

What's Your Health and Wellness IQ?

Take this quiz to see what you do and do not know about planning and preventing pregnancy. If you cannot answer a question, pay extra attention to that topic as you study this chapter.



Health and Wellness IQ

Assess

1. A woman can't get pregnant the first time she has sex.
2. No contraceptive method is 100% effective.
3. A man must take male hormones after getting a vasectomy.
4. A woman cannot become pregnant if she has sex during her menstrual period.
5. When a woman is sterilized, a doctor removes her ovaries.
6. The birth control pill works by stopping ovulation.
7. If a man is allergic to latex, he cannot use a condom.
8. You need a doctor's prescription to buy a condom at the drugstore.
9. The birth control pill reduces the risk of both pregnancy and STIs.
10. A woman can't get pregnant if a man withdraws his penis before he ejaculates.

1. Identify each statement as True, False, or It Depends. Choose It Depends if a statement is true in some cases, but false in others.
2. Revise each False statement to make it true.
3. Explain the circumstances in which each It Depends statement is true and when it is false.

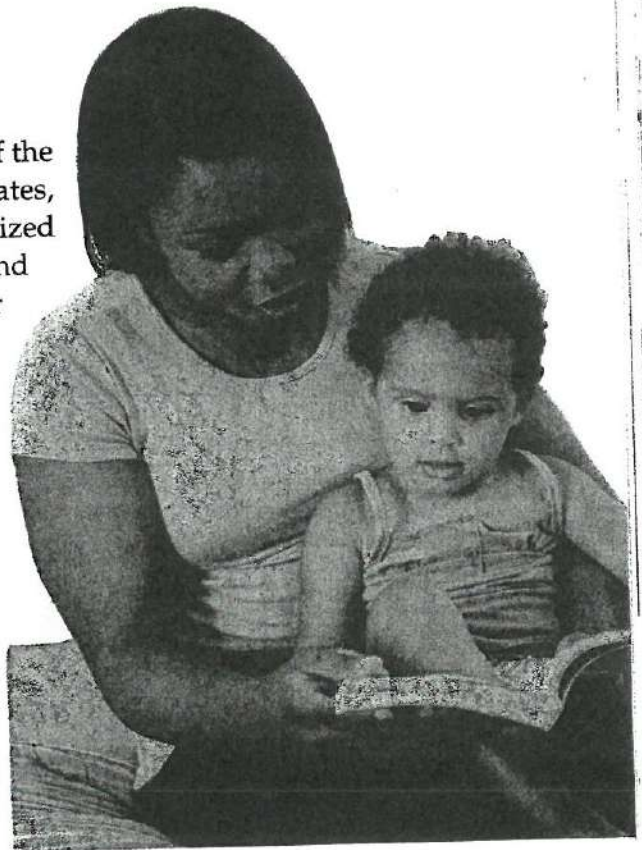
True	False	It Depends
True	False	It Depends
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True	False	It Depends

Setting the Scene

About 80% of teenage pregnancies are unplanned. In spite of the decades-long decline in teen pregnancy rates in the United States, the US teen birthrate is still among the highest in the industrialized world. The US teen birthrate is double what it is in Canada and France, three times higher than in Germany, and five times higher than in Japan.

Pregnancy and parenting at a young age take an enormous toll on the parents, their children, their extended families, and society. One of the most important steps you can take to achieve your life goals and reach your full potential is to avoid an unplanned pregnancy. The only 100% effective way to do this, and to avoid contracting an STI, is to abstain from sexual activity.

In this chapter, you will read about various contraceptive methods that temporarily block ovulation or fertilization. Surgical sterilization, the only permanent contraceptive method for adults, will be described. This chapter also explains how these methods work, their effectiveness, side effects, costs, and other advantages and disadvantages.



Lesson 23.1

Family Planning and the Role of Abstinence

Key Terms



E-Flash Cards

In this lesson, you will learn the meanings of the following key terms.

contraception

family planning

Lesson Objectives

After studying this lesson, you will be able to

- discuss family planning;
- explain the challenges of teen parenthood;
- identify the benefits of continuous abstinence;
- recognize pregnancy prevention facts and myths; and
- identify factors to consider when choosing a birth control method.

Before You Read

KWL Chart: Pregnancy Prevention

Create a KWL chart like the one shown here to map what you know, what you want to know, and what you have learned about family planning, teen pregnancy, and abstinence.

K What you Know	W What you Want to know	L What you have Learned

Warm-Up Activity

Family Planning

You may have heard the term family planning in the media or in your own family. What does the term mean to you? What specifically comes to mind when you hear the term family planning? What does abstinence mean? What are some possible benefits of remaining abstinent? Write a paragraph containing your answers to these questions.



Pregnancy, raising children, and family life can be among the most rewarding and meaningful experiences in a person's life. Many young people dream of someday having their own families. Experienced parents know, however, that pregnancy and family life demand attention, finances, time, and emotional maturity. Many couples plan their first pregnancy at a time when they are mature and best prepared to raise children.

Family Planning

A growing number of married couples choose to remain childless. Some of these couples worry that they will be unable to care for children for emotional, financial, or health reasons. A few are concerned about passing along a hereditary disease to their biological offspring. Some people may feel that having children is not necessary to lead a fulfilling life. In these situations, people want to know how to prevent pregnancy.

Other people want to raise children, but wish to postpone parenthood. They may want to have fewer children than their parents had, or wish to wait until they are financially self-sufficient and independent to have children. For these people, having the means to prevent pregnancy is vitally important.

Some people think family planning is the same as pregnancy prevention, but family planning is more than birth control. **Family planning** includes choosing when to have children, the number of children, the spacing of children, or whether or not to have children. Planning a family allows people to gather financial resources so they can provide their future children with adequate housing, food, healthcare, childcare, and education. By planning pregnancies, people can space their children so they are a certain number of years apart in age, if they feel it is important to do so. Family planning requires that a person thoroughly understands how pregnancy occurs and how pregnancy can be prevented.

family planning
the process of making choices about having children, including number of children and spacing between them

Personal Profile

Is Someone You Know at Risk for Pregnancy?

The questions below can help people assess whether they are at risk for pregnancy. If you know someone who may be at risk for pregnancy, suggest that he or she answer the following questions.

I practice sexual abstinence. **yes no**

We use a condom each time we have sex. **yes no**

My partner or I use birth control pills. **yes no**

I avoid alcohol and drugs. **yes no**

I understand how pregnancy occurs. **yes no**

I know how to get birth control and information about birth control. **yes no**

I understand how to use birth control correctly. **yes no**

I understand how birth control methods work. **yes no**

Add the number of yes answers to assess risk for pregnancy. Even one no answer means a higher risk than if all answers were yes. The more no answers, the higher the risk for pregnancy.

Teen Parenthood: A Difficult Road

As you read in earlier chapters, sexual activity, pregnancy, and childbirth pose serious health risks to teenagers and their children. For the following reasons, teenagers should reduce their risk of pregnancy:

- **Physical Health Risks for the Mother.** Teenage mothers, as compared to adult mothers, are at higher risk for physical health problems caused by pregnancy and childbirth (see pages 614–615). Early sexual activity by teenagers also increases their risk of contracting STIs. An adolescent girl's immature cervix is more susceptible to chlamydia infection than an adult woman's cervix.
- **Physical Health Risks for the Child.** Teenage mothers are more likely than adult mothers to give birth to infants with a low birth weight. This is a concern because babies with a low birth weight

Figure 23.1

Teen parents face many challenges, including keeping up with schoolwork and struggling to pay for their baby's needs. *What are some physical risks that this young girl and her baby might face?*



are more likely to become ill or die than babies with a normal birth weight. As a whole, the children of teenage mothers tend to have more health problems and a lower overall quality of life than the children of adult mothers. These children are also more likely to become teen parents themselves.

- **Financial Burden.** Children require food, clothing, housing, childcare, and education. Estimates show that raising a child costs between \$10,000 and \$15,000 per year, or more, depending on the area in which the family lives. These are expenses that few teenagers can afford. To provide for their children's needs, teenage parents often become financially dependent on relatives and government agencies. Money that most teenagers spend on new clothes and going out with friends must be spent on diapers, baby food, and other needs of the child.
- **Disrupted Education.** The pressure to earn money and care for a child makes it difficult for teenage parents to complete high school (Figure 23.1). Only one out of three teenage mothers completes high school. Only 1.5% of teenage mothers complete college by age 30. To provide for their children, teenage fathers must sometimes drop out of school and work full time, making it extremely difficult for them to continue their education.
- **Economic Consequences.** Without a high school diploma or a certificate or degree from a college or technical school, teenage parents have limited job opportunities. The jobs they qualify for are time consuming, have difficult hours—including weekends and holidays—and often pay minimum wage. When they have jobs, they are usually low-wage jobs. Teen mothers and their children are more likely to live in poverty than adult parents and their children. In addition, evidence shows that children raised in such conditions are more likely than other children to continue this pattern of having children at an early age and, therefore, living in poverty.
- **Social and Emotional Health Risks.** Raising a child is often stressful and can take a toll on the emotional and social health of a teen parent. The responsibilities of parenthood leave little time and money for "hanging out" with friends or dating.

Abstinence

Only continuous abstinence works 100% of the time to prevent pregnancy. Even more important, continuous abstinence is also 100% effective at preventing the transmission of sexually transmitted infections (STIs). A person who was once sexually active may choose to stop having sex and become abstinent. Reasons why teenagers would choose to be abstinent include the following:

- *Abstinence prevents pregnancy.* They do not want to carry a child or become a parent.

Figure 23.2: Teens and Risky Sexual Behavior

41% of teens have had sexual intercourse at least once.

6% of teens had sexual intercourse for the first time before 13 years of age.

12% of teens have had sexual intercourse with four or more persons.

43% of teens did not use a condom the last time they had sexual intercourse.

70% of teens did not use birth control pills, or a related hormonal birth control method, before they last had sexual intercourse.

21% of teens drank alcohol or used drugs before they last had sexual intercourse.

- *Abstinence prevents STIs and HIV/AIDS.* They understand that sexual activity puts them at risk for STIs and HIV/AIDS.
- *Abstinence increases enjoyment of non-sexual activities.* They want to enjoy a romantic relationship, which can become complicated by sexual activity.
- *Abstinence allows time for other parts of life.* They are committed to important goals like education, career, and other personal interests.
- *Abstinence is a key component of their value system.* Abstinence supports their values or religious beliefs. A number of religions teach that couples should practice abstinence before marriage.
- *Abstinence allows for emotional growth and maturity.* Sexual relationships require emotional maturity, intimacy, closeness, and trust. Many teenagers feel they are not emotionally capable of handling a sexual relationship or the possibility of becoming a parent (Figure 23.2).

Birth Control Methods

A method for preventing pregnancy is called **contraception**, or *birth control*. Many birth control methods exist, and each couple must choose the method that works best for them.

contraception
a method or substance that helps to prevent pregnancy; also known as birth control

SKILLS FOR HEALTH AND WELLNESS

Practicing Abstinence

The strategies listed below can help you practice abstinence.

- Remember the reasons you decided to be abstinent. Teens choose abstinence for various reasons. Their religion may teach abstinence, or they may not feel emotionally ready for sex. Others want to avoid pregnancy and STIs.
- Remember the consequences of having sex. Pregnancy and complications from STIs, such as infertility, will have serious, long-lasting effects on your health and well-being.
- Decide to be abstinent now, when you are not in a sexual situation, and when you are emotionally calm. It is more likely that you will stick with your decision if you do so before putting yourself in a sexual situation.
- Avoid situations that can affect your decision to be abstinent. Do not use alcohol or drugs and do not attend parties where they are used. Do not attend unsupervised parties. Do not go anywhere alone with someone you do not know well.
- Discuss your decision with your boyfriend or girlfriend and explain why it is important to you to remain abstinent.
- Remind yourself of the benefits of abstinence.

People can consult a healthcare professional if they have questions about selecting a birth control method. A healthcare professional, and the manufacturer's instructions accompanying the product or device, provide information about how contraceptives should be used.

Some people in committed relationships choose not to use birth control because their religion's teachings oppose contraception. Other people think birth control is too expensive, inconvenient, or unreliable. Many contraceptive methods do not protect people from STIs and HIV/AIDS. Instead of birth control, some of these people choose abstinence, the only contraceptive method that is 100% effective in preventing pregnancy and STI transmission.

Myths and Facts about Pregnancy Prevention

Many myths exist about how pregnancy occurs. The best way to guard against falling for myths is to learn the facts about reproduction and pregnancy (Figure 23.3). The following are some myths and facts about pregnancy.

Myth #1: If a woman urinates after having sex, she won't get pregnant.

Fact: Urinating after sex does *not* prevent pregnancy.

Myth #2: If a woman douches, or cleans the inside of her vagina, after having sex, she won't get pregnant.

Fact: Douching after sex does *not* prevent pregnancy. In fact, douching can actually increase the likelihood of pregnancy by pushing semen deeper into the vagina. In addition, douching does *not* prevent the transmission of STIs and HIV/AIDS (Figure 23.4).

Figure 23.3

People often think they are being helpful and giving good advice when they are actually spreading myths. If you are unsure, talk to a doctor or other reproductive health expert to get accurate information about birth control.



Myth #3: A woman cannot become pregnant the first time she has sex.
Fact: A woman *can* become pregnant the first time she has sex. If she has unprotected sex, or uses a form of birth control that is not 100% effective, she can become pregnant and acquire an STI or HIV/AIDS any time she has sex, including the first time.

Myth #4: A woman cannot become pregnant during her period.
Fact: A woman *can* become pregnant during her period. It is unlikely but possible. Women with regular cycles of 28 to 32 days will typically not become pregnant during their period. Many women, however, have irregular periods. Some women have shorter cycles (24 days, for example) and some ovulate earlier than the usual 14th day. These women can become pregnant during their period.

Myth #5: A woman cannot become pregnant if her partner withdraws or “pulls out” before he ejaculates.

Fact: A woman *can* become pregnant even if a man withdraws before ejaculation. Oftentimes, sperm is released from the penis before ejaculation. *Withdrawal*, which is covered later in this chapter, is the least effective method of birth control.

Myth #6: A woman cannot become pregnant if she stands up during or after sexual intercourse.

Fact: A woman *can* become pregnant no matter what position she is in during and after sexual intercourse. Standing up during sex will not prevent pregnancy.

Myth #7: Girls younger than 18 years of age cannot become pregnant.

Fact: Girls younger than 18 years of age *can* and *do* become pregnant. After a girl has begun menstruating, she can become pregnant no matter how old she is.

Myth #8: It is impossible for people to contract an STI or HIV/AIDS if they use a condom.

Fact: If used properly and consistently, latex and polyurethane condoms can reduce—but not eliminate—a person’s risk of contracting an STI or HIV/AIDS.

Myth #9: A woman cannot become pregnant if she or her partner uses birth control.

Fact: Using a birth control method reduces, but does not completely eliminate, the risk of pregnancy. A woman’s chances of becoming pregnant depend on the birth control method used—some methods have a greater percentage of effectiveness than others. The risk of pregnancy also depends on whether or not the birth control method is used consistently and correctly. Abstinence is the only way to avoid pregnancy completely.



Figure 23.4

Your future is too important to risk on questionable advice or information—especially when accurate, reliable information is just a few mouse clicks away. *Can you name two or three reliable websites for information about reproduction and pregnancy?*

Factors to Consider When Selecting a Birth Control Method

Each birth control method has its advantages and disadvantages. A person should consider his or her goals when selecting a method. Is the goal to prevent pregnancy and have protection from STIs and HIV/AIDS? Certain methods, such as the latex male condom, can reduce the risk of pregnancy, STIs, and HIV/AIDS. Other methods, such as hormonal birth control, reduce the risk of pregnancy but do not protect from STIs and HIV/AIDS.

Cost and availability should also be considered. Some methods, such as the female condom or contraceptive sponge, are inexpensive and can be obtained without a doctor's prescription. Other methods, such as the IUD (intrauterine device), require a doctor's visit. If a woman is using the birth control shot, she must visit her doctor regularly.

Some people want to use a reversible method of birth control so that they can choose to have children in the future. Others, however, would prefer a method that is permanent. Surgical sterilization is permanent and practically irreversible. You will learn more about surgical methods of birth control later in the chapter.

The ease of use for each birth control method should also be considered. Each method is effective only when used correctly every time, which may not always be convenient or possible. Some people cannot use certain types of birth control, such as the hormonal methods, because of medical conditions. In the next three lessons, you will learn about the effectiveness, correct use, and pros and cons of several types of birth control.

Lesson 23.1 Review

Know and Understand



1. What is the annual, estimated cost of raising a child?
2. Explain the economic consequences of teenage parenthood.
3. Which form of contraception is 100% effective for preventing pregnancy, STIs, and HIV/AIDS?
4. What are three factors to consider when choosing a birth control method?
5. Is sterilization reversible or permanent?

Analyze and Apply

6. How does family planning relate to pregnancy prevention?
7. Why do teenage parents have trouble completing high school?

Real World Health

Maria has just found out that she is pregnant. While this is great news, she has also just lost her job and no longer has health insurance. Use the Internet to research the different items that are needed for the first year of a baby's life. List the items and their costs on a piece of paper or in a spreadsheet. Add up the cost of all the items you listed. Remember that there are also medical costs involved in having a baby. Since Maria has recently lost her job and does not have health insurance, research and include healthcare costs that she might have and add those to your total. What is the final cost of having a baby and caring for it during the first year of life? Write a one-page paper describing what you have learned from this activity.

Lesson 23.2

Condoms and Other Barrier Methods

Lesson Objectives

After studying this lesson, you will be able to

- explain how barrier methods are used to prevent pregnancy;
- understand how to use male and female condoms; and
- describe various methods of contraception.

Warm-Up Activity

Barrier Methods

Create an acrostic poem for the term barrier methods using a template like the one shown here. For each letter, list a type of barrier method, advantage or disadvantage of using barrier methods, or something that you associate with barrier methods. After you and your classmates have created your poems, hang them up around the classroom. Discuss similarities and differences you see between your poem and your classmates' poems.

B _____	M _____
A _____	E _____
R _____	T _____
R _____	H _____
I _____	O _____
E _____	D _____
R _____	S _____

Key Terms



E-Flash Cards

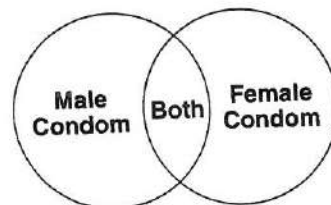
In this lesson, you will learn the meanings of the following key terms.

barrier methods
cervical cap
condoms
contraceptive sponge
diaphragm
spermicide

Before You Read

Male and Female Condoms

Create a Venn diagram comparing and contrasting the male condom and the female condom. What do they have in common? How are they different?



condom

a contraceptive product that fits over an erect penis or inside a woman's vagina, where it catches sperm and prevents them from reaching the ovum

barrier methods

contraceptive methods that physically block fertilization by preventing sperm from reaching the ovum

The rate of teen births in the United States has been declining. Surveys show, however, that risky sexual behaviors remained about the same during that time period as they had previously—except for one behavior. During that time, condom use increased among sexually active teens. This data shows that using contraception can reduce teen pregnancy. Evidence suggests, however, that teens can still improve their knowledge and use of contraception, which would further reduce the number of unplanned teen pregnancies.

Condoms are one of several barrier methods of birth control. **Barrier methods** physically block fertilization by preventing sperm from reaching the ovum. Each barrier method has its advantages and disadvantages. For example, some methods protect users from contracting STIs and HIV/AIDS, while other methods do not.

It is important to keep in mind, however, that no barrier method is 100% effective in preventing STI transmission. For example, a person with the herpes virus or the human papillomavirus (HPV) may not have visible sores on the skin. The virus may be present on the skin not covered by a condom, however, and can be transmitted to a partner.

Men and women say that some barrier methods work well for them, but find others to be less “user friendly.” Barrier methods of birth control include male condoms, female condoms, the diaphragm, the cervical cap, and the contraceptive sponge.

The Male Condom

Male condoms are worn on the penis during sexual intercourse. There are several types of male condoms:

- latex condoms—made from a form of natural rubber derived from the sap of rubber trees
- polyurethane condoms—made from various forms of plastic
- sheepskin, or lambskin condoms—made from the walls of sheep intestines. These condoms are sometimes called *natural*. The use of these condoms is *not* recommended because they contain small pores through which disease-causing organisms can pass into the vagina. Although these condoms reduce the risk of pregnancy, they do *not* prevent STIs and HIV/AIDS.

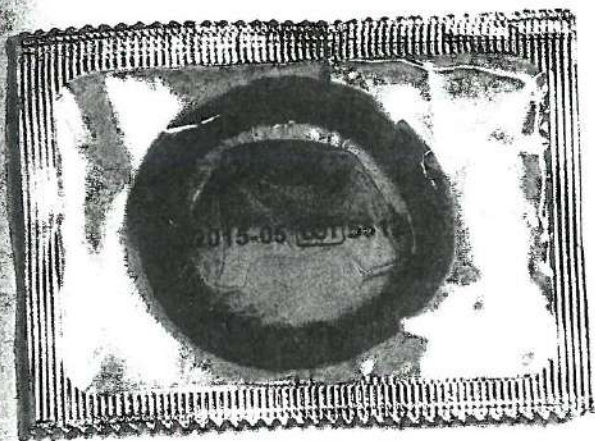
How it Works

The male condom is designed to fit over the erect penis (Figure 23.5). Condoms must be applied before the penis touches the sexual partner's genital. This is important because fluids containing sperm, and possibly microorganisms that cause STIs, can be released from the penis prior to ejaculation.

Condoms prevent pregnancy by catching the semen released during ejaculation and preventing sperm from reaching the ovum. In addition, some condoms are coated with **spermicide**, a substance that inactivates the sperm. Condoms cannot be reused; a new condom must be used each time intercourse occurs.

spermicide

a substance that inactivates sperm; often applied to condoms and other contraceptive products



Condom use has no health-related side effects unless one partner has a latex allergy, which can trigger an allergic reaction if latex condoms are used. People who have a latex allergy should use a different type of condom, or a different method of birth control.

Condoms become dry, brittle, and ineffective over time. The expiration date on condoms should always be checked, and expired condoms should be discarded. Condoms should not be stored in hot or cold places (like cars) or in wallets, where they can be damaged or punctured.

How to Use a Male Condom

Using a male condom is easy, but care should be taken to open, apply, and remove the condom properly to prevent spilling semen in the vagina. It's a good idea to practice applying and removing a condom before having sex. People can practice applying a condom by applying a condom over an object shaped like a penis.

Applying a Male Condom

- Gently tear open the condom package at its edge. Teeth or scissors should never be used to do this. If the package is wet or sticky, it may have opened and the condom should be discarded. Each condom is rolled into a ring within its package.
- Determine which way the condom unrolls.
- Pinch the condom tip to remove air. This prevents breakage when the condom fills with semen. Leave a small amount of space at the tip of the condom to collect semen.
- Place the condom at the tip of the erect penis.
- The condom won't roll if it's placed incorrectly on the penis. Once the condom is positioned correctly, roll it to the base of the penis.
- Apply some water-based lubricant if the condom is not lubricated. *Always use water-based lubricants or lotions.* The label on a bottle of lotion should state whether it is safe to use with latex condoms. Never use petroleum-based lotions or lubricants such as Vaseline with a latex condom. These substances will break down the latex barrier.



Figure 23.5

The male condom is designed to fit over an erect penis. Condoms are effective at preventing pregnancy if used properly (see figure on pages 716 and 717). Condoms can also prevent the transmission of STIs. *What are the different types of male condoms?*

Removing a Male Condom

- Remove the penis from the partner's genitals before it softens. Otherwise, the condom can fall off and spill semen.
- Hold the base of the condom at its ring while withdrawing to keep the condom from coming off the penis.
- Pull off the condom and dispose of it in the trash. Wash your hands.
- Never reuse a condom. Always use a new condom for each erection.

The Female Condom

A female condom is a device similar to a pouch, which the woman inserts into her vagina (Figure 23.6). Female condoms are made of plastic so they do not cause allergic reactions in people allergic to latex. Each end of the female condom has a flexible ring to help the woman insert it into her vagina, and to hold it in place while the penis is inserted in the vagina. The effectiveness of female condoms can be improved by adding spermicide to the inside or by withdrawing the penis before ejaculation.

How It Works

The female condom must be inserted before the penis touches the woman's genitals. The female condom prevents pregnancy by catching semen and preventing sperm from entering the vagina. The female condom also forms a barrier to STIs.

How to Use a Female Condom

Care should be taken to insert a female condom and remove it properly to prevent semen from spilling in the vagina.

Inserting a Female Condom

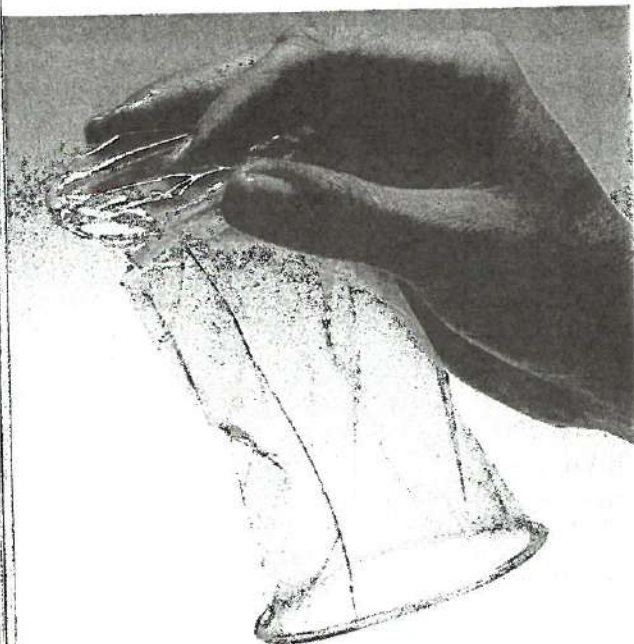
- Apply spermicide to the end of the condom that will face the cervix.
- Squeeze the inner ring at the closed end of the condom and push it into the vagina as deep as it will go. The outer ring should rest about one inch outside the vagina.
- The woman or her partner can hold the outer ring against the woman's vaginal opening, while the penis is inserted. The penis should not slide outside of the female condom.

Removing a Female Condom

- Hold the outer ring and twist the end of the condom to trap semen inside and prevent spillage.
- Pull the condom out of the vagina and discard it in the trash. A female condom can only be used once. A new condom must be used each time a person has sexual intercourse.

Figure 23.6

Female condoms are inserted into a woman's vagina. The effectiveness of these condoms can be increased by adding spermicide cream or jelly. *How do female condoms prevent pregnancy?*



Contraceptive Sponge

The *contraceptive sponge* is a barrier birth control method that blocks sperm from entering the uterus. The sponge also contains spermicide, which stops sperm from swimming.

The contraceptive sponge is made of plastic foam and is about two inches in diameter (Figure 23.7). The sponge is inserted into a woman's vagina and is positioned to cover her cervix. A sponge can be inserted several hours before sexual intercourse occurs and it can be left in place for 30 hours.

Unlike the condom, the sponge does not have to be replaced each time a couple has intercourse. The same sponge can be used more than once during a 30-hour period. The sponge has a small loop that enables a woman to pull it out with her finger.

The contraceptive sponge does not protect women from contracting STIs and HIV/AIDS, so the woman's partner should always wear a condom. Sponges are less effective in preventing pregnancy than male and female condoms. The contraceptive sponge is more effective in preventing pregnancy for women who have never given birth, as compared to women who have given birth.

Diaphragm

The *diaphragm* is a flexible, cup-shaped disk that covers the cervix and blocks sperm from entering the uterus (Figure 23.8). Unlike condoms and sponges, a diaphragm requires a doctor's exam and prescription. During the exam, the doctor checks the health of the cervix and uterus and prescribes the correctly sized diaphragm. Diaphragms can be purchased with a prescription at drugstores. Diaphragms are made of silicone, a material that usually does not cause discomfort.

A woman must read and follow the package's directions for the correct insertion, removal, and care of the diaphragm. It must be inserted several hours before intercourse and must be used each time a woman has intercourse. A diaphragm is usually covered with spermicide before it is inserted. This causes the sperm to stop moving and prevents them from entering the uterus.

A diaphragm costs more than a condom, sponge, and other barrier methods. The doctor's exam costs between \$50 and \$200, the diaphragm costs from between \$15 and \$75, and the spermicide cream costs between \$8 and \$17 per tube. The diaphragm can, however, be used multiple times and for much longer than other barrier methods. Therefore, while initial costs are relatively high, the diaphragm is inexpensive for long-term contraception.

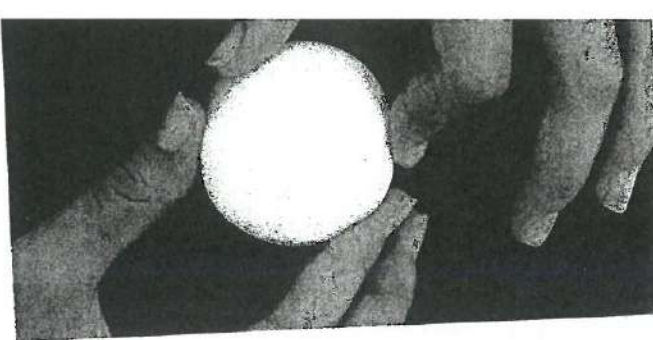


Figure 23.7

The contraceptive sponge blocks sperm from entering the uterus and contains spermicide to inactivate sperm. *Can the contraceptive sponge be used more than once?*

contraceptive sponge
a birth control method that blocks sperm from entering the uterus

diaphragm
a flexible, cup-shaped contraceptive product that covers the cervix and blocks sperm from entering the uterus

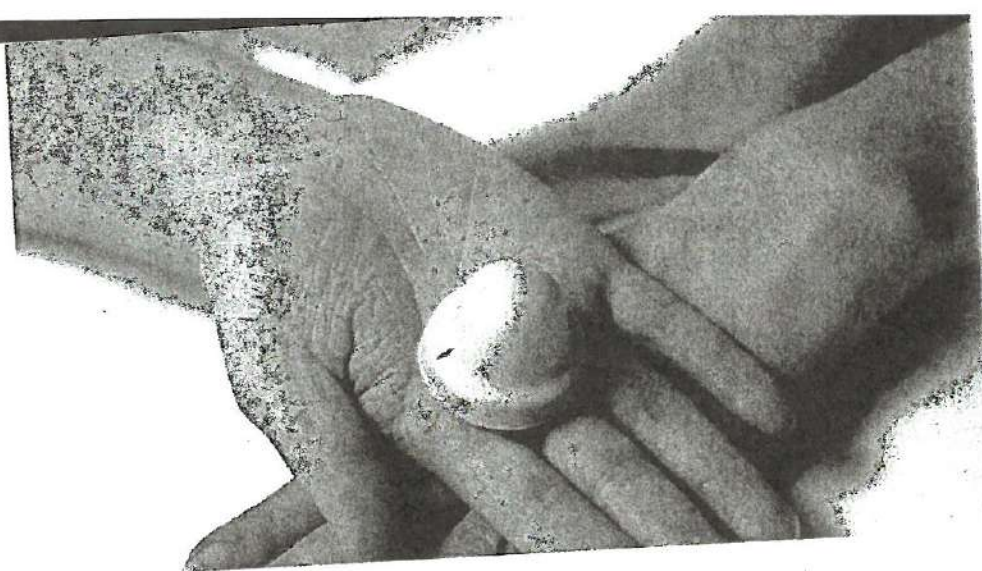


Figure 23.8

The diaphragm—a flexible, cup-shaped disk—covers the cervix and blocks sperm from entering the uterus. *What are some major differences between diaphragms and condoms?*

Figure 23.9

A cervical cap should be covered with spermicide before inserting it into the vagina. Does a woman need to see a doctor before using a cervical cap? Why or why not?



Cervical Cap

cervical cap
a flexible, silicone contraceptive product that covers the cervix and prevents sperm from entering the uterus

The **cervical cap** is a flexible cup that covers the woman's cervix (Figure 23.9). Like the diaphragm, the cervical cap is made of silicone and works by blocking sperm from entering the uterus. The cervical cap is smaller than a diaphragm and may be more difficult for a woman to position correctly. Because childbirth changes the size of a woman's cervix, women who have given birth will need to see a doctor to be fitted for a new cervical cap. The cap works best for women who have never given birth.

A woman must read and follow the package's directions for the correct insertion, removal, and care of the cervical cap. The cap must be covered with spermicide and inserted six hours before intercourse.

As with a diaphragm, women must see a doctor and obtain a prescription for a cervical cap. The doctor checks the health of the cervix and uterus and prescribes the correct size. The doctor's exam typically costs between \$50 and \$200, the cervical cap costs between \$60 and \$75, and the spermicide cream costs between \$8 and \$17 per tube.

Lesson 23.2 Review

Know and Understand



Assess

1. What is spermicide and how might it be used?
2. Why must a condom be applied before the penis touches a sexual partner's genitals?
3. *True or false?* Female condoms are reusable.
4. Both the _____ and _____ are flexible cups that cover the cervix and prevent sperm from entering the uterus.
5. Why are sheepskin or lambskin condoms unable to prevent STI transmission?

Analyze and Apply

6. What are some advantages and disadvantages of using barrier methods to prevent pregnancy?

7. Why is it important to practice properly applying and removing a condom before having sex?

Real World Health

People's attitudes about teen sexual activity are often influenced by their cultures or religions. Consider what beliefs and cultures have shaped your attitude toward teen sexual activity. To do this, research the different cultures, religions, and ethnicities that make up who you are. Then, identify the corresponding beliefs about teen sexual activity for each of these groups. On a separate piece of paper, describe what you find and reflect on how these attitudes have influenced your personal opinions on teen sexual activity.

sexuality

the expression of a person's gender through behavior and mature anatomy and physiology

biological sex

a person's sex—male or female—as determined by chromosomes

intersex

a condition characterized by ambiguous biological sex at birth

Figure 24.6

A doctor can determine a baby's biological sex by analyzing an ultrasound image.

A person's **sexuality** has to do with anatomy, and with being male or female. As you'll learn in this chapter, however, a person's sexuality is about much more than his or her chromosomes and body parts, or whether the person is sexually active. Sexuality develops with maturation and is the expression of a person's gender through behavior and mature anatomy and physiology.

Your sexuality is an important part of your identity that includes how you look, feel, think, and behave. It affects how other people perceive and treat you, and the roles you play in your family and in society. Your sexuality includes

- your biological sex;
- your gender—how you experience and express emotions such as love and intimacy, your gender roles, and your gender identity (masculinity and femininity for example);
- your sexual orientation; and
- your sexual experiences and thoughts.

You'll read more about each of these aspects of sexuality in this lesson.

Biological Sex

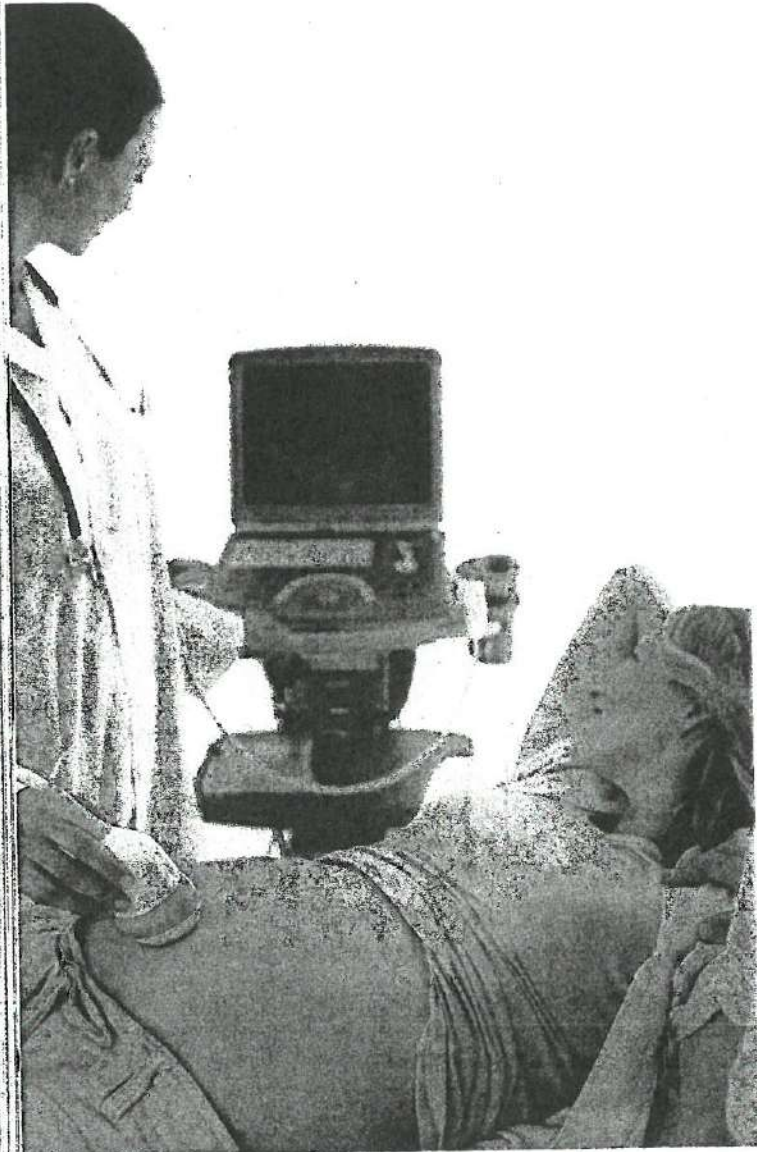
As you learned in chapter 20, your **biological sex** is determined by your sex chromosomes. Boys inherit a Y chromosome from their fathers and an X chromosome from their mothers. Girls inherit an X chromosome from each parent. These chromosomes direct the development and growth of sex organs and other sexual characteristics. Much of this growth and development occurred before you were born.

At about the seventh week of embryonic development, a person's biological sex is determined. After the 18th week of development, the sex organs of a fetus can be seen using ultrasound (Figure 24.6). At birth, biological sex is usually obvious by observation of the external sex organs. According to this observation, the baby is either a boy or a girl.

Intersex

While most babies are easily identified as either boys or girls, some babies are born with an ambiguous biological sex. This condition is called **intersex**. Scientists recognize that some degree of intersex is relatively common, occurring in about 1 in 2,000 live births.

Intersex babies have external sex organs that are not obviously male or female. This doesn't mean that intersex babies possess both male and female organs. Instead, the organs have not developed fully and can't be identified. For example, male organs may appear



smaller or resemble female organs. Due to this ambiguity, some babies cannot be assigned a sex at birth based on their anatomy alone.

Other Biological Differences

In other cases, the external sex organs do not match the baby's chromosomal sex. That is, some babies with XY chromosomes are born with female characteristics, and some babies with XX chromosomes develop male characteristics.

Other sex chromosome combinations cause ambiguous sexual development. For example, babies with *Turner Syndrome* have XO chromosomes, one X chromosome from one parent and no sex chromosome from the other parent. *Klinefelter Syndrome* describes the presence of two X chromosomes and one Y chromosome in boys.

Babies with Turner Syndrome or Klinefelter Syndrome do not show signs of ambiguity at birth. Instead, their sexually ambiguous traits appear during puberty. These observations indicate that being male or female is more complicated than possessing certain sexual anatomy or sex chromosomes.



Local and Global Health

The Evolving View of Gender

The United States officially recognizes two genders—male and female. Medical professionals have long known that a small percentage of children are born intersex. These children may face problems as they grow and mature if their assigned gender conflicts with their own gender identity.

Other countries have taken action to help protect the intersex minority. In 2013, Germany enacted a law that allows parents to avoid designating a gender to their baby on the birth certificate if the baby is born intersex. The parents can assign *male* or *female*, or they can select *neither*. Note that these babies are not assigned to a third gender. This system is intended to allow these children to select their gender, should they wish to, at a later date.

Germany joins Nepal and Sweden in recognizing non-traditional genders. In Sweden, parents may assign a third gender to their child. Boys are called *han*, girls are called *hon*, and an intersex child is called *hen*, a Swedish word recently coined for the third gender. Australia recently enacted a law that protects intersex people from discrimination. Australia is also considering taking further steps to recognize the intersex gender.



Thinking Critically

1. What is the advantage of allowing intersex individuals to select their gender when they grow up?
2. Do you think a person should be required to select a gender? Please explain your answer.
3. What kind of discrimination might an intersex person face?

Gender

You learned about gender and its relationship to mental health in chapter 15. As you know, *gender* refers to the characteristics a society associates with a particular biological sex. Sex is a legal status that is written on a birth certificate. *Male* and *female* are the sexes assigned to babies in the United States.

Within seconds, you usually know if a person is male or female. Think about how you know whether a person is a boy or a girl. You may rely on a person's physical traits, such as height and build, to determine gender. However, gender and being male or female encompass more than a person's anatomy.

Your perception of a person's gender is also influenced by behavior and other aspects of appearance, such as clothing and accessories. For example, what gender would you associate with someone dressed in pink and carrying a purse? How about someone wearing a baseball cap and a three-day beard? If you grew up in North America, you'd probably say the first person is female and the second a male.

Despite what most people think, masculinity and femininity are not defined by a person's sex chromosomes. Instead, they are defined by a person's gender expression, gender role, and gender identity.

Gender Identity and Expression

As you learned in chapter 15, gender identity has to do with more than biology—it involves the way people feel about and express their gender. Gender identity develops very early in life, with most three-year-olds easily identifying themselves as a boy or girl. A child's sense of his or her gender becomes well-established around five years of age.

Most boys will play with other boys, and girls will play with other girls. This may be a way for children to solidify and support their own sense of gender identity. It is normal, however, for some children to occasionally role-play as the opposite sex or to prefer playing with children of the opposite sex (Figure 24.7).

Figure 24.7

Although most children play with members of their same gender, it is normal for some to prefer playing with the opposite gender. *When you were a child, did you play with other children of your own gender or the opposite gender?*



Research in Action

Children of Homosexual Parents

About 200,000 children are raised by gay and lesbian couples in the United States. Many of these couples are legally married.

Some people question whether a child should be raised by gay or lesbian couples. The American Academy of Pediatrics (AAP), which is the nation's leading organization engaged in the scientific study of healthcare for children, has studied this topic. The AAP reviewed more than 30 years of scientific research pertaining to the well-being of children in families with same-sex parents. The AAP concluded that the parents' sexual orientations had no effect on the emotional or physical health of their children.

In addition, the parents' genders were found to have no effect on the children's well-being. Children fare as well with two male parents as they do with two female parents. The AAP found no evidence that same-sex marriage causes harm to children. They suggest that the stability of family life, and not the gender of the parents, is the most important factor for children's welfare.



Thinking Critically

1. Why do you think some people question the welfare of children raised by homosexual parents?
2. In the United States, people once questioned the welfare of children raised by one parent. Single parents rarely face that stigma today. Why do you think the view of single parents has changed?

Gender identity is both assigned and chosen. That is, parents assign gender to a baby when the baby's biological sex is identified at birth. Parents raise the baby as a boy or a girl, and the child learns to identify himself or herself as a boy or girl.

During adolescence or adulthood, some people realize that they are not comfortable with the gender assigned to them. This happens for many reasons. For example, an intersex person with female external organs may be raised as a female, but later in life may feel she is a male, regardless of her anatomy or chromosomes. She may choose to identify herself as male and assume the role and behaviors associated with males. This person is considered to be *transgender*.

Transgender people identify with the gender opposite their biological, anatomical sex. A transgender female is born with male sexual anatomy, but identifies with the female gender. A transgender male is born with female sexual anatomy, but identifies with the male gender. Because of social and cultural gender expectations, some transgender people are confused about their gender identity for many years before they are able to understand themselves.

Transgender people cope differently, but most face discrimination, difficulties at school and work, and complicated social lives. Some choose to

transgender
term that describes a person who identifies with the gender opposite his or her biological sex

change their appearance, clothing, and name to match the gender they feel they really are. A few transgender people undergo expensive reconstructive surgery to match their organs with their gender.

If children are confused about their gender or convinced that they are the opposite gender, parents should be supportive and try to help them understand their feelings. Sexual identity is *inborn*, or present at birth; children cannot help their sense of sexual identity.

Masculinity and Femininity

A society expects certain traits and behaviors to be exhibited by males and females. Masculinity and femininity are not defined by a person's sex chromosomes, biological sex, or assigned gender. Masculinity and femininity are expectations defined by a society.

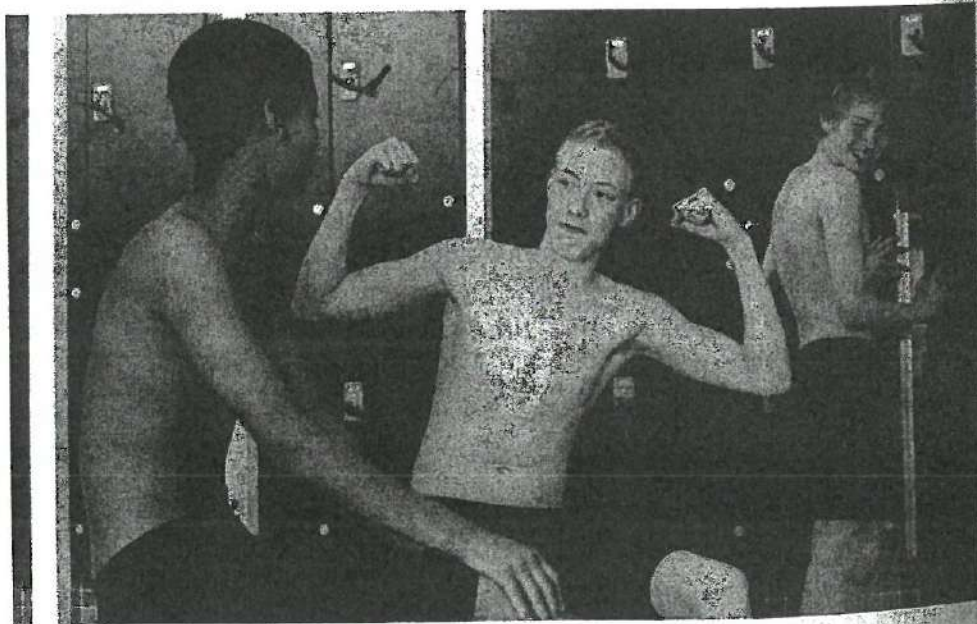
The definitions of masculinity and femininity vary among societies and cultures, and change over time. Characteristics commonly described as masculine or feminine are generally extreme opposites. For example, a trait commonly considered masculine is "strong"; its corresponding feminine trait is "weak." The feminine trait "graceful" has the masculine counterpart "clumsy." The masculine "aggressive" becomes the feminine "passive."

Naturally, it is impossible to be completely aggressive or completely passive. Most people's behavior lies somewhere in between these two extremes. In addition, no person possesses only masculine traits or only feminine traits. People exhibit both masculine and feminine traits, and their personalities contain aspects of both.

For these reasons, the expression of masculinity and femininity can be a source of insecurity for teens. Because they are still developing emotionally, physically, and socially, teens are often insecure about the way others perceive them. They think they are supposed to be "masculine" or "feminine," not realizing that these are just descriptions, or stereotypes, and not something that exists in real individuals (Figure 24.8).

Figure 24.8

Many boys feel they should exhibit masculine traits, while girls may feel pressured to be feminine. *Can you recall a time when you felt pressure to be more masculine or feminine?*



Movies, advertisements, and other media present unrealistic, exaggerated images of masculinity and femininity. In some cases, the media imply that extreme masculinity and femininity are normal and desirable. Realistically, however, no person exhibits these traits to the extreme, and no one can attain them to the degree portrayed by the media.

Sexual Orientation

Sexual orientation refers to the gender to which a person is romantically and physically attracted. The different types of sexual orientation include heterosexual, homosexual, and bisexual.

- **Heterosexual.** People who are **heterosexual** are romantically and physically attracted to people of the opposite gender. Heterosexuals are sometimes called *straight*.
- **Homosexual.** People who are **homosexual** are romantically and physically attracted to people of their own gender (Figure 24.9). The term *gay*, can refer to both homosexual men and women. Gay women also refer to themselves as *lesbian*. Results of the CDC's National Health Interview Survey found that about 1.6% of US adults identify themselves as gay or lesbian.
- **Bisexual.** People who are **bisexual** are romantically and physically attracted to people of both genders. About 0.7% of US adults say they are bisexual according to the CDC report.

People of all three sexual orientations can be found in all races, ethnicities, cultures, countries, and social and economic backgrounds. Many factors, some unknown, influence the development of a person's sexual orientation. Known factors include a person's genes, environment, and experiences. Early in puberty, some teenagers have already developed an awareness that they are homosexual or bisexual. Some may have known since childhood.

LGBT, which stands for *lesbian, gay, bisexual*, and *transgender*, is a common abbreviation used to identify people of these sexual orientations or gender identity. LGBT is sometimes expanded to include Q, I, and A (Q for those who are questioning their sexuality, I for intersex, and A for allies of the gay community). Some people argue that, despite efforts to make this abbreviation more inclusive, it still does not represent every sexual orientation or gender identity. Some people also argue that they do not want to be defined by an abbreviation. As the LGBT community continues to evolve, so will the terminology used to describe it.

sexual orientation
term that describes
which gender a person is
attracted to

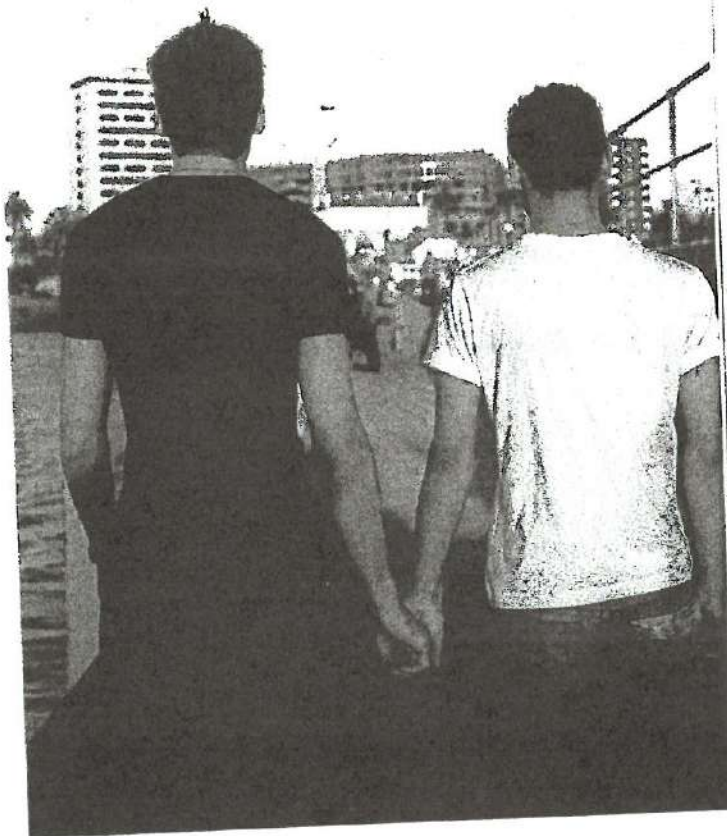
heterosexual
the quality of being
romantically and physically
attracted to members of the
opposite gender

homosexual
the quality of being
romantically and physically
attracted to members of the
same gender

bisexual
the quality of being
romantically and
physically attracted to
members of both genders

Figure 24.9

Some homosexuals develop an awareness of their sexual orientation during adolescence.



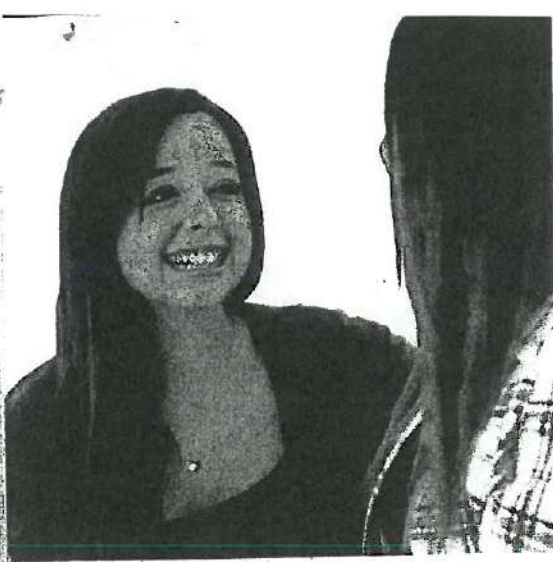


Figure 24.10

Developing a “crush” on a member of the same sex is fairly common among adolescents and is not necessarily an expression of homosexuality.

homophobia
irrational fear,
discrimination, and anger
directed at homosexuality
and LGBT individuals

Questions about Sexual Orientation

Whether straight, gay, or bisexual, teenagers often have questions about their emerging sexuality. It is not unusual for some teenagers to be unsure of or confused about their sexual orientation.

At times during adolescence, some heterosexual boys and girls develop romantic or physical attraction to people of the same gender. This does not necessarily mean, however, that they are homosexual or bisexual. For example, a girl might develop a “crush” on another girl in her school or on a female celebrity (Figure 24.10). This type of generalized sexuality and sexual curiosity is fairly common while adolescents are maturing, due in large part to increased hormone levels that occur during puberty. In time, most teenagers sort out their feelings as they discover and understand their sexual orientation.

While heterosexual teens are exploring their sexuality and sexual orientation, LGBT teens are doing the same. LGBT teens think about and want to discuss their romantic feelings, dating experiences, and sexuality, just as heterosexual teens do. LGBT teens often feel, however, that they must hide this part of themselves from others.

From a young age, LGBT teens notice that most people are straight, or heterosexual, and that straight sexual behavior is considered the norm. In much of society, LGBT teens are expected to be straight, and their sexual identity is expected to match their biological sex.

Coping with Homophobia

The term *homophobia* was first used in 1969 to describe an irrational fear of homosexuality. Today, homophobia describes discrimination, anger, and fear directed at homosexuality and LGBT individuals. LGBT teens may have to deal with other people’s negative attitudes and actions, in some cases on a daily basis. Some of the people exhibiting this negative behavior may be the LGBT teen’s own family members.

LGBT individuals are accepted more widely today than in the past. However, LGBT individuals still experience varying degrees of prejudice, rejection, bullying, sexual harassment, and violence. Compared with heterosexual teenagers, LGBT teens are at a greater risk for developing depression and anxiety, and for dropping out of school and running away from home. To avoid harassment, many LGBT people hide their sexual orientation or transgender identity, although it can be difficult and painful to deny this basic part of who they are.

Despite the discrimination that is still present, many LGBT teens, especially those who have good support systems, do feel comfortable with themselves. Many “come out” and tell trusted family members and friends about their sexual orientation or transgender identity.

Support for LGBT Youth

It is important for LGBT teens to have a supportive and accepting group of people around them (Figure 24.11). To create such a group, many schools

have created student organizations for LGBT students and the students who support them. Governments have also passed laws to protect LGBT individuals from discrimination and persecution. Federal laws, including the Civil Service Reform Act of 1978 and the Civil Rights Act of 1991, prohibit workplace discrimination against employees because of their sexual orientation.

You read briefly about hate crimes in chapter 19. Hate crimes are criminal acts motivated by the offender's bias against the victim's actual or perceived race, religion, disability, ethnicity, or sexual orientation. Many hate crimes are committed by teenagers. LGBT teenagers and adults are frequent victims of these crimes.

The Matthew Shepard and James Byrd, Jr. Hate Crimes Prevention Act protects people from crimes that target people because of their sexual orientation and race. Matthew Shepard was a young man who was murdered because he was gay. James Byrd was killed by a white supremacist because he was African-American.

Same-Sex Marriage

Same-sex marriage is the legal marriage between two people of the same sex. On June 26, 2015, the United States Supreme Court decided that same-sex couples have the right to marry. Therefore, all states must issue marriage licenses to same-sex couples, and states must recognize same-sex marriages legally performed in other states. The Court's decision was based on the Fourteenth Amendment of the United States Constitution, which guarantees all people have the rights given to all other US citizens.

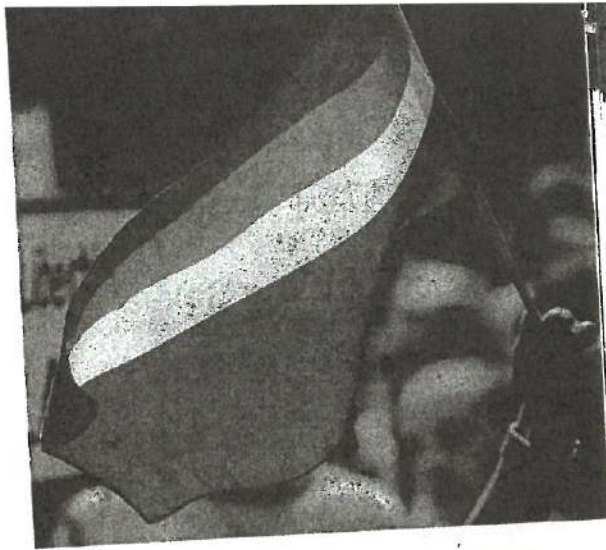


Figure 24.11

The rainbow flag symbolizes gay pride. *Does your school have an LGBT support group? If not, do you think one is needed?*

Lesson 24.2 Review

Know and Understand



Assess

1. What are four aspects that define a person's sexuality?
2. Which chromosome combination results in a male biological sex? Which results in a female biological sex?
3. What does it mean to be born intersex?
4. _____ people feel strongly that their gender is the opposite of their biological, anatomical gender.
5. What does the acronym *LGBT* stand for?
6. What is homophobia?

Analyze and Apply

7. Does gender determine a person's masculinity or femininity? Explain your answer.
8. How do prejudice and discrimination based on gender nonconformity affect the LGBT community?

Real World Health

People come in all varieties, with all different types of characteristics. Spend some quality time observing and watching different types of people. This people-watching activity can be done at school, at the mall, or in any area where many people are coming and going. What qualities do you immediately notice about the people you see? How do your observations vary based on the person's gender? What do you notice about yourself and your attitude toward certain types of people? What stereotypes might be influencing how you see people? Write a reflection about the qualities, behaviors, and attitudes you observed. What do these observations tell you about gender, sexuality, and cultural attitudes toward these concepts? What do they tell you about yourself?