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POCKETGUIDE for FAMILY PLANNING SERVICE PROVIDERS

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**Paul D. Blumenthal
Noel McIntosh**

editors

**Elizabeth Oliveras
Penelope A. Riseborough
Chris Davis**

JHPIEGO
CORPORATION

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for **FAMILY PLANNING**
SERVICE PROVIDERS

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REVIEWERS

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ABBREVIATIONS

AIDS:	acquired immune deficiency syndrome
BBT:	basal body temperature
BP:	blood pressure
BPM:	beats per minute
BTB/S:	breakthrough bleeding/spotting
CNS:	central nervous system
COC:	combined oral contraceptive
CVD:	cardiovascular disease
DMPA:	depot-medroxyprogesterone acetate
EE:	ethinyl estradiol
FH:	familial hyperlipidemia
GNIDs:	Gram negative intracellular diplococci
GTI:	genital tract infection
Hb/Hct:	hemoglobin/hematocrit
HBV:	hepatitis B
HDL:	high density lipoprotein
HIV:	human immunodeficiency virus
HLD:	high level disinfection
IUD:	intrauterine device
IV:	intravenous
LAM:	Lactational Amenorrhea Method
LNG:	levonorgestrel
NET-EN:	norethindrone enanthate
NFP:	natural family planning
NSAID:	nonsteroidal anti-inflammatory drug
PID:	pelvic inflammatory disease
PMNs:	polymorphonuclear neutrophil leukocytes
POC:	Progestin-only contraceptive
POPs:	Progestin-only pills (minipills)
STD:	Sexually transmitted disease
TSS:	Toxic shock syndrome
UTI:	urinary tract infection
VDRL:	the standard nonreponemal antigen serologic test for syphilis
WBC:	white blood cells

PREFACE

The *PocketGuide for Family Planning Service Providers* is designed to provide clinicians with easily accessible, clinically-oriented information for use in family planning service provision. It is intended to be used by anyone who needs answers to questions about a client's condition or a contraceptive method but who cannot afford to wait for an answer until getting to a library or reference manual.

HOW TO USE THE POCKETGUIDE

The information in the *PocketGuide* is organized according to two types of clinical situations:

- When faced with a **client with special needs**, such as a woman with a medical problem (e.g., diabetes) or who may need emergency contraception. (For each situation, guidance is provided for commonly encountered clinical conditions as well as rare medical problems.)
- When **information** about a specific **contraceptive method** is required. (For each method, information such as the mechanism of action, benefits, limitations and precautions for use is followed by instructions for management of common side effects and other problems.)

In addition, brief chapters on counseling, client assessment and client instructions provide the user with supplemental information which s/he needs when working in the clinic or office.

Finally, essential data have been included for reference when providing services which involve:

- management of genital tract infections (GTIs), or
- use of recommended infection prevention practices.

DESIGN OF THE POCKETGUIDE

More information exists on family planning methods, especially oral contraceptive pills and IUDs, than for almost any medical subject. Unfortunately, this information is not always available nor is it written and arranged in a "user friendly" manner. To overcome these problems, we (the authors) have limited the information in the *PocketGuide* to the essentials and have used a format called center-indexing to make it easier to find **what** is needed **when** it is needed. The **center index** and **icons**

direct the user to the appropriate section for a given clinical situation and cross-referencing guides the user to additional information. Other features include:

- Alphabetical listing of diseases in the **Medical Problems** chapter for ease in locating them
- The material in each contraceptive method section is organized in the **same sequence**, starting with general information and ending with management of side effects and other problems

Furthermore, to increase understanding and make problem solving easier, a brief explanation provides the rationale for:

- the indications and precautions for use (contraceptive method and clients with special needs chapters), and
- the course of action (management of side effects and other problems in the contraceptive method chapters).

MEDICAL CRITERIA FOR USE OF CONTRACEPTIVE METHODS

In March 1994, a scientific working group consisting of 26 participants from 16 countries met at the World Health Organization (WHO) to review medical criteria for selected methods of contraception. Included in the initial review process were:

- Low-dose (<35 µg estrogen) combined oral contraceptives
- Progestin-only contraceptives
 - minipills (POPs)
 - depot-medroxyprogesterone acetate (DMPA)
 - levonorgestrel implants (Norplant® implants)
- Copper-releasing IUDs

These contraceptive methods were selected because of their wide availability and the vast amount of epidemiological and clinical data available. It is planned that other contraceptive methods will be covered in subsequent review meetings. At the initial meeting, the group only recommended appropriate **eligibility** criteria for the **initiation** of specific contraceptive methods. It is planned that future meetings also will address issues of medical criteria for **continuation** of all methods.

In the WHO classification system, the suitability of different contraceptive methods is determined by weighing the health risks and benefits relative to

specific “conditions.” (A **condition** is defined to include both a woman’s **biologic characteristics** such as age or reproductive history and any known, pre-existing **medical condition(s)** such as diabetes or hypertension.)

The presence of a specific **condition** affecting eligibility for using a contraceptive method falls into one of four categories:

Class 1: A condition for which there is **no restriction** for the use of the contraceptive method. (Use the method in any circumstance.)

Class 2: A condition where the **benefits** of using the method generally **outweigh** the theoretical or proven **risks**. (Generally use the method.)

Class 3: A condition where the theoretical or proven **risks usually outweigh the benefits** of using the method. (Use of method not usually recommended unless other more appropriate methods are not available or acceptable.)

Class 4: A condition which represents an **unacceptable health risk** associated with the use of the contraceptive method. (Method should not be used.)

Serious pathologic problems (tumors and cancer) are uncommon in women of reproductive age, especially those younger than age 35. For example, **unexplained vaginal bleeding** in women of this age group is most often due to **pregnancy** or a **functional disorder** such as anovulation. Therefore, only women with unexplained vaginal bleeding which the clinician **strongly feels** could be caused by a serious problem need to be evaluated before starting any contraceptive method (WHO class 4 or 3, depending on the method). Women with **irregular menstrual bleeding patterns**, which are not suspected of being serious, can use any contraceptive method without restriction (WHO class 1).

Harmonizing the *PocketGuide* with International Medical Criteria

The WHO classification system complements the one used in this *PocketGuide*. For example, like the WHO system, the *PocketGuide* includes a brief rationale for **why** a particular condition is assigned to one of the four categories. (For the reader’s convenience, the WHO classification for each condition is included throughout the *PocketGuide*.)

The rationales included in this *PocketGuide*, however, are adapted not only from those presented in the WHO document but also from those provided in the manual *Recommendations for Updating Selected Practices in Contraceptive Use*, produced by the Technical Guidance Working Group

PREFACE

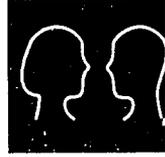
(November 1994) and selected references from the international literature on contraceptive technology.

Throughout the *PocketGuide*, every effort has been made to harmonize the existing information in order to provide clear guidance to the clinician on the provision of family planning services and management of side effects and other problems. By providing updated knowledge and consistency between different sources of information, it is hoped that:

- the **competence** and **confidence** of service providers will improve when assisting clients in making contraceptive choices,
- the quality of family planning will improve (e.g., increased client satisfaction), and
- access to quality contraceptive services will increase.

COUNSELING

Counseling is a **vital**, though often poorly performed, part of family planning that helps clients arrive at an informed choice of reproductive options. If the client chooses to use a family planning method, counseling also should help the client select a method s/he is satisfied with and prepare the client to use the method safely and effectively.



Counseling is one person talking with another to share information. Good counseling focuses on the individual client's needs and situation, and good counselors are willing to listen to the client's questions and concerns. To be effective, counseling must be based on the establishment of trust and respect between the client and counselor.

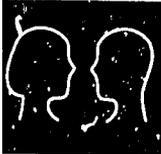
In serving clients, it is important to remember that they have the right to decide whether or not to practice family planning and the freedom to choose which method to use. At the same time, clients often look to the counselor for advice. While a method should never be forced on a client, carefully considered guidance often is appropriate.

The client also has a right to privacy and confidentiality. When receiving counseling or undergoing a physical examination or procedure, the client should be informed about the role of each person in the room as well as what will take place during the examination. Furthermore, the client has the right to refuse any type of examination if s/he does not feel comfortable with it.

In this section, information is provided in the form of tables, figures and charts to help the clinician in educating and counseling clients about all contraceptive methods.

COUNSELING

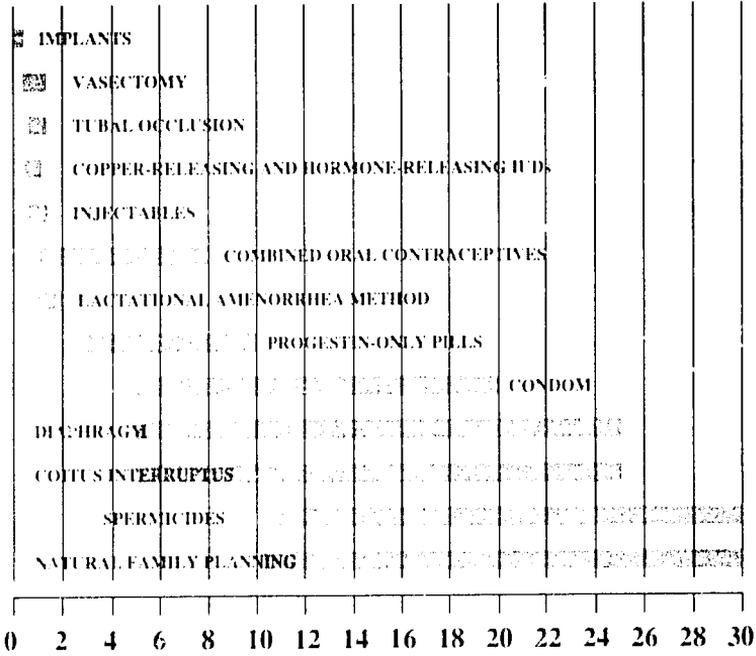
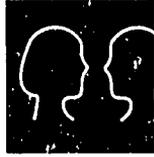
TABLE: RANGE OF PREGNANCY RATES PER 100 WOMEN DURING FIRST YEAR OF USE



METHOD	PREGNANCY RATES (TYPICAL USE)
Vasectomy	0.15-1
Tubal Occlusion	0.2-1
Progestin-Only Implants	0.2-1
Injectables	0.3-1
IUDs (copper- and hormone-releasing)	0.5-1
Combined Oral Contraceptives (COCs)	1-8
Lactational Amenorrhea Method (LAM)	2-3
Progestin-Only Pills (POPs)	3-10
Diaphragms with Spermicides	5-25
Coitus Interruptus (Withdrawal)	5-25
Condoms	10-30
Spermicides	10-30
Natural Family Planning (Periodic Abstinence)	10-30

Adapted from Population Action International 1991; Institute for Reproductive Health 1994.

GRAPH: RANGE OF PREGNANCY RATES PER 100 WOMEN DURING FIRST YEAR OF USE

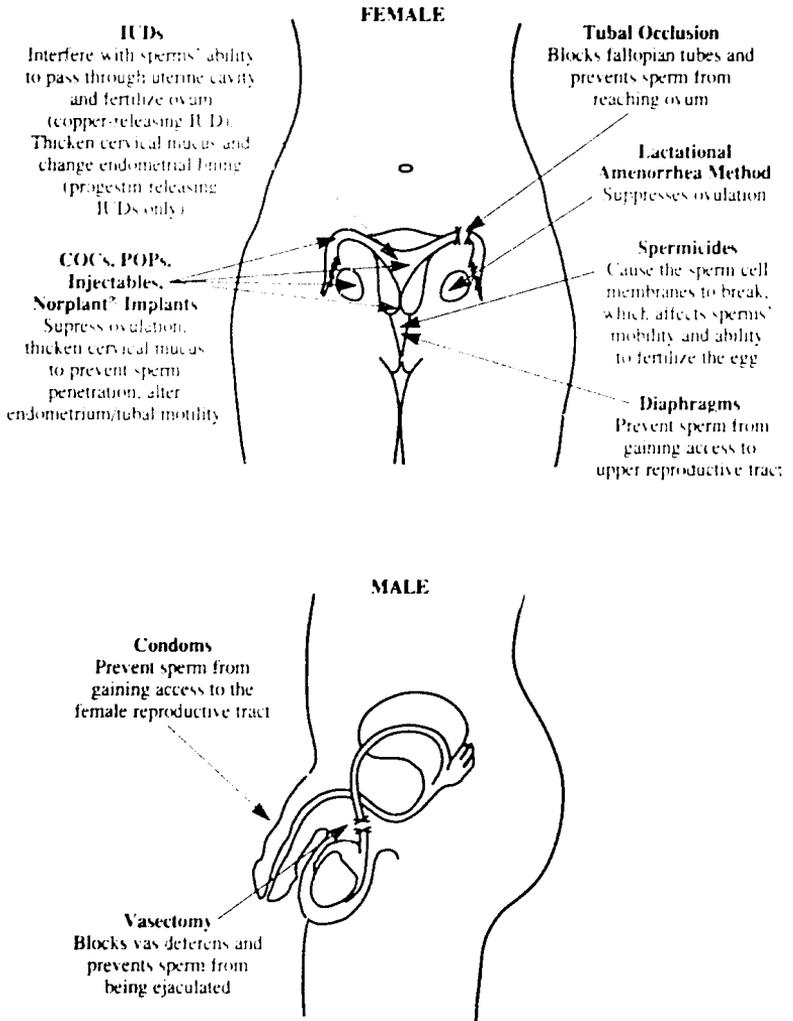


Percentage of sexually active women becoming pregnant in a year

COUNSELING



MECHANISMS OF ACTION



CLIENT ASSESSMENT

The primary purpose of client assessment is to **determine**:

- that the client is not pregnant,
- whether any conditions requiring precautions exist for a particular method, and
- whether there are any special problems that require further assessment or regular followup.



For most clients, this can be accomplished by asking a few key questions. Unless specific problems are identified, the safe provision of most contraceptive methods, except IUDs and voluntary sterilization, does **not** require performing a **physical or pelvic examination** because:

- The currently available low-dose ($< 35 \mu\text{g}$ estrogen) combined (estrogen and progestin) oral contraceptives (COCs) are much safer than the older products (i.e., they have fewer serious side effects and rarely make existing medical problems worse).
- Progestin-only pills, injectables and implants are free of estrogen-related effects and the amount of progestin delivered per day is lower than with COCs.

Where the demand for family planning is high and resources limited, requiring medical evaluation and/or laboratory testing before the provision of modern contraceptive methods is **not** justifiable. Moreover, screening, treatment and followup activities that are **not** essential to the provision of specific contraceptives (e.g., PAP smears and routine hemoglobins) act as barriers to contraceptive choice and access to services.

To enable clients to obtain the contraceptive method of their choice, client assessment should be limited **only** to those procedures that are necessary for **all** clients in **all** settings. During the assessment process, however, every attempt should be made to be sure the client is not pregnant.

CLIENT ASSESSMENT

HOW TO BE REASONABLY SURE A CLIENT IS NOT PREGNANT¹

You can be reasonably sure a client is not pregnant if she has no signs or symptoms of pregnancy (e.g., breast tenderness or nausea) and:

- has not had intercourse since her last menses, or
- has been correctly and consistently using a reliable contraceptive method, or
- is within the first 7 days after the start of her menses (day 1-7), or
- is within 4 weeks postpartum (for women who are not breastfeeding), or
- is within the first 7 days postabortion, or
- is fully breastfeeding, less than 6 months postpartum and has had no menstrual bleeding (see LAM below).



Physical examination is seldom necessary, except to rule out pregnancy of greater than 6 weeks, measured from the last menstrual period (LMP).

Pregnancy testing is not necessary except in cases where it is difficult to confirm pregnancy (i.e., 6 weeks or less from the LMP) or the results of the pelvic examination are equivocal (e.g., client weighs over 70-80 kg or has a retroverted uterus). In these situations, a highly sensitive pregnancy test (positive within 10 days after conception—detects < 50 MIU hCG) may be helpful, if readily available and inexpensive. If pregnancy testing is not available, counsel the client to use a barrier method until her menses occur or the possibility of pregnancy is confirmed.

Lactational Amenorrhea Method (see LAM chapter).

The Lactational Amenorrhea Method (LAM) is a highly effective contraceptive (98% protection during the first 6 months postpartum). A service provider can be reasonably sure that a fully or nearly fully breastfeeding woman is not pregnant if she is still within the first 6 months postpartum and has remained amenorrheic. The effectiveness of LAM in the second 6 months postpartum is under study.

¹ Adapted from Technical Guidance Working Group 1994.

When a woman is **more than 6 months postpartum** you can be reasonably sure she is not pregnant if she has kept her **breastfeeding frequency high**, is still **amenorrheic** and has **no clinical signs or symptoms of pregnancy**.²

The following tables provide:

- sample **Client Assessment Checklists** for reversible methods (hormonals and IUDs),
- guidelines for the suitability of clients to have voluntary sterilization in ambulatory health care facilities, and
- a summary of client assessment requirements for all methods.

In addition, special information is provided at the end of this section to help clinicians:

- know the standard definitions of terms used to describe menstrual bleeding patterns, and
- better understand the changes in the menstrual bleeding pattern associated with the use of hormonal contraceptives and IUDs.



² Although for IUD use it is very important to rule out pregnancy, women using LAM should not be denied other long-term methods because of the possibility of pregnancy.

CLIENT ASSESSMENT

USING THE CLIENT ASSESSMENT CHECKLISTS

If all of the **Client Assessment Checklist** items are negative (**NO**) and pregnancy is not suspected, the client can have method-specific counseling, pelvic examination (IUDs and voluntary sterilization only) and provision of the contraceptive. Any positive response (**YES**), however, means that the client should be further evaluated before making a final decision.



Note: Clients may not always have exact information about or recall the answers to the conditions listed in the **Client Assessment Checklists**. To be as certain as possible about the accuracy of information, it may be necessary to restate the question(s) in several different ways. Also, it is important to take into account any social, cultural or religious factors that might influence how the client responds.

The findings from the **Client Assessment Checklist** determine whether a physical examination is necessary (i.e., if the client's response suggests a precaution, a brief physical examination or additional questions may be necessary).

NOTES



CLIENT ASSESSMENT

REVERSIBLE METHODS: HORMONALS

CLIENT ASSESSMENT CHECKLIST		
HORMONAL METHODS (COCs, POPs, implants and injectables)	YES	NO ¹
First day of menses more than 7 days ago		
Breastfeeding and less than 6 weeks postpartum ^{2,3}		
Bleeding/spotting between periods or after intercourse		
Jaundice (abnormal yellow skin or eyes)		
Severe headaches or blurred vision		
Smoker over age 35 ³		
Severe pain in calves, thighs or chest, or swollen legs (edema) ³		
Blood pressure above 180 mm (systolic) or 105 mm (diastolic) ³		
Breast cancer or suspicious (firm, nontender or fixed) lump in the breast		
Taking drugs for epilepsy (seizures) or rifampin (for tuberculosis) ⁴		

¹ If client answers "No" to all questions, physical and pelvic examinations are not necessary for the safe provision of the contraceptive method.

² COCs are the method of last choice for breastfeeding women, especially in the first 6 weeks postpartum.

³ Does not apply to progestin-only contraceptives.

⁴ Does not apply to injectables (DMPA or NET-EN).



REVERSIBLE METHODS: IUDs

CLIENT ASSESSMENT CHECKLIST		
IUDs	YES	NO
First day of menses more than 7 days ago		
Client (or partner) has other sex partners		
Sexually transmitted genital tract infections (GTIs) or other STDs (e.g., HBV, HIV/AIDS)		
Pelvic infection (PID) or ectopic pregnancy		
Heavy menstrual bleeding (> 2 pads, cloths or tampons per hour) ¹		
Prolonged menstrual bleeding (> 8 days) ¹		
Severe menstrual cramping (dysmenorrhea) requiring analgesics and/or bed rest		
Bleeding/spotting between periods or after intercourse		
Symptomatic valvular heart disease ²		



¹ Does not apply to progestin-releasing IUDs.

² Give prophylactic antibiotics if not on long-term antibiotics at the time of IUD insertion.

CLIENT ASSESSMENT

PERMANENT METHODS: TUBAL OCCLUSION¹

Category
General health (assessed by history and limited physical examination)
Emotional state
Blood pressure
Height/weight (H/W)
Previous abdominal/pelvic surgery
Previous pelvic disease (PID, ectopic pregnancy) or ruptured appendix
Anemia (optional)



¹ Guidelines are for performing the procedure in an ambulatory health care facility. **Not acceptable** indicates that the procedure probably should be performed in a facility where additional assistance and backup services are available (i.e., more experienced physician, general anesthesia and capability to perform abdominal laparotomy).



Selection Criteria	
Acceptable	Not Acceptable
Negative history and no current symptomatic heart, lung or kidney disease	Uncontrolled diabetes or history of bleeding disorder; current symptomatic heart, lung or kidney disease
Calm, stable	Unresolved fear and anxiety
$\leq 180/105$ mm/Hg	$> 180/105$ mm/Hg
Normal H/W ratio Maximum weight: 75 kg (165 lb) Minimum weight: 35 kg (77 lb)	> 75 kg < 35 kg
C-sections only with mobile abdominal scar and normal pelvic examination	Other abdominal surgery, fixed scar or abnormal pelvic examination
Negative history and normal abdominal and pelvic examination	Abnormal abdominal/pelvic examination
Hg ≥ 9 g/dl	Hg < 9 g/dl

CLIENT ASSESSMENT

PERMANENT METHODS: VASECTOMY¹



Category
General health (assessed by history and limited physical examination)
Emotional state
Blood pressure
Anemia (optional)
Scrotal/inguinal infection or abnormalities (undescended testes, hernia)

¹ Guidelines are for performing the procedure in an ambulatory health care facility. **Not acceptable** indicates that the procedure probably should be performed in a facility where additional assistance and backup services are available (i.e., more experienced physician and capability to manage medical problems).

Selection Criteria	
Acceptable	Not Acceptable
Negative history and no current symptomatic heart, lung or kidney disease	Uncontrolled diabetes or history of bleeding disorder; current symptomatic heart, lung or kidney disease
Calm, stable	Unresolved fear and anxiety
$\leq 180/105$ mm/Hg	$> 180/105$ mm/Hg
Hg ≥ 9 g/dl	Hg < 9 g/dl
Negative examination	Infection of scrotal or inguinal area, balanitis or anatomic abnormalities



CLIENT ASSESSMENT

SUMMARY: CLIENT ASSESSMENT REQUIREMENTS FOR ALL CONTRACEPTIVE METHODS



Assessment	NFP or LAM	Barrier Methods (Condom/ Diaphragm)
Reproductive History	No	No
GTIs/STDs History	No	No
Physical Examination		
Female General (including BP)	No	No
Abdominal	No	No
Pelvic Spectrum	No	No
Pelvic Bimanual	No	Yes ¹
Male (groin, penis, testes and scrotum)	No	No

¹ Required to size/fit diaphragm.

² If screening checklist all negative ("No"), examination is not necessary.

³ Only necessary if pregnancy is suspected and pregnancy test is not available.

Hormonal Methods (COCs/POPs/ Injectables/Implants)	IUDs	Voluntary Sterilization (Female/Male)
Yes (See Client Assessment Checklist)	Yes (See Client Assessment Checklist)	Yes (See Guidelines for Assessing Clients)
No	Yes	Yes
No ²	Yes	Yes
No ²	Yes	Yes
No ^{1,3}	Yes	Yes
No ¹	Yes	Yes
NA	NA	Yes



CLIENT ASSESSMENT

MENSTRUAL BLEEDING PATTERNS WITH HORMONAL CONTRACEPTIVES AND IUDS



All modern contraceptive methods (hormonal pills, injectables, implants and IUDs) affect the menstrual bleeding pattern. In general, methods in which the bleeding pattern closely mimics those of noncontracepting women are more acceptable to the majority of women. Unfortunately, all of the reversible, modern methods alter the menstrual bleeding pattern in terms of:

- the number of bleeding/spotting days,
- the number of bleeding/spotting periods, or
- a combination of the two.

Vaginal Bleeding: Definitions

Throughout the *PocketGuide*, in describing changes in menstrual bleeding patterns for each contraceptive method, the characteristics of vaginal bleeding have been defined as follows:

Bleeding: Any bloody vaginal discharge requiring use of sanitary protection (pads, cloths or tampons)³

- **Heavy:** More than 2 pads, cloths or tampons per hour
- **Prolonged:** More than 8 days (duration)

Spotting: Minimal pink, brown or red discharge which requires no sanitary protection

- **Prolonged:** More than 8 days duration

Amenorrhea:

- **Primary (1°):** No uterine bleeding/spotting by age 16 (no 2° sexual development) or age 18 (if 2° sexual development)
- **Secondary (2°):** No uterine bleeding/spotting for at least 3 consecutive months

³ The amount of blood lost during a normal menstrual period is 50-80 ml.

Oligomenorrhea: Menstrual interval > 35 days but < 90 days (may or may not be ovulatory in noncontracepting women)

Polyomenorrhea: Menstrual interval 21 days or less (strongly suggests anovulation in noncontracepting women)

Because of the **direct association** between **vaginal bleeding patterns** and **reasons for stopping** a contraceptive, a clear understanding of the types of bleeding changes is important to adequately counsel clients and to better manage bleeding problems in continuing users.



To help clinicians better appreciate the impact modern contraceptive methods have on menstrual bleeding patterns, their varying effects are illustrated in the following figure. For this figure, the 5 types of **clinically important bleeding changes** (amenorrhea, infrequent bleeding, frequent bleeding, irregular bleeding and prolonged bleeding) for each method were compared to those of nearly 4000 noncontracepting, menstruating women (controls).

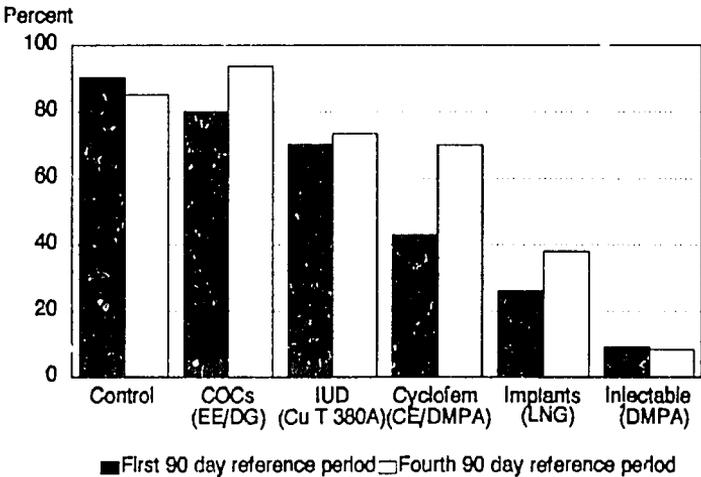
Between 85 and 90% of the control group had an "acceptable" bleeding pattern (cycle control) whereas for DMPA users only 8-9% had an "acceptable" bleeding pattern during the first year of use.⁴ It is important to note that some patterns considered unacceptable (e.g., amenorrhea or infrequent bleeding) may be considered acceptable, and even desirable to some women. For instance, as shown in the figure, by the fourth reference period the bleeding patterns of DMPA users were amenorrhea or infrequent bleeding (50-60%) rather than irregular or prolonged bleeding which characterized the bleeding during the first 90 day reference period. Therefore, understanding the effect of each contraceptive method on cycle control is important, and sharing this information with clients permits better selection of an appropriate method and increases client satisfaction.

⁴ An acceptable cycle was defined as the absence of the **clinically important bleeding changes** during consecutive 90 day reference periods.

CLIENT ASSESSMENT

Women with Acceptable Bleeding Patterns

First and Fourth 90 Day Reference Periods



COCs (30 μ g EE and 150 mg desogestrel); Cyclofem 5 mg estradiol cypionate and 25 mg DMPA); Levonorgestrel (LNG); DMPA (150 mg)

Adapted from Fraser 1994; Walling 1994 and Sastrawinata et al 1991.

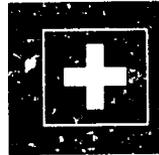
MEDICAL PROBLEMS

It must be remembered that women with medical problems, some of which are chronic or quite serious, also may need contraception. Providing a contraceptive method under these circumstances can be complicated because the underlying medical problem may limit the number of methods that are appropriate for use. As a consequence, special knowledge about the interaction between the medical problem and the various contraceptive methods is required on the part of the provider. Although many of the problems included in this chapter are uncommon, they are included to provide clinicians with the most up-to-date and complete information possible. Only in this way can clients with these medical problems be helped in choosing safe and effective contraception.

Women with medical problems need special counseling to guide them in choosing an appropriate contraceptive method. It is important for providers to remember that sometimes the most dangerous contraceptive is **no contraceptive**, especially in the presence of serious medical problems that make pregnancy dangerous (e.g., symptomatic valvular heart disease). Thus, the risk of pregnancy to such a patient must always be weighed against the low risk associated with using a particular contraceptive.¹

Finally, postpartum women with serious medical problems should be encouraged to fully breastfeed their infants. Clearly, breastfeeding according to LAM is an effective, short term method of contraception and it may be the safest method for a mother with medical problems.

The following pages outline key factors relevant to contraceptive use in clients with **medical problems**.



¹ For women with life-threatening health problems, who are in a mutually faithful relationship, vasectomy often is the safest long-term method for the couple.

MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

Cancer

Breast

COCs: Women with breast cancer should not use COCs. (WHO class 4)

POPs, Implants and Injectables: Women with breast cancer should avoid using these methods unless other more appropriate methods are not available or acceptable. (WHO class 3)

Cervical

IUD: Women awaiting or undergoing treatment should not use an IUD. (WHO class 4)

Endometrial and Ovarian (prior to treatment)

IUD: Women awaiting or undergoing treatment should not use an IUD. (WHO class 4)



**APPROPRIATE
CONTRACEPTIVE
METHODS²**

(WHO Class 1, 2)

COMMENTS

- | | |
|--|--|
| <ul style="list-style-type: none"> • LAM • IUD • Barriers • Spermicides • NFP • Voluntary sterilization | <p>Although there is no evidence that estrogens or progestins (COCs and POCs) cause breast cancer, this cancer is a hormonally sensitive tumor. WHO recommends that women with a history of but no evidence of current disease avoid COCs and progestin-only contraceptives (POCs).</p> |
| <ul style="list-style-type: none"> • LAM • COCs • POPs • Implants • Injectables • Barriers • Spermicides • NFP | <p>IUDs may increase the risk of infection or excessive bleeding which may make the condition appear worse.</p> <p>There is little concern that COCs or POCs increase the risk of progression of carcinoma-in-situ (CIS) to invasive cancer.</p> <p>In general, treatment of cervical cancer causes the woman to be sterile.</p> |
| <ul style="list-style-type: none"> • LAM • COCs • POPs • Implants • Injectables • Barriers • Spermicides • NFP | <p>IUDs may increase the risk of infection or excessive bleeding which may make the condition appear worse.</p> <p>COC use reduces the risk of developing either endometrial or ovarian cancer while POCs reduce the risk of endometrial cancer.</p> <p>In general, treatment of endometrial and ovarian cancers causes the woman to be sterile.</p> |



² Most appropriate method(s) are boldfaced.

MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

Depression (history, severe or recurrent)

COCs and POCs: Women with a history of depression, especially if severe or recurrent, should use these methods with caution.



Diabetes

COCs: Only women with diabetes of long-standing (> 20 years), who have **vascular problems** (neuropathy, nephropathy or retinopathy), need to avoid using COCs. (WHO class 3/4)

**APPROPRIATE
CONTRACEPTIVE
METHODS²**

(WHO Class 1, 2)

- LAM
- COCs
- POPs
- Implants
- Injectables
- IUD
- Barriers
- Spermicides
- NFP
- **Voluntary sterilization**

- LAM
- COCs
- **POPs**
- **Implants**
- Injectables
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

COMMENTS

Depression may be related to the progestin in COCs and POCs. If a woman thinks depression has worsened while using COCs or POCs, help her choose another method.

For women with a history of severe or recurrent episodes of depression, a trial of POPs may be preferable before giving injectables (DMPA) or implants because these methods cannot be stopped easily.

POPs and implants are **recommended** because they do not pose an additional risk of blood clotting problems (estrogen effect).

Although carbohydrate tolerance may change (slight decrease in glucose tolerance and increased insulin levels), COCs can be used safely. It is the progestin component (type and dose) of COCs that mainly is responsible for the effects on carbohydrate metabolism. Fortunately, the small changes induced by low-dose COCs and POCs are not thought to be clinically significant.



MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

Drug Interactions

Anticoagulants

COCs: Women with problems requiring use of anticoagulants should avoid using COCs unless other more appropriate methods are not available or acceptable. (WHO class 3)

Antiseizure drugs
(barbiturates,
carbamazepine and
phenytoin but **not**
valproic acid)

COCs, POPs and Implants: Women using antiseizure drugs should avoid using these methods unless other more appropriate methods are not available or acceptable. (WHO class 3)



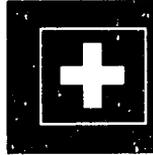
**APPROPRIATE
CONTRACEPTIVE
METHODS²**

(WHO Class 1, 2)

COMMENTS

- LAM
- POPs
- Implants
- Injectables
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

The use of COCs in these women poses an additional risk of blood clotting problems (estrogen effect).



- LAM
- **Injectables**
- **IUD**
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

Long-term use of drugs for epilepsy (except valproic acid) causes the liver to metabolize estrogens and progestins more rapidly and may decrease the effectiveness of all hormonal methods except injectables. Overall, COCs do **not** appear to alter seizure activity and can be provided with caution.

Development of intermenstrual spotting or bleeding may indicate a decreased level of sex steroid hormones (estrogens and progestin) due to interactions with antiseizure drugs. If this occurs, consider using a COC with a higher estrogen level (50 µg EE) or help the client choose another method.

The effectiveness of injectables (DMPA and NET-EN) is **not** decreased because blood levels of both are sufficient to compensate for the increased metabolism.

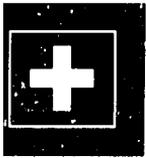
MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

**Familial
hyperlipidemia (FH)**

COCs: Women with diagnosed FH should avoid using COCs unless other more appropriate methods are not available or acceptable. (WHO class 3)



**Gall bladder problems
(biliary tract disease)**

COCs: Women with gall bladder disease, including those being treated medically, should avoid using COCs unless other more appropriate methods are not available or acceptable. (WHO class 3)

Headaches (migraine)

COCs: Only women with **migraine headaches and focal neurologic symptoms** should not use COCs. (WHO class 4)

**APPROPRIATE
CONTRACEPTIVE
METHODS²**

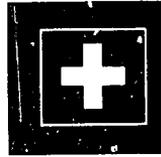
(WHO Class 1, 2)

COMMENTS

- LAM
- POPs
- Implants
- Injectables
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

Although FH is a risk factor for vascular disease, routine screening is **not** indicated because of the **rarity** of this disease.

Risk of vascular problems (heart attack, stroke, blood clotting disorders) is increased if COCs are used by patients with FH.



- LAM
- POPs
- Implants
- Injectables
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

Although COCs do **not** appear to **cause** gall bladder disease, they may shorten the time until the onset of disease in women with subclinical cases. This is most likely to occur within the first year of use.

- LAM
- POPs
- Implants
- Injectables
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

In women with severe, recurrent vascular (migraine) headaches who also have focal neurological symptoms (e.g., unable to speak for short intervals, temporary weakness or blurred vision), use of COCs may pose an additional risk for stroke (estrogen effect).

For women with severe headaches, POPs are recommended over implants (can not be easily stopped) and injectables (effect persists for several months after injection).

MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

Hepatitis/Cirrhosis

COCs: Women with active (symptomatic) hepatitis should not use COCs. (WHO class 4)

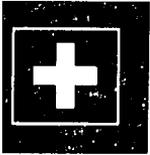
Implants and DMPA: Women with active (symptomatic) hepatitis should avoid using implants and DMPA unless other more appropriate methods are not available or acceptable. (WHO class 3)

High blood pressure

COCs: Women with blood pressure (BP) $\leq 180/105$ (mild hypertension) can use COCs. (WHO class 2)

If BP $> 180/105$ (moderate or severe hypertension), they should use COCs only if other more appropriate methods are not available or acceptable. (WHO class 3)

If they have vascular disease as well, they should not use COCs. (WHO class 4)



**APPROPRIATE
CONTRACEPTIVE
METHODS²**

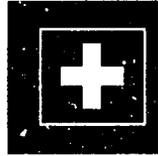
(WHO Class 1, 2)

COMMENTS

- LAM
- POPs
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

POPs may be used because they may be easily stopped, the dose is lower than with injectables and their effect does not persist.

COCs may be used by women who are asymptomatic (i.e., liver function has been normal for 3 months) or are carriers.



- LAM
- POPs
- Implants
- Injectables
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

Low-dose COCs cause little or no BP change in healthy clients, and it is reasonable to consider their use in women who already have high BP. (Use should be stopped if monitoring during the first few months reveals a marked increase in BP or vascular disease develops.)

In hypertensive women with underlying **vascular disease**, COC use poses an additional risk for blood clotting problems (estrogen effect).

MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

HIV/AIDS

IUD: Women with HIV/AIDS should avoid using an IUD unless other more appropriate methods are not available or acceptable. (WHO class 3)



Ischemic heart disease and Stroke (current or history)

COCs: In women with underlying arterial vascular disease, COCs should not be used. (WHO class 4)

Implants and Injectables: Because these methods **theoretically** pose an additional risk, their use should be avoided unless other more appropriate methods are not available or acceptable. (WHO class 3)

Liver tumors (adenoma and hepatoma)

COCs: Women with liver tumors should not use COCs. (WHO class 4)

POPs, Implants and Injectables: Women with liver tumors should avoid using these methods unless other more appropriate methods are not available or acceptable. (WHO class 3)

**APPROPRIATE
CONTRACEPTIVE
METHODS²**

(WHO Class 1, 2)

COMMENTS

- LAM
- POPs
- Implants
- Injectables
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

WHO recommends not using an IUD because of the **concern** that these women, who already are immunosuppressed, **theoretically** may be at more risk of getting GTIs and other STDs (e.g., HBV, HIV/AIDS) with an IUD in place.³

- LAM
- POPs
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

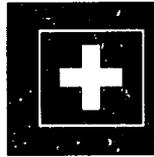
Women with documented arterial vascular disease (heart attack or stroke) should not use COCs because they pose an additional risk of blood clotting problems (estrogen effect).

With POCs, especially DMPA, some studies have reported decreased high-density lipoprotein (HDL). The **clinical significance** of these findings is **not known** at present.

- LAM
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

COCs may increase the risk of benign liver tumors and substantially increase the risk of hepatoma. However, because liver tumors (benign and malignant) are rare in women of reproductive age, routine screening (e.g., ultrasound) is not needed.

According to WHO, progestins (POCs) do **not** increase the risk of benign liver tumors; however, it is not clear whether progestins increase the risk of hepatoma.



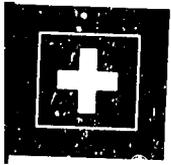
³ Women/men seropositive for HIV, or who have AIDS, **always** should use a condom (male or female) to reduce the chance of spreading the disease.

MEDICAL PROBLEMS

PROBLEM

METHODS WHICH
SHOULD BE USED
WITH CAUTION

Malaria (acute)



Schistosomiasis (acute)

**APPROPRIATE
CONTRACEPTIVE
METHODS²**

(WHO Class 1, 2)

COMMENTS

- LAM
- COCs
- POPs
- Implants
- Injectables
- IUD
- Barriers
- Spermicides
- NFP

For malaria, a serious and increasingly prevalent disease in many countries, **all** reversible contraceptive methods can be used. Voluntary sterilization should be delayed until client is asymptomatic.



- LAM
- COCs
- POPs
- Implants
- Injectables
- IUD
- Barriers
- Spermicides
- NFP

Although there is **theoretical** concern about an increase in blood loss during initial months of IUD and POC use, no reversible contraceptive methods pose an increased risk. Voluntary sterilization should be delayed until the client is asymptomatic.

MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

**Seizure disorders
(Epilepsy)**

COCs, POPs and Implants: Women using antiseizure drugs should avoid using these methods unless other more appropriate methods are not available or acceptable. (WHO class 3)



**Sickle cell disease and
trait**

COCs: Women with sickle cell disease should avoid using COCs unless other more appropriate methods are not available or acceptable. (WHO class 3) Women with sickle cell trait may use COCs.

**APPROPRIATE
CONTRACEPTIVE
METHODS²**

(WHO Class 1, 2)

COMMENTS

- LAM
- **Injectables**
- **IUD**
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

Long-term use of antiseizure drugs causes the liver to metabolize estrogens and progestins more rapidly and may decrease the effectiveness of all hormonal methods except injectables.

Development of intermenstrual spotting or bleeding may indicate a decreased level of sex steroids (estrogen and progestin) hormones due to interactions with antiseizure drugs. If this occurs, consider using a COC with a higher estrogen level (50 µg EE) or help client choose another method.

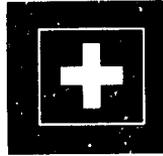
The effectiveness of **injectables** (DMPA and NET-EN) is **not** decreased because blood levels of both are sufficient to compensate for the increased metabolism.

- LAM
- POPs
- **Implants**
- **Injectables**
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

For women with **sickle cell disease trait**, prevention of unwanted pregnancy is very important for health reasons.

POCs are recommended. Implants and injectables are preferred over POPs, especially if the woman frequently is ill and not eating or drinking regularly. (Use of injectables and possibly implants also may decrease the frequency of attacks.)

Women with **sickle cell disease** already are at risk of vascular problems, and use of COCs should be avoided because it poses an additional risk for blood clotting problems (estrogen effect).



MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

Smoker and age 35 years or older

COCs: Client should use another (nonestrogen) contraceptive method. (WHO class 4)



Symptomatic valvular heart disease (rheumatic or congenital)

COCs: Client should use another (nonestrogen) contraceptive method. (WHO class 4)

IUD: Prior to inserting an IUD, prophylactic antibiotics are advised if the woman is not **already** receiving long acting antibiotics.

Thromboembolic disorders (e.g., blood clots in legs, lungs or eyes)

COCs: Women with thromboembolic disorders should not use COCs. (WHO class 4)

APPROPRIATE CONTRACEPTIVE METHODS²

(WHO Class 1, 2)

COMMENTS

- LAM
 - POPs
 - Implants
 - Injectables
 - IUD
 - Barriers
 - Spermicides
 - NFP
 - Voluntary sterilization
- Women 35 years or older who are heavy smokers (20 cigarettes or more per day⁴) **already** are at increased risk of heart attack, stroke and other clotting problems. Use of COCs by these women poses an additional risk of blood clotting problems (estrogen effect).
- LAM
 - POPs
 - IUD
 - Barriers
 - Spermicides
 - NFP
 - **Voluntary sterilization**
- Use of COCs with symptomatic valvular heart disease poses an additional risk for blood clotting problems (estrogen effect).
- Clients with Class III-IV heart disease should consider **voluntary sterilization**. Even if one pregnancy has been successful, further pregnancies are extremely risky.
- The use of antibiotics reduces the risk of infection and possible subacute endocarditis (SBE) during IUD insertion.
- LAM
 - POPs
 - Implants
 - Injectables
 - IUD
 - Barriers
 - Spermicides
 - NFP
 - Voluntary sterilization
- While COCs only slightly increase the risk of blood clotting problems in healthy women, this increased risk may have substantial impact on women already at risk for venous thromboembolism (e.g., women with current or past blood clots or following major surgery with prolonged bed rest).
- POPs and other POCs do not increase a woman's risk for blood clotting problems.



⁴ Definitions of **heavy smoking** vary internationally. Throughout this *PocketGuide* the WHO definition, 20 cigarettes or more per day, is used.

MEDICAL PROBLEMS

PROBLEM

METHODS WHICH SHOULD BE USED WITH CAUTION

Tuberculosis

COCs, POPs and Implants: Women using rifampin for tuberculosis should avoid using these methods unless other more appropriate methods are not available or acceptable. (WHO class 3)



Uterine fibroids

**APPROPRIATE
CONTRACEPTIVE
METHODS²**

(WHO Class 1, 2)

- LAM
- **Injectables**
- **IUD**
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

COMMENTS

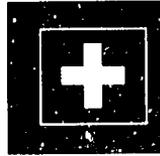
Long-term use of rifampin for tuberculosis causes the liver to metabolize estrogens and progestins more rapidly and may decrease the effectiveness of all hormonal methods except injectables.

Development of intermenstrual spotting or bleeding may indicate a decreased level of sex steroid (estrogen and progestin) hormones due to interactions with rifampin. If this occurs, consider using a COC with a higher estrogen level (50 µg EE) or help client choose another method.

The effectiveness of **injectables** (DMPA and NET-EN) is **not** decreased because blood levels of both are sufficient to compensate for the increased metabolism.

- LAM
- COCs
- POPs
- Implants
- **Injectables**
- IUD
- Barriers
- Spermicides
- NFP
- Voluntary sterilization

Although estrogens can stimulate growth of uterine fibroids, low-dose COCs (<50 µg EE) do not appear to cause them to grow.



NOTES



POSTPARTUM CONTRACEPTION

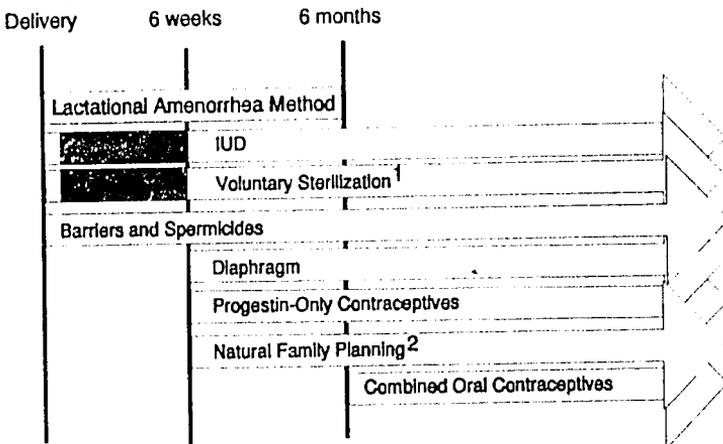
Many women want no more children or would like to delay pregnancy for at least 2 years after delivery. Only a small percentage of postpartum women, however, leave obstetrical delivery services having received counseling about family planning or with a contraceptive method. Postpartum women should be provided with family planning options. The International Planned Parenthood Federation (IPPF) recommends the following guidelines for service providers:

- Encourage full breastfeeding for all women.
- Do not discontinue breastfeeding to begin use of a contraceptive method.
- Contraceptive methods used by breastfeeding women should not adversely affect breastfeeding or the health of the infant.

Even for women who do not breastfeed, there are special recommendations for the postpartum period. In particular, it is important to note that the timing for beginning a method varies among contraceptives, even for non-breastfeeding mothers.



Timing of Method Initiation for Breastfeeding Women

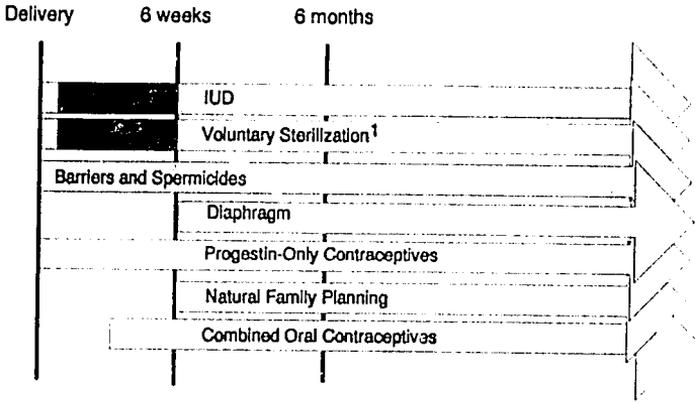


¹ Vasectomy can be performed at any time.

² NFP may be harder for breastfeeding women to use because reduced ovarian function makes fertility signs (e.g., mucus change, basal body temperature) more difficult to interpret. As a result, NFP can require prolonged periods of abstinence during breastfeeding.

POSTPARTUM CONTRACEPTION

Timing of Method Initiation for Nonbreastfeeding Women



¹ Vasectomy can be performed at any time.

Source: Family Health International 1994.

The following pages outline information about contraceptive methods for postpartum women, including timing after delivery, method characteristics and safety.

NOTES



POSTPARTUM CONTRACEPTION

COUNSELING OUTLINE

METHOD	TIMING AFTER DELIVERY
Lactational Amenorrhea Method (LAM) (Also see Lactational Amenorrhea Method chapter)	Should begin breastfeeding immediately after delivery. Highly effective for up to 6 months if fully breastfeeding and amenorrheic.
 Combined Oral Contraceptives (Also see COCs chapter)	If not breastfeeding, can be started after 3 weeks postpartum. During the first 6 weeks postpartum, COCs should not be used. (WHO class 4) From 6 weeks to 6 months postpartum, COCs should be used by breastfeeding women only if other methods are not available or acceptable. (WHO class 3) If fully breastfeeding and amenorrheic, delay for 6 months. Start COCs when weaning begins. (WHO class 2) If client has resumed menses and sexual activity, start COCs only if reasonably sure she is not pregnant.

**RELATED METHOD
CHARACTERISTICS**

REMARKS

Considerable health benefits for both mother and infant.

For greatest effectiveness, must be fully breastfeeding.

Gives time to choose and arrange for surgical or other contraceptive methods.

Effectiveness declines as weaning takes place or breastfeeding is supplemented.

During the first 2 to 3 weeks postpartum, the estrogen in COCs slightly increases the risk of blood clotting problems.

There is no increased risk of blood clotting beyond the third week postpartum.

During the first 6 weeks postpartum, COCs decrease the amount of breastmilk and may affect the healthy growth of the infant. (This effect may continue for up to 6 months.)

COCs should be the last choice for breastfeeding clients.

COCs may be given for women who were pre-eclamptic or had hypertension during pregnancy as long as BP is in normal range when starting COCs.



POSTPARTUM CONTRACEPTION

COUNSELING OUTLINE

METHOD	TIMING AFTER DELIVERY
Progestin-Only Contraceptives (Also see Progestin-Only Contraceptives and IUD chapters)	<p>If not breastfeeding, can be started immediately.</p> <p>If not breastfeeding and more than 6 weeks postpartum or already menstruating, start POC only if reasonably sure the woman is not pregnant. (WHO class 1)</p> <p>If fully breastfeeding, POC may be delayed until 6 months postpartum if she follows LAM (see LAM chapter). (WHO class 1)</p>
 IUD (Also see IUDs chapter)	<p>May be inserted postplacental, postcesarean section or postpartum (within 48 hours of delivery). (WHO class 1)</p> <p>If not inserted postplacentally or within 48 hours postpartum, insertion should be delayed until 4 to 6 weeks postpartum. (WHO class 1)</p> <p>If fully breastfeeding and amenorrheic, insertion should be delayed until 4 to 6 weeks postpartum.</p> <p>If breastfeeding and menses have resumed, insert only if reasonably sure the client is not pregnant.</p>

RELATED METHOD CHARACTERISTICS

REMARKS

Do not affect breastfeeding quantity, quality or health of infant.

Irregular bleeding may occur with POCs, even in lactating women.

Do not affect breastfeeding quantity, quality or health of infant.

Requires provider trained in postplacental or postpartum insertion.

Less pain during insertion for breastfeeding women.

Clients should be screened and counseled during prenatal period for postplacental insertion.

Fewer postinsertion side effects (bleeding, pain) when IUD inserted in breastfeeding women.

First year IUD removal rates are lower among breastfeeding women.

Expulsions less likely if inserted within 10 minutes after placenta is delivered.

After 4 to 6 weeks postpartum, the provider does not have to be trained in postpartum IUD insertion (technique same as for interval client).



POSTPARTUM CONTRACEPTION

COUNSELING OUTLINE

METHOD

TIMING AFTER DELIVERY

Nonfitted Barriers and Spermicides
(condoms, sponge, foam, cream, film, jelly, suppositories, tablets)

May be used any time postpartum.

(Also see **Barriers and Spermicides** chapter)

Fitted Barriers Used with Spermicides (diaphragm with foam, cream or jelly)

It is best to wait until the immediate postpartum period is over (6 weeks postpartum) before fitting diaphragm.

(Also see **Barriers and Spermicides** chapter)

Natural Family Planning

(Also see **Natural Family Planning** chapter)

Not recommended until resumption of regular menses. Client may begin charting at 6 weeks postpartum but should continue to use LAM.



**RELATED METHOD
CHARACTERISTICS**

REMARKS

Do not affect breastfeeding.

Useful as interim methods if initiation of another chosen method must be postponed.

Lubricated condoms and spermicides help overcome vaginal dryness during intercourse (common in breastfeeding women).

Do not affect breastfeeding.

Requires fitting (pelvic exam) by service provider. Diaphragm fitted prior to pregnancy may be too small due to changes in vaginal tissue or cervix after delivery.

Use of spermicides helps overcome vaginal dryness during intercourse (common in breastfeeding women).



Does not affect breastfeeding.

Cervical mucus difficult to "read" until menses have resumed and are regular (ovulatory).

Basal body temperature fluctuates when mother awakens at night to breastfeed. Thus, "early morning" basal body temperature elevation after ovulation may not be reliable.

POSTPARTUM CONTRACEPTION

COUNSELING OUTLINE

METHOD	TIMING AFTER DELIVERY
Abstinence	May be used any time.
 Tubal Occlusion (See Tubal Occlusion chapter)	May be performed immediately postpartum or within 48 hours. If not performed within 48 hours, should be delayed until 6 weeks postpartum. Ideal timing: After recovery from delivery and once health and survival of infant are more certain.
Vasectomy (See Vasectomy chapter)	Can be performed anytime after delivery. Ideal timing: After recovery from delivery and once health and survival of infant are more certain.

**RELATED METHOD
CHARACTERISTICS**

REMARKS

Does not affect breastfeeding.
100% effective

Some couples find long periods of postpartum abstinence difficult.

Acceptable in cultures in which postpartum abstinence is traditional.

Does not affect breastfeeding quantity, quality or health of infant.

Perform using local anesthesia/sedation. This minimizes risk to the mother and possible prolonged separation of mother and child due to complications.

Postpartum minilaparotomy is easier to perform within first 48 hours of delivery because the position of the uterus make the Fallopian tubes easier to find and see.

Counseling and informed consent should take place during prenatal period.

In cultures in which postpartum abstinence is traditional, vasectomy performed at this time leads to less disruption of intercourse for the couple.

Partner's contact with health care system may be a good time for man to use services.



NOTES



POSTABORTION CONTRACEPTION

Many clients come into contact with a family planning provider only when management of miscarriage (spontaneous or incomplete abortion) is necessary. These clients, who already may have experienced unwanted pregnancy either as a result of nonuse of contraception or method failure, may be in need of effective contraception.

Because ovulation and the subsequent risk of pregnancy return rapidly following an abortion, postabortion family planning services need to be initiated immediately. Following first trimester pregnancy loss, ovulation may occur as early as day 11 and it most often occurs before the first menstrual bleeding. In contrast to postpartum women, who may delay the return of ovulation (fertility) by breastfeeding, women who have experienced spontaneous or induced abortion face an **immediate** risk of pregnancy.

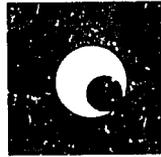
In general, all methods of contraception are appropriate for use immediately after postabortion care, provided:

- there are no complications requiring further treatment (i.e., severe bleeding, anemia or infection), and
- the provider screens for any precautions for use of a particular method.

It is recommended that women not have intercourse until postabortal bleeding stops.

Recommendations for contraceptive use after first trimester abortion (up to 14 weeks from LMP) are similar to those for interval use (i.e., women who have not been pregnant within the last 4 to 6 weeks and are not breastfeeding). Recommendations for contraceptive use after late second trimester spontaneous or incomplete abortion are more similar to the postpartum period. In either case, **thorough counseling** is essential so that the client freely chooses a method that meets her needs and that she can use safely and effectively.

The following pages (adapted from *Postabortion Care: A Reference Manual for Improving Quality of Care*) outline the factors relevant to the **postabortal** use of various contraceptive methods.



POSTABORTION CONTRACEPTION

COUNSELING OUTLINE

METHOD	TIMING AFTER ABORTION
Oral Contraceptives (COCs and POPs) (Also see COCs and Progestin-Only Contraceptives chapters)	Start COC or POP use immediately, preferably on the day of treatment.
Injectables (DMPA, NET-EN) (Also see Progestin-Only Contraceptives chapter)	May be given immediately.
 Implants (Norplant) (Also see Progestin-Only Contraceptives chapter)	May be given immediately.

**RELATED METHOD
CHARACTERISTICS**

REMARKS

Can be started immediately even if infection is present.

Highly effective.

Immediately effective.

Minimizes blood loss (i.e., improves anemia).

Can be started immediately even if infection is present.

If adequate counseling and informed decision-making cannot be guaranteed, delay first injection and provide a temporary interim method.

Can be started immediately even if infection is present.

If adequate counseling and informed decision-making cannot be guaranteed, delay insertion and provide a temporary interim method.

Access to a provider skilled in insertion and removal is necessary.



POSTABORTION CONTRACEPTION

COUNSELING OUTLINE

METHOD

TIMING AFTER ABORTION

IUD

(Also see IUDs chapter)

First Trimester:

IUDs can be inserted if risk or presence of infection can be ruled out.

Delay insertion until serious injury is healed, hemorrhage is controlled and acute anemia improves.

Second Trimester:

Delay for 4 to 6 weeks unless equipment and expertise is available for immediate postabortal insertion. Be sure there is no uterine infection. (If infection suspected, delay insertion until the infection has been resolved.)

Nonfitted Barriers and Spermicides (condoms, sponge, foam, cream, film, jelly, suppositories, tablets)

(Also see **Barriers and Spermicides** chapter)

Start use as soon as intercourse is resumed.



**RELATED METHOD
CHARACTERISTICS**

REMARKS

Uterine perforation can occur during insertion.

If adequate counseling and informed decision-making cannot be guaranteed, delay insertion and provide a temporary interim method.

Access to a provider skilled in insertion and removal is necessary.

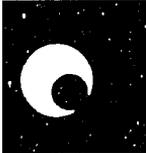


Good interim methods if initiation of another method must be postponed.

Intercourse should be delayed until bleeding has stopped (5 to 7 days).

POSTABORTION CONTRACEPTION

COUNSELING OUTLINE

METHOD	TIMING AFTER ABORTION
<p>Fitted Barriers Used with Spermicides (diaphragm with foam, cream or jelly)</p> <p>(Also see Barriers and Spermicides chapter)</p>	<p>Diaphragm can be fitted immediately after first trimester abortion. After second trimester abortion, fitting should be delayed until uterus returns to prepregnancy size (4 to 6 weeks).</p>
<p>Natural Family Planning</p> <p>(Also see Natural Family Planning chapter)</p>	<p>Not recommended for immediate postabortion use.</p>
 <p>Tubal Occlusion</p> <p>(Also see Tubal Occlusion chapter)</p>	<p>Technically, tubal occlusion (minilaparotomy or laparoscopy) can be performed immediately after treatment of abortion complications unless infection or severe blood loss is present.</p> <p>Do not perform until infection is fully resolved (3 months) or injury healed.</p>
<p>Vasectomy</p> <p>(Also see Vasectomy chapter)</p>	<p>May be performed at any time.</p> <p>Timing is not related to abortion.</p>

**RELATED METHOD
CHARACTERISTICS**

REMARKS

Diaphragm fitted prior to a second trimester pregnancy loss may be too small due to change in the vaginal tissue or cervix.

The first ovulation after an abortion will be difficult to predict and the method is unreliable until after a regular menstrual pattern has resumed.

Performing tubal occlusion after a first trimester incomplete abortion is similar to an interval procedure; after a second trimester incomplete abortion it is similar to a postpartum procedure.

Adequate counseling and informed decision-making and consent **must** precede voluntary sterilization procedures (tubal occlusion or vasectomy); this often is not possible at the time of emergency care.



Not immediately effective; therefore, interim contraceptive method must be used.

POSTABORTION CONTRACEPTION

GUIDELINES FOR CONTRACEPTIVE USE BY CLINICAL CONDITION

CLINICAL CONDITION

PRECAUTIONS

Confirmed or Presumptive Diagnosis of Infection

IUD: Do not insert until risk of infection ruled out or infection fully resolved (approximately 3 months).

Signs and symptoms of sepsis/infection

Female voluntary sterilization: Do not perform procedure until risk of infection ruled out or infection fully resolved (approximately 3 months).

Signs of unsafe or unclean induced abortion

Unable to rule out infection

Injury to Genital Tract

IUD: Do not insert until serious injury healed.

Uterine perforation (with or without bowel injury)

Diaphragm: Do not use until vaginal or cervical injury healed.

Serious vaginal or cervical injury, including chemical burns

Spermicides: Do not use until vaginal or cervical injury healed.

Female voluntary sterilization: Do not perform procedure until serious injury healed.



RECOMMENDATIONS

Oral contraceptives (COCs and POPs): can begin use immediately.

Implants (Norplant): can begin use immediately.

Injectables (DMPA, NET-EN): can begin use immediately.

Condom: can be used when sexual activity is resumed.

Diaphragm: can be used when sexual activity is resumed.

Spermicides: can be used when sexual activity is resumed.

Oral contraceptives (COCs and POPs): can begin use immediately.

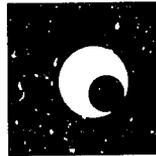
Implants (Norplant): can begin use immediately.

Injectables (DMPA, NET-EN): can begin use immediately.

Condom: can be used when sexual activity is resumed.

Diaphragm: can be used when sexual activity is resumed (can be used with uncomplicated uterine perforation).

Spermicides: can be used when sexual activity is resumed (can be used with uncomplicated uterine perforation).



POSTABORTION CONTRACEPTION

GUIDELINES FOR CONTRACEPTIVE USE BY CLINICAL CONDITION

CLINICAL CONDITION	PRECAUTIONS
Severe Bleeding (hemorrhage) and Related Severe Anemia (Hb < 7 gm/dl or Hct < 20)	Implants (Norplant): Delay insertion until acute anemia improves.
	Injectables: Delay injection until acute anemia improves.
	POPs: Use with caution until acute anemia improves.
	IUD (inert or copper-bearing): Delay insertion until acute anemia improves.
	Female voluntary sterilization: Do not perform procedure until the cause of hemorrhage or anemia resolved.



RECOMMENDATIONS

COCs: can begin use immediately (beneficial when hemoglobin is low).

IUD (progestin-releasing): can be used with severe anemia (decreases menstrual blood loss).

Condom: can be used when sexual activity is resumed.

Diaphragm: can be used when sexual activity is resumed.

Spermicides: can be used when sexual activity is resumed.



NOTES



EMERGENCY CONTRACEPTION

When intercourse occurs without contraceptive protection, unplanned and undesired pregnancy can result. Fortunately, there are means available to prevent pregnancy when unprotected intercourse occurs, and clients need not be turned away to anxiously await their menstrual period.

Before providing emergency contraception be sure the client is **not** already pregnant (i.e., she might have become pregnant in the previous month). Symptoms of early pregnancy may include:

- Breast tenderness
- Nausea
- Change in the last menses (light flow, short duration, etc.)
- Urinary frequency

In addition, women who are at increased risk of vascular problems (current or past blood clotting problems, heart attack or stroke) should be advised that the risk of a serious complication may be increased if they use the high-dose estrogen regimen.¹

While most contraceptives are appropriate **before** intercourse, several methods also can be used within a short time **after** unprotected intercourse. Often called "morning after pills," these regimens are better named secondary contraceptives or **emergency contraceptives** to remove the idea that the user must wait until the morning after intercourse to start treatment—or that she will be too late if she cannot obtain the pills until the afternoon or night after intercourse. The name **emergency contraception** also stresses that these methods, while better than nothing in the event of unprotected intercourse, typically are **less effective** than the ongoing use of modern contraceptive methods. Currently there are 2 types of emergency contraceptives: mechanical and hormonal. For example, when inserted up to 7 days after unprotected intercourse, copper-releasing IUDs can prevent a pregnancy from becoming established. Although over 15 regimens using hormonal methods are said to exist, only 4 have been adequately studied for widespread use.



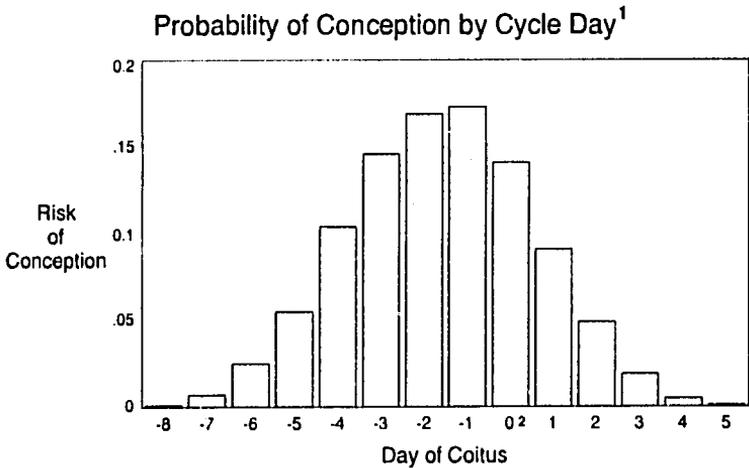
¹ COCs taken for a short duration (2 days) in a physically active client are unlikely to cause a serious problem even in women with these problems; therefore, do not withhold treatment if client requests it.

EMERGENCY CONTRACEPTION

If pregnancy is suspected, counsel client regarding options and the small risk of a problem **before** providing emergency contraception.²

RISK OF BECOMING PREGNANT

The risk of pregnancy (expected probability) for a given day of the menstrual cycle, as measured by the number of days **before** or **after** mid-cycle, is shown in the following figure.



¹ The number of pregnancies calculated using this chart represents the lower limit of expected pregnancies because it was derived from couples seeking pregnancy using artificial insemination with sperm.

² Day 0 (mid-cycle) is defined as 14 days **before** or **after** the expected onset of the next menses.

Adapted from Dixon et al 1980.

² Although there are no known teratogenic effects of using the emergency contraceptives described in this chapter, too few births resulting from failure of a method have been observed to rule out this possibility.

As shown in the figure, the risk of becoming pregnant depends on what day of the menstrual cycle the woman was at the time of intercourse. During the most fertile days, midway between 2 menstrual periods (days 12-15), the risk could be as high as 30%. By using one of the emergency contraceptive methods recommended, the risk of pregnancy is reduced by at least 75%. For example, a 30% risk would be reduced to about 8%.



EMERGENCY CONTRACEPTION

METHOD

TIMING IN RELATION TO UNPROTECTED INTERCOURSE

COCs (Morning After Pills)

Should be taken within 72 hours of unprotected intercourse.

Minimum Daily Dose: 100 μg EE
plus 500 mg LNG

Minimum Total Dose: 200 mg EE
plus 1000 mg LNG

(Also see **COCs** chapter)

Progestin-Only Pills (POPs)

Should be taken within 48 hours of unprotected intercourse.

Minimum Daily Dose: 750 μg LNG

Minimum Total Dose: 1500 μg
LNG

(Also see **Progestin-Only
Contraceptives** chapter)



REMARKS

INSTRUCTIONS

Very effective (< 3% failure rate)

Take 4 COCs containing 30-35 μg EE (e.g., Lo-Femenal) orally followed by 4 more in 12 hours (total = 8 pills).²

Side effects:

- Nausea (temporary, day or so)
- Vomiting (if within 1 hour after taking first or second dose of COCs, client may need to repeat the drug)

Alternatively, take 2 COCs containing 50 μg EE orally followed by 2 more in 12 hours (total = 4 pills).

If history indicates possible pre-existing pregnancy, it should be ruled out before giving COCs.

If no menses within 14 days, consult clinic or service provider to check for possible pregnancy.

If pregnancy not prevented, counsel client regarding options (see COCs chapter).

Very effective (< 3% failure rate)

Take 10 POPs, containing at least 37.5 μg levonorgestrel (75 μg norgestrel), orally followed by 10 more in 12 hours (total = 20 pills).

Fewer side effects than with COCs or high-dose estrogen

Minimal side effects:

- Nausea (temporary, day or so)
- Vomiting (if within 1 hour after taking first or second dose of POPs, client may need to repeat the drug)

If no menses within 14 days, consult clinic or service provider to check for possible pregnancy.



² If available, high-dose estrogen can be substituted for COCs. The recommended dose of each medication (2.5 mg EE, 10 mg conjugated estrogens or 5 mg esterone) must be taken twice daily (e.g., 5 mg EE) for 5 consecutive days.

EMERGENCY CONTRACEPTION

METHOD	TIMING IN RELATION TO UNPROTECTED INTERCOURSE
Antiprogestins (mifepristone)	Should be taken within 72 hours of unprotected intercourse.
IUD (Also see IUDs chapter)	Should be inserted within 5 days of unprotected intercourse.



REMARKS

INSTRUCTIONS

Very effective (< 1% failure rate)

Same side effects as with high-dose estrogen but less severe

Menses delayed in > 50% (delayed ovulation)

Very effective (< 1% failure rate)

Few side effects

Failure increases with longer interval between unprotected intercourse and insertion.

Requires minor procedure to insert, performed by trained provider

Provides long-term contraception

Should not be inserted for women at risk for GTIs and other STDs (e.g., HBV, HIV/AIDS).

May not be advisable for nulliparous clients.

Take 600 mg mifepristone.

If no menses within 21 days, consult clinic or service provider to check for possible pregnancy.

If pregnancy not prevented, counsel client regarding options. Remove IUD (see IUDs chapter for rationale).



NOTES



ADOLESCENTS

Sexually active adolescents are in need of safe and effective contraception. Studies show that large numbers of teens are sexually active, at least occasionally. Teens tend to have unpredictable lifestyles which revolve around such issues as assertion of independence, convenience and acceptance among their peers. Because of this, their relationships often are temporary and multiple sexual partners are likely. Furthermore, many teens do not use effective contraceptives, and those who do are likely to use them infrequently. Additionally, their lifestyles may expose them to considerable risk for contracting GTIs and other STDs (e.g., HBV, HIV/AIDS). Finally, early childbearing is associated with the poor health of both mothers and infants.

Although parents would prefer teenagers not to be sexually active until they are able to fully consider starting and caring for a family, often this does not happen. Because teens frequently have unplanned, unprotected intercourse, it is important that they have access to emergency contraceptive services (see **Emergency Contraception** chapter). Furthermore, adolescents need access to family planning services regardless of their marital status and these services should avoid unnecessary clinical procedures that may discourage teens from using services (e.g., pelvic examinations for teens requesting COCs).

In the following pages, only factors relevant to the use of specific contraceptive methods by **adolescents** are provided.



< 18

ADOLESCENTS

COUNSELING OUTLINE

METHOD	REMARKS
Oral Contraceptives (COCs and POPs)	Conditions requiring precautions are rare in teens.
(Also see COCs and Progestin-Only Contraceptives chapters)	Forgetfulness increases failure (common among teens).
	Most popular method among teens.
	Although there has been concern about the use of COCs by young adolescents (theoretical effect on growth), they may be safely used once a teen has started menstruating.
Implants (Norplant)	Side effects such as irregular bleeding/spotting, acne and weight gain may be particularly bothersome to teens. Thorough counseling is required.
(Also see Progestin-Only Contraceptives chapter)	Implants may be in place for periods of time when teen is temporarily not sexually active.
	Highly recommended for teens who want long-term contraception, especially if client had trouble using another method.



COUNSELING OUTLINE

METHOD	REMARKS
Injectables (Also see Progestin-Only Contraceptives chapter)	Side effects such as irregular bleeding/spotting, acne and weight gain, may be particularly bothersome to teens. Thorough counseling is required. Delayed return of fertility common. No need for supplies and non-visibility make this attractive to teens. Highly recommended for teens who require intermediate-duration contraception. Some studies show that use of DMPA in teens within 2 years of menarche may pose an additional long term risk for osteoporosis.
IUD (Also see IUDs chapter)	Not recommended for teens at risk for GTIs and other STDs (e.g., HBV, HIV/AIDS). May be used by nulliparous or parous teenager if not at risk for STDs.



ADOLESCENTS

COUNSELING OUTLINE

METHOD	REMARKS
Condom (Also see Barriers and Spermicides chapter)	Immediate protection but requires planning (coitus-related). Should be easily available as teens are likely to have unplanned intercourse. Only method that protects against GTIs and other STDs (e.g., HBV, HIV/AIDS).
Diaphragm (Also see Barriers and Spermicides chapter)	Generally not recommended for teens. Requires continued motivation and use with each act of intercourse. Best accepted by mature woman who can predict acts of intercourse and who is highly motivated to avoid pregnancy. Offers some protection against GTIs and other STDs (e.g., HBV, HIV/AIDS).
Emergency Contraception (Also see Emergency Contraception chapter)	Should be available as teens are likely to have unplanned, unprotected intercourse.
Withdrawal	May be only method available to teens. Be sure they are fully informed about technique.
Voluntary Sterilization (tubal occlusion and vasectomy)	Not appropriate for adolescents in most circumstances.



WOMEN OVER 35

Women over 35 may experience life events, such as divorce and remarriage, that place them at increased reproductive health risk. Women over the age of 35 are in need of safe and effective contraception and also may need protection against GTIs and other STDs (e.g., HBV, HIV/AIDS).

In the past, because the dose of estrogen in COCs was high ($\geq 50 \mu\text{g}$ EE), women over 35 were considered to be at increased risk for serious complications (heart attack, stroke and blood clotting problems). Recent data, however, based on women using the newer low-dose COCs ($< 35 \mu\text{g}$ EE) show that older women can safely use COCs until they are menopausal and beyond, if they have no additional risk factors.

Although some women are concerned about the risk of breast cancer if they continue to use hormonal methods after age 35, current data show no overall association between breast cancer and increasing duration of COC use. In fact, studies suggest that COC use may lead to decreased levels of breast cancer among older women. Moreover, long-term use of COCs (5-10 years) leads to decreased risk of both endometrial and ovarian cancer and offers other health benefits.

Finally, while **women over 35** who are heavy smokers (> 20 cigarettes per day) should be encouraged to stop smoking for health reasons, they can still use POCs.

Because **women over 35** can continue to use most contraceptive methods, in the following pages **only** those factors relevant to their use of specific contraceptives are provided.



WOMEN OVER 35

COUNSELING OUTLINE

METHOD	REMARKS
<p>COCs</p> <p>(Also see COCs chapter)</p>	<p>Should not be used by women over 35 who are heavy smokers (> 20 cigarettes per day¹). (WHO class 4)</p> <p>Low-dose COCs may be a source of estrogen replacement during perimenopause.</p>
<p>POCs (implants, injectables and POPs)</p> <p>(Also see Progestin-Only Contraceptives chapter)</p>	<p>Highly recommended for women over 35 who want long-term contraception, especially if client has had trouble using another method or does not want voluntary sterilization.</p> <p>POCs can be used in the perimenopausal years (40-50s).</p> <p>POCs can be used safely by women over 35, even if they are heavy smokers. (WHO class 1)</p>
<p>IUD</p> <p>(Also see IUDs chapter)</p>	<p>May be used safely by older woman if not at risk for GTIs and other STDs (e.g., HBV, HIV/AIDS).</p> <p>May be the preferred method in older women because newer IUDs (copper- and progestin-releasing):</p> <ul style="list-style-type: none">• are highly effective• require no followup care unless there are problems• are long-term methods (TCu 380A effective up to 10 years)

¹ Definitions of **heavy smoking** vary internationally. Throughout this *PocketGuide* the WHO definition, 20 cigarettes or more per day, is used.



COUNSELING OUTLINE

METHOD	REMARKS
Condom (Also see Barriers and Spermicides chapter)	Only method that protects against GTIs and other STDs (e.g., HBV, HIV/AIDS). Best used by mature women who can predict acts of intercourse in advance and who are highly motivated to avoid pregnancy.
Diaphragm (Also see Barriers and Spermicides chapter)	Best used by mature women who can predict acts of intercourse in advance and who are highly motivated to avoid pregnancy. Offers some protection against GTIs and other STDs (e.g., HBV, HIV/AIDS).
Voluntary Sterilization (tubal occlusion and vasectomy) (Also see Tubal Occlusion and Vasectomy chapters)	Appropriate for mature clients/couples who are certain about desire for permanent contraception.



LACTATIONAL AMENORRHEA METHOD (LAM)

COUNSELING OUTLINE

METHOD

Method that utilizes the temporary infertility that occurs during breastfeeding

Mechanism of Action

- Suppresses ovulation

APPROPRIATE FOR

LAM is effective for women who:

- are fully or nearly fully breastfeeding,
- have not had return of menses, **and**
- are less than 6 months postpartum.

Fully breastfeeding is characterized by:

- Breastfeeding whenever baby desires (at least every 4 hours during the day)
- Night time feedings (at least every 6 hours)
- Not substituting other food or liquids for a breastmilk meal



METHOD CHARACTERISTICS

BENEFITS

Effective (pregnancy rate 2-3% in first 6 months postpartum)

Easy to use

Effective immediately

Free

Does not interfere with intercourse

Reduces postpartum bleeding

No physical side effects

No medical supervision required

No supplies needed

Health Benefits

For child:

- Passive immunization
- Best source of nutrition
- Decreased exposure to pathogens in water or other milk

LIMITATIONS

User dependent: requires following instructions regarding breastfeeding practices

Fully or nearly fully breastfeeding may be difficult for some women due to social circumstances.

Short-term protection (limited to 6 months)

No protection against GTIs and other STDs (e.g., HBV, HIV/AIDS)



LACTATIONAL AMENORRHEA METHOD

PROBLEMS REQUIRING ACTION

PROBLEM	ACTION
Client has resumed her menses	Counsel about need for another method. ¹
Client's baby suckles infrequently, less than 6 times a day on both breasts, or her baby sleeps through the night	Counsel about need for another method. ¹
Client has added supplemental foods or liquids to her baby's diet	Counsel about need for another method. ¹
Client's baby is 6 months old or older	Counsel about need for another method. ¹

¹ Even if another method is required, client should be encouraged to continue breastfeeding.



RATIONALE

- ▶ Menses indicate resumption of ovulation and return of fertility. Pregnancy is likely if another contraceptive method is not used.
- ▶ Decreased breastfeeding frequency allows ovaries to resume normal functioning; ovulation is no longer suppressed.
- ▶ Decreased breastfeeding frequency allows ovaries to resume normal functioning; ovulation is no longer suppressed.

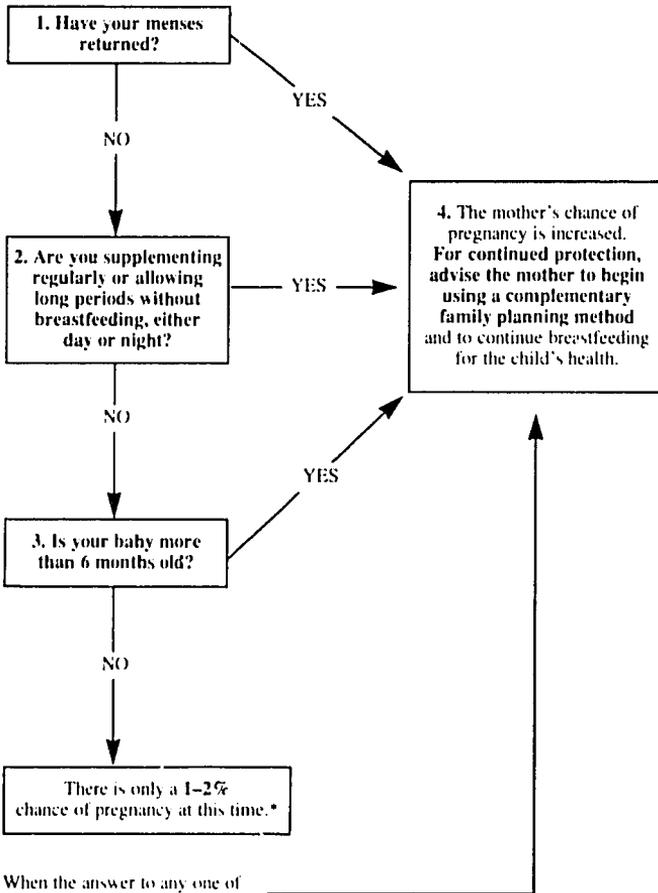
Note: "Supplemental" does not include tiny amounts of ritual or medicinal liquids or food; "supplemental" refers to liquid or food that **substitutes** for breastfeeding.

- ▶ At 6 months, supplementary food are introduced into the baby's diet. This reduces the likelihood that breastfeeding alone will effectively prevent pregnancy (see above).



LACTATIONAL AMENORRHEA METHOD

Ask the mother, or advise her to ask herself these 3 questions:



* However, the mother may choose to use a complementary method *at any time*.

Source: Institute for Reproductive Health 1994.



NOTES



REFACE

PREFACE



COUNSELING



CLIENT ASSESSMENT



MEDICAL PROBLEMS



POSTPARTUM CONTRACEPTION



POSTABORTION CONTRACEPTION



EMERGENCY CONTRACEPTION

< 18

ADOLESCENTS

> 35

WOMEN OVER 35



LACTATIONAL AMENORRHEA METHOD

COMBINED ORAL CONTRACEPTIVES



PROGESTIN-ONLY CONTRACEPTIVES
(implants, injectables, minipills)



INTRAUTERINE DEVICES (IUDs)



BARRIERS AND SPERMICIDES



NATURAL FAMILY PLANNING



VOLUNTARY STERILIZATION
(tubal occlusion, vasectomy)



CLIENT INSTRUCTIONS



INFECTION PREVENTION



GENITAL TRACT INFECTIONS



REFERENCES

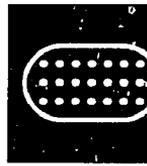




COMBINED ORAL CONTRACEPTIVES (COCs)

COUNSELING OUTLINE

METHOD	APPROPRIATE FOR
Combined oral contraceptive pills (COCs) contain both an estrogen (E) and progestin (P)	Women of any reproductive age or parity who want highly effective protection against pregnancy
<i>Types</i>	
Monophasic: All 21 active pills contain same amount E/P	Postabortion clients (may begin use at any time)
Biphasic: 2 different E/P combinations (10/11) of 21 active pills	Women with history of anemia Women with severe menstrual cramping
Triphasic: 3 different E/P combinations (6/5/10) of 21 active pills	Women with irregular menstrual cycles Women with history of ectopic pregnancy
<i>Mechanism of Action</i>	Breastfeeding mothers (6 months or more postpartum) or when supplementation of infant's diet begins (if before 6 months)
<ul style="list-style-type: none">• Suppress ovulation• Thicken cervical mucus (prevents sperm penetration)• Change endometrium (making implantation less likely)• Reduce sperm transport in upper genital tract (fallopian tubes)	



METHOD CHARACTERISTICS

BENEFITS

Highly effective (pregnancy rate 1-8 per 100 women during first year of use)

Effective immediately if started by day 7 of cycle

Pelvic examination not required prior to use

Few method-related health risks

Do not interfere with intercourse

Convenient, easy to use and can be provided by nonmedical staff

Can stop use easily

Health Benefits

Lighter, shorter periods

Decreased menstrual cramps

Improved anemia

Protection against ovarian and endometrial cancer

Decreased benign breast disease

Prevention of ectopic pregnancy

Protection against some causes of PID

LIMITATIONS

User dependent: require continued motivation and daily use

Forgetfulness increases failure

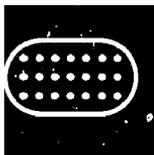
Resupply must be available

Effectiveness may be lowered when certain drugs are taken (see table **COC Interactions with Other Drugs** in this chapter)

Can delay return to fertility

Serious side effects possible (rare): myocardial infarction, stroke, venous thrombosis (1, 3 and 11 per 100,000 women on COCs, respectively); also rarely benign and malignant liver tumors

No protection against GTIs and other STDs (e.g., HBV, HIV/AIDS)

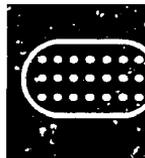


COMBINED ORAL CONTRACEPTIVES

MOST READILY AVAILABLE

PILL NAME
Monophasic
Eugynon
Lo-Femeral (USAID)
Microgynon
Neogynon
Noriday (USAID)
Norminest (USAID)
Norquest (USAID)
Triphasic
Logynon 6 brown tablets 5 white tablets 10 yellow tablets
Trinordiol 6 brown tablets 5 white tablets 10 yellow tablets

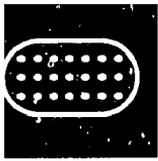
¹ Most readily available COCs (monophasic), so called "low-dose" pills, contain 30-35 μg ethinyl estradiol (EE). "High-dose" COCs are those containing 50 μg EE or more.



HORMONAL COMPOSITION¹

ESTROGEN	CONTENT μg	PROGESTIN	CONTENT μg
Ethinyl estradiol	50	Norgestrel	500
Ethinyl estradiol	30	Norgestrel	300
Ethinyl estradiol	30	Levonorgestrel	150
Ethinyl estradiol	50	Levonorgestrel	250
Mestranol ²	50	Norethindrone	1,000
Ethinyl estradiol	35	Norethindrone	500
Ethinyl estradiol	35	Norethindrone	1,000
Ethinyl estradiol	30	Levonorgestrel	50
Ethinyl estradiol	40	Levonorgestrel	75
Ethinyl estradiol	30	Levonorgestrel	125
Ethinyl estradiol	30	Levonorgestrel	50
Ethinyl estradiol	40	Levonorgestrel	75
Ethinyl estradiol	30	Levonorgestrel	125

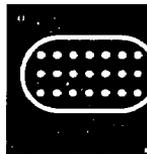
² 50 μg mestranol has the biologic potency of 30-35 μg EE; therefore, it should not be considered a high-dose COC.



COMBINED ORAL CONTRACEPTIVES

CONDITIONS REQUIRING PRECAUTIONS

CONDITION	PRECAUTION
Pregnancy (known or suspected)	<p>COCs should not be used during pregnancy and should be stopped if intrauterine pregnancy is confirmed and will be carried to term. (WHO class 4)</p> <p>If the possibility of pregnancy cannot be excluded by examination or pregnancy testing, use of COCs should be delayed until the next menstrual period. In the interim, help the client choose another method (e.g., condoms and spermicide).</p>
Breastfeeding	<p>Women less than 6 weeks postpartum should not use COCs. (WHO class 4)</p> <p>Fully breastfeeding mothers (6 weeks to 6 months postpartum) should use COCs only if other more appropriate methods (e.g., IUD or POCs) are not available or acceptable. (WHO class 3)</p>
Unexplained vaginal bleeding (only if serious problem suspected)	<p>Women with unexplained vaginal bleeding, which could be due to pregnancy or caused by a serious problem, should not use COCs unless other more appropriate methods are not available or acceptable. (WHO class 3)</p>

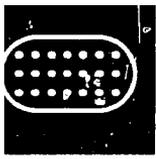


RATIONALE

- ▶ There is no reported harm to the woman or developing fetus from the small amount of estrogen and progestin in current (low-dose) COCs. It is, however, unwise for a woman to take **any drugs** in early pregnancy unless absolutely necessary.

- ▶ During the first **6 weeks** postpartum, the estrogen in COCs **slightly** increases the risk of blood clotting problems (estrogen effect). In addition, during the first **6 months** postpartum, COCs decrease the amount of breastmilk and may affect the healthy growth of the infant. Finally, fully breastfeeding mothers less than **6 months** postpartum are at low risk of pregnancy (< 2% failure rate, see **LAM** chapter).

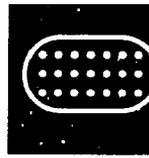
- ▶ Because COCs sometimes can cause intermenstrual spotting or bleeding, an underlying problem (i.e., normal or ectopic pregnancy, cervicitis, other pelvic pathology and, rarely, cancer of the genital tract) may be masked. Ideally, the cause of any persistent, unexplained vaginal bleeding or spotting (e.g., between menses or after intercourse) should be determined and, if possible, treated before COCs are prescribed. **None** of the above conditions, however, are worsened—and some are prevented—by use of COCs.



COMBINED ORAL CONTRACEPTIVES

CONDITIONS REQUIRING PRECAUTIONS

CONDITION	PRECAUTION
Jaundice (symptomatic, viral hepatitis)	COCs should not be used until clients have fully recovered from hepatitis (i.e., until either 3 months after becoming asymptomatic or normal liver function returns). Help client choose another method. (WHO class 4) For women with symptomatic gall bladder disease, COCs are not recommended unless other more appropriate methods are not available or acceptable. (WHO class 3)
Smoker and age 35 years or older	Client should use another (nonestrogen) contraceptive method. (WHO class 4)
Diabetes (> 20 years duration; vascular problems, or CNS, kidney or visual disease)	Women with advanced or long-standing diabetes should not use COCs. (WHO class 4) Insulin and noninsulin dependent diabetics without serious problems generally can use COCs. (WHO class 2)



RATIONALE

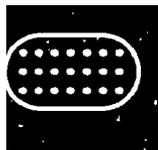
- ▶ The hormones in COCs (especially the estrogen) may be poorly metabolized in women with impaired liver function; therefore, their use may affect the health of these women. In addition, COCs may accelerate development of symptoms of gall bladder disease in asymptomatic women.

- ▶ Women 35 years or older who are heavy smokers (> 20 cigarettes per day³) already are at increased risk of heart attack, stroke and other blood clotting problems. Use of COCs by these women poses an additional risk of blood clotting problems (estrogen effect).

Women 35 years or older who stop smoking and have no other risk factors may use COCs.

- ▶ Use of COCs by women with advanced or long-standing (> 20 years) diabetes may worsen vascular problems and possibly accelerate the risk of blood clotting problems (estrogen effect).

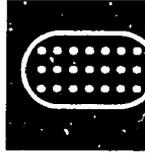
³ Definitions of **heavy smoking** vary internationally. Throughout this *PocketGuide* the WHO definition, 20 cigarettes or more per day, is used.



COMBINED ORAL CONTRACEPTIVES

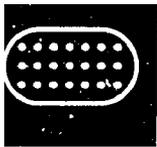
CONDITIONS REQUIRING PRECAUTIONS

CONDITION	PRECAUTION
Headaches (migraine)	Women with migraine and focal neurologic symptoms should not use COCs. (WHO class 4)
High blood pressure (hypertension, severe with or without vascular problems)	Women with BP > 180/105 (moderate or severe hypertension) should use COCs only if other more appropriate methods are not available or acceptable. (WHO class 3; if vascular disease as well, then WHO class 4.)
Breast cancer (current)	Women with breast cancer should not use COCs. (WHO class 4)
Breast cancer (a history and no current evidence of disease)	COCs are not recommended unless other more appropriate methods are not available or acceptable. (WHO class 3)
Breast lumps	COCs can be used safely by women with benign breast disease or a family history of breast cancer. (WHO class 1)
Liver tumors (adenoma and hepatoma)	Women with liver tumors should not use COCs. (WHO class 4)



RATIONALE

- ▶ In women with severe, recurrent vascular (migraine) headaches who also have focal neurological symptoms (e.g., unable to speak for short intervals, temporary weakness or blurred vision), use of COCs may pose an additional risk for stroke.
- ▶ Although COC use causes only small changes in BP of healthy women, in hypertensive women with underlying vascular disease, their use poses an additional risk for blood clotting problems (estrogen effect).
- ▶ There is no evidence that COCs cause breast cancer; however, breast cancer is a hormonally-sensitive tumor.
- ▶ Because breast cancer is a hormonally-sensitive tumor, clients with suspicious breast lumps (e.g., firm, nontender or fixed and which do not change during the menstrual cycle) need to be evaluated before using COCs.
- ▶ COCs may increase the risk of benign liver tumors and substantially increase the risk of hepatoma. Because liver tumors (benign and malignant) are rare in women of reproductive age, routine screening (ultrasound) is not needed.



COMBINED ORAL CONTRACEPTIVES

CONDITIONS REQUIRING PRECAUTIONS

CONDITION	PRECAUTION
Taking drugs for epilepsy (seizure disorder) or tuberculosis (rifampin)	Clients taking drugs for these disorders should be counseled about the potential reduction in the effectiveness of COCs. (WHO class 3)

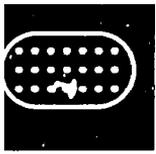


RATIONALE

- ▶ **Long-term** use of drugs for epilepsy (except valproic acid) and for tuberculosis causes the liver to metabolize estrogens and progestins more rapidly and may decrease the effectiveness of all hormonal methods except injectables.⁴ Overall, COCs do **not** appear to alter seizure activity and can be provided with caution.

Development of intermenstrual spotting or bleeding may indicate a decreased level of sex steroid hormones (estrogen and progestin) due to interactions with rifampin or antiseizure drugs. If this occurs, consider switching to a COC with a higher estrogen level (50 µg EE) or help client choose another method.

⁴ Because griseofulvin, which increases estrogen and progestin metabolism, usually is used only for a short period of time (2 to 4 weeks), women taking it for fungal infections can continue to use COCs. They should use a backup method while taking griseofulvin and until the start of the next menstrual period after stopping the antibiotic.



COMBINED ORAL CONTRACEPTIVES

CONDITIONS FOR WHICH THERE ARE NO RESTRICTIONS

CONDITION

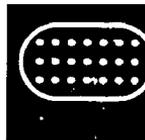
Age

Diabetes (uncomplicated or < 20 years duration)

Genital tract cancers (cervical, endometrial or ovarian)

High blood pressure (mild hypertension)

Pregnancy-related benign jaundice (cholestasis)



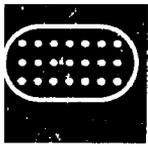
RATIONALE

- ▶ Sexually active adolescents are at risk of pregnancy, regardless of how young they are, and may safely use COCs (see **Adolescents** chapter).

Use of COCs does not increase in risk with age (> 35) if there are none of the following risk factors:

- smoking,
 - diabetes,
 - a mother, father, sister or brother who had a heart attack or stroke before age 50, or
 - family history of increased lipids (hyperlipidism).⁵
- ▶ Although glucose (carbohydrate) tolerance (and insulin requirements) may change slightly, both insulin dependent and noninsulin dependent diabetics can use COCs (WHO class 2) **unless** they have or develop vascular disease or have had diabetes for more than 20 years. (WHO class 4)
 - ▶ There is little concern that COCs affect the course of endometrial and ovarian cancers, and there is only theoretical concern that they may increase the risk of progression of carcinoma-in-situ (CIS) to invasive cancer.
 - ▶ Current (low-dose) COCs cause little or no BP change in healthy clients, and it is reasonable to consider their use in women who already have high BP. Women with BP $< 180/105$ (mild hypertension) can use COCs. (WHO class 2) (Use should be stopped if monitoring during the first few months reveals a marked increase in BP or vascular disease develops.)
 - ▶ Although a history of pregnancy-related benign jaundice (cholestasis) may predict an increased risk of developing COC-related cholestasis, there is **no known** risk for using COCs in clients with this history.

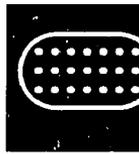
⁵ Although FH is a risk factor for vascular disease, routine screening is **not** indicated because of the **rarity** of this disease.



COMBINED ORAL CONTRACEPTIVES

MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT	ASSESSMENT
Amenorrhea (absence of vaginal bleeding or spotting)	<p>Ask how she has been taking her pills. Has she missed any pills in the cycle?</p> <p>Check for pregnancy by history, checking symptoms and performing a physical examination (speculum and bimanual) or a pregnancy test, if indicated and available.</p> <p>Is she using a low-dose pill (35 μg EE)?</p> <p>Has she stopped taking the pill?</p>



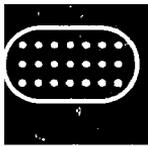
MANAGEMENT

- ▶ Missed pills or pills taken late increase risk of pregnancy. Clients on 21-day packets may forget to leave a pill-free week for menses. If pills are taken continuously, amenorrhea may result. This is not harmful.
- ▶ If **intrauterine pregnancy** is confirmed, counsel client regarding options.⁶ If pregnancy will be continued, stop use of COCs and assure her that the small dose of estrogen and progestin in the COCs will have no harmful effect on the fetus.

If client is **taking COCs correctly**, reassure. Explain that absent menses are most likely due to lack of buildup of uterine lining. If the client is unsatisfied, try a high-dose estrogen (50 μg EE) pill if available and no conditions requiring precaution exist.

If **not pregnant**, no treatment is required except counseling and reassurance. If she continues COCs, amenorrhea usually will persist. Advise client to return to clinic if amenorrhea continues to be a concern.

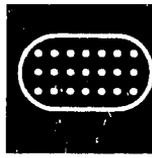
⁶ If pregnancy cannot be confirmed by pelvic exam (and pregnancy testing is not available), either refer the client for a pregnancy test or ask her to return in 2 to 4 weeks for repeat examination.



COMBINED ORAL CONTRACEPTIVES

MANAGEMENT OF SIDE EFFECTS

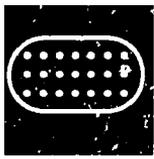
SIDE EFFECT	ASSESSMENT
Bleeding/Spotting (See Flowchart Management of Bleeding/Spotting for COCs and definitions of bleeding and spotting in this chapter)	<p>Has client recently begun COCs?</p> <p>Ask if she has missed 1 or more pills, or if she takes pills at a different time every day.</p> <p>Check for gynecological conditions (e.g., intrauterine or ectopic pregnancy, incomplete abortion PID).</p> <p>Is client taking new medicine (e.g., rifampin)?</p>
High blood pressure	<p>Ask if this is the first time anyone has told her that she has high blood pressure.</p> <p>Allow 15 minutes rest then repeat BP reading.</p> <p>If possible, recheck BP on 2 visits, 1 week apart:</p> <ul style="list-style-type: none">• Assess systolic BP. If > 180 on one visit, or > 160 mm Hg on 2 more visits 1 week apart, stop COCs.• Assess diastolic BP. If > 105 mm Hg on one visit, or > 90 mm Hg on 2 more visits 1 week apart, stop COCs.



MANAGEMENT

- ▶ If yes, reassure. Advise that breakthrough bleeding/spotting (BTB/S) is common during the first 3 months of COC use and decreases markedly in most women by the fourth month of use. If BTB/S persists and is bothersome, switch to another COC or help client choose another method.
- ▶ If yes, review instructions. If she continues to miss pills, she may need to switch methods to minimize risk of pregnancy. (See *Missed Pills* in this chapter.)
- ▶ If gynecologic problems are present, refer or manage according to clinic practice.
- ▶ If yes, give client a higher dose COC (50 μ g EE) or help her choose another method.
- ▶ If BP increases in a client with normal BP who is using COCs, follow closely. If any warning signs (severe headaches, chest pain, blurred vision) occur or BP > 180/105, COCs should be stopped.

If COCs are stopped help client choose another (nonestrogen) method. Tell her that high BP due to COCs usually goes away within 1 to 3 months. Take BP monthly to be sure it returns to normal. If after 3 months it has not, refer for further evaluation.



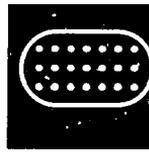
COMBINED ORAL CONTRACEPTIVES

MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT	ASSESSMENT
Nausea/Dizziness/Nervousness	Find out if pills are taken in morning or on an empty stomach. Check for pregnancy. If no cause found.

MANAGEMENT OF OTHER PROBLEMS

PROBLEM	ASSESSMENT
Acne	Ask how and how often she cleans her face. Ask if she is currently under great stress.
Breast fullness or tenderness (mastalgia)	Check for pregnancy. Check breasts for: <ul style="list-style-type: none">• Lumps or cysts• Discharge or galactorrhea (leakage of milk-like fluid) Ask whether client notices fullness only at a certain time of the month.
Chest pain (especially if it occurs with exercise, uncommon)	Assess for possible cardiovascular disease (CVD). Check: <ul style="list-style-type: none">• blood pressure and• heart for irregular beats (arrhythmias).



MANAGEMENT

- ▶ Advise client to take pill with evening meal or before bed time.
- ▶ If pregnant, manage as above (see **Amenorrhea**).

Counsel that it will probably decrease over the first 3 months of COC use or switch to a lower estrogen pill (20 μ g EE) if available, or a POC if problem is intolerable.

MANAGEMENT

- ▶ Acne usually is improved with COCs, however, in some clients it can worsen. Recommend cleaning face twice a day with an astringent, like lemon, and avoid using heavy facial creams. Counsel as appropriate. If condition is not tolerable, help client choose another (nonhormonal) method.
- ▶ If **pregnant**, manage as above (see **Amenorrhea**).

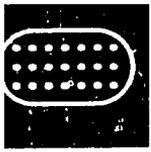
If **not pregnant**, usually improves within 3 months of starting COCs.

Do **not** stop COC unless client requests it after counseling.

- ▶ If physical examination shows lump or discharge suspicious for cancer (e.g., firm, nontender or fixed and which do not change during the menstrual cycle), refer to appropriate source for diagnosis. If no abnormality, reassure.

Switch to a lower estrogen pill if not already on lowest estrogen COC. Advise client to avoid caffeine, chocolate, etc. If the lowest dose pill is unacceptable, and symptomatic management not helpful, help client choose another method.

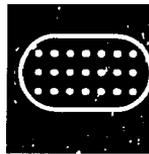
- ▶ If strong evidence of CVD, refer for evaluation. Consider stopping COCs and help client choose another method.



COMBINED ORAL CONTRACEPTIVES

MANAGEMENT OF OTHER PROBLEMS

PROBLEM	ASSESSMENT
Depression (mood change or loss of libido)	Discuss changes in mood.
Headache (especially with blurred vision)	Ask if there has been a change in pattern or severity of headaches since beginning the COC. Perform physical examination, measure blood pressure. Examine as appropriate: <ul style="list-style-type: none">• Eyes (fundoscopic)• Neurologic system
Jaundice	Acute jaundice occurring after starting COC use begins is not method-related. Check for: <ul style="list-style-type: none">• Active liver disease (hepatitis)• Gall bladder disease• Benign or malignant tumors



MANAGEMENT

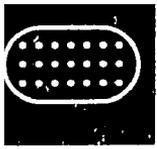
- ▶ Depression may be related to the progestin in COCs; therefore, if client thinks her depression has worsened while using COCs, help her choose another method. If COCs have not caused depression to worsen, they can be continued.
- ▶ If headaches are mild, treat with analgesics and reassure. Re-evaluate after 1 month if mild headaches persist.

If headaches have changed since starting COC (i.e., numbness, tingling or loss of speech; visual changes or blurred vision) stop COC and help client choose another (nonhormonal) method.

- ▶ The hormones (estrogen and progestin) in COCs have little effect on liver function and do not increase the risk of gall bladder disease. If client has jaundice due to **viral hepatitis**, stop COCs and help client choose another method until she is fully recovered (i.e., until either 3 months after becoming asymptomatic or normal liver function returns).

If jaundice is due to **gall bladder** disease, help client select another method unless other methods are not available or acceptable.

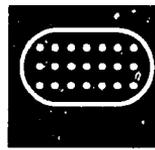
If jaundice is due to **liver tumor** or **cirrhosis**, stop COCs and refer for further evaluation. Help client choose another method.



COMBINED ORAL CONTRACEPTIVES

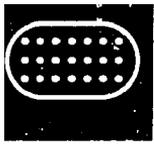
MANAGEMENT OF OTHER PROBLEMS

PROBLEM	ASSESSMENT
Missed active pills	Has client missed only 1 pill?
	Has client missed 2 or more consecutive pills?
Missed inactive ("reminder") pills	Has client missed reminder pills in week 4?
Starting COCs after day 7 of menstrual cycle	Check for pregnancy by symptoms, physical examination or pregnancy test, if indicated and available.



MANAGEMENT

- ▶ Advise client to take 2 pills when she remembers, even if it means taking 2 pills in the same day, and complete pack as usual. No backup method necessary.
- ▶ Advise client to take 2 pills per day until she catches up. Use backup method if she has sex during the next 7 days. (If she has started bleeding, advise her to stop taking pills and start a new pack 7 days later.)
- ▶ Advise client to throw away missed pills and complete pack as usual. No backup method is necessary for clients who miss any of the “reminder” pills in week 4 (28 day packs only).
- ▶ Advise client that her regular bleeding pattern may be altered. Use backup method if she has sex during the next 7 days. Seven days of pill use are necessary for suppression of follicular development.

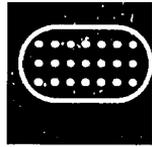


COMBINED ORAL CONTRACEPTIVES

COC INTERACTIONS WITH OTHER DRUGS

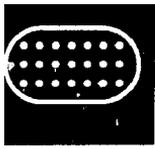
COMMONLY USED OR PRESCRIBED DRUGS
Analgesics Acetaminophen (Tylenol, Paracetamol and others)
Antibiotics —Griseofulvin and Rifampin * No documented clinical effect or significance has been established for penicillins, tetracyclines, cephalosporins and other commonly used antibiotics. COCs or other hormonal method may be used and no backup method routinely necessary with these antibiotics.
Antidepressants (Elavil, Norpramin, Tofranil and others)
Antihypertensives Methyldopa (Aldoctor, Aldomet and others)
Antiseizure Barbiturates (Phenobarbitol and others) Carbamazepine (Tegretol) Phenytoin (Dilantin) Primidone (Mysoline)
Beta-blockers (Corgard, Inderal, Lopressor, Tenormin)
Bronchodilators Theophylline (Bronkotabs, Marax, Primatene, Quibron Tedral, Theor-Dur and others)
Hypoglycemics (Diabinese, Orinase, Tolbutamide, Tolinase)
Tranquilizers Benzodiazepine (Ativan, Librium, Serax, Tranxene, Valium, Xanax and others)

Adapted from Rizack and Hillman 1985.



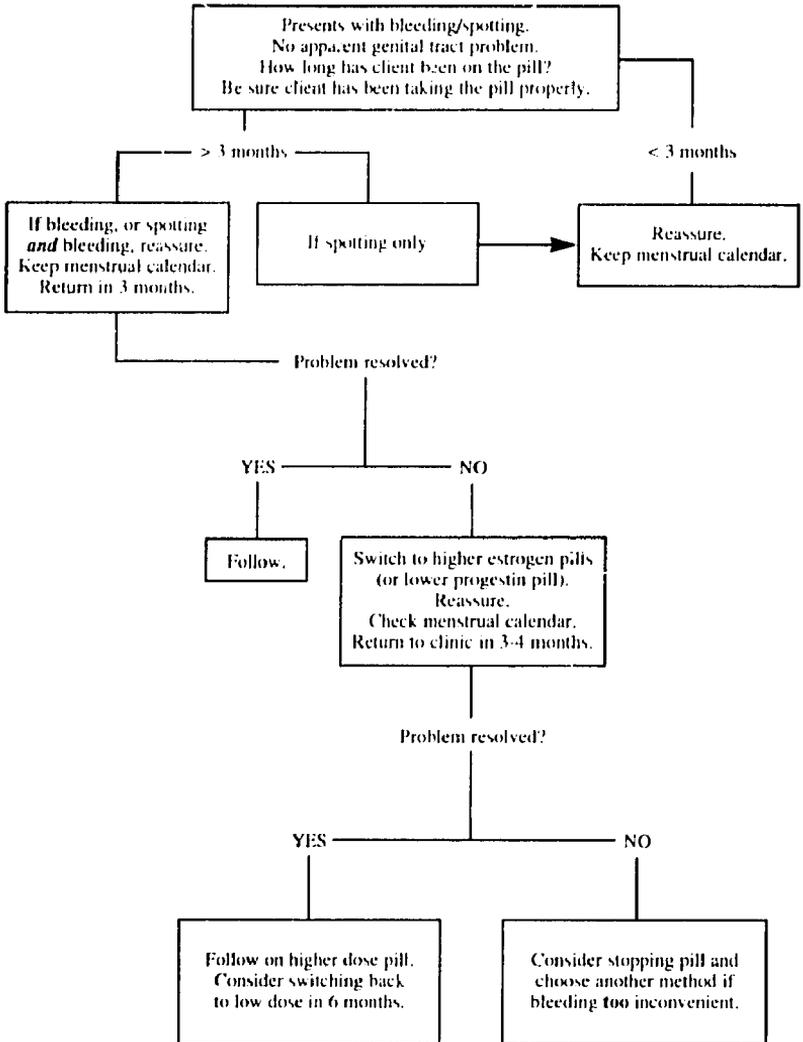
ADVERSE EFFECTS	COMMENTS AND RECOMMENDATIONS
Possible decreased pain-relieving effect (increased drug excretion)	Monitor pain-relieving response.
Decreased contraceptive effect, especially with low-dose COCs, < 35 µg ethinyl estradiol (EE)	Help client choose another method or use higher estrogen pill (50 µg EE) or backup method (e.g., condoms). ⁷
Possible increased antidepressant effect	Use with caution. Low doses are probably safe.
Possible decreased antihypertensive effect	Use COCs with caution, monitor BP.
Decreased contraceptive effect, especially if lowest dose COC Possible increased phenytoin effect	Help client choose another method or use higher dose pill (50 µg EE) or backup method (e.g., condoms).
Possible increased beta-blocker effect	Monitor cardiovascular status.
Increased theophylline effect	Monitor for symptoms of theophylline overdose.
Possible decreased hypoglycemic effect	Monitor blood glucose as for any diabetic patient.
Possible increased or decreased tranquilizer effects including psychomotor impairment	Use with caution. Commonly prescribed dosages are unlikely to result in significant effects.

⁷ Because griseofulvin usually is used only for a short period of time (2 to 4 weeks), women taking it for fungal infections can continue to use COCs. They should use a backup method while taking griseofulvin and until the start of the next menstrual period after stopping the antibiotic.

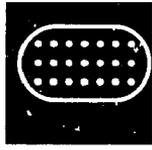


COMBINED ORAL CONTRACEPTIVES

Management of Bleeding/Spotting for COCs



NOTES

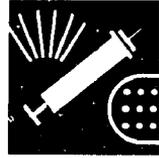


PROGESTIN-ONLY CONTRACEPTIVES (POCs)



COUNSELING OUTLINE - All Types

METHOD	APPROPRIATE FOR
All progestin-only contraceptives (POCs)	Women of any reproductive age or parity who want highly effective protection against pregnancy
<i>Types</i>	
Subdermal implants: Levonorgestrel (Norplant® implants)	Breastfeeding mothers (6 weeks or more postpartum) who need contraception
Injectables: Depot-medroxyprogesterone acetate (DMPA) and norethindrone enanthate (NET-EN)	Postpartum women who are not breastfeeding (may start immediately)
Progestin-only pills (minipills, POPs): Levonorgestrel, norgestrel or norethindrone	Postabortion clients (may start immediately)
IUDs: Progesterone- and levonorgestrel-releasing	Women with moderate to severe menstrual cramping
	Women who smoke (any age)
<i>Mechanisms of Action</i>	
<ul style="list-style-type: none"> • Suppress ovulation • Thicken cervical mucus (prevents sperm penetration) • Change endometrium making implantation less likely • Reduce sperm transport in upper genital tract (fallopian tubes) 	



METHOD CHARACTERISTICS

BENEFITS

Rapidly effective (< 24 hours) if started by day 7 of cycle

Pelvic examination not required prior to use (except progestin-releasing IUDs)

Few method-related health risks

Do not interfere with intercourse

Do not affect breastfeeding

Health Benefits

May decrease menstrual cramps

May improve anemia

Protection against endometrial cancer

Decreased benign breast disease

Prevention of ectopic pregnancy

Protection against some causes of PID

LIMITATIONS

Cause changes in menstrual bleeding patterns

- Irregular bleeding/spotting (60-70%)
- Amenorrhea (injectables 50-80%, implants < 10%, POPS rarely)

Weight gain common with injectable users; some weight gain or loss may occur with implants and POPS

Effectiveness may be lowered when certain drugs are taken (see **Taking drugs for epilepsy or tuberculosis** in this chapter)

No protection against GTIs and other STDs (e.g., HBV, HIV/AIDS)

PROGESTIN-ONLY CONTRACEPTIVES



COUNSELING OUTLINE - Implants

METHOD

APPROPRIATE FOR

Implants

Examples

Subdermal Implants (e.g., Norplant® implants): 6 thin, flexible capsules filled with levonorgestrel (LNG) which are inserted just under the skin of a woman's upper arm

Women of any reproductive age or parity who want long-term, highly effective, reversible contraception that does not require daily action

Women with desired family size who do not want voluntary sterilization

Women with sickle cell disease or trait

METHOD CHARACTERISTICS

BENEFITS

LIMITATIONS

Highly effective (pregnancy rates of 0.2-1.0 per 100 women during first year of use)

Requires minor surgical procedure, performed by trained provider, for insertion and removal

Not user dependent (return to clinic every 5 years unless problems)

Woman must return to health care provider or clinic for insertion of another set of capsules or removal

No supplies needed by client

Woman cannot stop whenever she wants (provider dependent)

Long-term protection (up to 5 years)

Cost effectiveness dependent on length of use (i.e., more cost effective if used for 3 or more years)

Can be provided by trained nonphysician

Immediate return of fertility on removal

Usually not visible to the casual observer



PROGESTIN-ONLY CONTRACEPTIVES



COUNSELING OUTLINE - Injectables

METHOD	APPROPRIATE FOR
Injectables	Women of any reproductive age or parity who want long-term, highly effective, reversible contraception that does not require daily action
<i>Examples</i>	
DMPA (Depo-Provera [®]): 150 mg of depot-medroxyprogesterone acetate injected every 3 months	Women with desired family size who do not want voluntary sterilization
NET-EN (Noristerat [®]): 200 mg of norethindrone enanthate injected every 2 months	Women with sickle cell disease or trait

METHOD CHARACTERISTICS

BENEFITS

Highly effective (pregnancy rate of 0.3-1.0 per 100 women during first year of use)

Not user dependent

No supplies needed by client

Intermediate-term protection (2 or 3 months per injection)

Can be provided by nonphysician

May be provided even if client is late for her return visit (up to 2 weeks, NET-EN; up to 4 weeks, DMPA)

LIMITATIONS

Must return to clinic for next injection (every 2 or 3 months)

Delay in return to fertility (with DMPA, average of 7 to 9 months)

Woman cannot discontinue whenever she wants (provider dependent)

Excessive vaginal bleeding in rare instances (less than 1 per 1000 users)



PROGESTIN-ONLY CONTRACEPTIVES

COUNSELING OUTLINE - Progestin-Releasing IUDs

METHOD

APPROPRIATE FOR

Progestin-Releasing IUDs

Examples

Progesterone-releasing (Progestasert®)

Levonorgestrel-releasing
(LevoNova®)

Women of any reproductive age or parity who want long-term, highly effective, reversible contraception that does not require daily action

Women with desired family size who do not want voluntary sterilization





METHOD CHARACTERISTICS

BENEFITS

LevoNova: Highly effective (pregnancy rate 0.2-0.5 per 100 women during the first year of use)

Progestasert: Effective (pregnancy rate 2-6 per 100 women during the first year of use)

LevoNova is effective for 5 years

For additional information on Benefits, see **IUDs** chapter

LIMITATIONS

Pelvic examination required and GTI screening recommended prior to insertion

Available only in a few countries

Expensive

Progestasert only effective for 1 year

Higher ectopic pregnancy rate with Progestasert

For additional information on Limitations, see **IUDs** chapter

PROGESTIN-ONLY CONTRACEPTIVES

COUNSELING OUTLINE - Progestin-Only Pills



METHOD

APPROPRIATE FOR

Progestin-Only Pills (minipills, POPs)

Women who want a POC but do not want injections or implants or should not use IUDs (high risk for GTIs and other STDs)

Examples

Levonorgestrel (Microlut®)

Norethindrone (Micronor®)

Norgestrel (Ovrette®)

HORMONAL CONTRACEPTIVE COMPOSITION CHART

PROGESTIN-ONLY PILLS		PROGESTIN CONTENT	
			µg
Microlut	35 pills	Levonorgestrel	300
Micronor	35 pills	Norethindrone	350
Ovrette (USAID)	28 pills	Norgestrel	75

METHOD CHARACTERISTICS

BENEFITS

Effective (pregnancy rate of 3-10 per 100 women during first year of use)

Can be provided by nonmedical staff

Convenient and easy to use

Immediate return of fertility when discontinued

Can stop use easily

LIMITATIONS

User dependent: require continued motivation and daily use

Must be taken **at the same time** every day

Forgetfulness increases failure

Resupply must be available



PROGESTIN-ONLY CONTRACEPTIVES



CONDITIONS REQUIRING PRECAUTIONS

CONDITION	PRECAUTION
Pregnancy (known or suspected)	<p>POCs should not be used during pregnancy and should be stopped if intrauterine pregnancy is confirmed and will be carried to term. (WHO class 4)</p> <p>If the possibility of pregnancy cannot be excluded by history, examination or pregnancy testing, use of a POC should be delayed until the next menstrual period. In the interim, help the client choose another method (e.g., condoms and spermicide).</p>
Unexplained vaginal bleeding (only if serious problem is suspected)	<p>Women with unexplained vaginal bleeding, which could be due to pregnancy or caused by a serious problem, should not use POPs unless other more appropriate methods are not available or acceptable. (WHO class 3)</p> <p>Until the cause of the unexplained bleeding is determined and any serious problems treated, the client should not use DMPA or implants. (WHO class 4)</p>



RATIONALE

- ▶ Current data show that the low dose of progestin in injectables, implants, POPs and progestin-releasing IUDs does **not** cause any significantly increased risk of birth defects, spontaneous abortion or stillbirths. Although the amount of progestin is small, it is unwise for a woman to take **any drugs** in early pregnancy unless absolutely necessary.

- ▶ Because POCs can cause intermenstrual spotting or bleeding, an underlying problem (i.e., normal or ectopic pregnancy, cervicitis, other pelvic pathology and, rarely, cancer of the genital tract) may be masked. **None** of the above conditions, however, are worsened—and some are prevented—by use of a POC.

It is only because DMPA¹ and implants cannot be easily stopped, that WHO recommends not starting them if a serious problem is suspected.

¹ At present, WHO has not assessed eligibility criteria for NET-EN; therefore these classifications apply only to DMPA.

PROGESTIN-ONLY CONTRACEPTIVES

CONDITIONS REQUIRING PRECAUTIONS



CONDITION

PRECAUTION

Jaundice (symptomatic, viral hepatitis)

POCs should be used only if more appropriate methods are **not** available or acceptable. (WHO class 3)

Progestin-only pills (POPs) generally may be used because they can be readily stopped if there is a problem. (WHO class 2)

Breast cancer (current or past with no current evidence of disease)

For women with current or past breast cancer, POCs are **not** recommended unless other more appropriate methods are not available or acceptable. (WHO class 3)

Breast lumps

POCs can be used safely by women with benign breast disease or a family history of breast cancer. (WHO class 1)



RATIONALE

- ▶ There is **no** evidence that progestins cause liver disease (e.g., benign or malignant tumors or cirrhosis), viral hepatitis or gall bladder problems (see **Conditions for Which There Are No Restrictions** in this chapter). Although progestins may be poorly metabolized in women with impaired liver function, POCs (especially POCs) are not likely to clinically worsen the liver disease and are safer than pregnancy in women with active hepatitis.

Note: For women who are **asymptomatic** (fully recovered or carriers), there is **no** restriction on the use of POCs. (WHO class 1)

- ▶ There is no evidence that low-dose progestins cause breast cancer; however, breast cancer is a hormonally-sensitive tumor.

- ▶ **Only** clients with suspicious breast lumps (e.g., firm, nontender or fixed and which do not change during the menstrual cycle) need to be evaluated before using a POC.

PROGESTIN-ONLY CONTRACEPTIVES



CONDITIONS REQUIRING PRECAUTIONS

CONDITION	PRECAUTION
Taking drugs for epilepsy (seizure disorder) or tuberculosis (rifampin)	Clients taking drugs for these disorders should be counseled about the potential reduction in the effectiveness of POCs. (WHO class 3) Injectables generally may be used because they deliver a higher dose of progestin. (WHO class 2)
Women who cannot tolerate any changes in their menstrual bleeding pattern	Women who express concern regarding changes in their menstrual pattern (irregular or more frequent bleeding) may want to consider trial use of POPs (3 months) before using another POC or they may choose another method.
Unable to remember to take pills every day at the same time (for POPs only).	Counsel about the importance of taking one pill, at the same time, each day. If the POP is taken more than 3 hours late , its protective benefits are greatly decreased and a backup method of contraception must be used for the next 48 hours.

PROGESTIN-ONLY CONTRACEPTIVES

CONDITIONS REQUIRING MORE FREQUENT FOLLOWUP CARE

CONDITION	ACTION
Diabetes mellitus	Diabetics who choose a POC should be followed to be sure the disease is controlled. (WHO class 2)
High blood pressure (mild hypertension)	Women with blood pressure (BP) \leq 180/105 (mild hypertension) can use POCs but should be followed to be sure their hypertension is controlled. (WHO class 1)
High blood pressure (hypertension, moderate to severe with or without vascular problems)	Even in women with BP $>$ 180/105 (moderate or severe hypertension), the benefits of using a POC generally outweigh the risks (i.e., pregnancy). (WHO class 2) POPs may be used because they can be readily stopped. (WHO class 1)



RATIONALE

- ▶ Although POCs (POPs and implants) slightly affect carbohydrate metabolism, they do not pose an additional risk of thrombosis (estrogen effect) in noninsulin or insulin dependent diabetics, **even those with vascular problems**. (Their use can, however, require more medication or insulin to maintain control of diabetes.)

DMPA is **not** recommended for use in diabetics with **vascular problems** because of a **theoretical** concern about their effect on lipid metabolism and therefore, the progression of the vascular disease.³ (WHO class 3)

- ▶ There have been no statistically significant trends of increased blood pressure in POC users.

- ▶ POCs may lower high-density lipoproteins (HDLs) and there is only a **theoretical concern** in women with underlying vascular problems (e.g., neuropathy or retinopathy).

³ At present, WHO has not assessed eligibility criteria for NET-EN; therefore these classifications apply only to DMPA.

PROGESTIN-ONLY CONTRACEPTIVES



CONDITIONS REQUIRING MORE FREQUENT FOLLOWUP CARE

CONDITION	ACTION
Headaches (severe, recurrent vascular or migraine)	Women with a history of severe vascular or migraine headaches should be followed to be sure their headaches do not worsen with use of POCs. (WHO class 2) POPs may be used because they can be readily stopped. (WHO class 1)
Depression	Women with a history of depression should be followed when using POCs. Help the client choose another method if depression worsens or recurs to a serious degree.

PROGESTIN-ONLY CONTRACEPTIVES



CONDITIONS FOR WHICH THERE ARE NO RESTRICTIONS

CONDITION

Gall bladder disease (symptomatic or asymptomatic)

Pre-eclampsia (history)

Smoking (any age, any amount)

Surgery (with or without prolonged bed rest)

Thromboembolic disorders (e.g., blood clots in the legs, lungs or eyes), superficial thrombophlebitis and varicose veins

Valvular heart disease (symptomatic or asymptomatic)



RATIONALE

- ▶ POCs have no effect on the development of gall bladder disease or the clinical course of women with symptoms. (WHO class 1)
- ▶ In the absence of any pre-existing vascular disease, POCs may be used. (WHO class 1)
- ▶ Because progestins do **not** increase the risk of cardiovascular disease, women (of any age) who are smokers and have no other risk factors can use POCs. (WHO class 1)
- ▶ Because POCs do not increase the risk of blood clotting problems, there is no restriction for use. (WHO class 1)
- ▶ Most experts now believe it is estrogens, not progestins, that cause blood clotting; therefore, women with current or past thromboembolic disorders can safely use all types of POCs. (WHO class 1)
- ▶ Because POCs do not increase the risk of blood clotting problems, including embolism, even women with complications such as pulmonary hypertension, irregular heart rhythm (fibrillation) or history of subacute bacterial endocarditis (SBE) can use POCs. (WHO class 1)

PROGESTIN-ONLY CONTRACEPTIVES



MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT

ASSESSMENT

Amenorrhea
(absence of vaginal bleeding or spotting)

If taking POPs, ask how she has been taking her pills. Has she missed any pills in the cycle? Has she stopped taking the pills?

Check for pregnancy (intrauterine or ectopic) by history, checking symptoms and performing a pelvic examination (speculum and bimanual) or a pregnancy test, if indicated and available.



MANAGEMENT

- ▶ Amenorrhea, though less common in implant users (about 7%), occurs in up to 50% of injectable users by the end of the first year of use. It is rare in POP users. Amenorrhea for 6 weeks or more, **especially** after a pattern of regular menses, may signal pregnancy and should be evaluated regardless of the contraceptive method used.⁴

If **not pregnant**, no treatment is required except counseling and reassurance. Explain that blood does not build up inside the uterus with amenorrhea. The continued action of small amounts of a progestin shrinks the endometrium, leading to decreased menstrual bleeding and, in some women, no bleeding at all. Finally, advise client to return to clinic if amenorrhea continues to be a concern.

If **intrauterine pregnancy** is confirmed, counsel client regarding options. If pregnancy will be continued, stop use of the POC and assure her that the small dose of progestin in the POC will have no harmful effect on the fetus.

If **miscarriage** (spontaneous abortion) occurs, it is not necessary to stop POCs.

If **ectopic pregnancy** is suspected, refer at once for complete evaluation.

Do **not** give hormonal treatment (COCs) to induce withdrawal bleeding. It is **not** necessary and usually is not successful unless 2 or 3 cycles of COCs are given.

⁴ If pregnancy cannot be confirmed by pelvic exam (and pregnancy testing is not available), either refer the client for a pregnancy test or ask her to return in 2 to 4 weeks for repeat examination.

PROGESTIN-ONLY CONTRACEPTIVES

MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT

ASSESSMENT

Bleeding/Spotting (prolonged spotting or moderate bleeding)

Prolonged spotting:
> 8 days

Moderate bleeding:
same as normal menses (50-80 ml per menses)

Perform pelvic examination (speculum and bimanual) to be sure bleeding is not due to other causes (e.g. genital tract lesions such as vaginitis, cervicitis, cervical polyps or uterine fibroids).

If pregnancy (intrauterine or ectopic) or incomplete abortion is suspected, examine and perform pregnancy test if indicated and available.





MANAGEMENT

- ▶ If an abnormality of the genital tract is found, treat the problem and counsel the client or refer for further evaluation. Do not stop use of POC. Advise client to return for additional counseling after management of problem(s).

See **Amenorrhea** for management of pregnancy-related conditions.

- ▶ Reassure client that light, intermenstrual bleeding or spotting occurs in a large percentage of women using POCs (15-20% of POP users during the first few cycles of use and 50-80% of injectables and implants users). It is not serious and usually does not require treatment. Most women can expect the altered bleeding pattern (or amenorrhea with DMPA) to become more regular after 6 to 12 months.

If the client is not satisfied after counseling and reassurance, but wants to continue using POCs, two treatment options are recommended:

- a cycle of COCs (30-35 μ g EE), or
- ibuprofen (up to 800 mg 3 times daily for 5 days) or other NSAID.

Be sure to tell the client to expect bleeding during the week after completing the COCs (21 pill pack) or during the last 7 pills if 28 pill pack.

PROGESTIN-ONLY CONTRACEPTIVES



MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT

ASSESSMENT

Bleeding
(prolonged or heavy bleeding)

Prolonged bleeding:
> 8 days

Heavy bleeding:
> normal menses

Perform pelvic examination (speculum and bimanual) to be sure bleeding is not due to other causes (e.g., genital tract lesions such as vaginitis, cervicitis, cervical polyps or uterine fibroids).

If pregnancy (intrauterine or ectopic) or incomplete abortion is suspected, examine and perform pregnancy test if indicated and available.

If no genital tract abnormality noted, check for significant anemia (pale conjunctiva or nail beds, low hematocrit or hemoglobin).

No other cause found, but client has prolonged bleeding or amount is more than normal menses.

No other cause found, but bleeding is:

- not reduced in 3 to 5 days, or
- much heavier (1-2 pads per hour)



MANAGEMENT

- ▶ If an abnormality of the genital tract is found, treat the problem and counsel the client or refer for further evaluation. Do **not** stop use of POC. Advise client to return for additional counseling after management of problem(s).

See **Amenorrhea** for management of pregnancy-related conditions.

For hematocrit < 27 or hemoglobin < 9 g/dl, give iron (FeSO_4 , 1 tablet daily for 1 to 3 months) and nutritional counseling. If anemia persists or client requests, stop use of POC and help client choose another method.

Note: Despite increased frequency of bleeding in some women, monthly blood loss in POC users usually is less than with normal menses in noncontracepting women. In some users, hemoglobin levels increase over time. (More women have increases than decreases in hemoglobin.)

- ▶ If the client is not satisfied after counseling and reassurance, but wants to continue using POCs, two treatment options are recommended:
 - a cycle of COCs (30-35 μg EE), or
 - ibuprofen (up to 800 mg 3 times daily for 5 days) or other NSAID.

Be sure to tell the client to expect bleeding during the week after completing the COCs (21 pill pack) or during the last 7 pills if 28 pill pack.

- ▶ If client wants to continue using a POC give:
 - 2 COC pills per day for the remainder of the cycle (at least 3 to 7 days) followed by 1 cycle (1 pill per day) of COCs.
 - Alternatively (if available), switch to 50 μg EE-containing COC or 50 μg EE or 1.25 mg conjugated estrogen (Premarin) for 14-21 days.

Note: Check to be sure bleeding has decreased within 3 days.

PROGESTIN-ONLY CONTRACEPTIVES



MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT	ASSESSMENT
Implants: Capsule expulsion	Check for partial or complete expulsion of capsule(s).
Implants: Infection at insertion site	Check area of insertion for infection (pain, heat and redness), pus or abscess.
Implants: "Missing" capsules	Usually due to capsules being inserted too deeply (subcutaneously) or, rarely, to less than 6 inserted or capsule expelled and forgotten by client.



MANAGEMENT

- ▶ Remove partially expelled capsule(s). Check to determine if remaining capsules are in place.
 - If area of insertion is not infected (no pain, heat and redness), replace capsule(s).
 - If area of insertion is infected:
 - remove remaining capsules and insert a new set in the other arm, or
 - help the client choose another method.
- ▶ If infection (not abscess), cleanse area (soap and water or antiseptic) and give appropriate oral antibiotic for 7 days.

Do **not** remove capsules. Ask client to return after 1 week. If no improvement, remove capsules and insert a new set in the other arm or help client choose another method.

If abscess:

- Prep with antiseptic
 - Incise and drain
 - Remove capsules
 - Perform wound care
 - Give oral antibiotics for 7 days
- ▶ Can almost always be detected by x-ray or sonography. If regular sonography used, focal length needs to be increased to about 15 cm to accurately focus. Capsules best seen in cross-section (transverse) as a shadow (echo-free area) under each capsule. If 6 capsules are present, do nothing until removal. At that time, special studies/tests may need to be repeated to localize capsules, and an expert in implants removal consulted.

PROGESTIN-ONLY CONTRACEPTIVES



MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT	ASSESSMENT
Lower abdominal/pelvic pain (with or without symptoms of pregnancy)	<p>Take history, perform abdominal and pelvic (speculum and bimanual) examinations.</p> <p>Check vital signs:</p> <ul style="list-style-type: none">• Pulse• Blood pressure• Temperature <p>Examine to rule out:</p> <ul style="list-style-type: none">• Ectopic pregnancy• PID• Appendicitis• Ovarian cysts <p>Do lab tests for Hb/Hct and pregnancy test if indicated and available.</p>
Weight gain or loss (change in appetite)	<p>Compare weight prior to POC use (if known) and current weight.</p> <p>Check for pregnancy.</p> <p>Check that the client is eating and exercising properly.</p>



MANAGEMENT

- ▶ **Refer immediately** if the client has any of the following:
 - Moderate to severe lower abdominal tenderness (rebound)
 - Elevated resting pulse (> 100 BPM)
 - Decreased blood pressure ($< 90/60$)
 - Elevated temperature ($> 38.3^{\circ}\text{C}$)
 - Suspected/confirmed pregnancy and acute anemia (e.g., < 9 g/dl Hb or < 27 Hct)

In some women using POCs, ovarian follicles develop and their shrinkage (atresia) is sometimes delayed. In these instances, the follicle may continue to grow beyond the size it would attain in a normal cycle. These enlarged follicles cannot be distinguished from ovarian cysts. They usually occur during the first 6 months of use, generally are asymptomatic and often are palpable.

In most cases the enlarged follicles disappear spontaneously and should not require treatment or stopping use of POC. Rarely, they may twist or rupture, sometimes causing abdominal pain, and surgical intervention may be required.

- ▶ Counsel client that fluctuations of 1-2 kg (2-4 lbs) may occur, especially with use of injectables.

Review diet if weight change is excessive (± 2 kg or more). If weight gain (or loss) is unacceptable, even after counseling, stop use and help client choose another method.

PROGESTIN-ONLY CONTRACEPTIVES



MANAGEMENT OF OTHER PROBLEMS

PROBLEM	ASSESSMENT
Acne	Ask how and how often she cleans her face. Ask if she is currently under great stress.
Breast fullness or tenderness (mastalgia)	Check for pregnancy. Check breasts for: <ul style="list-style-type: none">• Lumps or cysts• Discharge or galactorrhea (leakage of milk-like fluid), if not breastfeeding If she is breastfeeding and breast(s) is tender, examine for breast infection.
Chest pain (especially if it occurs with exercise, uncommon)	Assess for possible cardiovascular disease (CVD). Check: <ul style="list-style-type: none">• Blood pressure• Heart for irregular beats (arrhythmias)
Depression (mood changes or loss of libido)	Discuss changes in mood.
Excess hair growth (hirsutism) or hair loss	Review history, before and after beginning use of POC.



MANAGEMENT

- ▶ Acne can worsen with POC use. Recommend cleaning face twice a day with an astringent, like lemon, and avoid using heavy facial creams. Counsel as appropriate. If condition is not tolerable, help client choose another (nonhormonal) method.

- ▶ If **pregnant**, manage as above (see Amenorrhea).

If **not pregnant**, usually improves within 3 months of starting POCs.

Do **not** stop POC unless client requests it after counseling.

- ▶ If physical examination shows lump or discharge suspicious for cancer (e.g., firm, nontender or fixed and which do not change during the menstrual cycle), refer to appropriate source for diagnosis. If no abnormality, reassure.

- ▶ If breast(s) is not infected, recommend appropriate clothing for additional support.

If breast infection, use warm compresses, advise to continue breastfeeding and give antibiotics as appropriate.

- ▶ If strong evidence for CVD, refer for evaluation. Low-dose progestins do not increase the risk of CVD; therefore, stopping the POC is not necessary unless client requests it.

- ▶ Depression may be related to the progestin in POCs; therefore, if client thinks her depression has worsened while using a PCC, help her choose another method. If the POC has not caused depression to worsen, it can be continued.

- ▶ Pre-existing conditions such as excess facial or body hair might be worsened. Changes usually are not excessive, may improve over time, and **do not** require stopping POCs unless client requests it after counseling.

PROGESTIN-ONLY CONTRACEPTIVES



MANAGEMENT OF OTHER PROBLEMS

PROBLEM	ASSESSMENT
Headache (especially with blurred vision)	Ask if there has been a change in pattern or severity of headaches since beginning the POC. Perform physical examination, measure blood pressure. Examine as appropriate: <ul style="list-style-type: none">• Eyes (fundoscopic)• Neurologic system
High blood pressure	Check blood pressure. Confirm that BP is truly elevated: <ul style="list-style-type: none">• > 180/105 on 1 visit, or• > 160/90 on 2 more visits 1 week apart.
Jaundice	Acute jaundice occurring after starting POC use begins is not method-related. Check for: <ul style="list-style-type: none">• Active liver disease (hepatitis)• Gall bladder disease• Benign or malignant liver tumors
Nausea/Dizziness/ Nervousness	Check for pregnancy by checking symptoms, performing a pelvic examination (speculum and bimanual) and pregnancy test (if indicated and available).



MANAGEMENT

- ▶ If headaches are mild, treat with analgesics and reassure. Re-evaluate after 1 month if mild headaches persist.

If headaches have changed since starting POC (i.e., numbness, tingling or loss of speech; visual changes or blurred vision) stop POC and help client choose another (nonhormonal) method.

- ▶ Counsel client that a mild increase in blood pressure ($< 160/90$) does not require stopping the POC unless she requests it. If blood pressure is truly elevated, help the client choose another method. In addition, tell her that high BP usually goes away within 1 to 3 months. Take BP monthly to be sure it returns to normal. If after 3 months it has not returned to normal, refer for further evaluation.

If BP $> 180/105$ or she has vascular problems (neuropathy or retinopathy), the POC should be stopped. Help client choose another method.

- ▶ The progestins in POCs (e.g., levonorgestrel and norethindrone) have little effect on liver function and do not increase the risk of gall bladder disease or liver tumors. If the client has jaundice due to **viral hepatitis** and does **not** want to stop using the POC, it is unlikely that the POC will worsen liver disease and its use is safer than pregnancy.

- ▶ If pregnant, manage as above (see **Amenorrhea**).

If **not** pregnant, reassure that this is not a serious problem(s) and usually disappears with time.

PROGESTIN-ONLY CONTRACEPTIVES



MANAGEMENT OF OTHER PROBLEMS

PROBLEM	ASSESSMENT
Thromboembolic disorder (including blood clots in legs, lungs or eyes)	Assess for active blood clotting problem.
Injectables: Presents early for next injection	Is she more than 1 month early (DMPA) or 2 weeks early (NET-EN)?
Injectables: Presents late for next injection	Is she more than 1 month late (DMPA) or 2 weeks late (NET-EN)?
POPs: Late or missed pills	Has the client taken a pill less than 3 hours late ? Has the client taken a pill more than 3 hours late ? Has the client missed 1 or more pills ?
Starting POPs after the second day of menstrual cycle	Check for pregnancy by history, checking symptoms and performing a pelvic examination (speculum and bimanual) and a pregnancy test (if indicated and available).



MANAGEMENT

- ▶ Low-dose progestins do **not** increase the risk of blood clotting problems; therefore, stop only at client's request. If there is strong evidence of blood clotting disorder, refer for further evaluation.
- ▶ Giving injections early is not ideal but can be done when necessary. Reschedule the next injection for 3 months (DMPA) or 2 months (NET-EN) from current injection.
- ▶ It is acceptable to give DMPA up to 4 weeks (1 month) late and NET-EN up to 2 weeks late. If the client is **more than 1 month late (DMPA) or 2 weeks (NET-EN)**, check for pregnancy by pelvic examination or, if available, by pregnancy tes.. If examination is equivocal (and pregnancy test not available), ask the client to use a nonhormonal method for the next month and return for a repeat pelvic examination. If the examination is still negative, the client may receive her injection that day.
- ▶ Have client take the late pill as soon as possible, then continue on normal pill schedule. Backup contraception is **not** needed.
- ▶ Have client take the late pill as soon as possible, then continue on normal pill schedule. Remind her to use a backup method (e.g., condom and spermicide) if she has intercourse during the next 48 hours.
- ▶ The more pills missed, the more likely it is that pregnancy will occur. Have client take the next pill as soon as possible, then continue on normal pill schedule. Remind her to use a backup method if she has sex during the next 48 hours. If unprotected intercourse occurred, consider recommending emergency contraception (see **Emergency Contraception** chapter).
- ▶ A backup method of contraception (e.g., condom and spermicide) should be used if the client has intercourse during the next 48 hours. Although there is evidence that the effect of progestins on cervical mucus occurs within a few hours after taking the pill, there is a small chance of conception.

PROGESTIN-ONLY CONTRACEPTIVES



MANAGEMENT OF OTHER PROBLEMS

PROBLEM

ASSESSMENT

Stopping POPs

Switching from POPs to
COCs

Switching to POPs from
COCs

MANAGEMENT

- ▶ POPs can be stopped at any time during the menstrual cycle.
- ▶ Start COCs on the first day of menses to be sure ovulation does not occur.
- ▶ Start POPs on the day after taking the 21st pill (last active pill in 28 pill pack).

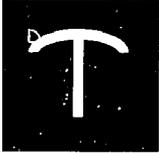


INTRAUTERINE DEVICES (IUDs)

COUNSELING OUTLINE

METHOD

APPROPRIATE FOR



Small flexible device inserted into the uterine cavity. Newer types are made of plastic and are medicated (slowly release small amounts of copper or progestin).

Women of any reproductive age or parity who want highly effective, long-term contraception that does not require daily action

Types

Women who have used an IUD successfully before

Copper-releasing: Copper T 380A, Nova '1' and Multiload 375

Breastfeeding mothers who need contraception

Progestin-releasing: Progestasert® and LevoNova®

Postabortion clients who do not have evidence of infection (may be inserted immediately)

Inert: Lippes Loop®

Women who prefer not to use hormonal methods or should not use them (e.g., heavy smokers over 35 years of age)

Mechanisms of Action

- Interfere with ability of sperm to pass through uterine cavity (copper-releasing IUDs)
- Interfere with the reproductive process **before** ova reach uterine cavity
- Thicken cervical mucus (progestin-releasing IUDs)
- Change endometrial lining (progestin-releasing IUDs)

Women at low risk for GTIs and other STDs (e.g., HBV, HIV/AIDS)

METHOD CHARACTERISTICS

BENEFITS

Highly effective (pregnancy rate of 0.5-1.0 per 100 women during first year of use for Copper T 380A)¹

Effective immediately

No supplies needed by client

Long-term protection (up to 10 years with Copper T 380A)

Immediate return to fertility on removal

Few method-related side effects

Do not interfere with intercourse

Do not affect breastfeeding

Only 1 followup visit needed unless there are problems

Inexpensive (copper-releasing)

Health Benefits

Decrease menstrual cramps (progestin-releasing)

LIMITATIONS

Pelvic examination required and GTI screening recommended prior to insertion

May increase risk of PID and subsequent infertility in women at risk for GTIs and other STDs (e.g., HBV, HIV/AIDS)

Require minor procedure, performed by trained provider, for insertion and removal

Need to check for strings after every menstrual period

Woman cannot stop use whenever she wants (provider dependent)

Increased menstrual bleeding and cramping during first few months

(For specific effects of progestin-releasing IUDs, see **Progestin-Only Contraceptives** chapter.)



¹ First year effectiveness: LevoNova 0.2-0.5; Lippes Loop (size D only) 1.0-2.0; Progestasert 2-6.

INTRAUTERINE DEVICES

CONDITIONS REQUIRING PRECAUTIONS

CONDITION

PRECAUTION

Pregnancy (known or suspected)

IUDs should **not** be used during pregnancy and should be removed if intrauterine pregnancy is confirmed and will be carried to term. (WHO class 4)

Unexplained vaginal bleeding (only if a serious problem is suspected)

Women with unexplained vaginal bleeding, which could be due to pregnancy or caused by a serious problem, should not use an IUD. (WHO class 4)

PID (current, recent or recurrent within the past 3 months)

Women with PID (current, recent or recurrent) should not use an IUD. (WHO class 4)

Women with a past history of PID and no current risk for STDs can safely use an IUD. (WHO class 1)

Acute purulent (pus-like) discharge from the cervical canal (gonorrhoeal or chlamydial cervicitis)

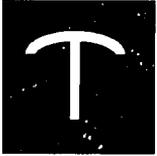
Women with acute purulent discharge should not use an IUD. (WHO class 4)

Distorted uterine cavity (large fibroids or abnormal uterine anatomy such as double uterus)

Women with a distorted uterine cavity should not use an IUD. (WHO class 4)

Genital tract cancer (cervical, endometrial or ovarian)

Women with genital tract cancer should not use an IUD prior to treatment. (WHO class 4)

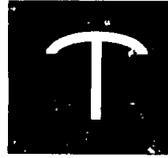


RATIONALE

- ▶ If a woman is pregnant at the time an IUD is inserted, she is at increased risk for spontaneous abortion (miscarriage) and premature birth as well as serious uterine infection (endometritis).

If the possibility of pregnancy **cannot** be excluded by history, examination or pregnancy testing, insertion of an IUD should be delayed until the next menstrual period. In the interim, help the client choose another method (e.g., condoms and spermicide).

- ▶ Because IUDs can cause intermenstrual spotting or bleeding, an underlying problem (i.e., normal or ectopic pregnancy, cervicitis, other pelvic pathology and, rarely, cancer of the genital tract) may be masked. The cause of any persistent, unexplained vaginal bleeding or spotting (e.g., between menses or after intercourse) should be determined and treated before an IUD is inserted.
- ▶ A history of recent or recurrent PID **not** associated with pregnancy or abortion strongly suggests the woman is at risk for GTIs and other STDs (e.g., HBV, HIV/AIDS).
- ▶ Sexually transmitted GTIs, with the exception of trichomoniasis, can increase a woman's risk for PID and subsequent infertility.
- ▶ Distortions of the uterine cavity (any congenital or acquired uterine abnormality) can cause difficulties in insertion, increase the possibility of IUD expulsion and decrease effectiveness.
- ▶ Although genital tract cancers, especially ovarian and endometrial, are very uncommon in women of reproductive age, use of an IUD prior to treatment may increase the risk of PID and bleeding which could make the condition worse.



INTRAUTERINE DEVICES

CONDITIONS REQUIRING PRECAUTIONS

CONDITION

PRECAUTION

A woman who has **more than one sexual partner** or whose partner has more than one sexual partner

Use of an IUD is not recommended unless other more appropriate methods are not available or acceptable. (WHO class 3)

If she elects to use an IUD, she (or her partner) should use a barrier method as well.

PROBLEMS REQUIRING ACTION

PROBLEM

ACTION

Cervical stenosis

Counsel the client about this problem. (If indicated, refer client to a center where cervical dilation with local anesthesia is available if client chooses to have an IUD.) (WHO class 2)

Marked anemia (hemoglobin <9 grams/d or hematocrit <27)

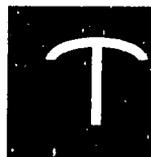
Choose IUD only if it is the best overall method for the client. If, after counseling, a copper-releasing IUD is still client's choice, she will require treatment for anemia. (WHO class 2)

Painful menstrual periods

Counsel client to be certain she understands potential problems with having an IUD. IUDs (except progestin-releasing) should not be the first choice. (WHO class 2)

RATIONALE

- ▶ Women at risk of GTIs and other STDs (e.g., HBV, HIV/AIDS) are more likely to develop PID if they have an IUD.



RATIONALE

- ▶ Severe narrowing of the cervical canal (entrance into the uterus) may make IUD insertion and removal more difficult and painful.

If client requests an IUD, local anesthesia (paracervical block) may be required and only an **experienced** and **skilled provider** should attempt insertion.

- ▶ The slightly increased menstrual blood loss from the copper-releasing IUD usually will not worsen anemia. (Conditions such as thalassemia and sickle cell disease, and treatment with anticoagulants may increase blood loss during the first few months making anemia worse.)

Note: Progestin-releasing IUDs can be used as they reduce blood loss.²

- ▶ In the presence of an IUD, menstrual cramping (dysmenorrhea) may be increased due to the release of prostaglandin.

Note: Progestin-releasing IUDs can be used as they reduce menstrual cramping.

² Blood loss is increased by 50% with inert IUDs such as the Lippes Loop (Size D)

INTRAUTERINE DEVICES

PROBLEMS REQUIRING ACTION

PROBLEM

ACTION

Previous ectopic pregnancy

If, after counseling, the IUD is still the client's chosen method, she should be taught the warning signs for ectopic pregnancy. (WHO class 2)

Simple vaginal infection
(candidiasis or bacterial
vaginosis) without cervicitis

If a simple vaginal infection is present, treat and recheck before IUD is inserted. (WHO class 2)

Symptomatic valvular heart
disease

Women with **symptomatic** valvular disease should receive antibiotic prophylaxis at the time of insertion.³ (WHO class 2)

³ Appropriate prophylactic antibiotics include:

- Amoxicillin 3.0 g orally 1 hour before procedure, then 1.5 g 6 hours after the initial dose
- Erythromycin stearate 1.0 g orally 2 hours before the procedure, then 500 mg 6 hours after the initial dose (for persons allergic to amoxicillins)

Note: Tetracyclines, including doxycycline, are **not** effective.

RATIONALE

- ▶ IUDs do not prevent **all** ectopic pregnancies. Women who have had prior ectopic pregnancies are at increased risk for another and should use a very effective contraceptive method, preferably one that blocks ovulation (e.g., COCs or injectables). Furthermore, a history of ectopic pregnancy may suggest client is at high risk for GTIs and other STDs (e.g., HBV, HIV/AIDS).
- ▶ During IUD insertion, the IUD can carry microorganisms from the vagina into the uterine cavity. Women with an untreated vaginal infection can be more likely to develop pelvic infection during the first month after IUD insertion. (Use of recommended infection prevention practices can minimize this risk. See **Infection Prevention** chapter.)
- ▶ During insertion, the IUD can carry microorganisms from the vagina into the uterine cavity. Women with **symptomatic** rheumatic heart disease should be treated with antibiotics before insertion to prevent infection.

Neither IUD insertion nor removal, however, cause sufficient bacteremia to promote endocarditis among women with **asymptomatic** congenital or rheumatic valvular disease.



INTRAUTERINE DEVICES

MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT

ASSESSMENT

Amenorrhea

(absence of vaginal bleeding or spotting)⁴

Ask client:

- when she had her last menstrual period (LMP),
- when she last felt IUD strings, and
- if she has symptoms of pregnancy.

Check for pregnancy (intrauterine or ectopic) by history, checking symptoms, and performing a pelvic examination (speculum and bimanual) or a pregnancy test, if indicated and available.

Perform pelvic (speculum and bimanual) examination to check for strings.

Irregular bleeding (with or without symptoms of pregnancy)

Perform abdominal and pelvic (speculum and bimanual) examinations to check for infection, pelvic pain or tenderness, palpable adnexal mass or enlarged uterus (consistent with pregnancy).

⁴ Oligomenorrhea (menstrual interval > 35 days) and secondary amenorrhea (menstrual interval greater than 3 months) can occur with progestin-releasing IUDs (Progestasert and LevoNova). Therefore, be sure to ask the client what type of IUD she has.

MANAGEMENT

- ▶ If client is over 45, explain that amenorrhea could be related to menopause.

If client has progestin-releasing IUD, explain that amenorrhea can occur and blood does not build up inside the uterus.

If **not pregnant**, no treatment is required except counseling and reassurance. Explain that blood does not build up inside the uterus. Advise the client to return to the clinic if amenorrhea remains a concern.

If **pregnancy less than 13 weeks** (by LMP or examination) and strings visible, explain that IUD should be removed to minimize risk of pelvic infection. If client agrees, remove IUD. Advise her to return to clinic if she has excessive bleeding, cramping, foul discharge or fever (possible threatened or incomplete abortion).

Do not attempt to remove IUD if:

- strings are not visible, or
- pregnancy greater than 13 weeks (by LMP or examination).

If **client is pregnant** and wishes to continue pregnancy but does not want IUD removed, advise her of increased risk of miscarriage (spontaneous abortion) and infection and that pregnancy should be followed closely.

- ▶ If **ectopic pregnancy** is suspected refer for complete evaluation. Ectopic pregnancy must be suspected in clients with irregular bleeding or abdominal pain.

If **infection** suspected, see **Pelvic Infection** in this chapter.



INTRAUTERINE DEVICES

MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT

ASSESSMENT

Bleeding
(prolonged or heavy bleeding)

Prolonged bleeding:
> 8 days

Heavy bleeding:
> normal menses

Perform pelvic examination (speculum and bimanual) to be sure client does not have:

- Intrauterine or ectopic pregnancy
- Incomplete abortion
- Vaginal, cervical or pelvic infection

Ask client how much she has bled.

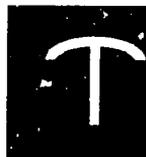
- Check for signs of marked anemia (pale conjunctiva or nail beds, low hemoglobin/hematocrit [< 9 g/dl Hb or < 27 Hct]).



MANAGEMENT

► Client has had IUD less than 3 months:

- If examination is normal, reassure and give iron tablets (1 tablet daily for 1 to 3 months). Ask client to return in 3 months for another check. Use locally approved drugs, such as ibuprofen (800 mg 3 times daily for 1 week), during bleeding episode, **if available**, to decrease bleeding.
- If examination is normal and bleeding interval short (less than 3 weeks), suspect anovulation; if longer intervals (more than 6 weeks) suspect delayed ovulation or if hot flashes, suspect menopause (age over 45) or other gynecologic endocrine problem. Refer to specialist for further evaluation.
- If bimanual examination shows enlarged or irregular uterus due to fibroids, tell client of the problem and refer for evaluation. Remove the IUD if bleeding worsens and client is anemic or requests removal, and help client choose another method.



Client has had IUD more than 3 months:

Recommend removal if marked anemia present and help client choose another method. If IUD is inert (Lippes Loop) and IUD is still client's choice, remove current IUD and insert a copper- or progestin-releasing IUD; give 3 more months of iron tablets and re-examine in 3 months. If client already has copper IUD (and progestin-releasing IUD not available), remove IUD, and help client choose another method.

INTRAUTERINE DEVICES

MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT

ASSESSMENT

Cramping

Perform abdominal and pelvic (speculum and bimanual) examinations to check for PID and other causes of cramping, such as partial expulsion of the IUD, cervical or uterine perforation or ectopic pregnancy.

Partner complains about strings

Check to be sure that IUD is in place (i.e., not partially expelled).



MANAGEMENT

- ▶ **Client has had IUD less than 3 months:**
 - If cause found, treat accordingly. Remove IUD if indicated and help client choose another method.
 - If no cause found and cramping **not** severe, reassure client and provide analgesic, such as ibuprofen.
 - If no cause found but cramping severe, remove the IUD. If there is **no** evidence of infection, replace with a new IUD (progestin-releasing, if available) or help client choose another method.
- ▶ **Client has had IUD more than 3 months:**
 - If cramping is new and cause found (such as PID), remove the IUD and treat accordingly.
 - If no cause found and cramping **not** severe, reassure client and provide analgesic, such as ibuprofen.
 - If no cause found but cramping severe, remove the IUD. If there is **no** evidence of infection, replace with a new IUD (progestin-releasing, if available) or help client choose another method.
- ▶ Counsel client that one option is to cut strings even with cervical os and inform client that she will no longer be able to feel strings. Record in chart that strings have been cut even with cervix for future removal.



INTRAUTERINE DEVICES

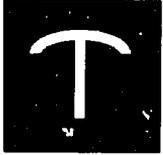
MANAGEMENT OF PROBLEMS

PROBLEM

ASSESSMENT

Missing strings

Ask the client whether she knows if the IUD has come out (been expelled).



If client does not know if IUD was expelled, ask her:

- When she had her LMP
- When she last felt the strings
- If she has any symptoms of pregnancy
- If she used a backup method (e.g., condom) from the time she noticed the missing strings

Rule out pregnancy by symptoms, physical examination or pregnancy test, if indicated and available.

If she returns with delayed (> 4 weeks) menses, check for pregnancy.

If she returns while menstruating and strings **still** are **not visible**, rule out lost IUD or perforation.

MANAGEMENT

- ▶ If client knows the IUD fell out, check for pregnancy. If not pregnant, insert new IUD, or provide backup method and insert new IUD during her next period.

If examination reveals possible ectopic pregnancy, refer to appropriate facility for complete evaluation.

If examination reveals pregnancy, see management under **Amenorrhea** above.

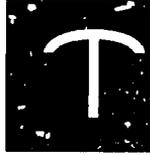
If strings are **not** found by carefully probing the cervical canal, client should use a nonhormonal contraceptive method and return with menses or in 4 weeks if her period does not start. Strings may come down with menses. If strings are seen at that time, reassure client and help her feel them.

- ▶ If client is **not** pregnant and no strings are seen on vaginal examination, it may mean that the IUD has fallen out, perforated the uterus (i.e., is outside the uterine cavity) or the strings are up inside the uterine cavity. Check for location of IUD either by carefully sounding the uterus, x-ray or ultrasonography.

If IUD **not** found, it may have been expelled without being seen. Insert another IUD or help client choose another method.

If IUD found to be in the uterine cavity and client wants to continue using an IUD, reassure client and either arrange for yearly followup, attempt to retrieve just the strings from the uterine cavity or remove the IUD (using an alligator forceps or Kelly clamp) and insert a new one.

If IUD found to be **outside** uterine cavity, decision to remove should be based on clinic guidelines (how long IUD in place, type of IUD, etc.).

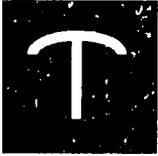


INTRAUTERINE DEVICES

MANAGEMENT OF PROBLEMS

PROBLEM

ASSESSMENT



Pelvic infection
(cramping accompanied by abdominal tenderness, fever, flu-like symptoms, headache, chills, nausea or vomiting, vaginal discharge, painful intercourse, palpable pelvic mass.)

Perform abdominal and pelvic (speculum and bimanual) examinations and GTI testing if available (see **GTI** chapter).

Vaginal discharge

Check history for exposure to GTIs and other STDs (e.g., HBV, HIV/AIDS) and examine for vaginitis, purulent cervicitis or beefy red cervix.

Examine saline and KOH wet mounts of vaginal discharge for trichomonas, monilia (candida) and gardnerella (see **GTI** chapter).

Prepare Gram stain of vaginal or cervical discharge. Observe for Gram negative intracellular diplococci (GNIDs) and WBC (PMNs) (see **GTI** chapter).

MANAGEMENT

- ▶ If abdominal and pelvic examinations confirm uterine or adnexal tenderness or microscopic testing supports diagnosis of PID, remove the IUD and treat with antibiotics.

If diagnosis equivocal, treat with antibiotics without removing IUD. Observe carefully for results of antibiotic treatment.

If diagnosis equivocal but client followup is not possible, remove IUD and treat with antibiotics.

If urethritis suspected, check Gram stain of urethral discharge.

- ▶ Obtaining accurate history will facilitate diagnosis and treatment.

- ▶ If saline or KOH wet mounts are positive, treat appropriately for specific organism.

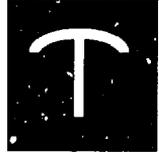
If cervicitis (mucopus or beefy red cervix), check Gram stain for cervical discharge.

- ▶ If positive for GNIDs, treat for gonorrhea. If negative for GNIDs and purulent cervicitis or beefy red cervix, treat for chlamydia. Obtain GC culture if available. Remove IUD if gonorrhea or chlamydia is confirmed or strongly suspected.



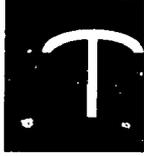
INTRAUTERINE DEVICES

MANAGEMENT OF PROBLEMS DURING INSERTION OR REMOVAL



PROBLEM	ASSESSMENT
Fainting (syncope), slow heart rate (bradycardia) or vasovagal episode during iUD insertion or removal	Is woman extremely anxious? Does she have a small uterus or cervical stenosis? (These characteristics increase risk for fainting and/or vasovagal reaction.)

MANAGEMENT



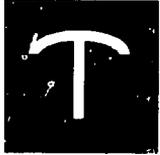
- ▶ Every step of IUD insertion and removal should be done **slowly** and **gently**, with an explanation of each step to the client. Other suggestions include:
 - If available, an analgesic (aspirin, acetaminophen or ibuprofen) may reduce pain associated with IUD insertion or removal. Provide 30 minutes prior to procedure and for 24 hours afterwards.
 - Maintain a calm, relaxed, unhurried atmosphere and a gently reassuring approach to the client.
 - At the earliest sign of fainting, stop the insertion and put a cool, wet cloth to the client's forehead.
 - If severe pain occurs as the IUD is being inserted through the cervical canal, leave the IUD in place and allow the client to rest. Keep the client laying down with her head lowered and legs elevated to ensure adequate blood flow.
 - Remove IUD if pain persists and is not relieved by analgesics or if client requests removal. Help her choose another method.

If fainting occurs:

- Turn client's head and shoulders to one side so that if she vomits she will not inhale any material.
- Maintain a clear airway by supporting the chin. (Do not hyperextend the neck.) Loosen any tight clothing, especially around the neck.
- Avoid overtreatment; observation and support usually are all that are required. Use analgesics for abdominal pain/cramping.

INTRAUTERINE DEVICES

MANAGEMENT OF PROBLEMS DURING INSERTION OR REMOVAL



PROBLEM

Suspected uterine perforation
(during uterine sounding or IUD insertion)

ASSESSMENT

Client complains of suddenly significant pain during procedure.

(Uterine sound or loaded IUD inserter tube passes into uterus beyond 9-10 cm without fundal resistance being felt.)

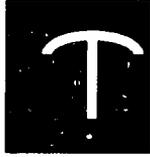
MANAGEMENT

- ▶ Stop the procedure (and remove the IUD if inserted). Observe for signs of intra-abdominal bleeding (i.e., falling BP, rising pulse, severe abdominal pain, tenderness, guarding and rigidity).⁵

Take BP and pulse every 15 minutes for 90 minutes. Have client sit up rapidly from a resting position. Observe for syncope or pulse greater than 120/min.

If negative after 2 hours, discharge with instructions for warning signs which require immediate return to clinic. Return after 1 week for checkup (see **Client Instructions** chapter).

Provide backup contraceptive method and help client choose another method.

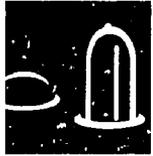


⁵ If intra-abdominal bleeding is suspected, stabilize (IVs) and refer (if necessary) for further evaluation and possible surgery.

BARRIERS AND SPERMICIDES

THE CONDOM (MALE)

COUNSELING OUTLINE



METHOD	APPROPRIATE FOR
<p>A thin sheath made of rubber (latex), vinyl or natural (animal) products which may be treated with a spermicide for added protection. It is placed on an erect penis.</p>	<p>Men who wish to actively participate in family planning</p>
<p><i>Types</i></p>	<p>Couples needing a temporary method while waiting for a long-term method (e.g., IUD, implants or voluntary sterilization) or wanting a backup method</p>
<p>Latex (plain, treated with spermicide)</p>	<p>Couples who need a method immediately</p>
<p>Plastic (vinyl)</p>	<p>Couples in which either partner has more than one sexual partner, even if using another method</p>
<p>Natural (animal products)</p>	<p>Couples who have intercourse infrequently</p>
<p><i>Mechanism of Action</i></p>	<p>Women/men at risk for GTIs and other STDs (e.g., HBV, HIV/AIDS)</p>
<p>Prevents sperm from gaining access to female reproductive tract and microorganisms (GTIs and other STDs) from passing from one partner to another.</p>	

METHOD CHARACTERISTICS

BENEFITS

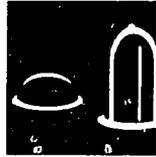
- No method-related health risks
- Effective immediately
- No medical supervision required
- Inexpensive
- Available outside the health care system
- Pelvic examination not required prior to use
- May prolong erection and time to ejaculation

Health Benefits

Latex and vinyl condoms (but not natural) provide protection against GTIs and other STDs (e.g., HBV, HIV/AIDS)

LIMITATIONS

- High failure rate (pregnancy rate 10-30 per 100 women during first year of use)
- Not advised for clients at high risk for pregnancy
- User dependent: requires continued motivation and use with each act of intercourse
- Resupply must be available
- Supplies must be readily available before intercourse occurs
- Adequate storage may not be available at client's home
- May reduce penile sensitivity
- Maintaining an erection may be difficult
- Proper disposal of used condoms may be a problem



BARRIERS AND SPERMICIDES

THE CONDOM (MALE)

PROBLEMS REQUIRING ACTION

PROBLEM	ACTION
Allergy to rubber or spermicides	Help client with documented allergy choose another method.
Couple/woman wants more effective protection against pregnancy	Help client choose another method.
Couple/woman wants a method not related to intercourse	Help client choose a noncoitus-related method, such as pills, implants, injectables, IUD or voluntary sterilization.
Not willing to use consistently	Counsel about importance of consistent use. Help client choose another method.



MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT	ASSESSMENT
Condom breaks or slips off during intercourse	Check condom for a hole or demonstrable leak.
Condom broken or breakage suspected (before intercourse)	Check condom for a hole or demonstrable leak.
Local irritation to the penis	Determine whether allergic or mechanical reaction present. Check for infection.
Diminishes sexual pleasure	One or both partners complain(s) of decreased pleasure or sensation during intercourse.

RATIONALE

- ▶ Allergic reactions, although uncommon, can be uncomfortable and possibly dangerous.
- ▶ Condoms, when used alone, are only about 80-95% effective. If the couple considers this risk of pregnancy too high, help them choose another method.
- ▶ Method is both coitus-related and user-dependent. If client not willing to use with **each** intercourse, the method will fail.

- ▶ Method is both coitus-related and user-dependent. If not used with **each** intercourse, the method will fail.



MANAGEMENT

- ▶ If condom breaks or leakage is suspected, consider a method of emergency contraception (see **Emergency Contraception** chapter).
- ▶ Discard and use new condom or use spermicide in conjunction with condom.
- ▶ If allergic reaction apparent, insure that condom is **not** medicated. If reaction persists, then consider natural condoms (lambskin or gut) or another method.

Note: Natural condoms do not provide protection against GTIs and other STDs (e.g., HBV, HIV/AIDS) and should not be used by those at risk.

- ▶ If decreased sensitivity is not acceptable, help client choose another method.

BARRIERS AND SPERMICIDES

THE DIAPHRAGM

COUNSELING OUTLINE

METHOD

APPROPRIATE FOR

A dome-shaped rubber cup attached to a flexible ring which is inserted into the vagina **before** intercourse

Women who prefer not to use hormonal methods or IUDs or who should not use them (e.g., heavy smokers over 35 years of age)

Types

Flat spring

Breastfeeding mothers who need contraception

Coil spring

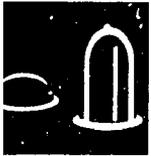
Couples who have **intercourse infrequently**

Arching spring

Mechanism of Action

Prevents sperm from gaining access to upper reproductive tract (uterus and fallopian tubes)

Women wanting **protection from GTIs and other STDs** (e.g., HBV, HIV/AIDS) and whose partner will not use a condom.



METHOD CHARACTERISTICS

BENEFITS

No method-related health risks

Effective immediately

Contains menstrual flow when used during menstrual period

Spermicide increases wetness (lubrication) during intercourse

Health Benefits

Some protection against GTIs and other STDs (e.g., HBV, HIV/AIDS) especially when used with spermicide

LIMITATIONS

High failure rate (pregnancy rate 5-25 per 100 women during first year of use)

Pelvic examination required for initial fitting by trained service provider

Not advised for clients at high risk for pregnancy

User dependent: requires continued motivation and use with each act of intercourse

Resupply must be available (spermicide required with each use)

Supplies must be readily available before intercourse occurs

Must be left in place for 6 hours after intercourse

Associated with urinary tract infections in some users



BARRIERS AND SPERMICIDES

THE DIAPHRAGM

CONDITIONS REQUIRING PRECAUTIONS

CONDITIONS

PRECAUTION

Repeated urinary tract infections (UTIs)

Advise client to void (urinate) immediately after intercourse. Consider single dose prophylactic antibiotic with intercourse. If this does not help, then help client choose another method.

Woman with physical disability or who finds it unpleasant to touch herself

Counsel to explore problem. Insure that client can insert diaphragm properly. If aversion or discomfort is severe, help client choose another method.

Uterine prolapse (uterus protruding into the vagina)

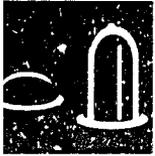
Help client choose another method.

Severe cystocele or rectocele (bulging of the walls of the bladder or rectum into the vagina)

Determine the extent of defect. Examine carefully after fitting to insure that the diaphragm can be retained. Ask client to strain (push down) with the diaphragm in place to see if it is displaced.

Vaginal stenosis (narrowing of the vaginal canal)

Examine carefully after fitting to see that client can insert the diaphragm properly. Client may need to choose another method.



RATIONALE

- ▶ Occasionally, the diaphragm causes urinary tract infections (UTIs) in some clients. This may be due to urethral compression produced by the device during insertion/removal. Often the symptoms (urinary frequency and burning) are not due to a UTI but to urethral irritation.
- ▶ Diaphragm use requires confidence in manipulating and palpating genitals (vulva and vagina). If diaphragm cannot be inserted properly, the method will fail.
- ▶ Uterine prolapse can cause difficulties in insertion and correct positioning of the diaphragm, increase the possibility of expulsion and decrease its effectiveness.
- ▶ Pelvic relaxation may prevent proper placement of the diaphragm, increase the possibility of expulsion and decrease its effectiveness.
- ▶ Vaginal stenosis (acquired or congenital) may make proper fitting and placement of the diaphragm difficult, increase the possibility of expulsion and decrease its effectiveness.



BARRIERS AND SPERMICIDES

THE DIAPHRAGM

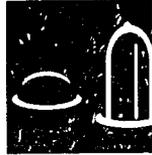
PROBLEMS REQUIRING ACTION



PROBLEMS	ACTION
Allergy to rubber or spermicides	Help client with documented allergy choose another method.
Couple/woman who wants more effective protection against pregnancy	Help client choose another method.
Woman does not want any inconvenience	Help client choose another method.
Not willing to use consistently	Counsel about importance of consistent use. Help client choose another method.
Soap and water not easily available	Inquire whether facilities for cleaning the diaphragm will be available.
Repeated intercourse over several hours	Apply more spermicide with each sexual act (do not remove diaphragm).

RATIONALE

- ▶ Allergic reactions, although uncommon, can be uncomfortable and possibly dangerous.
- ▶ Diaphragm, even when used with spermicide, is only about 75-95% effective. If the couple considers this risk of pregnancy too high, help them choose another method.
- ▶ Method is both coitus-related and user-dependent. If it is not used with **each** intercourse, the method will fail.
- ▶ Method is both coitus-related and user-dependent. If it is not used with **each** intercourse, the method will fail.
- ▶ If no facilities for cleaning are available, help client choose another method.
- ▶ Each application of spermicide is only effective for 1 to 2 hours. (Check instructions with each spermicide preparation for specific information on the duration of effectiveness and re-application.)



BARRIERS AND SPERMICIDES

THE DIAPHRAGM

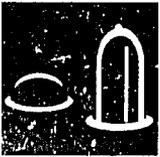
MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT

ASSESSMENT

Toxic shock syndrome (TSS)

Examine for signs/symptoms of toxic shock syndrome (e.g., fever, rash, nausea, vomiting, diarrhea, conjunctivitis, weakness, decreased blood pressure and shock).



Urinary tract infections (UTIs)

Urinalysis: > 10 WBC/high power field in unconcentrated specimen

Culture: > 100,000 organisms/ml

Suspected allergic reaction

Symptoms of vaginal irritation, especially postintercourse and no evidence of GTI

Pain from pressure on bladder/rectum

Client complains of vaginal discomfort. Vaginal ulcerations are noted on examination.

Vaginal discharge and odor if left in place for more than 24 hours

Check for GTI or foreign body in vagina (tampon, sponge, etc.).

MANAGEMENT

- ▶ When used properly, **the risk of toxic shock syndrome among diaphragm users is insignificant**. Client should know how to use method properly and be aware of warning signs.

Clients with history of toxic shock syndrome should avoid female barrier methods. (Does not apply to female condom.)

If toxic shock syndrome is suspected, refer client to center where intravenous fluids and antibiotics are available. Give oral rehydration as needed and a non-narcotic analgesic (NSAID or aspirin) if fever is high.

- ▶ Treat with appropriate antibiotic. If frequent UTIs are suspected and diaphragm is best or most desired option, advise voiding immediately after intercourse. Offer client postcoital prophylactic (single dose) antibiotics. Otherwise, help client choose another method.
- ▶ Provide another spermicides or help client choose another method. Allergic reactions, although uncommon, can be uncomfortable and possibly dangerous.
- ▶ Assess diaphragm fit. If current device is too large, fit with smaller device. Followup for resolution of symptoms.
- ▶ If no genital tract infection is present, instruct client to remove diaphragm as early as is convenient after intercourse, but **not** less than 6 hours after last episode. If symptoms recur, gentle douching with a mild solution is appropriate. Diaphragm should be gently cleaned with mild soap and water after removal. Powder or talc should **not** be used when storing diaphragm.



BARRIERS AND SPERMICIDES

SPERMICIDES

COUNSELING OUTLINE

METHOD

APPROPRIATE FOR

Chemicals (e.g., nonoxynol 9) that inactivate and/or kill sperm

Couples needing a **temporary** method while waiting for a long-term method (e.g., IUD, implants or voluntary sterilization) or wanting a **backup** method

Types

Aerosol foam

Creams

Film

Jellies

Vaginal suppositories

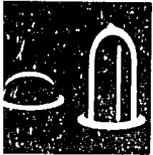
Vaginal tablets

Couples who have **intercourse infrequently**

Breastfeeding mothers who need contraception

Mechanism of Action

Cause the sperm cell membrane to break, which affects sperm movement (motility and mobility) and ability to fertilize the egg.



METHOD CHARACTERISTICS

BENEFITS

LIMITATIONS

No method-related health risks	High failure rate (pregnancy rate 10-30 per 100 women during first year of use)
Rapidly effective	
No medical supervision required	Not advised for clients at high risk for pregnancy
Available without medical prescription	User dependent: requires continued motivation and use with each act of intercourse
Simple to use	
No systemic side effects	Resupply must be available
Increases wetness (lubrication) during intercourse	Supplies must be readily available before intercourse occurs
<i>Health Benefits</i>	Must wait 7 to 10 minutes after application before intercourse (foaming tablets)
Some protection against GTIs and other STDs (e.g., HBV, HIV/AIDS)	Each application is only effective for 1 to 2 hours. (Check instructions with each spermicide preparation for specific information on the duration of effectiveness and re-application.)



BARRIERS AND SPERMICIDES

SPERMICIDES

CONDITIONS REQUIRING PRECAUTIONS

PROBLEM

ACTION

Woman with **physical disability** or who **finds it unpleasant to touch herself**

Counsel to explore problem. Insure that client can apply spermicide. If aversion or discomfort is severe, help client choose another method.

Genital anomalies or other abnormalities

Insure that anomaly does not interfere with administration. Help client choose another method.



PROBLEMS REQUIRING ACTION

PROBLEM

ACTION

Allergy to spermicidal agents

Help clients with documented allergy choose another method.

Woman who **does not want any inconvenience**

Help client choose another method.

Couple/woman who **wants more effective protection** against pregnancy

Help client choose another method.

Couple/woman **not willing to use consistently**

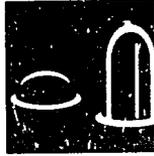
Counsel about importance of consistent use. Help client choose another method.

Repeated intercourse over several hours

Apply more spermicide with each intercourse.

RATIONALE

- ▶ Spermicide use requires touching the genitals (vulva and vagina). If spermicide is not placed deep in the vagina, the method will fail.
- ▶ Vaginal stenosis (narrowing of vaginal canal) is uncommon and other congenital abnormalities (double vagina) are rare. If present, they may make application of spermicide difficult. If spermicide is not placed deep in the vagina, the method will fail.



RATIONALE

- ▶ Allergic reactions, although uncommon, can be uncomfortable and possibly dangerous.
- ▶ Method is both coitus-related and user-dependent. If it is not used with **each** intercourse, the method will fail.
- ▶ Spermicide, when used alone is only about 75-80% effective.
- ▶ Method is both coitus-related and user-dependent. If it is not used with **each** intercourse, the method will fail.
- ▶ Each application of spermicide is only effective for 1 to 2 hours. (Check instructions with each spermicide preparation for specific information on the duration of effectiveness and re-application.)

BARRIERS AND SPERMICIDES

SPERMICIDES

MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT

ASSESSMENT

Vaginal irritation

Check for vaginitis and GTIs.

Penile irritation and discomfort

Check for GTIs.

Heat sensation in the vagina is bothersome

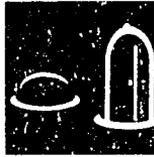
Check for allergic or inflammatory reaction.

Tablets fail to melt



MANAGEMENT

- ▶ If caused by spermicide, switch to another spermicide with a different chemical compound or help client choose another method.
- ▶ If caused by spermicide, switch to another spermicide with a different chemical compound or help client choose another method.
- ▶ If caused by spermicide, switch to another spermicide with a different chemical compound or help client choose another method.
- ▶ Select another type of spermicide with different chemical composition or help client choose another method.



NATURAL FAMILY PLANNING (NFP)

COUNSELING OUTLINE

METHOD

APPROPRIATE FOR

A couple voluntarily avoids or interrupts sexual intercourse during the fertile phase of the woman's cycle (time when the woman can become pregnant)

Couples willing and motivated to learn the woman's menstrual cycle

Women unable to use other methods

Methods

Coitus interruptus (withdrawal)

Women with regular menstrual cycles

Calendar Method

Basal Body Temperature (BBT)

Cervical Mucus Method

Couples with religious or philosophical reasons not to use other methods

Symptothermal (BBT + cervical mucus)

Mechanism of Action

Couples willing to abstain from intercourse for more than 1 week each cycle

For Contraception

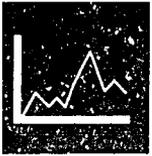
Intercourse is avoided or the penis is withdrawn from the vagina prior to ejaculation during the phase of the menstrual cycle when conception is most likely.

Couples in situations where no modern contraceptive methods are available or where supplies are likely to run out

For Conception

Intercourse is planned for near the mid-cycle (usually days 10-15) when conception is most likely.

Women/couples who have the ability and willingness to observe, record and interpret fertility signs



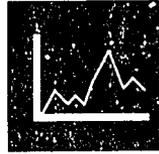
METHOD CHARACTERISTICS

BENEFITS

- Can be used to avoid or achieve pregnancy
- No physical side effects
- Free
- Increases involvement of male partner
- Increases knowledge of female reproductive system
- Immediate return to fertility

LIMITATIONS

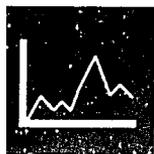
- High failure rate (pregnancy rate of 10-30 [periodic abstinence] and 5-25 [withdrawal] per 100 women during first year of use)
- May be difficult for women/couples to detect fertile phase
- Effectiveness is dependent on willingness to follow instructions
- Requires up to 3 months of instruction and counseling
- Must abstain or withdraw during fertile phase
- Requires daily record keeping
- Ovulatory mucus is difficult to discern in the presence of vaginal infections
- No protection against GTIs and other STDs (e.g., HBV, HIV/AIDS)



NATURAL FAMILY PLANNING

PROBLEMS REQUIRING ACTION

PROBLEM	ACTION
Couple desires a highly effective method	Help client choose another method.
Woman's age, parity or health problems make pregnancy a high risk	Help client choose another method.
Woman with irregular menstrual cycles	Counsel client that the risk of pregnancy is higher. If this is not acceptable, help her choose another method.
Couple unwilling to limit intercourse to certain times in the cycle; woman whose partner will not cooperate	Help client choose another method.
Couple with poor communication or who is having problems with their relationship	Help client choose another method.
Couple in which either partner has more than one sexual partner	Use condoms to protect against GTIs and other STDs (e.g., HBV, HIV/AIDS).
Woman who have persistent vaginal discharge	Counsel client that it will be more difficult to predict fertility using the cervical mucus method. If client wishes, help her choose another method.
Woman who finds it unpleasant to touch herself and/or examine her mucus	Counsel client and help her choose another method, if appropriate.



RATIONALE

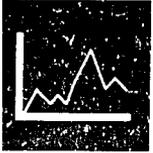
- ▶ Requires **strict** adherence to protocol. If protocol is not followed, failure rates are very high
- ▶ If pregnancy will expose the client to higher risks, then a more effective method should be considered or the couple must agree to very strict adherence.
- ▶ If the menstrual cycle is irregular, then prediction of the fertile phase is difficult. Cervical mucus and temperature (BBT) must be followed closely and changes may be hard to interpret.
- ▶ Requires complete cooperation of both partners.
- ▶ Requires good communication, cooperation and commitment.
- ▶ Women and men with more than one sexual partner are at high risk for GTIs and other STDs (e.g., HBV, HIV/AIDS). NFP provides no protection.
- ▶ For women who have persistent vaginal discharge, prediction of the fertile phase is difficult. Temperature (BBT) must be followed closely as cervical mucus changes may be difficult to interpret.
- ▶ For **maximum** effectiveness, the Cervical Mucus and Symptothermal methods require that the client is comfortable in examining herself. If not, reliance on cycle length (calendar method) and temperature (BBT) is possible but effectiveness may be reduced.



NATURAL FAMILY PLANNING

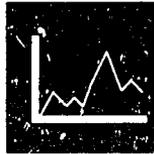
MANAGEMENT OF SIDE EFFECTS

SIDE EFFECT	ASSESSMENT
Use of NFP causes a problem in the couple's relationship	Couple complains about prolonged periods of abstinence
	Couple finds withdrawal during intercourse difficult



MANAGEMENT

- ▶ Help the couple identify alternative forms of sexual gratification (e.g., masturbation) to use during times of abstinence. If neither abstinence nor alternative forms of sexual gratification are tolerable for them, help them choose another method.
- ▶ Effectiveness of coitus interruptus may be enhanced by combination with sexual abstinence during the woman's fertile period or another method may be chosen.



VOLUNTARY STERILIZATION

TUBAL OCCLUSION

COUNSELING OUTLINE

METHOD

APPROPRIATE FOR

Voluntary surgical procedure for permanently terminating fertility in women

Methods

Minilaparotomy (interval or postpartum)

Laparoscopy (interval only)

Mechanism of Action

By blocking the fallopian tubes (cutting, cauterization, rings or clips) sperm are prevented from reaching ovum

Couples certain they want no more children

Women whose age or health problems might cause high-risk pregnancy

Couples who understand and voluntarily give informed consent for the procedure



METHOD CHARACTERISTICS

BENEFITS

Highly effective (pregnancy rate 0.2-1 per 100 women during first year of use)

Effective immediately

Permanent

Simple surgery, usually done under local anesthesia (see **Client Assessment** chapter)

No further expense or worry about contraception

No long-term side effects

Does not interfere with intercourse or sexual function (no effect on hormone production by ovaries)

LIMITATIONS

May regret later; therefore, counseling is important (reversal requires major surgery, is expensive and often is available only on a limited basis)

Risks and side effects of surgery

High initial cost (more costly than vasectomy)

Short-term pain/discomfort following procedure

Requires trained provider

No protection against GTIs and other STDs (e.g., HBV, HIV/AIDS)



VOLUNTARY STERILIZATION

TUBAL OCCLUSION

CONDITIONS REQUIRING PRECAUTIONS

CONDITION	PRECAUTION
Pregnancy (known or suspected)	Rule out pregnancy prior to procedure. Best performed in follicular phase of cycle (days 5 to 10).
Active pelvic infection or other serious infection	Delay procedure until infection treated and resolved.
Acute systemic infection (e.g., cold, flu)	Delay procedure until infection treated and resolved.



PROBLEMS REQUIRING ACTION

PROBLEM	ACTION
Client has: <ul style="list-style-type: none">• Diabetes• Symptomatic heart disease or clotting disorders• Is overweight (over 75 kg/165 lb if not normal H/W ratio)• PID (current, recent or recurrent within the last 3 months)• Multiple lower abdominal incisions/scars	Should only be performed by skilled clinician in an approved facility. Note: Diabetes should be under control before surgery.

RATIONALE

- ▶ Procedure performed early in pregnancy may be confused with failure. Use of uterine elevator may cause disruption of pregnancy and possible miscarriage (spontaneous abortion). In addition, the fallopian tubes in pregnancy are thickened and may not fit into sleeve of falope ring applicator used in laparoscopy.
- ▶ If procedure is performed in presence of uterine, tubal or peritoneal infection, abscess formation or increased severity of infection may result.
- ▶ Although tubal occlusion is a minor surgical procedure, it should not be performed when illness is present.

RATIONALE

- ▶ Clients with significant medical problems may need special surgical and followup management (e.g., general anesthesia) for voluntary sterilization. Only those clients who meet the **acceptable** criteria should have their surgery in ambulatory facilities (see **Client Assessment** chapter). Attempting to perform the procedure in women who do not meet these criteria (e.g., overweight women or those with extensive pelvic adhesions) invariably necessitates:
 - more sedation/analgesia for patient comfort,
 - larger incision,
 - longer operating time, and
 - prolonged recovery.

As a consequence, there is an increased risk of complications, especially infections, in this high-risk group.



VOLUNTARY STERILIZATION

TUBAL OCCLUSION

PROBLEMS REQUIRING ACTION

PROBLEM	ACTION
Desire for more children	Further assess concerns and, if appropriate, help client choose another method.
Excessive interest in reversal	Further assess concerns and, if appropriate, help client choose another method.
Disagrees with or does not want to sign informed consent form	Determine if concerns represent misunderstanding about method (e.g., rumor, myth). If so provide additional counseling. If client still does not wish to sign, help her choose another method.
 Pressure from someone else	Further assess concerns and, if appropriate, help client choose another method.
Depression	Further assess concerns and, if appropriate, help client choose another method.
Marital problems	Further assess concerns and, if appropriate, help client choose another method.
Is single	Further assess situation and, if appropriate, help client choose another method.
Has no children	Further assess situation and, if appropriate, help client choose another method.

RATIONALE

- ▶ Tubal occlusion is permanent. Help couples **considering** more children choose another method.
- ▶ Tubal occlusion is permanent. Help couples who **might** be interested in more children choose another method.
- ▶ Clients often have misconceptions about a procedure, even after counseling. Informed consent must be obtained before performing surgical procedures.
- ▶ Voluntary sterilization regret is higher when the decision was made as a result of undue pressure.
- ▶ Tubal occlusion is permanent. If emotional instability is present, the decision should be postponed.
- ▶ Because tubal occlusion is permanent, the decision to have the procedure is best made with both partners in accord.
- ▶ Tubal occlusion is permanent. Regret and request for reversal are higher in single women, especially young single women, than in older married women.
- ▶ Tubal occlusion is permanent. Regret and request for reversal are higher in nulliparous women, especially young nulliparous women, than in older multiparous women.



VOLUNTARY STERILIZATION

TUBAL OCCLUSION

MANAGEMENT OF PROBLEMS

PROBLEM	ASSESSMENT
Wound infection	Confirm presence of infection or abscess.
Postoperative fever	Determine source of infection.
Bladder, intestinal injuries (rare)	Determine presence of hematuria or other signs of internal injury.
Hematoma (subcutaneous)	Determine presence of infection or abscess.
Gas embolism (very rare)	Check for increased respiration and pulse, decreased blood pressure, evidence of hemodynamic instability.
Pain at incision site	Determine presence of infection or abscess.
Superficial bleeding (skin edges or subcutaneously)	Determine presence of infection or abscess.



MANAGEMENT

- ▶ If skin infection is present, treat with antibiotics. If abscess is present, drain and treat as indicated.
- ▶ Treat infection based on findings.
- ▶ Diagnose problem and manage appropriately. If bladder or bowel are injured and recognized intraoperatively, perform primary repair. If discovered postoperatively, refer to appropriate center as necessary.
- ▶ Apply warm, moist packs to site. Observe—usually will resolve over time but may require drainage if extensive.
- ▶ Intensive resuscitation may be necessary, including:
 - intravenous fluids,
 - CPR, and
 - other life support measures.
- ▶ Treat based on findings.
- ▶ Treat based on findings.



VOLUNTARY STERILIZATION

VASECTOMY

COUNSELING OUTLINE

METHOD	APPROPRIATE FOR
Voluntary surgical procedure for permanently terminating fertility in men	Couples certain they want no more children
<i>Mechanism of Action</i>	Age or health problems of wife might cause high-risk pregnancy
By blocking the vas deferens (ejaculatory duct) sperm are not present in the ejaculate	Couples who understand and voluntarily give informed consent for the procedure



METHOD CHARACTERISTICS

BENEFITS

Highly effective (pregnancy rate 0.15-1.0 per 100 women during first year of use)

Permanent

Simple surgery done under local anesthesia (see **Client Assessment** chapter)

Less surgical risk and expense than with female voluntary sterilization

No further expense or worry about contraception

No long-term side effects

Does not interfere with intercourse or sexual function (no effect on hormone or sperm production by testes)

LIMITATIONS

May regret later; therefore, counseling is important (reversal requires special surgery, is expensive and is often available only on a limited basis)

Delayed effectiveness (requires time and up to 20 ejaculations)

Risks and side effects of minor surgery

Short-term pain/discomfort following procedure

Requires trained provider

No protection against GTIs and other STDs (e.g., HBV, HIV/AIDS)



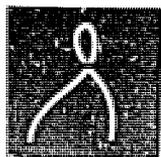
VOLUNTARY STERILIZATION

VASECTOMY

CONDITIONS REQUIRING PRECAUTION

CONDITION	PRECAUTION
Local skin or scrotal infection	Delay procedure until infection is resolved.
Genital infection (e.g., gonorrhea or syphilis)	Delay procedure until infection is resolved.
Other Problems: <ul style="list-style-type: none">• Large varicocele• Inguinal hernia• Filariasis• Scar tissue• Previous scrotal surgery• Intrascrotal mass	With any of these conditions, the procedure must be performed by a provider with extensive experience and skill in performing vasectomy.

PROBLEMS REQUIRING ACTION



PROBLEM	ACTION
Client has: <ul style="list-style-type: none">• Diabetes• Severe anemia (< 7 g/dl)• Symptomatic heart disease or clotting disorders (rare)	Should only be performed by skilled clinician in an approved facility. Note: Diabetes should be under control before surgery.
Desire for more children	Further assess concerns and, if appropriate, help client choose another method.
Excessive interest in reversal	Further assess concerns and, if appropriate, help client choose another method.

RATIONALE

- ▶ These conditions may increase risk for complications such as postoperative infection.
- ▶ These conditions may increase risk for complications such as postoperative infection.
- ▶ These conditions can make the operation more difficult to perform and increase the risk of infection.

RATIONALE

- ▶ Clients with significant medical problems may need special surgical and followup management (e.g., general anesthesia) for voluntary sterilization. There is an increased risk of complications, especially infections, in this high-risk group.
- ▶ Vasectomy is permanent. Help couples **considering** more children choose another method.
- ▶ Vasectomy is permanent. Help couples who **might** be interested in more children choose another method.



VOLUNTARY STERILIZATION

VASECTOMY

PROBLEMS REQUIRING ACTION

PROBLEM	ACTION
Disagrees with or does not want to sign informed consent form	Determine if concerns represent misunderstanding about method (e.g., rumor, myth). If so, provide additional counseling. If client still does not wish to sign, help him choose another method.
Pressure from someone else	Further assess concerns and, if appropriate, help client choose another method.
Depression	Further assess concerns and, if appropriate, help client choose another method.
Marital problems	Further assess concerns and, if appropriate, help client choose another method.



MANAGEMENT OF PROBLEMS

PROBLEM	ASSESSMENT
Wound infection	Confirm presence of infection or abscess.
Hematoma (scrotal)	Determine presence of infection or abscess.
Granuloma	Check for possible problem (infection, hematoma).
Excessive swelling	Check for swollen scrotum. Check for possible problem (infection, hematoma).
Pain at incision site	Check for infection, granuloma or epididymitis.

RATIONALE

- ▶ Clients often have misconceptions about a procedure, even after counseling. Informed consent must be obtained before performing surgical procedures.
- ▶ Voluntary sterilization regret is higher when the decision was made as a result of undue pressure.
- ▶ Vasectomy is permanent. If emotional instability is present, the decision should be postponed.
- ▶ Because vasectomy is permanent, the decision to have the procedure is best made with both partners in accord.



MANAGEMENT

- ▶ If skin infection is present, treat with antibiotics. If abscess is present, drain and treat as indicated.
- ▶ Apply warm, moist packs to site and provide scrotal support. Observe—will resolve over time.
- ▶ Observe—rare (< 0.4% cases), usually self-limited and resolve spontaneously.
- ▶ If large and painful, may require surgical management.

Observe—usually resolves spontaneously within 1 to 3 weeks. Provide scrotal support as needed.
- ▶ If no infection, treat symptomatically with scrotal support and analgesics as needed. Pain usually will resolve spontaneously.

NOTES



CLIENT INSTRUCTIONS

Long-term success, defined as satisfied clients and high continuation rates, will occur only if clinic staff recognize the importance of providing both followup care and prompt management of side effects and other problems. Explaining the common side effects to the client, as well as what to do if certain problems occur, promotes safe, effective and continued contraceptive use. Health care providers also need to ensure that clients know how to use a contraceptive method.

In particular a client should know:

- When to come back for a followup visit
- What are common side effects of the method
- What are the warning signs of possible problems
- What to do if there are changes in her menstrual periods
- How soon the method is effective
- How to protect against GTIs and other STDs (e.g., HBV, HIV/AIDS)
- How to care for wounds (implants, vasectomy, tubal occlusion)
- When and where the method should be removed (IUDs or implants)

To help a client understand and remember the most important points, be sure to explain them clearly and simply. Have the client repeat them so it is certain that s/he clearly understands the method. If possible, also give written instructions to the client or her/his spouse. For some contraceptive methods (e.g., injectables), an appointment card should be given as a reminder unless privacy is an issue. Clients should be instructed about warning signs and told to return to the clinic immediately if any occur.



This section contains sample instructions that may be given to clients.

CLIENT INSTRUCTIONS

BREASTFEEDING/LAM

How Often to Breastfeed

Breastfeed your baby on demand from both breasts, about 6 to 10 times per day.

Breastfeed your baby at least once during the night (no more than 6 hours should pass between any 2 feedings).

Note: Breastfeeding is primarily used for infant nutrition and health. Your baby may not want to breastfeed 6 to 10 times per day, or your baby may choose to sleep through the night. If either occurs, breastfeeding will be **less effective** as a contraceptive method.

When to Start Solid Foods

As long as the baby is growing well and gaining weight, and as long as you are eating a balanced diet and resting in order to have a good milk supply, the baby doesn't need any other foods until s/he is 6 months old.

Once you substitute other food or drink for breastfeeding meals, the baby will suckle less, and breastfeeding will no longer be an effective contraceptive method.



Menstrual Periods

When your menstrual period returns it is very likely that you are fertile again and you should begin using a contraceptive method immediately.

For Contraception:

- Breastfeed fully, without supplementation other than ritual drinks or such, and on demand.
- You will need a contraceptive method if you have a menstrual period, if you no longer breastfeed fully, and/or when your baby is 6 months old.
- Consult your health care provider or clinic before starting another contraceptive method.

What To Do When You Are Not Fully Breastfeeding or Stop Breastfeeding

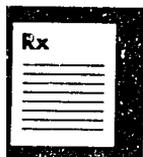
- You need to have a temporary supply of lubricated condoms or another method of contraception at home for use when you stop fully breastfeeding your baby.
- Return to the family planning clinic for help in finding a suitable contraceptive method.
- Use condoms and/or spermicides until you can obtain the contraceptive method of your choice.



CLIENT INSTRUCTIONS

COMBINED ORAL CONTRACEPTIVES (COCs)

- Take 1 pill each day, preferably at the same time of day.
- Take the first pill on the first to the seventh day (first day is preferred) after the beginning of your menstrual period.
- Some pill packets have 28 pills. Others have 21 pills. When the 28 day packet is empty, you should immediately start taking pills from a new packet. When the 21 day packet is empty, wait one week (7 days) and then begin taking pills from a new packet.
- If you forget to take 1 pill, take it as soon as you remember, even if it means taking 2 pills on 1 day.
- If you forget to take a pill 2 or more days in a row, you should take 2 pills every day until you catch up. Use a backup method (e.g., condoms and spermicide) or else do not have sex until you have finished that packet of pills.
- If you miss 2 or more menstrual periods, you should come to the clinic to check to see if you are pregnant.



Backup Method

The pill may not be fully protective during the first month unless it is started by the seventh day of the menstrual cycle. A backup contraceptive method (e.g., condoms or spermicide) should be used for 7 days during the first cycle if pills are started after the seventh day.

Starting a New Pack

After you take the last pill of the first cycle (28 day pill packages), start a new packet of pills the very next day and continue to follow the instructions on the packet. If the packet contains only 21 pills, you should wait 1 week before starting the next packet.

**WARNING SIGNS
FOR ORAL CONTRACEPTIVE USERS**

- Chest pain or shortness of breath
- Severe headaches (blurred vision)
- Severe leg pain
- Absence of any bleeding or spotting during pill free week (21 day pack) or after taking 7 inactive pills (28 day pack)—may be a sign of pregnancy.

Contact health care provider or clinic if you develop any of the above problems.



CLIENT INSTRUCTIONS

PROGESTIN-ONLY PILLS (POPs)

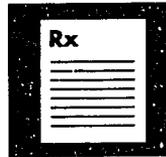
- Take 1 pill at the **same time** each day.
- Take the **first pill** on the **first day** of your menstrual period. If you start POPs after the first day of your period, but before the seventh day, use a backup method for the next 48 hours.
- Take all 28 pills in the pack. Start the next packet on the next day after the last pill.
- If you take a pill **less than 3 hours** late, take the next pill as soon as you remember.
- If you take a pill **more than 3 hours** late, take it as soon as you remember. Use a backup method if you have sex during the next 48 hours.
- If you forget to take 1 or more pills, you should take the next pill when you remember. Use a backup method if you have sex during the next 48 hours. If you had sex before taking the next pill, contact your health care provider or clinic.
- If you miss 2 or more menstrual periods, you should come to the clinic to check to see if you are pregnant. Do not stop taking the pills unless you know you are pregnant.
- If you have trouble remembering to take a pill at the same time every day, contact your health care provider or clinic.
- If you **vomit** soon after taking your pill, use a backup method if you have sex during the next 48 hours.
- **Always** have a backup method (e.g., condoms or spermicide) ready to use in case you take a pill more than 3 hours late or forget to take a pill.



**WARNING SIGNS
FOR PROGESTIN-ONLY PILLS**

- Delayed menstrual period after several months of regular cycles (may be a sign of pregnancy)
- Severe lower abdominal pain (may be a symptom of ectopic pregnancy)
- Heavy bleeding (more than 2 pads, cloths or tampons per hour) or prolonged bleeding (more than 8 days duration)
- Migraine (vascular) headaches, repeated very painful headaches or blurred vision

Contact health care provider or clinic if you develop any of the above problems.



CLIENT INSTRUCTIONS

IMPLANTS (Norplant® Implants)

Wound Care at Home

- Keep the area dry and clean for at least 48 hours. The incision could become infected if the area gets wet while bathing.
- Leave the gauze pressure bandage in place for 48 hours and the bandaid in place until the incision heals (about 3 to 5 days).
- There will be bruising, swelling or tenderness at the insertion site for a few days. This is normal.
- Routine work can be done immediately. Avoid bumping the area carrying heavy loads or applying unusual pressure to the site.
- After healing, the area can be touched and washed with normal pressure.

Return Visit

There is no medical reason for you to return for removal earlier than 5 years from insertion unless you are concerned about side effects or other health problems. You are, however, encouraged to return for routine preventive reproductive health care, including provision of condoms as necessary.

WARNING SIGNS FOR NORPLANT IMPLANT USERS

- Delayed menstrual period after several months of regular cycles (may be a sign of pregnancy)
- Severe lower abdominal pain (may be a symptom of ectopic pregnancy)
- Heavy bleeding (more than 2 pads, cloths or tampons per hour) or prolonged bleeding (more than 8 days duration)
- Pus or bleeding at the insertion site (may indicate infection)
- Expulsion of a capsule (this rarely occurs with proper placement)
- Migraine (vascular) headaches, repeated very painful headaches or blurred vision

Contact health care provider or clinic if you develop any of the above problems.



INJECTABLE CONTRACEPTIVES

Injections

Return to the health clinic for an injection every 3 months (DMPA) or every 2 months (NET-EN).

WARNING SIGNS FOR INJECTABLE CONTRACEPTIVES

- Delayed menstrual period after several months of regular cycles (may be a sign of pregnancy)
- Severe lower abdominal pain (may be a symptom of ectopic pregnancy)
- Heavy bleeding (more than 2 pads, cloths or tampons per hour) or prolonged bleeding (more than 8 days in duration)
- Pus or bleeding at the injection site (may indicate infection)
- Migraine (vascular) headaches, repeated very painful headaches or blurred vision

Contact health care provider or clinic if you develop any of the above problems.



CLIENT INSTRUCTIONS

THE IUD

- The IUD is effective immediately.
- There may be some bleeding or spotting the first few days after insertion.
- Return for checkup after the first postinsertion menses, 3 to 6 weeks after insertion.
- During the first month after insertion, check the strings several times, particularly after your next menstrual period. After the first month, you only need to check the strings after menses if you have:
 - cramping in the lower part of the abdomen,
 - spotting between periods or after intercourse, or
 - pain after intercourse (or if your partner experiences discomfort during sex).

Return Visit

There is no medical reason for you to return after your postinsertion checkup unless you are concerned about side effects or complications. You are, however, encouraged to return for routine preventive reproductive health care, including provision of condoms as necessary.



WARNING SIGNS FOR IUD USERS

- Period late with pregnancy symptoms (nausea, breast tenderness, etc.)
- Persistent or crampy lower abdominal pain, especially if accompanied by not feeling well, fever or chills (these symptoms suggest possible pelvic infection)
- Strings missing or the plastic tip of the IUD can be felt when checking for the strings
- Either you or your partner begin having sexual relations with more than one partner; IUDs do not protect women from GTIs and other STDs (e.g., HBV, HIV/AIDS).

Contact health care provider or clinic if you develop any of the above problems.

CONDOMS (MALE)

- Use the condom every time you have intercourse.
- The condom should be unrolled onto the erect penis **before** the penis enters the vagina, because the pre-ejaculatory semen contains active sperm.
- If the condom does not have an enlarged end (reservoir tip), about 1-2 cm should be left at the tip for the ejaculate.
- While holding on to the base (ring) of the condom, withdraw the penis before losing the erection. This prevents the condom from slipping off and spilling semen.
- **Each condom should be used only once and discarded.**
- Keep an extra supply of condoms on hand. Do not store them in a warm place or they will deteriorate and may leak during use.
- The date on the condom package is the date that the condom was manufactured, not the expiration date. Under proper storage conditions, the condom should be safe for 5 years.
- **Do not** use mineral oil, cooking oils, baby oil or petroleum jelly as lubricants for a condom. They cause deterioration of condoms in seconds. **If lubrication is required, use K-Y Jelly, surgical lubricant, saliva or vaginal secretions.**
- It is recommended that condoms be used if a person or sexual partner has more than one sexual partner in order to prevent GTIs and other STDs (e.g., HBV, HIV/AIDS).



CLIENT INSTRUCTIONS

THE DIAPHRAGM

- Use the diaphragm every time you have intercourse.
- First, empty your bladder and wash your hands.
- Check the diaphragm for holes by pressing the rubber and holding it up to the light or filling it with water.
- Squeeze a small amount of contraceptive cream or jelly into the cup of the diaphragm. (To make insertion easier, a small amount of cream/jelly can be placed on the leading edge of the diaphragm or in the opening to the vagina.) Squeeze the rim together.
- The following positions may be used for inserting the diaphragm:
 - One foot raised up on a chair or toilet seat
 - Lying down
 - Squatting
- Spread the lips of the vagina apart.
- Insert the diaphragm and cream/jelly back in the vagina and push the front rim up behind the pubic bone.
- Put your finger in the vagina and **feel the cervix** (feels like your nose) through the rubber to make sure it is covered.
- The diaphragm can be placed in the vagina up to 6 hours before having intercourse. If intercourse occurs more than 6 hours afterwards, another application of spermicide must be put in the vagina. Additional cream or jelly is needed for each repeated intercourse.
- Leave the diaphragm in for at least 6 hours after the last time intercourse occurs. Do not leave it in more than 24 hours before removal. Vaginal douching is not recommended at any time. If done, vaginal douching should be delayed for 6 hours after intercourse.



Remove diaphragm by hooking finger behind the front rim and pulling it out. If necessary, put your finger between the diaphragm and the pubic bone to break the suction before pulling it out. Wash the diaphragm with mild soap and water and dry it thoroughly prior to returning it to container.

SPERMICIDES

Foam

- Shake the container 20-30 times before using it.
- Place container in upright position, and put applicator over valve. Press applicator to side so it fills with foam.
- While lying down, insert applicator into the vagina until the tip is at or near the cervix. Push the plunger and release the foam. There is no need to wait for the foam to work.
- The foam applicator should be washed with soap and warm water, rinsed and dried. It can be taken apart for easier cleaning. Do not share these applicators with others.
- Keep an extra supply of foam on hand, especially if you cannot see whether the container is empty.

Cream/Jelly

- To insert contraceptive cream/jelly, squeeze into applicator until full. Insert the applicator into the vagina until the tip is at or near the cervix. Push the plunger and release the cream. There is no need to wait for the cream/jelly to work.
- The cream/jelly applicator should be washed with soap and warm water, rinsed and dried. It can be taken apart for easier cleaning. Do not share these applicators with others.
- Keep an extra supply of cream/jelly on hand, especially if you cannot see whether the container is empty.



Spermicides are effective when they are used correctly each time. They are much less effective than COCs, implants, injectables, POPs and IUDs. Spermicides can be used while breastfeeding.

CLIENT INSTRUCTIONS

NATURAL FAMILY PLANNING

CERVICAL MUCUS METHOD

You can determine your fertile phase by monitoring your cervical mucus.

A simple, accurate record is the key to success.

A series of codes is used to complete the record. These codes should be both appropriate to the local culture and widely available to NFP users. In some areas, colored stamps or inks are used; in others, it is more convenient to develop symbols that are written by hand; while in still others, both methods are combined resulting in handwritten symbols that are recorded with colored pens. Examples of the two systems are given below.

Examples of Codes Used in Fertility Record Keeping



or *

Use red or the symbol * to show bleeding.



or D

Use green or the letter D to show dryness.



or (M)

Use white or the letter M with a circle around it to show wet, clear, slippery, fertile mucus.



or M

Use yellow or the letter M to show sticky, white, cloudy, infertile mucus.

CERVICAL MUCUS METHOD *(continued)*

Definitions

- **Dry Days:** After menstrual bleeding ends, most women have 1 to a few days in which no mucus is observed and the vaginal area feels dry. These are called **dry days**.
- **Fertile Days:** When any type of mucus is observed before ovulation, you are considered to be fertile. Whenever mucus is seen, even if the mucus is of a sticky, pasty type, the wet fertile mucus may be present in the cervix and the **fertile days** have started.
- **Peak Day:** The last day of slippery and wet mucus is called the **peak day**; it indicates that ovulation is near or has just taken place.

For Conception

- Have intercourse during each cycle on the days when your vaginal discharge feels elastic, wet and slippery.



CLIENT INSTRUCTIONS

NATURAL FAMILY PLANNING

CERVICAL MUCUS METHOD *(continued)*

For Contraception

- As mucus may change during the day, observe it several times throughout the day. Every night before you go to bed, determine your highest level of fertility (see list of codes) and mark the chart with the appropriate symbol.
- Abstain from sexual intercourse for at least 1 cycle so that you will know the mucus days.
- Avoid intercourse during your menstrual period. These days are not safe; in short cycles, ovulation can occur during your period.
- During the dry days after your period, it is safe to have intercourse every other night (**Alternate Dry Day Rule**). This will keep you from confusing semen with cervical mucus.
- As soon as **any** mucus or sensation of wetness appears, avoid intercourse or sexual contact. Mucus days, especially fertile mucus days, are not safe (**Early Mucus Rule**).
- Mark the last day of clear, slippery, stretchy mucus with an X. This is the peak day. It is the most fertile time.
- After the peak day, avoid intercourse for the next 3 **dry** days and nights. These days are not safe (**Peak Day Rule**).
- Beginning on the morning of the fourth dry day, it is safe to have intercourse until your menstrual period begins again.



BASAL BODY TEMPERATURE (BBT) METHOD

You can determine your fertile phase by taking accurate measurements with a special thermometer to detect even a slight increase in your temperature.

Use the **Thermal Shift Rule**

- Take your temperature at about the same time each morning (before rising) and record the temperature on the chart provided by the NFP instructor. (See **Completed Basal Body Temperature Chart** on the next page.)
- Use the temperatures recorded on the chart for the first 10 days of your menstrual cycle to identify the highest of the “normal, low” temperatures (i.e., daily temperatures charted in the typical pattern without any unusual conditions). Disregard any temperatures that are abnormally high due to fever or other disruptions.
- Draw a line 0.05-0.1°C above the highest of these 10 temperatures. This line is called a **cover line** or temperature line.
- The **infertile phase** begins on the evening of the third consecutive day that the temperature stays above the cover line (**Thermal Shift Rule**).



SYMPTOTHERMAL METHOD - You should have instructions for both the **Cervical Mucus** and **Basal Body Temperature** methods.

You can determine your fertile days by monitoring both your temperature and your cervical mucus.

- After menstrual bleeding stops, you may have intercourse on the evening of every other dry day during the infertile days before ovulation. This is the **Alternate Dry Day Rule**, the same rule used with the **Cervical Mucus Method**.
- The fertile phase begins when wet vaginal sensations or any mucus is experienced. This is the **Early Mucus Rule**, the same rule used with the **Cervical Mucus Method**. Abstain from intercourse until the fertile phase ends.
- Abstain from intercourse until **both the Peak Day and Thermal Shift Rules** have been applied.
- When these rules do not identify the same day as the end of the fertile phase, always follow the most conservative rule, that is, the rule that identifies the **longest** fertile phase.

The following example refers to the **Completed Basal Body Temperature Chart** (see above). Following the **Thermal Shift Rule**, the woman is infertile after day 16. If, however, she follows the **Peak Day Rule**, she is not infertile until the 18th day. Therefore, she should use the conservative rule, the **Peak Day Rule**, and wait until the 18th day before resuming intercourse.



Note: You may have intercourse during the first 5 days of the menstrual cycle beginning with the first day of menstrual bleeding, if the **Peak Day** and **Thermal Shift Rules** were applied during the previous cycle. This is referred to as the **Menses Rule** and ensures that this is truly menstrual bleeding and not due to some other cause.

CLIENT INSTRUCTIONS

NATURAL FAMILY PLANNING

CALENDAR METHOD

You can determine your fertile period by monitoring your menstrual cycles.

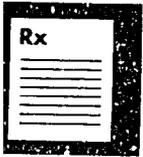
For Contraception

Calculate Your Fertile Period:

- Monitor the length of at least 6 menstrual cycles. Then calculate when the fertile days occur following the instructions below.
- From the number of days in your longest cycle, subtract 11. This identifies the **last fertile day** of your cycle.
- From the number of days in your shortest cycle, subtract 18. This identifies the **first fertile day** of your cycle.

Example: Longest cycle: 30 days minus 11 = 19
Shortest cycle: 26 days minus 18 = 8

- Your **fertile period** is calculated to be days 8 through 19 of your cycle (12 days of abstinence needed to avoid pregnancy).



Abstain from sexual intercourse during the fertile days.

For Conception

Have intercourse during the fertile days.

TUBAL OCCLUSION

- Keep the operative site dry for 2 days. Resume normal activities as is comfortable. (You should be able to return to normal activities within 7 days after surgery.)
- Avoid sexual intercourse for 1 week. After resuming intercourse, stop if it is uncomfortable.
- Avoid heavy lifting for 1 week.
- Return to or contact the health care provider or clinic immediately if any of the following develop:
 - Fever (greater than 38° C or 100.4° F)
 - Dizziness with fainting
 - Persistent or increasing abdominal pain
 - Bleeding or fluid coming from the incision
 - Signs or symptoms of pregnancy
- For pain, take 1 or 2 analgesic tablets (acetaminophen, ibuprofen or paracetamol) every 4 to 6 hours.
- Schedule a routine followup visit between 7 and 14 days from time of surgery.



CLIENT INSTRUCTIONS

VASECTOMY

- Wear a scrotal support, keep the operative site dry and rest for 2 days.
- If comfortable, you may resume sexual intercourse in 2 or 3 days, but delay sexual activity if you are uncomfortable. **Remember to use condoms or another family planning method until you have ejaculated at least 20 times.**
- Avoid heavy lifting and hard work for 3 days.
- Return to the health care provider or clinic if any of the following develop:
 - Bleeding or fluid coming from the incision area
 - A very painful or swollen scrotum
 - Fever (greater than 38° C or 100.4° F)
- For pain, take 1 or 2 analgesic tablets (acetaminophen, ibuprofen or paracetamol) every 4 to 6 hours and apply ice packs.
- Return after 1 week for removal of nonabsorbable stitches. (If no stitches or absorbable stitches were used to close the skin, there is no need to return unless there are problems.)
- Come back for a semen test 3 months after the operation if you wish to have proof that the vasectomy is completely effective.



INFECTION PREVENTION

Infection prevention (IP) in family planning and health care facilities has two primary objectives:

- to **minimize infections** due to microorganisms that cause serious wound infections, abdominal or serotal abscesses, pelvic inflammatory disease, gangrene and tetanus, and
- to **prevent the transmission of serious diseases such as hepatitis B and AIDS.**¹

The infection prevention practices described in this chapter are intended for use in all types of medical and health care facilities—from large urban hospitals to small rural clinics. They are designed to minimize costs and the need for both expensive and fragile equipment, while at the same time assuring a high level of infection prevention.

For additional information on infection prevention as well as detailed instructions on preparing chemical solutions and specific IP guidelines for the surgical contraceptive methods currently provided, see *Infection Prevention for Family Planning Service Programs* (Tietjen et al 1995).



¹ Throughout this manual, when hepatitis B (HBV) is mentioned, hepatitis C (HCV) and Delta hepatitis (HDV) also are referred to because their occurrence is worldwide and their modes of transmission/prevention are similar.

INFECTION PREVENTION

HANDWASHING

Handwashing may be the single most important procedure for preventing infection.

Handwashing is indicated **before**:

- Examining (direct contact with) a client
- Putting on **sterile** or **high level disinfected** gloves for surgical procedures

Handwashing is indicated **after**:

- Any situation in which hands may be contaminated, such as:
 - Handling soiled instruments and other items
 - Touching mucous membranes, blood or other body fluids
- Removing gloves. (Wash hands after removing gloves because gloves may have invisible holes or tears.)

For most activities, a brief handwashing with plain soap (an antiseptic agent is not necessary) for about 15 to 30 seconds followed by rinsing in a stream of water is sufficient.

SURGICAL HANDSCRUB

During surgical procedures such as minilaparotomy or vasectomy, sterile or high level disinfected gloves must be worn. A 3-to-5-minute handscrub with a solution containing chlorhexidine or an iodophor is recommended. (Chlorhexidine has been shown to be less irritating than iodophors.) Alternatively, surgical staff can wash hands with plain soap, then apply alcohol solution containing an emollient and rub until dry. (See below for directions on how to make an alcohol solution for surgical scrub.)



Applying an antiseptic prior to putting on gloves minimizes the number of microorganisms on hands under the gloves. This is important because gloves may have invisible holes or tears, or may be nicked during surgery.

Note: Skin damage caused by allergic reactions provides an ideal place for microorganisms to multiply and should be avoided. **Personnel with allergies to antiseptics or detergents may use plain soap followed by an alcohol rub.**

Alcohol Solution for Surgical Scrub

A non-irritating alcohol solution for surgical scrub can be made by adding either glycerine, propylene glycol or Sorbitol® to the alcohol (2 ml in 100 ml 60-90% alcohol solution). Use 3 to 5 ml for each application and continue rubbing the solution over the hands for about 2 minutes, using a total of 6 to 10 ml per scrub.

Supplies

- Soap (plain) or antiseptic, which is preferred, as provided by the facility
- Running water
- Stick or brush for cleaning the fingernails
- Soft brush or sponge for cleaning the skin
- Towels (sterile towels should be provided in the operating room)

Preparation

The surgeon, scrubnurse or technician should wear a short sleeved shirt or scrub suit to perform this procedure because it involves scrubbing to the elbows.

Instructions

STEP 1: Remove all jewelry.

STEP 2: Adjust water to a comfortable temperature.

STEP 3: Holding hands above the level of the elbows, wet hands thoroughly. Apply soap and clean under each fingernail using a brush.

STEP 4: Beginning at the fingertips, lather and wash with a soft brush or sponge, using a circular motion. Wash between all fingers. Move from fingertips to the elbow of one arm and repeat for the second arm.

STEP 5: Wash using a soft brush or sponge for 3 to 5 minutes (when using alcohol, pour or rub for 2 minutes).



INFECTION PREVENTION

- STEP 6:** Rinse each arm separately, fingertips first, holding hands above the level of elbows.
- STEP 7:** Using a separate towel for each hand, wipe from the fingertips to the elbow, and then discard the towel.
- STEP 8:** **Before putting on sterile gloves (and gown):** hold hands above the level of the waist and do not touch anything.
- STEP 9:** If scrubbed hands touch any “dirty” (nonsterile or high-level disinfected) object during the procedure, steps 3 through 8 must be repeated.

SKIN PREPARATION PRIOR TO SURGICAL PROCEDURES

Although skin cannot be sterilized, skin preparation with antiseptic solutions minimizes the number of microorganisms that may contaminate the surgical wound and cause infection. Antiseptics should be used for skin preparation prior to injections, surgical procedures (e.g., minilaparotomy) and for vaginal preparation prior to IUD insertion.

Instructions for Skin and Mucous Membrane Preparation

- STEP 1:** **Do not shave hair** at the operative site. Shaving increases the risk of infection as the tiny nicks in the skin provide an ideal setting for microorganisms to grow and multiply. If the hair must be cut, **trim** the hair close to the skin surface immediately before surgery.
- STEP 2:** Ask the client about **allergic reactions** (e.g., to iodine preparations) before selecting an antiseptic solution.
- STEP 3:** If visibly soiled, thoroughly **clean** the client’s skin or external genital area with soap and water before applying an antiseptic.
- STEP 4:** Apply antiseptic. Select antiseptic from the following recommended products:
- Alcohols (60-90% isopropyl, ethyl alcohol or “methylated spirit”) (do not use on mucous membranes such as the vagina)
 - Chlorhexidine gluconate 4% (e.g., Hibitane, Hibiclens)
 - Chlorhexidine gluconate and cetrimide, various concentrations (e.g., Savlon)



- Iodine preparation (1-3%); aqueous iodine and alcohol (tincture of iodine)
- Iodophors, various concentrations (e.g., Betadine)
- Parachlorometaxylenol (PCMX or chloroxylenol), various concentrations (e.g., Dettol)

STEP 5: Using dry, high-level disinfected forceps and cotton soaked in antiseptic, thoroughly clean the skin by gently scrubbing. Work from the operative site outward for several inches. (A circular motion from the center out helps to prevent recontamination of the operative site with local skin bacteria.)

STEP 6: Allow the antiseptic enough time to be effective before beginning the procedure. For example, when iodophors are used, allow 1 to 2 minutes, before proceeding.

For **cervical and vaginal preps**, prior to inserting a uterine elevator for minilaparotomy or IUD insertion or removal, select an aqueous (water-based) antiseptic, such as an iodophor or chlorhexidine gluconate (e.g., Hibiclens or Savlon). **Do not use alcohols or alcohol-containing preparations** (e.g., tincture of iodine). Alcohols burn; they also dry and irritate mucous membranes, which in turn, promotes the growth of microorganisms. Follow **STEPS 1-3** above, then:

STEP 4: After inserting the speculum, apply antiseptic solution liberally to the cervix and vagina (2 or 3 times). (It is not necessary to prep the external genital area if it appears clean. If heavily soiled, it is better to have the client wash her genital area thoroughly with soap and water before starting the procedure.)

STEP 5: If iodophors are used, allow time (1 to 2 minutes) before proceeding.

Instructions for Skin Preparation for Injections

Skin preparation is done before injections (e.g., injectable contraceptives such as DMPA) to remove as many microorganisms as possible from the client's skin in order to prevent superficial infection at the injection site or possibly an abscess.



INFECTION PREVENTION

Steps for Skin Preparation Prior to Injection

- STEP 1:** Before cleaning the skin with an antiseptic, be sure to remove all visible soil from the proposed injection site.
- STEP 2:** With antiseptic applied to a fresh cotton swab, wipe the injection site thoroughly using a circular, overlapping motion starting at the center.
- STEP 3:** Allow to dry before giving the injection.

PROCESSING INSTRUMENTS, SURGICAL GLOVES AND OTHER ITEMS

The basic infection prevention processes that should be used to reduce disease transmission from contaminated instruments, gloves and other items are:

- waste disposal and decontamination,
- cleaning and rinsing,
- sterilization, or
- high-level disinfection.



DECONTAMINATION, HIGH-LEVEL DISINFECTION AND STERILIZATION

How to make instruments/ items safer to contact:	Infection Prevention Process	Examples
Intact (unbroken) skin	Decontamination destroys viruses (such as HBV and HIV), bacteria, fungi and parasites.	Contaminated instruments and surgical gloves prior to cleaning; pelvic exam tables or other surfaces contaminated by body fluids
Intact mucous membranes or broken skin	High-level disinfection (HLD) destroys all microorganisms except some endospores. ¹ HLD should be preceded by decontamination and cleaning.	Uterine sounds, vaginal specula
Blood vessels or tissue beneath the skin	Sterilization destroys all microorganisms, including endospores. Sterilization should be preceded by decontamination and cleaning. ²	Surgical instruments such as needles and syringes, scalpels, trocars for insertion/removal of Norplant implants and surgical gloves

¹ Bacterial endospores are very difficult to kill because of their coating and can be killed reliably **only** by sterilization.

² If sterilization is not available, high-level disinfection is the only acceptable alternative.

Adapted from Spaulding 1968.



INFECTION PREVENTION

INFECTIOUS WASTE DISPOSAL

- Wearing utility gloves, transport solid infectious waste to disposal site in covered containers.
- Dispose of all sharp items in a puncture-resistant container.
- Carefully pour liquid waste down a utility drain or flushable toilet.
- Contaminated waste should be burned or buried.
- Wash hands, gloves and containers after disposal of infectious waste.

INSTRUCTIONS FOR PREPARING DILUTE CHLORINE SOLUTIONS

Formula for Making a Dilute Solution from a Concentrated One

$$\text{Total Parts (TP) (H}_2\text{O)} = \left[\frac{\% \text{ Concentrate}}{\% \text{ Dilute}} \right] - 1$$

Example: Make a dilute solution (0.1%) from 5% concentrated solution

1. Calculate $\text{TP(H}_2\text{O)} = \left[\frac{5.0\%}{0.1\%} \right] - 1 = 50 - 1 = 49$

2. Take 1 part concentrated solution and add to 49 parts H_2O .



Formula for Making a Dilute Chlorine Solution from Dry Powder

$$\text{Grams/Liter} = \left[\frac{\% \text{ Dilute}}{\% \text{ Concentrate}} \right] \times 1000$$

Example: Make a dilute chlorine-releasing solution (0.5%) from a concentrated powder (35%).

1. Calculate grams/liter: $\left[\frac{0.5\%}{35\%} \right] \times 1000 = 14.2 \text{ g / l}$

2. Add 14.2 grams (≈ 14 g) to 1 liter of water.



INFECTION PREVENTION

GLOVE REQUIREMENTS FOR COMMON PROCEDURES IN FAMILY PLANNING SETTINGS

Task or Activity
Blood pressure check
Temperature check
Injection
Blood drawing
Pelvic examination
IUD insertion (loaded in sterile package and inserted using "no-touch technique") ¹
IUD removal (using "no-touch technique")
Norplant implants insertion and removal
Surgery (minilaparotomy, laparoscopy, vasectomy)
MVA (using "no-touch technique")
Emergency childbirth
Handling and cleaning instruments
Handling contaminated waste
Cleaning blood or body fluid spills



¹ Although sterile gloves may be used for any surgical procedure, they are **not** always required. In some cases **exam** or **high-level disinfected** gloves are preferred because they are equally safe to use and less expensive.

² This includes new "never used" individual or bulk-packaged gloves (as long as boxes are stored properly).

Are Gloves Needed?	Preferred Gloves ¹	Acceptable Gloves
no		
no		
no		
yes	Exam ²	HLD Surgical
yes	Exam	HLD Surgical
yes	Exam	HLD Surgical
yes	Exam	HLD Surgical
yes	Sterile Surgical ⁴	HLD Surgical
yes	Sterile Surgical ⁴	HLD Surgical
yes	Exam	HLD Surgical
yes	Sterile Surgical ⁴	HLD Surgical
yes	Utility	Exam or Surgical ⁵
yes	Utility	Exam or Surgical ⁵
yes	Utility	Exam or Surgical ⁵

¹ If IUDs are supplied in bulk (e.g., Lippes Loop), they must be chemically sterilized or high-level disinfected before insertion. The choice of glove used for loading and inserting the IUD will be based on the final processing used (sterilization or high-level disinfection) because the IUD will need to be loaded into the inserter tube after final processing and before insertion.

⁴ When sterilization equipment (autoclave) is not available, high-level disinfection is the only acceptable alternative.

⁵ Reprocessed surgical gloves.



NOTES



GENITAL TRACT INFECTIONS (GTIs)

One of the most neglected areas in health care is the management of sexually transmitted genital tract infections (GTIs)—particularly vaginitis and cervicitis. Pelvic inflammatory disease (PID) is a serious problem in all countries. In view of the enormous health problems due to sexually transmitted GTIs, coupled with the limited resources available in developing countries, reducing the **incidence** of GTIs is unrealistic. A more realistic aim is to reduce the number of **GTI complications**, such as PID, urethral stricture and both male and female infertility.

Because family planning and GTI clinic services overlap substantially, it is important to provide GTI screening for family planning clients—even if the likelihood of GTI acquisition is low. GTIs are encountered frequently in family planning clients, especially in certain high-risk groups (e.g., clients who have more than 1 sexual partner). Effective screening does not require the use of complicated protocols or costly laboratory tests. Health care providers may provide GTI screening for large client populations by:

- Being aware of the signs and symptoms of GTIs
- Being aware of which GTIs are particularly common in their client population
- Carefully evaluating clients in whom GTIs are suspected, based on the medical history or physical examination findings

In primary health care facilities diagnosis usually rests solely on clinical findings (signs/symptoms). For secondary health care facilities, however, where pelvic examinations can be done and a microscope and simple laboratory testing are available, greater accuracy in managing the most frequently encountered sexually transmitted GTIs often is possible.

The clinical features of specific GTIs are summarized in this section. To assist the clinician in determining the cause of the client's problem, the following table provides specific information on the clinical findings, diagnosis and treatment of GTIs. **Before use, the treatment regimens should be reviewed and adapted to the local conditions, as necessary.**



GENITAL TRACT INFECTIONS

GTI	CLINICAL FINDINGS (signs/symptoms)
Vaginal/Urethral Discharge	
Bacterial vaginosis	Vaginal discharge with fishy odor, grayish in color Not necessarily sexually transmitted
Yeast (candidiasis)	Women <ul style="list-style-type: none"> • Curd-like vaginal discharge, whitish in color • Moderate to intense vaginal or vulvar itching (pruritus) Men <ul style="list-style-type: none"> • Itchy penile irritation (balanitis) Frequently not sexually transmitted



DIAGNOSIS	TREATMENT
<p>> 20% "clue cells" (vaginal epithelial cells covered with bacteria) on saline wet mount (or Gram stain); elevated vaginal pH (> 5) and positive "whiff" test for fishy smell</p>	<ul style="list-style-type: none"> • Metronidazole, 400 mg orally twice daily for 7 days <p>For pregnant women requiring treatment:</p> <ul style="list-style-type: none"> • Ampicillin, 500 mg orally 4 times daily for 7 days
<p>Presumptive diagnosis by symptoms; confirmed by microscopic examination of saline or KOH wet mount preparation</p>	<p>For females:</p> <p>Vaginal: antifungal inserted into the vagina as directed (e.g., 2 nystatin suppositories, each containing 100,000 units, or other antifungal drug each night for 7 nights)</p> <p>Vulvar: antifungal cream, ointment or lotion applied to vulva twice daily for 10 days</p> <p>Alternatively, paint vagina with 1% aqueous solution of gentian violet. Client should be encouraged to continue treatment for at least 1 week.</p> <p>In males with candida balanitis, topical application of a gentian violet solution or nystatin cream is advised.</p>



GENITAL TRACT INFECTIONS

GTI	CLINICAL FINDINGS (signs/symptoms)
Vaginal/Urethral Discharge (<i>continued</i>)	
Trichomoniasis	<p>May produce few symptoms in either sex</p> <p>Women often will have a frothy (bubbly), foul-smelling, greenish vaginal discharge.</p> <p>Men may have a urethral discharge.</p>
Gonorrhea ("clap" or "drip")	<p>Women</p> <ul style="list-style-type: none"> • Purulent (containing mucopus) vaginal discharge • Pain (or burning) on passing urine (dysuria) • Inflamed (red and tender) urethra <p>70% of women are asymptomatic in initial stages.</p> <p>If left untreated, can result in:</p> <ul style="list-style-type: none"> • infection of the pelvic organs (PID), • infertility due to tubal blockage, or • increased risk of ectopic pregnancy (tubal scarring). <p>Men</p> <ul style="list-style-type: none"> • Pain (or burning) on passing urine (dysuria) • Purulent (containing mucopus) urethral discharge (drip) <p>If left untreated, can result in:</p> <ul style="list-style-type: none"> • infection of the epididymis (coiled tube leading from the testis to the spermatic cord), • urethral abscess or narrowing (stricture), or • infertility (blockage of the epididymis).



DIAGNOSIS	TREATMENT
<p>In both sexes, diagnosis is made easily by observing microscopically the whipping motion (flagellating) of the parasite on saline wet mount.</p>	<ul style="list-style-type: none"> • Metronidazole 2 g, single oral dose (8x250 mg tablets) <p>Alternatives:</p> <ul style="list-style-type: none"> • Timidazole, 2 g, single oral dose • Nimorazole, 2 g, single oral dose <p>Occasionally, retreatment may be necessary after 14 days, especially in males.</p>
<p>Women 40-60% positive Gram-negative intracellular diplococci (GNIDs) on Gram stain of cervical smear</p> <p>Men Up to 98% positive GNIDs microscopically on Gram stain of urethral smear</p>	<p><i>Oral Regimens</i></p> <ul style="list-style-type: none"> • Amoxicillin, 3 g with clavulanic acid 250 mg, plus probenecid 1 g, as a single dose for males; given on 2 consecutive days for females • Norfloxacin, 800 mg in a single dose • Thiamphenicol, 2.5 g, daily for 2 days • Trimethoprim (80 mg)/sulfametrol (400 mg), 10 tablets daily for 2 days <p><i>Intramuscular Regimens</i></p> <ul style="list-style-type: none"> • Aqueous procaine penicillin G, 4.8 million units plus probenecid 1 g orally, plus amoxicillin 250 mg with clavulanic acid 125 mg orally • Ceftriaxone, 250 mg • Kanamycin, 2 g • Spectinomycin, 2 g



GENITAL TRACT INFECTIONS

GTI	CLINICAL FINDINGS (signs/symptoms)
Vaginal/Urethral Discharge (<i>continued</i>)	
<p>Chlamydia</p>	<p>Women Produces few symptoms, even with upper genital tract infection ("silent PID"); on examination, purulent vaginal or cervical discharge, frequently a "beefy" red cervix which is friable (bleeds easily)</p> <p>Men Most frequent cause (50%) of nongonococcal urethritis (NGU)</p>
Genital Ulcers and Bubo s	
<p>Chancroid (soft chancre)</p>	<p>Painful, "dirty" ulcers located anywhere on the external genitalia</p> <p>In 25-60% of cases, an enlarged lymph node (bubo) develops in the groin.</p> <p>Most common cause of genital ulcers in many parts of the world</p>



DIAGNOSIS	TREATMENT
<p>Presumptive diagnosis based on mucopus and/or friable (easily bleeding) cervix and negative GNIIDs</p> <p>Definitive diagnosis by serologic tests or culture</p>	<ul style="list-style-type: none"> • Tetracycline hydrochloride, 500 mg orally, 4 times a day for 7 days, or • Doxycycline 100 mg orally twice daily for 7 days <p>As an alternative and in pregnancy:</p> <ul style="list-style-type: none"> • Erythromycin, 500 mg orally 4 times a day for 7 days. Some experts believe it may be better to extend the treatment course to 10 or even 14 days.
<p>Presumptive diagnosis often rests on clinical features (syphilitic chancres usually are not painful) and a negative darkfield (microscopic) examination or serology (RPR or VDRL).</p> <p>Confirmation sometimes can be made if the causative bacteria are seen (Gram-negative coccobacilli in chains--the so-called "school of fish").</p>	<p>Oral Regimens:</p> <ul style="list-style-type: none"> • Co-trimoxazole (trimethoprim, 80 mg/ sulfamethoxazole, 400 mg), 8 tablets daily for 2 days • Trimethoprim, 250 mg/sulfamethopyrazine, 200 mg, 4 tablets in a single oral dose • Trimethoprim, 80 mg/sulfametrol, 400 mg, 8 tablets in a single oral dose • Thiamphenicol, 2.5 g by mouth daily for 2 day • Erythromycin, 500 mg orally every 6 hours for 7 days <p>Intramuscular Regimens:</p> <ul style="list-style-type: none"> • Ceftriaxone, 250 mg by intramuscular injection, single dose • Spectinomycin, 2 g by intramuscular injection, single dose



GENITAL TRACT INFECTIONS

GTI	CLINICAL FINDINGS (signs/symptoms)
Genital Ulcers and Buboos (<i>continued</i>)	
Syphilis	<p>Occurs in 2 forms—early (primary and secondary) and late.</p> <p>Early syphilis</p> <ul style="list-style-type: none"> • Initially, painless ulcer (chancre): in women on the external genitalia (labia), in men on the penis; and enlarged rubbery lymph nodes • Later (several months): non-itchy body rash <p>Both types of lesions disappear spontaneously.</p> <p>Late syphilis develops in about 25% of untreated cases and is often fatal due to involvement of the heart, great vessels and brain.</p>
Lymphogranuloma venereum (LGV)	<ul style="list-style-type: none"> • Small, usually painless papules (like pimples) on the penis or vulva, followed by • buboos in the groin which ultimately break down forming many fistula (draining openings) <p>If untreated, the lymphatic system may become blocked, producing elephantiasis (swelling of the genitals or extremities).</p>



DIAGNOSIS	TREATMENT
<p>Definitive diagnosis made by darkfield microscopy of secretions from a primary or secondary lesion or serology (RPR or VDRL) in equivocal cases or when there are no signs or symptoms (latent stage).</p>	<p>Early: Benzathine penicillin, 2.4 million units in a single dose by intramuscular injection</p> <p>In clients allergic to penicillin, tetracycline or erythromycin, 500 mg, orally 4 times a day for 15 days.</p> <p>Late: Aqueous procaine penicillin G, 600,000 units, by intramuscular injection daily for 21 days, or tetracycline or erythromycin, 500 mg, orally 4 times a day for 28 days</p>
<p>Clinical findings may not be helpful.</p> <p>Microscopic diagnosis rests on seeing inclusion bodies in white cells (PMNs) of bubo aspirate.</p>	<ul style="list-style-type: none"> • Tetracycline, 500 mg, orally 4 times daily for 14 days <p>Alternatives:</p> <ul style="list-style-type: none"> • Doxycycline, 100 mg, orally twice daily for 14 days or • Erythromycin, 500 mg, orally 4 times a day for 14 days



GENITAL TRACT INFECTIONS

GTI	CLINICAL FINDINGS (signs/symptoms)
Genital Ulcers and Buboos <i>(continued)</i>	
Granuloma inguinale (Donovanosis)	<p>An uncommon cause of ulcerative GTIs</p> <p>Typically, the infected person develops lumps under the skin which break down to form "beefy" red, painless ulcers.</p>
Genital herpes	<p>Multiple, painful, shallow ulcers which clear in 2 to 4 weeks (first attack) and may be accompanied by watery vaginal discharge in women; recurrent (multiple bouts) more than 50% of the time</p>



DIAGNOSIS	TREATMENT
<p>Diagnosis rests on identifying "Donovan bodies" inside the cell in Giemsa-stained smear from the groin or perineal buboes.</p>	<ul style="list-style-type: none"> • Trimethoprim, 80 mg/sulfamethoxazole, 400 mg, 2 tablets by mouth twice daily for 10 days, or • Tetracycline, 500 mg orally 4 times a day for 10 days with streptomycin, 750 mg by intramuscular injection daily for 10 days
<p>Presumptive diagnosis by signs and symptoms and, often, by exclusion</p>	<p>Client Instructions:</p> <ul style="list-style-type: none"> • Keep lesions clean. • Wash affected sites with soap and water and dry carefully. • Avoid sexual contact while lesions are present. • Use a condom (male or female) after lesions are healed. <p>If lesions become secondarily infected, treat for 5 days with trimethoprim, 80 mg/sulfamethoxazole, 400 mg, 2 tablets orally twice daily.</p>



GENITAL TRACT INFECTIONS

GTI	CLINICAL FINDINGS (signs/symptoms)
Genital Ulcers and Buboos (<i>continued</i>)	
<p>Genital warts (condyloma acuminata)</p>	<p>Single or multiple soft, painless, "cauliflower" growths which appear around the anus, vulvo-vaginal area, penis, urethra and perineum</p>
Lower Abdominal Pain	
<p>Pelvic inflammatory disease (PID)</p>	<p>Acute: lower abdominal tenderness, cervical motion tenderness (CMT) on pelvic examination and one or more of the following:</p> <ul style="list-style-type: none"> • purulent (containing mucopus) vaginal/ cervical discharge, • temperature > 38°C, • GNIDs on cervical smear, or • presence of a pelvic mass



DIAGNOSIS	TREATMENT
<p>Presumptive diagnosis by signs and symptoms. Exclude syphilis by darkfield examination or serology.</p>	<p>Preferred treatment, if available: Cryotherapy with liquid nitrogen, solid carbon dioxide, or cryoprobe</p> <p>Treat warts on the penile shaft or perivulval skin (since they will not respond to podophyllin) with glacial trichloroacetic acid (TCA 75% solution). Treat recurrences as above, making sure that partner(s) is examined.</p> <p>Alternatively, apply podophyllin solution (20%) carefully to warts, leave on for 4 hours and then wash. Repeat treatment weekly. Podophyllin should not be used during pregnancy and should not be applied to lesions on the cervix or inside the urethra.</p>
<p>GNIDs on cervical smear</p>	<p>For acute PID, treat for gonorrhoea (Kanamycin), chlamydia (Tetracycline) and anaerobic (Metronidazole) infections as follows:</p> <ul style="list-style-type: none"> • Kanamycin, 2 g by intramuscular injection • Tetracycline, 500 mg orally 4 times daily for 10 days • Metronidazole, 400 mg orally 3 times daily for 10 days



GENITAL TRACT INFECTIONS

GTI	CLINICAL FINDINGS (signs/symptoms)
Acute Scrotal Pain and/or Swollen Scrotum	
Epididymitis/ Orchitis	Acute: Severe pain in one or both testes, sudden swelling of the testes



DIAGNOSIS	TREATMENT
<p>May include urethral discharge (or past history)</p>	<p>If acute, treat for gonorrhoea (Kanamycin) and chlamydia (tetracycline) as follows:</p> <ul style="list-style-type: none"> • Kanamycin, 2 g by intramuscular injection, or • Tetracycline, 500 mg orally 4 times daily for 10 days <p>If urinary tract infection with Gram-negative bacilli such as <i>E. coli</i> or <i>pseudomonas</i> species, treat with trimethoprim and sulphamethoxazole as follows:</p> <ul style="list-style-type: none"> • Trimethoprim, 80 mg/ sulphamethoxazole, 400 mg, 2 tablets twice daily for 10 days



NOTES



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