### Appendix C:

# Resource Masters

#### (For Teacher and Parent Use Only)

The resource masters (RMs) in Appendix C (also referred to in the lesson plans) include teacher background information on specific topics such as puberty, reproduction, sexual intercourse, contraception, abortion, masturbation, and sexual orientation.

- RM 1: Background Information on Special Sensitive Topics
- RM 2: Sexual Orientation Terms and Definitions
- RM 3: Human Sexuality Terms and Definitions
- RM 4: The Menstrual Cycle
- RM 5: Reproduction and Sexual Intercourse
- RM 6: Reproduction: How New Life Is Formed
- RM 7: Puberty: A Time of Change
- RM 8: HIV/AIDS Terms and Definitions
- RM 9: HIV/AIDS/STI Facts
- RM 10: Postponing Intercourse Versus Having Intercourse
- RM 11: Contraceptive Methods and Considerations

The RMs are intended for teacher and parent use. They are not recommended for use as overheads or as handouts for students.

### Background Information on Special Sensitive Topics



The following information on abortion, masturbation, and sexual orientation is provided to help administrators, teachers, and parents when discussing this potentially sensitive content with students.

#### Abortion

Abortion is ending a pregnancy by removing the embryo or fetus from the uterus.	<ul> <li>Facts about Abortion: <ul> <li>legal in Canada</li> <li>not seen as acceptable in some religions and cultures</li> <li>a personal choice for every woman</li> <li>usually performed in the first 12 weeks of pregnancy</li> <li>may cause fewer complications if done earlier in pregnancy</li> <li>medical procedure done by a physician in a hospital or clinic</li> <li>procedure safer if done by a physician</li> <li>procedure takes about 15 minutes</li> <li>a suction device is used to remove the contents of the uterus (generally local anaesthetic used)</li> <li>some cramping and bleeding may occur after the procedure (controlled with medication)</li> <li>cost covered by Medicare if done in a hospital</li> <li>cost varies if done in a clinic</li> <li>females are able to have other pregnancies after abortion</li> <li>important to return for a checkup after two weeks</li> <li>if under 18, may need parental consent for procedure in a hospital</li> <li>counselling may be helpful in dealing with emotions after abortion</li> </ul> </li> </ul>
Masturbation	
Masturbation is rubbing or touching genitals to make them feel good—may lead to orgasm.	<ul> <li>Facts about Masturbation:</li> <li>natural expression of sexuality</li> <li>a personal choice</li> <li>common practice</li> <li>done by boys and girls, men and women</li> <li>will not cause mental or physical illness or harm</li> <li>deals with sexual feelings</li> <li>no risk of STIs or pregnancy</li> <li>some religions or cultures do not approve (students are encouraged to discuss questions about masturbation with parents)</li> <li>may be considered a problem if it interferes with other activities or relationships</li> <li>should be done in private</li> </ul>

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#### **Sexual Orientation**

# Sexual

#### **Facts about Sexual Orientation:**

- people do not choose their sexual orientation
- people attracted to those of the same sex are gay or lesbian
- people attracted to those of the opposite sex are heterosexual
- all people are worthy of respect, and prejudice should not be tolerated
- many GLBT\* people are mistreated and denied rights in society
- GLBT demonstrate their love for their partners in a variety of ways (as do heterosexual partners)
- people cannot be converted from one sexual orientation to another
- adolescent sexual activity, experimentation, and fantasy do not always indicate sexual orientation
- there are differing religious and cultural beliefs about GLBT
- people of all sexual orientations can adopt children or have their own
- "coming out" may be a difficult process for GLBT, as society views heterosexual as normal
- help is available for those who have questions about their sexual orientation (see BLM G-8: Sexual Health Information and Crisis Lines for Youth)
- GLBT is not a mental illness
- sexual orientation occurs on a continuum:

heterosexual bisexual gay/lesbian

\* GLBT refers to gay, lesbian, bisexual, and transgendered

#### **References:**

Bell, Ruth. *Changing Bodies, Changing Lives: A Book for Teens on Sex and Relationships*. 3rd ed. New York: NY: Three Rivers Press, 1998.

McCoy, Kathy, and Charles Wibbelsman. The Teenage Body Book. New York, NY: Perigee, 1999.

### Sexual Orientation Terms and Definitions



English is a fluid language in which definitions and connotations change over time and geography. The following definitions are suggested for the purposes of this document at the time of publication.

gay	a term once associated with either homosexual males or females, but is increasingly becoming associated specifically with male homosexuals.	
lesbian	a female homosexual.	
bisexual	someone who is physically and emotionally attracted to people regardless of gender.	
queer	originally a derogatory label used to refer to lesbian and gay people or to intimidate or offend homosexuals. Recently, this term has been reclaimed by some lesbians, gays, bisexuals, and transgendered people as an inclusive and positive way to identify all people targeted by heterosexism and homophobia. Some lesbians and gays have similarly reclaimed <i>dyke</i> and <i>faggot</i> for positive self-reference.	
straight	a common term for heterosexual.	
heterosexual ally	a heterosexual person who supports and honours sexual diversity, acts accordingly to interrupt and challenge homophobic and heterosexist remarks and actions of others, and is willing to explore these forms of bias within himself or herself.	
transgender	an umbrella term that includes transsexuals, cross-dressers, drag queens and drag kings, gender outlaws, and all those whose gender roles are ambiguous. This identification challenges traditional notions of sexuality and gender. Transgendered people may be heterosexual, bisexual, or homosexual.	
transsexual	those who recognize that their sexual identity conflicts in a fundamental way with the biological sex into which they were born. A person who has taken measures (e.g., surgery or hormone therapy) to change, or intends to change, his or her physical sex.	
two-spirited	an Aboriginal term used to describe people who embody both the male and female spirit. Two-spirit people were highly valued in traditional Aboriginal culture because they brought harmony and balance and could sit in both the male and female camps. Many lesbian, gay, bisexual, and transgendered Aboriginal people are reclaiming this term.	
cross-dressing/drag	dressing in clothes commonly worn by the other gender for entertainment or to make a political statement against the rigid gender roles demanded by society.	
transvestite	someone who enjoys dressing in clothing commonly worn by the other gender, for the purpose of emotional or sexual gratification.	

sexual orientation	innate direction of attraction for intimate emotional and sexual relationships with people of the same gender (homosexual, gay, lesbian), other gender (heterosexual), or two genders (bisexual). Sexual orientation may be the same as, or different from, sexual identity and/or sexual behaviour.
sexual behaviour	sexual orientation may not be as relevant as actual sexual behaviour. For example, a man who is married to a woman but who has sex with men may refer to himself as heterosexual; a self-identified lesbian may have sexual relations with men.
natal sex	the biological sex at birth. Society assumes a bipolar outlook on sex, including male and female only, while others may exist.
sexual identity	an individual's physical sense of being male or female.
gender identity	an individual's sense of place in the socially constructed role of male or female.
gender-role expectations	gender-based patterning—includes all the characteristics and traits culturally attributed to male and female roles in a given society.
gender behaviour	actions that may or may not reflect the gender-role expectations of a given society.
sexism	the societal/cultural, institutional, and individual beliefs and practices that privilege or subordinate either gender and denigrate gender-identified values.
heterosexism	the belief in the inherent superiority of heterosexuality over other patterns of loving and, thereby, the right to dominance. This privileges heterosexuals, oppresses homosexuals, and denigrates alternate sexuality and genders.
heterosexual assumption	the assumption that everyone is heterosexual unless otherwise indicated. This assumption is an aspect of heterosexism and perpetuates its existence.
heterosexual privilege	the benefits that heterosexual people automatically have and that are denied lesbians and gay males in a heterosexist culture. Also, the benefits that lesbians, gay males, and bisexuals receive as a result of claiming heterosexual identity and denying homosexual or bisexual identity.
homophobia	fear, hatred, or intolerance of those who are perceived to be gay, lesbian, or bisexual, or who exhibit behaviour that is deemed to fall outside traditional (heterosexual) gender roles. Homophobic acts may range from verbal harassment to violence targeting gay, lesbian, or bisexual people.
biphobia	fear, hatred, or intolerance of bisexual people.
transphobia	fear, hatred, or intolerance of transgendered people.
AIDSphobia	fear, hatred, or intolerance of people living with HIV/AIDS.
oppression	the systematic subjugation of a disempowered social group by a group with access to social power (Blumenfeld).
coming out	a process of coming to terms with and defining one's homosexual or bisexual orientation.

outing the public exposure of an individual's homosexuality or bisexuality.

**lifestyle** a term used to describe the way individuals live their lives. For example, some people like living in the country, while others like the city life. The word lifestyle is sometimes used incorrectly to describe a person's sexual orientation: "She is living a gay lifestyle." This usage is misleading because gay people live many different lifestyles. Being homosexual or bisexual does not define the style of one's life any more than being heterosexual does.

Sexual Orientation Terms and Definitions: Adapted by permission. Copyright © 2004 by Rainbow Resource Centre.

**Reference:** 

Blumenfeld, Warren J., ed. Homophobia: How We All Pay the Price. Boston, MA: Beacon Press, 1992.

# Human Sexuality Terms and Definitions

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abdominal region	the area of the body where the stomach, intestines, and reproductive organs are located.	
acne	a severe case of pimples.	
adolescence	the period of physical and psychological development from the beginning of puberty to maturity.	
anus	the opening where feces or body waste leaves the body.	
apocrine glands	sweat glands under the arms and in the genital area.	
areola	the darkened circular area of skin around the nipple.	
blackhead	a pore clogged with sebum and dark in colour because it is exposed to air.	
bladder	a sac inside the body that holds urine.	
breasts	the milk-producing glands in a female.	
cervix	the lower part of the uterus.	
chromosome	a DNA molecule that carries genes or heredity information.	
circumcision	the surgical procedure to remove the foreskin of the penis.	
clitoris	a small sensitive organ above a female's urinary opening.	
corona	the ring, or ridge, of skin that circles the lower edge of the glans.	
Cowper's glands	two small glands that contribute mucus to the semen.	
dermis	the layer of skin that makes new skin cells.	
eccrine glands	sweat glands found all over the body.	
egg	the female reproductive cell (also called <b>ovum</b> ).	
ejaculate	to eject or discharge semen; the act of ejaculation.	
ejaculation	occurs when semen comes out of the penis.	
embryo	a fetus during its first eight weeks of development in the uterus.	
endometrium	spongy, blood-filled tissue that lines the uterus.	
epidermis	the outer layer of skin.	
erection	occurs when the penis fills with blood and becomes hard.	
estrogen	a female sex hormone, produced in the ovaries, that develops and maintains female characteristics of the body.	
Fallopian tubes	narrow tubes between the ovaries and the uterus.	
fertilization	the joining of a female egg and a male sperm to form an embryo.	
fetus	development of an infant from 8 to 40 weeks in the uterus.	
foreskin	the skin around the head of the penis.	
genitals	the inner and outer sex organs.	
glans	the head of the penis.	

hormones	chemical messengers that tell parts of the body what to do.	
hymen	a ring of tissue that may partly cover the vaginal opening.	
labia	the folds of skin around the opening of the vagina.	
menopause	the end of a female's menstrual cycles, usually occurring when she is in her late forties or fifties.	
menstrual cramps	physical discomfort experienced by a female during a period.	
menstrual cycle	the process of ovulation and menstruation that occurs approximately once a month, beginning at puberty and ending with menopause.	
menstrual fluid	the uterine lining, consisting of spongy tissue and blood, that flows out the body through the vagina during a female's period.	
nipple	the small raised part in the centre of the breast.	
nocturnal emission	an ejaculation that occurs involuntarily during sleep (also called a <b>wet dream</b> ).	
ovaries	the two glands that produce the female sex hormones and release egg cells.	
ovulation	the release of a mature egg from the ovary.	
ovum (plural: ova)	the female reproductive cell (also called egg).	
pelvic area	the lower abdominal area between the hips that contains the reproductive organs.	
penis	the sex organ of a male.	
period	the time when a female is menstruating.	
pituitary gland	the gland at the base of the brain that is responsible for producing hormones that regulate the developmental changes that occur during puberty.	
progesterone	a female sex hormone, produced in the ovaries, that stimulates the preparation of the body for pregnancy.	
prostate gland	a male gland near the bladder that adds fluid to semen.	
puberty	the stage of life during which human males and females become sexually mature.	
pubic area	the area where the legs join the body and pubic hair appears during puberty.	
scrotum	the soft sac in males that holds the testicles or testes.	
sebaceous glands	the oil-making glands of the skin.	
sebum	oily substance made in the sebaceous glands.	
semen	a white, milky liquid that carries sperm out of the penis during ejaculation (also called <b>seminal fluid</b> ).	
seminal vesicles	two small pouches that produce part of the liquid in semen.	
smegma	a secretion from the sebaceous glands that produces a white, cheesy substance found between the folds of the vulva and under the foreskin of the penis.	
sperm	the male sex cell required to fertilize an egg to make a baby.	

sweat glands	the parts of the body that regulate body temperature by releasing water and salt.	
testes	the testicles.	
testicles	male sex glands that make hormones and sperm.	
testosterone	the male hormone, produced in the testicles, that causes many of the changes of male puberty.	
toxic shock syndrome (TSS)	a rare disease associated with tampon use.	
urethra	the tube through which urine and semen leave the male body.	
uterus	the hollow muscular organ that holds and nourishes the fetus.	
vagina	the passage that leads from the cervix to the outside of the body.	
vas deferens	the small tubes through which sperm travel from the testicles to the urethra.	
vulva	the outside sex organs of a female.	
wet dream	an ejaculation that occurs involuntarily during sleep (also called a <b>nocturnal emission</b> ).	

Human Sexuality Terms and Definitions: Adapted, by permission, from:

• Choices and Changes by Health Promotion Unit, Yukon Government.

<sup>•</sup> *Changing: A Guidebook about Puberty* by Changing Program, Proctor & Gamble Inc. and the Ontario Physical and Health Education Association.

# The Menstrual Cycle



### **Menstruation: Onset and Duration**

Girls can begin to menstruate between ages 9 and 16. Menstruation continues throughout life for 30 or 40 years until menopause occurs, *usually* about age 51. Menstruation is commonly referred to as a menstrual "period." The length of the cycle may vary from three to six weeks, but usually the ovary is stimulated to ovulate once every four weeks. Cycles can be irregular for the first two years, and can be affected by a variety of factors such as diet, activity, travel, illness, and stress. The "period" when menstrual flow occurs usually lasts from three to seven days.

### The Menstrual Cycle

The menstrual cycle is controlled by hormones. The pituitary gland of the brain usually stimulates one ovary to develop a ripe ovum (egg) every four weeks. More than one egg may be released at a time and ovulation may occur more than once a month. A series of changes prepares the uterus to receive a fertilized ovum. The tissues that line the uterus thicken and extra blood vessels develop. About 12 to 16 days before the menstrual flow occurs, the ovum is released from the ovary at ovulation and moves into the Fallopian tube by movement of fine hairs called cilia.

- If the ovum is joined within one day by a sperm cell, the ovum becomes fertilized, and a pregnancy beings to develop. Fertilization occurs in the Fallopian tube. The fertilized ovum travels down into the uterus and implants itself. It develops for nine months in the uterus. During pregnancy, menstruation does not normally occur. If the ovum is not fertilized, it disintegrates and is discharged with the menstrual flow.
- If the ovum is not joined by a sperm (not fertilized), the blood vessels cut off nourishment to the lining of the uterus, which breaks away and is passed out of the uterus and through the vagina. The vaginal opening is located between the openings of the urethra and anus. This flow of blood and tissue is called menstruation or a menstrual "period."

### Menstrual Products

Sanitary pads or tampons are used to absorb the discharge that occurs during menstruation. Girls are encouraged to discuss product choice with parents. Tampons should be changed every three to four hours, or as necessary, to avoid toxic shock syndrome. Toxic shock syndrome (TSS) is a rare occurrence caused by toxins produced by a bacterium called Staphylococcus aureus. The warning signs of TSS include sudden fever (38.8 degrees Celsius or more), vomiting, diarrhea, fainting, dizziness, and a rash that looks like sunburn. If these signs appear, the tampon should be removed at once and the girl/woman should consult a doctor. Risk can also be reduced by alternating the use of tampons with sanitary pads.

### **Activities during Menstruation**

Most girls engage in regular activities such as bathing, biking, swimming, and other sports during menstruation. A doctor or nurse may be consulted if menstrual problems such as severe cramps occur.

**The Menstrual Cycle:** Adapted, by permission, from *Elementary Family Life Education*. Copyright © 2002 by Winnipeg School Division.

### Reproduction and Sexual Intercourse



#### Note to Teachers

The topics of reproduction and sexual intercourse need to be treated with sensitivity. Teachers may wish to explain how a new life begins by stating:

"During sexual intercourse, the man's erect penis fits inside the woman's vagina. Sperm cells move along the pathway from the testicles to the penis and are ejaculated into the vagina. They then move along to the uterus and Fallopian tubes in search of the ovum."

#### How a New Life Begins

The bodies of males and females are designed in a way that makes reproduction possible. The **sperm** is the male reproductive cell and the **ovum** is the female reproductive cell. In order for a new life to begin, a sperm cell must join and enter an ovum (fertilization).

The beginning of a new life is related to **ovulation**, a stage of the menstrual cycle. A female is able to conceive when an ovum is released from an ovary at ovulation. The ovum generally has a lifespan of one day. If it is not fertilized, it will disintegrate and gradually be discharged in the menstrual flow.

The sperm's lifespan is up to five days. If the sperm cell enters the ovum, fertilization (conception) occurs. The fertilized cell contains 23 chromosomes from the father and 23 from the mother. These chromosomes contain all the genetic material (information) that makes the newly developing human unique (e.g., hair colour, eye colour, body size and shape). The father contributes the x (female) or y (male) chromosome that determines the sex of the new baby. If two eggs are fertilized by two sperm, fraternal (non-identical twins) are formed. If the already fertilized egg splits, identical twins are the result.

The fertilized ovum moves from the Fallopian tube to the uterus and imbeds itself into the thickened lining of the uterus, where it will grow and develop. At first, it is known as an embryo. From 8 to 40 weeks, it is called a fetus.

During pregnancy, a female's body changes in relation to the growth of the fetus. For example, the abdomen and breasts enlarge, hormones change, menstruation stops, and so on.

Babies may be born in a hospital or at home, usually with the help of a doctor, nurse, or midwife. During the birth, the mother works to push the baby out of the uterus (a strong contracting muscle) through the vagina and into the world.

**Reproduction and Sexual Intercourse:** Adapted, by permission, from *Elementary Family Life Education*. Copyright © 2002 by Winnipeg School Division.

### Reproduction: How New Life Is Formed



#### **Fertilization**

All human beings begin in the same way. A sperm cell from the male joins with an ovum from the female (in the Fallopian tube) to form a single cell, the fertilized egg (zygote). The fertilized cell is smaller than a pinhead, but within the nucleus, there are 23 pairs of chromosomes, which contain all the instructions for the development of a new human being. The information carried by the chromosomes, half from the father and half from the mother, is what makes each person a unique individual (e.g., hair colour, eye colour, height, body shape, and so on).

#### **Embryonic Development**

A few hours after fertilization, the cell divides into two smaller cells by a process called mitosis. A few hours later, each cell divides again, resulting in four cells. Further division results in 8, 16, 32 cells, and so on. Three or four days later, a cluster of cells has formed. Soon after this stage, cell differentiation begins. In this way, the **embryo** begins to grow. It implants into the uterine wall about six to seven days after fertilization. The embryo develops inside the uterus, which provides nourishment and protects the developing embryo from injury and temperature changes.

It takes approximately 40 weeks for a baby to develop fully before birth. Most changes occur during the first eight weeks. In this stage, the new human is called an embryo.

#### **Fetal Development**

From eight weeks on, the new human life is called a **fetus.** During the last seven months, the organs develop and grow larger. The fetus increases in size and weight in preparation for birth.

The developing fetus can be compared to an astronaut. The structures that protect and nourish the baby (i.e., the uterine wall, fetal membranes, amniotic fluid, umbilical cord, and placenta) are similar to the astronaut's lifeline, protective clothing, head gear, and support gases. At the end of the ninth month, the fetus is ready to be born and leave the protection of the uterus.

#### **Birth**

The birth process takes about 12 hours, on average. There are three stages: labour, delivery, and delivery of the afterbirth. An average baby is about 46 to 56 cm and has a mass of 2.5 to 3.5 kg.

#### Care of the Newborn

After birth, the baby breathes in oxygen and will begin to eat and digest food provided by the mother and/or other caregivers. Care for the newborn is an important and exciting aspect of family life, which carries with it joys and responsibilities for all members.

**Reproduction: How New Life Is Formed:** Adapted, by permission, from *Elementary Family Life Education*. Copyright © 2002 by Winnipeg School Division.

### Puberty: A Time of Change



#### **Changes Experienced during Puberty**

During puberty, the years of change from childhood to adulthood, boys' and girls' bodies undergo remarkable changes. Puberty begins when the pituitary gland at the base of the brain sends hormones (body chemicals) to parts of the body. The testicles are stimulated to produce sperm cells and the ovaries are stimulated to produce ova. Other hormones influence sexual maturation and growth. Physical changes are most noticeable. A growth spurt, accompanied by sexual, social and emotional changes, occurs gradually.

Although some Grade 5 students may begin to show signs of entering puberty, others may not. However, at this time students look forward to growing up and enjoy considering changes that will occur. Boys usually go through puberty between ages 10 and 16 (average 12 to 14) and girls between ages 9 and 16 (average 10 to 12).

The following growth changes may not be characteristic of all Grade 5 students, but are common in early puberty. The teacher should be sensitive in describing characteristics such as the following, understanding that students enter puberty at different times:

- **Primary** growth changes are directly related to male and female reproduction and genitals.
- Secondary growth changes are general growth changes that occur in boys and girls.
- **Social-emotional** growth changes are related to interpersonal relationships and self-concept.

Changes Experienced during Puberty		
Characteristics	Males	Females
1. Primary Growth Changes	<ul> <li>genitals grow and mature         <ul> <li>penis, scrotum, and testicles (testes) enlarge</li> <li>reproductive hormones are produced, influencing sperm development</li> </ul> </li> </ul>	<ul> <li>genitals grow and mature <ul> <li>vulva, vagina, and uterus enlarge</li> </ul> </li> <li>reproductive hormones are produced, resulting in menstruation and ovulation</li> <li>ova develop in ovaries</li> </ul>
2. Secondary Growth Changes	<ul> <li>body increases in size and mass:         <ul> <li>shoulders broaden</li> <li>muscles increase in size and strength</li> <li>hair develops on upper lip, face, armpits, legs, and pubic area</li> <li>voice deepens</li> <li>growth occurs in height/mass</li> <li>skin changes occur (coarseness, oiliness, perspiration)</li> </ul> </li> </ul>	<ul> <li>body increases in size and mass:</li> <li>pelvic bones (girdle) widen</li> <li>hips develop fatty pads</li> <li>breasts increase in size</li> <li>pubic hair and axillary hair appears</li> <li>growth occurs in height/mass</li> <li>skin changes occur (coarseness, oiliness, perspiration)</li> </ul>
3. Social- Emotional Changes	<ul> <li>attitude toward friends of the opposite sex changes (although at present, Grade 5 students are still likely to associate mainly with others of their own sex)</li> <li>need for acceptance by peers regarding dress, language, behaviour, emotions, and appearance becomes more evident</li> <li>conformity with peer groups increases</li> <li>individual decision making increases</li> <li>decisions about drugs (e.g., smoking, alcohol, solvents) become more important</li> </ul>	

**Changes Experienced during Puberty:** Adapted from *Family Life Education, Grade 5*. Copyright © 1990 by Manitoba Education and Training.

#### Transition from Late Childhood to Early Adolescence

The age of onset and the speed of the adolescent growth spurt are genetically determined, and there are definite differences between males and females.

- **Girls:** Growth spurts in girls begin about two years earlier and last for a shorter period of time than growth spurts in boys. Girls usually begin this quick growth at 10 to 12 years of age, with dramatic changes in height, weight, and body proportions. Hormonal changes in girls cause the percentage of body fat to increase by about 20% during the teenage years. It is theorized that a certain weight and/or percentage of fat is needed to trigger menstruation. Natural accumulation of fat will occur in the hips and breasts due to hormonal changes.
- **Boys:** Adolescent growth in boys usually begins around age 12 to 14. Boys not only grow for a longer period of time than girls, but they also grow faster. During this period of rapid growth, boys, like girls, experience dramatic changes in their bodies. The feet grow quickly and the legs grow faster than the trunk. Boys often feel clumsy and unbalanced during this time. For boys, the percentage of body fat decreases by about 12% to 15% during the teenage years, and the proportion of muscle and other lean body tissue increases. This, again, is a hormonal effect.

In general, adolescents will increase in height 15 to 23 cm (6 to 9 in.), with an accompanying 16 to 23 kg (35 to 50 lbs.) weight gain. Skeletal mass and major organs all double in size. Growth rate experienced in adolescence is second only to that experienced in infancy.

**Transition from Late Childhood to Early Adolescence:** Adapted, by permission, from *Elementary Family Life Education*. Copyright © 2002 by Winnipeg School Division.

RM 8

### HIV/AIDS Terms and Definitions

abstinence	refraining from any sexual activity that could lead to pregnancy or STIs.
AIDS	stands for <b>acquired immune deficiency syndrome</b> , a disease caused by the human immunodeficiency virus (HIV) that attacks the body's immune system, leading to its collapse and the vulnerability of the person to a number of infections or cancers. AIDS is the most advanced stage of the disease caused by HIV.
	• <b>acquired</b> —means that a disease is not hereditary.
	• immune—body's defence against disease.
	• <b>deficiency</b> —means that HIV destroys or severely weakens the immune system.
	• syndrome—refers to a group of medical symptoms.
AIDS dementia complex	direct damage of the brain cells caused by the HIV infection, resulting in a loss of concentration, confusion, and disorientation.
antibodies	substances produced by the body's immune system that destroy or inhibit the growth of specific disease-causing organisms.
AZT	a drug that inhibits the ability of the AIDS virus to produce new viral particles. It helps reduce the severity of the symptoms of the disease and usually prolongs life. It is used in combination with other antiviral drugs to minimize HIV resistance to treatment.
bone marrow	the tissue in the centre of some bones in which both red and white blood cells are formed.
communicable disease	a disease that can be passed from one person to another, and can enter the body through direct or indirect contact.
ELISA	stands for <b>enzyme-linked immunosorbent assay</b> , a blood test used to check for antibodies that indicate infection by HIV.
helper T cell	a type of white blood cell that coordinates the immune system to fight against disease-causing organisms.
hemophilia	a hereditary disease in which a person's blood may not clot easily and abnormal bleeding occurs.
HIV	stands for human immunodeficiency virus, the virus that causes AIDS.
immune system	the body's defence system, made up of body organs, tissues, and cells.
Kaposi's sarcoma	a rare type of cancer that occurs as spots on the surface of the skin or some mucous membranes. This type of cancer may contribute to the death of AIDS patients.
lymph nodes	glands located in areas such as the neck, armpits, and groin.
lymphocytes	a kind of white blood cell produced in bone marrow that fights pathogens.

opportunistic infection	any infection caused by a pathogen that a healthy immune system would normally be able to fight.	
pathogens	disease-causing organisms (viruses, bacteria, and fungi).	
PCP	stands for <b>pneumocystis carinii pneumonia</b> , an opportunistic form of pneumonia associated with AIDS. It is an unusual lung infection that causes an acute shortness of breath, fever, and a dry cough.	
risk behaviour	a behaviour that threatens health and increases a person's chances of becoming ill.	
virus	a micro-organism that can only reproduce inside a living host cell. This organism causes the disease.	
Western blot test	a blood test that confirms the presence of HIV antibodies.	
white blood cells	cells that destroy germs or harmful substances that enter the body.	

HIV/AIDS Terms and Definitions: Adapted from AIDS Education, Grades 5 and 6. Copyright © 1989 by Manitoba Education and Training.

# HIV/AIDS/STI Facts

**RM 9** 

### **History of HIV/AIDS**

- 1. AIDS (acquired immune deficiency syndrome) is caused by HIV (human immunodeficiency virus). HIV can attack and, over time, destroy the body's immune system.
- 2. HIV damages the body's immune system. A person has AIDS when HIV has done enough damage to the immune system to allow infections and diseases to develop.
- 3. At the present time, there is no cure for AIDS. Researchers are currently looking for a cure for AIDS, as well as a vaccine for HIV. Medication does prolong the lives of those with AIDS.
- 4. The time from when a person acquires HIV and develops the infections and diseases that characterize AIDS is a median of 11 years. Therefore, those who acquire HIV as teenagers may not develop the infections and diseases indicative of AIDS until they are in their mid-twenties.

#### Transmission

- 5. Worldwide, HIV is transmitted by vaginal intercourse in approximately two-thirds of the cases.
- 6. HIV-contaminated needles or syringes that are used for injecting drugs can transmit HIV directly into the bloodstream by passing infected blood from one person to another. HIV can also be transmitted by sharing or using contaminated needles for ear-piercing, tattooing, or ceremonial blood bonding, and by sharing or using other contaminated instruments such as razors.
- 7. HIV cannot be transmitted by casual contact. HIV is not transmitted by hugging, kissing, holding hands, shaking hands, massage, animal or mosquito bites, drinking from a public drinking fountain, swimming in a public pool, or using a public telephone.
- 8. Since 1985, all blood in Canada that is donated and used for blood transfusions has been screened for HIV and hepatitis B. In some regions of the world, blood transfusions are still a means of HIV transmission, as blood and blood products are not always screened for HIV and unsterilized needles or instruments may be used.
- 9. Some research has indicated that approximately 30% of mothers infected with HIV pass HIV to their unborn children during pregnancy or at birth. HIV can move from the blood or secretions of the infected mother to the blood of the child during pregnancy, at birth, or by breast-feeding.
- 10. HIV cannot be transmitted through insect or animal bites. HIV is only transmitted from one person to another.
- 11. Many people who have an STI, even HIV infection, do not have any symptoms. Although they look and feel healthy, they have STI-causing organisms in their bodies, which they can transmit to others.

#### Prevention

- 12. The most effective way of avoiding sexual transmission of HIV and other STIs is sexual abstinence. Abstinence means not having vaginal, anal, or oral sex.
- 13. The more sexual partners a person has, the greater the chances are that one of those partners will be infected with HIV or an STI.
- 14. Methods for preventing the transmission of HIV usually assist in the prevention of other STIs.
- 15. Contaminated needles used for tattooing, ear-piercing, or ceremonial blood bonding can spread HIV, hepatitis B, and other STI-causing organisms.

#### Symptoms

- 16. Frequently, people who are infected with HIV do not have any symptoms.
- 17. Anyone infected with HIV, whether or not he or she has symptoms, can transmit HIV to others. Although they look and feel healthy, they are infected with HIV, which they can transmit to others.
- 18. A person can have HIV for years without developing AIDS. As many as half the people with HIV infection still do not have AIDS 11 years after their initial infection.
- 19. With the exception of HIV and hepatitis B, a person can catch the same STI more than once in his or her life. Therefore, STI-preventive behaviours should always be practised.

#### Testing

20. A person who has sexual intercourse with different partners should have regular STI checkups even if he or she does not have STI symptoms. Many people who have an STI do not have any symptoms.

#### Help Sources

- 21. The HIV antibody test is available to anyone free of charge through the public health department or an STI clinic.
- 22. A person who suspects that she or he may be infected with HIV/AIDS or other STI and who has been participating in activities associated with STI transmission should stop engaging in such activities immediately. Even if no symptoms are present, he or she should go to a doctor or an STI clinic immediately for an STI checkup.

HIV/AIDS/STI Facts: Adapted from *Health Education (Senior 2), Curriculum Guide*. Copyright © 1993 by Manitoba Education and Training.

### Postponing Intercourse Versus Having Intercourse



Reasons why young people choose to postpone having intercourse	Reasons why young people choose to have intercourse
• Religious/cultural beliefs	• Curiosity
• Not ready	• Sexual attraction and desire
• Not wanting to hide something from parents	<ul><li>To demonstrate love for partner</li><li>Feeling pressured by your partner or</li></ul>
• Avoid guilt, fear, and disappointment	others
• Prevents STIs or pregnancy (because abstinence is the only method that is 100% effective in preventing STIs and	• "Social" pressure, feeling that everyone is doing it, and you're not quite normal if you're not
pregnancy)	• Wanting to feel loved/wanted
• More time for friends and other activities	• Feels good
<ul><li>More time for the relationship to develop</li><li>Concern about reputation</li></ul>	• To get someone to love you, to prevent the relationship from ending
• Personal belief that sex belongs only in a	• Influence of alcohol and/or drugs
<ul><li>certain kind of relationship</li><li>Belief that sex too soon can hurt a</li></ul>	<ul> <li>Not knowing how to say "no," just "going along"</li> </ul>
relationship (with a partner, friends, or parents)	• Both partners really love each other, and want to express it this way
• Had sex once before and decided s/he is not ready for a sexual relationship (for any of the above reasons: just because someone says "yes" to sex once does not mean s/he has to say "yes" again)	• Those questioning their sexual orientation may have sex in an attempt to "figure out" if they are attracted to opposite or same-sex partners

**Postponing Intercourse Versus Having Intercourse:** Adapted, by permission, from resource material produced by the City of Ottawa, Public Health Branch.

**Reference:** Planned Parenthood Federation of Canada. *Beyond the Basics: A Sourcebook on Sexual and Reproductive Health Education*. Ottawa, ON: Planned Parenthood Federation of Canada, 2001. 277.

## Contraceptive Methods and Considerations



Contraceptive Method/Product	Definition (Use/Application)	Considerations For	Considerations Against
Abstinence	• conscious decision to refrain from vaginal, anal, and oral sexual intercourse; voluntarily not engaging in sexual activity that may result in the exchange of body fluids	<ul> <li>prevents pregnancy</li> <li>eliminates risk of sexually transmitted infections (STIs) if body fluids are not exchanged</li> </ul>	
Cervical cap	• small latex cup that fits over the cervix to prevent sperm from reaching the ovum	can be inserted just before     intercourse	<ul> <li>can move/shift position during intercourse</li> <li>requires prescription and instruction from physician for proper fit</li> </ul>
Condom	<ul> <li>female condom: soft, thin, polyurethane (plastic) sheath with a flexible ring at each end         <ul> <li>inner ring at closed end inserts condom into vagina and helps keep it in place</li> <li>outer ring remains outside the vagina, protecting the labia (lip) area</li> </ul> </li> <li>male condom: thin latex or polyurethane sheath fitting over penis</li> </ul>	<ul> <li>can provide protection against STIs if used properly (for male, condom must be made of latex)</li> <li>is easily accessible</li> </ul>	<ul> <li>may cause irritation to genitals if latex allergies are present</li> </ul>
Depo-Provera	<ul> <li>long-acting, synthetic progesterone injection given every 84 days to stop ovaries from releasing an egg each month</li> </ul>	<ul> <li>may decrease cramping and menstrual bleeding</li> <li>reduces incidence of endometrial and ovarian cancer and pelvic inflammatory disease</li> </ul>	<ul> <li>does not affect fertility but may take up to two years for normal ovulation to return</li> <li>may decrease bone mineral density (calcium)</li> <li>may cause side effects such as bleeding and weight gain</li> </ul>
Diaphragm	• thin flexible latex disk attached to a circular rim that fits over the cervix to block the opening of the uterus to sperm	• is effective immediately after insertion	<ul> <li>requires prescription and instruction from physician for proper fit</li> <li>may cause bladder infections due to pressure on urethra from rim</li> <li>may cause toxic shock syndrome (fever, vomiting, diarrhea, rash)</li> </ul>
Intrauterine device (IUD)	<ul> <li>small T-shaped plastic object, with a fine copper wire and a thread attached to the base, inserted into the uterus by a physician</li> <li>changes the lining of the uterus, making it hard for a fertilized egg to attach to its wall</li> </ul>	<ul> <li>is effective</li> <li>does not require daily compliance</li> </ul>	<ul> <li>must be inserted by a physician and changed every three to five years, depending on type of coil</li> <li>increases the risk of ectopic (tubal) pregnancy</li> <li>may cause heavy menstrual bleeding and/or cramping</li> </ul>

(continued)

#### (continued)

Contraceptive Method/Product	Definition (Use/Application)	Considerations For	Considerations Against
Oral contraceptive or birth control pill	• pill containing female hormones estrogen and progestin, which prevent ovaries from releasing an egg each month	<ul> <li>may decrease cramping and menstrual bleeding</li> <li>may reduce incidence of ovarian and endometrial cancer and pelvic inflammatory disease</li> <li>improves menstrual cycle control</li> </ul>	<ul> <li>requires prescription and instruction from physician</li> <li>must be taken at the same time every day</li> <li>may cause bloating, headaches, sore breasts, and abdominal pain</li> </ul>
Patch	<ul> <li>small, smooth, square patch worn on the skin</li> <li>prevents ovulation</li> </ul>	<ul> <li>eliminates need to remember to take a daily pill</li> <li>may improve menstrual cycle side effects</li> </ul>	may cause irritation if     allergic reaction occurs
Spermicide	<ul> <li>vaginal spermicidal product (in gel, foam, cream, suppository, film, or tablet form) consisting of a chemical agent able to kill sperm</li> <li>applied just before intercourse</li> </ul>	<ul> <li>is available at pharmacies without prescription</li> <li>is inexpensive</li> <li>provides lubrication</li> </ul>	<ul> <li>should be used only in combination with another barrier method (e.g., gel/cream with diaphragm/cap)</li> <li>requires use of applicator</li> <li>may cause irritation if allergic reaction occurs</li> </ul>

#### **Other Considerations:**

- Emergency contraceptive pill (ECP) formerly called "morning-after pill"
- contains high doses of estrogen and progestin
  - is used in emergency/crisis situations within five days of unprotected sex
  - is most effective within 72 hours
  - must be prescribed by a physician or obtained from a clinic
  - will not affect a prior conception
- Sterilization
  - Tubal ligation: surgical division of Fallopian tubes and ligation of cut ends
  - Vasectomy: surgical cutting of vas deferens and ligation of each end
- Unreliable Methods
  - Natural family planning (rhythm): abstaining from intercourse for a specified number of days before/during/after ovulation. Women can ovulate more than once a month, and timing of ovulation may vary from cycle to cycle.
  - Withdrawal: removal of penis from vagina just before ejaculation due to sperm in the pre-ejaculate.

#### **References:**

- Ontario Physical and Health Education Association (OPHEA). Ontario Health and Physical Education Curriculum Support: Grades K-10. Toronto, ON: OPHEA, 2000.
- Ottawa, City of. People Services Department. *Teaching Sexuality Resource Kit*. 2<sup>nd</sup> ed. Ottawa, ON: City of Ottawa, People Services Department, 2002.

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