Suspected pregnancy	• Assess for pregnancy. • Stop injections if pregnancy is confirmed. • There are no known risks to a fetus conceived while a woman is using injectables

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Monthly injectables: summary

- Safe for almost all women
- Effective if used consistently and correctly - Coming back every 4 weeks is important for greatest effectiveness.
- Injection can be as much as 7 days early or late.
- Screening and counseling are essential

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch

What is the combined patch?

- A small, thin, square of flexible plastic worn on the body.
- Continuously releases 2 hormones, a progestin and an estrogen which are like the natural hormones progesterone and estrogen in a woman's body, directly through the skin into the bloodstream.
- Also called Ortho Evra and Evra.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: Mechanism of action

- Works primarily by preventing the release of eggs from the ovaries (ovulation).
- The woman puts on a new patch every week for 3 weeks, then no patch for the fourth week. During this fourth week the woman will have monthly bleeding.
- No delay in return of fertility after patch use is stopped.
- Does not provide protection against sexually transmitted infections.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: Effectiveness

- As commonly used, about 7 pregnancies per 100 women using the combined patch over the first year. That is, 93 of every 100 women using the combined patch will not become pregnant.

- When no mistakes are made with use of the patch, less than 1 pregnancy per 100 women using a patch over the first year (3 per 1,000 women).

- Pregnancy rates may be slightly higher among women weighing 90 kg or more.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: Side effects

- Skin irritation or rash where the patch is applied
- Changes in bleeding patterns:
  - Lighter bleeding and fewer days of bleeding
  - Irregular bleeding
  - Prolonged bleeding
  - No monthly bleeding
- Headaches
- Nausea
- Vomiting
- Breast tenderness and pain
- Abdominal pain
- Flu symptoms/upper respiratory infection
- Irritation, redness, or inflammation of the vagina (vaginitis)

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: Known health benefits and health risks

- Long-term studies of the patch are limited, but researchers expect that its health benefits and risks are like those of combined oral contraceptives.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: Who can start and when to start

- Medical eligibility criteria guidelines for when to start and helping continuing users for the combined patch are the same as for combined oral contraceptives and the combined vaginal ring.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: Late replacement or removal, or patch comes off - *1*

Forgot to apply a new patch after the 7-day patch-free interval or late changing patch at the end of week 1 or 2:

- Apply a new patch as soon as possible and keep the same patch-change day.
- If late by only 1 or 2 days (48 hours or less), there is no need for a backup method.
- If more than 2 days late (more than 48 hours), use a backup method for the first 7 days of patch use. The new patch will begin a new 4-week patch cycle, and this day of the week will become the new patch-change day.
- If more than 2 days late and unprotected sex occurred in the past 5 days, consider taking emergency contraceptive pills.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: Late replacement or removal, or patch comes off - *2*

Late taking off the patch at the end of week 3:

- Remove the patch.
- Start the next cycle on the usual patch-change day.
- No need for a backup method..

The patch came off and was off for less than 2 days (48 hours or less):

- Apply a new patch as soon as possible. (The same patch can be re-used if it was off less than 24 hours.)
- No need for a backup method.
- Keep the same patch change day.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: Late replacement or removal, or patch comes off - *3*

The patch came off and was off for more than 2 days (more than 48 hours):

- Apply a new patch as soon as possible, use a backup method for the next 7 days and keep the same patch-change day.
- If during week 3, skip the patch-free week and start a new patch immediately after week 3. If a new patch cannot be started immediately, use a backup method and keep using it through the first 7 days of patch use.
- If during week one and unprotected sex occurred in the past 5 days, consider taking emergency contraceptive pills.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined patch: summary

- Health benefits and risks are like those of combined oral contraceptives.
- Replace each patch on time for greatest effectiveness.
- No delay in return of fertility after patch use is stopped.
- Screening and counseling are essential

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring

What is the combined vaginal ring?

- A flexible ring that a woman places in her vagina.
- Continuously releases 2 hormones, a progestin and an estrogen which are like the natural hormones progesterone and estrogen in a woman's body, from inside the ring.
- Hormones are absorbed through the wall of the vagina directly into the bloodstream.

- Also called NuvaRing

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring: Mechanism of action

- Works primarily by preventing the release of eggs from the ovaries (ovulation).
- The woman leaves the ring in her vagina for 3 weeks, then removes it for the fourth week. During this fourth week the woman will have monthly bleeding.
- No delay in the return of fertility after ring use is stopped.
- No protection against sexually transmitted infections.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring: Effectiveness

- Depends on the user. Risk of pregnancy is greatest when a woman is late to start a new ring.

- As commonly used, about **7 pregnancies per 100 women using the combined vaginal ring over the first year**. That is, 93 of every 100 women using the combined vaginal ring will not become pregnant.

- When no mistakes are made with use of the combined vaginal ring, **less than 1 pregnancy per 100 women using the combined vaginal ring over the first year** (3 per 1,000 women).

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring: Side effects

- Changes in bleeding patterns, including:
  - Lighter bleeding and fewer days of bleeding
  - Irregular bleeding
  - Infrequent bleeding
  - Prolonged bleeding
  - No monthly bleeding
- Headaches
- Irritation, redness, or inflammation of the vagina (vaginitis)
- White vaginal discharge

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring: Known health benefits and health risks

- Long-term studies of the vaginal ring are limited.
- Researchers expect that its health benefits and risks are like those of combined oral contraceptives.
- Evidence to date has not shown adverse effects.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring: Who can start and when to start

- Medical eligibility criteria, guidelines for when to start, and helping continuing users for the combined ring are the same as for combined oral contraceptives and the combined patch.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring: Late replacement or removal - *1*

Left ring out for 48 hours or less during weeks 1 through 3:

- Put the ring back in as soon as possible, no need for a backup method.

Left ring out for more than 48 hours during weeks 1 or 2:

- Put the ring back in as soon as possible and use a backup method for the next 7 days.
- If the ring was left out for more than 48 hours in the first week and unprotected sex occurred in the previous 5 days, consider taking emergency contraceptive pills.

Left ring out for more than 48 hours during week 3:

- Put the ring back in as soon as possible and use a backup method for the next 7 days.
- Start a new ring at the end of the third week and skip the ring-free week. If unable to start the new ring at the end of the third week, use a backup method and keep using it through the first 7 days after starting a new ring.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring: Late replacement or removal - *2*

Forgot to insert a new ring at beginning of the cycle:

- Insert a new ring as soon as possible. If late by only 1 or 2 days (48 hours or less), that is, the ring is left out no longer than 9 days in a row, no need for a backup method. Keep the same ring removal day.
- If the new ring is inserted more than 2 days (more than 48 hours) late, that is, the ring is left out 10 days or more in a row, use a backup method for the first 7 days of ring use.
- If unprotected sex occurred in the past 5 days, consider taking emergency contraceptive pills.

Kept ring in longer than 3 weeks:

- If the same ring is used for up to 28 days (4 weeks), no backup method is needed. She can take a ring-free week or start a new ring immediately.
- If the same ring is used for 28 to 35 days (more than 4 weeks but less than 5 weeks), insert a new ring and skip the ring-free week. No backup method is needed.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Combined vaginal ring: summary

- Health benefits and risks are like those of combined oral contraceptives.
- Start each new ring on time for greatest effectiveness.
- No delay in return of fertility after patch use is stopped.
- Screening and counseling are essential

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

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.

Family Planning: A Global Handbook for Providers (3rd Edition, 2018)

Acknowledgement

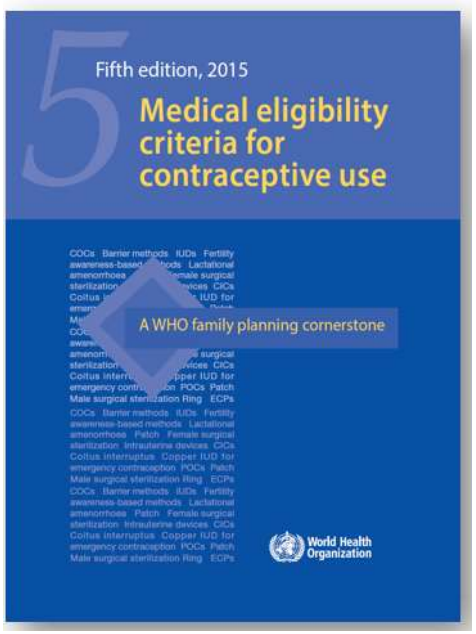
This training presentation was adapted from the following resources:

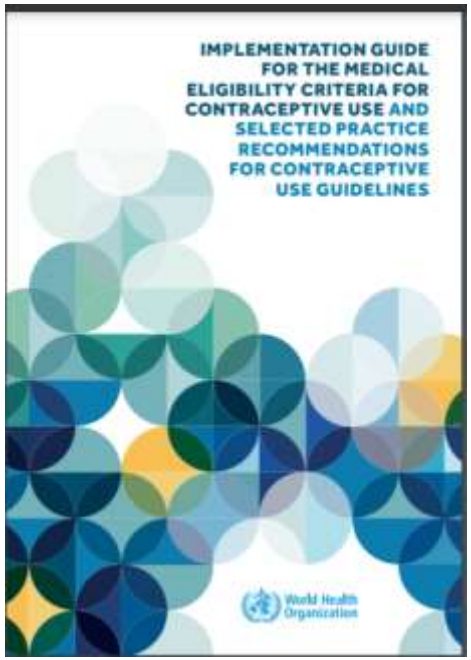
- Training Resource Package for Family Planning https://www.fptraining.org/

- 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