Emergency Contraception Facts for Family Planning Staff



What is Emergency Contraception?

Emergency contraception (EC) is used following unprotected or inadequately protected vaginal intercourse, when a contraceptive method has failed or is suspected of failing (i.e., condom breaks, two or more missed birth control pills) or following sexual assault. EC is available in different forms, including over-the-counter pills, prescription pills, and intrauterine devices (IUDs).

Types of Emergency Contraception

There are two categories of EC: emergency contraceptive pills and IUDs. EC in pill form is sometimes referred to as "the morning-after pill." Currently, there are three methods of EC approved as safe and effective by the FDA: oral levonorgestrel (progestin-only pill), oral pill containing ulipristal acetate, and combined hormonal contraceptive pills taken in a regimen different from daily contraception. Additionally, there are two methods that have been found to be safe and effective for use as emergency contraception, but that are not FDA-approved at this time. Researchers have found that the non-hormonal copper IUD is safe and effective for use as EC and that the levonorgestrel (LNG) 52 mg IUD is just as effective as the copper IUD for use as EC. Emergency contraceptive methods work via non-abortifacient mechanisms of action, and are ineffective after implantation.

Types of Emergency Contraceptive Pills

The **oral progestin-only pill** is the most frequently used EC method, and common brand names are Plan B One Step[™], My Way[™], or Next Choice[™]. A prescription is not needed to obtain this type of EC; it is available over-the-counter in all states. Information about laws and policies in each state can be found on the <u>Guttmacher Institute's website</u>. The single pill works primarily by preventing or delaying ovulation and by preventing fertilization by altering tubal transport of sperm and ova.¹ It is not effective once the process of implantation has begun.² Research shows that progestin-only pills do not prevent implantation, although this theoretical mechanism of action remains on the FDA-approved label despite substantial evidence it should be removed.³

The **oral pill containing ulipristal acetate** for EC is available by prescription and is known as ella®. This pill contains an anti-progestin medication that blocks the body from using the progesterone it makes naturally, thus preventing pregnancy by inhibiting or delaying ovulation.

The **Yuzpe method** is the oldest form of emergency contraception in the U.S.⁴ and is available by prescription. This method is dispensed in the form of multiple combined oral contraceptive pills. The best researched regimen consists of two tablets, each tablet containing 0.05 milligram (mg) of ethinyl estradiol and 0.50 mg of norgestrel, taken within 72 hours after unprotected intercourse; a second identical dose is to be taken 12 hours after the first dose. When used in this manner, the treatment is 74 percent effective in preventing pregnancy. This combined hormonal oral pill method of EC likely works by inhibiting or delaying ovulation. Combined oral contraceptive pills FDA approved for Yuzpe method use include: Ovral, Nordette, Levlen, Lo/Ovral, Triphasil, Tri-Levlen, and Ovrette.⁵

¹ United States Food & Drug Administration (FDA). FDA-Approved Drugs. Drug Databases. https://www.accessdata.fda.gov/scripts/cder/daf/

² DHHS U.S. Department of Health and Human Services. 1978. Code of Federal Regulations. 45CFR46.203. https://www.hhs.gov/ohrp/regulations-45-cfr-46/common-rule-subpart-b/index.html#46.203

³ American Society for Emergency Contraception (ASEC). June 2022. Mechanism of Action of Levonorgestrel Emergency Contraception Pills. https://www.americansocietyforec.org/_files/ugd/0cdab4_043f0fb9e84a4135a96c094ce126903f.pdf

⁴ Yuzpe AA, Thurlow HJ, Ramzy, I. et al.1974. Post coital contraception—a pilot study. Journal of Reproductive Medicine.13, 53–58 https://pubmed.ncbi.nlm.nih.gov/4844513/

⁵ Wertheimer, R. 2000. Emergency postcoital contraception. American Family Physician. 62(10):2287–2292. https://www.aafp.org/pubs/afp/issues/2000/1115/p2287.html

Combined hormonal emergency contraceptive pills have been widely available in the U.S. for over 50 years and are safe and effective in preventing pregnancy. They are not abortion pills. *EC pills do not interrupt or adversely impact an established pregnancy. They are sometimes confused with, but are not the same as, abortifacient medications, mifepristone or methotrexate, that end an established pregnancy.*

An established pregnancy as defined by the American College of Obstetricians and Gynecologists (ACOG) takes several days and is not completed until a fertilized egg is implanted in the lining of the uterus. A pregnancy is considered to be established only when the process of implantation is complete.⁶

Types of Emergency Contraceptive Intrauterine Devices (IUDs)

The **non-hormonal copper IUD**, also known as Paragard®, is the most effective form of emergency contraception, although not FDA-approved for use as EC. The copper IUD is highly effective for up to 7 days from unprotected intercourse and data are available to support its use through 10 days from unprotected intercourse. Although most guidelines recommend placing a copper IUD for EC within 5 days of unprotected intercourse, evidence suggests that a copper IUD is highly effective if placed at any time in the menstrual cycle. Research has confirmed that the copper IUD may remain in place for up to 12 years after insertion, continuing to prevent pregnancy. The contraceptive effectiveness of Paragard is enhanced by copper continuously released into the uterine cavity. Possible mechanisms of action by which copper enhances contraceptive efficacy include interference with sperm movement, viability, transport or fertilization, and prevention of implantation. It does not affect ovulation. 8

The **levonorgestrel (LNG) hormonal IUD** is not FDA-approved for use as EC. However, there is strong evidence that the levonorgestrel (LNG) IUD is just as effective when used for emergency contraception as the non-hormonal copper IUD. The LNG IUD, also known as Mirena® and Liletta®, is highly effective as EC for up to 5 days from unprotected intercourse. The LNG IUD may remain in place 8 years after insertion. It may work in several ways. It may thicken cervical mucus, thin the lining of the uterus, inhibit sperm movement, and reduce sperm survival. It may stop ovulation, but this is not the way it works in most cases. The LNG IUD delays follicular development when administered before the level of luteinizing hormone increases.

IUDs require a visit with a trained health care provider for insertion and removal. IUDs are effective for people of all ages and sizes, including adolescents and people who have never been pregnant. Evidence supports that Mirena® and Liletta® can be used as a quick-start method of contraception, meaning that the IUD can be placed at any day of the menstrual cycle, ¹⁰ and that use of a backup method is not needed after placement.

Visit rhntc.org for additional related tools and resources.

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 $[\]label{lem:contraceptive} \begin{tabular}{ll} American College of Obstetricians and Gynecologists. July 1998. Statement on Contraceptive Methods. $$\underline{$https://www.acog.org/clinical/clinical-guid-ance/committee-opinion/articles/2015/01/access-to-contraception}$$$

⁷ Robert A. Hatcher, Contraceptive Technology 21st Edition; page 106 (Atlanta: Managing Contraception, LLC, 2018).

⁸ FDA-Approved Drugs. Drug Databases.

⁹ Turok DK, Gero A, Simmons RG, et al. Levonorgestrel vs. copper intrauterine devices for emergency contraception. N Engl J Med 2021; 384:335–344. https://www.nejm.org/doi/full/10.1056/NEJMoa2022141