

Module 3

Preventing Unintended
Pregnancies and Sexually
Transmitted Infections

This module presents an overview of prescribing information. It does not include all of the information needed to use the following contraceptive methods safely and effectively. See full prescribing information for each contraceptive method.

Topics

- ▶ Hormonal Contraceptive Options for Teens
- ▶ Non-Hormonal Contraceptive Options for Teens
- ▶ Benefits of Dual Protection and Special Contraceptive Considerations
- ▶ Emergency Contraception (EC)
- ▶ Expedited Partner Therapy (EPT)
- ▶ HPV and the Gardasil Vaccine
- ▶ The Pharmacist's Role in Teen Sexual and Reproductive Health

Topics

- ▶ **Hormonal Contraceptive Options for Teens**
- ▶ Non-Hormonal Contraceptive Options for Teens
- ▶ Benefits of Dual Protection and Special Contraceptive Considerations
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Hormonal Contraceptive Methods

- ▶ Hormonal contraceptive methods are safe and, when used correctly, are almost 100% effective at preventing pregnancy.
- ▶ Hormonal options include:
 - ▶ Intrauterine device (IUD)
 - ▶ Implant
 - ▶ Injection
 - ▶ Vaginal ring
 - ▶ Patch
 - ▶ Contraceptive pills/oral contraceptive

Intrauterine Device (IUD)

Intrauterine Device (IUD)

An IUD is a small T-shaped device that is inserted into the uterus by a doctor. There are hormonal IUDs and a copper IUD. Copper IUDs do not contain hormones.



Hormonal (Mirena, Liletta, Skylla and Kyleena)¹



Copper, hormone-free (often called by its brand name, ParaGard)²

1. "Levonorgestrel Intrauterine System," U.S. National Library of Medicine, MedlinePlus, 2017. www.medlineplus.gov/druginfo/meds/a613047.html
2. ParaGard (copper IUD)," Mayo Clinic, 2017. www.mayoclinic.org/tests-procedures/paragard/basics/definition/prc-20013048.

Intrauterine Device (IUD)

▶ How well does it work?

- ▶ IUDs are more than 99% effective at preventing unintended pregnancies.¹

▶ How to use it

- ▶ A doctor inserts the IUD into the uterus.¹
 - ▶ A hormonal IUD can be left in place for three to five years, depending on the brand.²
 - ▶ ParaGard can be left in for up to 12 years.³
- ▶ The patient should check the threads monthly and report expulsion as efficacy may be lost.¹
- ▶ The patient should report signs of pelvic inflammatory disease to their health care provider:¹
 - ▶ Abdominal pain
 - ▶ Fever
 - ▶ Abnormal vaginal discharge
 - ▶ Painful intercourse
 - ▶ Painful urination

▶ How fast does it work?

- ▶ IUDs are effective immediately after insertion.¹

1. "Effectiveness of Family Planning," Centers for Disease Control and Prevention (CDC), 2011. www.cdc.gov/reproductivehealth/unintendedpregnancy/pdf/contraceptive_methods_508.pdf

2. "Levonorgestrel Intrauterine System," U.S. National Library of Medicine, MedlinePlus2017. www.medlineplus.gov/druginfo/meds/a613047.html

3. "ParaGard (copper IUD)," Mayo Clinic, 2017. www.mayoclinic.org/tests-procedures/paragard/basics/definition/prc-20013048.

Counseling Points for Hormonal IUDs

- ▶ Do not prevent STI transmission¹
- ▶ Recommended for adult women or teenagers who have or have not given birth²
- ▶ Available by prescription only¹
- ▶ Estrogen-free: releases small amounts of progestin into the uterus¹
- ▶ 99% effective in preventing implantation¹
- ▶ Periods may stop after a few months¹
- ▶ Women should avoid herbal drugs, such as St. John's Wort, if they have Mirena, Skyla and Kyleena.⁴

1. "Birth Control Methods," U.S. Department of Health and Human Services (HHS), Office of Women's Health, 2017. www.womenshealth.gov/files/fact-sheet-birth-control-methods.pdf

2. American College of Obstetricians and Gynecologists. "Practice Bulletin #121 - Long-Acting Reversible Contraception: Implants and Intrauterine Devices." *Obstetrics & Gynecology*. July 2011. 118(1):184-196.

3. "Effectiveness of Family Planning," Centers for Disease Control and Prevention (CDC), 2011. www.cdc.gov/reproductivehealth/unintendedpregnancy/pdf/contraceptive_methods_508.pdf

4. "Levonorgestrel Intrauterine System," U.S. National Library of Medicine, MedlinePlus2017. www.medlineplus.gov/druginfo/meds/a613047.html

Counseling Points for ParaGard

- ▶ Does not prevent STI transmission¹
- ▶ Safety and efficacy established in women younger than 16 years¹
- ▶ Available by prescription only¹
- ▶ Hormone-free: releases copper continuously into the uterus¹
- ▶ 99% effective in preventing implantation²

1. "Birth Control Methods," U.S. Department of Health and Human Services (HHS), Office of Women's Health, 2017.
www.womenshealth.gov/files/fact-sheet-birth-control-methods.pdf
2. "Effectiveness of Family Planning," Centers for Disease Control and Prevention (CDC), 2011.
www.cdc.gov/reproductivehealth/unintendedpregnancy/pdf/contraceptive_methods_508.pdf

Contraceptive Implant

Contraceptive Implant

The contraceptive implant (sometimes called by its brand name Implanon or Nexplanon) is a matchstick-size device that releases progestin. The implant is inserted in the upper, inner side of the non-dominant arm.



“Contraceptive Implant,” Mayo Clinic, 2017. www.mayoclinic.org/tests-procedures/contraceptiveimplant/basics/definition/prc-20015073

Contraceptive Implant

- ▶ **How well does it work?**
 - ▶ Contraceptive implants are more than 99% effective at preventing unintended pregnancies.¹
- ▶ **How to use it**
 - ▶ A doctor or nurse will place the implant under the skin of the woman's arm using a needle. The process only takes a few minutes.¹
 - ▶ The implant can be taken out by a doctor or nurse at any time.²
 - ▶ The implant can be left in for up to three years.¹
- ▶ **How fast does it work?**
 - ▶ If a woman gets the implant during the first five days of her period, she is protected against pregnancy immediately. Otherwise, it takes up to a week after getting the implant to be fully protected.²

1. "Contraception," CDC, 2011. www.cdc.gov/reproductivehealth/contraception/index.htm
2. "Birth Control Implant," Planned Parenthood, 2017. www.plannedparenthood.org/learn/birth-control/birth-control-implant-implanon

Contraceptive Implant Counseling Points

- ▶ Does not prevent STI transmission¹
- ▶ Available by prescription only²
- ▶ Patient should report signs and/or symptoms of cardiovascular events:²
 - ▶ Myocardial infarction
 - ▶ Stroke
 - ▶ Blood clot
- ▶ Contraceptive implants may increase the risk of serious blood clots, especially if the patient has other risk factors, such as smoking.²
- ▶ Women who wear contact lenses may have changes in lens tolerance, and should be assessed by an ophthalmologist
- ▶ Women should use backup contraception, such as condoms or abstinence, for the first seven days after implantation.¹

1. "Birth Control Implant," Planned Parenthood, 2017. www.plannedparenthood.org/learn/birth-control/birth-control-implant-implanon

2. "Nexplanon and Implanon," FDA, 2015. www.accessdata.fda.gov/drugsatfda_docs/label/2015/021529s011lbl.pdf

3. "Contraceptive Implant," Mayo Clinic, 2017. www.mayoclinic.org/tests-procedures/contraceptive-implant/basics/definition/prc-20015073

Contraceptive Injections

Contraceptive Injections

The contraceptive injection or birth control shot (sometimes called by its brand name, Depo-Provera) contains progestin.



"Medroxyprogesterone Injection," U.S. National Library of Medicine, MedlinePlus, 2017.
www.medlineplus.gov/druginfo/meds/a604039.html

Contraceptive Injections

- ▶ **How well does it work?**
 - ▶ The contraceptive injection is more than 99% effective at preventing unintended pregnancies when used as directed. It is 94% effective with typical use.
- ▶ **How to use it**
 - ▶ Once every three months, a doctor will give the woman a shot in her forearm or buttocks. The process only takes a few minutes.
- ▶ **How fast does it work?**
 - ▶ If a woman gets the shot within the first seven days after the start of her period, she is protected from pregnancy immediately.

Contraceptive Injection Counseling Points

- ▶ Does not prevent STI transmission¹
- ▶ Available by prescription only¹
- ▶ Potential for decreased bone mineral density and irreversible bone loss, which increases with treatment duration (continuous use for two or more years)²
- ▶ Potential for partial or complete vision loss¹
- ▶ Drug interactions with CYP3A4 inducers:¹
 - ▶ Barbiturates
 - ▶ Phenytoin
 - ▶ Rifampin
 - ▶ St. John's Wort

1. "Medroxyprogesterone Injection," U.S. National Library of Medicine, MedlinePlus, 2017. www.medlineplus.gov/druginfo/meds/a604039.html

2. Mayo Clinic, Depo-provera (contraceptive injection), 2017. www.mayoclinic.org/tests-procedures/depoprovera/basics/definition/prc-20013801

Contraceptive Ring

Contraceptive Ring

The contraceptive ring (sometimes called by its brand name, NuvaRing) is a soft, flexible plastic ring containing progestin and estrogen.



"Ethinyl Estradiol and Etonogestrel Vaginal Ring," U.S. National Library of Medicine, MedlinePlus, 2017.
www.medlineplus.gov/druginfo/meds/a604039.html

Contraceptive Ring

▶ How well does it work?

- ▶ The contraceptive ring is more than 99% effective when used as directed. It is 91% effective with typical use.

▶ How to use it

- ▶ The patient should wash her hands with soap and water.
- ▶ Using her fingers, she should bring the sides of the ring together and gently push it into her vagina. If a period is desired, the ring should be left in place for three weeks, and taken out on the fourth week.
 - ▶ To remove, the patient should hook her fingers through the ring and gently pull. A new ring should be inserted seven days after the last one was removed.
- ▶ If the patient wants to skip her period, she has several options. See the manufacturer instructions for exact details.

Contraceptive Ring

▶ How fast does it work?

- ▶ If a woman inserts the ring within the first five days after the start of her period, then it is effective immediately and no backup is needed.
- ▶ If she inserts the ring later than the first five days after the start of her period, it is effective after seven days of use. Additional contraception, such as a condom or abstinence, is needed if she has vaginal intercourse during the first seven days.

Contraceptive Ring Counseling Points

- ▶ Does not prevent STI transmission
- ▶ Available by prescription only
- ▶ Patients should report symptoms of toxic shock syndrome.
- ▶ Patients should not take the ring out during sex.
- ▶ Use of pads and tampons will not make the ring less effective.
- ▶ Ovulation and spontaneous menstrual cycles usually occur within a month after discontinuing use of contraceptive ring.
- ▶ Cigarette smoking increases the risk of serious cardiovascular events.

1. "Birth Control Ring," Planned Parenthood, 2017. www.plannedparenthood.org/learn/birth-control/birth-control-vaginal-ring-nuvaring
2. "NuvaRing," FDA, 2017. www.accessdata.fda.gov/drugsatfda_docs/nda/2013/021187Orig1s021.pdf

Contraceptive Ring Counseling Points

- ▶ If the ring is inadvertently expelled, rinse it in lukewarm water and reinsert it within 48 hours.
- ▶ If the ring stays out of the vagina for more than 48 hours:
 - ▶ Patients should use a backup method of birth control for seven days in a row.
 - ▶ Rinse the ring in lukewarm water and re-insert as soon as possible.

Contraceptive Patch

Contraceptive Patch

The contraceptive patch is a thin square-shaped skin patch containing progestin and estrogen. The patch is often called by its brand name Ortho Evra. However, Ortho Evra has been discontinued; Xulane is its replacement.



"Ethinyl Estradiol and Norelgestromin Transdermal Patch," U.S. National Library of Medicine, MedlinePlus, 2017.
www.medlineplus.gov/druginfo/meds/a602006.html

Contraceptive Patch

▶ How well does it work?

- ▶ The contraceptive patch is more than 99% effective when used as directed.¹
- ▶ It is 91% effective with typical use.¹
- ▶ It may be less effective in women who weigh more than 198 pounds.²

▶ How to use it

- ▶ Patients should put the contraceptive patch on clean, dry skin on their stomach, upper outer arm, buttocks or shoulder blade, NOT on the breasts.²
- ▶ Each patch is worn for one week. Patients should use a new patch each week, for three weeks in a row, and change it on the same day each week. If the patient does not want a period, she should not apply a patch on the fourth week.²
- ▶ If the patient wants to skip her period, then she has several options. See the manufacturer instructions for exact details.

1. "Birth Control Patch," Planned Parenthood, 2017. www.plannedparenthood.org/learn/birth-control/birth-control-patch
2. "Ethinyl Estradiol and Norelgestromin Transdermal Patch," U.S. National Library of Medicine, MedlinePlus, 2017. www.medlineplus.gov/druginfo/meds/a602006.html

Contraceptive Patch

- ▶ **How fast does it work?**
 - ▶ If applied to the skin within five days after the start of a woman's period, the contraceptive patch is effective immediately.
 - ▶ If applied after the fifth day of her period, protection begins after seven days. Patients should use backup contraception, such as condoms or abstinence, during those seven days.
- ▶ **Counseling Points:**
 - ▶ Available by prescription only.
 - ▶ Detachment of patch may go unrecognized
 - ▶ One patch replacement is supplied with each prescription

Contraceptive Patch Counseling Points

- ▶ **Less than 48 hours after detachment of the patch**
 - ▶ Apply a new patch as soon as possible.
 - ▶ Maintain the same “patch change day.”
 - ▶ Additional contraception is not required.
- ▶ **48 or more hours after detachment of the patch (or if the patient is unsure when it detached)**
 - ▶ Backup contraception, such as condoms or abstinence, should be used for seven consecutive days after a new patch has been applied.
 - ▶ The patient should put on a new patch right away, starting a new 4-week cycle. This will be their new patch change day.

Contraceptive Pill/Oral Contraceptive

Contraceptive Pill/Oral Contraceptive

- ▶ Combined contraceptive pills/oral contraceptives (COCs) contain progestin and estrogen. COCs inhibit ovulation and follicular growth by reducing the amount of luteinizing hormone and follicle-stimulating hormone in the bloodstream.
- ▶ Progestin-only pills (POPs) are oral contraceptives that only contain one hormone, progestin. POPs are sometimes called the “mini-pill.” They may be prescribed for women who cannot take estrogen.



“Combined Birth Control Pills,” Mayo Clinic, 2017. www.mayoclinic.org/tests-procedures/combo-birth-control-pills/basics/definition/prc-20014056

Contraceptive Pill/Oral Contraceptive

- ▶ **How well does it work?**
 - ▶ COCs and POPs are 99% effective if used as directed. They are 91% effective with typical use.
- ▶ **How to use**
 - ▶ Take one pill at the same time every day.
- ▶ **How fast does it work?**
 - ▶ Depends on when the patient starts taking oral contraceptive:
 - ▶ For COCs: If taken within five days of the start of the patient's period, the pill is effective immediately. Otherwise, protection begins after seven days of taking the pill.
 - ▶ POPs: The pill can be taken at any time, and protection begins after 48 hours.
 - ▶ Patient should use backup contraception in the meantime to prevent unintended pregnancy.

Contraceptive Pill/Oral Contraceptive

- ▶ Benefits of COCs:
 - ▶ Reduces or prevents acne¹
 - ▶ Reduces or prevents iron deficiency¹
 - ▶ May reduce risk of or prevent endometrial and ovarian cancers¹
 - ▶ May reduce risk of or prevent serious infections in the ovaries, fallopian tubes and uterus¹
- ▶ Benefits of POPs:
 - ▶ May help manage rheumatoid arthritis, but more research is needed²
 - ▶ Safe for breastfeeding women³
- ▶ Benefits of POPs and COCs:
 - ▶ Reduce menstrual cramps¹
 - ▶ Lighten periods¹
 - ▶ Reduce risk of ectopic pregnancy¹

1. "How effective is the birth control pill?" Planned Parenthood, 2017. www.plannedparenthood.org/learn/birthcontrol/birth-control-pill/how-effective-is-the-birth-control-pill
2. Albrecht, K. Callhoff J., Buttgereit F., Association between the use of oral contraceptives and patient-reported outcomes in an early arthritis cohort. Arthritis Care and Research 2016; 68 (3):400-405.
3. "Minipill (progestin-only birth control)", Mayo Clinic, 2017. www.mayoclinic.org/tests-procedures/minipill/basics/why-its-done/prc-20012857

Counseling Points for COCs

- ▶ The pill works best when taken at the same time every day¹
- ▶ Patient can start a pack any day of the month. However, the start day will affect whether or not the patient needs to use backup contraception¹
- ▶ If the patient misses a pill, they should use backup contraception such as a condom or abstinence until they can speak with their health care provider¹
- ▶ COCs may affect bone mineral density in adolescents and young adults²

1. "Birth Control Pill," Planned Parenthood, 2017. www.plannedparenthood.org/learn/birth-control/birth-control-pill
2. Delia Scholes, Rebecca A. Hubbard, Laura E. Ichikawa, et al. Oral Contraceptive Use and Bone Density Change in Adolescent and Young Adult Women: A Prospective Study of Age, Hormone Dose, and Discontinuation, *The Journal of Clinical Endocrinology & Metabolism*, Volume 96 (1):2011; E1380-E1387.

Counseling Points for COCs

- ▶ Some drugs may lower effectiveness of COCs:
 - ▶ Penicillin-based antibiotics
 - ▶ Anti-retrovirals
 - ▶ Rifampin
 - ▶ Barbiturates
 - ▶ Primidone
 - ▶ Certain anticonvulsants
 - ▶ Phenytoin
 - ▶ Carbamazepine
 - ▶ Topiramate
 - ▶ Oxcarbazepine

Topics

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- ▶ **Non-Hormonal Contraceptive Options for Teens**
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Non-hormonal Contraceptive Methods

- ▶ Non-hormonal contraceptive methods (non-HCs):
 - ▶ Condoms
 - ▶ Female Condoms
 - ▶ Copper IUDs
 - ▶ Diaphragm
 - ▶ Cervical cap
 - ▶ Sponge
 - ▶ Spermicide

- ▶ Non-HCs are safe, but, with the exception of condoms* and copper IUDs, are generally not recommended as the first choice for teens.

*With or without spermicide

Condoms

Condoms

- ▶ Condoms (both male and female) are the only contraceptive method that also prevent HIV and other STIs.
- ▶ Teen males should use a condom every time they have sex, even when their partner is using another contraceptive method (except for female condoms).

Male Condom
(i.e., external condom)



Female Condom
(i.e., internal condom)



"Condom Effectiveness." CDC, 2017. www.cdc.gov/condomeffectiveness/index.html

Male Condoms (i.e., External Condom)

▶ How well does it work?

- ▶ Male condoms are 98% effective when used as directed.¹
- ▶ Male condoms are 82% effective with typical use.¹
- ▶ Condoms *must* be stored safely to ensure effectiveness. Condoms can become brittle and are more likely to break if they are not stored correctly.²

▶ How to safely store condoms

- ▶ Store condoms in a cool, dry space, such as a bathroom medicine cabinet.²
- ▶ Heat and friction can damage condoms:²
 - ▶ Do not expose condoms to heat or light.
 - ▶ Do not keep condoms in a back pocket, wallet or glovebox.

1. "How Effective Are Condoms?" Planned Parenthood, 2017. www.plannedparenthood.org/learn/birth-control/condom/how-effective-are-condoms

2. "Contraceptive Methods," CDC, 2017. www.cdc.gov/reproductivehealth/unintendedpregnancy/pdf/contraceptive_methods_508.pdf

Male Condoms (i.e., External Condoms)

▶ How to use

- ▶ A condom is rolled onto an erect penis before intercourse and blocks ejaculated semen from entering the body of a sexual partner.¹
- ▶ Gently pinch any remaining air out of the tip of the condom before sex.¹
- ▶ If the condom is not already lubricated in the package, apply a water-based lubricant. This may help prevent breakage and irritation, which might decrease the risk of disease transmission.²
 - ▶ Never use a lubricant that contains oils, fats or grease (e.g., petroleum jelly, baby oil, body lotion). They can cause the condom to tear.

▶ Most condoms are made from latex. Alternatives for those allergic to latex include:²

- ▶ Polyurethane plastic
- ▶ Polyisoprene (made from natural rubber)
- ▶ Lambskin (made from intestinal membrane of a lamb)

1. "Contraceptive Methods," CDC, 2017.
www.cdc.gov/reproductivehealth/unintendedpregnancy/pdf/contraceptive_methods_508.pdf

2. "Male Condoms and Sexually Transmitted Diseases," FDA, 2017.
www.fda.gov/forpatients/illness/hiv/aids/ucm126372.htm#handle

Female Condoms (i.e., Internal Condom)

- ▶ How well does it work?
 - ▶ Female condoms are 95% effective when used as directed.¹
 - ▶ Female condoms are 75 to 82% effective with typical use.¹
 - ▶ Do not use female and male condoms at the same time. The devices will not stay in place, reducing effectiveness.²
- ▶ How to safely store female condoms
 - ▶ Store female condoms in a cool, dry place.²
- ▶ How to use it
 - ▶ The female condom is a pouch made out of nitrile. It has flexible rings at each end.²
 - ▶ Just before vaginal intercourse, it is inserted deep into the vagina. The ring at the closed end holds the pouch in the vagina. The ring at the open end stays outside the vaginal opening during intercourse.²
 - ▶ Female condoms come pre-lubricated, but water-based lubricants can be added on the penis before and during sex as needed.¹
 - ▶ Do not reuse female condoms.¹

1. "Female Condoms," U.S. National Library of Medicine, MedlinePlus, 2017.

www.medlineplus.gov/ency/article/004002.htm

2. "Female Condom Use," CDC, 2017. www.cdc.gov/condomeffectiveness/Female-condom-use.html

Counseling Points on Non-Hormonal Contraceptives

- ▶ Suggest options for patients with latex allergies and cross sensitivities.
- ▶ Advise patients to check for condom breakage or other contraceptive failures.
- ▶ Discourage patients from reusing female and male condoms.
- ▶ Financial status should not prevent patients from practicing safe sex. Connect patients to resources that provide free non-HCs.

For more information on non-HCs, visit [cdc.gov/reproductivehealth/contraception/index.htm](https://www.cdc.gov/reproductivehealth/contraception/index.htm)

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Dual Protection

- ▶ **Dual protection** is the use of an internal or external condom, along with a method of birth control to protect against STIs and unintended pregnancies.¹
 - ▶ Birth control includes hormonal contraceptives (pills, injections, implements, etc.) and non-hormonal (copper) IUDs.
- ▶ Consistent dual protection is the optimal method of protection against both unintended pregnancy and STIs for sexually active people.¹
- ▶ Although dual method protection has increased over time, only 8.8% of youth in public or private schools in the U.S. (grades 9 through 12) reported using two methods during their last sexual encounter in 2015.²
- ▶ **Pharmacists should promote dual protection while counseling teens on birth control and when selling emergency contraception.**

1. Cates W Jr and Steiner MJ. "Dual Protection against unintended pregnancy and sexually transmitted infections: what is the best contraceptive approach?" *Sexually Transmitted Diseases*. 29(3):168-74; 2002

2. National YRBS, 2015

Special Contraceptive Considerations in Women Younger than 20

- ▶ Keep in mind that women younger than 20:
 - ▶ Are at an increased risk of STIs.¹
 - ▶ May have difficulty complying with the best practices for contraception use.¹
 - ▶ Are at a decreased risk of cardiovascular diseases, but may have other concurrent diseases:²
 - ▶ Diabetes mellitus
 - ▶ Inflammatory bowel disease
 - ▶ Cystic fibrosis
 - ▶ Renal disease
 - ▶ Anorexia nervosa
 - ▶ Migraines
 - ▶ Depression

1. "Staying Healthy and Preventing STDs," CDC, 2016. www.cdc.gov/std/life-stages-populations/stdfact-teens.htm
2. "Teens (Ages 12-19) Diseases and Conditions," DCD, 2016. www.cdc.gov/parents/teens/diseases_conditions.html

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Emergency Contraception (EC)

▶ What is it?

- ▶ EC is the only method of contraception that prevents pregnancy after sexual intercourse.¹
- ▶ There are two types of emergency contraceptive pills:¹
 - ▶ Progestin-only EC with levonorgestrel (e.g., Plan B, Take Action, Next Choice and My Way).
 - ▶ Ulipristal acetate (e.g., Ella)
- ▶ EC is NOT an abortion pill (e.g., Mifepristone or RU486).¹
- ▶ EC does NOT protect against STIs.¹
- ▶ EC is NOT a replacement for regular contraceptive pills.¹
- ▶ EC is safe for most teens.²

1. "Emergency Contraception," Princeton University, Office of Population Research, 2017.

<http://ec.princeton.edu/emergency-contraception.html>

2. "Emergency Contraception," Advocates for Youth, 2007.

www.advocatesforyouth.org/storage/advfy/documents/Factsheets/emergency%20contraception%20fsa.pdf

Emergency Contraception (EC)

▶ How does it work?

- ▶ EC works by the same mechanism of action as regular contraceptive pills.
- ▶ However, EC is less effective at preventing pregnancy than other forms of birth control that are used before or during sex.
- ▶ Levonorgestrel EC (i.e. Plan B) should be taken within 72 hours (three days) of unprotected sex
- ▶ Ulipristal acetate EC (i.e. Ella) should be taken within 120 hours (five days) of unprotected sex

EC Regimens

Progestin-only EC with levonorgestrel (e.g., Plan B, Take Action, Next Choice and My Way)

- ▶ No age restriction.
- ▶ No prescription needed.
- ▶ Reduces the risk of pregnancy by up to 95% if taken within 24 hours after unprotected sex.
- ▶ Can be taken up to five days after having unprotected sex:
 - ▶ If a woman waits 72 hours to take this type of EC, it reduces her risk of pregnancy by up to 89%.
 - ▶ Waiting longer than 72 hours greatly reduces the effectiveness of this type of EC.
- ▶ This type of EC may not be as effective for women who are overweight or obese.

EC Regimens

Ulipristal Acetate EC (e.g., Ella)

- ▶ No age restriction.
- ▶ Available by prescription only.
- ▶ Reduces the risk of pregnancy by up to 85% if taken within five days (120 hours) after unprotected sex.
- ▶ This type of EC may not be as effective for women who are overweight or obese.

Counseling Points for Plan B/Ella

- ▶ Does not prevent STI transmission.¹
- ▶ Patients should consider pregnancy if menstruation is delayed for more than one week of anticipated start date.¹
- ▶ Patients should contact a health care professional if vomiting occurs within **two** hours of taking progestin-only EC with levonorgestrel and within **three** hours of taking ulipristal acetate.¹
 - ▶ If the patient vomits, then they may not have absorbed the medication in the EC.²
- ▶ Patients should check the expiration date if purchasing for possible later use.¹
- ▶ Patients should avoid taking EC if they are already pregnant, think they may be pregnant or are breastfeeding.¹
- ▶ Patients should use a backup method of birth control after taking EC until they get their next period.²

1. "Levonorgestrel," U.S. National Library of Medicine, MedlinePlus, www.medlineplus.gov/druginfo/meds/a610021.html

2. "What is the ella morning-after pill?" Planned Parenthood, 2017. www.plannedparenthood.org/learn/morning-after-pill-emergency-contraception/whats-ella-morning-after-pill

Topics

- ▶ Hormonal Contraceptive Options for Teens
- ▶ Non-Hormonal Contraceptive Options for Teens
- ▶ Benefits of Dual Protection and Special Contraceptive Considerations
- ▶ Emergency Contraception (EC)
- ▶ **Expedited Partner Therapy (EPT)**
- ▶ HPV and the Gardasil Vaccine
- ▶ The Pharmacist's Role in Teen Sexual and Reproductive Health

Expedited Partner Therapy (EPT)

- ▶ A strategy for treating the sex partners of patients with an STI in order to reduce the risk of repeat STI.
- ▶ Legal in New York State (including NYC) for *Chlamydia trachomatis* (chlamydia) infection only.
- ▶ When treating a patient for chlamydia, the health care provider gives the patient medication or a prescription to deliver to their sex partner(s). Treatment is provided without an intervening evaluation of the partner.
- ▶ EPT is a common approach to partner treatment in NYC.
 - ▶ In NYC, approximately half of EPT is provided in the form of a prescription.

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Human Papilloma Virus (HPV)

- ▶ HPV is a sexually transmitted infection.
- ▶ There are more than 100 different strains or types of HPV.
- ▶ Both men and women are affected.
- ▶ HPV arises along the:
 - ▶ Genital area
 - ▶ Anus
 - ▶ Linings of vagina
 - ▶ Cervix or rectum
- ▶ High-risk HPV types:
 - ▶ Types 6 and 11, which cause 90% of genital warts
 - ▶ Type 16, which causes 95% of anal cancers
 - ▶ Types 16 and 18, which cause 70% of cervical cancers

Gardasil-9 Vaccine

- ▶ Covers nine virus types.
 - ▶ Types 6, 11, 16, 18, 31, 33, 45, 52 and 58
- ▶ Recommended for girls, women, boys and men from 9 to 26 years of age.
 - ▶ Helps protect girls and women against genital warts and cervical, vaginal, vulvar and anal cancers caused by these nine types of HPV.
 - ▶ Helps protect boys and men against anal cancer and genital warts caused by these nine types of HPV.
- ▶ Intramuscular injection administered according to a two or three-dose schedule depending on patient age.
- ▶ Side effects:
 - ▶ Nausea
 - ▶ Dizziness
 - ▶ Pruritus (i.e., itching)
 - ▶ Erythema (i.e., superficial reddening of the skin)
 - ▶ Injection site swelling

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- ▶ **The Pharmacist's Role in Teen Sexual and Reproductive Health**

The Pharmacist's Role in Unintended Teen Pregnancy and STI Prevention

- ▶ Provide educational materials (e.g., pamphlets, handouts with relevant websites and numbers) in the pharmacy waiting area.
 - ▶ Educational materials and any posters displayed should reflect the diversity of all teens.
 - ▶ Topics could include puberty, sexually transmitted infections, sexuality and contraception.
 - ▶ Materials should be provided in multiple languages when possible.
- ▶ Seek out free resources:
 - ▶ For FREE educational materials from the New York City Health Department, call 311. Materials are available in English, Spanish and many other languages.
 - ▶ For FREE condoms, call the condom distribution coordinator at 347 -396-7743 or call 311.
 - ▶ Download FREE posters and infographics at [cdc.gov/reproductivehealth/contraception/index.htm](https://www.cdc.gov/reproductivehealth/contraception/index.htm)
- ▶ Provide information about **local free sexual health clinic services**:
 - ▶ Example: Family Planning Benefit Program (FPBP) - a public health insurance program for New Yorkers who need family planning services, but may not be able to afford them.
health.ny.gov/health_care/medicaid/program/longterm/familyplanbenprog.htm

The Pharmacist's Role in Unintended Teen Pregnancy and STI Prevention

- ▶ Promote dual protection.
- ▶ Encourage partner communication.
- ▶ Recommend the “Sexual and Reproductive Health Youth-Friendly Pharmacy Curriculum” to other pharmacists.
 - ▶ Request that local pharmacy schools, state pharmacy board and pharmacy associations offer this curriculum.
- ▶ Sell teens complete and appropriate treatment regimens.
- ▶ Emphasize the importance of treatment compliance.

Key Points

- ▶ Discuss benefits of each contraceptive method with patient:
 - ▶ Which method fits the patient's lifestyle and ability to adhere to the regimen
 - ▶ Whether the method prevents STI transmission
 - ▶ The consequences of non-compliance
- ▶ Dual protection is the recommended contraceptive method:
 - ▶ Use of an internal or external condom, along with a method of birth control to protect against STIs and unintended pregnancies.
- ▶ Emergency contraception is an option after unprotected sex or birth control failure:
 - ▶ Emergency contraception is not a regular method of birth control.

Module 3 Quiz

Module 3 Quiz

1. Emergency contraception is only effective within 24 hours.
TRUE or FALSE
2. Paragard should be replaced every
a) 12 years b) 3 years c) 5 years d) 1-2 years
3. Condoms (external or internal) are the only contraceptive method that also prevent HIV and other STIs.
TRUE or FALSE
4. Emergency contraception is an abortion pill.
TRUE or FALSE