

Contraception, Day 2: A Closer Look

Grade 9 and 10, Lesson #21

Time Needed:

One class period

Student Learning Objectives:

To be able to ...

1. List 2 of the 4 contraceptive methods with the fewest health risks.
2. Explain the difference between benign *side effects* and actual *health risks*.
3. Realize that all methods are safer than pregnancy and childbirth.
4. Name 2 of the 6 methods with the most health benefits.
5. Recognize that, in addition to information, people's beliefs and feelings about birth control will influence their decisions.

Agenda:

1. Do a brief transition from yesterday's lesson.
2. Have students present oral Field Trip Reports on "Prescription..." and "Non-Prescription Birth Control". Ensure that the issues (particularly cost and access) are covered.
3. Use Reference Sheet 3 or lecture and discussion to explore side effects, medical risks, and health benefits of all methods.
4. Answer students' questions (anonymous and otherwise) regarding birth control.
5. Use Contraceptive Worksheet 3 to summarize.

Note: The teacher's script is indicated by italics. This script is meant to be a guide for teachers who might find it helpful.

Activities:

1. Do a brief transition from yesterday's lesson.

Explain that today's lesson examines birth control a little more closely than yesterday's. Remind the class that you want them all to be able to act as health educators for their friends and families.

2. Have students present oral Field Trip Reports on "Prescription..." and "Non-Prescription Birth Control". Ensure that the issues (particularly cost and access) are covered.

Have students share their oral field trip reports on "Prescription Birth Control" and on Non-prescription Birth Control." See Lesson 1 for a Field Trip Grading Form (with criteria). Make sure to make at least one specific, positive comment about each report, as the student finishes. Then, put plenty of specific feedback in writing, on the written version of the report.

Ensure that the class knows (even if Reporters fail to mention) these things:

- *that a person must see a doctor for sterilization and a doctor or nurse practitioner to get the pill, ring, patch, shot, implant, IUD, and diaphragm. (It is also desirable to get professional help to learn fertility awareness.) All other methods are available in most pharmacies.*
- *that, although some methods may seem expensive, they are all less expensive than the least complicated delivery. They may be free or low-cost at a Health Department or Planned Parenthood ... and even at their highest, most methods cost less than two people enjoying a movie with popcorn. Specifically ^{1,2}:*

Abstinence is free.

Sterilization costs up to \$350 to \$755 for a man and \$1200 - \$2,500 for a woman, for ongoing birth control, providing many years of protection.

Pills cost up to \$15 to \$50 per pack, lasting a month.

Ring costs \$30 to \$40 per ring, lasting a month

Patch costs \$30 to \$42 per 3 patches, which together last a month

Shot (Depo-Provera) is \$30-\$65 per injection vial, lasting 3 months

Implant -- there is no information on costs available at this time.

IUDs cost up to \$400, lasting up to 10 years.

"Male" condoms cost \$0.27- \$1.09 per single-use condom (more for the polyurethane ones as well as the lambskin ones -- the latter aren't recommended anyway).

"Female" condoms cost \$2.00-2.50 per single-use condom

Diaphragm costs up to about \$30-50; lasting a year or two

Fertility awareness "costs" up to \$5-\$30 for a book and/or \$25-\$75 for a class.

Withdrawal is free

Spermicides:

Spermicidal cream or gel costs up to \$10 per tube, good for 20-30 uses.

Foam costs up to \$10 - \$15 per can, good for about 30 applications.
Sponges cost \$7.49 to \$8.99 for a package of 3 single-use sponges
Film and suppositories cost \$1.00 per single-use piece of film.

- *that clinics do not notify people's parents...that a teen can legally get birth control without his or her parents' involvement. The only kind not legally available to teens without parental consent is sterilization. Most doctors and clinics also require parental consent to insert an IUD, although they are not legally bound to do so (in Washington State).³*

Getting birth control without one's family's involvement is, of course, far from ideal. Ask the class to think of the advantages of talking with a parent or other adult family member about birth control. They may come up with some of the following (you can elaborate on their list as well):

- *A parent may have valuable experiences and beliefs to share.*
 - *A parent may have valuable information (family medical history, for example) the teen is unaware of.*
 - *It gives the teen a chance to talk over his or her concerns about birth control.*
 - *The parent and teen may grow closer; there will be more chance for understanding, support and respect between them.*
 - *There will be less chance of secrecy and mistrust between them.*
 - *If the teen ever decides to get birth control, the adult may be able and willing to help, or to go along for support.*
- 3. Use Reference Sheet 3, or lecture and discussion, to explore side effects, medical risks, and health benefits of all methods.**

Provide information about the *side effects, medical risks, and health benefits* of all seventeen methods. There are two ways to do this:

- hand out Reference Sheet 3 and have volunteers read aloud from it, **or**
- use a combination of question-and-answer format and lecture, holding up the methods or showing Transparencies 1-13 (from lesson 20). The reading level of the Reference Sheet is fairly sophisticated; if your class has many "reluctant readers", this will be the better alternative.

4. Answer students' questions (anonymous and otherwise) regarding birth control.

Answer questions that have not already been addressed. Students may ask, for example, about experimental methods such as, male pills. You can explain that these are being researched, but are not available to the general public in the United States and may not be for years.

5. Use Contraceptive Worksheet 3 to summarize.

To summarize the lesson, explain that people often ask, "What's the Best Method?" ... but "best" can mean different things, depending upon who's asking. Some people mean, "Which one is the most effective?" Others mean, "Which one is safest? least expensive? least hassle?" and so on. Each person or couple must decide which method is "best" according to their own situation at that time. The class now has a chance to consider what various people and couple's might need to know to make decisions.

Hand out Contraceptive Worksheet 3 and allow students a few minutes to fill it out, individually. Then, have them share their answers aloud. The answers are:

Most Effective (8) = a) abstinence, e) IUD, g) oral contraceptive pills, h) patch, i) ring, k) sterilization, m) the shot (Depo-Provera), n. implant

Note: f) combining condoms (either a "male" or "female") and a hormonal method may be very effective as well, although there are not specific studies that have been done to determine an efficacy rate

These are the most effective, in actual use by "average" people. In laboratory situations or with highly motivated and trained research subjects, other methods may be as effective.¹

Even the least effective methods, however, are all far more effective than nothing. If 100 couples had un-protected intercourse for a year, approximately 85 would become pregnant! Even withdrawal would reduce that number to about 19.¹

Safest (4) = a) abstinence, b) "male" condoms*, k) male sterilization, p) "female" condom**

Other methods, though they may involve no risks in and of themselves, but may involve the significant health risks of an unintentional pregnancy.

* Although this is called a "male" condom, it can be worn on a penis or used on a sex toy.

** Although this is called a "female" condom, it can be used by any gender, vaginally or anally .

Most Health Benefits (6) = a) abstinence, b) "male" condoms, f) combining condoms (both kinds) and hormonal methods, g) oral contraceptive pills k) sterilization, p) "female" condom

All of these count because they are so effective in preventing pregnancy and birth risks. The pill also protects against some cancers. It is believed that the patch and ring have similar benefits, but at present there is not evidence. Abstinence, condoms, and 2-methods (when the two methods include a condom) also significantly reduce risk of STIs-sexually transmitted infections and HIV).¹

Least Side Effects (6) = a) abstinence, d) fertility awareness,

k) sterilization, and m) withdrawal...
"male" and "female" condoms cause allergic reactions so rarely
that (b and p) are also acceptable answers

Abstinence, fertility awareness, sterilization and withdrawal can all have psychological "side effects" (such as frustration) but their physical side effects are of brief duration and little consequence.

Explain that the last two issues raised (at the end of the Worksheet) will be addressed tomorrow.

Contraceptive Worksheet 3

WHAT'S THE BEST METHOD?

NAME _____

PERIOD _____

DIRECTIONS:

1. In the first column, check the 8 **most effective** methods.
2. In the next column, check the 4 **safest** methods (those with the least chance of medical risks.)
3. Next, check the 6 with the **most health benefits** (such as protecting the woman against the risks of childbirth, cancer or PID ...or protecting either partner against sexually transmitted infections - STIs).
4. In the last column, check the 6 methods with the **least chance of side effects**.

<u>METHOD</u>	<u>most effective</u>	<u>most safest</u>	<u>health benefits</u>	<u>least side effects</u>
a. abstinence	_____	_____	_____	_____
b. "male" condom	_____	_____	_____	_____
c. diaphragm with gel	_____	_____	_____	_____
d. fertility awareness	_____	_____	_____	_____
e. intra-uterine device (IUD)	_____	_____	_____	_____
f. combination of hormonal method plus condoms	_____	_____	_____	_____
g. oral contraceptives (pill)	_____	_____	_____	_____
h. the patch	_____	_____	_____	_____
i. the ring	_____	_____	_____	_____
j. contraceptive sponge	_____	_____	_____	_____
k. sterilization (tubal ligation or vasectomy)	_____	_____	_____	_____
l. withdrawal	_____	_____	_____	_____
m. the shot (Depo)	_____	_____	_____	_____
n. implant	_____	_____	_____	_____
o. emergency contraceptive pills	_____	_____	_____	_____
p. "female" condom	_____	_____	_____	_____

Contraceptive Worksheet Sheet 3 (continued)

ONCE YOU HAVE FINISHED....

NOW... You have shown which ones are the most effective, the safest, and the most beneficial. You've shown which methods have the fewest side effects. These are all important facts. Remember, two more factors are part of a **thoughtful decision**: feelings and beliefs. People may ask themselves:

Which methods are the easiest: ... *It depends on the person's or couple's feelings!*

Which are the most ethical (moral) : ... *It depends on the person's or couple's beliefs (religious and personal.) and, for many people, on whether they are married.*

Contraceptive Reference Sheet 3

Side Effects, Medical Risks and Health Benefits

What's the difference between side effects and medical risks ?

Side effects may be pleasant or unpleasant, but are in no way dangerous. **Medical risks**, on the other hand, are safety concerns ... they don't happen to everyone who uses a particular medicine, but they are important to discuss with a doctor when deciding on a medicine.

For example, one **side effect** of eating a hot dog may be that it makes you burp. That isn't dangerous, it's just something you learn to expect. One **medical risk** of eating hot dogs is heart attacks. Not everyone who eats hot dogs gets heart attacks, of course. They are a concern, though, for people with high cholesterol and/or high blood pressure. For those people, the doctor may recommend some other food, instead, with less salt and fat.

What are some of the **main medical risks** of contraceptives?

What about **side effects** and **health benefits** ?

¹ Most information is taken from Hatcher, Robert A. et al. (2005) Contraceptive Technology (18th Rev. Ed.) unless otherwise noted (see references below).

BEHAVIORAL METHODS

ABSTINENCE: MAIN HEALTH RISKS

NONE...relative risk: safest method

ABSTINENCE: MAIN BENEFITS

TO HEALTH: NO sexually transmissible infections, NO pregnancy or birth risks NO medical risks

TO RELATIONSHIP: learning to communicate better, cooperate more, be creative and affectionate

ABSTINENCE: "SIDE EFFECTS"

Possible frustration, but nobody ever died of frustration ...maybe discomfort from excess blood in the genital area, but not pain (according to most people)... some may fail to use contraceptive protection when abstinence ends ⁴ ...despite these "side effects", more people probably choose it than any other method

Contraceptive Reference Sheet 3 (continued)**WITHDRAWAL**: MAIN HEALTH RISKS

Normal risks associated with pregnancy and birth, if she becomes pregnant
Does NOT protect from HIV or other STIs.

WITHDRAWAL: MAIN BENEFITS

Can be used when no other method is available

WITHDRAWAL: SIDE EFFECTS

Possible frustration since it requires self control.

FERTILITY AWARENESS: MAIN HEALTH RISKS

Normal risks associated with pregnancy and birth, if she becomes pregnant.
Does NOT protect from HIV or other STIs.

FERTILITY AWARENESS: MAIN BENEFITS

TO HEALTH: getting to know and understand the body can be advantageous throughout different life stages (for avoiding or attaining pregnancy or understanding certain illnesses)
NO medical side effects.

TO RELATIONSHIP: learning to communicate better, cooperate more, be creative and affectionate

FERTILITY AWARENESS: SIDE EFFECTS

Possible frustration or confusion since method requires self discipline and accuracy in daily charting and observing of fertility signs (cervical fluid)...not recommended for women with irregular cycles (who sometimes have periods closer together and sometimes longer apart) ⁸...

COMBINING TWO METHODS [such as a condom ("male" or "female") with a hormonal method of birth control]: MAIN HEALTH RISKS

Risks associated with the methods as mentioned in this Reference sheet

COMBINING 2 METHODS: MAIN BENEFITS

TO HEALTH: **greatly** reduce risk of HIV and other sexually transmissible infections when a condom is included

TO RELATIONSHIP: learning to communicate better, cooperate more

COMBINING 2 METHODS: SIDE EFFECTS

See individual methods for side effects

...some people may feel this is too complicated or difficult for them

Contraceptive Reference Sheet 3 (continued)

BARRIER METHODS:

“MALE” CONDOM: MAIN HEALTH RISKS

NONE...relative risk: probably tied with male sterilization for the 2nd safest method in terms of health risks ... with one exception: lambskin condoms do not protect against HIV and other STIs.

“MALE” CONDOM: MAIN HEALTH BENEFITS

Latex and polyurethane ones reduce the risk of sexually transmissible infections...including HIV (AIDS)

“MALE” CONDOM: SIDE EFFECTS

...may slightly reduce sensation (some people object to that; others prefer it, as it may make intercourse last longer)...also rare allergic reactions to the latex or lubricant

“FEMALE” CONDOM: MAIN HEALTH RISKS

NONE...relative risk: similar to safety for “male” condom

“FEMALE” CONDOM: MAIN HEALTH BENEFITS

Reduce the risk of sexually transmissible infections ...including HIV (AIDS).

“FEMALE” CONDOM: SIDE EFFECTS

...may slightly reduce sensation... rare allergic reactions to vinyl... for some people it can be awkward to use.

DIAPHRAGM MAIN HEALTH RISKS

Very slight risk of Toxic Shock Syndrome, so the woman should wash her hands before use, and respect the 24 hour limit *... also pregnancy and birth risks

DIAPHRAGM: MAIN HEALTH BENEFITS

May reduce the risk of some sexually transmissible infections (except for staph, the one that causes Toxic Shock Syndrome) because some germs may be blocked

May reduce risk for cervical cancer and the genital warts (HPV) on the cervix

DIAPHRAGM: SIDE EFFECTS

Some people are allergic to the method itself or the spermicide (cream, gel) used with it ... these people may have some itching or burning... sometimes it helps to try different brands of cream or gel ... also some women may have more yeast or bladder infections ... and some women leave them in too long and notice an odor

*These limits *include* the 6 hours **after** last intercourse that she waits before removing the diaphragm.

*Contraceptive Reference Sheet 3 (continued)***HORMONAL METHODS:****ORAL CONTRACEPTIVES (PILLS): MAIN HEALTH RISKS**

blood clots (which can lead to stroke or heart attack, on rare occasion) ... a higher risk in women who smoke, are over 35, have blood-related problems already (such as diabetes, heart disease), or who have a family history of blood-related problems, some women may have an increased risk for high blood pressure, ... relative risk: much safer than pregnancy and birth for young, healthy women, especially non-smokers

Does NOT protect from HIV or other STIs

ORAL CONTRACEPTIVES (PILLS): MAIN HEALTH BENEFITS

decrease risk of infertility by reducing risk of PID (Pelvic Inflammatory Disease)... reduce risk of cancers of ovaries, uterus and endometrium... decreases risk of some cysts in the breasts and ovaries... suppresses endometriosis in women that have it and prevents it in women that don't... decreased risk of anemia and osteoporosis... may clear up acne, reduce menstrual cramps, shorten periods, and lessen Pre-Menstrual Syndrome (PMS)

ORAL CONTRACEPTIVES (PILLS): SIDE EFFECTS

May increase acne or breast tenderness...may temporarily stop menstruation (until she stops pills)... may reduce interest in sex... may cause bleeding between periods... may cause depression, nausea, headache, slight weight gain or weight loss ¹⁰ ...if these persist, she can talk with her doctor or nurse practitioner about changing doses

TRANSDERMAL CONTRACEPTIVE PATCH: MAIN HEALTH RISKS

Thought to be the same for as oral contraceptives although information about this may not be available for years.

Does NOT protect from HIV or other STIs

TRANSDERMAL CONTRACEPTIVE PATCH: MAIN HEALTH BENEFITS

Thought to be similar to oral contraceptives.

TRANSDERMAL CONTRACEPTIVE PATCH: SIDE EFFECTS

Thought to be similar to oral contraceptives (nausea, weight gain, bleeding between periods): with more likelihood of having breast tenderness, and spotting... some women may have skin irritation, redness or rash at the site of the patch.

Contraceptive Reference Sheet 3 (continued)

VAGINAL CONTRACEPTIVE RING: MAIN HEALTH RISKS

Thought to be the same for as oral contraceptives although information about this may not be available for years.

Does NOT protect from HIV or other STIs

VAGINAL CONTRACEPTIVE RING):
MAIN HEALTH BENEFITS

Thought to be similar to oral contraceptives

VAGINAL CONTRACEPTIVE RING SIDE
EFFECTS

Thought to be similar to oral contraceptives (weight gain, bleeding between periods): with fewer side effects for headaches, nausea and breast tenderness. And less irregular bleeding... some women may have vaginal discomfort and discharge

THE SHOT (DEPO PROVERA) : MAIN HEALTH RISKS

Risk of pregnancy is low, but if she does become pregnant the pregnancy is more likely to be in the tubes... and very rarely, allergic reaction

Does NOT protect from HIV or other STIs

THE SHOT (DEPO-PROVERA)): MAIN
HEALTH BENEFITS

Decreased or light period (sometimes absent) with less cramps, pain, mood changes, headaches, breast tenderness and nausea

Decreased risk for endometrial cancer, ovarian cancer and PID (pelvic inflammatory disease)
Decreased risk of seizures

THE SHOT (DEPO-PROVERA)): SIDE
EFFECTS

Some women may have menstrual changes, weight gain, depression, headaches, breast tenderness or vaginal dryness ⁵

Contraceptive Reference Sheet 3 (continued)

IMPLANTS: MAIN HEALTH RISKS

May have some of the same risks as oral contraceptives pills....higher risk of ectopic (sometimes called "tubal") pregnancy if she becomes pregnant

Does NOT protect from HIV or other STIs

IMPLANTS: MAIN HEALTH BENEFITS

Decreased or no period⁹ which means less chance of anemia

IMPLANTS: SIDE EFFECTS^{6 9}

Some women may have menstrual changes (bleeding too little or too much or none), acne, dizziness, mood swings, headache, weight gain, breast tenderness...pain/infection at site after insertion....small scar is possible

EMERGENCY CONTRACEPTIVE (EC) PILLS: MAIN HEALTH RISKS

None

Does NOT protect from HIV or other STIs

EMERGENCY CONTRACEPTIVE (EC) PILLS: MAIN HEALTH BENEFITS

Can prevent unplanned pregnancy in case of a contraceptive failure or unprotected intercourse if taken within 5 days (120 hours) of the unprotected intercourse

EMERGENCY CONTRACEPTIVE (EC) PILLS: SIDE EFFECTS

Not a regular form of birth control...may cause nausea and vomiting, though the brand called "Plan B" has much less chance of this than the older forms of EC, menstrual changes (period may come a few days later or earlier than expected)

*Contraceptive Reference Sheet 3 (continued)***SPERMICIDES:****SPERMICIDES (FOAM, FILM AND SUPPOSITORIES): MAIN HEALTH RISKS**

Normal risks associated with pregnancy and birth, if she becomes pregnant

Using a spermicide more than two times a day can irritate the lining of the vagina and may increase the risk of getting HIV. ⁷

Does NOT protect from HIV or other STIs. ⁷

SPERMICIDES (FOAM, CREAM, GEL, FILM AND SUPPOSITORIES): MAIN BENEFITS

Available without prescription ... Non-hormonal ... Reversible ... Controlled by the woman ⁷

SPERMICIDES (FOAM, FILM AND SUPPOSITORIES): SIDE EFFECTS

Irritation to lining of vagina... about 1 out of 50 people is allergic (they have some itching or burning; they can try a different brand)

SPONGE: MAIN HEALTH RISKS

Very slight risk of Toxic Shock Syndrome, so the woman should wash her hands before use, respect the 24 hour limit *... and use another method during her period, also pregnancy and birth risks ...

Using a spermicide more than two times a day can irritate the lining of the vagina and may increase the risk of getting HIV. ⁷

Does NOT protect from HIV or other STIs. ⁷

SPONGE: MAIN HEALTH BENEFITS

Available without prescription ... Non-hormonal ... Reversible ... Controlled by the woman ⁷

SPONGE: SIDE EFFECTS

Some people are allergic to the spermicide ... these people have some itching or burning... also some women have more yeast or bladder infections ... ⁷

*These limits *include* the 6 hours **after** last intercourse that she waits before removing the sponge.

Contraceptive Reference Sheet 3 (continued)

OTHER METHODS:

INTRA-UTERINE DEVICE (IUD): MAIN HEALTH RISKS

There is a small risk of Pelvic Inflammatory Disease (PID: which can lead to infertility) up to one month after insertion in some women ...this is especially a concern in women who have more than 1 partner or who change partners fairly often...which is why it isn't a good method for many teens...during insertion there is a small risk of perforation of the uterus or cervix (if it is an experienced provider, this risk is 1 per 1,000) ... relative risk: safer than pregnancy and birth for a monogamous couple

Does NOT protect from STIs or HIV (AIDS)

INTRA-UTERINE DEVICE (IUD): MAIN HEALTH BENEFITS

The hormonal kind reduces risk of endometrial cancer... and may reduce menstrual bleeding, and PMS

INTRA-UTERINE DEVICE (IUD): SIDE EFFECTS

The copper IUD may cause increased menstrual bleeding and cramps and a risk for anemia

After insertion there may be cramping and pain

STERILIZATION: MAIN HEALTH RISKS

OF VASECTOMY: very slight risk of blood clot or infection (as with any minor surgical procedure)

OF TUBAL LIGATION: very slight risk of blood clot, injury to the uterus or the bladder or bowel, infection, or reaction to anesthetic (as with any minor surgical procedure)

Does NOT protect from STIs or HIV (AIDS)

STERILIZATION: MAIN HEALTH BENEFITS

Very little chance of pregnancy so the woman is almost completely protected from the risks associated with pregnancy and child birth...also women with tubal ligations have less Pelvic Inflammatory Disease (PID)

STERILIZATION: SIDE EFFECTS

The person will be uncomfortable for a few days afterward and some women have problems with their periods...other than that, sterilization has no effect on sexual feelings or function (men can still get erections, ejaculate, have sex; women can still have sex, have sexual feelings)

REFERENCES:

¹ Hatcher, Robert A. et al. (2005). *Contraceptive Technology* (18th Rev. Ed.). New York: Ardent Media, Inc.

² Planned Parenthood. "Your Contraceptive Choices" Retrieved on July 14 from: <http://www.plannedparenthood.org/pp2/portal/files/portal/medicalinfo/birthcontrol/pub-contraception-choices.xml>

³ Washington State Legislature. Initiative Measure No. 120, approved November 5, 1991 RCW 9.02.100 Reproductive privacy- Public policy. Retrieved on July 14 from: <http://www.leg.wa.gov/RCW/index.cfm?section=9.02.100&fuseaction=section>

⁴ Hannah Brückner Ph.D. ,Peter Bearman Ph.D. (April 2005) After the promise: The STD consequences of adolescent virginity pledges. *Journal of Adolescent Health*. Vol. 36 (4) pgs. 271-278

⁵ Family-Planning Program, Public Health - Seattle & King County. (April 14, 2005) Section II. Depo Medroxyprogesterone Acetate (Depo-Provera) or DMPA. Clinical Practice Guidelines 2001.

⁶ Funk S, Miller MM, Mishell DR Jr, Archer DF, Poindexter A, Schmidt J, Zampaglione E; The Implanon US Study Group. (May 2005) Safety and efficacy of Implanon, a single-rod implantable contraceptive containing etonogestrel. *Contraception*.71(5):319-26.

⁷ Family-Planning Program, Public Health - Seattle & King County. (June 16, 2004) Section II. Spermicide. Clinical Practice Guidelines 2001.

⁸ Family-Planning Program, Public Health - Seattle & King County. (December 20, 2004) Section II. Fertility Awareness or Infertility Basal Body Temperature Charting. Clinical Practice Guidelines 2001.

⁹ Family-Planning Program, Public Health - Seattle & King County. (April, 2005) Section II. Implant Contraceptives. Clinical Practice Guidelines 2001.

¹⁰ Family-Planning Program, Public Health - Seattle & King County. (October, 2004) Section II. Oral Contraceptive Pills. Clinical Practice Guidelines 2001.

