## Male Condoms

This chapter describes male latex condoms. Female condoms, which usually are plastic and inserted into a woman's vagina, are available in some areas (see Female Condoms, p. 211, and Comparing Condoms, p. 360).

### **Key Points for Providers and Clients**

- Male condoms help protect against sexually transmitted infections, including HIV. Condoms are the only contraceptive method that can protect against both pregnancy and sexually transmitted infections.
- Require correct use with every act of sex for greatest effectiveness.
- **Require both male and female partner's cooperation.** Talking about condom use before sex can improve the chances one will be used.
- May dull the sensation of sex for some men. Discussion between partners sometimes can help overcome the objection.

### What Are Male Condoms?

- Sheaths, or coverings, that fit over a man's erect penis.
- Also called rubbers, "raincoats," "umbrellas," skins, and prophylactics; known by many different brand names.
- Most are made of thin latex rubber.
- Work by forming a barrier that keeps sperm out of the vagina, preventing pregnancy. Also keep infections in semen, on the penis, or in the vagina from infecting the other partner.

### **How Effective?**

*Effectiveness depends on the user:* Risk of pregnancy or sexually transmitted infection (STI) is greatest when condoms are not used with every act of sex. Very few pregnancies or infections occur due to incorrect use, slips, or breaks.

#### Protection against pregnancy:

- As commonly used, about 15 pregnancies per 100 women whose partners use male condoms over the first year. This means that 85 of every 100 women whose partners use male condoms will not become pregnant.
- When used correctly with every act of sex, about 2 pregnancies per 100 women whose partners use male condoms over the first year.

Return of fertility after use of condoms is stopped: No delay

Protection against HIV and other STIs:

• Male condoms significantly reduce the risk of becoming infected with HIV when used correctly with every act of sex.

Less effective

More effective

- When used consistently and correctly, condom use prevents 80% to 95% of HIV transmission that would have occurred without condoms (see Question 2, p. 208).
- Condoms reduce the risk of becoming infected with many STIs when used consistently and correctly.
  - Protect best against STIs spread by discharge, such as HIV, gonorrhea, and chlamydia.
  - Also protect against STIs spread by skin-to-skin contact, such as herpes and human papillomavirus.

### Side Effects, Health Benefits, and Health Risks

### Side Effects

None

### Known Health Benefits

Help protect against:

- Risks of pregnancy
- STIs, including HIV

May help protect against:

- Conditions caused by STIs:
  - Recurring pelvic inflammatory disease and chronic pelvic pain
  - Cervical cancer
  - Infertility (male and female)

### Known Health Risks

Extremely rare:

• Severe allergic reaction (among people with latex allergy)



### Why Some Men and Women Say They Like Condoms

- Have no hormonal side effects
- Can be used as a temporary or backup method
- Can be used without seeing a health care provider
- Are sold in many places and generally easy to obtain
- Help protect against both pregnancy and STIs, including HIV

#### **Bringing Up Condom Use**

Some women find it hard to discuss their desire to use condoms with their partners. Others have difficulty persuading their partners to use condoms every time they have sex. Men give different reasons for not using condoms. Some do not like the way condoms can dull the



sensation of sex. Sometimes men's reasons are based on rumors or misunderstanding. Having the facts can help a woman respond to her partner's objections (see Correcting Misunderstandings, p. 202).

Talking First Can Help. Woman who talk to their partners about using condoms before they begin to have sex can improve the chances that condoms are used. Women can try the approaches they think are best, depending on the partner and the circumstances. Some points that have been persuasive in different situations include:

- Emphasizing use of condoms for pregnancy prevention rather than STI protection.
- Appealing to concern for each other—for example: "Many people in the community have HIV infection, so we need to be careful."
- Taking an uncompromising stance—for example: "I cannot have sex with you unless you use a condom."
- Suggesting to try a female condom, if available. Some men prefer them to male condoms.
- For pregnant women, discussing the risks that STIs pose to the health of the baby and stressing how condoms can help protect the baby.

Also, a woman can suggest that her partner or the couple together come to the clinic for counseling on the importance of condom use.

### Correcting Misunderstandings (see also Questions and Answers, p. 208)

Male condoms:

- Do not make men sterile, impotent, or weak.
- Do not decrease men's sex drive.
- Cannot get lost in the woman's body.
- Do not have holes that HIV can pass through.
- Are not laced with HIV.
- Do not cause illness in a woman because they prevent semen or sperm from entering her body.
- Do not cause illness in men because sperm "backs up."
- Are used by married couples. They are not only for use outside marriage.

### Who Can and Cannot Use Male Condoms

### Medical Eligibility Criteria for Male Condoms

All men and women can safely use male condoms except those with:

Severe allergic reaction to latex rubber

For more information on latex allergy, see Mild irritation in or around the vagina or penis or mild allergic reaction to condom, p. 207; Severe allergic reaction to condom, p. 207; and Question 11, p. 210.

### **Providing Male Condoms**

### When to Start

Any time the client wants.

### **Explaining How to Use**

**IMPORTANT:** Whenever possible, show clients how to put on a condom. Use a model of a penis, if available, or other item, like a banana, to demonstrate.

Explain the 5 Basic Steps of Using a Male Condom Basic Steps Important Details			
	Use a new condom for each act of sex	<ul> <li>Important Details</li> <li>Check the condom package. Do not use if torn or damaged. Avoid using a condom past the expiration date—do so only if a newer condom is not available.</li> <li>Tear open the package carefully. Do not use fingernails, teeth, or anything that can damage the condom.</li> </ul>	
2.	Before any physical contact, place the condom on the tip of the erect penis with the rolled side out	• For the most protection, put the condom on before the penis makes any genital, oral, or anal contact.	
3.	Unroll the condom all the way to the base of the erect penis	<ul> <li>The condom should unroll easily. Forcing it on could cause it to break during use.</li> <li>If the condom does not unroll easily, it may be on backwards, damaged, or too old. Throw it away and use a new condom.</li> <li>If the condom is on backwards</li> </ul>	
		and another one is not available, turn it over and unroll it onto the penis.	
4.	Immediately after ejaculation, hold the rim of the condom in place and withdraw the penis while it is still erect	<ul> <li>Withdraw the penis.</li> <li>Slide the condom off, avoiding spilling semen.</li> <li>If having sex again or switching from one sex act to another, use a new condom.</li> </ul>	
5.	Dispose of the used condom safely	• Wrap the condom in its package and put in the rubbish or latrine. Do not put the condom into a flush toilet, as it can cause problems with plumbing.	

### Explain the 5 Basic Steps of Using a Male Condom

### Supporting the User

Ensure client understands correct use	<ul> <li>Ask the client to explain the 5 basic steps of using a condom by putting it on a model or other object and then taking it off. When counseling, use the graphic on p. 363, Correctly Using a Male Condom.</li> </ul>
Ask clients how many condoms they will need until they can return	• Give plenty of condoms and, if available, a water- or silicone-based lubricant. Oil-based lubricants should not be used with latex condoms. See box below.
	<ul> <li>Tell clients where they can buy condoms, if needed.</li> </ul>
Explain why using a condom with	<ul> <li>Just one unprotected act of sex can lead to pregnancy or STI—or both.</li> </ul>
every act of sex is important	• If a condom is not used for one act of sex, try to use one the next time. A mistake once or twice does not mean that it is pointless to use condoms in the future.
Explain about emergency contraceptive pills (ECPs)	• Explain ECP use in case of errors in condom use—including not using a condom—to help prevent pregnancy (see Emergency Contraceptive Pills, p. 45). Give ECPs, if available.
Discuss ways to talk about using condoms	<ul> <li>Discuss skills and techniques for negotiating condom use with partners (see Bringing Up Condom Use, p. 201).</li> </ul>

### Lubricants for Latex Condoms

Lubrication helps avoid condom breakage. There are 3 ways to provide lubrication—natural vaginal secretions, adding a lubricant, or using condoms packaged with lubricant on them.

Sometimes lubricants made of glycerine or silicone, which are safe to use with latex condoms, are available. Clean water and saliva also can be used for lubrication. Lubricants should be applied on the outside of the condom, in the vagina, or in the anus. Lubricants should not be put on the penis, as this can make the condom slip off. A drop or two of lubricant on the inside of the condom before it is unrolled can help increase the sensation of sex for some men. Too much lubricant inside, however, can make the condom slip off.

Do not use products made with oil as lubricants for latex condoms. They can damage latex. Materials that should *not* be used include: any oils (cooking, baby, coconut, mineral), petroleum jelly, lotions, cold creams, butter, cocoa butter, and margarine.

### What Condom Users Should Not Do

Some practices can increase the risk that the condom will break and should be avoided.

- Do not unroll the condom first and then try to put it on the penis
- Do not use lubricants with an oil base because they damage latex
- Do not use a condom if the color is uneven or changed
- Do not use a condom that feels brittle, dried out, or very sticky
- Do not reuse condoms
- Do not have dry sex

Also, do not use the same condom when switching between different penetrative sex acts, such as from anal to vaginal sex. This can transfer bacteria that can cause infection.

#### "Come Back Any Time": Reasons to Return

Assure every client that she or he is welcome to come back any time—for example, if he or she has problems, questions, or wants another method or she thinks she might be pregnant. Also if:

- Client has difficulty using condoms correctly or every time he or she has sex.
- Client has signs or symptoms of severe allergic reaction to latex condom (see Severe allergic reaction to condom, p. 207).
- Woman recently had unprotected sex and wants to avoid pregnancy. She may be able to use ECPs (see Emergency Contraceptive Pills, p. 45).

### **Helping Continuing Users**

- 1. Ask clients how they are doing with the method and whether they are satisfied. Ask if they have any questions or anything to discuss.
- 2. Ask especially if they are having any trouble using condoms correctly and every time they have sex. Give clients any information or help that they need (see Managing Any Problems, p. 206).
- Give clients more condoms and encourage them to come back for more before their supply runs out. Remind them where else they can obtain condoms.
- Ask a long-term client about major life changes that may affect her or his needs—particularly plans for having children and STI/HIV risk. Follow up as needed.

### **Problems With Use**

May or may not be due to the method.

- Problems with condoms affect clients' satisfaction and use of the method. They deserve the provider's attention. If the client reports any problems, listen to the client's concerns and give advice.
- Offer to help the client choose another method—now, if he or she wishes, or if problems cannot be overcome—unless condoms are needed for protection from STIs, including HIV.

Condom breaks, slips off the penis, or is not used

- ECPs can help prevent pregnancy in such cases (see Emergency Contraceptive Pills, p. 45). If a man notices a break or slip, he should tell his partner so that she can use ECPs if she wants.
- Little can be done to reduce the risk of STIs if a condom breaks, slips, or is not used (see Question 7, p. 209). If the client has signs or symptoms of STIs after having unprotected sex, assess or refer.
- If a client reports breaks or slips:
  - Ask clients to show how they are opening the condom package and putting the condom on, using a model or other item. Correct any errors.
  - Ask if any lubricants are being used. The wrong lubricant or too little lubricant can increase breakage (see Lubricants for Latex Condoms, p. 204). Too much lubricant can cause the condom to slip off.
  - Ask when the man withdraws his penis. Waiting too long to withdraw, when the erection begins to subside, can increase the chance of slips.

Difficulty putting on the condom

• Ask clients to show how they put the condom on, using a model or other item. Correct any errors.

Difficulty persuading partner to use condoms or not able to use a condom every time

- Discuss ways to talk about condoms with partner (see Bringing Up Condom Use, p. 201) and also dual protection rationales (see Choosing a Dual Protection Strategy, p. 280).
- Consider combining condoms with:
  - Another effective contraceptive method for better pregnancy protection.
  - If no risk of STIs, a fertility awareness method, and using condoms only during the fertile time (see Fertility Awareness Methods, p. 239).
- Especially if the client or partner is at risk for STIs, encourage continued condom use while working out problems. If neither partner has an

infection, a mutually faithful sexual relationship provides STI protection without requiring condom use but does not protect against pregnancy.

Mild irritation in or around the vagina or penis or mild allergic reaction to condom (itching, redness, rash, and/or swelling of genitals, groin, or thighs during or after condom use)

- Suggest trying another brand of condoms. A person may be more sensitive to one brand of condoms than to others.
- Suggest putting lubricant or water on the condom to reduce rubbing that may cause irritation.
- If symptoms persist, assess or refer for possible vaginal infection or STI as appropriate.
  - If there is no infection and irritation continues or recurs, the client may have an allergy to latex.
  - If not at risk of STIs, including HIV, help the client choose another method.
  - If the client or partner is at risk for STIs, suggest using female condoms or plastic male condoms, if available. If not available, urge continued use of latex condoms. Tell the client to stop using latex condoms if symptoms become severe (see Severe allergic reaction to condom, below).
  - If neither partner has an infection, a mutually faithful sexual relationship provides STI protection without requiring condom use but does not protect against pregnancy.

#### New Problems That May Require Switching Methods

May or may not be due to the method.

**Female partner is using miconazole or econazole** (for treatment of vaginal infections)

- A woman should not rely on latex condoms during vaginal use of miconazole or econazole. They can damage latex. (Oral treatment will not harm condoms.)
- She should use female condoms or plastic male condoms, another contraceptive method, or abstain from sex until treatment is completed.

**Severe allergic reaction to condom** (hives or rash over much of body, dizziness, difficulty breathing, or loss of consciousness during or after condom use). See Signs and Symptoms of Serious Health Conditions, p. 320.

- Tell the client to stop using latex condoms.
- Refer for care, if necessary. Severe allergic reaction to latex could lead to life-threatening anaphylactic shock. Help the client choose another method.
- If the client or partner cannot avoid risk of STIs, suggest they use female condoms or plastic male condoms, if available. If neither partner has an infection, a mutually faithful sexual relationship provides STI protection without requiring condom use but does not protect against pregnancy.

### Questions and Answers About Male Condoms

#### I. Are condoms effective at preventing pregnancy?

Yes, male condoms are effective, but only if used correctly with every act of sex. When used consistently and correctly, only 2 of every 100 women whose partners use condoms become pregnant over the first year of use. Many people, however, do not use condoms every time they have sex or do not use them correctly. This reduces protection from pregnancy.

#### 2. How well do condoms help protect against HIV infection?

On average, condoms are 80% to 95% effective in protecting people from HIV infection when used correctly with every act of sex. This means that condom use prevents 80% to 95% of HIV transmissions that would have occurred without condoms. (It does *not* mean that 5% to 20% of condom users will become infected with HIV.) For example, among 10,000 uninfected women whose partners have HIV, if each couple has vaginal sex just once and has no additional risk factors for infection, on average:

- If all 10,000 did not use condoms, about 10 women would likely become infected with HIV.
- If all 10,000 used condoms correctly, I or 2 women would likely become infected with HIV.

The chances that a person who is exposed to HIV will become infected can vary greatly. These chances depend on the partner's stage of HIV infection (early and late stages are more infectious), whether the person exposed has other STIs (increases susceptibility), male circumcision status (uncircumcised men are more likely to become infected with HIV), and pregnancy (women who are pregnant may be at higher risk of infection), among other factors. On average, women face twice the risk of infection, if exposed, that men do.

### 3. Does using a condom only some of the time offer any protection from STIs, including HIV?

For best protection, a condom should be used with every act of sex. In some cases, however, occasional use can be protective. For example, if a person has a regular, faithful partner and has one act of sex outside of the relationship, using a condom for that one act can be very protective. For people who are exposed to STIs, including HIV frequently, however, using a condom only some of the time will offer limited protection.

### 4. Will using condoms reduce the risk of STI transmission during anal sex?

Yes. STIs can be passed from one person to another during any sex act that inserts the penis into any part of another person's body (penetration). Some sex acts are riskier than others. For example, the risk of becoming infected with HIV is 5 times higher with unprotected receptive anal sex than with unprotected receptive vaginal sex. When using a latex condom for anal sex, a water- or silicone-based lubricant is essential to help keep the condom from breaking.

### 5. Are plastic (synthetic) condoms effective for preventing STIs, including HIV?

Yes. Plastic condoms are expected to provide the same protection as latex condoms, but they have not been studied as thoroughly. The United States Food and Drug Administration recommends that condoms made of plastic be used for protection from STIs, including HIV, only if a person cannot use latex condoms. Condoms made of animal skin such as lambskin (also called natural skin condoms) are not effective for preventing STIs, including HIV, however.

#### 6. Do condoms often break or slip off during sex?

No. On average, about 2% of condoms break or slip off completely during sex, primarily because they are used incorrectly. Used properly, condoms seldom break. In some studies with higher breakage rates, often a few users experienced most of the breakage in the entire study. Other studies also suggest that, while most people use condoms correctly, there are a few who consistently misuse condoms, which leads to breaks or slips. Thus, it is important to teach people the right way to open, put on, and take off condoms (see Correctly Using a Male Condom, p. 363) and also to avoid practices that increase the risk of breakage (see What Condom Users Should Not Do, p. 205).

### 7. What can men and women do to reduce the risk of pregnancy and STIs if a condom slips or breaks during sex?

If a condom slips or breaks, taking emergency contraceptive pills can reduce the risk that a woman will become pregnant (see Emergency Contraceptive Pills, p. 45). Little can be done to reduce the risk of STIs, however, except for HIV. Washing the penis does not help. Vaginal douching is not very effective in preventing pregnancy, and it increases a woman's risk of acquiring STIs, including HIV, and pelvic inflammatory disease. If exposure to HIV is certain, treatment with antiretroviral medications (post-exposure prophylaxis), where available, can help reduce HIV transmission. If exposure to other STIs is certain, a provider can treat presumptively for those STIs—that is, treat the client as if he or she were infected.

#### 8. Can a man put 2 or 3 condoms on at once for more protection?

There is little evidence about the benefits of using 2 or more condoms. It is generally not recommended because of concerns that friction between the condoms could increase the chance of breakage. In one study, however, users reported less breakage when 2 condoms were used at once, compared with using 1 condom.

### 9. Will condoms make a man unable to have an erection (impotent)?

No, not for most men. Impotence has many causes. Some causes are physical, some are emotional. Condoms themselves do not cause impotence. A few men may have problems keeping an erection when using condoms, however. Other men—especially older men—may have difficulty keeping an erection because condoms can dull the sensation of having sex. Using more lubrication may help increase sensation for men using condoms.

### 10. Aren't condoms used mainly in casual relationships or by people who have sex for money?

No. While many casual partners rely on condoms for STI protection, married couples all over the world use condoms for pregnancy protection, too. In Japan, for example, 42% of married couples use condoms—more than any other family planning method.

#### II. Is allergy to latex common?

No. Allergy to latex is uncommon in the general population, and reports of mild allergic reactions to condoms are very rare. Severe allergic reactions to condoms are extremely rare.

People who have an allergic reaction to rubber gloves or balloons may have a similar reaction to latex condoms. A mild reaction involves redness, itching, rash, or swelling of the skin that comes in contact with latex rubber. A severe reaction involves hives or rash over much of the body, dizziness, difficulty breathing, or loss of consciousness after coming in contact with latex. Both men and women can be allergic to latex and latex condoms.

## **Female Condoms**

This chapter describes plastic (synthetic) female condoms.

### **Key Points for Providers and Clients**

- Female condoms help protect against sexually transmitted infections, including HIV. Condoms are the only contraceptive method that can protect against both pregnancy and sexually transmitted infections.
- Require correct use with every act of sex for greatest effectiveness.
- A woman can initiate female condom use, but the method requires her partner's cooperation.
- **May require some practice.** Inserting and removing the female condom from the vagina becomes easier with experience.

### What Are Female Condoms?

- Sheaths, or linings, that fit loosely inside a woman's vagina, made of thin, transparent, soft plastic film.
  - Have flexible rings at both ends
  - One ring at the closed end helps to insert the condom
  - The ring at the open end holds part of the condom outside the vagina
- Different brand names include Care, Dominique, FC Female Condom, Femidom, Femy, Myfemy, Protectiv', Reality, and Woman's Condom.
- Lubricated with a silicone-based lubricant on the inside and outside.
- Rubber female condoms are available in some countries. Different brand names include: L'amour, Reddy Female Condom, V Amour, and VA w.o.w. Condom Feminine, which are made of latex, and the FC 2 Female Condom, made of nitrile.
- Work by forming a barrier that keeps sperm out of the vagina, preventing pregnancy. Also keep infections in semen, on the penis, or in the vagina from infecting the other partner.

### **How Effective?**

Effectiveness depends on the user: Risk of pregnancy or sexually transmitted infection (STI) is greatest when female condoms are not used with every act of sex. Few pregnancies or infections occur due to incorrect use, slips, or breaks.

#### Protection against pregnancy:

- As commonly used, about 21 pregnancies per 100 women using female condoms over the first year. This means that 79 of every 100 women using female condoms will not become pregnant.
- When used correctly with every act of sex, about 5 pregnancies per 100 women using female condoms over the first year.

Return of fertility after use of female condom is stopped: No delay

#### Protection against HIV and other STIs:

• Female condoms reduce the risk of infection with STIs, including HIV, when used correctly with every act of sex.

### Why Some Women Say They Like Female Condoms

- Women can initiate their use
- Have a soft, moist texture that feels more natural than male latex condoms during sex
- Help protect against both pregnancy and STIs, including HIV
- Outer ring provides added sexual stimulation for some women
- Can be used without seeing a health care provider

### Why Some Men Say They Like Female Condoms

- Can be inserted ahead of time so do not interrupt sex
- Are not tight or constricting like male condoms
- Do not dull the sensation of sex like male condoms
- Do not have to be removed immediately after ejaculation





effective



### Side Effects, Health Benefits, and Health Risks

Side Effects None

### Known Health Benefits

Help protect against:

- Risks of pregnancy
- STIs, including HIV

### Known Health Risks

None

### Correcting Misunderstandings (see also Questions and Answers, p. 219)

Female condoms:

- Cannot get lost in the woman's body.
- Are not difficult to use, but correct use needs to be learned.
- Do not have holes that HIV can pass through.
- Are used by married couples. They are not only for use outside marriage.
- Do not cause illness in a woman because they prevent semen or sperm from entering her body.

### Who Can Use Female Condoms

### Medical Eligibility Criteria for Female Condoms

All women can use plastic female condoms. No medical conditions prevent the use of this method.

(For information on eligibility criteria for latex female condoms, see Medical Eligibility Criteria for Male Condoms, p. 202. For information on managing clients with latex allergy, see Male Condoms, Mild irritation in or around the vagina and penis or mild allergic reaction to condom, p. 207; and Severe allergic reaction to condom, p. 207.)

### **Providing Female Condoms**

### When to Start

Any time the client wants.

### **Explaining How to Use**

**IMPORTANT:** Whenever possible, show the client how to insert the female condom. Use a model or picture, if available, or your hands to demonstrate. You can create an opening similar to a vagina with one hand and show how to insert the female condom with the other hand.

Explain the 5 Basic Steps of Using a Female Condom		
Important Details		
• Check the condom package. Do not use if torn or damaged. Avoid using a condom past the expiration date—do so only if newer condoms are not available.		
<ul> <li>If possible, wash your hands with mild soap and clean water before inserting the condom.</li> </ul>		
• Can be inserted up to 8 hours before sex. For the most protection, insert the condom before the penis comes in contact with the vagina.		
<ul> <li>Choose a position that is comfortable for insertion—squat, raise one leg, sit, or lie down.</li> </ul>		
• Rub the sides of the female condom together to spread the lubricant evenly.		
• Grasp the ring at the closed end, and squeeze it so it becomes long and narrow.		
<ul> <li>With the other hand, separate the outer lips (labia) and locate the opening of the vagina.</li> </ul>		
• Gently push the inner ring into the vagina as far up as it will go. Insert a finger into the condom to push it into place. About 2 to 3 centimeters of the condom and the outer ring remain outside the vagina.		

#### **Basic Steps**

**3.** Ensure that the penis enters the condom and stays inside the condom

#### Important Details

- The man or woman should carefully guide the tip of his penis inside the condom—not between the condom and the wall of the vagina. If his penis goes outside the condom, withdraw and try again.
- If the condom is accidentally pulled out of the vagina or pushed into it during sex, put the condom back in place.



4. After the man The female condom does not need to be withdraws his removed immediately after sex. penis, hold the Remove the condom outer ring of before standing up, to the condom. avoid spilling semen. twist to seal in fluids, and If the couple has sex again, they should use gently pull it a new condom. out of the vagina Reuse of female condoms is not recommended (see Question 5, p. 220). 5. Dispose of • Wrap the condom in its package and put it in the used the rubbish or latrine. Do not put the condom condom safely into a flush toilet, as it can cause problems with plumbing.

### Supporting the User

Ensure client understands correct use	<ul> <li>Ask the client to explain the 5 basic steps of using the female condom while handling one.</li> <li>If a model is available, the client can practice inserting the condom in the model and then taking it out.</li> </ul>
Ask the client how many condoms she	<ul> <li>Give plenty of condoms and, if available, lubricant.</li> </ul>
thinks she will need until she can return	<ul> <li>Tell the client where she can buy female condoms, if needed.</li> </ul>
Explain why using a condom with	<ul> <li>Just one unprotected act of sex can lead to pregnancy or STI—or both.</li> </ul>
every act of sex is important	• If a condom is not used for one act of sex, try to use one the next time. A mistake once or twice does not mean that it is pointless to use condoms in the future.
Explain about emergency contraceptive pills (ECPs)	• Explain ECP use in case of errors in condom use—including not using a condom—to help prevent pregnancy (see Emergency Contraceptive Pills, p. 45). Give ECPs if available.
Discuss ways to talk about using condoms	<ul> <li>Discuss skills and techniques for negotiating condom use with partners (see Bringing Up Condom Use, p. 201).</li> </ul>

### Lubricants for Female Condoms

Plastic female condoms come lubricated with a silicone-based lubricant. Unlike most male condoms, which are made of latex, plastic condoms can be used with any type of lubricant—whether made with water, silicone, or oil.

Some female condoms come with additional lubricant in the package. Some clinics may be able to provide clients with more lubricant. If a client needs additional lubrication, she can also use clean water, saliva, any oil or lotion, or a lubricant made of glycerine or silicone.

### **Tips for New Users**

- Suggest to a new user that she practice putting in and taking out the condom before the next time she has sex. Reassure her that correct use becomes easier with practice. A woman may need to use the female condom several times before she is comfortable with it.
- Suggest she try different positions to see which way insertion is easiest for her.
- The female condom is slippery. Some women find insertion easier if they put it in slowly, especially the first few times.
- If a client is switching from another method to the female condom, suggest that she continue with the previous method until she can use the female condom with confidence.

### "Come Back Any Time": Reasons to Return

Assure every client that she is welcome to come back any time—for example, if she has problems, questions, or wants another method; she has any major change in health status; or she thinks she might be pregnant. Also if:

- She has difficulty using female condoms correctly or every time she has sex.
- She recently had unprotected sex and wants to avoid pregnancy. She may be able to use ECPs (see Emergency Contraceptive Pills, p. 45).

### **Helping Continuing Users**

- Ask how the client is doing with the method and whether she is satisfied. Ask if she has any questions or anything to discuss.
- Ask especially if she has any trouble using female condoms correctly and every time she has sex. Give her any information or help that she needs (see Managing Any Problems, p. 218).
- Give her more female condoms and encourage her to come back for more before her supply runs out. Remind her where else she can obtain female condoms.
- Ask a long-term client about major life changes that may affect her needs—particularly plans for having children and STI/HIV risk. Follow up as needed.

### **Problems With Use**

May or may not be due to the method.

- Problems with condoms affect clients' satisfaction and use of the method. They deserve the provider's attention. If the client reports any problems, listen to her concerns and give advice.
- Offer to help the client choose another method—now, if she wishes, or if problems cannot be overcome—unless condoms are needed for protection from STIs, including HIV.

#### Difficulty inserting the female condom

 Ask the client how she inserts a female condom. If a model is available, ask her to demonstrate and let her practice with the model. If not, ask her to demonstrate using her hands. Correct any errors.

Inner ring uncomfortable or painful

• Suggest that she reinsert or reposition the condom so that the inner ring is tucked back behind the pubic bone and out of the way.

Condom squeaks or makes noise during sex

• Suggest adding more lubricant to the inside of the condom or onto the penis.

Condom slips, is not used, or is used incorrectly

- ECPs can help prevent pregnancy (see Emergency Contraceptive Pills, p. 45).
- Little can be done to reduce the risk of STIs if a condom breaks, slips, or is not used (see Male Condoms, Question 7, p. 209). If the client has signs or symptoms of STIs after having unprotected sex, assess or refer.
- If a client reports slips, she may be inserting the female condom incorrectly. Ask her to show how she is inserting the condom, using a model or demonstrating with her hands. Correct any errors.

Difficulty persuading partner to use condoms or not able to use a condom every time

• Discuss ways to talk with her partner about the importance of condom use for protection from pregnancy and STIs. (See Male Condoms, Difficulty persuading partner to use condoms or not able to use a condom every time, p. 206.)

### **Mild irritation in or around the vagina or penis** (itching, redness, or rash)

- Usually goes away on its own without treatment.
- Suggest adding lubricant to the inside of the condom or onto the penis to reduce rubbing that may cause irritation.
- If symptoms persist, assess and treat for possible vaginal infection or STI, as appropriate.
  - If there is no infection, help the client choose another method unless the client is at risk for STIs, including HIV
  - For clients at risk of STIs, including HIV, suggest using male condoms. If using male condoms is not possible, urge continued use of female condoms despite discomfort.
  - If neither partner has an infection, a mutually faithful sexual relationship provides STI protection without requiring condom use but does not protect against pregnancy.

#### Suspected pregnancy

- Assess for pregnancy.
- A woman can safely use female condoms during pregnancy for continued STI protection.

### Questions and Answers About Female Condoms

#### I. Is the female condom difficult to use?

No, but it does require practice and patience. See Tips for New Users, p. 217.

### 2. Can female condoms effectively prevent both pregnancy and STIs, including HIV?

Yes. Female condoms offer dual protection, against both pregnancy and STIs, including HIV, if used consistently and correctly. Many people, however, do not use condoms every time they have sex, or do not use them correctly. This reduces protection from both pregnancy and STIs.

### 3. Can a female condom and a male condom be used at the same time?

No. Male and female condoms should not be used together. This can cause friction that may lead to slipping or tearing of the condoms.

### 4. What is the best way to make sure the penis goes into the condom and not outside the condom?

To avoid incorrect use, the man should carefully guide his penis and place the tip inside the outer ring of the condom. If the penis goes between the wall of the vagina and the condom, the man should withdraw and try again.

#### 5. Can the female condom be used more than once?

Reuse of the female condom is not recommended. Reuse of currently available female condoms has not been tested.

### 6. Can the female condom be used while a woman is having her monthly bleeding?

Women can use the female condom during their monthly bleeding. The female condom cannot be used at the same time as a tampon, however. The tampon must be removed before inserting a female condom.

#### 7. Isn't the female condom too big to be comfortable?

No. Female condoms are the same length as male condoms, but wider. They are very flexible and fit to the shape of the vagina. Female condoms have been carefully designed and tested to fit any woman, whatever the size of her vagina, and any man, whatever the size of his penis.

#### 8. Can a female condom get lost inside a woman's body?

No. The female condom remains in a woman's vagina until she takes it out. It cannot go past a woman's cervix and into the womb (uterus) because it is too large for that.

#### 9. Can the female condom be used in different sexual positions?

Yes. The female condom can be used in any sexual position.

### CHAPTER 15

# Spermicides and Diaphragms

### **Spermicides**

### **Key Points for Providers and Clients**

- Spermicides are placed deep in the vagina shortly before sex.
- Require correct use with every act of sex for greatest effectiveness.
- One of the least effective contraceptive methods.
- Can be used as a primary method or as a backup method.

### What Are Spermicides?

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

### **How Effective?**

Effectiveness depends on the user: Risk of pregnancy is greatest when spermicides are not used with every act of sex.

- One of the least effective family planning methods.
- As commonly used, about 29 pregnancies per 100 women using spermicides over the first year. This means that 71 of every 100 women using spermicides will not become pregnant.
- When used correctly with every act of sex, about 18 pregnancies per 100 women using spermicides over the first year.

Return of fertility after spermicides are stopped: No delay

Protection against sexually transmitted infections (STIs): None. Frequent use of nonoxynol-9 may increase risk of HIV infection (see Question 3, p. 235).

### Side Effects, Health Benefits, and Health Risks

### Side Effects (see Managing Any Problems, p. 233)

Some users report the following:

Irritation in or around the vagina or penis

Other possible physical changes:

Vaginal lesions

### Known Health Benefits

Help protect against:

Risks of pregnancy



### Known Health Risks

Uncommon:

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

Rare:

 Frequent use of nonoxynol-9 may increase risk of HIV infection (see Question 3, p. 235)



Less effective

### Correcting Misunderstandings (see also Questions and Answers, p. 235)

Spermicides:

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

### Why Some Women Say They Like Spermicides

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

# Who Can and Cannot Use Spermicides

Safe and Suitable for Nearly All Women

# Medical Eligibility Criteria for **Spermicides**

All women can safely use spermicides except those who:

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

### **Providing Spermicides**

### When to Start

• Any time the client wants.

### **Explaining How to Use Spermicides**

Give spermicide	• Give as much spermicide as possible—even as much as a year's supply, if available.
Explain how to insert spermicide into the vagina	<ol> <li>Check the expiration date and avoid using spermicides past their expiration date.</li> <li>Wash hands with mild soap and clean water, if possible.</li> </ol>
	<b>3.</b> Foam or cream: Shake cans of foam hard. Squeeze spermicide from the can or tube into a plastic applicator. Insert the applicator deep into the vagina, near the cervix, and push the plunger.
	<ol> <li>Tablets, suppositories, jellies: Insert the spermicide deep into the vagina, near the cervix, with an applicator or with fingers. Film: Fold film in half and insert with fingers that are dry (or else the film will stick to the fingers and not the cervix).</li> </ol>
Explain when to insert	<ul> <li>Foam or cream: Any time less than one hour before sex.</li> </ul>
spermicide into the vagina	<ul> <li>Tablets, suppositories, jellies, film: Between 10 minutes and one hour before sex, depending on type.</li> </ul>
Explain about multiple acts of sex	<ul> <li>Insert additional spermicide before each act of vaginal sex.</li> </ul>
Do not wash the vagina (douche) after sex	• Douching is not recommended because it will wash away the spermicide and also increase the risk of sexually transmitted infections.
	<ul> <li>If you must douche, wait for at least 6 hours after sex before doing so.</li> </ul>

### Supporting the Spermicide User

Ensure client understands correct use	<ul> <li>Ask the client to repeat how and when to insert her spermicide.</li> </ul>
Describe the most common side effects	<ul> <li>Itching and irritation in or around the vagina or penis.</li> </ul>
Explain about emergency contraceptive pills (ECPs)	• Explain ECP use in case the spermicide is not used at all or is not used properly (see Emergene Contraceptive Pills, p. 45). Give her ECPs, if available.

### **Diaphragms**

### **Key Points for Providers and Clients**

- The diaphragm is placed deep in the vagina before sex. It covers the cervix. Spermicide provides additional contraceptive protection.
- A pelvic examination is needed before starting use. The provider must select a diaphragm that fits properly.
- Require correct use with every act of sex for greatest effectiveness.

### What Is the Diaphragm?

- A soft latex cup that covers the cervix. Plastic and silicone diaphragms may also be available.
- The rim contains a firm, flexible spring that keeps the diaphragm in place.
- Used with spermicidal cream, jelly, or foam to improve effectiveness.
- Comes in different sizes and requires fitting by a specifically trained provider. A one-size-fits-all diaphragm may become available. It would not require seeing a provider for fitting.
- Works by blocking sperm from entering the cervix; spermicide kills or disables sperm. Both keep sperm from meeting an egg.

### **How Effective?**

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

- As commonly used, about 16 pregnancies per 100 women using the diaphragm with spermicide over the first year. This means that 84 of every 100 women using the diaphragm will not become pregnant.
- When used correctly with every act of sex, about 6 pregnancies per 100 women using the diaphragm with spermicide over the first year.

Return of fertility after use of the diaphragm is stopped: No delay

Protection against STIs: May provide some protection against certain STIs but should not be relied on for STI prevention (see Question 8, p. 236).

### Side Effects, Health Benefits, and Health Risks

### Side Effects (see Managing Any Problems, p. 233)

Some users report the following:

Irritation in or around the vagina or penis

Other possible physical changes:

Vaginal lesions

### Known Health Benefits

Help protect against:

Risks of pregnancy

May help protect against:

- Certain STIs (chlamydia, gonorrhea, pelvic inflammatory disease, trichomoniasis)
- Cervical precancer and cancer

### Known Health Risks

Common to uncommon:

• Urinary tract infection

Uncommon:

- Bacterial vaginosis
- Candidiasis

#### Rare:

• Frequent use of nonoxynol-9 may increase risk of HIV infection (see Question 3, p. 235)

#### Extremely rare:

Toxic shock syndrome



Less

### Correcting Misunderstandings (see also Questions and Answers, p. 235)

Diaphragms:

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

### Why Some Women Say They Like the Diaphragm

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

### Who Can and Cannot Use Diaphragms

### Safe and Suitable for Nearly All Women

Nearly all women can use the diaphragm safely and effectively.

# Medical Eligibility Criteria for **Diaphragms**

Ask the client the questions below about known medical conditions. Examinations and tests are not necessary. If she answers "no" to all of the questions, then she can start using the diaphragm if she wants. If she answers "yes" to a question, follow the instructions. In some cases she can still start using the diaphragm. These questions also apply to the cervical cap (see p. 238).

### I. Have you recently had a baby or second-trimester spontaneous or induced abortion? If so, when?

□ NO □ YES The diaphragm should not be fitted until 6 weeks after childbirth or second-trimester abortion, when the uterus and cervix have returned to normal size. Give her a backup method<sup>\*</sup> to use until then.

#### (Continued on next page)

\* Backup methods include abstinence, male and female condoms, spermicides, and withdrawal. Tell her that spermicides and withdrawal are the least effective contraceptive methods. If possible, give her condoms.

Medical Eligibility Criteria for Diaphragms (continued)

#### 2. Are you allergic to latex rubber?

- □ NO □ YES She should not use a latex diaphragm. She can use a diaphragm made of plastic.
- 3. Do you have HIV infection or AIDS? Do you think you are at high risk of HIV infection? (Discuss what places a woman at high risk for HIV [see Sexually Transmitted Infections, Including HIV, Who Is At Risk?, p. 276]. For example, her partner has HIV.)

### □ NO □ YES Do not provide a diaphragm. For HIV protection, recommend using condoms alone or with another method.

For complete classifications, see Medical Eligibility Criteria for Contraceptive Use, p. 333. Be sure to explain the health benefits and risks and the side effects of the method that the client will use. Also, point out any conditions that would make the method inadvisable, when relevant to the client.

### Using Clinical Judgment in Special Cases of Diaphragm Use

Usually, a woman with any of the conditions listed below should not use the diaphragm. In special circumstances, however, when other, more appropriate methods are not available or acceptable to her, a qualified provider who can carefully assess a specific woman's condition and situation may decide that she can use the diaphragm with spermicide. The provider needs to consider the severity of her condition and, for most conditions, whether she will have access to follow-up.

- History of toxic shock syndrome
- Allergy to latex, especially if the allergic reaction is mild (see Mild irritation in or around the vagina or penis or mild allergic reaction to condom, p. 207)
- HIV infection or AIDS

### **Providing Diaphragms**

### When to Start

Woman's situation	When to start
Any time	At any time
	<ul> <li>If she has had a full-term delivery or second- trimester spontaneous or induced abortion less than 6 weeks ago, give her a backup method* to use, if needed, until 6 weeks have passed.</li> </ul>
Special advice for women switching from another method	<ul> <li>Suggest that she try the diaphragm for a time while still using her other method. This way she can safely gain confidence that she can use the diaphragm correctly.</li> </ul>

### **Explaining the Fitting Procedure**

Learning to fit women for a diaphragm requires training and practice. Therefore, this is a summary and not detailed instructions.

- 1. The provider uses proper infection-prevention procedures (see Infection Prevention in the Clinic, p. 312).
- 2. The woman lies down as for a pelvic examination.
- **3.** The provider checks for conditions that may make it impossible to use the diaphragm, such as uterine prolapse.
- **4.** The provider inserts the index and middle fingers into the vagina to determine the correct diaphragm size.
- 5. The provider inserts a special fitting diaphragm into the client's vagina so that it covers the cervix. The provider then checks the location of the cervix and makes sure that the diaphragm fits properly and does not come out easily.
- 6. The provider gives the woman a properly fitting diaphragm and plenty of spermicide to use with it, and teaches her to use it properly (see Explaining How to Use a Diaphragm, p. 230).

With a properly fitted diaphragm in place, the client should not be able to feel anything inside her vagina, even when she walks or during sex.

<sup>\*</sup> Backup methods include abstinence, male and female condoms, spermicides, and withdrawal. Tell her that spermicides and withdrawal are the least effective contraceptive methods. If possible, give her condoms.

### Explaining How to Use the Diaphragm

**IMPORTANT:** Whenever possible, show the woman the location of the pubic bone and cervix with a model or a picture. Explain that the diaphragm is inserted behind the pubic bone and covers the cervix.

Explain the 5 Basic Steps to Using a Diaphragm		
Basic Steps Important Details		
1. Squeeze a spoonful of spermicidal cream, jelly, or foam into the diaphragm and around the rim	<ul> <li>Wash hands with mild soap and clean water, if possible.</li> <li>Check the diaphragm for holes, cracks, or tears by holding it up to the light.</li> <li>Check the expiration date of the spermicide and avoid using any beyond its expiration date.</li> <li>Insert the diaphragm less than 6 hours before</li> </ul>	
	having sex.	
2. Press the rim together; push into the vagina as far as it goes	<ul> <li>Choose a position that is comfortable for insertion—squatting, raising one leg, sitting, or lying down.</li> </ul>	
<b>3.</b> Feel diaphragm to make sure it covers the cervix	<ul> <li>Through the dome of the diaphragm, the cervix feels like the tip of the nose.</li> <li>If the diaphragm feels uncomfortable, take it out and insert it again.</li> </ul>	
- Coff		

2

Basic Steps	Important Details	
<b>4.</b> Keep in place for	<ul> <li>Keep the diaphragm in place at least 6 hours after having sex but no longer than 24 hours.</li> </ul>	
at least 6 hours after sex	<ul> <li>Leaving the diaphragm in place for more than one day may increase the risk of toxic shock syndrome. It can also cause a bad odor and vaginal discharge. (Odor and discharge go away on their own after the diaphragm is removed.)</li> </ul>	
	<ul> <li>For multiple acts of sex, make sure that the diaphragm is in the correct position and also insert additional spermicide in front of the diaphragm before each act of sex.</li> </ul>	
5. To remove, slide a finger	<ul> <li>Wash hands with mild soap and clean water, if possible.</li> </ul>	
under the rim of the diaphragm to	<ul> <li>Insert a finger into the vagina until the rim of the diaphragm is felt.</li> </ul>	
pull it down and out	<ul> <li>Gently slide a finger under the rim and pull the diaphragm down and out. Use care not to tear the diaphragm with a fingernail.</li> </ul>	
	<ul> <li>Wash the diaphragm with mild soap and clean water and dry it after each use.</li> </ul>	

### Supporting the Diaphragm User

Ensure client understands correct use	<ul> <li>Ask the client to repeat how and when to insert and remove the diaphragm.</li> </ul>
Explain that use becomes easier with time	<ul> <li>The more practice she has with inserting and removing the diaphragm, the easier it will get.</li> </ul>
Describe the most common side effects	<ul> <li>Itching and irritation in or around the vagina or penis.</li> </ul>
Explain about emergency contraceptive pills (ECPs)	<ul> <li>Explain ECP use in case the diaphragm moves out of place or is not used properly (see Emergency Contraceptive Pills, p. 45). Give her ECPs, if available.</li> </ul>
Explain about replacement	• When a diaphragm gets thin, develops holes, or becomes stiff, it should not be used and needs to be replaced. She should obtain a new diaphragm about every 2 years.

## Tips for Users of Spermicides or the Diaphragm With Spermicide

- Spermicides should be stored in a cool, dry place, if possible, out of the sun. Suppositories may melt in hot weather. If kept dry, foaming tablets are not as likely to melt in hot weather.
- The diaphragm should be stored in a cool, dry place, if possible.
- She needs a new diaphragm fitted if she has had a baby or a secondtrimester miscarriage or abortion.

### "Come Back Any Time": Reasons to Return

Assure every client that she is welcome to come back any time—for example, if she has problems, questions, or wants another method; she has any major change in health status; or she thinks she might be pregnant.

General health advice: Anyone who suddenly feels that something is seriously wrong with her health should immediately seek medical care from a nurse or doctor. Her contraceptive method is most likely not the cause of the condition, but she should tell the nurse or doctor what method she is using.

### **Helping Continuing Users**

- 1. Ask how the client is doing with the method and whether she is satisfied. Ask if she has any questions or anything to discuss.
- 2. Ask especially if she has any problems using the method correctly and every time she has sex. Give her any information or help she needs (see Managing Any Problems, next page).
- Give her more supplies and encourage her to come back for more before she runs out. Remind her where else she can obtain more spermicides if needed.
- 4. Ask a long-term client if she has had any new health problems since her last visit. Address problems as appropriate. For new health problems that may require switching methods, see p. 234.
- Ask a long-term client about major life changes that may affect her needs—particularly plans for having children and STI/HIV risk. Follow up as needed.

### Problems Reported as Side Effects or Problems With Use

May or may not be due to the method.

- Side effects or problems with spermicides or diaphragms affect women's satisfaction and use of the method. They deserve the provider's attention. If the client reports side effects or problems, listen to her concerns, give her advice, and, if appropriate, treat.
- Offer to help the client choose another method—now, if she wishes, or if problems cannot be overcome.

#### Difficulty inserting or removing diaphragm

 Give advice on insertion and removal. Ask her to insert and remove the diaphragm in the clinic. Check its placement after she inserts it. Correct any errors.

#### Discomfort or pain with diaphragm use

- A diaphragm that is too large can cause discomfort. Check if it fits well.
  - Fit her with a smaller diaphragm if it is too large.
  - If fit appears proper and different kinds of diaphragms are available, try a different diaphragm.
- Ask her to insert and remove the diaphragm in the clinic. Check the diaphragm's placement after she inserts it. Give further advice as needed.
- Check for vaginal lesions:
  - If vaginal lesions or sores exist, suggest she use another method temporarily (condoms or oral contraceptives) and give her supplies.
  - Assess for vaginal infection or sexually transmitted infection (STI). Treat or refer for treatment as appropriate.
  - Lesions will go away on their own if she switches to another method.

**Irritation in or around the vagina or penis** (she or her partner has itching, rash, or irritation that lasts for a day or more)

- Check for vaginal infection or STI and treat or refer for treatment as appropriate.
- If no infection, suggest trying a different type or brand of spermicides.

**Urinary tract infection** (burning or pain with urination, frequent urination in small amounts, blood in the urine, back pain)

- Treat with cotrimoxazole 240 mg orally once a day for 3 days, or trimethoprim 100 mg orally once a day for 3 days, or nitrofurantoin 50 mg orally twice a day for 3 days.
- If infection recurs, consider refitting the client with a smaller diaphragm.

**Bacterial vaginosis** (abnormal white or grey vaginal discharge with unpleasant odor; may also have burning during urination and/or itching around the vagina)

• Treat with metronidazole 2 g orally in a single dose or metronidazole 400–500 mg orally twice daily for 7 days.

**Candidiasis** (abnormal white vaginal discharge that can be watery or thick and chunky; may also have burning during urination and/or redness and itching around the vagina)

- Treat with fluconazole 150 mg orally in a single dose, miconazole 200 mg vaginal suppository, once a day for 3 days, or clotrimazole 100 mg vaginal tablets, twice a day for 3 days.
- Miconazole suppositories are oil-based and can weaken a latex diaphragm. Women using miconazole vaginally should not use latex diaphragms or condoms during treatment. They can use a plastic female or male condom or another method until all medication is taken. (Oral treatment will not harm latex.)

#### Suspected pregnancy

- Assess for pregnancy.
- There are no known risks to a fetus conceived while using spermicides.

#### New Problems That May Require Switching Methods

May or may not be due to the method.

**Recurring urinary tract infections or vaginal infections** (such as bacterial vaginosis or candidiasis)

Consider refitting the client with a smaller diaphragm.

**Latex allergy** (redness, itching, rash, and/or swelling of genitals, groin, or thighs [mild reaction]; or hives or rash over much of the body, dizziness, difficulty breathing, loss of consciousness [severe reaction])

• Tell the client to stop using a latex diaphragm. Give her a plastic diaphragm, if available, or help her choose another method, but not latex condoms.

**Toxic shock syndrome** (sudden high fever, body rash, vomiting, diarrhea, dizziness, sore throat, and muscle aches). See Signs and Symptoms of Serious Health Conditions, p. 320.

- Treat or refer for immediate diagnosis and care. Toxic shock syndrome can be life-threatening.
- Tell the client to stop using the diaphragm. Help her choose another method but not the cervical cap.

### **Questions and Answers About Spermicides and Diaphragms**

### 1. Do spermicides cause birth defects? Will the fetus be harmed if a woman accidentally uses spermicides while she is pregnant?

No. Good evidence shows that spermicides will not cause birth defects or otherwise harm the fetus if a woman becomes pregnant while using spermicides or accidentally uses spermicides when she is already pregnant.

#### 2. Do spermicides cause cancer?

No, spermicides do not cause cancer.

### 3. Do spermicides increase the risk of becoming infected with HIV?

Women who use nonoxynol-9 several times a day may face an increased risk of becoming infected with HIV. Spermicides can cause vaginal irritation, which may cause small lesions to form on the lining of the vagina or on the external genitals. These lesions may make it easier for a woman to become infected with HIV. Studies that suggest spermicide use increases HIV risk have involved women who used spermicides several times a day. Women who have multiple daily acts of sex should use another contraceptive method. A study among women using nonoxynol-9 an average of 3 times a week, however, found no increased risk of HIV infection for spermicide users compared with women not using spermicides. New spermicides that are less irritating may become available.

#### 4. Is the diaphragm uncomfortable for the woman?

No, not if it is fitted and inserted correctly. The woman and her partner usually cannot feel the diaphragm during sex. The provider selects the properly sized diaphragm for each woman so that it fits her and does not hurt. If it is uncomfortable, she should come back to have the fit checked and to make sure that she is inserting and removing the diaphragm properly.

### 5. If a woman uses the diaphragm without spermicides, will it still prevent pregnancy?

There is not enough evidence to be certain. A few studies find that diaphragm users have higher pregnancy rates when they do not use a spermicide with it. Thus, using a diaphragm without spermicide is not recommended.

#### 6. Could a woman leave a diaphragm in all day?

Yes, although doing so is usually not recommended. A woman could leave a diaphragm in all day if she cannot put it in shortly before having sex. She should not leave the diaphragm in for more than 24 hours, however. This can increase the risk of toxic shock syndrome.

#### 7. Can a woman use lubricants with a diaphragm?

Yes, but only water- or silicone-based lubricants if the diaphragm is made of latex. Products made with oil cannot be used as lubricants because they damage latex. Materials that should not be used with latex diaphragms include any oils (cooking, baby, coconut, mineral), petroleum jelly, lotions, cold creams, butter, cocoa butter, and margarine. Oil-based lubricants will not harm a plastic diaphragm. Spermicides usually provide enough lubrication for diaphragm users.

#### 8. Do diaphragms help protect women from STIs, including HIV?

Research suggests that the diaphragm may help protect somewhat against infections of the cervix such as gonorrhea and chlamydia. Some studies have also found that it also may help protect against pelvic inflammatory disease and trichomoniasis. Studies are underway to assess protection from HIV. Currently, only male and female condoms are recommended for protection from HIV and other STIs.

#### 9. What is the vaginal sponge, and how effective is it?

The vaginal sponge is made of plastic and contains spermicides. It is moistened with water and inserted into the vagina so that it rests against the cervix. Each sponge can be used only once. It is not widely available.

Effectiveness depends on the user: Risk of pregnancy is greatest when a woman does not use the sponge with every act of sex.

Women who have given birth:

- One of the least effective methods, as commonly used.
- As commonly used, about 32 pregnancies per 100 women using the sponge over the first year.
- When used correctly with every act of sex, about 20 pregnancies per 100 women over the first year.

More effective among women who have not given birth:

- As commonly used, about 16 pregnancies per 100 women using the sponge over the first year.
- When used correctly with every act of sex, about 9 pregnancies per 100 women over the first year.



# **Cervical Caps**

#### **Key Points for Providers and Clients**

- The cervical cap is placed deep in the vagina before sex. It covers the cervix.
- Require correct use with every act of sex for greatest effectiveness.
- Used together with spermicide to improve effectiveness.

#### What Is the Cervical Cap?

- A soft, deep, latex or plastic rubber cup that snugly covers the cervix.
- Comes in different sizes; requires fitting by a specifically trained provider.
- Different brand names include FemCap and Leah's Shield.

#### **How Effective?**

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

Women who have given birth:

- One of the least effective methods, as commonly used.
- As commonly used, about 32 pregnancies per 100 women using the cervical cap with spermicide over the first year. This means that 68 of every 100 women using the cervical cap will not become pregnant.
- When used correctly with every act of sex, about 20 pregnancies per 100 women using the cervical cap over the first year.

More effective among women who have not given birth:

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

Return of fertility after use of cervical cap is stopped: No delay

Protection against sexually transmitted infections: None

Never given

Have given

birth

Less

birth

#### Side Effects, Health Benefits, and Health Risks

Same as for diaphragms (see Diaphragms, Side Effects, Health Benefits, and Health Risks, p. 226).

### Medical Eligibility Criteria for Cervical Caps

Ask the client the Medical Eligibility Criteria questions for Diaphragms (see p. 227). Also ask the question below about known medical conditions. Examinations and tests are not necessary. If she answers "no" to all of the questions here and for the diaphragm, then she can start the cervical cap if she wants. If she answers "yes" to a question, follow the instructions. In some cases she can still start the cervical cap.

- I. Have you been treated or are you going to be treated for cervical precancer (cervical intraepithelial neoplasia [CIN]) or cervical cancer?
- **I** NO **I YES** Do not provide the cervical cap.

For complete classifications, see Medical Eligibility Criteria for Contraceptive Use, p. 333. Be sure to explain the health benefits and risks and the side effects of the method that the client will use. Also, point out any conditions that would make the method inadvisable, when relevant to the client.

### **Providing Cervical Caps**

Providing the cervical cap is similar to providing (see p. 229) and helping diaphragm users (see p. 232). Differences include:

#### Inserting

- Fill one-third of the cap with spermicidal cream, jelly, or foam.
- Press the rim of the cap around the cervix until it is completely covered, pressing gently on the dome to apply suction and seal the cap.
- Insert the cervical cap any time up to 42 hours before having sex.

#### Removing

- Leave the cervical cap in for at least 6 hours after her partner's last ejaculation, but not more than 48 hours from the time it was put in.
- Leaving the cap in place for more than 48 hours may increase the risk of toxic shock syndrome and can cause a bad odor and vaginal discharge.
- Tip the cap rim sideways to break the seal against the cervix, then gently pull the cap down and out of the vagina.

#### 238 Family Planning: A Global Handbook for Providers

#### CHAPTER 17

# Fertility Awareness Methods

#### Key Points for Providers and Clients

- Fertility awareness methods require partners' cooperation. Couple must be committed to abstaining or using another method on fertile days.
- Must stay aware of body changes or keep track of days, according to rules of the specific method.
- No side effects or health risks.

#### What Are Fertility Awareness Methods?

- "Fertility awareness" means that a woman knows how to tell when the fertile time of her menstrual cycle starts and ends. (The fertile time is when she can become pregnant.)
- Sometimes called periodic abstinence or natural family planning.
- A woman can use several ways, alone or in combination, to tell when her fertile time begins and ends.
- Calendar-based methods involve keeping track of days of the menstrual cycle to identify the start and end of the fertile time.
  - Examples: Standard Days Method and calendar rhythm method.
- Symptoms-based methods depend on observing signs of fertility.
  - Cervical secretions: When a woman sees or feels cervical secretions, she may be fertile. She may feel just a little vaginal wetness.
  - Basal body temperature (BBT): A woman's resting body temperature goes up slightly after the release of an egg (ovulation), when she could become pregnant. Her temperature stays higher until the beginning of her next monthly bleeding.
  - Examples: TwoDay Method, BBT method, ovulation method (also known as Billings method or cervical mucus method), and the symptothermal method.

• Work primarily by helping a woman know when she could become pregnant. The couple prevents pregnancy by avoiding unprotected vaginal sex during these fertile days—usually by abstaining or by using condoms or a diaphragm. Some couples use spermicides or withdrawal, but these are among the least effective methods.

#### **How Effective?**

Effectiveness depends on the user: Risk of pregnancy is greatest when couples have sex on the fertile days without using another method.

 As commonly used, in the first year about 25 pregnancies per 100 women using periodic abstinence. (How these women identified their fertile time is not known. Pregnancy rates for most of the specific fertility awareness methods as commonly used are not available.) This means that 75 of every 100 women relying on periodic abstinence will not become pregnant. Some newer fertility awareness methods may be easier to use and, thus, more effective (see Question 3, p. 254).



effective

- Pregnancy rates with consistent and correct use vary for different types of fertility awareness methods (see table, below).
- In general, abstaining during fertile times is more effective than using another method during fertile times.

# Pregnancy Rates With Consistent and Correct Use and Abstinence on Fertile Days

Method	Pregnancies per 100 Women Over the First Year
Calendar-based methods	
Standard Days Method	5
Calendar rhythm method	9
Symptoms-based methods	
TwoDay Method	4
Basal body temperature (BBT) method	I
Ovulation method	3
Symptothermal method	2

Return of fertility after fertility awareness methods are stopped: No delay Protection against sexually transmitted infections (STIs): None

#### Side Effects, Health Benefits, and Health Risks

#### Side Effects

None

#### Known Health Benefits

Help protect against:

• Risks of pregnancy

#### Known Health Risks

None

#### Why Some Women Say They Like Fertility Awareness Methods

- Have no side effects
- Do not require procedures and usually do not require supplies
- Help women learn about their bodies and fertility
- Allow some couples to adhere to their religious or cultural norms about contraception
- Can be used to identify fertile days by both women who want to become pregnant and women who want to avoid pregnancy

#### **Correcting Misunderstandings** (see also Questions and Answers, p. 253)

Fertility awareness methods:

- Can be very effective if used consistently and correctly.
- Do not require literacy or advanced education.
- Do not harm men who abstain from sex.
- Do not work when a couple is mistaken about when the fertile time occurs, such as thinking it occurs during monthly bleeding.



#### Fertility Awareness Methods for Women With HIV

- Women who are infected with HIV, have AIDS, or are on antiretroviral (ARV) therapy can safely use fertility awareness methods.
- Urge these women to use condoms along with fertility awareness methods. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs.

### Who Can Use Calendar-Based Methods

### Medical Eligibility Criteria for Calendar-Based Methods

All women can use calendar-based methods. No medical conditions prevent the use of these methods, but some conditions can make them harder to use effectively.

*Caution* means that additional or special counseling may be needed to ensure correct use of the method.

Delay means that use of a particular fertility awareness method should be delayed until the condition is evaluated or corrected. Give the client another method to use until she can start the calendar-based method.

In the following situations use *caution* with calendar-based methods:

 Menstrual cycles have just started or have become less frequent or stopped due to older age (Menstrual cycle irregularities are common in young women in the first several years after their first monthly bleeding and in older women who are approaching menopause. Identifying the fertile time may be difficult.)

In the following situations *delay* starting calendar-based methods:

- Recently gave birth or is breastfeeding (*Delay* until she has had at least 3 menstrual cycles and her cycles are regular again. For several months after regular cycles have returned, use with *caution*.)
- Recently had an abortion or miscarriage (Delay until the start of her next monthly bleeding.)
- Irregular vaginal bleeding

In the following situations *delay* or use *caution* with calendar-based methods:

• Taking any mood-altering drugs such as anti-anxiety therapies (except benzodiazepines), antidepressants (selective serotonin reuptake inhibitors [SSRIs], tricyclic, or tetracyclic), long-term use of certain antibiotics, or long-term use of any nonsteroidal antiinflammatory drug (such as aspirin, ibuprofen, or paracetamol). These drugs may delay ovulation.



### Providing Calendar-Based Methods

#### When to Start

Once trained, a woman or couple usually can begin using calendar-based methods at any time. Give clients who cannot start immediately another method to use until they can start.

Woman's situation	When to start
Having regular menstrual cycles	Any time of the month
	<ul> <li>No need to wait until the start of next monthly bleeding.</li> </ul>
No monthly bleeding	<ul> <li>Delay calendar-based methods until monthly bleeding returns.</li> </ul>
<b>After childbirth</b> (whether or not breastfeeding)	<ul> <li>Delay the Standard Days Method until she has had 3 menstrual cycles and the last one was 26–32 days long.</li> </ul>
	• Regular cycles will return later in breastfeeding women than in women who are not breastfeeding.
After miscarriage or abortion	• Delay the Standard Days Method until the start of her next monthly bleeding, when she can start if she has no bleeding due to injury to the genital tract.
Switching from a hormonal method	<ul> <li>Delay starting the Standard Days Method until the start of her next monthly bleeding.</li> </ul>
	• If she is switching from injectables, delay the Standard Days Method at least until her repeat injection would have been given, and then start it at the beginning of her next monthly bleeding.
After taking emergency contraceptive pills	• Delay the Standard Days Method until the start of her next monthly bleeding.

#### Explaining How to Use Calendar-Based Methods

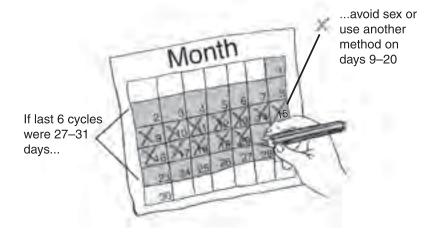
#### **Standard Days Method**

**IMPORTANT:** A woman can use the Standard Days Method if most of her menstrual cycles are 26 to 32 days long. If she has more than 2 longer or shorter cycles within a year, the Standard Days Method will be less effective and she may want to choose another method.

Keep track of the days of the menstrual cycle	• A woman keeps track of the days of her menstrual cycle, counting the first day of monthly bleeding as day 1.
Avoid unprotected sex on days 8–19	• Days 8 through 19 of every cycle are considered fertile days for all users of the Standard Days Method.
	• The couple avoids vaginal sex or uses condoms or a diaphragm during days 8 through 19. They can also use withdrawal or spermicides, but these are less effective.
	• The couple can have unprotected sex on all the other days of the cycle—days I through 7 at the beginning of the cycle and from day 20 until her next monthly bleeding begins.
Use memory aids if needed	• The couple can use CycleBeads, a color-coded string of beads that indicates fertile and nonfertile days of a cycle, or they can mark a calendar or use some other memory aid.
If monthly bleeding ( does not begin before reaching the last brown bead, her menstrual cycle is longer than 32 days. If monthly bleeding begins again before reaching the dark brown bead, her menstrual cycle is shorter than 26 days.	<ul> <li>On day I—the first day of monthly bleeding—move the rubber ring to the red bead.</li> <li>Each bead represents a day of the menstrual cycle.</li> <li>The next day move the ring to the next bead. Do this every day, even bleeding days.</li> <li>White bead days are days when bead days are days when the woman can become pregnant. She should avoid unprotected sex.</li> </ul>

#### Calendar Rhythm Method

Keep track of the days of the menstrual cycle	•	Before relying on this method, a woman records the number of days in each menstrual cycle for at least 6 months. The first day of monthly bleeding is always counted as day 1.
Estimate the fertile time	•	The woman subtracts 18 from the length of her shortest recorded cycle. This tells her the estimated first day of her fertile time. Then she subtracts 11 days from the length of her longest recorded cycle. This tells her the estimated last day of her fertile time.
Avoid unprotected sex during fertile time	•	The couple avoids vaginal sex, or uses condoms or a diaphragm, during the fertile time. They can also use withdrawal or spermicides, but these are less effective.
Update calculations monthly	•	<ul> <li>She updates these calculations each month, always using the 6 most recent cycles.</li> <li>Example: <ul> <li>If the shortest of her last 6 cycles was 27 days, 27 - 18 = 9. She starts avoiding unprotected sex on day 9.</li> <li>If the longest of her last 6 cycles was 31 days, 31 - 11 = 20. She can have unprotected sex again on day 21.</li> <li>Thus, she must avoid unprotected sex from day 9 through day 20 of her cycle.</li> </ul> </li> </ul>



### Who Can Use Symptoms-Based Methods

# Medical Eligibility Criteria for Symptoms-Based Methods

All women can use symptoms-based methods. No medical conditions prevent the use of these methods, but some conditions can make them harder to use effectively.

*Caution* means that additional or special counseling may be needed to ensure correct use of the method.

Delay means that use of a particular fertility awareness method should be delayed until the condition is evaluated or corrected. Give the client another method to use until she can start the symptoms-based method.

In the following situations use *caution* with symptoms-based methods:

- Recently had an abortion or miscarriage
- Menstrual cycles have just started or have become less frequent or stopped due to older age (Menstrual cycle irregularities are common in young women in the first several years after their first monthly bleeding and in older women who are approaching menopause. Identifying the fertile time may be difficult.)
- A chronic condition that raises her body temperature (for basal body temperature and symptothermal methods)

In the following situations *delay* starting symptoms-based methods:

- Recently gave birth or is breastfeeding (*Delay* until normal secretions have returned—usually at least 6 months after childbirth for breastfeeding women and at least 4 weeks after childbirth for women who are not breastfeeding. For several months after regular cycles have returned, use with *caution*.)
- An acute condition that raises her body temperature (for basal body temperature and symptothermal methods)
- Irregular vaginal bleeding
- Abnormal vaginal discharge

In the following situations *delay* or use *caution* with symptoms-based methods:

 Taking any mood-altering drugs such as anti-anxiety therapies (except benzodiazepines), antidepressants (selective serotonin reuptake inhibitors [SSRIs], tricyclic, or tetracyclic), anti-psychotics (including chlorpromazine, thioridazine, haloperidol, risperdone, clozapine, or lithium), long-term use of certain antibiotics, any nonsteroidal anti-inflammatory drug (such as aspirin, ibuprofen, or paracetamol), or antihistamines. These drugs may affect cervical secretions, raise body temperature, or delay ovulation.

### **Providing Symptoms-Based** Methods

#### When to Start

\_ \_ \_

Once trained, a woman or couple usually can begin using symptoms-based methods at any time. Women not using a hormonal method can practice monitoring their fertility signs before they start using symptoms-based methods. Give clients who cannot start immediately another method to use until they can start.

Woman's situation	When to start
Having regular menstrual cycles	Any time of the month
	<ul> <li>No need to wait until the start of next monthly bleeding.</li> </ul>
No monthly bleeding	<ul> <li>Delay symptoms-based methods until monthly bleeding returns.</li> </ul>
After childbirth (whether or not breastfeeding)	<ul> <li>She can start symptoms-based methods once normal secretions have returned.</li> </ul>
	<ul> <li>Normal secretions will return later in breastfeeding women than in women who are not breastfeeding.</li> </ul>
After miscarriage or abortion	• She can start symptoms-based methods immediately with special counseling and support, if she has no infection-related secretions or bleeding due to injury to the genital tract.
Switching from a hormonal method	• She can start symptoms-based methods in the next menstrual cycle after stopping a hormonal method.
After taking emergency contraceptive pills	• She can start symptoms-based methods once normal secretions have returned.

#### **Explaining How to Use Symptoms-Based Methods**

#### **TwoDay Method**

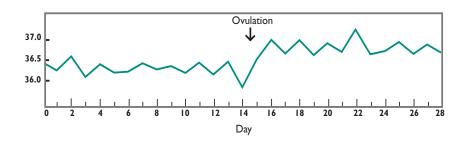
**IMPORTANT:** If a woman has a vaginal infection or another condition that changes cervical mucus, the TwoDay Method will be difficult to use.

Check for secretions	<ul> <li>The woman checks for cervical secretions every afternoon and/or evening, on fingers, underwear, or tissue paper or by sensation in or around the vagina.</li> <li>As soon as she notices any secretions of any type, color, or consistency, she considers herself fertile that day and the following day.</li> </ul>
Avoid sex or use another method on fertile days	• The couple avoids vaginal sex or uses condoms or a diaphragm on each day with secretions and on each day following a day with secretions. They can also use withdrawal or spermicides, but these are less effective.
Resume unprotected sex after 2 dry days	• The couple can have unprotected sex again after the woman has had 2 dry days (days without secretions of any type) in a row.

#### Basal Body Temperature (BBT) Method

**IMPORTANT:** If a woman has a fever or other changes in body temperature, the BBT method will be difficult to use.

Take body temperature daily	•	The woman takes her body temperature at the same time each morning before she gets out of bed and before she eats anything. She records her temperature on a special graph.
	•	She watches for her temperature to rise slightly— $0.2^{\circ}$ to $0.5^{\circ}$ C ( $0.4^{\circ}$ to $1.0^{\circ}$ F)—just after ovulation (usually about midway through the menstrual cycle).
Avoid sex or use another method until 3 days after the temperature rise	•	The couple avoids vaginal sex, or uses condoms or a diaphragm from the first day of monthly bleeding until 3 days after the woman's temperature has risen above her regular tem- perature. They can also use withdrawal or spermicides, but these are less effective.
Resume unprotected sex until next monthly bleeding begins	•	When the woman's temperature has risen, above her regular temperature and stayed higher for 3 full days, ovulation has occurred and the fertile period has passed.
	•	The couple can have unprotected sex on the 4th day and until her next monthly bleeding begins.



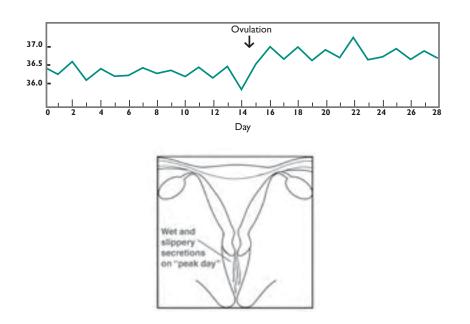
#### **Ovulation Method**

**IMPORTANT:** If a woman has a vaginal infection or another condition that changes cervical mucus, this method may be difficult to use.

Check cervical secretions daily	<ul> <li>The woman checks every day for any cervical secretions on fingers, underwear, or tissue pape or by sensation in or around the vagina.</li> </ul>
Avoid unprotected sex on days of heavy monthly bleeding	• Ovulation might occur early in the cycle, during the last days of monthly bleeding, and heavy bleeding could make mucus difficult to observe.
Resume unprotected sex until secretions begin	<ul> <li>Between the end of monthly bleeding and the start of secretions, the couple can have unprotected sex, but not on 2 days in a row. (Avoiding sex on the second day allows time for semen to disappear and for cervical mucus to b observed.)</li> </ul>
	<ul> <li>It is recommended that they have sex in the evenings, after the woman has been in an uprigh position for at least a few hours and has been able to check for cervical mucus.</li> </ul>
Avoid unprotected sex when secretions begin and until 4 days after "peak day"	<ul> <li>As soon as she notices any secretions, she considers herself fertile and avoids unprotected sex.</li> <li>She continues to check her cervical secretions each day. The secretions have a "peak day"—the last day that they are clear, slippery, stretchy, and wet. She will know this has passed when, on the next day, her secretions are sticky or dry, or she has no secretions at all. She continues to consider herself fertile for 3 days after that peak day and avoids unprotected sex.</li> </ul>
Resume unprotected sex	<ul> <li>The couple can have unprotected sex on the 4th day after her peak day and until her next monthly bleeding begins.</li> </ul>

# Symptothermal Method (basal body temperature + cervical secretions + other fertility signs)

Avoid unprotected sex on fertile days	<ul> <li>Users identify fertile and nonfertile days by combining BBT and ovulation method instructions.</li> </ul>
	<ul> <li>Women may also identify the fertile time by other signs such as breast tenderness and ovulatory pain (lower abdominal pain or cramping around the time of ovulation).</li> </ul>
	• The couple avoids unprotected sex between the first day of monthly bleeding and either the fourth day after peak cervical secretions or the third full day after the rise in temperature (BBT), whichever happens later.
	• Some women who use this method have unprotected sex between the end of monthly bleeding and the beginning of secretions, but not on 2 days in a row.



Fertility Awareness Methods L

#### Supporting the User

#### "Come Back Any Time": Reasons to Return

No routine return visit is required. Providers should invite a woman or couple to meet with them a few times during the first few cycles if they want more help. Assure every client that she is welcome to come back any time—for example, if she has problems, questions, or wants another method; she has any major change in health status; or thinks she might be pregnant. Also if:

- She is having difficulty identifying her fertile days.
- She is having trouble avoiding sex or using another method on the fertile days. For example, her partner does not cooperate.

### Helping Continuing Users

#### Helping Clients at Any Visit

- 1. Ask clients how they are doing with the method and whether they are satisfied. Ask if they have any questions or anything to discuss.
- **2.** Ask especially if they are having difficulty identifying her fertile days or trouble avoiding unprotected sex on the fertile days.
- 3. Check whether the couple is using the method correctly. Review observations or records of fertility signs. If needed, plan for another visit.
- **4.** Ask a long-term client if she has had any new health problems since her last visit. Address problems as appropriate.
- Ask a long-term client about major life changes that may affect her needs—particularly plans for having children and STI/HIV risk. Follow up as needed.

#### **Managing Any Problems**

#### **Problems With Use**

- Problems with fertility awareness methods affect women's satisfaction and use of the method. They deserve the provider's attention. If the client reports any problems, listen to her concerns and give her advice.
- Offer to help the client choose another method—now, if she wishes, or if problems cannot be overcome.

#### Inability to abstain from sex during the fertile time

- Discuss the problem openly with the couple and help them feel at ease, not embarrassed.
- Discuss possible use of condoms, diaphragm, withdrawal, or spermicides or sexual contact without vaginal sex during the fertile time.

#### 252 Family Planning: A Global Handbook for Providers

• If she has had unprotected sex in the past 5 days she can consider ECPs (see Emergency Contraceptive Pills, p. 45).

#### **Calendar-Based Methods**

Cycles are outside the 26–32 day range for Standard Days Method

 If she has 2 or more cycles outside the 26 to 32 day range within any 12 months, suggest she use the calendar rhythm method or a symptomsbased method instead.

Very irregular menstrual cycles among users of calendar-based methods

• Suggest she use a symptoms-based method instead.

#### Symptoms-Based Methods

Difficulty recognizing different types of secretions for the ovulation method

- Counsel the client and help her learn how to interpret cervical secretions.
- Suggest she use the TwoDay Method, which does not require the user to tell the difference among types of secretions.

Difficulty recognizing the presence of secretions for the ovulation method or the TwoDay Method

- Provide additional guidance on how to recognize secretions.
- Suggest she use a calendar-based method instead.

### Questions and Answers About Fertility Awareness Methods

#### I. Can only well-educated couples use fertility awareness methods?

No. Couples with little or no formal schooling can and do use fertility awareness methods effectively. Couples must be highly motivated, welltrained in their method, and committed to avoiding unprotected sex during the fertile time.

#### 2. Are fertility awareness methods reliable?

For many couples, these methods provide reliable information about the fertile days. If the couple avoids vaginal sex, or uses condoms or a diaphragm during the woman's fertile time, fertility awareness methods can be very effective. Using withdrawal or spermicides during the fertile time is less effective.

### 3. What is new about the newer fertility awareness methods, the Standard Days Method and the TwoDay Method?

These new fertility awareness methods are easier to use correctly than some of the older ones. Thus, they could appeal to more couples and be more effective for some people. They are like older methods, however, in that they rely on the same ways of judging when a woman might be fertile—by keeping track of the days of the cycle for the Standard Days Method and by cervical secretions for the TwoDay Method. So far, there are few studies of these methods. A clinical trial found that, as the Standard Days Method was commonly used by women who had most cycles between 26 and 32 days long, there were 12 pregnancies per 100 women over the first year of use. In a clinical trial of the TwoDay Method as it was commonly used, there were 14 pregnancies per 100 women over the first year of use. This rate is based on those who remained in the study. Women who detected secretions on fewer than 5 days or more than 14 days in each cycle were excluded.

### 4. How likely is a woman to become pregnant if she has sex during monthly bleeding?

During monthly bleeding the chances of pregnancy are low but not zero. Bleeding itself does not prevent pregnancy, and it does not promote pregnancy, either. In the first several days of monthly bleeding, the chances of pregnancy are lowest. For example, on day 2 of the cycle (counting from the first day of bleeding as day 1), the chance of getting pregnant is extremely low (less than 1%). As the days pass, the chances of pregnancy increase, whether or not she is still bleeding. The risk of pregnancy rises until ovulation. The day after ovulation the chances of pregnancy begin to drop steadily. Some fertility awareness methods that depend on cervical secretions advise avoiding unprotected sex during monthly bleeding because cervical secretions cannot be detected during bleeding and there is a small risk of ovulation at this time.

### 5. How many days of abstinence or use of another method might be required for each of the fertility awareness methods?

The number of days varies based on the woman's cycle length. The average number of days a woman would be considered fertile—and would need to abstain or use another method—with each method is: Standard Days Method, 12 days; TwoDay Method, 13 days; symptothermal method, 17 days; ovulation method, 18 days.



# **Withdrawal**

#### **Key Points for Providers and Clients**

- Always available in every situation. Can be used as a primary method or as a backup method.
- Requires no supplies and no clinic or pharmacy visit.
- One of the least effective contraceptive methods. Some men use this method effectively, however. Offers better pregnancy protection than no method at all.
- Promotes male involvement and couple communication.

#### What Is Withdrawal?

- The man withdraws his penis from his partner's vagina and ejaculates outside the vagina, keeping his semen away from her external genitalia.
- Also known as coitus interruptus and "pulling out."
- Works by keeping sperm out of the woman's body.

#### **How Effective?**

Effectiveness depends on the user: Risk of pregnancy is greatest when the man does not withdraw his penis from the vagina before he ejaculates with every act of sex.

- One of the least effective methods, as commonly used.
- As commonly used, about 27 pregnancies per 100 women whose partner uses withdrawal over the first year. This means that 73 of every 100 women whose partners use withdrawal will not become pregnant.
- When used correctly with every act of sex, about 4 pregnancies per 100 women whose partners use withdrawal over the first year.

Return of fertility after use of withdrawal is stopped: No delay

Protection against sexually transmitted infections: None

#### Side Effects, Health Benefits, and Health Risks

None



18

**Nithdrawal** 

### Who Can and Cannot Use Withdrawal

### Medical Eligibility Criteria for Withdrawal

All men can use withdrawal. No medical conditions prevent its use.

### **Using Withdrawal**

• Can be used at any time.



#### **Explaining How to Use**

When the man	<ul> <li>He should withdraw his penis from the woman's</li></ul>
feels close to	vagina and ejaculate outside the vagina, keeping
ejaculating	his semen away from her external genitalia.
lf man has ejaculated recently	• Before sex he should urinate and wipe the tip of his penis to remove any sperm remaining.

#### **Giving Advice on Use**

Learning proper use can take time	<ul> <li>Suggest the couple also use another method until the man feels that he can use withdrawal correctly with every act of sex.</li> </ul>
Greater protection from pregnancy is available	• Suggest an additional or alternative family planning method. (Couples who have been using withdrawal effectively should not be discouraged from continuing.)
Some men may have difficulty using withdrawal	<ul> <li>Men who cannot sense consistently when ejaculation is about to occur.</li> </ul>
	<ul> <li>Men who ejaculate prematurely.</li> </ul>
Can use emergency contraceptive pills (ECPs)	• Explain ECP use in case a man ejaculates before withdrawing (see Emergency Contraceptive Pills, p. 45). Give ECPs if available.

# Lactational Amenorrhea Method

#### **Key Points for Providers and Clients**

- A family planning method based on breastfeeding. Provides contraception for the mother and best feeding for the baby.
- Can be effective for up to 6 months after childbirth, as long as monthly bleeding has not returned and the woman is fully or nearly fully breastfeeding.
- **Requires breastfeeding often, day and night.** Almost all of the baby's feedings should be breast milk.
- Provides an opportunity to offer a woman an ongoing method that she can continue to use after 6 months.

#### What Is the Lactational Amenorrhea Method?

- A temporary family planning method based on the natural effect of breastfeeding on fertility. ("Lactational" means related to breastfeeding. "Amenorrhea" means not having monthly bleeding.)
- The lactational amenorrhea method (LAM) requires 3 conditions. All 3 must be met:
  - I. The mother's monthly bleeding has not returned
  - 2. The baby is fully or nearly fully breastfed and is fed often, day and night
  - 3. The baby is less than 6 months old
- "Fully breastfeeding" includes both exclusive breastfeeding (the infant receives no other liquid or food, not even water, in addition to breast milk) and almost-exclusive breastfeeding (the infant receives vitamins, water, juice, or other nutrients once in a while in addition to breast milk).
- "Nearly fully breastfeeding" means that the infant receives some liquid or food in addition to breast milk, but the majority of feedings (more than three-fourths of all feeds) are breast milk.

19

• Works primarily by preventing the release of eggs from the ovaries (ovulation). Frequent breastfeeding temporarily prevents the release of the natural hormones that cause ovulation.

#### **How Effective?**

Effectiveness depends on the user: Risk of pregnancy is greatest when a woman cannot fully or nearly fully breastfeed her infant.

- As commonly used, about 2 pregnancies per 100 women using LAM in the first 6 months after childbirth. This means that 98 of every 100 women relying on LAM will not become pregnant.
- When used correctly, less than I pregnancy per 100 women using LAM in the first 6 months after childbirth.

Return of fertility after LAM is stopped: Depends on how much the woman continues to breastfeed

Less

effective

More effective

Protection against sexually transmitted infections: None

#### Side Effects, Health Benefits, and Health Risks

#### Side Effects

None. Any problems are the same as for other breastfeeding women.

#### Known Health Benefits

Helps protect against:

• Risks of pregnancy

Encourages:

 The best breastfeeding patterns, with health benefits for both mother and baby

#### None

Known Health Risks

#### Correcting Misunderstandings (see also Questions and Answers, p. 265)

The lactational amenorrhea method:

- Is highly effective when a woman meets all 3 LAM criteria.
- Is just as effective among fat or thin women.
- Can be used by women with normal nutrition. No special foods are required.
- Can be used for a full 6 months without the need for supplementary foods. Mother's milk alone can fully nourish a baby for the first 6 months of life. In fact, it is the ideal food for this time in a baby's life.
- Can be used for 6 months without worry that the woman will run out of milk. Milk will continue to be produced through 6 months and longer in response to the baby's suckling or the mother's expression of her milk.

#### 258 Family Planning: A Global Handbook for Providers

### Who Can Use the Lactational Amenorrhea Method

### Medical Eligibility Criteria for the Lactational Amenorrhea Method

All breastfeeding women can safely use LAM, but a woman in the following circumstances may want to consider other contraceptive methods:

- Has HIV infection including AIDS (see The Lactational Amenorrhea Method for Women With HIV, p. 260)
- Is using certain medications during breastfeeding (including moodaltering drugs, reserpine, ergotamine, anti-metabolites, cyclosporine, high doses of corticosteroids, bromocriptine, radioactive drugs, lithium, and certain anticoagulants)
- The newborn has a condition that makes it difficult to breastfeed (including being small-for-date or premature and needing intensive neonatal care, unable to digest food normally, or having deformities of the mouth, jaw, or palate)

## Why Some Women Say They Like the Lactational Amenorrhea Method

- It is a natural family planning method
- It supports optimal breastfeeding, providing health benefits for the baby and the mother
- It has no direct cost for family planning or for feeding the baby

### The Lactational Amenorrhea Method for Women With HIV

- Women who are infected with HIV or who have AIDS can use LAM. Breastfeeding will not make their condition worse. There is a chance, however, that mothers with HIV will transmit HIV to their infants through breastfeeding. Without any antiretroviral (ARV) therapy, if infants of HIV-infected mothers are mixed-fed (breast milk and other foods) for 2 years, between 10 and 20 of every 100 will become infected with HIV through breast milk, in addition to those already infected during pregnancy and delivery. Exclusive breastfeeding reduces this risk of HIV infection through breastfeeding by about half. Reducing the length of time of breastfeeding also greatly reduces the risk. For example, breastfeeding for 12 months reduces transmission by 50% compared with breastfeeding for 24 months. HIV transmission through breast milk is more likely among mothers with advanced disease or who are newly infected.
- Women taking ARV therapy can use LAM. In fact, giving ARV therapy to an HIV-infected mother or an HIV-exposed infant very significantly reduces the risk of HIV transmission through breastfeeding.
- HIV-infected mothers should receive the appropriate ARV interventions and should exclusively breastfeed their infants for the first 6 months of life, introduce appropriate complementary foods at 6 months, and continue breastfeeding for the first 12 months. Breastfeeding should then stop only once a nutritionally adequate and safe diet without breast milk can be provided.
- At 6 months—or earlier if her monthly bleeding has returned or she stops exclusive breastfeeding—a woman should begin to use another contraceptive method in place of LAM and continue to use condoms. Urge women with HIV to use condoms along with LAM. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs.

(For further guidance on infant feeding for women with HIV, see Maternal and Newborn Health, Preventing Mother-to-Child Transmission of HIV, p. 294.)

### **Providing the Lactational Amenorrhea Method**

#### When to Start

Woman's situation	When to start
Within 6 months after childbirth	• Start breastfeeding immediately (within one hour) or as soon as possible after the baby is born. In the first few days after childbirth, the yellowish fluid produced by the mother's breasts (colostrum) contains substances very important to the baby's health.
	<ul> <li>Any time if she has been fully or nearly breastfeeding her baby since birth and her monthly bleeding has not returned.</li> </ul>



#### When Can a Woman Use LAM?

A breastfeeding woman can use LAM to space her next birth and as a transition to another contraceptive method. She may start LAM at any time if she meets all 3 criteria required for using the method.

2

#### Ask the mother these 3 questions:



Has your monthly bleeding returned?





...she can use LAM. There is only a 2% change of pregnancy at this time. A woman may choose another family planning method at any time—but preferably not a method with estrogen while her baby is less than 6 months old. Methods with estrogen include combined oral contraceptives, monthly injectables, the combined patch, and the combined vaginal ring.



Are you regularly giving the baby other food besides breast milk or allowing long periods without breastfeeding, either day or night?



Is your baby more than 6 months old?

#### But, when the answer to any one of these questions is yes...

...her chances of pregnancy increase. Advise her to begin using another family planning method and to continue breastfeeding for the child's health.

#### **Explaining How to Use**

Breastfeed often	•	An ideal pattern is feeding on demand (that is, whenever the baby wants to be fed) and at least 10 to 12 times a day in the first few weeks after childbirth and thereafter 8 to 10 times a day, including at least once at night in the first months.
	•	Daytime feedings should be no more than 4 hours apart, and night-time feedings no more than 6 hours apart.
	•	Some babies may not want to breastfeed 8 to 10 times a day and may want to sleep through the night. These babies may need gentle encouragement to breastfeed more often.
Start other foods at 6 months	•	She should start giving other foods in addition to breast milk when the baby is 6 months old. At this age, breast milk can no longer fully nourish a growing baby.
Plan follow-up visit	•	Plan for the next visit while the LAM criteria still apply, so that she can choose another method and continue to be protected from pregnancy.
	•	If possible, give her condoms or progestin-only pills now. She can start to use them if the baby is no longer fully or nearly fully breastfeeding, if her monthly bleeding returns, or if the baby reaches 6 months of age before she can come back for another method. Plan for a follow-on method. Give her any supplies now.

#### Supporting the User

#### "Come Back Any Time": Reasons to Return

Assure every client that she is welcome to come back any time—for example, if she has problems, questions, or wants another method; she has a major change in health status; or she thinks she might be pregnant. Also, if:

• She no longer meets one or more of the 3 LAM criteria and so cannot keep relying on LAM.

### **Helping Continuing Users**

#### Helping Clients Switch to a Continuing Method

 A woman can switch to another method any time she wants while using LAM. If she still meets all 3 LAM criteria, it is reasonably certain she is not pregnant. She can start a new method with no need for a pregnancy test, examinations, or evaluation.



- 2. To continue preventing pregnancy, a woman *must* switch to another method as soon as any one of the 3 LAM criteria no longer applies.
- 3. Help the woman choose a new method before she needs it. If she will continue to breastfeed, she can choose from several hormonal or nonhormonal methods, depending on how much time has passed since childbirth (see Maternal and Newborn Health, Earliest Time That a Woman Can Start a Family Planning Method After Childbirth, p. 293).

#### Managing Any Problems

#### **Problems With Use**

- Problems with breastfeeding or LAM affect women's satisfaction and use of the method. If the client reports any problems, listen to her concerns, give her advice, and, if appropriate, treat.
- Offer to help the client choose another method—now, if she wishes, or if problems cannot be overcome.
- For problems with breastfeeding, see Maternal and Newborn Health, Managing Breastfeeding Problems, p. 295.

### Questions and Answers About the Lactational Amenorrhea Method

#### I. Can LAM be an effective method of family planning?

Yes. LAM is very effective if the woman's monthly bleeding has not returned, she is fully or nearly fully breastfeeding, and her baby is less than 6 months old.

### 2. When should a mother start giving her baby other foods besides breast milk?

Ideally, when the baby is 6 months old. Along with other foods, breast milk should be a major part of the child's diet through the child's second year or longer.

#### 3. Can women use LAM if they work away from home?

Yes. Women who are able to keep their infants with them at work or nearby and are able to breastfeed frequently can rely on LAM as long as they meet all 3 criteria for LAM. Women who are separated from their infants can use LAM if breastfeeds are less than 4 hours apart. Women can also express their breast milk at least every 4 hours, but pregnancy rates may be slightly higher for women who are separated from their infants. The one study that assessed use of LAM among working women estimated a pregnancy rate of 5 per 100 women during the first 6 months after childbirth, compared with about 2 per 100 women as LAM is commonly used.

### 4. What if a woman learns that she has HIV while she is using LAM? Can she continue breastfeeding and using LAM?

If a woman is newly infected with HIV, the risk of transmission through breastfeeding may be higher than if she was infected earlier, because there is more HIV in her body. The breastfeeding recommendation is the same as for other HIV-infected women, however. HIV-infected mothers or their infants should receive the appropriate ARV therapy, and mothers should exclusively breastfeed their infants for the first 6 months of life, then introduce appropriate complementary foods and continue breastfeeding for the first 12 months of life. At 6 months or earlier if her monthly bleeding has returned or she stops exclusive breastfeeding—she should begin to use another contraceptive method in place of LAM and continue to use condoms. (See also Maternal and Newborn Health, Preventing Mother-to-Child Transmission of HIV, p. 294.)

# Serving Diverse Groups

#### **Key Points for Providers and Clients**

#### Adolescents

• Unmarried and married youth may have different sexual and reproductive health needs. All contraceptives are safe for young people.

#### Men

• Correct information can help men make better decisions about their own health and their partner's health, too. When couples discuss contraception, they are more likely to make plans that they can carry out.

Women Near Menopause

• To be sure to avoid pregnancy, a woman should use contraception until she has had no monthly bleeding for 12 months in a row.

### **Adolescents**

Young people may come to a family planning provider not only for contraception but also for advice about physical changes, sex, relationships, family, and problems of growing up. Their needs depend on their particular situations. Some are unmarried and sexually active, others are not sexually active, while still others are already married. Some already have children. Age itself makes a great difference, since young people mature quickly during the adolescent years. These differences make it important to learn about each client first, to understand why that client has come, and to tailor counseling and the offer of services accordingly.

#### **Provide Services with Care and Respect**

Young people deserve nonjudgmental and respectful care no matter how young they are. Criticism or unwelcoming attitudes will keep young people away from the care they need. Counseling and services do not encourage young people to have sex. Instead, they help young people protect their health.

To make services friendly to youth, you can:

- Show young people that you enjoy working with them.
- Counsel in private areas where you cannot be seen or overheard. Ensure confidentiality and assure the client of confidentiality.
- Listen carefully and ask open-ended questions such as "How can I help you?" and "What questions do you have?"
- Use simple language and avoid medical terms.



- Use terms that suit young people. Avoid such terms as "family planning," which may seem irrelevant to those who are not married.
- Welcome partners and include them in counseling, if the client desires.
- Try to make sure that a young woman's choices are her own and are not pressured by her partner or her family. In particular, if she is being pressured to have sex, help a young woman think about what she can say and do to resist and reduce that pressure. Practice skills to negotiate condom use.
- Speak without expressing judgment (for example, say "You can" rather than "You should"). Do not criticize even if you do not approve of what the young person is saying or doing. Help young clients make decisions that are in their best interest.
- Take time to fully address questions, fears, and misinformation about sex, sexually transmitted infections (STIs), and contraceptives. Many young people want reassurance that the changes in their bodies and their feelings are normal. Be prepared to answer common questions about puberty, monthly bleeding, masturbation, night-time ejaculation, and genital hygiene.

#### All Contraceptives Are Safe for Young People

Young people can safely use any contraceptive method.

- Young women are often less tolerant of side effects than older women. With counseling, however, they will know what to expect and may be less likely to stop using their methods.
- Unmarried young people may have more sex partners than older people and so may face a greater risk of STIs. Considering STI risk and how to reduce it is an important part of counseling.

For some contraceptive methods there are specific considerations for young people (see contraceptive method chapters for complete guidance):

**Hormonal contraceptives** (oral contraceptives, injectables, combined patch, combined vaginal ring, and implants)

- Injectables and the combined ring can be used without others knowing.
- Some young women find regular pill-taking particularly difficult.

#### **Emergency contraceptive pills** (ECPs)

- Young women may have less control than older women over having sex and using contraception. They may need ECPs more often.
- Provide young women with ECPs in advance, for use when needed. ECPs can be used whenever she has any unprotected sex, including sex against her will, or a contraceptive mistake has occurred.

#### Female sterilization and vasectomy

• Provide with great caution. Young people and people with few or no children are among those most likely to regret sterilization.

#### Male and female condoms

- Protect against both STIs and pregnancy, which many young people need.
- Readily available, and they are affordable and convenient for occasional sex.
- Young men may be less successful than older men at using condoms correctly. They may need practice putting condoms on.

#### **Intrauterine device** (copper-bearing and hormonal IUDs)

• IUDs are more likely to come out among women who have not given birth because their uteruses are small.

#### Diaphragms, spermicides, and cervical caps

• Although among the least effective methods, young women can control use of these methods, and they can be used as needed.

#### Fertility awareness methods

- Until a young woman has regular menstrual cycles, fertility awareness methods should be used with caution.
- Need a backup method or ECPs on hand in case abstinence fails.

#### Withdrawal

- Requires the man to know when he is about to ejaculate so he can withdraw in time. This may be difficult for some young men.
- One of the least effective methods of pregnancy prevention, but it may be the only method available—and always available—for some young people.

### Men

#### Important Supporters, Important Clients

To health care providers, men are important for 2 reasons. First, they influence women. Some men care about their partner's reproductive health and support them. Others stand in their way or make decisions for them. Thus, men's attitudes can determine whether women can practice healthy behaviors. In some circumstances, such as avoiding HIV infection or getting help quickly in an obstetric emergency, a man's actions can determine whether a woman lives or dies.

Men are also important as clients. Major family planning methods—male condoms and vasectomy—are used by men. Men also have their own sexual and reproductive health needs and concerns—in particular regarding sexually transmitted infections (STIs)—which deserve the attention of the health care system and providers.

#### Many Ways to Help Men

Providers can give support and services to men both as supporters of women and as clients.

#### Encourage Couples to Talk

Couples who discuss family planning—with or without a provider's help are more likely to make plans that they can carry out. Providers can:

- Coach men and women on how to talk with their partners about sex, family planning, and STIs.
- Encourage joint decision-making about sexual and reproductive health matters.
- Invite and encourage women to bring their partners to the clinic for joint counseling, decision-making, and care.
- Suggest to female clients that they tell their partners about health services for men. Give informational materials to take home, if available.



### **Provide Accurate Information**

To inform men's decisions and opinions, they need correct information and correction of misperceptions. Topics important to men include:

- Family planning methods, both for men and for women, including safety and effectiveness
- STIs including HIV/AIDS—how they are and are not transmitted, signs and symptoms, testing, and treatment
- The benefits of waiting until the youngest child is 2 years old before a woman becomes pregnant again
- Male and female sexual and reproductive anatomy and function
- Safe pregnancy and delivery

### **Offer Services or Refer**

Important services that many men want include:

- Condoms, vasectomy, and counseling about other methods
- Counseling and help for sexual problems
- STI/HIV counseling, testing, and treatment
- Infertility counseling (see Infertility, p. 304)
- Screening for penile, testicular, and prostate cancer

Like women, men of all ages, married or unmarried, have their own sexual and reproductive health needs. They deserve good-quality services and respectful, supportive, and nonjudgmental counseling.



## Women Near Menopause

A woman has reached menopause when her ovaries stop releasing eggs (ovulating). Because bleeding does not come every month as menopause approaches, a woman is considered no longer fertile once she has gone 12 months in a row without having any bleeding.

Menopause usually occurs between the ages of 45 and 55. About half of women reach menopause by age 50. By age 55 some 96% of women have reached menopause.

To prevent pregnancy until it is clear that she is no longer fertile, an older woman can use any method, if she has no medical condition that limits its use. By itself, age does not restrict a woman from using any contraceptive method.

### **Special Considerations About Method Choice**

When helping women near menopause choose a method, consider:

**Combined hormonal methods** (combined oral contraceptives [COCs], monthly injectables, combined patch, combined vaginal ring)

- Women age 35 and older who smoke—regardless of how much—should not use COCs, the patch, or the vaginal ring.
- Women age 35 and older who smoke 15 or more cigarettes a day should not use monthly injectables.
- Women age 35 or older should not use COCs, monthly injectables, the patch, or the vaginal ring if they have migraine headaches (whether with migraine aura or not).

**Progestin-only methods** (progestin-only pills, progestin-only injectables, implants)

- A good choice for women who cannot use methods with estrogen.
- During use, DMPA decreases bone mineral density slightly. It is not known whether this decrease in bone density increases the risk of bone fracture later, after menopause.

#### **Emergency contraceptive pills**

• Can be used by women of any age, including those who cannot use hormonal methods on a continuing basis.

#### Female sterilization and vasectomy

- May be a good choice for older women and their partners who know they will not want more children.
- Older women are more likely to have conditions that require delay, referral, or caution for female sterilization.

Male and female condoms, diaphragms, spermicides, cervical caps and withdrawal

- Protect older women well, considering women's reduced fertility in the years before menopause.
- Affordable and convenient for women who may have occasional sex.

**Intrauterine device** (copper-bearing and hormonal IUDs)

- Expulsion rates fall as women grow older, and are lowest in women over 40 years of age.
- Insertion may be more difficult due to tightening of the cervical canal.

#### Fertility awareness methods

• Lack of regular cycles before menopause makes it more difficult to use these methods reliably.



### When a Woman Can Stop Using Family Planning

Because bleeding does not come every month in the time before menopause, it is difficult for a woman whose bleeding seems to have stopped to know when to stop using contraception. Thus, it is recommended to use a family planning method for 12 months after last bleeding in case bleeding occurs again.

Hormonal methods affect bleeding, and so it may be difficult to know if a woman using them has reached menopause. After stopping a hormonal method, she can use a nonhormonal method. She no longer needs contraception once she has had no bleeding for 12 months in a row.

Copper-bearing IUDs can be left in place until after menopause. They should be removed within 12 months after a woman's last monthly bleeding.

### **Relieving Symptoms of Menopause**

Women experience physical effects before, during, and after menopause: hot flashes, excess sweating, difficulty holding urine, vaginal dryness that can make sex painful, and difficulty sleeping.

Providers can suggest ways to reduce some of these symptoms:

- Deep breathing from the diaphragm may make a hot flash go away faster. A woman can also try eating foods containing soy or taking 800 international units per day of vitamin E.
- Eat foods rich in calcium (such as dairy products, beans, fish) and engage in moderate physical activity to help slow the loss of bone density that comes with menopause.
- Vaginal lubricants or moisturizers can be used if vaginal dryness persists and causes irritation. During sex, use a commercially available vaginal lubricant, water, or saliva as a lubricant, if vaginal dryness is a problem.

# Sexually Transmitted Infections, Including HIV

### **Key Points for Providers and Clients**

- People with sexually transmitted infections (STIs) including HIV, can use most family planning methods safely and effectively.
- Male and female condoms can prevent STIs when used consistently and correctly.
- **STIs can be reduced in other ways, too**—limiting number of partners, abstaining from sex, and having a mutually faithful relationship with an uninfected partner.
- Some STIs have no signs or symptoms in women. If a woman thinks her partner may have an STI, she should seek care.
- **Some STIs can be treated.** The sooner treated, the less likely to cause long-term problems, such as infertility or chronic pain.
- In most cases, vaginal discharge comes from infections that are not sexually transmitted.

Family planning providers can help their clients in various ways to prevent STIs, including infection with the Human Immunodeficiency Virus (HIV). Program managers and providers can choose approaches that fit their clients' needs, their training and resources, and the availability of services for referral.

# What Are Sexually Transmitted Infections?

STIs are caused by bacteria and viruses spread through sexual contact. Infections can be found in body fluids such as semen, on the skin of the genitals and areas around them, and some also in the mouth, throat, and rectum. Some STIs cause no symptoms. Others may cause discomfort or pain. If not treated, some can cause pelvic inflammatory disease, infertility, chronic pelvic pain, and cervical cancer. Over time, HIV suppresses the immune system. Some STIs can also greatly increase the chance of becoming infected with HIV.

STIs spread in a community because an infected person has sex with an uninfected person. The more sexual partners a person has, the greater his or her risk of either becoming infected with STIs or transmitting STIs.

## Who Is at Risk?

Many women seeking family planning services—women in stable, mutually faithful, long-term relationships—face little risk of getting an STI. Some clients may be at high risk for STIs, however, or have an STI now. Clients who might benefit most from discussion of STI risk include those who do not have steady partners, unmarried clients, and anyone, married or unmarried, who asks or expresses concern about STIs or HIV, or that her partner may have other partners.

The risk of acquiring an STI, including HIV, depends on a person's behavior, the behavior of that person's sexual partner or partners, and how common those diseases are in the community. By knowing what STIs and what sexual behavior are common locally, a health care provider can better help a client assess her or his own risk.

Understanding their own risk for HIV and other STIs helps people decide how to protect themselves and others. Women are often the best judges of their own STI risk, especially when they are told what behaviors and situations can increase risk.

Sexual behavior that can increase exposure to STIs includes:

- Sex with a partner who has STI symptoms
- A sex partner who has recently been diagnosed with or treated for an STI
- Sex with more than one partner—the more partners, the more risk
- Sex with a partner who has sex with others and does not always use condoms
- Where many people in the community are infected with STIs, sex without a condom may be risky with almost any new partner

In certain situations people tend to change sexual partners often, to have many partners, or to have a partner who has other partners—all behaviors that increase the risk of STI transmission. This includes people who:

- Have sex for money, food, gifts, shelter, or favors
- Move to another area for work or travel often for work, such as truck driving
- Have no established long-term sexual relationship, as is common among sexually active adolescents and young adults
- Are the sexual partners of these people

#### 276 Family Planning: A Global Handbook for Providers

## What Causes STIs?

Several types of organisms cause STIs. Those caused by organisms such as bacteria generally can be cured. STIs caused by viruses generally cannot be cured, although they can be treated to relieve symptoms.

STI	Туре	Sexual transmission	Nonsexual transmission	Curable?
Chancroid	Bacterial	Vaginal, anal, and oral sex	None	Yes
Chlamydia	Bacterial	Vaginal and anal sex Rarely, from genitals to mouth	From mother to child during pregnancy	Yes
Gonorrhea	Bacterial	Vaginal and anal sex, or contact between mouth and genitals	From mother to child during delivery	Yes
Hepatitis B	Viral	Vaginal and anal sex, or from penis to mouth	In blood, from mother to child during delivery or in breast milk	No
Herpes	Viral	Genital or oral contact with an ulcer, including vaginal and anal sex; also genital contact in area without ulcer	From mother to child during pregnancy or delivery	No
HIV	Viral	Vaginal and anal sex Very rarely, oral sex	In blood, from mother to child during pregnancy or delivery or in breast milk	No
Human papilloma- virus	Viral	Skin-to-skin and genital contact or contact between mouth and genitals	From mother to child during delivery	No
Syphilis	Bacterial	Genital or oral contact with an ulcer, including vaginal and anal sex	From mother to child during pregnancy or delivery	Yes
Tricho- moniasis	Parasite	Vaginal, anal, and oral sex	From mother to child during delivery	Yes

#### More About HIV and AIDS

- HIV is the virus that causes acquired immune deficiency syndrome (AIDS). HIV slowly damages the body's immune system, reducing its ability to fight other diseases.
- People can live with HIV for many years without any signs or symptoms of infection. Eventually, they develop AIDS—the condition when the body's immune system breaks down and is unable to fight certain infections, known as opportunistic infections.
- There is no cure for HIV infection or AIDS, but antiretroviral (ARV) therapy can slow how the disease progresses, improve the health of those with AIDS, and prolong life. ARVs also can reduce mother-tochild transmission at the time of delivery and during breastfeeding. Opportunistic infections can be treated.
- Family planning providers can help with prevention and treatment efforts for HIV/AIDS, particularly in countries where many people are infected with HIV, by:
  - Counseling about ways to reduce risk of infection (see Choosing a Dual Protection Strategy, p. 280).
  - Refer clients for HIV counseling and testing and for HIV care and treatment if the clinic does not offer such services.

### Symptoms of Sexually Transmitted Infections

Early identification of STIs is not always possible. For example, chlamydia and gonorrhea often have no noticeable signs or symptoms in women. Early identification, however, is important both to avoid passing on the infection and to avoid more serious long-term health consequences. To help detect STIs early, a provider can:

- Ask whether the client or the client's partner has genital sores or unusual discharge.
- Look for signs of STIs when doing a pelvic or genital examination for another reason.
- Know how to advise a client who may have an STI.
- If the client has signs or symptoms, promptly diagnose and treat, or else refer for appropriate care.
- Advise clients to notice genital sores, warts, or unusual discharge in themselves or in their sexual partners.

Common signs and symptoms that may suggest an STI include:

Symptoms	Possible cause	
Discharge from the penis—pus,	Commonly: Chlamydia, gonorrhea	
clear or yellow-green drip	Sometimes: Trichomoniasis	
Abnormal vaginal bleeding or bleeding after sex	Chlamydia, gonorrhea, pelvic inflammatory disease	
Burning or pain during urination	Chlamydia, gonorrhea, herpes	
Lower abdominal pain or pain during sex	Chlamydia, gonorrhea, pelvic inflammatory disease	
Swollen and/or painful testicles	Chlamydia, gonorrhea	
Itching or tingling in the genital area	Commonly: Trichomoniasis	
	Sometimes: Herpes	
Blisters or sores on the genitals, anus, surrounding areas, or mouth	Herpes, syphilis, chancroid	
Warts on the genitals, anus, or surrounding areas	Human papillomavirus	
Unusual vaginal discharge—changes from normal vaginal discharge in color, consistency, amount, and/or odor	Most commonly: Bacterial vaginosis, candidiasis (not STIs; see Common Vaginal Infections Often Confused With Sexually Transmitted Infections, below)	
	Commonly: Trichomoniasis	
	Sometimes: Chlamydia, gonorrhea	

# Common Vaginal Infections Often Confused With Sexually Transmitted Infections

The most common vaginal infections are not sexually transmitted. Instead, they usually are due to an overgrowth of organisms normally present in the vagina. Common infections of the reproductive tract that are not sexually transmitted include bacterial vaginosis and candidiasis (also called yeast infection or thrush).

- In most areas these infections are much more common than STIs. Researchers estimate that between 5% and 25% of women have bacterial vaginosis and between 5% and 15% have candidiasis at any given time.
- Vaginal discharge due to these infections may be similar to discharge caused by some STIs such as trichomoniasis. It is important to reassure clients with such symptoms that they may not have an STI—particularly if they have no other symptoms and are at low risk for STIs.

 Bacterial vaginosis and trichomoniasis can be cured with antibiotics such as metronidazole; candidiasis can be cured with anti-fungal medications such as fluconazole. Without treatment, bacterial vaginosis can lead to pregnancy complications and candidiasis can be transmitted to a newborn during delivery.

Washing the external genital area with unscented soap and clean water, and not using douches, detergents, disinfectants, or vaginal cleaning or drying agents are good hygiene practices. They may also help some women avoid vaginal infections.

# Preventing Sexually Transmitted Infections

The basic strategies for preventing STIs involve avoiding or reducing the chances of exposure. Family planning providers can talk to clients about how they can protect themselves both from STIs, including HIV, and pregnancy (dual protection).

### **Choosing a Dual Protection Strategy**

Every family planning client needs to think about preventing STIs, including HIV—even people who assume they face no risk. A provider can discuss what situations place a person at increased risk of STIs, including HIV (see Who Is At Risk?, p. 276), and clients can think about whether these risky situations come up in their own lives. If so, they can consider 5 dual protection strategies.

One person might use different strategies in different situations; one couple might use different strategies at different times. The best strategy is the one that a person is able to practice effectively in the situation that she or he is facing. (Dual protection does not necessarily mean just using condoms along with another family planning method.)

# Strategy 1: Use a male or female condom correctly with every act of sex.

• One method helps protect against pregnancy and STIs, including HIV.

# Strategy 2: Use condoms consistently and correctly plus another family planning method.

- Adds extra protection from pregnancy in case a condom is not used or is used incorrectly.
- May be a good choice for women who want to be sure to avoid pregnancy but cannot always count on their partners to use condoms.

# Strategy 3: If both partners know they are not infected, use any family planning method to prevent pregnancy and stay in a mutually faithful relationship.

- Many family planning clients will fall into this group and thus are protected from STIs, including HIV.
- Depends on communication and trust between partners.

Other strategies, which do not involve using contraceptives, include:

#### Strategy 4: Engage only in safer sexual intimacy that avoids intercourse and otherwise prevents semen and vaginal fluids from coming in contact with each other's genitals.

- Depends on communication, trust, and self-control.
- If this is a person's first-choice strategy, it is best to have condoms on hand in case the couple does have sex.

# Strategy 5: Delay or avoid sexual activity (either avoiding sex any time that it might be risky or abstaining for a longer time).

- If this is a person's first-choice strategy, it is best to have condoms on hand in case the couple does have sex.
- This strategy is always available in case a condom is not at hand.

Many clients will need help and guidance to make their dual protection strategy succeed. For example, they may need help preparing to talk with their partners about STI protection, learning how to use condoms and other methods, and handling practical matters such as where to get supplies and where to keep them. If you can help with such matters, offer to help. If not, refer the client to someone who can provide more counseling or skillsbuilding, such as role-playing to practice negotiating condom use.

# **Contraceptives for Clients** with STIs, HIV, and AIDS

People with STIs, HIV, AIDS, or on antiretroviral (ARV) therapy can start and continue to use most contraceptive methods safely. In general, contraceptives and ARV medications do not interfere with each other. There are a few limitations, however. See the table below. (Also, every chapter on a contraceptive method provides more information and considerations for clients with HIV and AIDS, including those taking ARV medications.)

#### **On Anti**retroviral Has Has (ARV) **Method STIs HIV or AIDS** Therapy Intrauterine Do not insert an A woman with Do not insert device IUD in a woman HIV can have an an IUD if client IUD inserted. is not clinically (copperwho is at very bearing or high individual risk well. A woman with hormonal for gonorrhea AIDS should IUDs) and chlamydia, not have an IUD or who currently inserted unless has gonorrhea, she is clinically chlamydia, purulent well on ARV cervicitis, or PID. therapy. (A current IUD (A woman who user who becomes develops AIDS infected with while using an gonorrhea or IUD can safely chlamydia or continue using develops PID can the IUD.) safely continue using an IUD during and after treatment.) Female If client has Women who are infected sterilization gonorrhea, chlamydia, with HIV, have AIDS, or are on purulent cervicitis, antiretroviral therapy can safely or PID, delay undergo female sterilization. sterilization until the Special arrangements are needed condition is treated to perform female sterilization on and cured. a woman with AIDS. Delay the procedure if she is currently ill with AIDS-related illness.

# Special Family Planning Considerations for Clients with STIs, HIV, AIDS, or on Antiretroviral Therapy

Method	Has STIs	Has HIV or AIDS	On Anti- retroviral (ARV) Therapy
Vasectomy	If client has scrotal skin infection, active STI, swollen, tender tip of penis, sperm ducts, or testicles, delay sterilization until the condition is treated and cured.	Men who are infected with HIV, have AIDS, or are on antiretroviral therapy can safely undergo vasectomy. Special arrangements are needed to perform vasectomy on a man with AIDS. Delay the procedure if he is currently ill with AIDS-related illness.	
<b>Spermicides</b> (including when used with diaphragm or cervical cap)	Can safely use spermicides.	Should not use spermicides if at high risk of HIV, infected with HIV, or has AIDS.	Should not use spermicides.
Combined oral con- traceptives, combined injectables, combined patch, combined ring	Can safely use combined hormonal methods.	Can safely use combined hormonal methods.	A woman can use combined hormonal methods while taking ARVs unless her treatment includes ritonavir.
Progestin- only pills	Can safely use progestin-only pills.	Can safely use progestin-only pills.	A woman can use progestin- only pills while taking ARVs unless her treatment includes ritonavir.
Progestin- only injectables and implants	No special considerations. Can safely use progestin-only injectables or implants.		

#### **Cervical Cancer**

#### What Is Cervical Cancer?

Cervical cancer results from uncontrolled, untreated growth of abnormal cells in the cervix. A sexually transmitted infection, the human papillomavirus (HPV), causes such cells to develop and grow.

HPV is found on skin in the genital area, in semen, and also in the tissues of the vagina, cervix, and mouth. It is primarily transmitted through skin-to-skin contact. Vaginal, anal, and oral sex also can spread HPV. Over 50 types of HPV can infect the cervix; 6 of them account for nearly all cervical cancers. Other types of HPV cause genital warts.

An estimated 50% to 80% of sexually active women are infected with HPV at least once in their lives. In most cases, the HPV infection clears on its own. In some women, however, HPV persists and causes precancerous growths, which can develop into cancer. Overall, less than 5% of all women with persistent HPV infection get cervical cancer.

Cancer of the cervix usually takes 10 to 20 years to develop, and so there is a long period of opportunity to detect and treat changes and precancerous growths before they become cancer. This is the goal of cervical cancer screening.

#### Who Is at Greatest Risk?

Some factors make women more likely to be infected by HPV. Others help HPV infection progress to cervical cancer more quickly. A woman with any of these characteristics would benefit especially from screening:

- Started having sex before age 18
- Has many sexual partners now or over the years
- Has a sexual partner who has or has had many other sexual partners
- Had many births (the more births, the greater the risk)
- Has a weak immune system (includes women with HIV/AIDS)
- Smokes cigarettes
- Burns wood indoors (as for cooking)
- Has had other sexually transmitted infections
- Has used combined oral contraceptives for more than 5 years

#### Screening and Treatment

Screening for cervical cancer is simple, quick, and generally not painful. A Papanicolaou (Pap) smear involves scraping a few cells from the cervix and examining them under a microscope. A woman will need to go to a facility for results and for treatment if an abnormality is found.

Before precancers become cancer, they can be frozen away with a probe filled with dry ice (cryotherapy) or cut away using a hot wire loop (loop electrosurgical excision procedure [LEEP]). Freezing is less effective for larger growths, but LEEP requires electricity and more extensive training. No hospital stay is needed for either type of treatment.

Treatment for cervical cancer includes surgery or radiation therapy, sometimes together with chemotherapy.

#### Promising New Approaches to Screening and Prevention

An alternative to the Papanicolaou smear is being tested. The cervix is coated with either vinegar or Lugol's iodine, which makes any abnormal cells visible to the provider. This makes possible immediate treatment if needed.

In 2006 the European Union and the United States Food and Drug Administration approved the first vaccine against cervical cancer, precancer, and genital warts. The vaccine protects against infection by 4 types of HPV that account for about 70% of all cervical cancers and an estimated 90% of all genital warts. It is approved for use among females age 9 to 26 years.

# Questions and Answers About Sexually Transmitted Infections, Including HIV

# I. Does having another STI place a person at greater risk of infection if they are exposed to HIV?

Yes. In particular, infections that cause sores on the genitals such as chancroid and syphilis increase a person's risk of becoming infected if exposed to HIV. Other STIs, too, can increase the risk of HIV infection.

# 2. Does using a condom only some of the time offer any protection from STIs, including HIV?

For best protection, a condom should be used with every act of sex. In some cases, however, occasional use can be protective. For example, if a person has a regular, faithful partner and has one act of sex outside of the relationship, using a condom for that one act can be very protective. For people who are exposed to STIs, including HIV, frequently, however, using a condom only some of the time will offer limited protection.

# 3. Who is more at risk of becoming infected with an STI—men or women?

If exposed to STIs, women are more likely to become infected than men due to biological factors. Women have a greater area of exposure (the cervix and the vagina) than men, and small tears may occur in the vaginal tissue during sex, making an easy pathway for infection.

#### 4. Can HIV be transmitted through hugging? Shaking hands? Mosquito bites?

HIV cannot be transmitted through casual contact. This includes closed mouth kissing, hugging, shaking hands, and sharing food, clothing, or toilet seats. The virus cannot survive long outside of the human body. Mosquitoes cannot transmit HIV, either.

#### 5. Is there any truth to rumors that condoms are coated with HIV?

No, these rumors are false. Some condoms are covered with a wet or a powder-like material such as spermicide or cornstarch, but these are materials used for lubrication, to make sex smoother.

# 6. Will having sex with a virgin cure someone with an STI, including HIV?

No. Instead, this practice only risks infecting the person who has not yet had sex.

# 7. Will washing the penis or vagina after sex lower the risk of becoming infected with an STI?

Genital hygiene is important and a good practice. There is no evidence, however, that washing the genitals prevents STI infection. In fact, vaginal douching increases a woman's risk of acquiring STIs, including HIV, and pelvic inflammatory disease. If exposure to HIV is certain, treatment with antiretroviral medications (post-exposure prophylaxis), where available, can help reduce HIV transmission. If exposure to other STIs is certain, a provider can treat presumptively for those STIs—that is, treat the client as if he or she were infected.

# 8. Does pregnancy place women at increased risk of becoming infected with HIV?

Current evidence is conflicting as to whether pregnancy increases a woman's chances of infection if exposed to HIV. If she does become infected with HIV during pregnancy, however, the chances that HIV will be transmitted to her baby during pregnancy, delivery, and childbirth may be at their highest because she will have a high level of virus in her blood. Thus, it is important for pregnant women to protect themselves from HIV and other STIs through condom use, mutual faithfulness, or abstinence. If a pregnant woman thinks that she may have HIV, she should seek HIV testing. Resources may be available to help her prevent transmitting HIV to her baby during pregnancy, delivery, and childbirth.

# 9. Is pregnancy especially risky for women with HIV/AIDS and their infants?

Pregnancy will not make the woman's condition worse. HIV/AIDS may increase some health risks of pregnancy, however, and may also affect the health of the infant. Women with HIV are at greater risk of developing anemia and infection after vaginal delivery or caesarean section. The level of risk depends on such factors as a woman's health during pregnancy, her nutrition, and the medical care she receives. Also, the risk of these health problems increases as HIV infection progresses into AIDS. Further, women with HIV/AIDS are at greater risk of having preterm births, stillbirths, and low birthweight babies.

# 10. Does using hormonal contraception increase the risk of becoming infected with HIV?

The best evidence is reassuring. Recent studies among family planning clients in Uganda and Zimbabwe and women in a study in South Africa found that users of DMPA, NET-EN, or combined oral contraceptives were no more likely to become infected with HIV than women using nonhormonal methods. Use of hormonal methods is not restricted for women at high risk for HIV or other STIs.

#### II. How well do condoms help protect against HIV infection?

On average, condoms are 80% to 95% effective in protecting people from HIV infection when used correctly with every act of sex. This means that condom use prevents 80% to 95% of HIV transmissions that would have occurred without condoms. (It does *not* mean that 5% to 20% of condom users will become infected with HIV.) For example, among 10,000 uninfected women whose partners have HIV, if each couple has vaginal sex just once and has no additional risk factors for infection, on average:

- If all 10,000 did not use condoms, about 10 women would likely become infected with HIV.
- If all 10,000 used condoms correctly, I or 2 women would likely become infected with HIV.

The chances that a person who is exposed to HIV will become infected can vary greatly. These chances depend on the partner's stage of HIV infection (early and late stages are more infectious), whether the person exposed has other STIs (increases susceptibility), male circumcision status (uncircumcised men are more likely to become infected with HIV), and pregnancy (women who are pregnant may be at higher risk of infection), among other factors. On average, women face twice the risk of infection, if exposed, that men do.

### CHAPTER 22

# Maternal and Newborn Health

### **Key Points for Providers and Clients**

- Wait until the youngest child is at least 2 years old before trying to become pregnant again. Spacing births is good for the mother's and the baby's health.
- Make the first antenatal care visit within the first 12 weeks of pregnancy.
- Plan ahead for family planning after delivery.
- **Prepare for childbirth.** Have a plan for normal delivery and an emergency plan, too.
- Breastfeed for a healthier baby.

Many health care providers see women who want to become pregnant, who are pregnant, or who have recently given birth. Providers can help women plan pregnancies, plan for contraception after delivery, prepare for childbirth, and care for their babies.

# **Planning Pregnancy**

A woman who wants to have a child can use advice about preparing for safe pregnancy and delivery and having a healthy child:

- It is best to wait at least 2 years after giving birth before stopping contraception to become pregnant.
- At least 3 months before stopping contraception to get pregnant, a woman should begin taking care to eat a balanced diet, and she should continue doing so throughout pregnancy. Folic acid and iron are particularly important.
  - Folic acid is found in such foods as legumes (beans, bean curd, lentils, and peas), citrus fruits, whole grains, and green leafy vegetables. Folic acid tablets may be available.
  - Iron is found in such foods as meat and poultry, fish, green leafy vegetables, and legumes. Iron tablets may be available.

• If a woman has, or may have been exposed to a sexually transmitted infection (STI), including HIV, treatment can reduce the chances that her child will be born with an infection. If a woman thinks she has been exposed or might be infected, she should seek testing, if available.

# **During Pregnancy**

The first antenatal care visit should come early in pregnancy, ideally before week 12. For most women, 4 visits during pregnancy are appropriate. Women with certain health conditions or complications of pregnancy may need more visits, however. Provide care or refer for antenatal care.



## Health Promotion and Disease Prevention

- Counsel women about good nutrition and eating foods that contain iron, folate, vitamin A, calcium, and iodine and avoiding tobacco, alcohol, and drugs (except medications recommended by a health care provider).
- Help pregnant women protect themselves from infections.
  - If she is at risk for STIs, discuss condom use or abstinence during pregnancy (see Sexually Transmitted Infections, Including HIV, p. 275).
  - Ensure that pregnant women are immunized against tetanus.
  - To prevent or treat anemia, where hookworm infection is common provide treatment (antihelminthic therapy) after the first trimester.
- Help pregnant women protect their babies from infections.
  - Test for syphilis as early in pregnancy as possible, and treat as needed.
  - Offer HIV testing and counseling.
- Pregnant women are particularly susceptible to malaria. Provide insecticidetreated bed nets for malaria prevention and effective malaria treatment to every pregnant woman in areas where malaria is widespread, whether or not malaria is diagnosed (presumptive treatment). Monitor pregnant women for malaria and provide immediate treatment when diagnosed.

### Planning for Family Planning After Delivery

Help pregnant women and new mothers decide how they will avoid pregnancy after childbirth. Ideally, family planning counseling should start during antenatal care.

• Waiting until her baby is at least 2 years old before a woman tries to become pregnant again is best for the baby and good for the mother, too.

- A woman who is not fully or nearly fully breastfeeding is able to become pregnant as soon as 4 to 6 weeks after childbirth.
- A woman who is fully or nearly fully breastfeeding is able to become pregnant as soon as 6 months postpartum (see Lactational Amenorrhea Method, p. 257).
- For maximum protection, a woman should not wait until the return of monthly bleeding to start a contraceptive method, but instead she should start as soon as guidance allows (see Earliest Time That a Woman Can Start a Family Planning Method After Childbirth, p. 293).

### Preparing for Childbirth and Complications

Potentially life-threatening complications develop in about 15% of pregnancies, and all of these women need immediate care. Most complications cannot be predicted, but providers can help women and their families be prepared for them.

- Help women arrange for skilled attendance at birth, and ensure that they know how to contact the skilled birth attendant at the first signs of labor.
- Explain danger signs during pregnancy and childbirth to women and their families (see below).
- Help the woman and her family plan how she will reach emergency care if complications arise: Where will she go? Who will take her there? What transport will they use? How will she pay for medical help? Are there people ready to donate blood?



#### Danger Signs During Pregnancy and Childbirth

If any of these signs appears, the family should follow their emergency plan and get the woman to emergency care immediately.

- Fever (38° C/101° F or higher)
- Foul-smelling discharge from vagina
- Severe headache/blurred vision
- Decreased or no fetal movements
- Green or brown fluid leaking from vagina
- High blood pressure
- Vaginal bleeding
- Difficulty breathing
- Convulsions, fainting
- Severe abdominal pain

# After Childbirth

- Coordinate family planning visits with an infant's immunization schedule.
- Optimal breastfeeding offers triple value: important improvements in child survival and health, better health for mothers, and temporary contraception. Still, any breastfeeding is better than none (except if a woman has HIV). See Preventing Mother-to-Child Transmission of HIV, p. 294.

#### **Guidelines for Best Breastfeeding**

- I. Begin breastfeeding the newborn as soon as possible within I hour after delivery
  - Stimulates uterine contractions that help prevent heavy bleeding.
  - Helps the infant to establish suckling early on, which stimulates milk production.
  - Colostrum, the yellowish milk produced in the first days after childbirth, provides important nutrients for the child and transfers immunities from mother to child.
  - Avoids the risks of feeding the baby contaminated liquids or foods.

#### 2. Fully or nearly fully breastfeed for 6 months

• Mother's milk alone can fully nourish a baby for the first 6 months of life.

#### 3. At 6 months, add other foods to breastfeeding

- After 6 months babies need a variety of foods in addition to breast milk.
- At each feeding breastfeed before giving other foods.
- Breastfeeding can and should continue through the child's second year or longer.

### Earliest Time That a Woman Can Start a Family Planning Method After Childbirth

Family Planning Method	Fully or Nearly Fully Breastfeeding	Partially Breastfeeding or Not Breastfeeding				
Lactational Amenorrhea Method	Immediately	(Not applicable)				
Vasectomy	Immediately or during partner's pregnancy <sup>‡</sup>					
Male or female condoms	Immediately					
Spermicides						
Copper-bearing IUD	Within 48 hours, otherwise wait 4 weeks					
Female sterilization	Within 7 days, otherwise wait 6 weeks					
Levonorgestrel IUD	4 weeks after childbirth					
Diaphragm	6 weeks after childbirth					
Fertility awareness methods	Start when normal secretions have returned (for symptoms-based methods) or she has had 3 regular menstrual cycles (for calendar-based methods). This will be later for breastfeeding women than for women who are not breastfeeding.					
Progestin-only pills	6 weeks after childbirth <sup>§</sup>	Immediately if not				
Progestin-only injectables		breastfeeding <sup>§</sup> 6 weeks after childbirth				
Implants		if partially breastfeeding§				
Combined oral contraceptives	6 months after childbirth <sup>§</sup>	21 days after childbirth if not breastfeeding <sup>§</sup>				
Monthly injectables		6 weeks after childbirth if partially breastfeeding <sup>§</sup>				
Combined patch						
Combined vaginal ring						

<sup>+</sup> If a man has a vasectomy during the first 6 months of his partner's pregnancy, it will be effective by the time she delivers her baby.

<sup>§</sup> Earlier use is not usually recommended unless other, more appropriate methods are not available or not acceptable. See also p. 129, Q&A 8.

### Preventing Mother-to-Child Transmission of HIV

A woman infected with HIV can pass HIV to her child during pregnancy, delivery, or breastfeeding. Preventive antiretroviral (ARV) therapy (prophylaxis) given to the mother during pregnancy and labor can greatly reduce the chances that the baby will be infected while developing in the uterus or during delivery. During breastfeeding, ARV therapy for the mother, for the HIV-exposed infant, or for both, also can significantly reduce the chances of HIV transmission through breast milk.

# How can family planning providers help prevent mother-to-child transmission of HIV?

- Help women avoid HIV infection (see Sexually Transmitted Infections, Including HIV, Preventing Sexually Transmitted Infections, p. 280).
- Prevent unintended pregnancies: Help women who do not want a child to choose a contraceptive method that they can use effectively.
- Offer HIV counseling and testing: Offer counseling and testing to all pregnant women, if possible, or offer to refer them to an HIV testing service, so they can learn their HIV status.
- *Refer:* Refer women with HIV who are pregnant, or who want to become pregnant, to services for prevention of mother-to-child transmission, if available.
- Encourage appropriate infant feeding: Counsel women with HIV on safer infant feeding practices to reduce the risk of transmission, and help them develop a feeding plan. If possible, refer them to someone trained to counsel on infant feeding.
  - For all women, including women with HIV, breastfeeding, and especially early and exclusive breastfeeding, is an important way to promote the child's survival.
  - HIV-infected mothers and/or their infants should receive the appropriate ARV therapy, and mothers should exclusively breastfeed their infants for the first 6 months of life, then introduce appropriate complementary foods and continue breastfeeding for the first 12 months of life.
  - Breastfeeding should then stop only once a nutritionally adequate and safe diet without breast milk can be provided. When mothers decide to stop breastfeeding, they should stop gradually within one month, and infants should be given safe and adequate replacement feeds to enable normal growth and development. Stopping breastfeeding abruptly is not advised.
  - Even when ARV therapy is not available, breastfeeding (exclusive breastfeeding in the first 6 months of life and continued

breastfeeding for the first 12 months of life) may still give infants born to mothers infected with HIV a greater chance of survival while still avoiding HIV infection than not breastfeeding at all.

- In some well-resourced countries with low infant and child mortality rates, however, avoiding all breastfeeding will be appropriate. A woman with HIV should be advised of the national recommendation for infant feeding by HIV-infected mothers and counseled and supported in the feeding practice that best suits her situation.
- An HIV-infected mother should consider replacement feeding if—and only if—all the following conditions are met:
  - safe water and sanitation are assured in the household and community;
  - the mother or caregiver can reliably provide infant formula:
    - o sufficient for normal growth and development of the infant
    - o cleanly and frequently, to avoid diarrhea and malnutrition, and
    - o exclusively in the first 6 months;
  - the family is supportive of this practice; and
  - the mother or caregiver can obtain health care that offers comprehensive child health services.
- If infants and young children are known to be HIV-infected, mothers should be strongly encouraged to exclusively breastfeed for the first 6 months of life and continue breastfeeding up to 2 years or beyond.
- If a woman is temporarily unable to breastfeed—for example, she or the infant is sick, she is weaning, or her supply of ARVs has run out—she may express and heat-treat breast milk to destroy the HIV before feeding it to the infant. Milk should be heated to the boiling point in a small pot and then cooled by letting the milk stand or by placing the pot in a container of cool water. This should be used only short-term, not throughout breastfeeding.
- Women with HIV who are breastfeeding need advice on keeping their nutrition adequate and their breasts healthy. Infection of the milk ducts in the breast (mastitis), a pocket of pus under the skin (breast abscess), and cracked nipples increase the risk of HIV transmission. If a problem does occur, prompt and appropriate care is important (see Sore or cracked nipples, p. 296).

### Managing Any Breastfeeding Problems

If a client reports any of these common problems, listen to her concerns and give advice.

#### Baby is not getting enough milk

- Reassure the woman that most women can produce enough breast milk to feed their babies.
- If the newborn is gaining more than 500 grams a month, weighs more than birth weight at 2 weeks, or urinates at least 6 times a day, reassure her that her baby is getting enough breast milk.
- Tell her to breastfeed her newborn about every 2 hours to increase milk supply.
- Recommend that she reduce any supplemental foods and/or liquids if the baby is less than 6 months of age.

#### Sore breasts

- If her breasts are full, tight, and painful, then she may have engorged breasts. If one breast has tender lumps, then she may have blocked ducts. Engorged breasts or blocked ducts may progress to red and tender infected breasts. Treat breast infection with antibiotics according to clinic guidelines. To aid healing, advise her to:
  - Continue to breastfeed often
  - Massage her breasts before and during breastfeeding
  - Apply heat or a warm compress to breasts
  - Try different breastfeeding positions
  - Ensure that the infant attaches properly to the breast
  - Express some milk before breastfeeding

#### Sore or cracked nipples

- If her nipples are cracked, she can continue breastfeeding. Assure her that they will heal over time.
- To aid healing, advise her to:
  - Apply drops of breast milk to the nipples after breastfeeding and allow to air-dry.
  - After feeding, use a finger to break suction first before removing the baby from the breast.
  - Do not wait until the breast is full to breastfeed. If full, express some milk first.
- Teach her about proper attachment and how to check for signs that the baby is not attaching properly.
- Tell her to clean her nipples with only water only once a day and to avoid soaps and alcohol-based solutions.
- Examine her nipples and the baby's mouth and buttocks for signs of fungal infection (thrush).
- 296 Family Planning: A Global Handbook for Providers

### CHAPTER 23

# **Reproductive Health Issues**

### **Key Points for Providers and Clients**

Postabortion Care

• Fertility returns quickly, within a few weeks, after abortion or miscarriage. Women need to start using a family planning method almost immediately to avoid unwanted pregnancy.

Violence Against Women

• Violence is not the woman's fault. It is very common. Local resources may be available to help.

#### Infertility

• Infertility often can be prevented. Avoiding sexually transmitted infections and receiving prompt treatment for these and other reproductive tract infections can reduce a client's risk of infertility.

# Family Planning in Postabortion Care

Women who have just been treated for postabortion complications need easy and immediate access to family planning services. When such services are integrated with postabortion care, are offered immediately postabortion, or are nearby, women are more likely to use contraception when they face the risk of unintended pregnancy.

## Help Women Obtain Family Planning

#### Counsel with Compassion

A woman who has had postabortion complications needs support. A woman who has faced the double risk of pregnancy and unsafe induced abortion especially needs help and support. Good counseling gives support to the woman who has just been treated for postabortion complications. In particular:

- Try to understand what she has been through
- Treat her with respect and avoid judgment and criticism
- Ensure privacy and confidentiality
- Ask if she wants someone she trusts to be present during counseling

#### **Provide Important Information**

A woman has important choices to make after receiving postabortion care. To make decisions about her health and fertility, she needs to know:

- Fertility returns quickly—within 2 weeks after a first-trimester abortion or miscarriage and within 4 weeks after a second-trimester abortion or miscarriage. Therefore, she needs protection from pregnancy almost immediately.
- She can choose among many different family planning methods that she can start at once (see next page). Methods that women should not use immediately after giving birth pose no special risks after treatment for abortion complications.
- She can wait before choosing a contraceptive for ongoing use, but she should consider using a backup method<sup>\*</sup> in the meantime if she has sex. If a woman decides not to use contraceptives at this time, providers can offer information on available methods and where to obtain them. Also, providers can offer condoms, oral contraceptives, or emergency contraceptive pills for women to take home and use later.
- To avoid infection, she should not have sex until bleeding stops—about 5 to 7 days. If being treated for infection or vaginal or cervical injury, she should wait to have sex again until she has fully healed.
- If she wants to become pregnant again soon, encourage her to wait. Waiting at least 6 months may reduce the chances of low birthweight, premature birth, and maternal anemia. A woman receiving postabortion care may need other reproductive health services. In particular, a provider can help her consider if she might have been exposed to sexually transmitted infections.

<sup>\*</sup> Backup methods include abstinence, male or female condoms, spermicides, and withdrawal. She can use spermicides if she has no vaginal or cervical injury. Tell her that spermicides and withdrawal are the least effective contraceptive methods. If possible, give her condoms.



#### When to Start Contraceptive Methods

- Combined oral contraceptives, progestin-only pills, progestin-only injectables, monthly injectables, combined patch, implants, male condoms, female condoms, and withdrawal can be started immediately in every case, even if the woman has injury to the genital tract or has a possible or confirmed infection.
- IUDs, female sterilization, and fertility awareness methods can be started once infection is ruled out or resolved.
- IUDs, combined vaginal ring, spermicides, diaphragms, cervical caps, female sterilization, and fertility awareness methods can be started once any injury to the genital tract has healed.

Special considerations:

- *IUD* insertion immediately after a second-trimester abortion requires a specifically trained provider.
- Female sterilization must be decided upon in advance, and not while a woman is sedated, under stress, or in pain. Counsel carefully and be sure to mention available reversible methods (see Female Sterilization, Because Sterilization Is Permanent, p. 174).
- The combined vaginal ring, spermicides, diaphragms, and cervical caps can be used immediately even in cases of uncomplicated uterine perforation.
- The *diaphragm* must be refitted after uncomplicated first-trimester miscarriage or abortion. After uncomplicated second-trimester miscarriage or abortion, use should be delayed 6 weeks for the uterus to return to normal size, and then the diaphragm should be refitted.
- Fertility awareness methods: A woman can start symptoms-based methods once she has no infection-related secretions or bleeding due to injury to the genital tract. She can start calendar-based methods with her next monthly bleeding, if she is not having bleeding due to injury to the genital tract.

# **Violence Against Women**

Every family planning provider probably sees many women who have experienced violence. Violence against women is common everywhere, and in some places it is very common. In a recent study of 10 countries more than 1 of every 10 women and up to about 7 of every 10 women reported that they had experienced physical or sexual violence in their lifetimes. Physical violence includes a wide range of behaviors, including hitting, slapping, kicking, and beating. Sexual violence includes unwanted sexual contact or attention, coercive sex, and forced sex (rape). Violence against women can be psychological, too, such as controlling behavior, intimidation, humiliation, isolating a woman from family and friends, and restricting her access to resources.

Women experiencing violence have special health needs, many of them related to sexual and reproductive health. Violence can lead to a range of health problems including injuries, unwanted pregnancy, sexually transmitted infections (STIs) including HIV, decreased sexual desire, pain during sex, and chronic pelvic pain. For some women, violence may start or become worse during pregnancy, placing her fetus at risk as well. Furthermore, a man's violence or the threat of violence can deprive a woman of her right to make her own choice about whether to use family planning or what method to use. Therefore, providers of reproductive health care may be more likely than other health care providers to see abused women among their usual clientele.

### What Can Providers Do?

1. Help women feel welcome, safe, and free to talk. Help women feel comfortable speaking freely about any personal issue, including violence. Ensure every woman that her visit will be confidential.

Give women opportunities to bring up violence, such as asking a woman about her partner's attitudes toward her using family planning, asking whether she foresees any problems with using family planning, and asking simply if there is anything else she would like to discuss.

2. Ask women about abuse whenever violence is suspected. While most women will not bring up that they are being abused, many will talk if asked about violence. Asking all clients if they are experiencing violence is recommended only when providers are well-trained in counseling about violence, privacy and confidentiality can be ensured, and there are sufficient resources available to respond adequately to identified cases of violence. Until then, providers can ask whenever abuse is suspected, thereby focusing resources on those who need immediate care.

Be alert to symptoms, injuries, or signs that suggest violence. Providers may suspect violence when depression, anxiety, chronic headaches, pelvic pain, or vague stomach pains have not improved over time with treatment. Another sign of violence may be when the client's story about how an injury occurred does not fit the type of injury she has. Suspect violence with any injury during pregnancy, especially to the abdomen or breasts.

Some tips for bringing up the subject of violence:

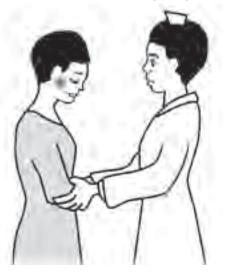
- To increase trust, explain why you are asking—because you want to help.
- Use language that is comfortable for you and best fits your own style.
- Do not ask such questions when a woman's partner or anyone else is present or when privacy cannot be ensured.
- You can say, "Domestic violence is a common problem in our community so we have been asking our clients about abuse."
- You can ask such questions as:
  - "Your symptoms may be due to stress. Do you and your partner tend to fight a lot? Have you ever gotten hurt?"
  - "Does your partner ever want sex when you do not? What happens in such situations?"
  - "Are you afraid of your partner?"

#### 3. Counsel in a nonjudgmental, sensitive, supportive manner.

An important service for women in violent relationships is counseling. Counseling about violence should be tailored to a woman's particular circumstances. Women may be at different stages of willingness to seek change. This will affect whether and how a woman will accept help.

Some women will not be ready to discuss their situation with a health care provider. The point of counseling is not to find out for sure whether the client is experiencing violence, but rather to address the issue with compassion and let her know that you care.

 If she does not want to talk about the violence, assure her that you are available whenever she needs you. Tell her what options and resources are available should she ever want them.



- If she wants to talk about her experience of violence, you can:
  - Ensure confidentiality, and keep the woman's situation confidential. Tell only those who need to know (such as security staff), and do that only with the client's permission.
  - Acknowledge her experience. Listen, offer support, and avoid making judgments. Respect her ability and her right to make her own choices about her life.
  - Try to relieve the woman's possible feelings of shame and selfblame: "No one ever deserves to be hit." "You don't deserve the abuse, and it's not your fault."
  - Explain that violence is a common problem: "This happens to many women." "You are not alone, and help is available."
  - Explain that violence is not likely to stop on its own: "Abuse tends to continue, and often it becomes worse and happens more often."
- **4.** Assess a woman's immediate danger, help her develop a safety plan, and refer her to community resources. If the woman faces immediate danger, help her consider various courses of action. If not in immediate danger, help her develop a longer-term plan.
  - Help her assess her present situation:
    - "Is he here at the health facility now?"
    - "Are you or your children in danger now?"
    - "Do you feel safe to go home?"
    - "Is there a friend or relative who can help you with the situation at home?"
  - Help her protect herself and her children if the violence recurs. Suggest that she keep a bag packed with important documents and a change of clothes so she can leave quickly if need be. Suggest that she have a signal to let children know when to seek help from neighbors.
  - Make and keep up-to-date a list of resources available to help victims of abuse, including police, counseling services, and women's organizations that can provide emotional, legal, and perhaps even financial support. Give a copy of the list to the client.
- **5.** Provide appropriate care. Tailor your care and counseling to a woman's circumstances.
  - Treat any injuries or see that she gets treatment.
  - Evaluate risk of pregnancy and provide emergency contraception if appropriate and wanted.
  - Offer emergency contraceptive pills for future use (see Emergency Contraceptive Pills, p. 45).

- If she wants, give her a contraceptive method that can be used without a partner's knowledge, such as an injectable.
- Help women think about whether they could safely propose condom use, without risking further violence.
- In cases of rape:
  - First collect any samples that could be used as evidence (such as torn or stained clothing, hair, and blood or semen stains).
  - Provide or refer for HIV and STI testing and treatment. Some women may need such services repeatedly.
  - Consider post-exposure prophylaxis for HIV, if available, and presumptive treatment for gonorrhea, chlamydia, syphilis, and other, locally common STIs.
- 6. Document the woman's condition. Carefully document the woman's symptoms or injuries, the cause of the injuries, and her history of abuse. Clearly record the identity of the abuser, his relationship to the victim, and any other details about him. These notes could be helpful for future medical follow-up and legal action, if taken.



# Infertility

## What Is Infertility?

Infertility is the inability to produce children. Although often the woman is blamed, infertility occurs in both men and women. On average, infertility affects I of every 10 couples. A couple is considered infertile after having 12 months of unprotected sex without pregnancy. A couple can be infertile whether or not the woman has been pregnant in the past.

Among couples with no fertility problems, 85% of women will become pregnant over one year. On average, pregnancy occurs after 3 to 6 months of unprotected sex. There is great variation around this average, however.

Pregnancy wastage is another form of infertility: A woman can become pregnant, but miscarriage or stillbirth prevents a live birth.

### What Causes Infertility?

Different factors or conditions can reduce fertility, such as:

- Infectious diseases (sexually transmitted infections [STIs], including HIV, other reproductive tract infections; mumps that develop after puberty in men)
- Anatomical, endocrine, genetic, or immune system problems
- Aging
- Medical procedures that bring infection into a woman's upper reproductive tract

STIs are a major cause of infertility. Left untreated, gonorrhea and chlamydia can infect fallopian tubes, the uterus, and ovaries. This is known as pelvic inflammatory disease (PID). Clinical PID is painful, but sometimes PID has no symptoms and goes unnoticed (silent PID). Gonorrhea and chlamydia can scar women's fallopian tubes, blocking eggs from traveling down the tubes to meet sperm. Men can have scarring and blockage in the sperm duct (epididymis) and urethra from untreated gonorrhea and chlamydia (see Female Anatomy, p. 364, and Male Anatomy, p. 367).

Other reasons for male infertility include a natural inability either to produce any sperm at all or enough sperm to cause pregnancy. Less commonly, sperm are malformed and die before reaching an egg. Among women, natural inability to become pregnant often is due to blocked fallopian tubes or inability to ovulate.

Fertility is also related to age. As a woman gets older, her ability to become pregnant naturally deceases over time. Emerging evidence suggests that, similarly, men, as they age, produce sperm that is less able to fertilize an egg.

Postpartum and postabortion infections also can cause PID, which may lead

to infertility. This happens when the surgical instruments used for medical procedures are not properly disinfected or sterilized. A woman can also develop PID if an infection present in the lower reproductive tract is carried into the upper reproductive tract during a medical procedure.

## **Preventing Infertility**

Infertility is often preventable. Providers can:

- Counsel clients about STI prevention (see Sexually Transmitted Infections, Including HIV, Preventing Sexually Transmitted Infections, p. 280).
   Encourage clients to seek treatment as soon as they think they might have an STI or might have been exposed.
- Treat or refer clients with signs and symptoms of STIs and clinical PID (see Sexually Transmitted Infections, Including HIV, Symptoms of Sexually Transmitted Infections, p. 278). Treating these infections helps preserve fertility.
- Avoid infection by following proper infection-prevention practices when performing medical procedures that pass instruments from the vagina into the uterus, such as IUD insertion (see Infection Prevention in the Clinic, p. 312).

### **Contraceptives Do Not Cause Infertility**

- With most contraceptive methods, there is no delay in the return of fertility after use is stopped. The return of fertility after injectable contraceptives are stopped usually takes longer than with most other methods (see Progestin-Only Injectables, Questions 6 and 7, p. 79, and Monthly Injectables, Questions 10 and 11, p. 100). In time, however, women who have used injectables are as fertile as they were before using the method, taking aging into account.
- Among women with current gonorrhea or chlamydia, IUD insertion slightly increases the risk of pelvic inflammatory disease in the first 20 days after insertion. Still, research has not found that former IUD users are more likely to be infertile than other women (see Copper-Bearing IUD, Question 4, p. 155).

### **Counseling Clients With Fertility Problems**

Counsel both partners together, if possible. Men often blame women for infertility when they themselves might be responsible. Tell couples:

- A man is just as likely to have fertility problems as a woman. It may not be possible to find who is infertile and what caused the infertility.
- Try for pregnancy for at least 12 months before worrying about infertility.
- The most fertile time of a woman's cycle is several days before and at the time an egg is released from the ovary (see The Menstrual Cycle, p. 366). Suggest they have sex often during this time. Fertility awareness methods can help couples identify the most fertile time of each cycle (see Fertility Awareness Methods, p. 239). Teach or refer if the couple wants to try this.
- If after one year the suggestions above have not helped, refer both partners for evaluation, if available. The couple also may want to consider adoption.

# Family Planning Provision

Class A: Essential and mandatory in all circumstances

# Importance of Selected Procedures for Providing Family Planning Methods

							,	ii cii cui					
The classifications	for safe and effective use of the contraceptive method.												
below of examinations	Class B: Contributes substantially to safe and effective use.							use.					
and tests apply to	lf the	test	or e	xamina	tion	cann	ot be d	done, ho	wev	er, th	e		
people who are	risk of not performing it should be weighed against the								Э				
presumed to be	benefits of making the contra						aceptive method available.						
healthy. For a person	Class C: Does not contribute substantially to safe												
with a known medical	and e	ffecti	ve u	se of th	ne co	ontra	ceptive	metho	d.				
condition or other	I.	6				I I	1		I	2	I		
special condition,		injectables	pills					_		sterilization			
refer to the Medical		tat	/ P	<b>`</b>			ale	pu		zai			
Eligibility Criteria	ves	ec	l n	l no			female	IS a	s	Lii			
for Contraceptive	pti	Ξ.	-	es es	6			gms a caps	ide	ste	کر ا		
Use, p. 324.	l in a	h h	sti	sti abl	nt:		and oms	al	lic		to		
	Combined oral contraceptives	Monthly	ge	ect 98	pla	IUDs	Male and condoms	Diaphra	- un	na	ec		
Specific situation	ပိ ပ်	Ϋ́	<b>Progestin-only</b>	Progestin-only injectables	Implants	⊡	<b>M</b> ale condo	Diaphragms and cervical caps	Spermicides	Female	Vasectomy		
Breast examination		С		~				~					
by provider	С	C	С	С	С	С	С	С	С	С	NA		
Pelvic/genital examination	-	С	С	С	С	Α	С	А	C	А	Α		
Cervical cancer screening	C	С	С	С	С	С	С	С	С	С	NA		
Routine laboratory tests	С	С	С	С	С	С	С	С	С	С	С		
Hemoglobin test	С	С	С	С	С	В	С	С	С	В	С		
STI risk assessment:													
medical history and	C	C	C	С	C	<b>A</b> *	С	C†	C†	С	C		
physical examination													
STI/HIV screening:	c	С	С	С	С	В*	с	C <sup>†</sup>	C <sup>†</sup>	С	С		
laboratory tests				C				U.		C			
Blood pressure screening	‡	‡	‡	‡	‡	C	С	С	C	Α	C§		

If a woman has a very high individual likelihood of exposure to gonorrhea or chlamydia, she generally should not have an IUD inserted unless other methods are not available or not acceptable. If she has current purulent cervicitis, gonorrhea, or chlamydia, she should not have an IUD inserted until these conditions are resolved and she is otherwise medically eligible.

<sup>†</sup> Women at high risk of HIV infection or AIDS should not use spermicides. Using diaphragms and cervical caps with spermicide is not usually recommended for such women unless other more appropriate methods are not available or acceptable.

NA=Not applicable

\* Desirable, but in settings where the risks of pregnancy are high, and hormonal methods are among the few methods widely available, women should not be denied use of hormonal methods solely because their blood pressure cannot be measured.

§ For procedures performed using only local anesthesia.

# **Successful Counseling**

Good counseling helps clients choose and use family planning methods that suit them. Clients differ, their situations differ, and they need different kinds of help. The best counseling is tailored to the individual client.

Client Type	Usual Counseling Tasks
Returning clients with no problems	<ul> <li>Provide more supplies or routine follow-up</li> <li>Ask a friendly question about how the client is doing with the method</li> </ul>
Returning clients with problems	<ul> <li>Understand the problem and help resolve it— whether the problem is side effects, trouble using the method, an uncooperative partner, or another problem</li> </ul>
New clients with a method in mind	<ul> <li>Check that the client's understanding is accurate</li> <li>Support the client's choice, if client is medically eligible</li> <li>Discuss how to use method and how to cope with any side effects</li> </ul>
New clients with no method in mind	<ul> <li>Discuss the client's situation, plans, and what is important to her about a method</li> <li>Help the client consider methods that might suit her. If needed, help her reach a decision</li> <li>Support the client's choice, give instructions on use, and discuss how to cope with any side effects</li> </ul>

Give time to clients who need it. Many clients are returning with no problems and need little counseling. Returning clients with problems and new clients with no method in mind need the most time, but usually they are few.

# **Tips for Successful Counseling**

- Show every client respect, and help each client feel at ease.
- Encourage the client to explain needs, express concerns, ask questions.
- Let the client's wishes and needs guide the discussion.
- Be alert to related needs such as protection from sexually transmitted infections including HIV, and support for condom use.
- Listen carefully. Listening is as important as giving correct information.
- Give just key information and instructions. Use words the client knows.
- Respect and support the client's informed decisions.
- Bring up side effects, if any, and take the client's concerns seriously.

- Check the client's understanding.
- Invite the client to come back any time for any reason.

Counseling has succeeded when:

- Clients feel they got the help they wanted
- Clients know what to do and feel confident that they can do it
- Clients feel respected and appreciated
- Clients come back when they need to
- And, most important, clients use their methods effectively and with satisfaction.

### **Counseling Tool Available from WHO**

The Decision-Making Tool for Family Planning Clients and Providers, another of the World Health Organization's 4 cornerstones of family planning guidance, helps clients and providers in counseling sessions with choosing and learning to use family planning methods. This tool is an illustrated flip chart. It offers help tailored for each type of client mentioned in the table on previous page. Key information from this handbook can be found in the Decision-Making Tool, worded in a way that may be helpful for counseling.

To see the *Decision-Making Tool* and to download it from the Internet, go to http://www.who.int/reproductivehealth/publications/family\_planning/9241593229index/en/index.html.

# Who Provides Family Planning?

Many different people can learn to inform and advise people about family planning and to provide family planning methods. Countries and programs have various guidelines about who can offer which methods and where, and some have rules that differ depending on whether the client is starting a new method or is continuing a method. Still, in countries around the world these people commonly provide family planning:

- Nurses, nurse-midwives, nurse-practitioners
- Auxiliary nurse-midwives
- Midwives
- Physicians, including gynecologists and obstetricians
- Physicians' assistants, physicians' associates
- Pharmacists, pharmacists' assistants, chemists
- Primary health care providers, community health care providers
- Community-based health workers and community members serving as community-based distributors
- Specifically trained traditional birth attendants
- Shopkeepers and vendors
- Volunteers, experienced users of family planning, peer educators, and community leaders

Specific training helps all these people do a better job at providing family planning. Training needs to cover skills in informing and counseling clients about choosing and using specific methods, including their side effects, as well as teaching any specific technical skills such as how to give injections or insert an IUD. Checklists can help a wide range of providers and managers in various ways, such as screening clients for medical eligibility criteria, making sure all steps in a process are carried out (such as infection prevention), and assuring good quality of services.

Method	Who can provide?
Oral contraceptives, combined patch, combined vaginal ring	<ul> <li>All providers with training, including brief specific training.</li> </ul>
Emergency contraceptive pills	• All providers.

Method	Who can provide?
Injectables	<ul> <li>Anyone trained to give injections and to handle needles and syringes properly, including appropriate disposal. This includes community- based health care providers.</li> </ul>
Implants	<ul> <li>Anyone with training in medical procedures and training in insertion of the specific implants being used, including physicians, nurses, nurse- midwives, nurse-practitioners, midwives, physicians' assistants and associates.</li> </ul>
Intrauterine device (copper-bearing and hormonal IUDs)	• Anyone with training in medical procedures and specific training in IUD screening, insertion, and removal including physicians, nurses, nurse- midwives, midwives, nurse-practitioners, physicians' assistants and associates, and medical students. Training is different for the copper-bearing IUD and the hormonal IUD. In some countries pharmacists sell IUDs—the woman takes the IUD to a health care provider who inserts it.
Female sterilization	<ul> <li>Anyone with specific training in the procedure, including general physicians, specialized physicians (such as gynecologists and surgeons), medical assistants or medical students under supervision. Laparoscopy is best performed by experienced and specifically trained surgeons.</li> </ul>
Vasectomy	• Anyone with specific training in the procedure, including physicians, medical officers, nurse- midwives, nurse practitioners, midwives, physicians' assistants and associates.
Male and female condoms and spermicides	• All providers.
Diaphragms and cervical caps	• Any provider specifically trained to perform pelvic examinations and to choose the right size diaphragm or cervical cap for each woman.
Fertility awareness methods	• Anyone specifically trained to teach fertility awareness. Experienced users of these methods often make the best teachers.
Withdrawal, lactational amenorrhea method	• These methods do not require a provider. Still, knowledgeable and supportive health care providers can help clients use these methods most effectively.

# Infection Prevention in the Clinic

Infection-prevention procedures are simple, effective, and inexpensive. Germs (infectious organisms) of concern in the clinic include bacteria (such as staphylococcus), viruses (particularly HIV and hepatitis B), fungi, and parasites. In the clinic, infectious organisms can be found in blood, body fluids with visible blood, or tissue. (Feces, nasal secretions, saliva, sputum, sweat, tears, urine, and vomit are not considered potentially infectious unless they contain blood.) The organisms can be passed through mucous membranes or broken skin, such as cuts and scratches, and by needlesticks with used needles and other puncture wounds. Infectious organisms can pass from clinics to communities when waste disposal is not proper or staff members do not wash their hands properly before leaving the clinic.

# **Basic Rules of Infection Prevention**

These rules apply the universal precautions for infection prevention to the family planning clinic.

### Wash hands



- Hand washing may be the single most important infection-prevention procedure.
- Wash hands before and after examining or treating each client. (Hand washing is not necessary if clients do not require an examination or treatment.)
- Use clean water and plain soap, and rub hands for at least 10 to 15 seconds. Be sure to clean between the fingers and under fingernails.
   Wash hands after handling soiled instruments and other items or touching mucous membranes, blood, or other body fluids. Wash hands before putting on gloves, after taking off gloves, and whenever hands get dirty. Wash hands when you arrive at work, after you use the toilet or latrine, and when you leave work. Dry hands with a paper towel or a clean, dry cloth towel that no one else uses, or air-dry.

Process instruments that will be reused	<ul> <li>High-level disinfect or sterilize instruments that touch intact mucous membranes or broken skin.</li> <li>Sterilize instruments that touch tissue beneath the skin (see The 4 Steps of Processing Equipment, p. 315).</li> </ul>

Wear gloves	•	Wear gloves for any procedure that risks touching blood, other body fluids, mucous membranes, broken skin, soiled items, dirty surfaces, or waste. Wear surgical gloves for surgical procedures such as insertion of implants. Wear single-use examination gloves for procedures that touch intact mucous membranes or generally to avoid exposure to body fluids. Gloves are not necessary for giving injections.
	•	Change gloves between procedures on the same client and between clients.
	•	Do not touch clean equipment or surfaces with dirty gloves or bare hands.
	•	Wash hands before putting on gloves. Do not wash gloved hands instead of changing gloves. Gloves are not a substitute for hand washing.
	•	Wear clean utility gloves when cleaning soiled instruments and equipment, handling waste, and cleaning blood or body fluid spills.
Do pelvic examinations only when needed	•	Pelvic examinations are not needed for most family planning methods—only for female steril- ization, the IUD, diaphragm, and cervical cap (see Importance of Selected Procedures for Providing Family Planning Methods, p. 307). Pelvic exami- nations should be done only when there is a reason—such as suspicion of sexually transmit- ted infections, when the examination could help with diagnosis or treatment.
For injections, use new auto- disable syringes and needles	•	Auto-disable syringes and needles are safer and more reliable than standard single-use disposable syringes and needles, and any disposable syringes and needles are safer than sterilizing reusable syringes and needles. Reusable syringes and needles should be considered only when single- use injection equipment is not available and if programs can document the quality of sterilization. Cleaning the client's skin before the injection is
		not needed unless the skin is dirty. If it is, wash with soap and water and dry with a clean towel. Wiping with an antiseptic has no added benefit.
Wipe surfaces with chlorine solution	•	Wipe examination tables, bench tops, and other surfaces that come in contact with unbroken skin with 0.5% chlorine solution after each client.

Dispose of singleuse equipment and supplies properly and safely



- Use personal protective equipment—goggles, mask, apron, and closed protective shoes—when handling wastes.
- Needles and syringes meant for single use must not be reused. Do not take apart the needle and syringe. Used needles should not be broken, bent, or recapped. Put used needles and syringes immediately into a puncture-proof container for disposal. (If needles and syringes will not be incinerated, they should be decontaminated by flushing with 0.5% chlorine solution before they are put into the puncture-proof container.) The puncture-proof sharps container should be sealed and either burned, incinerated, or deeply buried when three-fourths full.
- Dressings and other soiled solid waste should be collected in plastic bags and, within 2 days, burned and buried in a deep pit. Liquid wastes should be poured down a utility sink drain or a flushable toilet, or poured into a deep pit and buried.
- Clean waste containers with detergent and rinse with water.
- Remove utility gloves and clean them whenever they are dirty and at least once every day.
- Wash hands before and after disposing of soiled equipment and waste.
- Wash linens (for example, bedding, caps, gowns, and surgical drapes) by hand or machine and line-dry or machine-dry. When handling soiled linens, wear gloves, hold linens away from your body, and do not shake them.

### Little Risk of HIV Infection in the Clinic

Health care providers may be exposed to HIV through needle sticks, mucous membranes, or broken skin, but the risk of infection is low:

- Needle sticks or cuts cause most infections in health care settings. The average risk of HIV infection after a needle stick exposure to HIV-infected blood is 3 infections per 1,000 needle sticks.
- The risk after exposure of the eye, nose, or mouth to HIV-infected blood is estimated to be about 1 infection per 1,000 exposures.

Following universal precautions is the best way that providers can avoid workplace exposure to HIV and other fluid-borne infections.

### Make Infection Prevention a Habit

With each and every client, a health care provider should think, "What infection prevention is needed?" Any client or provider may have an infection without knowing it and without obvious symptoms. Infection prevention is a sign of good health care that can attract clients. For some clients cleanliness is one of the most important signs of quality.



## The 4 Steps of Processing Equipment

- Decontaminate to kill infectious organisms such as HIV and hepatitis B and to make instruments, gloves, and other objects safer for people who clean them. Soak in 0.5% chlorine solution for 10 minutes. Rinse with clean cool water or clean immediately.
- 2. Clean to remove body fluids, tissue, and dirt. Wash or scrub with a brush with liquid soap or detergent and water. Avoid bar soap or powdered soap, which can stay on the equipment. Rinse and dry. While cleaning, wear utility gloves and personal protective equipment—goggles, mask, apron, and enclosed shoes.
- **3.** High-level disinfect or sterilize.
  - High-level disinfect to kill all infectious organisms except some bacterial endospores (a dormant, resistant form of bacteria) by boiling, by steaming, or with chemicals. High-level disinfect instruments or supplies that touch intact mucous membranes or broken skin, such as vaginal specula, uterine sounds, and gloves for pelvic examinations.
  - Sterilize to kill all infectious organisms, including bacterial endospores, with a high-pressure steam autoclave, a dry-heat oven, chemicals, or radiation. Sterilize instruments such as scalpels and needles that touch tissue beneath the skin. If sterilization is not possible or practical (for example, for laparoscopes), instruments must be high-level disinfected.
- **4.** Store instruments and supplies to protect them from contamination. They should be stored in a high-level disinfected or sterilized container in a clean area away from clinic traffic. The equipment used to sterilize and high-level disinfect instruments and supplies also must be guarded against contamination.

24

# Managing Contraceptive Supplies

Good-quality reproductive health care requires a continuous supply of contraceptives and other commodities. Family planning providers are the most important link in the contraceptive supply chain that moves commodities from the manufacturer to the client.

Accurate and timely reports and orders from providers help supply chain managers determine what products are needed, how much to buy, and where to distribute them. Clinic staff members do their part when they properly manage contraceptive inventory, accurately record and report what is provided to clients, and promptly order new supplies. In some facilities one staff member is assigned all the logistics duties. In other facilities different staff members may help with logistics as needed. Clinic staff members need to be familiar with, and work within, whatever systems are in place to make certain that they have the supplies they need.

# Logistics Responsibilities in the Clinic

Each supply chain operates according to specific procedures that work in a specific setting, but typical contraceptive logistics responsibilities of clinic staff include these common activities:

### Daily

- Track the number and types of contraceptives dispensed to clients using the appropriate recording form (typically called a "daily activity register").
- Maintain proper storage conditions for all supplies: clean, dry storage, away from direct sun and protected from extreme heat.
- Provide contraceptives to clients by "First Expiry, First Out" management of the stock of supplies. "First Expiry, First Out," or FEFO, sees to it that products with the earliest labeled expiry dates are the first products issued or dispensed. FEFO clears out older stock first to prevent waste due to expiry.





### **Regularly** (monthly or quarterly, depending on the logistics system)

- Count the amount of each method on hand in the clinic and determine the quantity of contraceptives to order (often done with a clinic pharmacist). This is a good time to inspect the supplies, looking for such problems as damaged containers and packages, IUD or implant packaging that has come open, or discoloration of condoms.
- Work with any community-based distribution agents supervised by clinic staff, reviewing their consumption records and helping them complete their order forms. Issue contraceptive supplies to community-based agents based on their orders.
- Report to and make requests of the family planning program coordinator or health supplies officer (typically at the district level), using the appropriate reporting and ordering form or forms. The quantity that is ordered is the amount that will bring the stock up to the level that will meet expected need until the next order is received. (A plan should be made in advance to place emergency orders or borrow supplies from neighboring facilities if there are sudden increases in demand, potential for running out of inventory, or large losses, for example, if a warehouse is flooded.)
- Receive the ordered contraceptive supplies from the clinic pharmacist or other appropriate person in the supply chain. Receipts should be checked against what was ordered.

24

# APPENDIX A **Contraceptive Effectiveness**

### Rates of Unintended Pregnancies per 100 Women

Nates of Offinitended				
	Pregnan	•Year cy Rates ssellª)	l 2-month Pregnancy Rates (Cleland & Ali <sup>b</sup> )	
Family planning method	Consistent and correct use	As commonly used	As commonly used	Кеу
Implants	0.05	0.05		0-0.9
Vasectomy	0.1	0.15		Very
Levonorgestrel IUD	0.2	0.2		effective
Female sterilization	0.5	0.5		1-9
Copper-bearing IUD	0.6	0.8	2	Effective
LAM (for 6 months)	0.9°	2 <sup>c</sup>		
Monthly injectables	0.05	3		10-25
Progestin-only injectables	0.3	3	2	Moder-
Combined oral contraceptives	0.3	8	7	ately effective
Progestin-only oral pills	0.3	8		
Combined patch	0.3	8		26–32
Combined vaginal ring	0.3	8		Less
Male condoms	2	15	10	effective
Ovulation method	3			
TwoDay Method	4			
Standard Days Method	5			
Diaphragms with spermicide	6	16		
Female condoms	5	21		
Other fertility awareness methods		25	24	
Withdrawal	4	27	21	
Spermicides	18	29		
Cervical caps	26 <sup>d</sup> , 9 <sup>e</sup>	32 <sup>d</sup> ,16 <sup>e</sup>		
No method	85	85	85	

Rates largely from the United States. Source: Trussell J. Contraceptive efficacy. In: Hatcher R et al., editors. Contraceptive technology. 19th revised ed. 2007. Rates for monthly injectables and cervical cap are from Trussell J. Contraceptive failure in the United States. Contraception. 2004;70(2): 89-96.

<sup>b</sup> Rates from developing countries. Source: Cleland | and Ali MM. Reproductive consequences of contraceptive failure in 19 developing countries. Obstetrics and Gynecology. 2004;104(2): 314-320.

<sup>c</sup> Rate for consistent and correct use of LAM is a weighted average from 4 clinical studies cited in Trussell (2007). Rate for LAM as commonly used is from Kennedy KI et al. Consensus statement: Lactational amenorrhea method for family planning. International Journal of Gynecology and Obstetrics. 1996;54(1): 55-57.

<sup>d</sup> Pregnancy rate for women who have given birth

<sup>e</sup> Pregnancy rate for women who have never given birth

## APPENDIX B

# Signs and Symptoms of Serious Health Conditions

The table below lists signs and symptoms of some serious health conditions. These conditions are mentioned under Health Risks or Managing Any Problems in the chapters on contraceptive methods. These conditions occur rarely to extremely rarely among users of the method. They also occur rarely among people of reproductive age generally. Still, it is important to recognize possible signs of these conditions and to take action or refer for care if a client reports them. In some cases, clients who develop one of these conditions may need to choose another contraceptive method.

Condition	Description	Signs and Symptoms
Deep vein thrombosis	A blood clot that develops in the deep veins of the body, generally in the legs	Persistent, severe pain in one leg, sometimes with swelling or red skin.
Ectopic pregnancy	Pregnancy in which the fertilized egg implants in tissue outside the uterus, most commonly in a fallopian tube but sometimes in the cervix or abdominal cavity	<ul> <li>In the early stages of ectopic pregnancy, symptoms may be absent or mild, but eventually they become severe. A combination of these signs and symptoms should increase suspicion of ectopic pregnancy:</li> <li>Unusual abdominal pain or tenderness</li> <li>Abnormal vaginal bleeding or no monthly bleeding—especially if a change from her usual bleeding pattern</li> <li>Light-headedness or dizziness</li> <li>Fainting</li> </ul>
Heart attack	Occurs when the blood supply to the heart is blocked, usually due to a build-up of cholesterol and other substances in the coronary arteries	Chest discomfort or uncomfortable pressure; fullness, squeezing, or pain in the center of the chest that lasts longer than a few minutes or that comes and goes; spreading pain or numbness in one or both arms, back, jaw, or stomach; shortness of breath; cold sweats; nausea.

Condition	Description	Signs and Symptoms
Liver disorders	Infection with hepatitis inflames the liver; cirrhosis scars tissue, which blocks blood flow through the liver	Yellow eyes or skin (jaundice) and abdominal swelling, tenderness, or pain, especially in the upper abdomen.
Pelvic inflamma- tory disease (PID)	An infection of the upper genital tract, caused by various types of bacteria	Lower abdominal pain; pain during sex, pelvic examination, or urination; abnormal vaginal bleeding or discharge; fever; cervix bleeds when touched. In a pelvic examination, signs of PID include tenderness in the ovaries or fallopian tubes, yellowish cervical discharge containing mucus and pus, bleeding easily when the cervix is touched with a swab, or a positive swab test, and tenderness or pain when moving the cervix and uterus during pelvic examination.
Pulmonary embolism	A blood clot that travels through the bloodstream to the lungs	Sudden shortness of breath, that may worsen with a deep breath, cough that may bring up blood, fast heart rate, and a light-headed feeling.
Ruptured ectopic pregnancy	When a fallopian tube breaks due to an ectopic pregnancy	Sudden sharp or stabbing pain in lower abdomen, sometimes on one side. Possible right shoulder pain. Usually, within hours the abdomen becomes rigid and the woman goes into shock.
Severe allergic reaction to latex	When a person's body has a strong reaction to contact with latex	Rash over much of the body, dizziness brought on by a sudden drop in blood pressure, difficult breathing, loss of consciousness (anaphylactic shock).
Stroke	When arteries to the brain become blocked or burst, preventing normal blood flow and leading to the death of brain tissue	Numbness or weakness of the face, arm or leg, especially on one side of the body; confusion or trouble speaking or understanding; trouble seeing in one or both eyes; trouble walking, dizziness, loss of balance or coordination; severe headache with no other known cause. Signs and symptoms develop suddenly.
Toxic shock syndrome	A severe reaction throughout the body to toxins released by bacteria	High fever, body rash, vomiting, diarrhea, dizziness, muscle aches. Signs and symptoms develop suddenly.

В

# APPENDIX C

# Medical Conditions That Make Pregnancy Especially Risky

Some common medical conditions make pregnancy riskier to a woman's health. The effectiveness of her contraceptive method thus has special importance. For a comparison of the effectiveness of family planning methods, see Contraceptive Effectiveness, p. 319.

Some methods depend more on their users for effectiveness than do others. Mostly, the methods that require correct use with every act of sex or abstaining during fertile days are the less effective methods, as commonly used:

- Spermicides
- Withdrawal
- Fertility awareness methods
- Cervical caps
- Diaphragms
- Female condoms
- Male condoms

If a woman says that she has any of the common conditions listed below:

- She should be told that pregnancy could be especially risky to her health and in some cases, to the health of her baby.
- During counseling, focus special attention on the effectiveness of methods. Clients who are considering a method that requires correct use with every act of sex should think carefully whether they can use it effectively.

#### **Reproductive Tract Infections and Disorders**

- Breast cancer
- Endometrial cancer
- Ovarian cancer
- Some sexually transmitted infections (gonorrhea, chlamydia)
- Some vaginal infections (bacterial vaginosis)

### **Cardiovascular Disease**

- High blood pressure (systolic blood pressure higher than 160 mm Hg or diastolic blood pressure higher than 100 mm Hg)
- Complicated valvular heart disease
- Ischemic heart disease (heart disease due to narrowed arteries)
- Stroke

#### **Other Infections**

- HIV/AIDS (see Sexually Transmitted Infections Including HIV, Question 9, p. 287)
- Tuberculosis
- Schistosomiasis with fibrosis of the liver

### **Endocrine Conditions**

 Diabetes if insulin dependent, with damage to arteries, kidneys, eyes, or nervous system (nephropathy, retinopathy, neuropathy), or of more than 20 years' duration

### Anemia

• Sickle cell disease

### **Gastrointestinal Conditions**

- Severe (decompensated) cirrhosis of the liver
- Malignant (cancerous) liver tumors (hepatoma)

С

# APPENDIX D

# Medical Eligibility Criteria for Contraceptive Use

The table on the following pages summarizes the World Health Organization Medical Eligibility Criteria for using contraceptive methods. These criteria are the basis for the Medical Eligibility Criteria checklists in Chapters I through 19.

Category	With Clinical Judgment	With Limited Clinical Judgment
1	Use method in any circumstances	Yes
2	Generally use method	(Use the method)
3	Use of method not usually recommended unless other more appropriate methods are not available or not acceptable	No (Do not use the method)
4	Method not to be used	

#### **Categories for Temporary Methods**

Note: In the table beginning on the next page, category 3 and 4 conditions are shaded to indicate that the method should not be provided where clinical judgment is limited.

For vasectomy, male and female condoms, spermicides, diaphragms, cervical caps, and lactational amenorrhea method, see p. 333. For fertility awareness methods, see p. 334.

#### **Categories for Female Sterilization**

Accept (A)	There is no medical reason to deny the method to a person with this condition or in this circumstance.
Caution (C)	The method is normally provided in a routine setting, but with extra preparation and precautions.
Delay (D)	Use of the method should be delayed until the condition is evaluated and/or corrected. Alternative, temporary methods of contraception should be provided.
Special (S)	The procedure should be undertaken in a setting with an experienced surgeon and staff, equipment needed to provide general anesthesia, and other backup medical support. The capacity to decide on the most appropriate procedure and anesthesia support also is needed. Alternative, temporary methods of contraception should be provided if referral is required or there is otherwise any delay.

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>I = Initiation of the method</li> <li>C = Continuation of the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Combined oral contraceptives	Monthly injectables	Combined patch and combined vaginal ring	Progestin-only pills	Progestin-only injectables	Implants	Emergency contraceptive pills*	Copper-bearing intrauterine device	Levonorgestrel intrauterine device	Female sterilization*
PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY										
Pregnant	NA	NA	NA	NA	NA	NA	NA	4	4	D
Age		enarche 40 yea				che to years		Menar < 20	che to years	Young age
	1	1	1	1	2	1	—	2	2	С
	2	40 year	rs		18 to 4	5 years		≥ 20	years	
	2	2	2	1	1	1	—	1	1	
					>	45				
				1	2	1	—			
Parity										
Nulliparous (has not given birth)	1	1	1	1	1	1	_	2	2	А
Parous (has given birth)	1	1	1	1	1	1	—	1	1	А
Breastfeeding										
< 6 weeks postpartum	4	4	4	3ª	3ª	3ª	1	b	b	*
≥ 6 weeks to < 6 months postpartum (primarily breastfeeding)	3	3	3	1	1	1	1	Ь	b	А
≥ 6 months postpartum	2	2	2	1	1	1	1	b	b	А
Postpartum (not breastfee	ding)									
< 21 days	3	3	3	1	1	1	—	b	b	
With other added VTE risk factors	3/4**	3/4**	3/4**							*
21–42 days	2	2	2	1	1	1	—	b	b	
With other added VTE risk factors	2/3**	2/3**	2/3**							
>42 days	1	1	1	1	1	1	—	1	1	Α
Postabortion										
First trimester	1	1	1	1	1	1		1	1	
Second trimester	1	1	1	1	1	1		2	2	*
Immediate post-septic abortion	1	1	1	1	1	1	—	4	4	

<sup>™</sup> For additional conditions relating to emergency contraceptive pills and female sterilization, see p. 332. (Co <sup>™</sup>Category depends on the number, severity, and combination of risk factors for venous thromboembolism (VTE).

<sup>a</sup> In settings where pregnancy morbidity and mortality risks are high and this method is one of few widely available contraceptives, it may be made accessible to breastfeeding women immediately postpartum.

<sup>b</sup> Postpartum IUD use: For the copper-bearing IUD, insertion at <48 hours is category I. For the LNG-IUD, insertion at <48 hours is category 3 for breastfeeding women and category I for women not breastfeeding. For all women and both IUD types, insertion from 48 hours to <4 weeks is category 3; ≥4 weeks, category I; and puerperal sepsis, category 4.

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>I = Initiation of the method</li> <li>C = Continuation of the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Combined oral contraceptives	Monthly injectables	Combined patch and combined vaginal ring	Progestin-only pills	Progestin-only injectables	Implants	Emergency contraceptive pills*	Copper-bearing intrauterine device	Levonorgestrel intrauterine device	Female sterilization*
Past ectopic pregnancy	1	1	1	2	1	1	1	1	1	A
History of pelvic surgery	1	1	1	1	1	1		1	1	C*
Smoking										
Age < 35 years	2	2	2	1	1	1	_	1	1	Α
Age ≥ 35 years										
<15 cigarettes/day	3	2	3	1	1	1	_	1	1	Α
≥15 cigarettes/day	4	3	4	1	1	1	_	1	1	А
Obesity										
≥ 30 kg/m² body mass index	2	2	2	1	1†	1	_	1	1	С
Blood pressure measurement unavailable	NAc	NAc	NA <sup>c</sup>	NAc	NA <sup>c</sup>	NAc		NA	NA	NA
CARDIOVASCULAR DIS	EASE									
Multiple risk factors for arterial cardiovascular disease (older age, smoking, diabetes, and hypertension)	3/4 <sup>d</sup>	3/4 <sup>d</sup>	3/4 <sup>d</sup>	2	3	2	_	1	2	s
Hypertension <sup>e</sup>										
History of hypertension, where blood pressure CANNOT be evaluated (including hypertension in pregnancy)	3	3	3	2 <sup>c</sup>	2 <sup>c</sup>	2 <sup>c</sup>		1	2	NA
Adequately controlled hypertension, where blood pressure CAN be evaluated	3	3	3	1	2	1		1	1	С
Elevated blood pressure (pro	perly m	easure	d)							
Systolic 140–159 or diastolic 90–99	3	3	3	1	2	1	—	1	1	C <sup>f</sup>
Systolic ≥ 160 or diastolic ≥ 100 <sup>g</sup>	4	4	4	2	3	2	—	1	2	Sf
Vascular disease	4	4	4	2	3	2	_	1	2	S

<sup>†</sup> From menarche to age <18 years, ≥30 kg/m² body mass index is category 2 for DMPA, category 1 for NET-EN.

<sup>c</sup> In settings where pregnancy morbidity and mortality risks are high and this method is one of few widely available contraceptives, women should not be denied access simply because their blood pressure cannot be measured.

<sup>d</sup> When multiple major risk factors exist, any of which alone would substantially increase the risk of cardiovascular disease, use of the method may increase her risk to an unacceptable level. However, a simple addition of categories for multiple risk factors is not intended. For example, a combination of factors assigned a category 2 may not necessarily warrant a higher category.

<sup>e</sup> Assuming no other risk factors for cardiovascular disease exist. A single reading of blood pressure is not sufficient to classify a woman as hypertensive.

<sup>f</sup> Elevated blood pressure should be controlled before the procedure and monitored during the procedure.

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>= Initiation of the method</li> <li>C = Continuation of the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Combined oral contraceptives	Monthly injectables	Combined patch and combined vaginal ring		rrogestin-only pills	Progestin-only injectables	-	Implants	Emergency contraceptive pills*	Copper-bearing intrauterine device	Levonorgestrel intrauterine device	Female sterilization*
History of high blood pressure during pregnancy (where current blood pressure is measurable and normal)	2	2	2	,	1	1		1	_	1	1	A
Deep venous thrombosis (	DVT)/P	ulmon	ary en	۱bo	lisn	n (PE)						
History of DVT/PE	4	4	4	2	2	2	1	2	*	1	2	А
Acute DVT/PE	4	4	4	3	3	3	:	3	*	1	3	D
DVT/PE and on anticoagulant therapy	4	4	4	1	2	2		2	*	1	2	S
Family history of DVT/PE (first-degree relatives)	2	2	2		1	1		1	*	1	1	А
Major surgery												
With prolonged immobilization	4	4	4	1	2	2		2		1	2	D
Without prolonged immobilization	2	2	2	,	1	1		1	_	1	1	Α
Minor surgery without prolonged immobilization	1	1	1	,	1	1		1	—	1	1	Α
Known thrombogenic mutations (e.g., Factor V Leiden, Prothrombin mutation; Protein S, Protein C, and Antithrombin deficiencies) <sup>g</sup>	4	4	4	2	2	2	2	2	*	1	2	А
Superficial venous throm	bosis											
Varicose veins	1	1	1		1	1		1	—	1	1	Α
Superficial thrombophlebitis	2	2	2		1	1		1	_	1	1	Α
Ischemic heart disease <sup>g</sup>				Ι	С		Ι	С			ΙC	
Current	4	4	4	2	3	3	2	3	*	1	2 3	D
History of												С
<b>Stroke</b> (history of cerebrovascular accident) <sup>g</sup>	4	4	4	2	3	3	2	3	*	1	2	С
Known hyperlipidemias	2/3 <sup>h</sup>	2/3 <sup>h</sup>	2/3 <sup>h</sup>	2	2	2	2	2	—	1	2	A
Valvular heart disease												
Uncomplicated	2	2	2		1	1		1	—	1	1	Ci
Complicated <sup>‡, g</sup>	4	4	4		1	1		1		2 <sup>i</sup>	2 <sup>i</sup>	S*
<sup>‡</sup> Pulmonary hypertension, atrial fibrillation, history of subacute bacterial endocarditis. (Continued)												

<sup>g</sup> This condition may make pregnancy an unacceptable health risk. Women should be advised that because of relatively higher pregnancy rates, as commonly used, spermicides, withdrawal, fertility awareness methods, cervical caps, diaphragms, or female or male condoms may not be the most appropriate choice.

<sup>h</sup> Assess according to the type and severity of hyperlipidemia and the presence of other cardiovascular risk factors.

<sup>i</sup> Prophylactic antibiotics are advised before providing the method.

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>= Initiation of the method</li> <li>C = Continuation of the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Combined oral	contraceptives	M		Combined patch and	combined vaginal ring		Progestin-only pills	Progestin-only	injectables <sup>(</sup>		Impiants	Emergency contraceptive pills*	Copper-bearing	intrauterine device	Levonorgestrel	intrauterine device	Female sterilization*
Systemic lupus erythema	tos					-			-	~				-				
Positive (or unknown)		us							Ι	С				Ι	С			
antiphospholipid antibodies		4	4	1	4	4	3	3	3	3	3	3	—	1	1	3	3	S
Severe thrombocytopenia	1	2	2	2	1	2	1	2	3	2	1	2	—	3	2	1	2	S
Immunosuppresive treatment	1	2	2	2	1	2	1	2	2	2	1	2	—	2	1	1	2	S
None of the above	1	2	2	2	1	2	1	2	2	2	1	2	—	1	1	1	2	С
NEUROLOGICAL CON	DIT	101	NS															
Headaches <sup>j</sup>	Ι	С	I	С	I	С	Ι	С	Ι	С	I	С				Ι	С	
Nonmigrainous (mild or severe)	1	2	1	2	1	2	1	1	1	1	1	1	—		1	1	1	А
Migraine													2					
Without aura	Ι	С	Ι	С	Ι	С	Ι	С	Ι	С	Ι	С				Ι	С	
Age < 35	2	3	2	3	2	3	1	2	2	2	2	2	_		1	2	2	А
Age ≥ 35	3	4	3	4	3	4	1	2	2	2	2	2	_		1	2	2	А
With aura, at any age	4	4	4	4	4	4	2	3	2	3	2	3	_		1	2	3	А
Epilepsy	1	k	1	k	1	k	1	k	1	k	1	k	_		1		1	С
DEPRESSIVE DISORDER	RS																	
Depressive disorders	1	I I	1	1	1	I I	1	I I	1	1	1	1	_		1	1	1	С
REPRODUCTIVE TRAC	T II	NFE	СТ	10	NS	AN	ID I	DIS	OR	DE	RS							
Vaginal bleeding patterns	5															Ι	С	
Irregular pattern without heavy bleeding		1		1		1	2	2	1	2	1	2			1	1	1	А
Heavy or prolonged bleeding (including regular and irregular patterns)		1	,	1		1		2	1	2	1	2		2	2	1	2	А
Unexplained vaginal bleeding (suspicious for serious condition), before evaluation	2	2	1	2	1	2	2	2		3		3		I 4	<b>c</b> 2	I 4	<b>c</b> 2	D
Endometriosis		1		1		1		1		1		1	_	1	2		1	S
Benign ovarian tumors (including cysts)		1	,	1		1		1		1		1			1		1	А
Severe dysmenorrhea		1		1	-	1		1	-	1	-	1	—		2		1	А
Trophoblast disease																		
ß-hCG regression		1		1		1		1		1		1	_		3		3	А
β-hCG elevation <sup>g</sup>		1		1	-	1		1	-	1	-	1	—	_	4	_	1	D
Cervical ectropion		1		1	-	1		1	-	1	-	1	—		1		1	А

<sup>j</sup> Category is for women without any other risk factors for stroke.

<sup>k</sup> If taking anticonvulsants, refer to section on drug interactions, p. 332.

<sup>1</sup> Certain medications may interact with the method, making it less effective.

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>= Initiation of the method</li> <li>C = Continuation of the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Combined oral contraceptives	Monthly injectables	Combined patch and combined vaginal ring	Progestin-only pills	Progestin-only injectables	Implants	Emergency contraceptive pills*	Copper-bearing	intrauterine device	Levonorgestrel	intrauterine device	Female sterilization*
Cervical intraepithelial neoplasia (CIN)	2	2	2	1	2	2		-	1	2	2	A
<b>Cervical cancer</b> (awaiting treatment)	2	2	2	1	2	2	_	I 4	<b>C</b> 2	I 4	<b>C</b> 2	D
Breast disease		r	,				1					
Undiagnosed mass	2	2	2	2	2	2			1	2	2	Α
Benign breast disease	1	1	1	1	1	1		-	1			Α
Family history of cancer	1	1	1	1	1	1		-	1		I	Α
Breast cancer												
Current <sup>g</sup>	4	4	4	4	4	4	—		1	4	1	С
Past, no evidence of disease for at least 5 years	3	3	3	3	3	3	_		1		3	А
Endometrial cancer <sup>g</sup>	1	1	1	1	1	1	_	I 4	<b>C</b> 2	I 4	<b>C</b> 2	D
Ovarian cancer <sup>g</sup>	1	1	1	1	1	1	—	3	2	3	2	D
Uterine fibroids												
Without distortion of the uterine cavity	1	1	1	1	1	1	_		1			С
With distortion of the uterine cavity	1	1	1	1	1	1	_	4	4	4	4	С
Anatomical abnormalitie	s											
Distorted uterine cavity	_	_	_	_	_	_	_	4	4	4	1	_
Other abnormalities not distorting the uterine cavity or interfering with IUD insertion (including cervical stenosis or lacerations)	_		_	—	_	—		2	2	2	2	_
Pelvic inflammatory disea	ase (PII	D)										
Past PID (assuming no current risk factors for STIs)								Ι	с	Ι	с	
With subsequent pregnancy	1	1	1	1	1	1	_	1	1	1	1	Α
Without subsequent pregnancy	1	1	1	1	1	1	_	2	2	2	2	с
Current PID	1	1	1	1	1	1	—	4	<b>2</b> <sup>m</sup>	4	<b>2</b> <sup>m</sup>	D
Sexually transmitted infe	ctions	(STIs) <sup>g</sup>						Ι	С	I	С	
Current purulent cervicitis,	1	1	1	1	1	1	_	4	2	4	2	D
chlamydia, or gonorrhea												

<sup>m</sup>Treat PID using appropriate antibiotics. There is usually no need to remove the IUD if the client wishes to continue use.

Medical Eligibility Criteria for Contraceptive Use 329

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>I nitiation of the method</li> <li>C continuation of the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Combined oral contraceptives	Monthly injectables	Combined patch and combined vaginal ring	Progestin-only pills	Progestin-only injectables	lmplants	Emergency contraceptive pills*	Copper-bearing intrauterine device	Levonorgestrel intrauterine device	Female sterilization*
Vaginitis (including trichomonas vaginalis and bacterial vaginosis)	1	1	1	1	1	1	_	2 2	2 2	А
Increased risk of STIs	1	1	1	1	1	1	_	$\frac{2}{3^n}$ 2	$\frac{2}{3^n}$ 2	А
HIV/AIDS <sup>g</sup>			·				·			
								ΙC	ΙC	
High risk of HIV	1	1	1	1	1	1	_	2 2	2 2	А
HIV-infected	1	1	1	1	1	1		2 2	2 2	А
AIDS	1	1	1	1	1	1	_	3 2	3 2	S°
Treated with NRTIs	1	1	1	1	1	1		$\frac{2}{3^p}$ 2	$\frac{2}{3^p}$ 2	_
Treated with NNRTIs	2	2	2	2	DMPA 1 NET-EN 2	2	_	$\frac{2}{3^{p}}$ 2	$\frac{2}{3^{p}}$ 2	_
Treated with ritonavir-boosted protease inhibitors	3	3	3	3	DMPA 1 NET-EN 2	2	_	$\frac{2}{3^{p}}$ 2	$\frac{2}{3^{p}}$ 2	_
OTHER INFECTIONS										
Schistosomiasis										
Uncomplicated	1	1	1	1	1	1	_	1	1	А
Fibrosis of liver (if severe, see cirrhosis, next page) <sup>g</sup>	1	1	1	1	1	1	_	1	1	с
Tuberculosis <sup>g</sup>			·					ΙC	ΙC	
Non-pelvic	1	1	1	1	1	1	_	1 1	1 1	А
Known pelvic	1	1	1	1	1	1	_	4 3	4 3	S
Malaria	1	1	1	1	1	1	—	1	1	А
ENDOCRINE CONDITIO	ONS									
Diabetes										
History of gestational diabetes	1	1	1	1	1	1	_	1	1	Aq
Non-vascular diabetes										
Non-insulin dependent	2	2	2	2	2	2		1	2	C <sup>i,q</sup>
Insulin dependent <sup>g</sup>	2	2	2	2	2	2	—	1	2	C <sup>i,q</sup>

<sup>n</sup> The condition is category 3 if a woman has a very high individual likelihood of exposure to gonorrhea or chlamydia.

<sup>o</sup>Presence of an AIDS-related illness may require a delay in the procedure.

<sup>P</sup> AIDS is category 2 for insertion for those clinically well on antiretroviral therapy; otherwise, category 3 for insertion. <sup>q</sup> If blood glucose is not well controlled, referral to a higher-level facility is recommended.

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>= Initiation of the method</li> <li>C = Continuation of the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Combined oral contraceptives	Monthly injectables	Combined patch and combined vaginal ring	Progestin-only pills	Progestin-only injectables	Implants	Emergency contraceptive pills*	Copper-bearing intrauterine device	Levonorgestrel intrauterine device	Female sterilization*
With kidney, eye, or nerve damage <sup>g</sup>	3/4 <sup>r</sup>	3/4 <sup>r</sup>	3/4 <sup>r</sup>	2	3	2	_	1	2	s
Other vascular disease or diabetes of >20 years' duration <sup>g</sup>	3/4 <sup>r</sup>	3/4 <sup>r</sup>	3/4 <sup>r</sup>	2	3	2		1	2	s
Thyroid disorders										
Simple goiter	1	1	1	1	1	1	_	1	1	Α
Hyperthyroid	1	1	1	1	1	1	_	1	1	S
Hypothyroid	1	1	1	1	1	1	—	1	1	С
GASTROINTESTINAL C	OND	TION	S							
Gall bladder disease										
Symptomatic										
Treated by cholecystectomy	2	2	2	2	2	2	_	1	2	А
Medically treated	3	2	3	2	2	2	_	1	2	А
Current	3	2	3	2	2	2		1	2	D
Asymptomatic	2	2	2	2	2	2	_	1	2	A
History of cholestasis										
Pregnancy-related	2	2	2	1	1	1		1	1	Α
Past combined oral contraceptives-related	3	2	3	2	2	2	_	1	2	А
Viral hepatitis	ΙC	I C	ΙC							
Acute or flare	$\frac{3}{4^r}$ 2	3 2	$\frac{3}{4^{r,s}}$ 2	1	1	1	2	1	1	D
Carrier	1	1	1	1	1	1		1	1	Α
Chronic	1	1	1	1	1	1		1	1	A
Cirrhosis										
Mild (compensated)	1	1	1	1	1	1	—	1	1	A
Severe (decompensated) <sup>g</sup>	4	3	4	3	3	3	—	1	3	St
Liver tumors			,		· · · · ·				ı	
Focal nodular hyperplasia	2	2	2	2	2	2	—	1	2	A
Hepatocellular adenoma	4	3	4	3	3	3		1	3	Ct
Malignant (hepatoma) <sup>g</sup>	4	3/4	4	3	3	3		1	3	C <sup>t</sup>

<sup>r</sup> Assess according to severity of condition.

(Continued)

<sup>s</sup> In women with symptomatic viral hepatitis, withhold these methods until liver function returns to normal or 3 months after she becomes asymptomatic, whichever is earlier.

<sup>t</sup> Liver function should be evaluated.

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>I = Initiation of the method</li> <li>C = Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Combined oral contraceptives	Monthly injectables	Combined patch and combined vaginal ring	Progestin-only pills	Progestin-only injectables	lmplants	Emergency contraceptive pills*	Copper-bearing intrauterine device	Levonorgestrel intrauterine device	Female sterilization*
ANEMIAS										
Thalassemia	1	1	1	1	1	1	—	2	1	С
Sickle cell disease <sup>g</sup>	2	2	2	1	1	1		2	1	С
Iron-deficiency anemia	1	1	1	1	1	1	_	2	1	D/C <sup>u</sup>
DRUG INTERACTIONS (for antiretroviral drugs, see HIV/AIDS)										
Anticonvulsant therapy										
Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine)	31	2	31	31	DMPA 1 NET-EN 2	2 <sup>1</sup>	_	1	1	_
Lamotrigine	3§	3§	3§	1	1	1		1	1	—
Antimicrobial therapy			·		·					
Broad-spectrum antibiotics	1	1	1	1	1	1	_	1	1	_
Antifungals and antiparasitics	1	1	1	1	1	1	_	1	1	_
Rifampicin or rifabutin therapy	31	2	31	31	DMPA 1 NET-EN 2	2	_	1	1	_

§ Combined hormonal contraceptives may reduce the effectiveness of lamotrigine.

<sup>u</sup> For hemoglobin < 7 g/dl, delay. For hemoglobin  $\geq$  7 to < 10 g/dl, caution.

#### \*Additional conditions relating to emergency contraceptive pills:

Category 1: Repeated use; rape.

*Category* 2: History of severe cardiovascular complications (ischemic heart disease, cerebrovascular attack, or other thromboembolic conditions, and angina pectoralis).

#### \*Additional conditions relating to female sterilization:

*Caution*: Diaphragmatic hernia; kidney disease; severe nutritional deficiencies; previous abdominal or pelvic surgery; concurrent with elective surgery.

Delay: Abdominal skin infection; acute respiratory disease (bronchitis, pneumonia); systemic infection or gastroenteritis; emergency surgery (without previous counseling); surgery for an infectious condition; certain postpartum conditions (7 to 41 days after childbirth); severe pre-eclampsia/eclampsia; prolonged rupture of membranes (24 hours or more); fever during or immediately after delivery; sepsis after delivery; severe hemorrhage; severe trauma to the genital tract; cervical or vaginal tear at time of delivery); certain postabortion conditions (sepsis, fever, or severe hemorrhage; severe trauma to the genital tract; cervical or vaginal tear at time of abortion; acute hematometra); subacute bacterial endocarditis; unmanaged atrial fibrillation.

*Special arrangements:* Coagulation disorders; chronic asthma, bronchitis, emphysema, or lung infection; fixed uterus due to previous surgery or infection; abdominal wall or umbilical hernia; postpartum uterine rupture or perforation; postabortion uterine perforation.

#### **Conditions relating to vasectomy:**

No special considerations: High risk of HIV, HIV-infected, sickle cell disease.

*Caution:* Young age; depressive disorders; diabetes; previous scrotal injury; large varicocele or hydrocele; cryptorchidism (may require referral); lupus with positive (or unknown) antiphospholipid antibodies; lupus and on immunosuppressive treatment.

*Delay:* Active STIs (excluding HIV and hepatitis); scrotal skin infection; balanitis; epididymitis or orchitis; systemic infection or gastroenteritis; filariasis; elephantiasis; intrascrotal mass.

Special arrangements: AIDS (AIDS-related illness may require delay); coagulation disorders; inguinal hernia; lupus with severe thrombocytopenia.

# Conditions relating to male and female condoms, spermicides, diaphragms, cervical caps, and the lactational amenorrhea method:

All other conditions listed on the previous pages that do not appear here are a category 1 or NA for male and female condoms, spermicides, diaphragms, and cervical caps and not listed in the Medical Eligibility Criteria for the Lactational Amenorrhea Method.

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>NA = Not applicable</li> <li>Condition</li> </ul>	Male and female condoms	Spermicides	Diaphragms	Cervical caps	Lactational amenorrhea method <sup>#‡</sup>					
<b>REPRODUCTIVE HISTORY</b>										
Parity										
Nulliparous (has not given birth)	1	1	1	1	_					
Parous (has given birth)	1	1	2	2	—					
< 6 weeks postpartum	1	1	NA <sup>v</sup>	NA <sup>v</sup>	—					
CARDIOVASCULAR DISEASE										
Complicated valvular heart disease (pulmonary hypertension, risk of atrial fibrillation, history of subacute bacterial endocarditis) <sup>g</sup>	1	1	2	2	_					
REPRODUCTIVE TRACT INF			DERS							
Cervical intraepithelial neoplasia	1	1	1	4	—					
Cervical cancer	1	2	1	4	_					
Anatomical abnormalities	1	1	NA <sup>w</sup>	NA <sup>×</sup>	—					
HIV/AIDS <sup>g</sup>										
High risk of HIV	1	4	4	4						
HIV-infected	1	3	3	3	Cy					
AIDS	1	3	3	3	Cy					

<sup>v</sup> Wait to fit/use until uterine involution is complete.

<sup>w</sup> Diaphragm cannot be used in certain cases of uterine prolapse.

<sup>x</sup> Cap use is not appropriate for a client with severely distorted cervical anatomy.

<sup>9</sup> Caution: women with HIV or AIDS should receive appropriate ARV therapy and exclusively breastfeed for the first 6 months of a baby's life, introduce appropriate complementary foods at 6 months, and continue breastfeeding through 12 months.

(Continued)

D

<ul> <li>= Use the method</li> <li>= Do not use the method</li> <li>= Condition not listed; does not affect eligibility for method</li> <li>Condition</li> </ul>	Male and female condoms	Spermicides	Diaphragms	Cervical caps	Lactational amenorrhea method#
			-	-	
History of toxic shock syndrome	1	1	3	3	—
Urinary tract infection	1	1	2	2	_
Allergy to latex <sup>z</sup>	3	1	3	3	—

<sup>z</sup> Does not apply to plastic condoms, diaphragms, and cervical caps.

#### <sup>#</sup>Additional conditions relating to lactational amenorrhea method:

Medication used during breastfeeding: To protect infant health, breastfeeding is not recommended for women using such drugs as anti-metabolites, bromocriptine, certain anticoagulants, corticosteroids (high doses), cyclosporine, ergotamine, lithium, mood-altering drugs, radioactive drugs, and reserpine.

Conditions affecting the newborn that may make breastfeeding difficult: Congenital deformities of the mouth, jaw, or palate; newborns who are small-for-date or premature and needing intensive neonatal care; and certain metabolic disorders.

A = Accept     C = Caution     D = Delay       Condition	Symptoms-based methods	Calendar-based methods			
Age: post menarche or perimenopause	С	С			
Breastfeeding < 6 weeks postpartum	D	D <sup>aa</sup>			
Breastfeeding $\geq$ 6 weeks postpartum	Cpp	D <sup>bb</sup>			
Postpartum, not breastfeeding	Dcc	D <sup>aa</sup>			
Postabortion	С	D <sup>dd</sup>			
Irregular vaginal bleeding	D	D			
Vaginal discharge	D	A			
Taking drugs that affect cycle regularity, hormones, and/or fertility signs	D/C <sup>ee</sup>	D/C <sup>ee</sup>			
Diseases that elevate body temperate	ire				
Acute	D	A			
Chronic	С	A			

#### **Conditions relating to fertility awareness methods:**

<sup>aa</sup> Delay until she has had 3 regular menstrual cycles.

<sup>bb</sup> Use caution after monthly bleeding or normal secretions return (usually at least 6 weeks after childbirth).

<sup>cc</sup> Delay until monthly bleeding or normal secretions return (usually < 4 weeks postpartum).

<sup>dd</sup> Delay until she has had one regular menstrual cycle.

ee Delay until the drug's effect has been determined, then use caution.



**abscess** A pocket of **pus** surrounded by inflammation, caused by a bacterial infection and marked by persistent pain.

**acquired immune deficiency syndrome (AIDS)** The condition, due to infection with **human immunodeficiency virus** (HIV), when the body's immune system breaks down and is unable to fight certain infections.

#### AIDS See acquired immune deficiency syndrome.

#### amenorrhea See vaginal bleeding.

anaphylactic shock See Severe allergic reaction to latex, Appendix B, p. 321.

anemia A condition in which the body lacks adequate **hemoglobin**, commonly due to iron deficiency or excessive blood loss. As a result, tissues do not receive adequate oxygen.

**antiretroviral (ARV) therapy** A group of drugs used to treat people with **acquired immune deficiency syndrome (AIDS)**. There are several ARV classes, which work against HIV in different ways. Patients may take a combination of several drugs at once.

**atrial fibrillation** A heart rhythm disorder in which the upper heart chambers contract in an abnormal or disorganized manner.

#### aura See migraine aura.

**backup method** A contraceptive method used when mistakes are made with using an ongoing method of contraception, or to help ensure that a woman does not become pregnant when she first starts to use a contraceptive method. Include abstinence, male or female condoms, spermicides, and withdrawal.

**bacterial endocarditis** Infection that occurs when bacteria from the bloodstream colonize damaged heart tissue or valves.

**bacterial vaginosis** A common condition caused by overgrowth of bacteria normally found in the **vagina**. Not a sexually transmitted infection.

balanitis Inflammation of the tip of the penis.

benign breast disease Growth of abnormal but noncancerous breast tissue.

benign ovarian tumor Noncancerous growth that develops on or in the ovary.

**blood pressure** The force of the blood against the walls of blood vessels. Generally, normal systolic (pumping) blood pressure is less than 140 mm Hg, and normal diastolic (resting) blood pressure is less than 90 mm Hg (see **hypertension**).

**bone density** A measure of how dense and strong a bone is. When old bone breaks down faster than new bone tissue is formed, bones become less dense, increasing risk of fractures.

#### breakthrough bleeding See vaginal bleeding.

breast cancer Malignant (cancerous) growth that develops in breast tissue.

**breastfeeding** Feeding an infant with milk produced by the breasts (see also Lactational Amenorrhea Method, p. 257). Breastfeeding patterns include:

**exclusive breastfeeding** Giving the infant only breast milk with no supplementation of any type—not even water—except for perhaps vitamins, minerals, or medication.

**fully breastfeeding** Giving the infant breast milk almost exclusively but also water, juice, vitamins, or other nutrients infrequently.

**nearly fully breastfeeding** Giving the infant some liquid or food in addition to breast milk, but more than three-fourths of feedings are breastfeeds.

**partially breastfeeding** Any breastfeeding less than nearly fully breastfeeding, giving the infant more supplementation with other liquids or food. Less than three-fourths of feedings are breastfeeds.

candidiasis A common vaginal infection caused by a yeast-like fungus. Also known as yeast infection or thrush. Not a sexually transmitted infection.

cardiovascular disease Any disease of the heart, blood vessels, or blood circulation.

cerebrovascular disease Any disease of the blood vessels of the brain.

**cervical cancer** Malignant (cancerous) growth that occurs in the **cervix**, usually due to persistent infection with certain types of **human papillomavirus**.

**cervical ectropion** A nonserious condition in which the mucus-producing cells found in the cervical canal begin to grow on the area around the opening of the **cervix**.

**cervical intraepithelial neoplasia (CIN)** Abnormal, precancerous cells in the cervix. Mild forms may go away on their own, but more severe abnormalities may progress to **cervical cancer** if not treated. Also called cervical dysplasia or precancer.

#### cervical laceration See laceration.

**cervical mucus** A thick fluid plugging the opening of the **cervix**. Most of the time it is thick enough to prevent **sperm** from entering the **uterus**. At the midpoint of the **menstrual cycle**, however, the mucus becomes thin and watery, and sperm can more easily pass through.

cervical stenosis When the cervical opening is narrower than normal.

cervicitis See purulent cervicitis.

**cervix** The lower portion of the **uterus** extending into the upper **vagina** (see Female Anatomy, p. 364).

**chancroid** A **sexually transmitted infection** caused by a bacterium, which causes an ulcer to grow on the genitals.

chlamydia A sexually transmitted infection caused by a bacterium. If left untreated, it can cause infertility.

cholecystectomy Surgical removal of the gallbladder.

cholestasis Reduced flow of bile secreted by the liver.

cirrhosis (of the liver) See Liver disorders, Appendix B, p. 321.

cryptorchidism Failure of one or both testes to descend into the scrotum after birth.

**decontaminate (medical equipment)** To remove infectious organisms in order to make instruments, gloves, and other objects safer for people who clean them.

deep vein thrombosis See Deep vein thrombosis, Appendix B, p. 320.

**depression** A mental condition typically marked by dejection, despair, lack of hope, and sometimes either extreme tiredness or agitation.

**diabetes (diabetes mellitus)** A chronic disorder that occurs when blood glucose levels become too high because the body does not produce enough insulin or cannot use the insulin properly.

disinfection See high-level disinfection.

dual protection Avoiding both pregnancy and sexually transmitted infection.

dysmenorrhea Pain during vaginal bleeding, commonly known as menstrual cramps.

eclampsia A condition of late pregnancy, labor, and the period immediately after delivery characterized by convulsions. In serious cases, sometimes followed by coma and death.

ectopic pregnancy See Ectopic pregnancy, Appendix B, p. 320.

ejaculation The release of semen from the penis at orgasm.

**elephantiasis** A chronic and often extreme swelling and hardening of skin and tissue just beneath the skin, especially of the legs and **scrotum**, due to an obstruction in the lymphatic system (see **filariasis**).

**embryo** The product of fertilization of an egg (**ovum**) by a **sperm** during the first 8 weeks of development.

endometrial cancer Malignant (cancerous) growth in the lining of the uterus.

endometriosis A condition in which tissue of the endometrium grows outside the uterus. Tissue may attach itself to the reproductive organs or to other organs in the abdominal cavity. Can cause pelvic pain and impair fertility.

endometrium The membrane that lines the inner surface of the uterus. It thickens and is then shed once a month, causing monthly bleeding. During pregnancy, this lining is not shed but instead changes and produces hormones, helping to support the pregnancy (see Female Anatomy, p. 364).

**engorgement (breast engorgement)** A condition during breastfeeding that occurs when more milk accumulates in the breasts than the infant consumes. May make breasts feel full, hard, tender, and warm. Can be prevented (or relieved) by breastfeeding often and on demand.

**epididymis** A coiled tube (duct) attached to and lying on the **testes**. Developing **sperm** reach maturity and develop their swimming capabilities within this duct. The matured sperm leave the epididymis through the **vas deferens** (see Male Anatomy, p. 367).

epididymitis Inflammation of the epididymis.

epilepsy A chronic disorder caused by disturbed brain function. May involve convulsions.

**estrogen** Hormone responsible for female sexual development. Natural estrogens, especially the **hormone** estradiol, are secreted by a mature ovarian **follicle**, which surrounds the egg (**ovum**). Also, a group of synthetic drugs that have effects similar to those of natural estrogen; some are used in some hormonal contraceptives.

**expulsion** When a contraceptive implant or intrauterine device fully or partially comes out of place.

**fallopian tube** Either of a pair of slender ducts that connect the **uterus** to the region of each **ovary. Fertilization** of an egg (**ovum**) by **sperm** usually takes place in one of the fallopian tubes (see Female Anatomy, p. 364).

fertilization Union of an ovum with a sperm.

fetus The product of **fertilization** from the end of the 8th week of pregnancy until birth (see **embryo**).

fibroid See uterine fibroid.

fibrosis The excess formation of fibrous tissue, as in reaction to organ damage.

**filariasis** A chronic parasitic disease caused by filarial worms. May lead to inflammation and permanent clogging of channels in the lymphatic system and **elephantiasis**.

**fixed uterus** A **uterus** that cannot be moved out of place, often as a result of **endometriosis**, past surgery, or infection.

**follicle** A small round structure in the **ovary**, each of which contains an egg (**ovum**). During **ovulation** a follicle on the surface of the ovary opens and releases a mature egg.

foreskin Hood of skin covering the end of the penis (see Male Anatomy, p. 367).

fully breastfeeding See breastfeeding.

**gallbladder diseases** Conditions that affect the gallbladder, a sac located under the liver that stores bile used in fat digestion. May include inflammation, infection, or obstruction, gallbladder cancer, or gall stones (when the components of bile solidify within the organ).

gastroenteritis Inflammation of the stomach and intestine.

genital herpes A disease caused by a virus, spread by sexual contact.

genital warts Growths on the vulva, the vaginal wall, and the cervix in women, and on the penis in men. Caused by certain types of human papillomavirus.

**gestational trophoblast disease** Disease during pregnancy involving abnormal cell growth of the trophoblast, the outermost layer of cells of the developing **embryo**, which develops into the **placenta**.

goiter A noncancerous enlargement of the thyroid.

gonorrhea A sexually transmitted infection caused by a bacterium. If not treated, can cause infertility.

heart attack See Heart attack, Appendix B, p. 320. See also ischemic heart disease.

heavy bleeding See vaginal bleeding.

**hematocrit** The percentage of whole blood that is made up of red blood cells. Used as a measurement of **anemia**.

hematoma A bruise or area of skin discoloration caused by broken blood vessels beneath the skin.

hematometra An accumulation of blood in the **uterus**, which may occur following spontaneous or induced abortion.

**hemoglobin** The iron-containing material in red blood cells that carries oxygen from the lungs to the tissues of the body.

hepatitis See Liver disorders, Appendix B, p. 321.

hernia The projection of an organ, part of an organ, or any bodily structure through the wall that normally contains it.

#### herpes See genital herpes.

**high-level disinfection (medical instruments)** To destroy all living microorganisms except some forms of bacteria. Compare with **sterilize**.

HIV See human immunodeficiency virus.

**hormone** A chemical substance formed in one organ or part of the body and carried in the blood to another organ or part, where it works through chemical action. Also, manufactured chemical substances that function as hormones.

human immunodeficiency virus (HIV) The virus that causes acquired immune deficiency syndrome (AIDS).

**human papillomavirus (HPV)** A common, highly contagious virus spread by sexual activity and skin-to-skin contact in the genital area. Certain subtypes of HPV are responsible for most cases of **cervical cancer**; others cause **genital warts**.

**hydrocele** The collection of fluid in a body cavity, especially in the **testes** or along the **spermatic cord** (see Male Anatomy, p. 367).

hyperlipidemia High level of fats in the blood that increases the risk of heart disease.

hypertension Higher blood pressure than normal; 140 mm Hg or higher (systolic) or 90 mm Hg or higher (diastolic).

hyperthyroidism Too much production of thyroid hormones.

hypothyroidism Not enough production of thyroid hormones.

**implantation** The embedding of the **embryo** into the **endometrium** of the **uterus** where it establishes contact with the woman's blood supply for nourishment.

infertility The inability of a couple to produce living children.

**informed choice** A freely made decision based on clear, accurate, and relevant information. A goal of family planning counseling.

infrequent bleeding See vaginal bleeding.

inguinal hernia A hernia in the groin.

intercourse See sex.

irregular bleeding See vaginal bleeding.

**ischemic heart disease, ischemia** Ischemia is reduced blood flow to tissues of the body. When this reduced flow is in the arteries of the heart, it is called ischemic heart disease.

jaundice Abnormal yellowing of the skin and eyes. Usually a symptom of liver disease.

**labia** The inner and outer lips of the **vagina**, which protect the internal female organs (see Female Anatomy, p. 365).

**laceration** A wound or irregular tear of the flesh anywhere on the body, including the **cervix** and **vagina**.

**laparoscope** A device consisting of a tube with lenses for viewing the inside of an organ or body cavity. Used in diagnosis and in some female sterilization procedures.

**laparoscopy** A procedure performed with a laparoscope.

**latex allergy** When a person's body has a reaction to contact with latex, including persistent or recurring severe redness, itching, or swelling. In extreme cases, may lead to anaphylactic shock (see Severe allergic reaction to latex, Appendix B, p. 321).

lesion A disturbed or diseased area of skin or other body tissue.

liver disease Includes tumors, hepatitis, and cirrhosis.

mastitis An inflammation of breast tissue due to infection that may cause fever, redness, and pain.

menarche The beginning of cycles of monthly bleeding. Occurs during puberty after girls start producing estrogen and progesterone.

**menopause** The time in a woman's life when monthly bleeding stops permanently. Occurs when a woman's **ovaries** stop producing eggs (ova). A woman is considered menopausal after she has had no bleeding for 12 months.

menorrhagia See vaginal bleeding.

menses, menstrual period, menstruation See monthly bleeding.

menstrual cycle A repeating series of changes in the **ovaries** and **endometrium** that includes **ovulation** and **monthly bleeding.** Most women have cycles that each last between 24 and 35 days (see The Menstrual Cycle, p. 366).

migraine aura A nervous system disturbance that affects sight and sometimes touch and speech (see Identifying Migraine Headaches and Auras, p. 368).

migraine headache A type of severe, recurrent headache (see Identifying Migraine Headaches and Auras, p. 368).

minilaparotomy A female sterilization technique performed by bringing the **fallopian tubes** to a small incision in the abdomen and then usually tying and cutting them.

miscarriage Natural loss of pregnancy during the first 20 weeks.

**monthly bleeding** Monthly flow of bloody fluid from the **uterus** through the **vagina** in adult women, which takes place between **menarche** and **menopause**. Also, the monthly vaginal flow of bloody fluid that women have while using combined hormonal contraceptives (a withdrawal bleed).

mucous membrane Membrane lining passages and cavities of the body that come in contact with air.

#### nearly fully breastfeeding See breastfeeding.

**nephropathy** Kidney disease, including damage to the small blood vessels in the kidneys from long-standing diabetes.

**neuropathy** Nervous system or nerve disease, including nerve degeneration due to damage to the small blood vessels in the nervous system from long-standing diabetes.

nonsteroidal anti-inflammatory drug (NSAID) A class of drugs used to reduce pain, fever, and swelling.

orchitis Inflammation of a testis (see Male Anatomy, p. 367).

ovarian cyst Fluid-filled sac that develops in the ovary or on its surface. Usually disappears on its own but may rupture and cause pain and complications.

**ovaries** A pair of female sex glands that store and release ova (see **ovum**) and produce the sex **hormones estrogen** and **progesterone** (see Female Anatomy, p. 364).

ovulation The release of an ovum from an ovary.

ovum Reproductive egg cell produced by the ovaries.

partially breastfeeding See breastfeeding.

pelvic inflammatory disease See Pelvic inflammatory disease, Appendix B, p. 321.

pelvic tuberculosis Infection of the pelvic organs by tuberculosis bacteria from the lungs.

**pelvis** The skeletal structure located in the lower part of the human torso, resting on the legs and supporting the spine. In females, also refers to the hollow portion of the pelvic bone structure through which the **fetus** passes during birth.

penis The male organ for urination and sexual intercourse (see Male Anatomy, p. 367).

**perforation** A hole in the wall of an organ or the process of making the hole, as with a medical instrument.

**placenta** The organ that nourishes a growing **fetus**. The placenta (afterbirth) is formed during pregnancy and comes out of the **uterus** within a few minutes after the birth of a baby.

postpartum After childbirth; the first 6 weeks after childbirth.

**pre-eclampsia Hypertension** with either excess protein in the urine, or local or generalized swelling, or both (but without convulsions) after 20 weeks of pregnancy. May progress to **eclampsia**.

premature birth A birth that occurs before 37 weeks of pregnancy.

**preventive measures** Actions taken to prevent disease, such as washing hands or providing drugs or other therapy.

**progesterone** A steroid **hormone** that is produced by the **ovary** after **ovulation**. Prepares the **endometrium** for **implantation** of a fertilized egg (**ovum**), protects the **embryo**, enhances development of the **placenta**, and helps prepare the breasts for **breastfeeding**.

**progestin** (**progestogen**) Any of a large group of synthetic drugs that have effects similar to those of **progesterone.** Some are used in hormonal contraceptives.

prolonged bleeding See vaginal bleeding.

**prolonged rupture of membranes** Occurs when the fluid-filled sac surrounding a pregnant woman's fetus breaks 24 hours or more before delivery of the infant.

prophylaxis See preventive measures.

**prostate** Male reproductive organ where some of the **semen** is produced (see Male Anatomy, p. 367).

**puerperal sepsis** Infection of the reproductive organs during the first 42 days **postpartum** (puerperium).

pulmonary embolism See Pulmonary embolism, Appendix B, p. 321.

**pulmonary hypertension** Continuous **hypertension** in the pulmonary artery, impeding blood flow from the heart to the lungs.

**purulent cervicitis** Inflammation of the **cervix** accompanied by a **pus**-like discharge. Often indicates infection with gonorrhea or chlamydia.

pus A yellowish-white fluid formed in infected tissue.

**retinopathy** Disease of the retina (nerve tissue lining the back of the eye), including damage to the small blood vessels to the retina from long-standing diabetes.

ruptured ectopic pregnancy See Ruptured ectopic pregnancy, Appendix B, p. 321.

schistosomiasis A parasitic disease caused by a flatworm living in a snail host. People become infected while wading or bathing in water containing larvae of the infected snails.

scrotum The pouch of skin behind the penis that contains the testes (see Male Anatomy, p. 367).

semen The thick, white fluid produced by a man's reproductive organs and released through the **penis** during **ejaculation**. Contains **sperm** unless the man has had a vasectomy.

seminal vesicles Male organs where sperm mixes with semen (see Male Anatomy, p. 367).

**sepsis** The presence of various **pus**-forming and disease-causing organisms, or poisonous substances that they produce, in the blood or body tissues.

septic abortion Induced or spontaneous abortion involving infection.

sex, sexual intercourse Sexual activity in which the penis is inserted into a body cavity.

anal Sex involving the anus.

oral Sex involving the mouth.

vaginal Sex involving the vagina.

**sexually transmitted infection (STI)** Any of a group of bacterial, fungal, and viral infections and parasites that are transmitted during sexual activity.

sickle cell anemia, sickle cell disease Hereditary, chronic form of anemia. Blood cells take on an abnormal sickle or crescent shape when deprived of oxygen.

**speculum** A medical tool used to widen a body opening to better see inside. A speculum is inserted into the vagina to help see the cervix.

**sperm** The male sex cell. Sperm are produced in the **testes** of an adult male, mixed with **semen** in the **seminal vesicles**, and released during **ejaculation** (see Male Anatomy, p. 367).

**spermatic cord** A cord consisting of the **vas deferens**, arteries, veins, nerves, and lymphatic vessels that passes from the groin down to the back of each **testis** (see Male Anatomy, p. 367).

spontaneous abortion See miscarriage.

spotting See vaginal bleeding.

**sterilize** (medical equipment) To destroy all microorganisms, including spores that are not killed by **high-level disinfection**.

stroke See Stroke, Appendix B, p. 321.

superficial thrombophlebitis Inflammation of a vein just beneath the skin due to a blood clot.

**syphilis** A **sexually transmitted infection** caused by a bacterium. If untreated, may progress to systemic infection, causing general paralysis and dementia or be transmitted to the fetus during pregnancy or childbirth.

**tampon** A plug of cotton or other absorbent material used to absorb fluids, such as a plug inserted in the vagina to absorb bloody flow during **monthly bleeding**.

**testes, testicles** The 2 male reproductive organs that produce **sperm** and the **hormone** testosterone. Located in the **scrotum**. (Testis if referring to one of the testes; see Male Anatomy, p. 367).

thalassemia An inherited type of anemia.

thromboembolic disorder (or disease) Abnormal clotting of blood in the blood vessels.

thrombogenic mutations Any of several genetic disorders that causes abnormal thickening or clotting of the blood.

thrombophlebitis Inflammation of a vein due to the presence of a blood clot (see thrombosis).

thrombosis Formation of a blood clot inside a blood vessel.

thrush See candidiasis.

thyroid disease Any disease of the thyroid (see hyperthyroid, hypothyroid).

toxic shock syndrome See Toxic shock syndrome, Appendix B, p. 321.

trichomoniasis A sexually transmitted infection caused by a protozoan.

#### trophoblast disease See gestational trophoblastic disease.

**tuberculosis** A contagious disease caused by a bacterium. Most commonly infects the respiratory system; also infects the organs in a woman's **pelvis**, and then known as **pelvic tuberculosis**.

urethra Tube through which urine is released from the body (see Female Anatomy, p. 365 and Male Anatomy, p. 367). In men, **semen** also passes through the urethra.

uterine fibroid Noncancerous tumor that grows in the muscle of the uterus.

**uterine perforation** Puncturing of the wall of the **uterus**, which may occur during an induced abortion or with insertion of an intrauterine device.

uterine rupture A tear of the uterus, typically during labor or late pregnancy.

uterus The hollow, muscular organ that carries the **fetus** during pregnancy. Also called the womb (see Female Anatomy, p. 364).

vagina The passage joining the outer sexual organs with the **uterus** in females (see Female Anatomy, p. 364).

vaginal bleeding Any bloody vaginal discharge (pink, red, or brown) that requires the use of sanitary protection (pads, cloths, or tampons). Different vaginal bleeding patterns include:

amenorrhea No bleeding at all at expected bleeding times.

**breakthrough bleeding** Any bleeding outside of expected bleeding times (i.e., outside of regular monthly bleeding) that requires use of sanitary protection.

heavy bleeding (menorrhagia) Bleeding that is twice as heavy as a woman's usual bleeding.

infrequent bleeding Fewer than 2 bleeding episodes over 3 months.

**irregular bleeding** Spotting and/or breakthrough bleeding that occurs outside of expected bleeding times (i.e., outside of regular monthly bleeding).

menstrual bleeding, monthly bleeding. Bleeding that takes place, on average, for 3-7 days about every 28 days.

prolonged bleeding Bleeding that lasts longer than 8 days.

**spotting** Any bloody vaginal discharge outside of expected bleeding times that requires no sanitary protection.

vaginal mucus The fluid secreted by glands in the vagina.

**vaginitis** Inflammation of the **vagina**. May be due to infection by bacteria, viruses, or fungi, or to chemical irritation. Not a sexually transmitted infection.

valvular heart disease Health problems due to improperly functioning heart valves.

varicose veins Enlarged, twisted veins, most commonly seen in veins just beneath the skin of the legs.

vas deferens (vas, vasa) 2 muscular tubes that transport sperm from the testes to the seminal vesicles. These tubes are cut or blocked during a vasectomy (see Male Anatomy, p. 367).

vascular disease Any disease of the blood vessels.

vulva The exterior female genitals.

warts See genital warts.

withdrawal bleed See monthly bleeding.

womb See uterus.

yeast infection See candidiasis.

# Index

# Α

abdominal bloating and discomfort...61,75, 177

abdominal pain...50, 137, 139, 146, 200, 279, 291, 301, 320–321

as side effect...27, 47, 102, 111, 119

management of...40, 44, 125, 130, 151, 152, 177, 179

- abdominal surgery...171
- abnormal vaginal bleeding...See unexplained vaginal bleeding
- abscess...126, 171, 178, 194
- abstinence...252, 254, 287, 290...See also periodic abstinence
- acetaminophen...See paracetamol

acne

as side effect...2, 111, 158, 164 management of...3, 19, 125

- adolescence, adolescent... I 54, 242, 246, 267–27 I, 276
- allergic reaction...See latex allergy

amenorrhea...See no monthly bleeding

anal sex...205, 209, 277, 284

anaphylactic shock...207, 321

- anatomical abnormalities... 137, 304, 329, 333
- anemia...See iron-deficiency anemia, sickle cell anemia, thalassemia
- anesthesia, anesthetic...176, 180, 181, 195 general...166, 169, 187, 324 local...120–121, 166, 175–176, 191

anti-anxiety therapies...242, 246

anti-nausea medications...5 I

antibiotics... 139, 156, 242, 247, 280, 328

and contraceptive effectiveness...242, 247, 332

- before IUD insertion...139, 156
- for abscess, infection...126, 178, 194
- for pelvic inflammatory disease...151, 156, 329

anticonvulsants...20, 41, 127, 328, 332 antidepressants...242, 246 antiretroviral therapy...209, 282–283, 287, 294 not limiting method use...9, 30, 55, 67, 88, 115, 136, 138, 171, 188, 283, 330, 332 antiseptic...126, 142, 144, 147, 178, 194, 313 artery damage due to diabetes...77, 97 ARVs...See antiretroviral therapy aspirin...242, 247

- as treatment...18, 19, 39, 40, 76, 96, 125, 126, 194
- to be avoided...143, 150, 177, 192

aura...See migraine auras, migraine headaches

# В

bacteria...205, 277, 312, 315, 321

bacterial infection...151

anticoagulants...259, 334

bacterial vaginosis...226, 234, 279–280, 322, 330...See also vaginal conditions

balanitis... 188, 333

barbiturates...8, 9, 20, 29, 30, 41, 114, 115, 127, 332

basal body temperature...239-240, 249

benign breast disease...329

birth defects...3, 22, 42, 47, 54, 80, 83, 98, 129, 133, 223, 235

birth spacing...82, 289-291

birth weight...295

bleeding...See vaginal bleeding

blocked or narrowed arteries...41, 77, 128, 323

as medical eligibility criterion...7, 66, 67, 86, 170, 327, 332

blood clot...3, 20, 23, 41, 77, 97, 100, 128, 194, 320, 321...See *also* deep vein thrombosis

as medical eligibility criterion...7, 29, 30, 66, 67, 86, 114, 115, 160, 161, 170

blood pressure...2, 20, 77, 97, 98, 291, 321, 323 as medical eligibility criterion...7-8,9, 65-66, 67, 86-87, 88, 170, 326-327 checking...16, 74, 94, 152, 186, 307, 326 bone density...61, 80, 272, 274 breakthrough bleeding...See irregular bleeding breast cancer...4, 20, 23, 41, 77, 79, 97, 128, 322 as medical eligibility criterion...8, 9, 29, 30, 66, 67, 87, 88, 115, 160, 161, 169, 329 breast examination ... 5, 28, 64, 84, 113, 134, 307 breastfeeding... I 67... See also and return of fertility...291 and starting a method...293, 372 and women with HIV...260, 265, 294, 295 as medical eligibility criterion...6, 9, 65, 67, 85, 88, 115, 242, 246, 325, 334 best breastfeeding practices...292 breastfeeding problems...295-296 breast milk...257, 260, 263, 265, 277, 292, 294 breast tenderness and pain...251, 371 as side effect...2, 13, 27, 34, 47, 83, 102, 111, 119, 158, 164 management of ... 19, 40, 96, 125 bromocriptine...259, 334 burning or pain with urination...139, 151, 233, 234, 279, 321 С calendar-based methods...239-240, 242-245, 253–254, 269, 273, 299, 334 medical eligibility criteria...242 calendar rhythm method...239-240, 245, 253...See also calendar-based methods candidiasis...226, 234, 279, 280

carbamazepine...8, 9, 20, 29–30, 41, 114–115, 127, 332

cervical cancer...4, 79, 137, 200, 223, 226, 227, 238, 284–285, 329, 333

cervical cancer screening...5, 28, 64, 84, 113, 134, 167, 285, 307

contraceptive effectiveness...237 medical eligibility criteria...227-228, 238 cervical intraepithelial neoplasia...238, 329, 333 cervical mucus secretions...25, 109, 239, 247, 248-251, 253-254, 364 cervicitis...See purulent cervicitis cervix...131, 142, 151, 175, 220, 227, 229, 286, 320-321, 364 cervical cap, diaphragm, and spermicide insertion...224, 230, 238 chancroid...277, 279, 286 chest pain...321 chlamydia...78, 136, 169, 277, 278, 279, 282-283, 303, 304-305, 307, 322, 330 and IUD use...132, 136-137, 138-139, 151, 154 protection against...200, 226, 236 cholestasis...331 circumcision, male...208, 288, 367 coagulation disorders...171, 332 colostrum...261,292 combined injectable contraceptives... See monthly injectables combined oral contraceptives... I-24, I48, 269, 272, 299, 358 contraceptive effectiveness... I-2 medical eligibility criteria...6-9 side effects and management...2, 17-20 combined patch...101-104, 148, 269, 272, 299, 358 contraceptive effectiveness...101-102 medical eligibility criteria...6-9 side effects and management...17-20, 102 combined vaginal ring...105-108, 148, 269, 272, 299, 358 contraceptive effectiveness...106 medical eligibility criteria...6-9 side effects and management...17-20, 106

cervical cap... 148, 237-238, 269, 273, 299

community-based distribution...63, 317 community health care providers...63, 310 complications of pregnancy and childbirth...291 with female sterilization...166, 178 with implant... 112, 120, 126 with IUD...132, 152-153, 159 with vasectomy...185, 194 condom breaks or slips...200, 206, 209, 212, 218, 361 condoms, female... 148, 211-220, 269, 273, 299, 360-361, 361-362 contraceptive effectiveness...212 medical eligibility criteria...213 condoms, male...148, 199-210, 269, 273, 299, 360-361, 361-362, 363...See also negotiating condom use contraceptive effectiveness...200 medical eligibility criteria...202 confidentiality...268, 298, 300, 302 continuous use of combined oral contraceptives...18-19,21 contraceptive effectiveness...236, 319, 355, 358, 360, 362, back cover...See also contraceptive effectiveness for each method copper-bearing intrauterine device...131-156, 269, 273, 299, 362 contraceptive effectiveness...131-132 medical eligibility criteria...135-139 side effects and management... 132, 149-154 coronary artery disease...See blocked or narrowed arteries corticosteroids...259, 334 counseling...308-309 about infertility...304-306 about violence...300-303 diverse groups...267-274 for female sterilization and vasectomy...173-174, 189 in postabortion care...297-299 cryptorchidism...333

### D

- deep vein thrombosis...3, 23, 100, 320...See also blood clot
- Depo-Provera...See depot medroxyprogesterone acetate, progestin-only injectables
- depo-subQ provera...63
- depot medroxyprogesterone acetate (DMPA)
  - as progestin-only injectables...59, 60, 61, 62, 63, 71, 72, 73, 74, 78, 79, 80, 98, 272, 359...See also progestin-only injectables
  - in monthly injectables...81,92
- depression...19, 39, 76, 125, 301
- diabetes...323
  - as medical eligibility criterion...7–8, 9, 20, 65–66, 67, 77, 86–88, 97, 170, 326, 330–331, 333
- diaphragm... 148, 225-236, 269, 273, 299

contraceptive effectiveness...226

- medical eligibility criteria...227-228
- side effects and management...226, 233–234
- diarrhea...15, 17, 27, 36, 38, 234, 321
- diet...19, 75, 96, 125, 289-290
- disinfection of instruments...312...See also high-level disinfection
- dizziness... 178, 210, 320, 321
  - as side effect...2, 27, 34, 47, 61, 71, 83, 91, 111, 158
  - management of...18, 40, 76, 96, 126, 127, 150, 152, 179, 207, 234
- DMPA...See depot medroxyprogesterone acetate (DMPA)

DMPA-SC...63

douche, douching...209, 224, 280, 287

drug interactions...332

dual protection strategies...280-281

# E

eclampsia... 169, 332

econazole...207

ectopic pregnancy...28, 55, 113, 134, 152, 320, 321, 325

diagnosis and care...40, 126–127, 152, 179

reducing risk of...27, 44, 112, 129, 133, 156, 167, 182

effectiveness, contraceptive... See contraceptive effectiveness

ejaculation...203, 212, 238, 255-256, 363, 367

- electrocoagulation... 176
- elephantiasis... 188, 333
- eligibility criteria...See medical eligibility criteria for each contraceptive method

emergency contraception...52, 142, 362...See also emergency contraceptive pills

emergency contraceptive pills...45–58, 73, 74, 94, 95, 204, 206, 209, 216, 217, 225, 231, 256, 269, 272, 302

contraceptive effectiveness...46

medical eligibility criteria...48

using oral contraceptive pills as...54, 56–58

emphysema...171, 332

endometrial cancer...3, 4, 62, 79, 132, 322, 329, 362

endometriosis...3, 62, 159, 169, 328

endometrium... 157, 364, 366

epididymis...188, 304

epididymitis... 188, 333

epilepsy... 170, 328

erection...185, 206, 210, 361, 363

ergotamine...259, 334

estrogen...15, 364...See also ethinyl estradiol

in combined hormonal contraceptives... I, 24, 81, 98, 101, 105 in emergency contraceptive pills...45–46,

50, 54–59

ethinyl estradiol...50, 54, 56-58, 76, 124

expulsion

of an IUD...142, 152–153, 273 of implants...112, 126 extended use of combined oral contraceptives...18, 19, 21

eye damage due to diabetes...See vision damage due to diabetes

### F

fainting, faintness...40, 127, 152, 178, 179, 191, 291, 320, 362 fallopian tube... 137, 165, 181, 304, 364, 366 fatigue...47, 150, 371 female condom...See condoms, female female sterilization... 148, 165-182, 269, 273, 299 contraceptive effectiveness...165-166 medical eligibility criteria...168-171 fertility... 182, 197, 257, 298, 304-306 fertility awareness methods...148, 239–254, 269, 273, 299...See also calendar-based methods, symptoms-based methods contraceptive effectiveness...240 medical eligibility criteria...242, 246-247 fertilization...364 fever...139, 146, 151, 154, 178, 234, 249, 291, 321, 332 fibroid...See uterine fibroids fibrosis... 170, 323, 330 filariasis... 188, 333 follicle...See ovarian follicle follow-up visit...23, 128, 139, 146-147, 177, 192, 263 forced sex...49, 300, 303, 332 forceps...147, 153, 191 fungal infection...296

### G

gall bladder disease...9, 20, 85, 331 gastroenteritis...171, 188, 332–333 genital herpes...200, 277, 279 genital irritation...102, 103, 202, 207, 213, 219, 225, 228, 231, 233, 235, 274 genital lesions, sores, ulcers...137, 222, 226,

233, 277, 278

genital warts...279, 284-285

gloves...210, 312-315

goiter...331

gonorrhea...136, 169, 277, 278, 279, 282–283, 303, 304–305, 307, 322, 330 and IUD use...132, 136–137, 138–139, 151, 154 protection against...200, 226, 236 griseofulvin...332

### Н

hair growth...3, 365

hand washing ... 71, 92, 224, 230, 231, 312-314

headaches, migraine...See migraine headaches

headaches, ordinary...150

as side effect...2, 13, 27, 34, 47, 61, 71, 83, 91, 102, 106, 111, 119, 158, 164 management of...18, 39, 76, 96, 125

- heart attack...3, 7, 66, 86, 320

heart disease...8, 20, 41, 66, 87, 97, 170, 198, 323, 328, 333...See *also* blocked or narrowed arteries, heart attack

heavy or prolonged bleeding...250, 292, 328, 359

as side effect...27, 61, 71, 83, 102, 106, 132, 143, 158

- management of...19, 39, 76–77, 96, 124–125, 149
- hematoma...185, 190

hematometra...332

- hemoglobin...150, 152, 170, 171, 186, 307, 332
- hemorrhage...169, 332
- hepatitis...6, 29, 65, 85, 93, 114, 160, 171, 277, 312, 315, 321, 330, 331, 333...See also liver disease
- hernia...169, 170, 188, 332-333

herpes...See genital herpes

high-level disinfection...142, 312, 315

high blood pressure...See blood pressure

HIV/AIDS...226, 275-288...See also antiretroviral therapy and safe method use ... 9, 30, 67, 88, 115, 138, 171, 188, 241, 260 limitations on method use...282-283 prevention of...200, 209, 212, 260, 265, 280, 294-295 hormone-free week...18, 19, 103, 107 HPV...See human papillomavirus human immunodeficiency virus...See HIV/ AIDS human papillomavirus...4, 279, 284-285 hydrocele...187, 333 hypertension...See blood pressure hyperthyroidism...171,331 hypothyroidism... 170, 331

# I

ibuprofen... 143, 242, 247

- as treatment...17, 18, 19, 38, 39, 40, 75, 76, 95, 96, 124, 125, 126, 145, 149, 150, 177, 192, 194
- Implanon...109, 110, 111, 116, 118, 120, 130, 360...See also implants

implants...109-130, 148, 269, 272, 299, 360

contraceptive effectiveness...110

medical eligibility criteria...114-115

side effects and management...|||, |24-|28

impotence...202, 210

infant...See newborn health

- infection...See also liver infection, reproductive tract infection, sexually transmitted infection, urinary tract infection
  - and female sterilization...166, 169, 171, 177, 178

and implants...112, 123, 126, 129

and IUD...132, 134–139, 141, 142, 151, 155, 156, 159, 163

and vasectomy...185, 187–188, 190, 193, 194

infection prevention...120–121, 142, 156, 175, 191, 229, 305, 310, 312, 312–315, 315 infertility, infertile...3, 18, 27, 38, 47, 62, 75, 79, 83, 96, 100, 112, 124, 133, 155, 200, 275, 304–306

informed consent... 167, 173, 186, 189

infrequent bleeding...2, 27, 61, 83, 91, 106, 111, 158...See also irregular bleeding

injectable, injectable contraceptive... See monthly injectables, progestin-only injectables

injection...49, 60, 63, 71–75, 92–95, 313...See also syringes

insertion and removal instructions

cervical cap...231-232, 238

diaphragm...230-231

female condom...214

implants...120-121

IUD...143-144, 147-148

spermicide...224

intensive neonatal care...259, 334

intrascrotal mass...188, 333

intrauterine device...See copper-bearing intrauterine device, levonorgestrel intrauterine device

involution...See uterine involution

iron-deficiency anemia...132, 150, 362

as medical eligibility criterion...170, 171, 332

not limiting method use...5, 28, 84, 113

prevention of...39, 76, 96, 125, 149, 290

protection against...3, 62, 111, 159, 362

irregular bleeding...21, 62, 99, 159, 167, 242, 246, 253, 358, 362...See *also* vaginal bleeding

as side effect...2, 27, 34, 47, 61, 71, 83, 91, 102, 106, 111, 119, 132, 143, 158

management of...17–18, 38–39, 53, 75, 95, 124, 149–150

ischemic heart disease...See blocked or narrowed arteries

itching...210, 279

as side effect...225, 231

management of...207, 219, 233, 234

IUD...See copper-bearing intrauterine device, levonorgestrel intrauterine device

IUD strings... 144, 145, 151, 153, 156

### J

Jadelle... 109, 110, 120, 123, 130, 360...See also implants

jaundice...See liver disease

### Κ

kidney damage due to diabetes...20, 77, 97, 323, 331 as medical eligibility criterion...7, 9, 65, 67, 86, 88, 170

kidney disease... 170, 332

### L

lactational amenorrhea method (LAM)...257–265 contraceptive effectiveness...258 medical eligibility criteria...259

LAM...See lactational amenorrhea method (LAM)

lamotrigine...8, 9, 20, 87, 88, 97, 332

laparoscope, laparoscopy...165, 175–176, 182, 311

latex allergy...200, 202, 207, 210, 228, 234, 334

lesions...See genital lesions, sores, ulcers

levo...See levonorgestrel

levonorgestrel...46, 50, 54, 56–58, 124, 157, 360...See also norgestrel

levonorgestrel intrauterine device...157–164, 269, 273, 299, 362

contraceptive effectiveness... 158

medical eligibility criteria...135–139, 160–161

side effects... I 58

light-headedness...40, 127, 152, 179, 320

lighter bleeding...2, 83, 102, 106, 111, 158

lithium...247, 259, 334

liver disease...30, 41, 77, 97, 128, 321, 323

as medical eligibility criterion...6, 29, 65, 67, 85, 88, 114, 115, 160, 161, 170–171, 330

LNG...See levonorgestrel

LNG-IUD...See levonorgestrel intrauterine device logistics...316-317

lubricants...274 for female condoms...211, 216, 218–219 for male condoms...204, 206–207, 209 lung infection...171, 332 lupus...See systemic lupus erythematosus

# Μ

- malaria...290, 330
- male involvement...270-271

male sterilization...See vasectomy

- malignant trophoblast disease...169
- maternal health...289-296
- medical eligibility criteria...See medical eligibility criteria for each specific contraceptive method
- medroxyprogesterone acetate/estradiol cypionate...81, 92...See also monthly injectables
- mefenamic acid...75, 124
- menarche...242, 246, 325, 334
- menopause...24, 83, 154, 180–181, 242, 246, 272–274

menstrual bleeding (menses, menstrual period, menstruation)...See monthly bleeding

- menstrual cramps...3, 132, 143, 150, 159
- menstrual cycle...25, 44, 46, 109, 130, 156

and fertility awareness methods...239, 242, 244–245, 249, 253

- miconazole...207, 234
- migraine auras, migraine headaches...8–9, 20, 41, 77, 87–88, 97, 128, 272, 328, 368–369

milk production...78, 258, 292...See also breast milk

minilaparotomy...165, 175, 182

- minipill...See progestin-only pill
- miscarriage... 156, 159, 298, 299, 304, 372
  - and safe method use...5, 28, 64, 84, 113, 133, 134
  - and starting a method...12, 33, 70, 91, 118, 141, 163, 172, 242–243, 246–247
  - in an IUD user...132, 153–154

missed pills...14–15, 17, 35–36, 38–39, inside back cover

missing strings...See IUD strings

monthly bleeding...21, 51, 53, 91, 99, 103, 107, 156, 220, 241, 366...See also heavy or prolonged bleeding, infrequent bleeding, irregular bleeding, no monthly bleeding, unexplained vaginal bleeding, vaginal bleeding

and fertility awareness methods... 242-247, 249-251, 254

- effects of method on...2, 13, 27, 34, 47, 50, 61, 71, 83, 91, 102, 106, 111, 119, 132, 143, 158, 164, 180
- monthly injectables...81–100, 148, 269, 272, 299, 358–359

contraceptive effectiveness...82

medical eligibility criteria...85-88

side effects and management...83, 95–97

- mood-altering drugs...242, 246, 259, 334
- mood changes...23, 44, 80, 100, 130, 371...See also depression

as side effect...2, 27, 61, 111, 158

management of ... 19, 39, 76, 125

morning-after pills...See emergency contraceptive pills

mucous membranes...312-315

# Ν

narrowed arteries...See blocked or narrowed arteries

natural family planning...See fertility awareness methods, lactational amenorrhea method, withdrawal

nausea...8, 24, 87, 146, 151, 320, 362, 368, 371

as side effect...2, 13, 27, 34, 47, 50, 102, 111, 158

management of... 18, 51, 126

needle...See syringe

negotiating condom use...201, 204, 206, 281

- nephropathy...See kidney damage due to diabetes
- nerve damage due to diabetes, neuropathy...20, 77, 97, 170, 323
  - as medical eligibility criterion...7, 9, 65, 67, 86, 88, 33 l

newborn health...260, 265, 287, 289-296

no-scalpel vasectomy...185, 190, 191

- no monthly bleeding...40, 43, 51, 74, 78, 113, 167, 179, 257, 370
  - as a side effect...2, 27, 61, 83, 102, 106, 111, 158, 164
  - management of ... 18, 38, 75, 96, 124

when to start method...12, 33, 70, 91, 118, 163, 172, 247

- nonoxynol-9...221, 222, 226, 235
- nonsteroidal anti-inflammatory drugs...17, 38, 39, 95, 96, 149, 150, 247
- norethindrone enanthate (NET-EN)
  - as progestin-only injectables...59, 60, 61, 62, 71, 72, 73, 74, 78, 79, 80, 98, 288, 359
  - in monthly injectables...81,92
- norgestrel...46, 50, 54, 56, 57, 58
- Norplant...109, 110, 120, 123, 130, 360...See also implants
- NSAIDs...See nonsteroidal antiinflammatory drugs

# 0

- obesity...171, 326
- oral contraceptives...See combined oral contraceptives, progestin-only pills
- oral sex...277, 284
- orchitis... 188, 333
- ovarian cancer...3, 4, 135, 136, 166, 322
- ovarian cysts...3, 40, 44, 126–127, 130, 158
- ovarian follicle...27, 40, 44, 111, 126-127, 130
- ovary, ovaries...54, 137, 272, 304, 321, 364, 366
- oversedation...176

overweight...See obesity

- ovulation... 1, 25, 45, 54, 60, 81, 101, 105, 109, 142, 239, 242, 247, 249, 250, 251, 258, 366
- ovulation method...239, 240, 251, 253, 254
- oxcarbazepine...8, 9, 20, 29, 30, 41, 114, 115, 127, 332

### Ρ

pain... 137, 218, 233, 275, 368...See also abdominal pain, menstrual cramps, breast pain and tenderness after female sterilization...177, 178, 181 after implant insertion...120, 123, 126 after IUD insertion...145, 150, 152 after vasectomy... 185, 192, 194, 195 during sex...146, 151, 274, 279, 300, 321 pain reliever...See aspirin, ibuprofen, paracetamol, nonsteroidal antiinflammatory drugs paracetamol...242, 247 as treatment... 18, 19, 39, 40, 76, 96, 125, 126, 143, 145, 150, 177, 192, 194 patch...See combined patch pelvic examination...23, 130, 137, 144, 147, 151, 175, 179, 225, 229, 313, 321, 370-371 pelvic inflammatory disease... 132, 154, 156 and infertility...155, 304-305 as medical eligibility criterion...169, 282-283, 329 diagnosis of... 137, 146-147, 151, 279, 321 protection against...3, 62, 111, 159, 166, 200, 226, 236 pelvic tuberculosis...135, 171, 330 penis...363, 367 and female condom use...214-215, 218, 220, 360-361 and male condom use...203, 206, 209, 360-361 and sexually transmitted infections... 139, 277, 279, 283, 287 and withdrawal...255–256 irritation...202, 207, 213, 219, 222, 225, 226, 228, 231, 233 perforation...See uterine perforation periodic abstinence...239, 240, 254 pharmacist...310, 317 phenytoin...8, 9, 20, 29, 30, 41, 114, 115, 127, 332 PID...See pelvic inflammatory disease pill-free interval...See hormone-free week polycystic ovarian syndrome...3

post-exposure prophylaxis...209, 287, 303

postabortion care... 169, 297-299, 305, 332

postcoital contraception...See emergency contraceptive pills

postpartum method provision...140, 166, 169, 227, 293, 325, 333, 334, 362

pre-eclampsia... 169, 332

pregnancy...181...See also ectopic pregnancy

antenatal care...290–291

assessing for ... 136, 370-371

conditions that make pregnancy risky...322-323

not disrupted by a method...22, 54, 78, 98

planning...271, 289-290

signs and symptoms...371

suspected in an IUD user...153-154

transmission of sexually transmitted infections in...277, 287

premature birth...298

premature ejaculation...256

- primidone...8, 9, 20, 29, 30, 41, 114, 115, 127, 332
- progesterone...1, 25, 45, 59, 81, 101, 105, 109

progestin

in emergency contraceptive pills...45, 46, 47, 50, 56–58

in hormonal contraceptives... 1, 24, 25, 59, 81, 98, 101, 105, 109, 157

progestin-only injectables...59–80, 148, 269, 272, 299

contraceptive effectiveness...60

medical eligibility criteria...65-67

side effects and management...61, 75-77

progestin-only pills...25–44, 148, 269, 272, 299 contraceptive effectiveness...26 medical eligibility criteria...29–30

side effects and management...27, 38-41

- prolonged immobilization...8, 20, 87, 97, 171, 327
- prolonged rupture of membranes...332

prostate cancer...271

providers...310–311

puerperal sepsis...135, 325

pulmonary embolism...3, 321, 327

purulent cervicitis...137, 169, 282, 283, 307, 330

### R

radioactive drugs...259, 334

rape...See forced sex

rash...102, 207, 210, 219, 233, 234, 321

regret of sterilization...167, 173, 174, 186, 189, 195, 269

reproductive tract infections...304, 322

reserpine...259, 334

retinopathy...See vision damage due to diabetes

return of fertility...2, 26, 47, 60, 79, 82, 100, 102, 106, 110, 200, 212, 222, 226, 237, 240, 255, 258

reversal of sterilization...166, 181, 184, 196

rifampin, rifampicin...8, 9, 17, 20, 29, 30, 38, 41, 114, 115, 127, 332

ring, vaginal...See combined vaginal ring

ritonavir...9, 20, 30, 41, 88, 97, 283, 330

### S

schistosomiasis...170

scrotal injury...187, 333

scrotal skin infection... 188, 283, 333

scrotum...183, 187, 188, 190, 191, 192, 194, 195

sedation...175, 176, 180

seizures...8, 29, 114

semen...183, 195, 199, 202–203, 211, 213, 215, 250, 255–256, 275, 281, 284, 367

semen analysis... 183, 186, 192, 196

sepsis...See puerperal sepsis

septic miscarriage, septic abortion...132, 135, 153–154, 325

sexual ability, sexual desire, sexual performance...23, 44, 80, 100, 130, 180, 195, 300

sexual contact without intercourse...281... See also abstinence

Index 351

sexual intercourse...See anal sex, oral sex, vaginal sex

sexually transmitted infections...133, 154, 275–288, 290, 300, 303

- and infertility...304-305
- and safe contraceptive use...19, 41, 77, 78, 97, 127, 153, 155, 233, 288
- as medical eligibility criterion...136–139, 188, 330, 333
- no protection against...2, 26, 47, 60, 82, 110, 132, 158, 166, 184, 222–223, 240, 258
- prevention...198–220, 226, 236, 280–281, 290
- risk factors...139, 276
- sickle cell anemia...62, 170, 323
- side effects...See side effects for each contraceptive method
- Sino-Implant (II)...109, 110, 360

smoking...4, 5, 6, 8, 9, 24, 28, 64, 84, 85, 87, 88, 99, 113, 170, 272, 284, 326

- sores...See genital lesions, sores, ulcers
- speculum...142, 143, 144, 147
- sperm...54, 165, 202, 213, 225, 237, 256, 304, 364, 366–367...See also semen, semen analysis
  - blocked or damaged to prevent pregnancy...25, 109, 131, 183, 185, 190–191, 199, 211, 221, 225
- spermatic cord...187, 195
- sperm duct... 188, 283, 304, 333
- spermicides...148, 221–225, 232–236, 269, 273, 299
  - contraceptive effectiveness...222
  - medical eligibility criteria...223

side effects and management...222, 233, 233–234

spontaneous abortion...See miscarriage

spotting...See irregular bleeding

Standard Days Method...239, 240, 243, 244, 253, 254

STD, STI...See sexually transmitted infections

sterilization...See female sterilization, vasectomy

sterilize (medical equipment)...312, 315...See also high-level disinfection storing contraceptives...232, 316

- stroke...3, 7, 8, 20, 41, 66, 67, 77, 86, 87, 97, 128, 170, 321, 323, 327, 328, 368
- surgery...8, 20, 87, 97, 155, 166, 169, 171, 177, 179, 181, 182, 184, 195, 196, 285, 325, 327, 332
- symptoms-based methods...239, 240, 246–251, 253, 269, 273, 334

medical eligibility criteria...246–247

symptothermal method...239, 240, 251, 254

syphilis...277, 279, 286, 290, 303

syringe...71–72, 92–93, 120, 313–314 reusable...72, 93, 313

systemic infection...332, 333

systemic lupus erythematosus...8, 30, 67, 87, 115, 136, 161, 171, 188, 328, 333

### Т

- TCu-380A IUD...See copper-bearing intrauterine device
- testes, testicles, testis... 185, 187, 188, 195, 279, 283, 367
- thalassemia... I 70, 332
- thromboembolic disorder...332
- thrombophlebitis...327

thrush...See candidiasis

thyroid conditions...170-171, 331

- topiramate...8, 9, 20, 29–30, 41, 114–115, 127, 332
- toxic shock syndrome...226, 228, 231, 234, 236, 238, 321, 334
- trichomoniasis...226, 236, 279–280

trimethoprim...233

trophoblast disease... 135, 136, 169, 328

tubal ligation, tubectomy...See female sterilization

tuberculosis...8, 29, 114, 323, 330...See also pelvic tuberculosis

TwoDay Method...239, 240, 248, 253, 254

### U

ulcer...See genital lesions, sores, ulcers uncircumcised...208, 288

undescended testicles...187–188 unexplained vaginal bleeding...40, 127, 152, 179, 279, 320 as medical eligibility criterion...66, 67, 114, 115, 135, 169

- management of ... 19, 41, 77, 97, 127, 153
- United States Food and Drug Administration...55, 63, 209, 285

upper respiratory infection...102

- upset stomach...See nausea
- urinary tract infection...222, 226, 233, 234, 334
- urination...371...See also see burning or pain with urination
- uterine cavity... 137, 179, 329
- uterine fibroids...62, 169, 329
- uterine involution...227, 299, 333
- uterine perforation...132, 137, 142, 147, 159, 169, 299, 332
- uterine rupture... 169, 332
- uterus...137, 155, 157, 169, 182, 332, 364, 366, 370–371

# V

vaginal bleeding...23, 154...See also heavy or prolonged bleeding, infrequent bleeding, irregular bleeding, monthly bleeding, no monthly bleeding, unexplained vaginal bleeding

vaginal discharge...106, 139, 146, 151, 154, 231, 234, 238, 246, 279, 291

vaginal dryness, vaginal lubricant...274

- vaginal infection...134, 207, 219, 233–234, 248, 250, 279–280, 322
- vaginal itching...See itching

vaginal ring...See combined vaginal ring

- vaginal secretions...204, 223
- vaginal sex...205, 208–209, 224, 240, 244–245, 248–249, 252–253, 288
- vaginal sponge...236
- vaginal tear...286, 332
- vaginal wetness...239

vaginal yeast infection...See candidiasis

vaginitis...102, 106, 330

vaginosis...See bacterial vaginosis

- varicocele... 187, 333
- varicose veins...5, 23, 28, 84, 100, 113, 327
- vas, vas deferens, vasa deferens...183, 184, 190, 191, 195, 367

vascular disease...323, 327, 331

- vasectomy...149, 183–198, 269, 273
  - contraceptive effectiveness...183–184 medical eligibility criteria...187–188

violence against women...300-303

- viral hepatitis...See hepatitis
- vision damage due to diabetes...20, 77, 97, 323 as medical eligibility criterion...7, 9, 65, 67, 86, 88, 170, 331
- voluntary surgical contraception...See female sterilization, vasectomy

vomiting...8, 87, 146, 151, 234, 312, 321, 362, 368, 371 and pill effectiveness...15, 17, 36, 38 as side effect...47, 102 management of...51

vulva...137

### W

waste, waste disposal...312–314, 316, 365

- weak, weakness...150, 167, 181, 185, 195, 202, 321, 368
- weight, weight change...22, 78, 167, 180, 195, 371
  - and duration of implant effectiveness...110, 123, 130, 360
  - as side effect...2, 13, 61, 63, 71, 83, 91, 111, 158, 359

management of... 19, 75, 96, 125

withdrawal...148, 255–256, 269, 273, 299 contraceptive effectiveness...255 medical eligibility criteria...256

### Y

yeast infection...See candidiasis youth...See adolescence, adolescent

# Methodology

This handbook, one of the World Health Organization's family planning cornerstones, provides evidence-based guidance developed through worldwide collaboration. The World Health Organization (WHO) Department of Reproductive Health and Research invited more than 30 organizations to participate in its preparation. The INFO Project at the Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs led the handbook development process.

This handbook is the successor to The Essentials of Contraceptive Technology (Johns Hopkins School of Public Health, Population Information Program, 1997). While Essentials served as a starting point, new evidence-based guidance has been incorporated and new content has been added (see What's New in This Handbook?, p. viii).

Guidance in this book comes from several similar consensus processes:

- The Medical Eligibility Criteria for Contraceptive Use and the Selected Practice Recommendations for Contraceptive Use. WHO expert Working Groups developed these guidelines.
- For additional questions specific to this handbook, WHO convened an expert Working Group that met in Geneva on 21–24 June 2005. To discuss topics needing special attention, several subgroups met between October 2004 and June 2005. At the June 2005 meeting the full expert Working Group reviewed and endorsed the subgroups' recommendations.
- Content not addressed in these consensus processes was developed through collaboration between researchers at the INFO Project and technical experts. Then, a group of experts and, finally, representatives of the collaborating organizations had the opportunity to review the entire text.

The 2011 Update of the Handbook

- This 2011 update incorporates all guidance from the latest expert Working Group meeting in April 2008 for the *Medical Eligibility Criteria* and the *Selected Practice Recommendations*, and two Technical Consultations related to these guidelines in October 2008 and January 2010.
- Further guidance has also been incorporated from an expert Working Group meeting on HIV and infant feeding in October 2009 and a Technical Consultation on community-based provision of injectable contraceptives in June 2009.
- In addition to the new guidance available, this update also corrects any errors and brings up to date available information on brands of contraceptives. Selected members of the expert Working Group that met in 2005, experts who contributed to the handbook, and WHO staff have contributed to and reviewed the update. They include: Mario Festin, Mary Lyn Gaffield, Lucy Harber, Douglas Huber, Roy Jacobstein, Sarah Johnson, Kirsten Krueger, Enriquito Lu, Ward Rinehart, James Shelton, Jeff Spieler, and Irina Yacobson.

Future Handbook Updates

• This handbook will be reviewed every 3 to 4 years to determine the need for revisions. New WHO guidance will be incorporated into electronic versions as it becomes available.

# Some definitions used in this handbook

Effectiveness: Rates are largely the percentages of US women estimated to have unintended pregnancies during the first year of use, unless noted otherwise.

Side effects: Conditions reported by at least 5% of users in selected studies, regardless of evidence of causality or biological plausibility, listed in order of frequency with the most common at the top.

Terms describing health risks (percentage of users experiencing a risk): Common:  $\geq 15\%$  and <45%Uncommon:  $\geq 1\%$  and <15%Rare:  $\geq 0.1\%$  and <1% (<1 per 100 and  $\geq 1$  per 1,000) Very rare:  $\geq 0.01\%$  and <0.1% (<1 per 1,000 and  $\geq 1$  per 10,000) Extremely rare: <0.01% (<1 per 10,000)

# Sources for WHO guidelines and reports of consultations

Community-based health workers can safely and effectively administer injectable contraceptives. Geneva, WHO, 2010. http://www.who.int/ reproductivehealth/publications/family planning/WHO CBD brief/en/ index.html Guidelines on HIV and infant feeding. 2010. Principles and recommendations for infant feeding in the context of HIV and a summary of evidence. Geneva, WHO, 2010. http://www.who.int/child adolescent health/ documents/9789241599535/en/index.html Medical Eligibility Criteria for Contraceptive Use (4th ed.) Geneva, WHO, 2010. http://www.who.int/reproductivehealth/publications/family\_ planning/9789241563888/en/index.html Selected Practice Recommendations for Contraceptive Use (2<sup>nd</sup> ed.) Geneva, WHO, 2004. http://www.who.int/reproductivehealth/publications/family\_ planning/9241562846index/en/index.html Selected Practice Recommendations for Contraceptive Use: 2008 Update. Geneva, WHO, 2008. http://www.who.int/reproductivehealth/ publications/family\_planning/9241562846index/en/index.html Statement on combined hormonal contraceptive use during the postpartum period. Geneva, WHO, 2010. http://www.who.int/reproductivehealth/ publications/family\_planning/rhr\_10\_15/en/index.html Technical consultation on hormonal contraception use during lactation and effects on the newborn. Geneva, WHO, 2010. http://www.who.int/ reproductivehealth/publications/family\_planning/RHR\_10\_05/en/index.html

(More on processes, sources, selection criteria, and terminology used in this book can be found online at http://www.fphandbook.org/.)

# **Illustration and Photo Credits**

Illustrations by Rafael Avila and Rita Meyer, unless otherwise noted below. All adaptations by Rafael Avila.

- p. 5 David Alexander, Center for Communication Programs (CCP), courtesy of Photoshare
- p. 30 DELIVER
- p. 34 Cheikh Fall, CCP, courtesy of Photoshare
- p. 37 Lauren Goodsmith, courtesy of Photoshare
- p. 46 Francine Mueller, CCP
- p. 60 David Alexander, CCP, courtesy of Photoshare
- p. 63 PATH
- p. 82 Schering AG
- p. 99 CCP, courtesy of Photoshare
- p. 102 Ortho-McNeil Pharmaceutical
- p. 106 David Alexander, CCP, courtesy of Photoshare
- p. 112 David Alexander, CCP, courtesy of Photoshare
- p. 113 David Alexander, CCP, courtesy of Photoshare
- p. 119 Organon USA
- p. 120 Indonesia Ministry for Population, National Family Planning Coordinating Board
- p. 121 Indonesia Ministry for Population, National Family Planning Coordinating Board
- p. 122 JHPIEGO. Source: Bluestone B, Chase R, and Lu ER, editors. IUD Guidelines for Family Planning Service Programs. 3rd ed. Baltimore: JHPIEGO; 2006. (adapted)
- p. 133 David Alexander, CCP, courtesy of Photoshare
- p. 142 David Alexander, CCP, courtesy of Photoshare
- p. 144 JHPIEGO. Source: Bluestone B, Chase R, and Lu ER, editors. IUD Guidelines for Family Planning Service Programs. 3rd ed. Baltimore: JHPIEGO; 2006. (adapted)
- p.145 JHPIEGO. Source: Bluestone B, Chase R, and Lu ER, editors. IUD Guidelines for Family Planning Service Programs. 3rd ed. Baltimore: JHPIEGO; 2006. (adapted)
- p. 159 David Alexander, CCP, courtesy of Photoshare
- p. 175 EngenderHealth (adapted)
- p. 176 EngenderHealth (adapted)
- p. 191 EngenderHealth (adapted)
- p. 212 David Alexander, CCP, courtesy of Photoshare
- 356 Family Planning: A Global Handbook for Providers

- p. 215 Female Health Foundation (adapted)
- p. 222 David Alexander, CCP, courtesy of Photoshare
- p. 238 Francine Mueller, CCP
- p. 244 Institute for Reproductive Health, Georgetown University (adapted)
- p. 250 Institute for Reproductive Health, Georgetown University (adapted)
- p. 251 Institute for Reproductive Health, Georgetown University (adapted)
- p. 264 LINKAGES Project, Academy for Educational Development
- p. 268 Helen Hawkings, courtesy of Photoshare
- p. 270 Bangladesh Center for Communication Programs
- p. 290 Rick Maiman, David and Lucile Packard Foundation, courtesy of Photoshare
- p. 291 CCP, courtesy of Photoshare
- p. 299 CCP, courtesy of Photoshare
- p. 303 Hesperian Foundation (adapted)
- p. 312 Lamia Jaroudi, CCP, courtesy of Photoshare
- p. 314 DELIVER
- p. 315 CCP, courtesy of Photoshare
- p. 316 Claudia Allers, FPLM/Johns Snow International, courtesy of Photoshare
- p. 317 DELIVER

# **Comparing Contraceptives**

# **Comparing Combined Methods**

Charac- teristic	Combined Oral Contra- ceptives	Monthly Inject- ables	Combined Patch	Combined Vaginal Ring
How it is used	Pill taken orally.	Intramuscular injection.	Patch worn on upper outer arm, back, abdomen or buttocks. Not on breasts.	Ring inserted in the vagina.
Frequen- cy of use	Daily.	Monthly: Injection every 4 weeks.	Weekly: Patch is changed every week for 3 weeks. No patch worn 4th week.	Monthly: Ring kept in place for 3 weeks and taken out during 4th week.
Effective- ness	Depends on user's ability to take a pill every day.	Least dependent on the user. User must return to clinic every 4 weeks (plus or minus 7 days).	Requires user's attention once a week.	Depends on user keeping the ring in place all day, not leaving it out for more than 3 hours at a time.
<b>Bleeding</b> patterns	Typically, irregular bleeding for the first few months and then lighter and more regular bleeding.	Irregular bleeding or no monthly bleeding is more common than with COCs. Some also have prolonged bleeding in the first few months.	Similar to COCs, but irregular bleeding is more common in the first few cycles than with COCs.	Similar to COCs, but irregular bleeding is less common than with COCs.
Privacy	No physical signs of use but others may find the pills.	No physical signs of use.	Patch may be seen by partner or others.	Some partners may be able to feel the ring.

### 358 Family Planning: A Global Handbook for Providers

# **Comparing Injectables**

Charac- teristic	DMPA	NET-EN	Monthly Injectables
Time between injections	3 months.	2 months.	I month.
How early or late a client can have the next injection	2 weeks early, 4 weeks late.	2 weeks.	7 days.
Injection technique	Deep intramuscular injection into the hip, upper arm, or buttock. (Also, see Progestin-Only Injectables, New Formulation of DMPA, p. 63.)	Deep intramuscular injection into the hip, upper arm, or buttock. May be slightly more painful than DMPA.	Deep intramuscular injection into the hip, upper arm, buttock, or outer thigh.
Typical bleeding patterns in first year	Irregular and prolonged bleeding at first, then no bleeding or infrequent bleeding. About 40% of users have no monthly bleeding after I year.	Irregular or prolonged bleeding in first 6 months but shorter bleeding episodes than with DMPA. After 6 months bleeding patterns are similar to those with DMPA. 30% of users have no monthly bleeding after 1 year.	Irregular, frequent, or prolonged bleeding in first 3 months. Mostly regular bleeding patterns by I year. About 2% of users have no monthly bleeding after I year.
Average weight gain	I–2 kg per year.	I–2 kg per year.	l kg per year.
Pregnancy rate, as commonly used	About 3 pregnancies per 100 women in the first year.	Assumed to be similar to DMPA.	
Average delay in time to pregnancy after stopping injections	4 months longer than for women who used other methods.	I month longer than for women who used other methods.	I month longer than for women who used other methods.

# **Comparing Implants**

Characteristic	Jadelle	Implanon	Sino- Implant (II)	Norplant
Type of progestin	Levonorg- estrel.	Etonogestrel.	Levonor- gestrel.	Levonor- gestrel.
Number	2 rods.	l rod.	2 rods.	6 capsules.
Lifespan	Up to 5 years.	3 years.	4 years, may be extended to 5.	Up to 7 years.
Effectiveness and Client's Weight (see also Implants, Question 9, p. 130)	80 kg or more: Becomes less effective after 4 years of use.	Weight has no known impact on effectiveness.	80 kg or more: Becomes less effective after 4 years of use.	80 kg or more: Becomes less effective after 4 years of use. 70–79 kg: Becomes less effective after 5 years of use.
Availability	Expected to replace Norplant by 2011.	Primarily available in Europe, Asia and Africa. Also approved for use in United States.	Primarily available in Asia and Africa.	Being phased out of use (see Implants, p. 130, Q&A 11).

# **Comparing Condoms**

Characteristic	Male Condoms	Female Condoms
How to wear	Rolled on the man's penis. Fits the penis tightly.	Inserted into the woman's vagina. Loosely lines the vagina and does not constrict the penis.
When to put on	Put on erect penis right before sex.	Can be inserted up to 8 hours before sex.

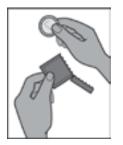
Continued on next page

Characteristic	Male Condoms	Female Condoms
Material	Most made of latex; some of synthetic materials or animal membranes.	Most made of a thin, synthetic film; a few are latex.
How it feels during sex	Change feeling of sex.	Fewer complaints of changed feeling of sex than with male condoms.
Noise during sex	May make a rubbing noise during sex.	May rustle or squeak during sex.
Lubricants to use	Users can add lubricants:	Users can add lubricants:
	<ul> <li>Water-based or silicone-based only.</li> </ul>	<ul> <li>Water-based, silicone- based, or oil-based.</li> </ul>
	<ul> <li>Applied to outside of condom.</li> </ul>	<ul> <li>Before insertion, applied to outside of condom.</li> </ul>
		<ul> <li>After insertion, applied to inside of condom or to the penis.</li> </ul>
Breakage or slippage	Tend to break more often than female condoms.	Tend to slip more often than male condoms.
When to remove	Require withdrawing from the vagina before the erection subsides.	Can remain in vagina after erection subsides. Requires removal before woman stands.
What it protects	Cover and protect most of the penis, protect the woman's internal genitalia.	Cover both the woman's internal and external genitalia and the base of the penis.
How to store	Store away from heat, light, and dampness.	Plastic condoms are not harmed by heat, light or dampness.
Reuse	Cannot be reused.	Reuse not recommended (see Female Condoms, p. 220, Q&A 5).
Cost and availability	Generally low cost and widely available.	Usually more expensive and less widely available than male condoms.

# **Comparing IUDs**

Characteristic	Copper-Bearing IUD	Levonorgestrel IUD	
Effectiveness	Nearly equal. Both are among the most effective methods.		
Length of use	Approved for 10 years.	Approved for 5 years.	
Bleeding patterns	Longer and heavier monthly bleeding, irregular bleeding, and more cramping or pain during monthly bleeding.	More irregular bleeding and spotting in the first few months. After one year no monthly bleeding is more common. Causes less bleeding than copper-bearing IUDs over time.	
Anemia	May contribute to iron- deficiency anemia if a woman already has low iron blood stores before insertion.	May help prevent iron- deficiency anemia.	
Main reasons for discontinuation	Increased bleeding and pain.	No monthly bleeding and hormonal side effects.	
Noncontraceptive benefits	May help protect against endometrial cancer.	Effective treatment for long and heavy monthly bleeding (alternative to hysterectomy). May also help treat painful monthly bleeding. Can be used as the progestin in hormone replacement therapy.	
Postpartum use	Can be inserted up to 48 hours postpartum.	Can be inserted after 4 weeks postpartum.	
Use as emergency contraception	Can be used within 5 days after unprotected sex.	Not recommended.	
Insertion	Requires specific training but easier to insert than levonorgestrel IUD.	Requires specific training and a unique, more difficult insertion technique. Women may experience faintness, pain, and nausea or vomiting at insertion more than with the copper-bearing IUD.	
Cost	Less expensive.	More expensive.	

# **Correctly Using a Male Condom**



1. Use a new condom for each act of sex



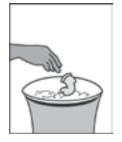
2. Before any contact, place the condom on tip of erect penis with rolled side out



**3.** Unroll the condom all the way to base of penis



4. After ejaculation, hold rim of condom in place, and withdraw penis while it is still erect



5. Dispose of the used condom safely

Job Aids/Tools

# Female Anatomy and How Contraceptives Work in Women

# Internal Anatomy

# Womb (uterus)

Where a fertilized egg grows and develops into a fetus. *IUDs* are placed in the uterus, but they prevent fertilization in the fallopian tubes. *Copper-bearing IUDs* also kill sperm as they move into the uterus.

### Ovary

Where eggs develop and one is released each month. The *lactational amenorrhea method (LAM)* and *hormonal methods*, especially those with estrogen, prevent the release of eggs. *Fertility awareness methods* require avoiding unprotected sex around the time when an ovary releases an egg.

### Uterine lining (endometrium)

Lining of the uterus, which gradually thickens and then is shed during monthly bleeding.

# Cervix

The lower portion of the uterus, which extends into the upper vagina. It produces mucus. *Hormonal methods* thicken this mucus, which helps prevent sperm from passing through the cervix. Some fertility awareness methods require monitoring cervical mucus. The *diaphragm*, *cervical cap*, and *sponge* cover the cervix so that sperm cannot enter.

# Fallopian tube

An egg travels along one of these tubes once a month, starting from the ovary. Fertilization of the egg (when sperm meets the egg) occurs in these tubes. *Female sterilization* involves cutting or clipping the fallopian tubes. This prevents sperm and egg from meeting. *IUDs* cause a chemical change that damages sperm before they can meet the egg in the fallopian tube.

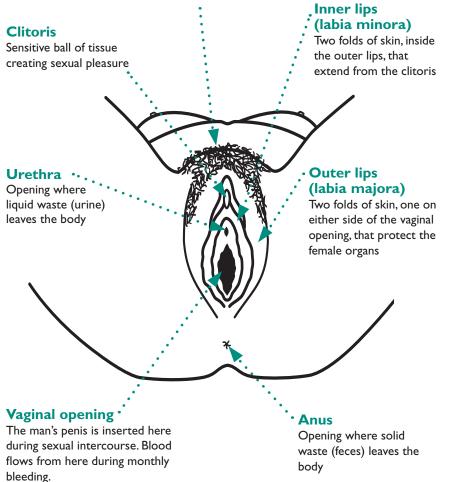
### Vagina

Joins the outer sexual organs with the uterus. The *combined ring* is placed in the vagina, where it releases hormones that pass through the vaginal walls. The *female condom* is placed in the vagina, creating a barrier to sperm. *Spermicides* inserted into the vagina kill sperm.

# **External Anatomy**

## **Pubic hair**

Hair that grows during puberty and surrounds the female organs



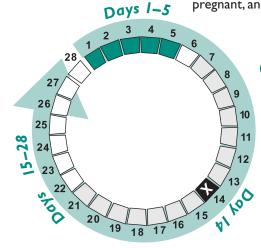
# The Menstrual Cycle





Usually lasts from 2–7 days, often about 5 days

If there is no pregnancy, the thickened lining of the womb is shed. It leaves the body through the vagina. This monthly bleeding is also called menstruation. Contractions of the womb at this time can cause cramps. Some women bleed for a short time (for example, 2 days), while others bleed for up to 8 days. Bleeding can be heavy or light. If the egg is fertilized by a man's sperm, the woman may become pregnant, and monthly bleeding stops.



3 Days 15–28: Thickening of the womb lining



2 Day 14: Release of egg



Usually occurs between days 7 and 21 of the cycle, often around day 14

Usually, one of the ovaries releases one egg in each cycle (usually once a month). The egg travels through a fallopian tube towards the womb. It may be fertilized in the tube at this time by a sperm cell that has travelled from the vagina.

Usually about 14 days long, after ovulation

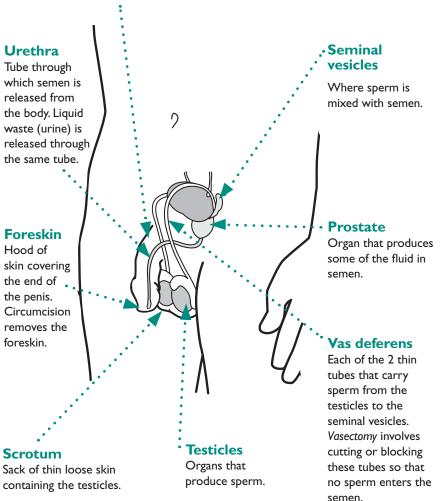
The lining of the uterus (endometrium) becomes thicker during this time to prepare for a fertilized egg. Usually there is no pregnancy, and the unfertilized egg cell dissolves in the reproductive tract.

# **Male Anatomy**

# and How Contraceptives Work in Men

### Penis

Male sex organ made of spongy tissue. When a man becomes sexually excited, it grows larger and stiffens. Semen, containing sperm, is released from the penis (ejaculation) at the height of sexual excitement (orgasm). A *male condom* covers the erect penis, preventing sperm from entering the woman's vagina. *Withdrawal* of the penis from the vagina avoids the release of semen into the vagina.



# Identifying Migraine Headaches and Auras

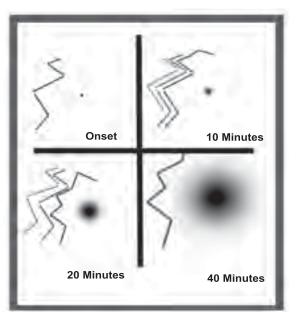
Identifying women who suffer from migraine headaches and/or auras is important because migraines, and aura in particular, are linked to higher risk of stroke. Some hormonal contraceptives can increase that risk further.

# **Migraine Headaches**

- Recurring, throbbing, severe head pain, often on one side of the head, that can last from 4 to 72 hours.
- Moving about often makes the migraine headache worse.
- Nausea, vomiting, and sensitivity to light or noise may also occur.

# **Migraine Auras**

- Nervous system disruptions that affect sight and sometimes touch and speech.
- Almost all auras include a bright area of lost vision in one eye that increases in size and turns into a crescent shape with zigzag edges.
- About 30% of auras also include a feeling of "pins and needles" in one hand that spreads up the arm and to one side of the face. Some auras also include trouble with speaking. Seeing spots or flashing lights, or having blurred vision, which often occurs during migraine headaches, is not aura.



People describe visual auras as bright, shimmering lines or waves around a bright area of lost vision that increase in size and turn into a crescent shape with zigzag edges. The black spot represents how the area of lost vision increases in size over time.

 Auras develop slowly over several minutes and go away within an hour, typically before the headache starts. (In contrast, a sudden blackout in one eye, particularly with a feeling of "pins and needles" or weakness in the opposite arm or leg, may indicate a stroke.)

# **Identifying Migraine Headaches**

For women who want a hormonal method  $^{\!\pm\!\!\delta}$  or are using one.

If a woman reports having very bad headaches, ask her these questions to tell the difference between a migraine headache and an ordinary headache. If she answers "yes" to any 2 of these questions, she probably suffers from migraine headaches. Continue to Identifying Migraine Auras, below.

- I. Do your headaches make you feel sick to your stomach?
- 2. When you have a headache, do light and noise bother you a lot more than when you do not have a headache?
- 3. Do you have headaches that stop you from working or carrying out your usual activities for one day or more?

# **Identifying Migraine Auras**

Ask this question to identify the most common migraine aura. If a woman answers "yes," she probably suffers from migraine auras.

1. Have you ever had a bright light in your eyes lasting 5 to 60 minutes, loss of clear vision usually to one side, and then a headache? (Women with such aura often bring one hand up beside their heads when describing the vision change. In some cases the bright light is not followed by a headache.)

If her headaches are not migraines and she does not have aura, she can start or continue hormonal methods if she is otherwise medically eligible. Any later changes in her headaches should be evaluated, however.

# Can a Woman With Migraines and/or Aura Use a Hormonal Method?

In situations where clinical judgment is limited:

Yes	= Yes, can use	No
	= Initiation	С

No = No, do not use C = Continuation

	Combined methods <sup>‡</sup>		Progestin-only methods§	
Migraine headaches	I C		l.	С
Without aura				
Age < 35	Yes	No	Yes	Yes
Age ≥ 35	No	No	Yes	Yes
With aura, at any age	No	No	Yes	No

<sup>†</sup> Methods with estrogen and progestin: combined oral contraceptives, monthly injectables, combined patch, and combined vaginal ring

§ Methods with progestin only: progestin-only pills, progestin-only injectables, and implants

# Further Options to Assess for Pregnancy

A woman can start a hormonal contraceptive method or, in most cases, an IUD any time it is reasonably certain that she is not pregnant. This includes a certain number of days after the start of monthly bleeding, depending on the method. At other times in a woman's monthly cycle, the checklist on p. 372 often can be used to be reasonably certain she is not pregnant.

A woman who answers "no" to all questions in the pregnancy checklist may or may not be pregnant. In most situations, such a woman will need to use a backup method<sup>\*</sup> and wait either until her next monthly bleeding to start her method of choice or until it becomes clear that she is pregnant.

In some cases, however, some providers may want to assess for pregnancy by other means. To do so, providers can follow one of the sets of instructions below, as appropriate for their situation and training. These options are especially useful when there are likely explanations—other than pregnancy—that a woman has not had monthly bleeding for several months. Such reasons include:

- She has given birth more than 6 months ago and is still breastfeeding.
- She continues to have no monthly bleeding after recently stopping a progestin-only injectable.
- She has a chronic health condition that stops monthly bleeding.

# **Assessing for Pregnancy**

### If a pregnancy test is available:

• Give her a urine pregnancy test or refer her to a facility with such tests. If the pregnancy test is negative, give her the contraceptive method she wants.

# If a pregnancy test is not available but a provider can conduct a bimanual pelvic examination:

- Take a history from the woman, including when she had her last monthly bleeding and whether she has signs or symptoms of pregnancy (see symptoms on next page).
- Conduct a bimanual pelvic examination to determine the size of her uterus so that you can make a comparison later.
- Give her a backup method to use and teach her how to use it consistently and correctly. Ask her to return in about 4 weeks or when she has monthly bleeding, whichever comes first.

<sup>\*</sup> Backup methods include abstinence, male and female condoms, spermicides, and withdrawal. Tell her that spermicides and withdrawal are the least effective contraceptive methods. If possible, give her condoms.

When she returns:

- If she returns with monthly bleeding, give her the contraceptive method she wants.
- If she returns still without monthly bleeding after 4 weeks, conduct a second pelvic examination.
  - A woman who previously had regular monthly bleeding and now has no bleeding is most likely pregnant and would have some enlargement of the uterus.
  - If there is no enlargement of the uterus, no other signs or symptoms of pregnancy, and she has used a backup method consistently and correctly, give her the contraceptive method that she wants. She may need to continue her backup method for the first few days of use, as specified for each method.

# If neither a pregnancy test nor a bimanual examination is available:

• The provider can give the woman a backup method and ask her to return during her next monthly bleeding or in 12 to 14 weeks, whichever comes first.

When she returns:

- If she returns with monthly bleeding, give her the contraceptive method she wants.
- If she returns still without monthly bleeding after 12 to 14 weeks:
  - If she is pregnant, the uterus can be felt externally, through the lower abdominal wall, coming up from below.
  - If there is no enlargement of the uterus and no other signs or symptoms of pregnancy, and she has used a backup method consistently and correctly, give her the contraceptive method that she wants. She may need to continue her backup method for the first few days of use, as specified for each method.

Tell her to return to the clinic any time if she thinks that she might be pregnant, or if she has signs or symptoms of pregnancy (see below). If you suspect an underlying health problem as the reason for a prolonged absence of monthly bleeding, refer for assessment and care.

# Signs and Symptoms of Pregnancy

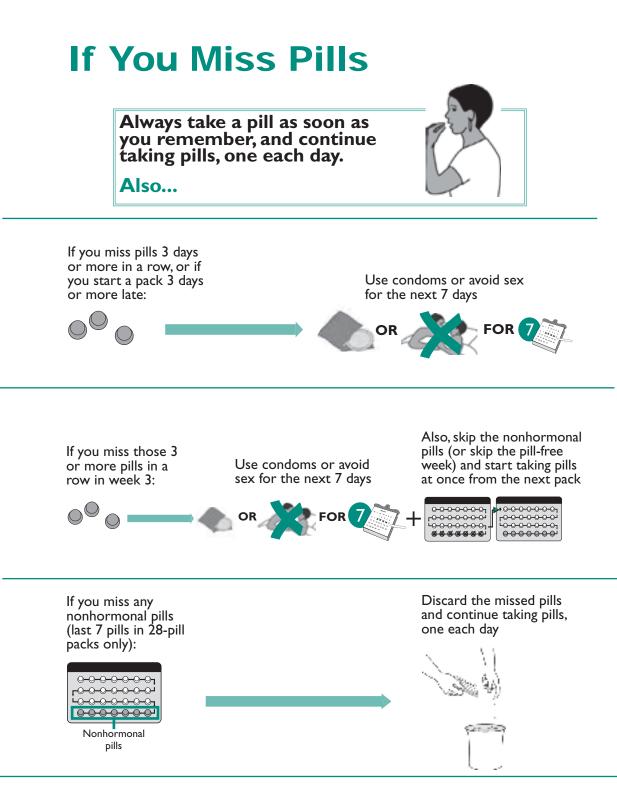
- Nausea
- Breast tenderness
- Fatigue
- Vomiting

- Increased frequency of urination
- Increased sensitivity to odors
- Mood changes
- Weight gain

# Pregnancy Checklist

Ask the client questions I-6. As soon as the client answers "yes" to any question, stop and follow the instructions below.

NO				YES
	Did you have a baby less than 6 months ago, are you fully or nearly-fully breastfeeding, and had no monthly bleeding since then?			
	2 Have you abstair since your last n		xual intercourse ding or delivery?	
	3 Have you had a baby in the last 4 weeks?			
	Did your last monthly bleeding start within the past 7 days (or within the past 12 days if the client is planning to use an IUD)?			
	5 Have you had a miscarriage or abortion in the last 7 days (or within the past 12 days if the client is planning to use an IUD)?			
	<sup>6</sup> Have you been using a reliable contraceptive method consistently and correctly?			
If the client answered " <b>no</b> " to <i>all</i> questions, pregnancy cannot be ruled out. The client should wait for her next monthly bleeding or use			If the client answe " <b>yes</b> " to <i>at least o</i> of the questions, a she has no signs o symptoms of preg you can give her t	ne Ind r nancy,
ruled out. The client should wait for her next			she has no signs o symptoms of preg	r nar he

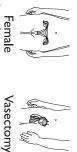


**Comparing Effectiveness of Family Planning Methods** 

# More effective

Less than I pregnancy per 100 women in one year





# How to make your method more effective

**Implants, IUD, female sterilization:** After procedure, little or nothing to do or remember

**Vasectomy:** Use another method for first 3 months

**Injectables:** Get repeat injections on time

**Lactational Amenorrhea Method** (for 6 months): Breastfeed often, day and night

**Pills:** Take a pill each day

Injectables

LAM

Pills

Patch

Vaginal Ring ................

Patch, ring: Keep in place, change on time

**Condoms, diaphragm:** Use correctly every time you have sex

Fertility awareness methods: Abstain or use condoms on fertile days. Newest methods (Standard Days Method and TwoDay Method) may be easier to use.

Withdrawal, spermicides: Use correctly every time you have sex

Less effective About 30 pregnancies per 100 women in one year

Withdrawal Spermicides

Condoms

Male

Diaphragm

Condoms

Female

Fertility Awareness

Methods

