Grade 6





Learner Outcomes

Students investigate human reproduction from fertilization to birth.

The <u>Knowledge</u>, <u>Understanding</u>, <u>and Skills and Procedures</u> for this outcome that are covered in this lesson are listed at the end.

How To Use

This lesson plan contains several activities to achieve the learner outcomes above. You may choose to do some or all of the activities, based on the needs of your students and the time available. Some of the activities build on the ones that come before them, but all can be used alone.

For a quick lesson, combine activities A, B, C and F.

Classroom Activities & Timing

See also the <u>Differing Abilities</u> lesson plans.

- A. Ground Rules (5-10 minutes)
- B. Introduction to STBBIs (10-15 minutes)
- C. Introduction to Birth Control (10-15 minutes)
- D. Prevention Frayer Models (15-20 minutes)
- E. Birth Control and STBBIs Kahoot! Quiz (15-20 minutes)
- F. Question Box (5-10 minutes)

Required Materials

GRAPH: Birth Control Effectiveness

CHART: Dual Protection

HANDOUT: Birth Control, STBBIs and Abstinence

KAHOOT! QUIZ and ANSWER KEY: Birth Control and STBBIs

All the student handouts are also available in the Grade 6 Workbook.

All the charts and graphs are also available as slides in **Grade 6 Diagrams**.





Background Information for Teachers

Sexually Transmitted and Blood-borne Infections

This lesson uses the terms sexually transmitted infections (STIs), and sexually transmitted and blood-borne infections (STBBIs) as needed. Common STIs include chlamydia, gonorrhea, syphilis, and HPV. Common blood-borne infections include HIV, hepatitis B and hepatitis C.

Learning about STBBIs helps students to take care of their own bodies, thereby reducing the risk of transmitting STBBIs and preventing possible health problems related to having an STBBI. Untreated STBBIs may cause a variety of health-related concerns.

One of the greatest deterrents to the practice of safer sex is the "It won't happen to me" mindset. However, the risk of infection is very real. <u>Statistics</u> show that over 29% of chlamydia cases reported in 2019 were in Albertans ages 15-19, while this age group makes up less than 6% of the population. Gonorrhea and syphilis levels are also very high in this age group.

STI has replaced the term STD (sexually transmitted disease). In medical science, infection is the term used to indicate that a bacteria, virus, parasite, or other microbe has entered the body and begun to multiply. The term disease indicates that signs and symptoms of illness are present. There are many people with STIs who have no symptoms, therefore STI is a more accurate term.

Birth Control

Birth control methods can be grouped in different ways. For example, in the past educators often divided birth control methods into groups based on how they prevented pregnancy (barrier, hormonal, spermicides and other).

Recently, health educators are grouping birth control methods into a different set of categories, in part to emphasize the high effectiveness of long-acting reversible contraceptives (LARCs) over time:

Long-acting reversible contraceptives (LARCs)	Short acting reversible contraceptives (SARCs)	Used in the moment
Copper IUDHormonal IUDBirth Control Implant	 Birth control injection Birth control patch Birth control pill Birth Control ring 	 Abstinence Condom Diaphragm* Fertility awareness Internal (vaginal) condom Vaginal spermicide** Withdrawal

*Diaphragms are very rarely used in Canada, as the spermicidal jelly required is no longer available.

**Vaginal spermicides come as film or foam. It is recommended that vaginal spermicides be used with another form of birth control such as condoms.

Prevention

The only sure way to avoid pregnancy is to abstain from any activity where a penis or semen are near the vaginal area (including anal and vaginal sex or penis/vaginal touching). The only sure way to avoid STBBIs (sexually transmitted and blood borne infections) is to abstain from any activity that involves sexual contact between one person's body and another person's genital area, semen, or vaginal fluid and from contact with infected breastmilk, blood, and bedding/towels.

Aside from abstinence, these strategies can reduce risk of pregnancy:

- Delay sex
- Correctly and consistently using dual protection (condom plus another method of birth control increases contraceptive effectiveness and also reduces risk for STBBIs)
- Clear communication with partners about intentions, limits, and safer sex

As well as the three bullets listed above, these additional strategies can reduce risk of STBBIs:

- Limiting sexual partners
- Getting vaccinated against hepatitis B & human papillomavirus (HPV)
- Getting regular testing and treatment if needed
- Clear communication between partners about sexual history, testing, and treatment

Educational programs that result in the most positive sexual health outcomes (e.g., delayed first intercourse, safer sex strategies, healthy relationships) and are best at reducing negative sexual health outcomes (e.g., unintended pregnancy, STBBI) are programs that are comprehensive and include information about relationships, communication, sexual decision making, birth control & STBBI prevention.

Resources

For the most up-to-date information about STBBIs, see the <u>STI Health Information Sheets</u>. MyHealthAlberta has more information about <u>Pre-Exposure Prophylaxis</u> (PrEP) for HIV prevention.

For the most up-to-date information about birth control methods, see the Birth Control Health Information Sheets.

The Health Information Sheets are not included in the lesson plans, as they are updated frequently. Using the link will ensure access to the most recent version of each Health Information Sheet.

Inclusive Language

Language is complex, evolving, and powerful. In these lessons, <u>inclusive</u> <u>language</u> is used to include all students, including those with diverse gender identities and sexual orientations. This includes the use of 'they' as a singular gender-neutral pronoun.

A person's sex can be assigned at birth as male or female. Some people are intersex (the reproductive, sexual, or genetic biology of a person is unclear, not exclusively male or female or otherwise does not fit within traditional definitions of male or female). Assigned sex is independent of gender.

Gender identity is a person's internal sense of identity as girl/woman, boy/man, fluid among genders or no gender (regardless of what sex they were assigned at birth).

For many people, their gender is the same as the sex they were assigned at birth (cisgender). For others, their gender identity is different from the sex they were assigned at birth. They may use terms like transgender, trans, non-binary, gender fluid, gender queer, agender or others, to describe their gender identity. The umbrella term 'trans' is primarily used here, to describe people whose gender identity and sex assigned at birth differ. While this umbrella term does not fit everyone, the intention is to be inclusive as possible.

A. Ground Rules

Ensure <u>ground rules</u> are established before beginning this lesson. For classes that have already established ground rules, quickly reviewing them can help ensure a successful lesson.

B. Introduction to STBBIs

It will be helpful if students have recently reviewed the concepts and vocabulary of sex and reproduction in lesson one, before completing this activity.

These discussion questions help students define STBBIs and provide a rationale for learning about them through class discussion.

With the class, discuss answers to the following questions. Discussion notes are provided.

What is an STI?

 STIs are infections spread primarily by close sexual contact and sexual intercourse. Sexual contact means any intimate skin-toskin contact in the genital area. This includes touching or oral, vaginal, or anal sexual activity with partners of any gender. Examples include chlamydia, gonorrhea, syphilis, and HPV.

What is a BBI?

- Blood-borne infections are passed from one person to another through an exchange of blood and other body fluids.
- Examples include HIV, hepatitis B and hepatitis C.

Together these infections are referred to as STBBIs. Most STBBIs don't have any symptoms. You can't tell if someone has an STBBI by looking at them.

Why is it important to learn about STBBIs?

- It helps a person be able to take care of their own body
- It helps a person to discuss STBBIs with a partner before any sexual activity
- Regular testing and treatment can eliminate or minimize the health problems caused by an STBBI
- Untreated STBBIs can cause problems for a person's health and future ability to have children
- BBIs and some untreated STIs can be passed from mothers to babies

How do people get STBBIs?

- STBBIs can be passed from one person who has an infection to another person through:
 - Anal, oral, or vaginal sex
 - Any sexual activity involving genital contact
 - o Childbirth or breastfeeding, to a baby
 - Body piercing or tattooing with non-sterile equipment
 - Sharing needles, pipes, or straws for drug use

What can a person do to reduce their risk for STBBIs?

- Get vaccinated for hepatitis B and HPV
- Abstain from sex and sexual contact
- Use condoms/dental dams for all sexual activity
- Limit the number of sexual partners
- Go for STI testing and complete any treatment as needed
- Get piercings and tattoos only from reputable places that clean and sterilize all equipment and use only sterile needles

If you want to find out about STBBIs, what sources can provide accurate information?

- Family doctors, clinics (e.g., Sexual and Reproductive Health Clinic or STI Clinic) or community health centres
- Teachers, counsellors, or school nurse
- Fact sheets from a reliable source (Health Services/Agency)

Services available in your area can be found on the AHS
Sexual and
Reproductive Health
website.

C. Introduction to Birth Control

It will be helpful if students have recently reviewed the concepts and vocabulary of sex and reproduction before completing this activity.

With the class, discuss answers to the following questions. Discussion notes are provided. A short video, such as ones available from Amaze.org, may be a good introduction to this topic.

What is birth control?

- Birth control refers to the different methods used to prevent pregnancy.
- Some forms of birth control also protect against STIs.
- There are many different types of birth control.
- Hormonal birth control methods have hormones that prevent a pregnancy by stopping the ovaries from releasing an egg.
- Non-hormonal birth control methods create a barrier between sperm and the egg, change the chemistry of the reproductive tract or do both.
- Natural methods of birth control do not involve medications or devices to prevent pregnancy. They prevent a pregnancy by using certain behaviours and/or paying close attention to a person's body and menstrual cycle. These methods are sometimes called natural family planning. They do not provide any STBBI protection.

Why is it important to learn about birth control?

- Factual information is critical to make healthy decisions now and in the future.
- Some people have sex in their teen years and need to know this information to prevent an unintended pregnancy.
- Birth control methods help to prevent pregnancy. Some methods also protect against STBBIs.
- All students benefit from understanding birth control methods and the role of abstinence and condoms/internal (vaginal) condoms/dental dams for STBBI protection no matter their sex assigned at birth, gender identity, gender expression or sexual orientation.
- Many people use hormonal birth control methods like the pill for other reasons, such as to regulate menstrual cycles or limit premenstrual syndrome (PMS) symptoms like cramping, heavy periods, and acne.

Can you identify/describe some methods of birth control?

 List the methods identified by students on the board under the heading Methods of Birth Control.

- If students need prompting to get started, display the <u>Birth Control</u> <u>Tool</u>
- Explain the concept of effectiveness: the effectiveness rate is how well the birth control method works to prevent pregnancy. The "perfect use" rate is how well it works when used perfectly, every single time. The "typical use" rate is how well it works when used by most people, including forgetting to use it occasionally, or accounting for breakage of methods like condoms.
- Display the Birth Control Effectiveness Graph and discuss which methods have the most and least effectiveness. The methods with the highest effectiveness have the least possibility of user error. Methods that require remembering something every day (e.g., the pill), and/or every time someone has sex (e.g., condom), have lower effectiveness. You can choose to show the simplified graph that contains only the typical use data and fewer methods, or the more complex graph that includes more methods and perfect use data.
- Condoms (internal/vaginal and external/male/penile) provide protection from STBBIs as well. Display the **Dual Protection** chart to discuss the importance of both STI prevention and effective birth control for vaginal sex.

What is abstinence?

- Abstinence can mean different things to different people. For some, it means having no sexual contact with other people. For others, it could mean having limited contact, allowing some sexual activities, but not vaginal sex.
- People can choose abstinence at any time, even if they have had sex in the past. Many young people choose abstinence at this age as they don't feel ready for sex.
- Many people choose abstinence as a way of reducing the risk of STI transmission and unintended pregnancy.
- Abstinence is often referred to as being 100% safe, meaning that
 it completely eliminates the risk of STIs and unintended
 pregnancy. This is only true if the definition includes eliminating
 any intimate sexual behaviour involving skin to genital (including
 oral and anal sex), genital to genital or body fluid to genital
 contact.
- Pregnancy can also occur without vaginal sex if sperm is ejaculated near the entrance of the vagina during sexual touching.
- Oral sex and anal sex are forms of sex and carry the same risks of STIs as vaginal sex. An infection could spread to the area that has been in contact (e.g., anus, mouth, penis, vulva, vagina).
- Consider watching the video What is Abstinence? as an introduction or summary of the discussion. Note that the video refers to "STDs" instead of the preferred term STIs.

How do people choose birth control methods and STBBI protection?

- The best birth control method and STBBI prevention method are ones that you will use correctly and consistently. There is not one method that is the best for everybody.
- Long-acting reversible contraceptives (LARCs) including IUDs and implants, are highly effective choices that work well for many people. If used together with condoms (dual protection) the risk of STI transmission and unintended pregnancy is very low.

D. Prevention Frayer Models

- 1. Combine students into groups of 3.
- 2. Give each group the **Birth Control**, **STBBIs and Abstinence** handouts (see page 15).
- 3. Give each group time to complete their 3 Frayer models. You may wish to give them additional resources to help them complete the maps. Helpful resources could include:
 - Birth Control Kit
 - STI tool
 - Birth Control flashcards
 - What is Abstinence? video (Note that the video refers to "STDs" instead of the preferred term STIs.)
 - Amaze.org videos on birth control or STIs
 - SOGC STIs information page
 - SOGC Birth Control information page
- 4. Discuss the models as a class and have each group fill in additional information as needed.

E. Birth Control and STBBIs Kahoot! Quiz

This quiz can be a great review, wrap-up of the unit, or a fun energizer in between other activities. For more information on using Kahoot!, visit kahoot.com

- 1. Open the Kahoot! Quiz: Grade 6 Birth Control and STBBIs
- 2. As a class, answer the quiz questions and discuss the answers together. You can play the quiz in individual or team mode.
- 3. The answer key contains additional information about each question.

F. Question Box

Answer any questions from the <u>question box</u> in the previous lesson. Have students submit any new questions and address them next class.

Addressing the questions at the next class allows you time to review the questions and prepare responses.

Self-Reflection

During the lesson, were:

- ground rules being followed?
- good practices established regarding group work and discussion?

What will you change for future classes with this group?

What will you change for future use of this lesson?

Learning Outcomes

This lesson addresses the following Grade 6 <u>Physical Education and Wellness curriculum</u> outcomes:

Knowledge

- Pregnancy can occur as a result of sexual intercourse.
- Abstinence means choosing not to have sexual intercourse.
- Self-control can support decision making related to human reproduction.
- Different types of birth control can have varying levels of effectiveness and risks.
- Sexual activity can expose individuals to sexually transmitted infections and blood-borne infections.
- Some birth control measures can lower the risk of sexually transmitted infections and blood-borne infections.

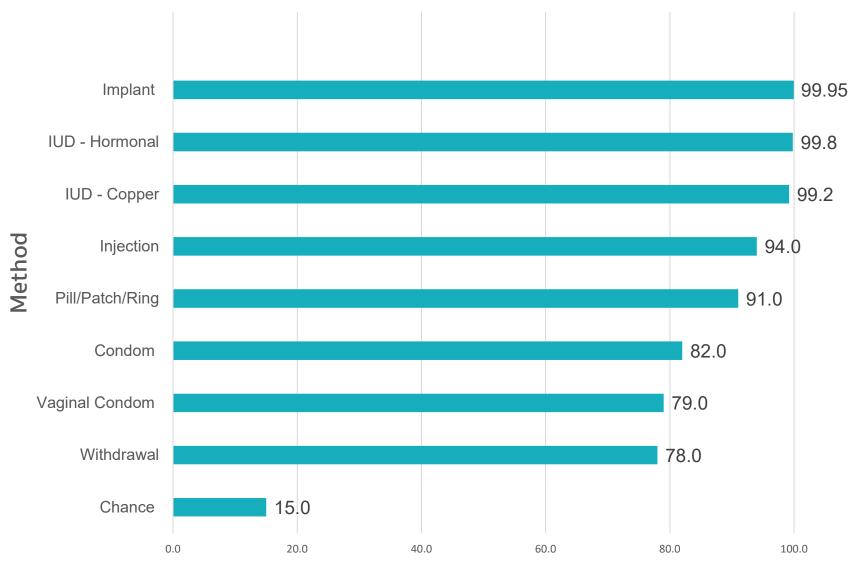
Understanding

- Abstinence is the most effective way to prevent pregnancy.
- Birth control and natural family planning can help prevent pregnancy and sexually transmitted infections.

Skills and Procedures

Identify effective ways to prevent pregnancy and sexually transmitted infections.

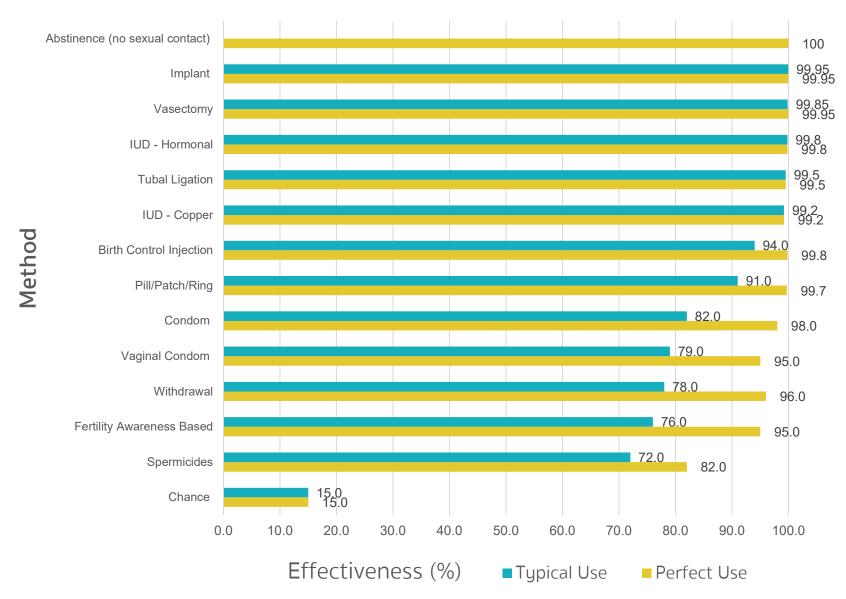
Birth Control Effectiveness



Typical Use % Effectiveness

Source: SOGC, Canadian Contraception Consensus, 2015

Birth Control Effectiveness



Source: SOGC, Canadian Contraception Consensus, 2015

Birth Control Effectiveness

Notes

Vasectomy: The perfect use effectiveness is based on confirmation by lab test that no sperm are present.

Diaphragm: The effectiveness of fitted diaphragms has only been studied with spermicidal gel which is no longer available in Canada. The efficacy of fitted or unfitted diaphragms used with acid buffering gel is unknown.

Dual Protection

Method	STI Protection	Pregnancy Prevention (Typical use) *
Condom (external/male)	√ √	√
Emergency Contraception	×	√ **
Fertility Awareness	×	√
Injection	×	√ √
Internal Condom***	√ √	√
Implant	×	$\checkmark\checkmark\checkmark$
IUD	×	√ √ √
Pill/Patch/Ring	×	$\checkmark\checkmark$
Withdrawal (pulling out)	×	√
No Method	×	×

✓= Fair, ✓✓= Good, ✓✓✓ =Excellent, × = none

Dual Protection

For birth control methods:

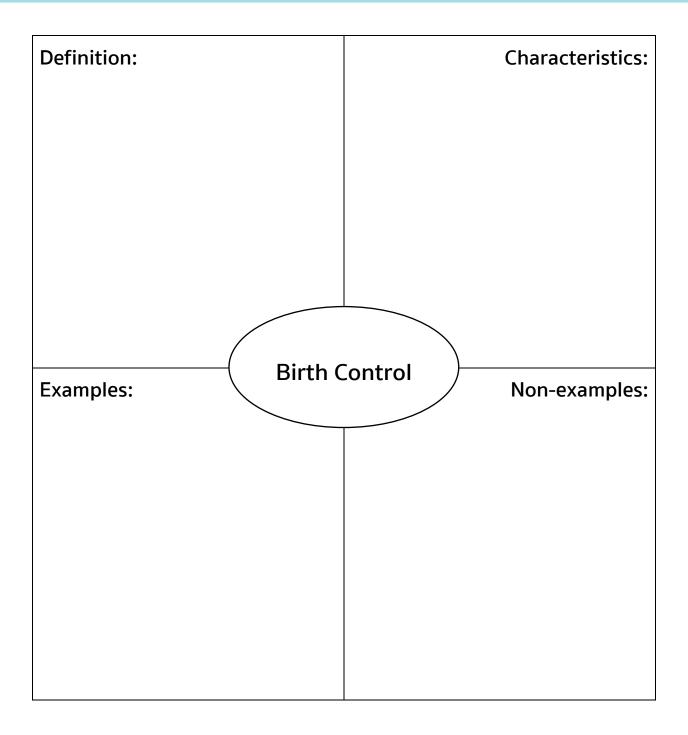
√√√	Excellent	99% or higher
√ √	Good	90%-98%
✓	Fair	70% -89%

^{*}Some birth control methods have much higher effectiveness in 'perfect use' conditions. For a comparison of the difference between perfect and typical use, see the Birth Control Effectiveness Graph.

^{**} The contraceptive effectiveness rate for emergency contraception depends on what kind is used, and how soon after unprotected sex the method is used. See the Health Information Sheet on emergency contraception for more information.

^{***}The internal condom is also known as the vaginal condom.

Birth Control, STBBIs and Abstinence







Definition:			Characteristics:
	-(STB	etaBls $igarrow$	
Examples:			Non-examples:





Definition:		Characteristics:
F	Abstinence —	NII
Examples:		Non-examples:





ANSWER KEY: Grade 6 Birth Control and STBBIs

Correct answers are in bold text.

- 1. Regular testing for STBBIs is important because most STBBIs have no symptoms.
 - True
 - False

All STBBIs CAN have symptoms, but many people don't get any symptoms. Or, the symptoms they do get may be so mild that they don't notice them or realize that they have an infection. Anyone who is sexually active should have a plan for regular testing so the infection can be caught early and treated or cured.

- 2. Using a condom or an internal condom provides protection from STBBIs.
 - True
 - False

They are both barrier methods that provide good protection from STBBIs like gonorrhea, chlamydia, syphilis, and HIV. They also provide protection against pregnancy. A condom and internal condom should not be used together (at the same time) as that increases the chance that they will break due to friction. Internal condoms are also known as vaginal condoms.

- 3. Withdrawal is a highly effective method of birth control.
 - True
 - False

Withdrawal is about 78% effective, with typical use. Most birth control methods are more effective. It can be hard for the person to pull out before ejaculating during sex. There can be sperm cells contained in pre-ejaculate (pre-cum) which is released from the penis prior to ejaculation. These sperm cells can fertilize an egg and lead to pregnancy, in exactly the same way that sperm cells released during ejaculation can.

- 4. Using both a condom and the pill is called dual protection.
 - True
 - False

Dual protection means using methods that provide STI protection and birth control.

- 5. STBBIs among teenagers are pretty rare.
 - True
 - False

Thousands of teenagers have STBBIs. It doesn't matter what age you are; STBBIs can infect a person of any age. In Alberta, people age 15-19 are only about 6% of the population but they have about 30% of the chlamydia cases each year.





- 6. The IUD is a very effective method of birth control.
 - True
 - False

With typical use an IUD is 99.2% (Copper IUD) to 99.8% (Hormonal IUD) effective. This protection lasts for 5-10 years depending on the type of IUD.

- 7. The birth control pill may regulate menstrual periods or reduce cramps.
 - True
 - False

Many people take the birth control pill for these reasons, even if they aren't sexually active or need birth control to prevent pregnancy.

- 8. The pill, patch, ring, or injection all protect against both pregnancy and STBBIs.
 - True
 - False

Hormonal birth control methods (the pill, patch, ring, implant, or injection) only provide protection against pregnancy, not STBBIs. Using a barrier method like a condom or internal condom is recommended to provide STBBI protection for anyone using hormonal birth control.

- 9. In Alberta, parents must be notified if their child is treated for an STI.
 - True
 - False

At the Sexual & Reproductive Health Clinics and STI Clinics, parents are NOT notified if their child is being treated for an STI, as long as there are no concerns for the child's safety. However, it is always best to talk with your parents, even about a difficult subject such as an STI.





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