



Photo: Mark Edwards/Brazil



BARRIERS

7

# 7 BARRIERS



## 1 Introduction

Barrier methods of contraception prevent pregnancy by blocking the entrance of sperm into the uterine cavity. Some of the barrier methods, particularly condoms, help to protect against sexually transmitted infections (STIs), including HIV infection.

A major advantage of the barrier methods is their safety. They have only a few local side-effects and there are almost no medical contraindications to their use. Most are available without medical prescription and are well suited to community-based distribution systems.

A disadvantage is their lower use-effectiveness compared with hormonal methods, IUDs, and sterilization. Sexual and reproductive health (SRH)/family planning service providers should emphasize careful user education and counselling to ensure optimal effectiveness of barrier methods. Clients must understand that if a barrier is used as the only method, and if maximum effectiveness is desired, it must be used correctly for *every* act of sexual intercourse.

Barrier methods include the following:

- Condoms.
- Diaphragms.
- Spermicides: creams, jellies, suppositories, foaming suppositories or tablets and aerosol foams.

**At least condoms and one or two types of spermicides should be available in all SRH/family planning service delivery programmes;** diaphragms should be available whenever there is a demand for this method *and* trained staff to provide it.

### 1.1 General indications

**Barrier contraceptives should be provided to any male or female client who requests them after receiving appropriate counselling and reaching an informed decision.**

Barrier contraceptives are especially appropriate:

- When there are medical contraindications to other reversible methods

and when sterilization is not desired or desirable.

- For clients who have intercourse infrequently.
- As an interim form of contraception, for example:
  - During lactational amenorrhoea.
  - During the time just following vasectomy.
  - When IUD threads cannot be felt.
  - When the woman is taking drugs that interfere with oral contraceptive efficacy.
  - While awaiting another method (e.g., a sterilization procedure or IUD insertion).
  - During investigation of gynecological symptoms.
  - As a temporary alternative or back-up to another method.
  - In conjunction with fertility awareness, for use during the fertile phase of the menstrual cycle.
- For protection against STIs including HIV infection (condoms).

## 1.2 Medical eligibility criteria

The International Planned Parenthood Federation and other bodies have collaborated with the World Health Organization (WHO) in the development of eligibility criteria for the use of various contraceptive methods. The following classification (the WHO medical eligibility criteria) was agreed:

- Category 1: A condition for which there is no restriction for the use of the contraceptive method.
- Category 2: A condition where the advantages of using the method generally outweigh the theoretical or proven risks.
- Category 3: A condition where the theoretical or proven risks usually outweigh the advantages of using the method.
- Category 4: A condition which represents an unacceptable health risk if the contraceptive is used (i.e., the contraceptive is contraindicated).

### **Category 4 (contraindications)**

There are no general contraindications to use of barrier methods of contraception.

### **Category 3**

*Some conditions require careful consideration* when advising a client on the possible use of a barrier method because they may represent a risk to the well-being and health of the client. Conditions specific to each type of barrier method are listed in the respective sections. The following conditions apply to all barrier methods:

- Client's inability to obtain or use a barrier method consistently.
- A need for highly effective protection against pregnancy (e.g., high-risk pregnancy in the event of method failure).

Refer to sections 2.3, 3.3 and 4.3 of this chapter for conditions relevant to particular barrier methods.

## **1.3 Health assessment**

In general, health assessment is not necessary before providing a barrier method of contraception. However, a client's visit to a clinic for a barrier method should be taken as an opportunity to offer the client other available sexual and reproductive health services as appropriate.

When a physical examination is performed for a female client, it should include a pelvic examination with speculum visualization of the cervix and bimanual examination. A cervical (Pap) smear may be obtained if indicated and available.

## **1.4 Service management**

### **Storage, shelf-life, quality control and supply**

Any programme that makes barrier methods of contraception available must have a system to ensure that the products offered are of acceptable quality. This requires:

- Proper transport and storage.
- A system to ensure that the products are not used after their expiry dates or, if there is no expiry date, after their recommended shelf-life has elapsed.

- A procedure to ensure that samples of the products are checked every 6–9 months. If any products of questionable reliability are found, samples should be properly tested before distribution.

### **Training**

Individuals providing barrier methods of contraception should be properly trained on counselling and the technical aspects related to the provision of the various types of barrier methods.

See sections 2.8, 3.12 and 4.8 for additional guidelines related to particular barrier methods.

## **2 Condoms**

### **2.1 Definition**

#### **Male condom**

This condom is a sheath made to fit over the erect penis. It collects semen and acts as a barrier preventing passage of sperm into the vagina. The condom is available rolled in individual packets, and is unrolled onto the erect penis before intercourse.

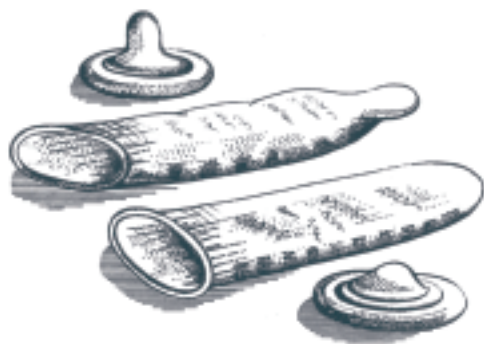
Most condoms are made of thin latex rubber.

When used correctly at every act of intercourse, the condom can be a reasonably effective method of contraception. The latex condom is also an effective barrier to protect against the transmission of STIs, including transmission of HIV/AIDS.

Many different kinds and brands of condoms are available (Figure 7.1). They differ in such qualities as:

- Shape (plain, reservoir tip, contoured for fit).
- Colour (opaque, transparent, various colours).
- Lubrication (with silicone oil, jellies, powders or non-lubricated).
- Thickness (ultra-thin to standard).
- Texture (smooth, textured or ribbed surface).
- With or without spermicide.

Figure 7.1 Condoms – rolled and unrolled, teat-shaped and plain



**Service providers should be aware of the characteristics and differences among the brands and types of condoms available in the programme and be able to advise clients accordingly.**

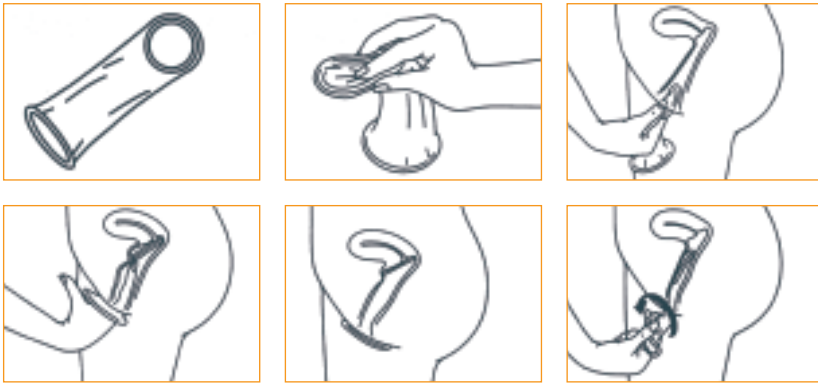
### **Female condom (Figure 7.2)**

The female condom, is made of soft pliable polyurethane prelubricated with a silicone-based substance (dimethicone). It is inserted into the vagina before sexual intercourse. An inner ring is used for insertion and holds the condom in place high in vagina; an outer ring lies flat and covers the labia during sexual intercourse. After ejaculation, the female condom retains the seminal fluid, preventing it from coming into contact with the cervix.

The contraceptive efficacy of the female condom is within the wide range quoted for other barrier methods, but lower than that of male condoms.

Laboratory studies have shown that the female condom is an effective barrier not only to sperm but also to bacteria and viruses including HIV. The female condom is now available in many countries, but use is limited by its high cost. The safety and feasibility of re-use is currently the subject of research. In the meantime, re-use of female condoms is not recommended. However, given the diversity of cultural and social contexts and personal circumstances under which female condom reuse may be acceptable, feasible and safe, and since the balance of risks and benefits varies according to individual settings, the final decision on whether or not to support reuse of the female condom must ultimately be taken locally.

Figure 7.2 The female condom



## 2.2 Indications

**The latex condom should be provided to all individuals who request them, even if these individuals are using another contraceptive method or are not formal clients of the programme.** Formal registration in the programme should not be a requirement for obtaining condoms.

The condom may be particularly appropriate for couples who have decided to use a barrier method (see section 1.1) and when:

- The male partner wishes to take responsibility for contraception.
- Protection against STIs, including HIV transmission, is needed or desired.

Other indications include:

- Premature ejaculation.
- Female partner with a cervical lesion.

## 2.3 Medical eligibility criteria

### Category 4 (contraindications)

None.

### Category 3

In addition to the conditions that require careful consideration listed in section 1.2, the following is specific to the latex condom:

- Allergy or sensitivity to latex.

## 2.4 Counselling and information

**Clients for condoms should receive appropriate counselling for the selection and use of this method of contraception, whenever possible and convenient for them. Counselling helps to ensure informed choice and proper condom use. However, counselling should not be a prerequisite for providing condoms.**

For selection of this method:

- Discuss with the client the advantages and disadvantages of the condom and of alternative family planning methods.
- Explain that latex condoms help to protect against STIs, including HIV.
- Explain to the client that the condom can fail to protect against pregnancy and/or STIs, including HIV transmission, especially if not used correctly with every act of intercourse.
- Discuss the likelihood of partner co-operation with condom use.

### For use of this method:

- Instruct very carefully and explicitly about correct use of condoms. Use a penis model for demonstrating correct fit if possible.
- Emphasize that a new condom must be used for each act of intercourse.
- Advise the client about the use of spermicide in addition to the condom in order to increase effectiveness.
- Encourage the client to return for advice if there are any doubts about or problems with the use of the condom.
- Advise the client that if the woman misses a period she should visit a clinic to exclude the possibility of pregnancy and for follow-up care.

Also see section 4.6: Instructions to the client (in relation to spermicides).

## 2.5 Condom selection

- *Pre-lubricated condoms versus non-lubricated:* Without lubrication, there may be more of a chance of intra-vaginal breakage if vaginal lubrication is insufficient.
- *Ultra-thin condoms are more prone to breakage.* If breakage has been a problem for the couple, advise a different type of condom.

## 2.6 Instructions to the client

Advise the client about the importance of following exactly the instructions for use and the reason for each of the steps (reasons are highlighted *in italics*).

Important rules for use to emphasize are:

- Put on the condom before any genital contact, *because otherwise sperm and/or infectious agents may be transmitted.*
- Compress the tip of the condom between finger and thumb, and leave a half-inch of latex material at the end of the erect penis. *This will leave a space for the ejaculate to collect and will decrease chances of condom breakage.*
- Use only spermicides or lubricants given or recommended by the programme. Do not use petroleum jelly ('Vaseline'), mineral oil, lotions, or other oil-based products for lubrication, *because they increase the chance of condom breakage.* The use of nonoxynol-9 is not recommended for protection against HIV (see section 4.1).
- After ejaculation withdraw the penis from the vagina while it is still erect, and hold the ring of the condom at the base of the penis firmly with the fingers *so that the condom will not slip off, releasing the ejaculate.*
- If the condom breaks or tears during intercourse, apply spermicide immediately (foam or gel), and consider the use of emergency contraception *for protection against pregnancy* (see chapter 10: Emergency contraception).
- Handle the condom carefully *to avoid punctures*; special care should be taken with long fingernails.
- Use a spermicide with the condom *for maximum effectiveness.*
- Store condoms in a cool, dry place. Do not use a condom if it appears damaged or brittle *because it is more likely to break.*

- After using the condom once, throw it away in a waste receptacle or toilet, *to prevent people, particularly children, from coming in contact with it.*

**After explaining the instructions, ask the client to repeat them to you in his/her own words. If necessary, repeat the instructions emphasizing the points which the client has not understood well. This information can be put on a card or leaflet and given to the client. It has to be written and presented in a way that the client or somebody close to him/ her (in case the client cannot read) can easily understand.**

## 2.7 Side-effects

- Side-effects from use of the condom are infrequent.
- Occasionally clients are allergic to latex rubber, or to the lubricant or spermicide used with the condom. If this occurs:
  - Recommend a change of condom brand or type.
  - If the client is using a condom with spermicide, recommend a condom without spermicide or with a different kind of spermicide.
  - If the client is allergic to latex, non-allergenic condoms, made of purified rubber, are available in some areas.
  - Advise another method if the problem continues.

## 2.8 Service management

### Storage, shelf-life, sampling and testing

- The shelf-life of stored condoms depends on the conditions of storage. A safe storage time in hot and/or humid conditions may be as short as 3-6 months. In cool and dry conditions, sealed condoms should have a shelf-life of 3-5 years from the date of manufacture. The manufacture date or the expiry date is usually printed on the packets of condoms.
- Storage requirements are as follows: a cool room temperature, dry conditions, and a convenient and accessible place away from direct sunlight.
- Condoms should be sampled at least twice a year for deterioration, looking for any that are brittle, sticky or discoloured.
- Condom water-leakage tests can be conducted with simple, portable equipment and should be used:

- If visual inspection raises questions about quality.
- When large quantities of condoms are stored and distributed. Samples of stocks should be tested regularly.

### Provision of condoms

- Acceptable older stocks of condoms should be distributed before those with more recent dates of manufacture.
- When possible, give the client a three-month supply of condoms or dispense according to the client's request. An approximate three-month supply is 40 condoms.

NOTE: The SRH/family planning programme is encouraged to expand educational efforts among clients and the community on the important protective effect of condoms against STIs, including HIV infection.

## 3 Diaphragms

### 3.1 Definition

A diaphragm is a shallow, dome-shaped rubber cup with a flexible rim. When correctly inserted into the vagina before intercourse, the dome covers the cervix. Spermicidal cream or jelly is placed in the dome before insertion. The contraceptive effect of the diaphragm depends partly on its function as a barrier between semen and the cervix, and partly on its function as a spermicide holder. When used correctly at every act of intercourse the diaphragm can be a reasonably effective method of contraception.

There are four types of diaphragm:

- *Flat-spring*, in which the spring is a flat band of metal;
- *Coil-spring*, with a firm, coiled wire spring;
- *Arcing-spring*, with a combination metal spring which allows the rim to assume an arcing rather than a flat, folded shape; and
- *The wide-seal rim*, available in both arcing and coil-spring types. This latter has a flexible flange approximately 1.5 cm wide attached to the inner edge of the rim; the purpose of the flange is to hold spermicide in place and to create a better seal between the diaphragm and the vaginal wall.

### 3.2 Indications

If available in the programme, **the diaphragm should be provided to any woman who requests it after receiving appropriate counselling and reaching an informed decision.**

The diaphragm may be particularly appropriate for a woman who has decided to use a barrier method (see section 1.1) and who:

- Wants her own method of contraception (as opposed to depending solely on her partner's use of a condom).
- Wishes to separate the time of application of the contraceptive from the time of intercourse.
- Can learn the insertion technique.
- Has an acceptable amount of privacy at home for the insertion, removal, care and storage of the diaphragm.
- Has facilities, such as clean water and soap, necessary to care properly for the diaphragm.

### 3.3 Medical eligibility criteria

#### Category 4 (contraindications)

None.

#### Category 3

In addition to the conditions listed in section 1.2, the following conditions require careful consideration before use of the diaphragm:

- History of toxic shock syndrome.
- Vaginal or uterine anatomical abnormalities that interfere with appropriate placement or satisfactory fit of the diaphragm, such as prolapsed uterus, poor vaginal tone, vaginal obstruction or poor retropubic ridge.
- High risk of HIV, HIV infection and AIDS.
- Allergy to latex and sensitivity to spermicides.
- Inability of client to insert diaphragm and feel cervix adequately.

## Category 2

Precaution is needed in the presence of:

- Full-term delivery within the past 6-12 weeks. Diaphragms are unsuitable until uterine involution is complete.
- Parous women.
- Complicated valvular heart disease.
- Urinary tract infection.

### 3.4 Counselling and information

All diaphragm clients should receive appropriate counselling for selection and use of this method of contraception.

#### For selection of the method

- Discuss with the client the advantages and disadvantages of the diaphragm and of alternative family planning methods. Inform the client about the effectiveness of the method and the importance of using it with every act of intercourse. Take or check the medical history and follow with individualized counselling reflecting any specific concerns or questions the client may have.

#### For use of the method

See instructions in section 3.9 of this chapter.

- Inform the woman about the proper use and care of the diaphragm and the proper time for re-checks and replacement. The woman should know that if she misses a period or has problems with comfort or usage she should visit the clinic for follow-up care.
- *Side-effects*: Inform the woman about the signs of urinary tract infection, toxic shock syndrome and vaginitis. She should be counselled to seek help for these symptoms and signs. Inform her that there should not be any discomfort to either partner when the diaphragm is in place.
- Include counselling about the fertility cycle if the couple wishes to use condoms as a second method during the time when ovulation is most likely.

### 3.5 Health assessment

See section 1.3 of this chapter. In addition, pelvic examination should always be performed before providing the diaphragm to exclude conditions which require careful consideration for selection and use of this method of contraception.

### 3.6 Diaphragm selection

#### Arcing-spring diaphragm

- Most women find the arcing-spring diaphragm convenient and comfortable.
- The arcing-spring diaphragm helps to ensure that the posterior rim is inserted correctly behind the cervix.
- A woman with a retroverted uterus, a markedly anteverted uterus or a very long, firm nulliparous cervix may find it easier to insert an arcing-spring diaphragm than a coil-spring or flat-spring type.
- The arcing-spring diaphragm may be useful for a woman with a cystocele or mild prolapse.

#### Coil-spring and flat-spring diaphragms

- Either of these options may be useful for women who find the arcing-style diaphragm uncomfortable or who have exceptionally firm vaginal tone.
- The *flat-spring* is useful if the woman has a shallow arch behind the pubic symphysis; the *coil-spring*, if there is a deep arch.
- The *coil-spring* should only be used if there is no uterine displacement; the *flat-spring* may be used with an anteflexed uterus.

### 3.7 Who can provide diaphragms?

Medical doctors, midwives, nurses and other health workers who have been properly trained can provide this method, in accordance with local laws and regulations.

### 3.8 Fitting the diaphragm

The diaphragm (available in 50-95 mm sizes) must be fitted for size by personnel specifically trained for this procedure. Fitting can be carried out at any time during the menstrual cycle.

- Before fitting, perform a careful pelvic examination, looking for any pelvic pathology and conditions requiring careful consideration.
- Use actual diaphragm sets, not fitting ring sets, for fitting and practice.

### **Procedure for fitting the diaphragm**

Choice of diaphragm type will depend on depth of vagina, vaginal muscle tone, and uterine position.

NOTE: A coil-spring or flat-spring must be used if a woman finds a diaphragm introducer necessary for insertion, although an introducer is rarely necessary. The diaphragm position still needs to be checked by hand.

- Obtain an estimate of the size needed by manually measuring the distance between the posterior fornix of the vagina and the pelvic ridge:
  - Insert the index and middle fingers into the vagina until the middle finger reaches the upper posterior wall of the vagina.
  - With the tip of the thumb, mark the point where the index finger touches the pubic bone. The distance between the tip of the middle finger and the thumb is the anticipated diameter of the diaphragm.
- Fit the diaphragm between the symphysis pubis and the posterior fornix of the vagina (cul de sac). It should cover both the cervix and the upper anterior wall of the vagina and touch both lateral vaginal walls.
- Select the largest diaphragm size that is comfortable for the client and is contained by the pubic bone. The client should not be able to feel the diaphragm once it is in place:
  - If the diaphragm is too large, it may cause discomfort or may distort and displace.
  - If it is not large enough, it may be displaced and not cover the cervical os.

### **Teaching the woman how to use the diaphragm**

After selecting the type and size of the diaphragm, teach the woman how to feel the cervix under the dome of the diaphragm (“feels like the tip of your nose”), and to check the position of the anterior rim well up behind the pubic symphysis (Figure 7.3).

Give clear instructions about insertion and removal of the diaphragm and application of spermicide (see below).

- Instruct the woman to insert along the posterior vaginal wall, aiming the folded diaphragm towards the back, then to push the anterior rim up behind the pelvic ridge with the finger tip.
- For removal, instruct her to place one finger over the nearest (anterior) rim and pull the diaphragm down and out. Two fingers may also be used to grip and pull the rim as an alternative method.
- Use a plastic transparent pelvic model to demonstrate correct insertion and placement if possible.

Provide privacy for the client while she practices. Suggest a practical and comfortable position for insertion, such as standing with one foot propped up, squatting, or lying down. After the client inserts the diaphragm herself, check for correct position and re-check the fit of the diaphragm.

Prescribe the exact size and type of diaphragm that the woman could wear comfortably and successfully insert and remove. Provide a supply of spermicidal jelly or cream.

Figure 7.3 Feeling cervix through the diaphragm



### 3.9 Instructions to the client

#### When to insert the diaphragm

It may be inserted at any time before sexual intercourse.

#### Using the diaphragm

- At least a tablespoon of spermicide should be applied to the diaphragm before each use and additional spermicide should be used for each act of intercourse. If the diaphragm was inserted more than 2 hours before intercourse, it is advisable to apply additional spermicide before intercourse.
- The woman should check before intercourse that the cervix is covered and that the rim is placed comfortably tight behind the pubic bone.
- The woman should leave the diaphragm in place at least 6 hours after the last intercourse, but not more than 24 hours after insertion.

#### Cleaning, inspecting and storing the diaphragm

- The woman should wash the diaphragm with mild soap and warm water and dry. Cornstarch may be used to dust the diaphragm. The diaphragm should be stored in its container, away from heat. The woman should check for perforations regularly by holding the diaphragm up to light.
- Petroleum jelly, disinfectant, detergents or perfumed soaps and powders should not be applied to the diaphragm.

#### Replacing the diaphragm

- The woman needs to replace her diaphragm after 2 years of use.
- If the woman has given birth, or has gained or lost weight (3-7 kg or more), she needs to be refitted to ensure the diaphragm is appropriate.

A reminder for the couple: “The effectiveness of the diaphragm depends on using it every time you have intercourse”.

#### Follow-up

Arrange a follow-up visit in 1-2 weeks to re-check fit and usage. Instruct the woman to wear the diaphragm for at least 8 hours before that visit.

**After explaining the instructions, ask the client to repeat them to you in her own words. If necessary, repeat the instructions, emphasizing the points which the client has not understood well. Offer a printed instruction sheet with illustrations.**

### 3.10 Follow-up care

- Carry out a routine follow-up at 1-2 weeks after the fitting to check usage and fit.
- Make plans for an annual re-check at this time.
- Encourage the client to return at any time for problems such as side-effects, weight gain or loss of more than 4.5kgs, or dissatisfaction with the method.

### 3.11 Side-effects

Side-effects related to use of the diaphragm are infrequent but do exist:

- *Urinary tract infection (UTI).*

**Treatment:** Treat UTI or refer for treatment. The woman should discontinue diaphragm use during treatment. Consider if diaphragm size is too large and, if so, fit a smaller one. Provide an interim contraceptive method during treatment.

- *Local irritation caused by sensitivity or allergy,* usually to the spermicide used with the diaphragm.

**Treatment:** Change to another spermicidal product which has a different active compound. If the problem persists, suggest changing to another method of contraception.

- *Partner or user discomfort* (cramps, bladder or rectal pressure) from mechanical contact or pressure from the diaphragm rim.

**Treatment:** Change diaphragm size or rim type if the client wishes to continue.

- *Vaginal discharge and odour* may occur if the diaphragm is left in the vagina longer than 24 hours.

**Treatment:** Provide reassurance and recommend hygienic measures if there is no vaginitis. Provide specific treatment or referral if symptoms recur and if any vaginitis organism is present.

- *Vaginal lesion caused by diaphragm rim.*

**Treatment:** The woman should temporarily discontinue use. Provide an

interim contraceptive method. Reconfirm diaphragm fit. The woman may resume use when the lesion has healed.

- *Anterior vaginal wall lesion* caused by removal of the diaphragm.

**Treatment:** The woman should temporarily suspend use until the lesion has healed. Provide an interim contraceptive method. Check extraction technique; check fingernail length.

### 3.12 Service management

#### Storage and shelf-life

The shelf-life of stored diaphragms should be limited to 3-5 years. The quality of the latex is affected by ultraviolet light and heat; thus, examine diaphragms every 6-9 months for deterioration, as well as before providing them to individual clients.

#### Supplies

Approximately 2 tubes of jelly are needed every 3 months. One tube contains about 25 applications; 6-8 tubes per year may be needed.

#### Equipment needed for fitting diaphragms

- Sterile or disinfected sample diaphragms in a range of sizes.
- Sterile jelly or boiled/disinfected water to lubricate diaphragms during fitting.
- Non-sterile gloves (reusable gloves should be sterilized or high-level disinfected between clients).

#### Care of fitting equipment

This refers to diaphragms and/or fitting rings which are used for fitting clients and teaching them how properly to use the method.

- Decontaminate by soaking in 0.5% chlorine solution for 10 minutes.
- Wearing utility gloves, wash with detergent and water removing any organic material.
- Dry before putting into disinfectant solution.
- Disinfect by soaking in 0.1% chlorine solution for 20 minutes. Alternatively disinfection can be done by boiling, but it reduces the lifespan of the diaphragms and/or fitting rings.
- Air or towel dry and store in a clean container.

Wherever an autoclave is available, the fitting sets could be steam sterilized after decontamination and washing.

## Training

The diaphragm should only be provided in a family planning or sexual and reproductive health clinic where staff are specifically trained to provide it. Decisions on whether training of staff is necessary should be made by the programme manager, based on the demand for the method.

## 4 Spermicides

### 4.1 Definition

Spermicides are chemicals that inactivate and kill sperm. To a certain degree, they also form a barrier over the cervix. The principal spermicidal agents acting as surfactants are nonoxynol-9, octoxynol, menfegol and benzalkonium chloride.

The different kinds of carriers for spermicide include creams, jellies (gels), suppositories, foaming tablets or suppositories and aerosol foams.

Spermicides alone offer low contraceptive efficacy, but give high efficacy when used as a supplement to other barrier methods. There is no evidence that spermicides including nonoxynol-9 offer any protection against HIV and other STIs. Furthermore, there is some evidence that frequent use of nonoxynol-9 (twice a day or more) increases rather than reduces the chance of HIV transmission, perhaps by irritating the vaginal and cervical mucosa. For these reasons, spermicides are not recommended for protection against HIV or other STIs.

Service providers should be aware of the characteristics and differences among the types and brands of spermicides available in the programme and advise clients accordingly.

### 4.2 Indications

**Spermicides should be provided to any individual who requests them for contraception including those who are not regular clients of the programme.** Formal registration in the programme should not be a requirement for obtaining spermicides. Spermicides may be appropriate for couples who have decided to use a barrier method and:

- Are highly motivated to use spermicides effectively.
- The woman's natural fertility is decreased by age or lactation.
- A possible pregnancy would not pose a high risk to the woman's health.
- Wish to use a spermicide in association with a diaphragm or condom.

See also section 1.1 of this chapter.

### **4.3 Medical eligibility Criteria**

#### **Category 4 (contraindications)**

- Clients at high risk of HIV infection.
- Clients who are HIV-positive.
- Clients who have AIDS.

#### **Category 2**

Spermicides can generally used, but with precaution in certain circumstances:

- The low effectiveness of the spermicides should be an important consideration when method failure could result in a high-risk pregnancy.
- Sensitivity to the spermicide.
- Cervical cancer.

### **4.4 Counselling and information**

Give appropriate counselling and information for selection and use of this method of contraception.

#### **For selection of the method**

The woman or couple must be informed of the advantages and disadvantages of using spermicides alone including:

- The higher risk of pregnancy as compared to other methods.
- The proper use and care of spermicides, including the need for a waiting interval for dispersal of suppositories and tablets.

### For use of the method

See section 4.6 below.

## 4.5 Spermicide selection

- Foam is recommended if spermicides are to be used as the sole method. Foam in an aerosol container is active immediately; it requires use of an applicator.
- Foaming suppositories and tablets are convenient to carry and store; however, they require a waiting interval of 10-15 minutes after insertion and before intercourse.
- Melting suppositories also require a 10-15 minute waiting interval.
- Contraceptive jelly is usually used with diaphragms.

Spermicides containing mercuric compounds should never be recommended or stocked.

## 4.6 Instructions to the client about spermicides

Advise the client about:

- The importance of using spermicide before each act of intercourse.
- The need for a 10-15 minute waiting interval after insertion for foaming tablets or suppositories. There is no waiting interval for creams, jellies and gels.
- The importance of following the recommendations of the manufacturer for use and storage of each individual product (e.g., shaking aerosol foams before filling the applicator).
- The need for another application if intercourse takes place more than 1 hour after initial application.
- The importance of correct placement high in the vagina so that the cervix is well covered.
- The need to visit a clinic to exclude the possibility of pregnancy if the woman misses a period.

**After explaining the instructions, ask the client to repeat them to you in her/his own words. If necessary, repeat the instructions, emphasizing the points which the client has not understood well. Offer a printed instruction sheet with illustrations.**

#### 4.7 Side-effects

Side-effects of the use of spermicides are infrequent and minor:

- *Local irritation caused by sensitivity or allergy.*

**Treatment:** Change to another spermicidal product which has a different active compound. If the problem persists suggest changing to another contraceptive method.

Concerns raised about congenital abnormalities in births following failure of spermicides have not been confirmed by several studies.

#### 4.8 Service management

##### Storage and shelf-life

- Limit the shelf-life of stored spermicidal products to the times specified by the manufacturer of each product. Estimated shelf-life from the date of manufacture is 5 years.
- Test a sample of stocks in storage every 6-9 months:
  - For foaming tablets to ensure that the packaging has resisted moisture.
  - For aerosol foams to test that the container is functioning.

##### Supplies

When possible, give the client a 3 month supply or dispense according to the client's request. A 3 month supply is 1 bottle of foam, 2 tubes of cream or jelly, or 40 foaming tablets.

