# Contraceptive Methods For Ongoing Use Curriculum for Pharmacy Personnel in [*insert country*]

## Session Overview

### Learning objectives

By the end of this session, participants will be able to:

- Identify contraceptive methods available at pharmacies, as well as the characteristics and common side effects of these methods.
- Identify the contraceptive methods most appropriate for use by adolescents.
- Identify which contraceptive methods provide protection against sexually transmitted infections.
- Identify contraceptive methods that should be provided in a clinical setting.

### Time

3 hours, 20 minutes

### Agenda for this session

1. Introduction and Pre-Session Questionnaire (15 min.)
2. Providing Contraception to Adolescents (25 min.)
3. Review of Contraceptive Methods Available in Pharmacies (60 min.)
4. Other Contraceptive Methods (20 min.)
5. Counseling for Ongoing Contraception (30 min.)
6. Condom Use Demonstration (30 min.)
7. Review, Conclusion, and Post-Session Questionnaire (20 min.)

### Handouts and training aids

*Contraceptive Method Options, A Resource for Pharmacists and Pharmacy Staff* (booklet)
HO 1: Presentation Outline
TA 1: Contraceptive Methods Grab Bag

### Preparation

You will need the following materials for this session:

- Flip chart, overhead, or chalkboard
- Markers or chalk
- Scissors
- Tape

Local data on the following issues can be used in this session:

- Adolescents and sexual activity
- Available contraceptive methods
- Contraceptive methods available in pharmacies

## Content and format for this section were adapted from:


- *Expanding the Range of Contraceptive Options: A Manual for Community Health Outreach Workers.* Philippines: PATH (2000).
- *Comprehensive Reproductive Health and Family Planning Training Curriculum* (Module 3: Counseling for Family Planning Services). Watertown, MA: Pathfinder International (1998). Also available at: http://www.pathfind.org/pf/pubs/mod3.pdf.
- Hatcher, Robert A. et al. *Contraceptive Technology 17th Revised Edition.* New York: Ardent Media (1998).
- Planned Parenthood: www.plannedparenthood.org/bc/. Last accessed 2001.
- Reproductive Health Outlook: www.rho.org. Last accessed 2003.
- World Health Organization. *Improving Access to Quality Care in Family Planning: Medical Eligibility Criteria for Contraceptive Use*. Geneva: WHO (2nd edition 2000). Also available at: http://www.who.int/reproductivehealth/publications/RHR_00_2_ medical _eligibility_criteria_second_edition/. Last accessed 2003.
- *Sexual and Reproductive Health Briefing Cards—Adolescent Sexual and Reproductive Health*. New York, NY: Family Care International (2000).
- Hatcher, Robert A. et al. *The Essentials of Contraceptive Technology.* Baltimore: Johns Hopkins University School of Public Health, Population Information Program (2002).

# Introduction
## (15 Minutes)

1. **Introduce trainer and participants.**
2. **Review objectives of this session (write out on flip chart, overhead, or chalkboard).**
3. **Establish time frame for this session.**

See session overview for learning objectives. Emphasize practical approach of training.

This training is designed to update knowledge of currently available contraceptive methods by providing accurate information in a time-efficient format. While this information should be used to help better serve the entire client population, we would like to emphasize contraceptive methods that are particularly important and effective for adolescents.

The session is scheduled to last approximately 3 hours and 20 minutes. During the session, participants will participate by sharing their thoughts, ideas and experiences in discussions, small group work, role-plays, and large group discussions. Encourage participants to ask questions when they have them.

4. **Distribute pre-session questionnaire. Allow participants approximately ten minutes to complete the questionnaire.**

# Providing Contraception to Adolescents

**(25 Minutes)**

**Brainstorm, presentation**

1. **Present the importance of consistent and correct use of contraception among adolescents, citing country-specific data when available.**
2. **Ask participants "What are possible barriers to adolescents' access to contraception?"**
3. **Note participants' responses on flip chart.**

Throughout the world, many men and women, married and unmarried, become sexually active during adolescence. [*Insert country-specific data on adolescence and sexual activity*.]

However, most adolescents lack accurate knowledge about reproduction, sexuality, and contraception and do not have access to reproductive health information and services, including contraception.

Sexual relationships present physical and emotional risks and the only guarantee against pregnancy is not having vaginal intercourse. Similarly, there are certain health and social advantages, particularly for young women, to postponing sexual intercourse until they reach their 20s. However, since postponing sex is not always possible, there are contraceptive methods that, if used consistently and correctly, can greatly reduce the risk of pregnancy and sexually transmitted infections (STIs) during vaginal intercourse. In addition, studies have shown that access both to contraceptive information and services does *not* hasten the onset of sex, increase the frequency of sex, nor increase the number of sexual partners.[1]

4. **Emphasize the role of pharmacy staff in providing contraceptive services to adolescents.**
5. **Cite data on adolescent use of pharmacies from pre-project assessment (if available) as noted below.**
6. **Discuss the advantages of providing youth-friendly services.**

Adolescents who feel comfortable seeking reproductive health services at your pharmacy will recommend your store to their friends and family and will frequent your store for their health-related and other needs.

It is important to treat all customers with respect regardless of their age or the services they are seeking. This will help you maintain a large client base.

[*Insert country-specific information on adolescent use of pharmacies from pre-project assessment*.]

There are several contraceptive options that sexually active adolescents may choose to prevent unwanted pregnancy. This training session will emphasize the different methods that adolescents may use to protect themselves against pregnancy and STIs and that are available in [*insert country*] pharmacies. We will also briefly discuss methods which require a clinic visit or are non-product related. Some of these methods may not be widely available here, and we will only mention these briefly. It is important to know that the contraceptive methods to be discussed in this session are on the *World Health Organization's Model Essential Drug List*.

An informational handout – *Contraceptive Method Options, A Resource for Pharmacists and Pharmacy Staff* – on all methods will be given to you as a resource guide. This handout contains a brief description of each method, including information on contraindications.

**7. Ask participants "What factors does a person take into consideration when seeking a method of contraception?"**

**8. Note participant responses on the flip chart, overhead, or chalkboard making sure the points below are covered.**

Whether or not a method is acceptable to a particular person is dependent not only on whether it is medically appropriate, but also on whether it is practically and personally appropriate.

Contraceptive needs may change throughout a person's life. An individual should think about the following questions when deciding which method to use:

- Does it fit into my lifestyle?
- Is it convenient?
- Is it effective?
- Is it safe?
- Is it affordable?
- Is it reversible?
- Does it protect against STIs?
- Is the service private and confidential?
- Can I manage the side effects?
- Do I have contraindications?

**9. Ask participants "What do you think is important method-related information to provide to adolescent clients?"**

**10. Make sure the points below are covered.**

Participants should keep in mind the following principles when counseling adolescents about which contraceptive methods to use:

- Effectiveness of the method.
- Advantages and disadvantages.
- Side effects and complications.
- Proper instructions.
- Ability to prevent STI and HIV infection.
- Contraindications.
- When to return to pharmacy.
- Referral information if a health care provider is needed.

## Key Points

- Most adolescents lack accurate knowledge about reproduction and contraception and do not have access to reproductive health information and services.
- Many adolescents are sexually active. Data have shown that access to contraception does not increase sexual activity.
- The health impact of unintended pregnancy and STIs for adolescents is significant.

# Review of Contraceptive Methods Available in Pharmacies

**(60 Minutes)**

**Pair and small group work, presentation**

1. **Divide participants into six groups. Assign one contraceptive method to each group. The methods covered include:**

   **- Male condom**
   **- Female condom**
   **- Spermicides**
   **- Oral contraceptive pills**
   **- Injectable contraceptives**
   **- Emergency contraceptive (EC) pills**

**[If one or more of these methods is NOT available in country, present information about it in the following section on Other Contraceptive Methods]**

2. **Ask participants to work in their groups for 20 minutes to prepare information about the contraceptive method on flip chart paper. They should address the five topics listed below. They should use one another as resources and base their information on what they already know about the method. Each group will present their information to the larger group. Any misinformation should be corrected after the presentation.**

   **- Name and brief description of method (maximum three sentences).**
   **- Advantages and disadvantages of method.**
   **- Approximate cost in [*insert country*].**
   **- Appropriateness for adolescents.**
   **- Potential side effects.**

3. **Distribute HO 1: *Presentation Outline* to show the approximate format participants can use for presenting their method (they should transfer the information to flip chart paper).**

4. **Distribute copies of the resource *Contraceptive Method Options* to participants. Use this resource and the information provided below to correct and complement each group's presentation.**

Many young people have intercourse infrequently and thus prefer to use over-the-counter methods such as condoms, which are usually widely available in pharmacies. Condoms are the best protection against pregnancy and infection for women and men of all ages who have sexual intercourse.

**Male condoms** are one of the most highly recommended methods for adolescents because they are easily available and protect against both STIs and pregnancy. Pharmacy staff are also in an excellent position to promote this method.

Male condoms are a method of contraception that has been around for years; however, they have become particularly important recently because of the protection that they provide against STIs, including HIV.

**Female condoms** provide a physical barrier that lines the vagina entirely and partially shields the perineum. The female condom is a soft, loose-fitting polyurethane pouch with flexible rings at each end. It is inserted deep into the vagina like a diaphragm.

**The duel or Condom Plus Method is the recommended method for adolescents who are vulnerable to STI/HIV and pregnancy due to risky sexual practices.** This method uses condoms in *combination with* another contraceptive method to cover risk from STI/HIV infection *and* pregnancy.

**Spermicides** are a barrier method of birth control. They are available in a variety of contraceptive preparations, including: **foams, creams, jellies, film,** and **suppositories**. These products are inserted deep into the vagina shortly before intercourse. They form a chemical barrier to the uterus and kill or inactivate sperm. **When used alone, spermicides provide some contraceptive protection, but are best when used with another barrier method, such as condoms, to prevent pregnancy.** In addition, spermicides should not be used as a method for preventing transmission of HIV or other STIs. Male or female condoms should be used in conjunction with spermicides to protect against STI transmission.

It should be noted that most spermicides contain Nonoxynol-9 (N-9). N-9 has been shown to *increase* the risk of HIV with *frequent* use in women at *high-risk* of HIV. However, women at *low-risk* of HIV infection may use N-9 spermicides as a moderately effective, female-controlled form of birth control.

**Oral contraceptive pills (OCs)** are a monthly series in which one pill is taken daily. The active ingredients are synthetic hormones like those produced by the body to regulate the menstrual cycle. Combined oral contraceptive pills (COCs) contain both estrogen and progestin. Progestin-only pills contain no estrogen.

COCs work by suppressing ovulation. COCs may also thicken the cervical mucus and alter tubal secretions to prevent sperm penetration. Progestin-only pills can also prevent ovulation, but they work mainly by thickening the cervical mucus. Both types of pills can also change the lining of the uterus, thereby interfering with implantation.

OCs do not protect against STIs, but are a popular choice among adolescent women in many regions. Correct and consistent use can be difficult for some adolescents, however. While there

have been some theoretical concerns about the use of COCs among young adolescents, these have not been substantiated by scientific evidence. However, for clients under age 18, there are concerns about effects of **progestin-only** contraceptives on bone development, nevertheless the World Health Organization still considers these acceptable to use.

Continuation rates among OC users are low: 25 to50 percent of women will stop taking them within one year. Most will stop for nonmedical reasons. Breakthrough bleeding can be a major reason why some women stop taking OCs. If clients do not have or use another (back-up) method after they discontinue taking OCs, unintended pregnancy can result. It is important to counsel and reassure clients regarding potential side effects and let them know that breakthrough bleeding will decrease after the first three to four months, or can be managed. Caution the client not to stop taking oral contraceptives unless she has another method to use. Remember that clients often complain that they were not given instructions on what to do if they miss a pill, which results in their simply discontinuing taking any more pills.

**Hormonal injections** are reversible contraceptive methods containing synthetic hormones similar to OCs; they provide women with safe and highly effective contraceptive protection. Two types of injectable contraceptives are available:

1. **Progestin-only** formulations that contain a progesterone hormone and are effective for two or three months.
2. **Combined** formulations that contain both a progestin and an estrogen and are effective for one month.

**Progestin-only** formulations consist of DMPA (depot medroxyprogesterone acetate) and NET-EN (norethisterone enantate). DMPA is the injectable formulation most widely used worldwide. DMPA is injected every three months. NET-EN is injected every two months.

There are a number of **combined** formulations. The most extensively studied formulations are known by their brand names, Cyclofem™ and Mesigyna®; both are monthly injectables. Cyclofem™ contains the same progestin hormone as DMPA, and Mesigyna® contains the same progestin as NET-EN. Both Cyclofem™ and Mesigyna® contain an added estrogen.

The injectable suppresses ovulation and also thickens the cervical mucus, which prevents sperm from joining with an egg.

Detailed information on these methods is provided in the contraceptive methods resource manual.

**Emergency contraceptive pills (ECPs)** are a form of contraception that women can use to prevent pregnancy *after* unprotected intercourse (such as when a contraceptive fails or when sex occurs without contraception). ECPs are an increased dose of oral contraceptive pills taken as soon as possible, optimally within 72 hours (3 days), after unprotected sex. They can be taken up to five days after unprotected sex, but they are more effective the sooner they are taken. A second dose is taken 12 hours later. In many countries, dedicated products are available for use as EC, although standard oral contraceptives can also be used in the absence of a specifically labeled EC product.

There are two ECP regimens: the progestin-only method, which is associated with fewer side effects and has higher efficacy (85%), and the combined method (74% effective). Recent WHO research has demonstrated that both doses of the progestin-only method may be taken at the same time. (For more information, see the EC session of this curriculum).

## Key Points: Condoms

- Duel method use (condom plus another method of contraception) is the recommended method for adolescents because it protects against STIs and pregnancy. This method consists of condoms in combination with another contraceptive method to reduce risk of HIV/STI infection and pregnancy.
- If used correctly, latex condoms are effective against many STIs, including HIV, the virus that causes AIDS.
- Female and male condoms are appropriate for couples at risk for HIV/STIs and for women needing a back-up method.
- Female condoms allow women to take responsibility for preventing infection.
- Inexpensive and accessible, condoms are a clear first choice for sexually active adolescents.

## Key Point: Spermicides

- When used alone, spermicides provide some contraceptive protection, but are best when used with a barrier method to prevent pregnancy.

## Key Points: Oral Contraceptives

- There are two types of OCs: combined estrogen-progestin and progestin-only pills.
- OCs are a popular choice among adolescent women in many regions.
- OCs are one of the most effective reversible methods of birth control available to women.
- OCs DO NOT protect against STIs. Condoms should be used in conjunction with OCs to prevent infection transmission for couples at risk.
- It is difficult for many women to remember to take OCs every day, particularly for adolescents who may not have the privacy to do so.

## Key Points: Hormonal Injectables

- Hormonal injections consist of a shot in the arm or buttock every 4 to12 weeks, depending on which injectable the woman is getting.
- Injectables protect against pregnancy for 4 to 12 weeks.
- Injectables offer no protection against STIs.

## Key Points: Emergency Contraceptive Pills

- EC is the only method of contraception that **prevents** pregnancy **after** intercourse.
- ECPs should be taken within 5 days of unprotected intercourse.
- ECPs should not be used as a regular contraceptive method, but only in cases of emergency.
- ECPs work by the same mechanism of action as regular contraceptive pills.
- ECPs offers no protection against STIs.

# Other Contraceptive Methods

## (20 Minutes)

### Brainstorm, presentation

1. **Ask participants "What other contraceptive methods have you heard of?" List responses on flip chart.**

2. **Briefly discuss each method available in [*insert country*] based on the information below. Also discuss if it is appropriate for adolescents. Supplement discussion as needed using the information in the following pages. Refer participants to the *Contraceptive Method Options* booklet for further details.**

Several other available contraceptive methods may or may not be appropriate for adolescents. Some of these methods require a doctor or clinic visit. However, as reproductive health care providers, you should be aware of these methods and be able to provide referrals when appropriate.

**Norplant® implants** provide five years of effective contraception. The method consists of putting six small capsules under the skin of a woman's upper arm. Norplant® implants work by preventing the release of the egg and thickening the cervical mucus to keep sperm from joining the egg.

Many young women have active and unpredictable lifestyles. They sometimes forget to take OCs or make an appointment for an injection. With Norplant® implants, women can have long-term, reliable protection against pregnancy for five years—without having to remember anything—except to use a condom for protection against STIs.

**Use of Norplant® implants requires clinicians who are trained in its insertion and removal. In addition, Norplant® implants do not protect against STIs. If a woman is using Norplant®, she should be encouraged to use condoms if she is at risk of infection.**

As with progestin-only pills and injections for clients under age 18, there are theoretical concerns about the effects of Norplant® implants on bone development. However, the World Health Organization still considers these acceptable to use.

**Intrauterine devices (IUDs)** are small flexible devices made of metal and/or plastic that prevent pregnancy. They are inserted into a woman's uterus through her vagina. The most widely used IUDs are copper-bearing IUDs.

IUDs are generally not recommended for young women and women who have not yet had children. These groups have a higher risk of IUD expulsion and pelvic inflammatory disease.

Age by itself is not a contraindication for IUD use, but demographic studies have shown that women under the age of 25 have a higher incidence of STIs. IUD users who get certain STIs can develop pelvic inflammatory disease and become unable to have children. Adolescents are at very high risk for these infections. The lifestyles and sexual behavior of younger women may put them at greater risk.

The **diaphragm** is a shallow latex cup and the **cervical cap** is a thimble-shaped latex cap. Both are manually inserted into the vagina prior to intercourse. Both methods serve as barriers to prevent sperm from joining with the egg. While these methods might be appropriate, they are not widely used by adolescent women.

**Sterilization** by a vasectomy (for men) or a tubal ligation (for women) is a permanent method for individuals who do not want any more children.

In men, the vas deferens, which carry sperm from the testes to the urethra of the penis, are cut. In women, the fallopian tubes, which carry the eggs from the ovary to the uterus, are cut. Both procedures are highly effective (99.5-99.9 percent) safe and convenient.

These methods are **not appropriate for anyone who may want to have a child in the future**. Because people so often change their minds about having families, sterilization is usually discouraged for people under 30 who have not had children.

**3. Briefly discuss other *nonmedical methods* of contraception and their relative appropriateness for adolescents. These include fertility awareness methods, lactational amenorrhea method, withdrawal, and abstinence.**

The fertility awareness methods, lactational amenorrhea method, and withdrawal are generally not recommended for adolescents because their effectiveness rates are low and adolescents may have a difficult time using them correctly.

Adolescents may be counseled in ways to have intimate relationships that do not include sexual intercourse, thereby averting risk of unintended pregnancy and exposure to STIs. Sexual relationships present physical and emotional risks. Abstinence is a very good way to postpone taking those risks until women and men are mature enough to handle them.

## Key Points: Norplant® Implants

- Norplant® implants may be an appropriate method for adolescents because it provides long-term reliable protection against pregnancy with little responsibility on the part of the woman.
- Implants require clinicians who are trained in insertion and removal. In addition, implants do not protect against STIs.

## Key Points: Intrauterine Devices

- IUDs are generally not recommended for adolescents.
- IUDs do not protect against STIs.
- IUDs must be inserted by a trained clinician.

## Key Point: Diaphragms and Cervical Caps

- Cervical barrier methods are best suited for women who find using a method near or at the time of intercourse acceptable. Adolescents may prefer this type of method if they have sexual intercourse infrequently and do not want to use a hormonal method.
- Diaphragms and cervical caps do not protect against STIs.

## Key Point: Sterilization

- These methods are not recommended for adolescents.

## Key Points: Nonmedical Methods

- Fertility awareness methods, lactational amenorrhea method, and withdrawal are generally not recommended for adolescents because of low efficacy rates.
- Adolescents may be counseled on how to have intimate relationships that do not involve sexual intercourse, thereby averting the potential risk of pregnancy or STI transmission.

# Counseling for Ongoing Contraception

**(30 Minutes)**

**Role-play, discussion**

1. **Ask participants to work in pairs to prepare a short role-play to demonstrate how to effectively counsel clients for their ongoing contraception needs.**
2. **The pharmacy worker in each role-play should show how they would: counsel the client about the method, give instructions to the client about the use of the method, and refer a client if that is necessary.**
3. **Cut apart the list of methods provided in TA 1: *Contraceptive Methods Grab Bag* and place them in a bag or a hat. Have each pair select one method from the bag.**
4. **Allow ten minutes for each pair to discuss and prepare before all the pairs present the role-plays to the large group.**

# Condom Demonstration

**(30 Minutes)**

**Demonstration role-play, discussion**

1. **Ask three participants to volunteer and demonstrate the correct use of the male condom.**
2. **Provide a wooden penis model and condoms, or if these are not available, ask the participants to verbally describe correct condom use.**
3. **The participant in each role-play should show how they would: counsel the client about condom use, demonstrate correct condom use, and describe the correct use of condoms if there is no privacy or possibility to demonstrate in the pharmacy.**
4. **Discuss what worked well and what could be improved in each demonstration.**

# Review and Conclusion

**(20 min.)**

**Presentation, discussion**

1. **Review contents of resource materials that were distributed.**
2. **Review the objectives for this session. Ask participants "To what degree do you feel that the objectives for this session have been met?"**
3. **Make recommendations on how pharmacy staff can help increase the use of contraceptive methods.**

In closing this session, we would like to emphasize that the most important thing pharmacy staff can do to improve the consistent and appropriate use of contraception is to talk about it with their clients. Pharmacy staff have a crucial role to play in reducing unintended pregnancy by educating clients about appropriate contraceptive methods and providing the methods when appropriate. Pharmacy staff are also encouraged to initiate discussions with clients about contraceptive use when appropriate.

The following **recommendations** can help increase adolescent clients' use of pharmacies for their reproductive health needs.

- Provide services in a friendly, helpful, and nonjudgmental fashion.
- Make contraceptive method informational materials available in your pharmacy and distribute client materials during client visits.
- Encourage all (not just high-risk) clients to obtain information regarding contraceptive methods and STI risks from a pharmacy.
- Know where to refer adolescents for health treatments and check-ups, and make sure the locations are adolescent friendly.
- Display youth-friendly services logo in pharmacy. [*Only appropriate if project is using one.*]

4. **Distribute post-session questionnaire. Allow participants approximately ten minutes to complete the questionnaire.**
5. **Collect the post-session questionnaire and then go over it, asking participants to call out the correct answers.**
6. **Thank trainees for their participation in this training**

## References

1. Kirby, Douglas. *Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy.* The National Campaign to Prevent Teen Pregnancy. Washington DC (2001).

# Handouts and Training Aids
# Contraceptive Methods for Ongoing Use

## Pre- and Post-Session Questionnaire

# Contraceptive Methods

### Respondent Background:

I am: ___ Male ___ Female
I am: ___ Pharmacist ___ Counter staff ___Other, specify:_____

| Mark the following statements as true or false. | True | False |
|---|---|---|
| 1. It is appropriate to counsel couples using other methods successfully to use condoms also. | | |
| 2. The goal of "dual method" use is to prevent pregnancy and prevent STIs. | | |
| 3. Condoms protect against pregnancy, STIs, and HIV. | | |
| 4. Norplant® implants can only be inserted by trained medical professionals. | | |
| 5. Oral contraceptives provide some protection against STIs. | | |
| 6. Fertility awareness methods are recommended methods of contraception for adolescents. | | |
| 7. The key to increased effectiveness in using female condoms is correct and consistent use. | | |
| 8. Sterilization is an appropriate method of contraception for adolescents. | | |
| 9. Oral contraceptives work by suppressing ovulation. | | |
| 10. Access to contraception increases sexual activity. | | |
| 11. It is easy for adolescents to get information about contraception. | | |
| 12. Spermicides are less effective if you use them with a condom. | | |
| 13. Oral contraceptives cause infertility. | | |
| 14. IUDs do not provide protection against STIs. | | |

## Pre- and Post-Session Questionnaire

# Contraceptive Methods

### Answer Key

| Mark the following statements as true or false. | True | False |
|---|---|---|
| 1. It is appropriate to counsel couples using other methods successfully to use condoms also. | X | |
| 2. The goal of "dual method" use is to prevent pregnancy and prevent STIs. | X | |
| 3. Condoms protect against pregnancy, STIs, and HIV. | X | |
| 4. Norplant® implants can only be inserted by trained medical professionals. | X | |
| 5. Oral contraceptives provide some protection against STIs. | | X |
| 6. Fertility awareness methods are recommended methods of contraception for adolescents. | | X |
| 7. The key to increased effectiveness in using female condoms is correct and consistent use. | X | |
| 8. Sterilization is an appropriate method of contraception for adolescents. | | X |
| 9. Oral contraceptives work by suppressing ovulation. | X | |
| 10. Access to contraception increases sexual activity. | | X |
| 11. It is easy for adolescents to get information about contraception. | | X |
| 12. Spermicides are less effective if you use them with a condom. | | X |
| 13. Oral contraceptives cause infertility. | | X |
| 14. IUDs do not provide protection against STIs. | X | |

# Handout 1: Presentation Outline

**GROUP NO. ____**

| Method name and description | Advantages and disadvantages of the method | Cost | Appropriateness for adolescents | Possible side effects |
|---|---|---|---|---|
| | | | | |

# Training Aid 1: Contraceptive Methods Grab Bag

**Intrauterine device (IUD)**

✂ ----------

**Oral contraceptive pills (OCPs)**

✂ ----------

**Male condom**

✂ ----------

**Female condom**

✂ ----------

**Norplant® implants**

✂ ----------

**Emergency contraception**

✂ ----------

**Injectible contraceptive**

✂ ----------

**Withdrawal**

✂ ----------

**Lactational amenorrhea method (LAM)**

✂ ----------

**Diaphragm or cervical cap**

✂ ----------

**Abstinence**

✂ ----------

**Fertility awareness method (FAM)**

✂ ----------

**Vasectomy**

✂ ----------

**Tubal ligation**

# Contraceptive Method Options

# A Resource Booklet for Pharmacists and Pharmacy Staff

# Introduction

With an estimated one billion adolescents alive today, the world is experiencing the largest adolescent population in history. As a result, adolescent reproductive health is an increasingly important component of global health. Throughout the world, the majority of men and women, married and unmarried, become sexually active during adolescence. However, most young people lack accurate knowledge about reproduction, sexuality, and contraception and do not have access to reproductive health information and services, including contraception.[1] The only guarantee against pregnancy is not having vaginal intercourse. However, other contraceptive methods can greatly reduce the risk of pregnancy during vaginal intercourse.

Individuals deciding which contraceptive method to use should think about the following questions:

- Does it fit into my lifestyle?
- Is it convenient?
- Is it effective?
- Is it safe?
- Is it affordable?
- Is it reversible?
- Does it protect against sexually transmitted infections (STIs)?
- Is the service private and confidential?[2]

Adolescents have the right to clear and accurate information about contraceptive methods, including correct use, side effects, and how to reach a health care provider with concerns.[3] In general, adolescents are healthy and not yet affected by adult health issues such as high blood pressure or chronic diseases. As a result, they can choose from a wide range of contraceptive options, **although condoms often are a clear first choice for adolescents**. Appropriate counseling is essential to helping adolescents manage potential side effects. Counseling should address both pregnancy prevention and protection against STIs.

Keep in mind the following principles when counseling clients about which contraceptive methods to use. Explain to the client:

- Benefits of the method.
- Risks of the method (both major risk and all common side effects), including the consequences of method failure.
- Alternatives to the method.
- Explanation of the method.

This booklet will provide information about currently available contraceptive methods. Some of these methods may not be available in certain countries, and some of them are not dispensed through pharmacies. However, the purpose of this informational handout is to provide pharmacists with an accurate reference tool on contraception. On page three is a summary of methods that are particularly appropriate for adolescents and why. The remainder of the document goes into some detail about those methods and other contraceptive method options.

# Contraception for Adolescents: A Summary

Below is a summary of methods appropriate for adolescent use. This booklet contains more detail about each of these methods, as well as other contraceptive methods that may or may not be appropriate for adolescent use.

| Method | Summary |
|---|---|
| **Abstinence** | • Should be discussed as an option, both for those who have not yet initiated sexual activity and for those who have. |
| **Male condoms** | • Male condoms are a clear first choice for sexually active adolescents who are not in a monogamous relationship.<br>• Condoms help protect against STIs in addition to pregnancy. |
| **Female barrier methods** | • Female barrier methods, including female condoms and diaphragms, can be appropriate choices for some adolescents.<br>• Female condoms help protect against STIs in addition to pregnancy.<br>• Consistent and correct use can present problems for adolescents. Barrier methods require planning and negotiating with a partner about use. Partner acceptance may be difficult for some young women to achieve. |
| **Spermicides** | • When used alone, spermicides are only moderately effective for pregnancy prevention but better than no method at all.<br>• Abstinence or use of a male latex condom or female condom along with a spermicide is the safest choice to protect against STIs and pregnancy.<br>• Nonoxynol-9 (N-9) spermicides have been shown to increase the risk of HIV infection when used frequently by women at high risk. |
| **Oral contraceptives** | • Oral contraceptives do not protect against STIs, but are a popular choice among adolescent women in many regions.<br>• Correct and consistent use can be difficult for some women, especially when they experience hormonal side effects. |
| **Injections and implants** | • Injectables and implants do not protect against STIs but have some advantages for young women including convenience (as compared to daily pill regimens) and confidentiality.<br>• Young women should be counseled about potential side effects such as menstrual disturbances and weight gain.<br>• For clients under age 18, there are theoretical concerns about the effects of progestin-only contraceptives on bone development, although WHO considers these generally acceptable to use.[4,5,6]<br>• Adolescents who choose hormonal contraceptives should be advised to use a condom in addition to their primary method to protect against STIs. [7] |
| **Withdrawal** | • Withdrawal does not protect against STIs.<br>• Withdrawal may be the only method available in some circumstances, and both male and female adolescents should understand how it works. |

## Postcoital Method

| | |
|---|---|
| **Emergency contraceptive pills (ECPs)** | • ECPs do not protect against STIs, but are an important method to have available for adolescents, as they can be taken within 120 hours of unprotected intercourse.<br>• ECPs are an important method for adolescents to know about. Because adolescents often do not plan ahead for sex, and may have difficulty using condoms or other contraceptive methods. |

# Abstinence

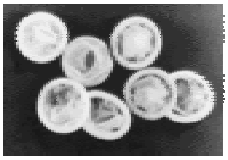
## What is it?

Abstinence means not engaging in sexual intercourse.

## Youth use

Sexual relationships present physical and emotional risks. Abstinence is a very good way to postpone taking those risks until women and men are mature enough to handle them. Women who postpone vaginal intercourse until their 20s have certain health advantages. They are less likely to suffer from STIs, infertility, and cancer of the cervix than women who have vaginal intercourse at younger ages.[2] However, it is often difficult for many people to abstain from sex for long periods. Additionally, both partners must mutually accept abstinence. Often one partner may feel pressured by the other to have intercourse even if he/she wants to abstain. Should a couple stop abstaining, it is important to protect themselves against pregnancy or STIs.

# Male Condoms



Source: [2]

## What are they?

The **condom** is a thin sheath worn over the erect penis when a couple is having sex. Contraceptive jelly or foam may be used with the condom for added protection against pregnancy. This is an inexpensive contraceptive method that is known to protect against STIs and pregnancy. **Male condoms are a recommended first choice for sexually active adolescents and offer the best combined protection against STIs (gonorrhea, syphilis, chlamydia, trichomoniasis, HIV) and pregnancy.**

## Youth Use

Condoms help protect against STIs and pregnancy, which is important for both married and unmarried youth. Sometimes people think they are in a monogamous relationship when in reality they may not be. Using condoms helps prevent the consequences of unprotected intercourse. Latex or polyurethane condoms should be used. Oil-based lubricants should not be used with condoms because they can weaken the condom and cause breakage.

## Summary Characteristics of Condoms

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of typical use is 3% to 14%. If used consistently and correctly, the failure rate during the first year is 3%.[8] |
| **Age limitations** | None. |
| **Mode of action** | Prevents sperm from reaching the female reproductive tract. |
| **Effect on STI risk** | **Protects against STIs, including HIV.** |
| **Contraindications** | None. |
| **Duration of use** | Most couples can use condoms safely throughout their reproductive years (if they are satisfied with the method and have no problems with it). |
| **Side effects** | Most men and women experience no side effects. Some men or women may have an allergic reaction to latex. If itching, burning, or swelling develop, the client(s) should return to the pharmacy to discuss another method. |
| **Return to fertility** | Immediate upon discontinuation. |

## Note

- Occasionally a condom may break or slip off during intercourse. If this occurs, both partners should assess their risk of acquiring an STI and seek counseling or treatment as necessary. Women may also want to consider using emergency contraception to prevent pregnancy, if it is available. Pharmacy staff should be prepared to address clients' concerns regarding unprotected intercourse.

# Female Condoms

Source: [2]

## What is it?

The **female condom** is a soft, loose-fitting polyurethane pouch with flexible rings at each end. It is inserted deep into the vagina like a diaphragm. One ring lies inside at the closed end of the sheath, and serves as an insertion mechanism and internal anchor. The other ring forms the external, open edge of the device and remains outside the vagina after insertion. The pouch is coated on the inside with a silicone-based lubricant; additional lubricant for the outside is usually provided with the device.

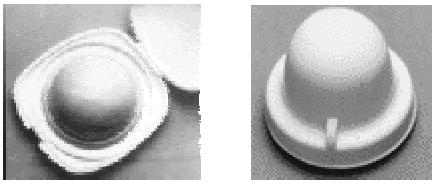
## Youth Use

Female condoms help protect against STIs and pregnancy and also give the woman more control over protecting herself. However, consistent and correct use can present problems for adolescents. Barrier methods require planning and negotiating with a partner about use, and partner acceptance may be difficult for some young women to achieve.

## Summary Characteristics of Female Condoms

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of typical use is 21%. If used consistently and correctly, the failure rate during the first year is 3%.[8] |
| **Age limitations** | None. |
| **Mode of action** | The female condom provides a physical barrier that lines the vagina entirely and partially shields the perineum. It prevents the contact of the penis with the vaginal mucosa and cervix. The female condom collects semen before, during, and after ejaculation. |
| **Effect on STI risk** | **Protects against STIs, including HIV.** |
| **Contraindications** | None. |
| **Duration of use** | Most couples can use condoms safely throughout their reproductive years (if they are satisfied with the method and have no problems with it). |
| **Side effects** | Side effects are rare with the use of the female condom. The most common problems may be skin irritation or possible vaginal or penal discomfort; the outer ring may irritate the vulva, while the inner ring may irritate the penis. Allergy to polyurethane is another possible side effect. |
| **Return to fertility** | Immediate upon discontinuation. |

# Diaphragms and Cervical Caps



Source: [2]

## What are they?

The **diaphragm** is a shallow rubber cup with a flexible rim and the **cervical cap** is a thimble-shaped rubber cap with a firm round rim. The diaphragm and cervical cap both need to be fitted by a clinician.

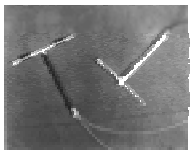
## Youth Use

Female barrier methods can be appropriate choices for some adolescents. However, consistent and correct use can present problems. Barrier methods require planning and negotiating with a partner about use. Partner acceptance may be difficult for some young women to achieve.

## Summary Characteristics of Diaphragms and Cervical Caps

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of typical use for the diaphragm (when used with spermicide) is 20%. If used consistently and correctly, the failure rate during the first year is 5%.[8]<br>For the cervical cap, the failure rates during the first year of typical use are 20% for women who have not had children and 40% for women who have had children. If used consistently and correctly, the failure rate during the first year is 9% for women who have not had children and 26% for women who have.[8] |
| **Age limitations** | None |
| **Parity limitations** | No restrictions on use. However, women who have had children may experience higher rates of pregnancy with the cervical cap. |
| **Mode of action** | Creates a physical barrier to block passage of sperm into the uterus and fallopian tubes; diaphragm and cervical cap effectiveness is increased by use of spermicide. |
| **Effect on STI risk** | **Not protective.** |
| **Indications and contraindications** | Most women can wear diaphragms and cervical caps. Women who are not comfortable touching their genitals may not like the diaphragm or cervical cap. Neither method is recommended for women who have a history of toxic shock syndrome or recurrent urinary tract infections. |
| **Duration of use** | Used near or at the time of intercourse. The diaphragm or cap must be left in place for at least six hours after intercourse. Appropriate for both short- and long-term use; women can use barrier contraceptives throughout their reproductive years (if the woman is satisfied with the method and has no problems with it). |
| **Side effects** | Most women have no side effects. However, some women are prone to develop frequent bladder infections with the diaphragm. Mild irritation or allergic reactions to rubber, cream, or jelly occur occasionally. |
| **Return to fertility** | Immediate upon discontinuation. |

# Intrauterine Devices



Source:[2]

## What are they?

**Intrauterine devices** (IUDs) are small flexible devices made of metal and/or plastic that prevent pregnancy when inserted into a woman's uterus through her vagina. The most widely used IUDs are copper-bearing IUDs. Inert (unmedicated) and progestin-releasing IUDs (levonorgestrel or progesterone) are less widely available. IUDs are a safe and effective method of reversible, long-term contraception for most women. They do not affect breastfeeding, interfere with intercourse, or have hormonal side effects; only some gynecologic and obstetric conditions and infections preclude use of the method.

## Youth Use

**IUDs are not recommended for most young women.** Intrauterine devices are generally not recommended for young women and women who have not yet had children. Unless she has had a child, a young woman's uterus may be too small to hold an IUD. These groups have a higher risk of IUD expulsion and pelvic inflammatory disease (PID). Age by itself is not a contraindication for IUD use, but demographic studies have shown that women under the age of 25 have a higher incidence of these complications. IUD users who get certain sexually transmitted infections can develop pelvic inflammatory disease and become unable to have children. Adolescents are at very high risk for these infections. The lifestyles and sexual behavior of younger women may put them at greater risk for STIs than older women.

## Summary Characteristics of IUDs

| | |
|---|---|
| **Effectiveness** | The failure rate for copper IUDs is 0.6% to 0.8% during the first year of typical use.[8] For the levonorgestrel-IUD, the failure rate is 0.1% during the first year of typical use. |
| **Age limitations** | No restrictions on use for women age 20 and over. |
| **Parity limitations** | No limitations. Women can generally use IUDs if they do not have a history of PID, a previous ectopic pregnancy, or multiple sex partners (or partner who has other partners). |
| **Mode of action** | Inhibits sperm migration in the upper female genital tract, inhibits ovum transport, and stimulates endometrial changes. |
| **Effect on STI risk** | **Not protective.** |
| **Duration of use** | The Copper-T 380A device remains effective for up to 10 years, the multi-load copper IUD remains effective for up to 5 years, and the levonorgestrel-releasing IUD is effective for at least 5 years. Most women can use IUDs safely throughout their reproductive years (if the woman is satisfied with the method and has no problems with it). |
| **Return to fertility** | Immediate upon removal. |

# Spermicides

Source: [2]

## What are they?

**Spermicides** are a reversible barrier method of birth control. They are available in a variety of contraceptive preparations including: **creams, film, foams, jellies, and suppositories.** These products are inserted deep into the vagina shortly before intercourse. Some condoms also come lubricated with spermicide.

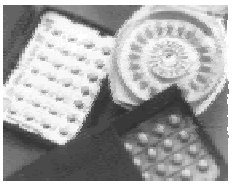
## Youth Use

Spermicides often are used as a temporary method while waiting for a long-term method or by couples who have intercourse infrequently. However, if not used exactly as directed, these products may not form a good barrier over the cervix. **When used alone, spermicides provide some contraceptive protection, but are best when used with a barrier method to prevent pregnancy.** In addition, spermicides should not be used as a method for preventing transmission of HIV or other STIs. Male or female condoms should be used in conjunction with spermicides to protect against STI transmission.

## Summary Characteristics of Spermicides

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of typical use is 6% to 26%.[8] Efficacy is improved if spermicides are used in conjunction with mechanical barrier methods, such as a condom, diaphragm, or cervical cap. |
| **Age limitations** | No restrictions on age. |
| **Mode of action** | Spermicides destroy or immobilize sperm. |
| **Effect on STI risk** | **Spermicides do not protect against STIs, including HIV. Condoms should be used for STI protection.** |
| **Safety** | Most spermicides are made with Nonoxynol-9 (N-9). N-9 has been shown to increase the risk of HIV infection when used frequently by women at high risk. However, for women at low risk of HIV, N-9 spermicides are a moderately effective, female-controlled form of birth control.<br><br>WHO no longer recommends N-9 coated condoms; however if a N-9 coated condom is the only condom available, it is better than no condom. |
| **Duration of use** | Used at or near the time of intercourse; appropriate for both short- and long-term use; women can use spermicides throughout their reproductive years (if the woman is satisfied with the method and has no problems with it). |
| **Return to fertility** | Immediate upon discontinuation. |

# Oral Contraceptives: Combined Oral Contraceptive Pills



Source: [2]

## What are they?

Combined oral contraceptive pills (COCs) are a monthly series of pills in which one pill is taken daily. The active ingredients are synthetic hormones like those produced by the body to regulate the menstrual cycle. Present-day COCs contain low-doses of both estrogen and progestin.

## Youth Use

Oral contraceptives are a popular choice among youth in many regions. Correct and consistent use can be difficult for some girls, especially when they experience common hormonal side effects. According to the World Health Organization, theoretical concerns about the use of COCs among young adolescents have not been substantiated by scientific evidence.[6]

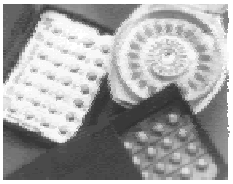
## Summary Characteristics of COCs

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of use of typical use is 6% to 8%. If used correctly and consistently, the failure rate is 0.1% during the first year.[8]<br>**IMPORTANT:** Birth control pills work best if taken at about the same time every day. Pregnancy can happen if an error is made in using the pills (i.e. pills are started too late in the cycle or two or more pills are missed in a row. |
| **Age limitations** | No restrictions on use from menarche to age 40.[6] |
| **Mode of action** | Primary mechanism inhibits ovulation; secondary mechanisms thicken the cervical mucus and change sperm transport. Does not disrupt existing pregnancy. |
| **Safety** | Most women can take COCs safely. Serious problems are very rare. |
| **Effect on STI risk** | **Not protective.** |
| **Contraindications** | **Absolute contraindications**<br>• Breastfeeding (< 6 weeks postpartum)<br>• Jaundice (symptomatic viral hepatitis or cirrhosis)<br>• Current or history of ischemic heart disease or stroke<br>• Current or history of deep venous thrombosis/pulmonary embolism<br>• Vascular disease<br>• Smoker and age 35 years or older (≥ 15 cigarettes/day)<br>• Diabetes mellitus > 20 years duration<br>• Migraine headaches and age ≥ 35<br>• High blood pressure (≥ 160/100)<br>• Breast cancer<br>• Benign or malignant liver tumors<br>**Relative contraindications**<br>• From 6 weeks to 6 months postpartum if breastfeeding<br>• < 3 weeks postpartum even if not breastfeeding<br>• High blood pressure<br>• Multiple risk factors for cardiovascular disease<br>• History of breast cancer<br>• Symptomatic gall bladder disease |

## Summary Characteristics Continued

| | |
|---|---|
| **Side effects** | Common side effects<br>(Not harmful, but may be unpleasant; usually lessen or stop in a few months)<br>• Menstrual changes – irregular bleeding or spotting (generally related to missed pills); amenorrhea.<br>• Estrogen related effects – high blood pressure, nausea, dizziness, vomiting, breast fullness or tenderness.<br>• Depression – mood change or loss of libido.<br>IMPORTANT: Good counseling regarding possible side effects, and encouraging clients to continue for the first three months are most helpful. If side effects persist, and the client does not want to continue, help her choose another contraceptive method. |
| **Drug interactions** | Certain antiseizure medications (barbiturates, carbamezapine, phenytoin, primidone) and antibiotics (rifampicin and griseofulvin) may reduce the contraceptive effect of COCs. |
| **When to start** | • The first day of menstrual bleeding is best.<br>• Any of the first 7 days after menstrual bleeding starts, if she is cycling normally.<br>• Clients can begin COCs up to 7 days after menstrual bleeding starts, but should avoid sex or use additional protection for the next 7 days. Needs to be sure she is not pregnant.<br>• Postabortion immediately or within 7 days.<br>• Postpartum after 3 weeks if not breastfeeding; after 6 months if using LAM. |
| **Duration of use** | Most women can use COCs safely throughout their reproductive years; there is no need for periodic discontinuation. |
| **Return to fertility** | Immediate or after slight delay (average 2-3 months). |

# Progestin-Only Oral Contraceptive Pills



Source: [2]

## What are they?

**Progestin-only pills** (POPs) are a monthly series of pills in which one pill is taken daily. POPs contain very small amounts of progestin. They do not contain estrogen. POPs are the best oral contraceptive for breastfeeding women.

## Youth Use

Correct and consistent use can be difficult for some girls, especially when they experience common hormonal side effects. For clients under age 18, there are theoretical concerns about effects of progestin-only contraceptives on bone development, although WHO considers POPs generally acceptable to use.[6]

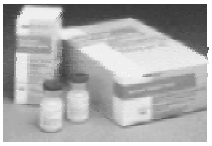
## Summary Characteristics of POPs

| | |
|---|---|
| **Effectiveness** | *For breastfeeding women:* The failure rate during the first year of use is 1%.<br>*For all women:* If used correctly and consistently the failure rate is 0.5% during the first year of use.[8]<br>**IMPORTANT:** Birth control pills work best if taken at about the same time every day. Pregnancy can happen if an error is made in using the pills (i.e. pills are started too late in the cycle or two or more pills are missed in a row). |
| **Age limitations** | No restrictions on use. For women under 18 years of age, there are theoretical concerns regarding effect of progestin-only contraceptives on bone development, but WHO considers POPs generally acceptable to use. |
| **Mode of action** | Primary action thickens cervical mucus, thereby preventing sperm penetration and inhibiting ovulation. Does not disrupt existing pregnancy. |
| **Safety** | Most women can use POPs safely and effectively. |
| **Effect on STI risk** | **Not protective.** |
| **Contraindications** | **Absolute contraindications**<br>• Current breast cancer<br>**Relative contraindications**<br>• Breastfeeding (< 6 weeks postpartum)<br>• Severe cirrhosis<br>• Benign or malignant liver tumors<br>• Active viral hepatitis<br>• History of stroke or breast cancer<br>• Current and history of ischemic heart disease<br>• Current deep venous thrombosis/pulmonary embolism |
| **Side effects** | (Not harmful, but may be unpleasant; usually lessen or stop in a few months)<br>• Menstrual changes (irregular bleeding or spotting; prolonged or heavy bleeding; amenorrhea<br>• Headaches and breast tenderness |
| **Drug interaction** | Certain antiseizure medications (barbiturates, carbamezapine, phenytoin, primidone) and antibiotics (rifampicin and griseofulvin) may reduce the contraceptive effect of POPs. |

## Summary Characteristics Continued

| | |
|---|---|
| **When to start** | • Day 1 of the menstrual cycle is best.<br>• Anytime client is reasonably certain she is not pregnant.<br>• Postpartum (if breastfeeding):<br>-After 6 months if using LAM.<br>-After 6 weeks if not using LAM.<br>• Postpartum (if not breastfeeding) – immediately.<br>• Postabortion – immediately. |
| **Duration of use** | Most women can use POPs safely throughout their reproductive years; there is no need for periodic discontinuation. |
| **Return to fertility** | Immediate or after slight delay. |

# Injectable Contraceptives & Implants: Combined Hormonal Injections



Source: [2]

## What are they?

**Injectable** contraceptives contain hormonal drugs that provide women with safe and highly effective contraceptive protection. Combined injectable contraceptives (CICs) contain both progestin and estrogen and are effective for one month. There are a number of combined formulations. The most extensively studied formulations are known by their brand names, Cyclofem™ and Mesigyna®; both are monthly injectables.

## Youth Use

Injectables do not protect against STIs but have some advantages for young women, including convenience and confidentiality. Young women should be counseled about potential side effects. According to the World Health Organization, theoretical concerns about the use of CICs among young adolescents have not been substantiated by scientific evidence.[6]

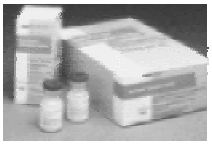
## Summary Characteristics of CICs

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of use is 0.3%.[8] Hormonal injections are one of the most effective reversible methods of birth control. Pregnancy rates may be higher for women who are late for an injection or who miss an injection. |
| **Age limitations** | No restrictions on use from menarche to age 40.[6] |
| **Mode of action** | Primarily inhibits ovulation; secondary mechanisms thicken the cervical mucus and change sperm transport. There is no known harm to the woman, the course of her pregnancy, or the fetus if CICs are accidentally used during pregnancy. |
| **Safety** | Most women can use injectables safely. |
| **Effect on STI risk** | **Not protective.** |

## Summary Characteristics Continued

| | |
|---|---|
| **Contraindications** | **Absolute contraindications**<br>• Breastfeeding (< 6 weeks postpartum)<br>• Current or history of deep venous thrombosis/pulmonary embolism<br>• Multiple risk factors for cardiovascular disease<br>• Vascular disease<br>• Active viral hepatitis<br>• Current or history of ischemic heart disease or stroke<br>• Blood clotting disorders<br>• Diabetes mellitus > 20 years duration<br>• Migraine headaches and age ≥ 35<br>• High blood pressure (≥ 160/100)<br>• Current breast cancer<br>• Malignant liver tumors<br>**Relative contraindications**<br>• From 6 weeks to 6 months postpartum if breastfeeding<br>• < 3 weeks postpartum even if not breastfeeding<br>• Smoker and age 35 years or older (>15 cigarettes daily)<br>• High blood pressure (140-159/90-99)<br>• Severe cirrhosis<br>• History of breast cancer<br>• Benign liver tumors |
| **Side effects** | Most women adjust to injectables with few or no problems. However, as with all medicines, there may be some side effects for some women (not harmful, but may be unpleasant).<br>• Menstrual changes<br>– Irregular bleeding or spotting (generally related to missed pills)<br>– Amenorrhea<br>• Estrogen related effects<br>– High blood pressure<br>– Nausea/dizziness/vomiting<br>– Breast fullness or tenderness (mastalgia)<br>• Depression (mood change) |
| **When to start** | • Anytime a woman can be reasonably sure she is not pregnant.<br>• Days 1-7 of the menstrual cycle.<br>• Postpartum:<br>– After 6 months if using LAM.<br>– After 3 weeks if not breastfeeding.<br>• Postabortion – immediately or within 7 days. |
| **Drug interaction** | Use of certain antiseizure medications (barbiturates, carbamezapine, phenytoin, primidone) and antibiotics (rifampicin and griseofulvin) may reduce the contraceptive effect of injectables. |
| **Duration of use** | Most women can use injectables safely throughout their reproductive years (if the woman is satisfied with the method and has no problems with it). |
| **Return to fertility** | Within 3 months. |

# Progestin-Only Hormonal Injections



Source: [2]

## What are they?

**Injectable** contraceptives contain hormonal drugs that provide women with safe and highly effective contraceptive protection. Progestin-only formulations contain a progestin hormone and are effective for 2 or 3 months.

Progestin-only injectables (POIs) include DMPA (depot medroxyprogesterone acetate) and NET-EN (norethisterone enantate). DMPA is the injectable formulation most widely used worldwide. DMPA is injected every 3 months. NET-EN is injected every 2 months.

## Youth Use

Injectables do not protect against STIs but have some advantages for young women, including convenience and confidentiality. Young women should be counseled about potential side effects. For clients under age 18, there are theoretical concerns about effects of progestin-only contraceptives on bone development, although the World Health Organization considers POIs generally acceptable to use.[6]

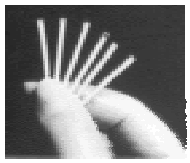
## Summary Characteristics of POIs

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of use is0.3%.[8] Hormonal injections are one of the most effective reversible methods of birth control. Pregnancy rates may be higher for women who are late for an injection or who miss an injection. |
| **Age limitations** | No age restrictions. For women under age 18 and greater than age 45, there are theoretical concerns regarding hypo-estrogenic effects particularly due to DMPA use. |
| **Mode of action** | Injectables work primarily by thickening the cervical mucus, thereby hampering sperm transport and suppressing ovulation. They will not disrupt an existing pregnancy. |
| **Safety** | Most women can use injectables safely. |
| **Effect on STI risk** | **Not protective.** |
| **Contraindications** | **Absolute contraindications**<br>• Current breast cancer<br>**Relative contraindications**<br>• Breastfeeding (< 6 weeks postpartum)<br>• High blood pressure ≥ 160/100<br>• Multiple risk factors for cardiovascular disease<br>• Current deep venous thrombosis/pulmonary embolism<br>• Vascular disease<br>• Unexplained vaginal bleeding<br>• Severe cirrhosis<br>• Benign or malignant liver tumors<br>• Active viral hepatitis<br>• History of stroke or breast cancer<br>• History of diabetes of > 20 years' duration<br>• Current and history of ischemic heart disease |

## Summary Characteristics Continued

| | |
|---|---|
| **Side effects** | Most women adjust to injectables with few or no problems. However, as with all medicines, there may be some side effects for some women. It is important to consider that there is no way to stop the effects of the injection. The most common side effects (not harmful, but may be unpleasant) may include:<br>• Menstrual changes<br>– Irregular bleeding or spotting (more common during first 6 to 12 months).<br>– Prolonged or heavy bleeding (very rare).<br>– Amenorrhea (many women consider this a benefit).<br>• Weight gain<br>• Headaches, dizziness, and mood changes<br>• About one-third of users discontinue in first year because of side effects: counseling and reassurance is crucial!<br><br>Over 90% of women using DMPA experience irregular and unpredictable menstrual bleeding or amenorrhea in their first year of use.[9] With continued use of DMPA, bleeding becomes less and less frequent and eventually over 60% of DMPA users experience prolonged amenorrhea.[10] NET-EN disrupts bleeding patterns somewhat less than DMPA.[6] |
| **When to start** | • Days 1 to 7 of the menstrual cycle.<br>• Anytime during the menstrual cycle when a woman can be reasonably sure that she is not pregnant.<br>• Postpartum:<br>– Immediately if not breastfeeding.<br>– After 6 weeks if only partially breastfeeding.<br>– After 6 months if fully breastfeeding.<br>• Postabortion – immediately or within first 7 days. |
| **Drug interaction** | Use of certain antiseizure medications (barbiturates, carbamezapine, phenytoin, primidone) and antibiotics (rifampicin and griseofulvin) may reduce the contraceptive effect of injectables. |
| **Duration of use** | Most women can use injectables safely throughout their reproductive years (if the woman is satisfied with the method and has no problems with it). |
| **Return to fertility** | After a delay of about 3 to 6 months. |

# Hormonal Implants



Source: [2]

## What are they?

**Hormonal implants** are reversible prescription methods of birth control. Contraceptive implants consist of hormone-filled capsules that are inserted under the skin in the woman's upper arm. The first contraceptive implant system developed was the Norplant® system, which consists of 6 thin, flexible capsules made of silicone.

The clinician will numb a small area of a woman's arm and, usually, make one small cut. The capsules will be inserted under the skin of the arm she uses least. Insertion takes about 10 minutes. The clinician will advise her to have a follow-up visit within the first 3 months after insertion. It is best to have follow-up visits once a year after that. She should be sure to tell any health care provider that she is using implants. Norplant® should be removed after 5 years because it stops working.

## Youth Use

Implants do not protect against STIs but have some advantages for young women, including convenience and confidentiality. They may be appropriate for young married women who desire birth spacing. Young women should be counseled about potential side effects. Three studies of Norplant use, one in adolescents and two in adult women, showed no decrease in bone density with long-term use compared with nonusers.[6]

## Summary Characteristics of Hormonal Implants

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of use for soft-capsule implants is 0.1%.[8] |
| **Age limitations** | No age restrictions on use. |
| **Mode of action** | Primarily thickens cervical mucus and inhibits ovulation. |
| **Safety** | In general, most women can use implants safely. |
| **Effect on STI risk** | **Not protective.** |
| **Contraindications** | **Absolute contraindications**<br>• Current breast cancer<br>**Relative contraindications**<br>• Breastfeeding <6 weeks postpartum<br>• Current deep venous thrombosis/pulmonary embolism<br>• Unexplained vaginal bleeding<br>• Severe cirrhosis<br>• Benign or malignant liver tumors<br>• Active viral hepatitis<br>• History of stroke or breast cancer<br>• Current and history of ischemic heart disease |

## Summary Characteristics Continued

| | |
|---|---|
| **Side effects** | • Changes in menstrual bleeding (normal; usually becomes more regular after 9 to 12 months):<br>– Light spotting or bleeding between monthly periods.<br>– Prolonged bleeding (uncommon, and often decreases after first few months).<br>– Amenorrhea (some women see it as an advantage).<br>• There are other side effects for some women. They may include:<br>– Headaches/nausea/dizziness/nervousness.<br>– Enlargement of ovaries or ovarian cysts.<br>– Change in appetite – weight gain or loss.<br>– Breast tenderness and/or discharge.<br>– Acne or skin rash.<br>– Increase or loss of facial hair. |
| **When to start** | • Days 1 to 7 of the menstrual cycle.<br>• Anytime during the menstrual cycle when a woman can be reasonably sure that she is not pregnant.<br>• Postpartum:<br>– Immediately if not breastfeeding.<br>– After 6 weeks if partially breastfeeding or after 6 months if fully breastfeeding.<br>• Postabortion – immediately or within first 7 days. |
| **Drug interaction** | Certain antiseizure medications (barbiturates, carbamezapine, phenytoin, primidone) and antibiotics (rifampicin and griseofulvin) may reduce the contraceptive effect of implants. |
| **Duration of use** | Norplant implants are effective for 5 years. Most women can use implants safely throughout their reproductive years (if the woman is satisfied with the method and has no problems with it). |
| **Return to fertility** | Immediate upon removal. |

# Withdrawal

## What is it?

Male withdrawal, also called coitus interruptus, requires a man to withdraw his penis from his partner's vagina prior to ejaculation. Withdrawal has been used as a contraceptive for centuries and can be effective in preventing pregnancy when clients are motivated and able to practice it correctly and consistently with every act of intercourse—that is, with perfect use. No medical condition restricts a client's eligibility for use of withdrawal. It does not affect breastfeeding, has no hormonal side effects, and can be used as a backup to other methods.

## Youth Use

Withdrawal does not protect against STIs but for some adolescents may be the only method available in certain circumstances. Both male and female adolescents should understand how it works.

## Summary Characteristics of Withdrawal

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of typical is 4% to 19%.[8] |
| **Age limitations** | No restrictions |
| **Mode of action** | Prevents sperm from entering the vagina. |
| **Effect on STI risk** | **Not protective.** |
| **Duration of use** | Most clients can use withdrawal safely throughout their reproductive years (if they are satisfied with the method and have no problems with it). |
| **Return to fertility** | Immediate upon discontinuation. |

# Emergency Contraceptive Pills

## What are they?

Emergency contraceptive pills (ECPs) are a form of contraception that women can use to prevent pregnancy **after** unprotected intercourse (such as when a contraceptive fails or when sex occurs without contraception). ECPs are most effective if used within 72 hours (3 days) of unprotected intercourse, but they may be used up to 5 days. There are two types of ECPs—a progestin-only regimen and a combined estrogen/progestin regimen. The progestin-only regimen is more effective and has fewer side effects than the combined regimen. In some countries, ECPs are available as dedicated products, however, regular oral contraceptive pills can also be used for emergency contraception.

## Youth Use

ECPs do not protect against STIs, but are an important method to have available for adolescents, as they can be taken after unprotected intercourse. Adolescents are especially unlikely to plan ahead for sex and may have difficulty using condoms or other methods.

## Characteristics of ECPs

| | |
|---|---|
| **Effectiveness** | The failure rate of ECPs ranges from approximately 26% to 15%, depending on the regimen used and when treatment is initiated. (Note: this failure rate cannot be compared directly to annual failure rates of other methods because it is for a single use.) |
| **Age limitations** | No restrictions on use. |
| **Mode of action** | Primarily inhibits ovulation; treatment also may cause changes in the endometrium. |
| **Effect on STI risk** | **Not protective.** |
| **Drug interaction** | None known; given the short duration of treatment it is unlikely that drug interactions that affect COC use also affect ECP use. |
| **Duration of use** | Intended for occasional "emergency" use; other methods used correctly and consistently provide more effective ongoing contraceptive protection. |
| **Return to fertility** | Immediate; therefore, it is critical that women begin using another form of contraception immediately after use. |

# Fertility Awareness Methods

## What are they?

**Fertility Awareness Methods (FAMs)** require a woman to chart her menstrual cycle to detect certain physical signs that help her predict "unsafe" days (days in which she is most likely to become pregnant). She must abstain from intercourse (periodic abstinence) or use condoms during 9 or more "unsafe" days. FAMs include:

- Checking temperature daily.
- Checking cervical mucus daily.
- Recording menstrual cycles on calendar.

## Youth Use

FAMs are not recommended for youth because:

- These methods work best for women with very regular periods. Young women often have irregular periods.
- Young women are at higher risk of STIs and pelvic inflammatory disease. Using FAM does not protect against infections.
- Their partners may not wish to cooperate in using this method.
- A young woman's relationship may not be as stable or as committed as is necessary for developing the trust and cooperation necessary for effective use of this method.

## Summary Characteristics of FAMs

| | |
|---|---|
| **Effectiveness** | The failure rate during the first year of use is 1% to 20%.[8] The failure rate depends on a woman's ability to identify the fertile period of each menstrual cycle and the couples' motivation and discipline to practice abstinence when required. |
| **Age limitations** | No restrictions, but generally not recommended for adolescents. |
| **Mode of action** | Helps a client prevent pregnancy by avoiding unprotected sexual intercourse during the fertile period of a woman's menstrual cycle. |
| **Effect on STI risk** | **Not protective.** |
| **Duration of use** | Most women can use FAM safely throughout their reproductive years (if they are satisfied with the method and have no problems with it). |
| **Return to fertility** | Immediate upon discontinuation. |

# Lactational Amenorrhea Method

## What is it?

The **Lactational Amenorrhea Method (LAM)** is a family planning method for breastfeeding women, with natural protection against pregnancy for up to 6 months.

## Youth Use

This method may only be used by a woman who is breastfeeding her baby often, both day and night; if her menstruation has not returned; and her baby is less than 6 months old. This method does not protect against STIs.

## Summary Characteristics of LAM

| | |
|---|---|
| **Effectiveness** | The failure rate during the first 6 months after childbirth in **exclusively** breastfeeding women is 1-2%. |
| **Age limitations** | No restrictions. |
| **Mode of action** | Suppresses ovulation (release of eggs from ovaries). |
| **Effect on STI risk** | **Not protective.** |
| **Duration of use** | Commonly used for the first 6 months after childbirth; some women continue for up to 1 year or longer, although effectiveness varies. |
| **Return to fertility** | Immediate; once any of the LAM criteria are not met, a woman should use an additional method of contraception as she may be at risk of pregnancy. |

# Sterilization

## What is it?

**Sterilization** for men and women is a permanent method for individuals who do not want any more children. With a vasectomy, the vas deferens, which carry sperm from the testes to the urethra of the penis, are cut. In a tubal ligation, the fallopian tubes, which carry the eggs from the ovary to the uterus, are cut. Both methods are highly effective (99.5% to 99.9%), safe, convenient, and performed in a single procedure.

## Youth Use

These methods are not appropriate for anyone who may want to have a child in the future. Because people so often change their minds about having families, sterilization is usually discouraged for people under 30 who have not had children.

## Summary Characteristics of Sterilization

| | |
|---|---|
| **Effectiveness** | **Women**: The failure rate in the first year after the procedure is 0.5%.<br>**Men:** The failure rate in the first year after the procedure is 0.1% to 0.2%.[8] |
| **Age limitations** | No restrictions, but not recommended for young people |
| **Mode of action** | **Women:** Blocks the fallopian tubes to prevent the ovum and sperm from uniting.<br>**Men:** Blocks the vas deferens (ejaculatory duct) to prevent sperm from being released into the ejaculate. |
| **Effect on STI risk** | **Not protective.** |
| **Drug interaction** | Certain antiseizure medications (barbiturates, carbamezapine, phenytoin, primidone) and antibiotics (rifampicin and griseofulvin) may affect the effectiveness of anesthetics used during the procedure. |
| **Duration of use** | Sterilization is a permanent contraceptive method. |
| **Return to fertility** | **Women:** A woman is sterile from the time the procedure is completed.<br>**Men:** The method is not effective immediately; a man is sterile and his ejaculate is sperm-free about 3 months or 20 ejaculations after the procedure is completed. |

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## Content and format for this resource tool were adapted from:


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