



## THE FACTS ON EMERGENCY CONTRACEPTION

*Despite the many highly effective birth control options women have to choose from, none are 100% perfect. And sometimes, mistakes happen – a condom breaks, a diaphragm slips, a woman forgets to take her pill. Or she has sex when she didn't plan to – or want to. Each year, there are about 3.1 million unintended pregnancies in the United States – just over half occur among women who are using a regular method of contraception.<sup>1</sup> Emergency contraception (EC) gives a woman a safe second chance to prevent pregnancy in the first few days after sex.*

### What is Emergency Contraception?

Emergency contraception is a safe, effective back-up birth control method that can prevent pregnancy after unprotected intercourse or when contraception fails. There are several forms of emergency contraception.

Current forms of FDA approved EC are **Plan B One-Step®**, **Next Choice™**, and **ella®**. Plan B One-Step and Next Choice are currently on the market. ella will be available within the fourth quarter of 2010. The copper IUD and contraceptive pills (containing either progestin alone or a combination of estrogen and progestin) have also been shown to be effective at preventing unintended pregnancy after un or under-protected sex.

- **Plan B One-Step and Next Choice are progestin-only (levonorgestrel) pills** and are effective at preventing pregnancy up to **3 days (72 hours)** after unprotected sex or contraceptive failure. Research shows continued, but declining levels of efficacy up to 120 hours for these products.<sup>2</sup> Both are available over-the-counter for consumers 17 years and older and prescription-only for women 16 years and younger. The sooner a woman takes either product, the better it works.
- **ella, containing ulipristal acetate** is effective up to **5 days (120 hours)** after un or under-protected sex and is a prescription-only product. ella has the same level of effectiveness over the 120 hrs, and is most effective during the time a woman has the greatest chance of becoming pregnant.

Emergency contraception provides no protection from HIV/AIDS or sexually transmitted infections. Emergency contraception, when used as directed, does not interrupt a pregnancy, and it will not work if a woman is already pregnant. Emergency contraceptive products can safely be used every time a woman has unprotected sex or experiences contraceptive failure. However, emergency contraceptive pills do not protect against future acts of unprotected sex and they are not as effective as other birth control methods. If you are sexually active and want to or need to keep from getting pregnant, you should talk to your health care provider about a more effective method that works for you.

## **Is EC the Same Thing as the “Morning-After Pill”?**

Yes. Because EC can help reduce the risk of pregnancy after sex, some people like to call it the “morning-after pill.” Labels for the FDA approved progestin-only products (Next Choice and Plan B One-Step) say EC should be used within 72 hours of unprotected sex or contraceptive failure, while ella can be used up to 120 hours after un or under-protected sex . However, there is no reason to delay treatment.

## **How Do Emergency Contraceptive Pills Work?**

All methods of EC work before the beginning of pregnancy, which is commonly defined as the implantation of a fertilized egg in the lining of a woman’s uterus; implantation typically begins five to seven days after fertilization.<sup>3</sup>

Progestin-only EC products like Next Choice and Plan B One-Step delay or inhibit ovulation (the release of the egg into the uterus).<sup>4</sup> These progestin-only products are more effective during the first half of the menstrual cycle, before ovulation has occurred.<sup>5</sup> Research suggests that progestin-only products might also prevent a fertilized egg from being implanted in the uterus by causing biochemical alterations in the lining of the uterus, which would impair its receptivity to the implantation of a fertilized egg.<sup>6</sup>

ella, which is effective any time during a woman’s cycle, delays ovulation by inhibiting the release of an egg into the uterus.

## **Is EC the Same Thing as the “Abortion Pill”?**

No. EC should not be confused with Mifeprex®, also known as RU-486. EC and Mifeprex® are different drugs. Although ulipristal acetate and mifepristone are both antiprogestins, they work differently. Ulipristal acetate, like other EC pills, helps to prevent pregnancy, while Mifeprex® terminates an early pregnancy.

## **How Should a Woman Take Emergency Contraceptives?**

Plan B One-Step consists of a single tablet containing 1.5 mg levonorgestrel (progestin). This single tablet should be taken as soon as possible within 72 hours of unprotected intercourse.

Next Choice packets consist of two tablets, each containing 0.75 mg levonorgestrel (progestin). The first tablet should be taken as soon as possible within 72 hours of unprotected intercourse the second tablet 12 hours later. Research shows that taking both pills at the same time (a total of 1.5mg), is as effective as two doses 12 hours apart.<sup>3</sup> Data also show that EC can still reduce the risk of pregnancy when taken on days 4 and 5,<sup>3</sup> but the sooner it is taken, the better it works.<sup>7</sup>

Ella, consists of one tablet containing 30 mg of ulipristal acetate. This single tablet should be taken as soon as possible within 120 hours of unprotected sex or contraceptive failure.

## What Are the Side Effects of FDA Approved Emergency Contraception Options?

Some women experience one or more side effects after taking emergency contraception. Side effects include nausea, vomiting, abdominal pain, fatigue, headache, dizziness, breast tenderness, and menstrual changes. No serious complications have been associated with Plan B One-Step or Next Choice. Although ella is a new drug compound it has been tested in over 2,700 women with no serious adverse side effects reported. Further, an expert panel of public health professionals reviewed ella, determining it to be a safe and effective emergency contraceptive product with no serious side effects.

## Where Can a Woman Get Emergency Contraceptives?

In all cases emergency contraception is kept behind pharmacy counters, requiring customers to request it from pharmacy staff. Women 17 and older must have proof of age to acquire Plan B One-Step or Next Choice without a prescription, while women 16 and younger need a prescription. Ella requires a prescription before purchase.

In a limited number of states, younger women will be able to obtain EC directly from a pharmacist without having to visit a clinic or health care provider first. In Alaska, California, Hawaii, Maine, Massachusetts, New Hampshire, New Mexico, Vermont, and Washington, there are collaborative drug therapy agreements between individual physicians and pharmacists to provide EC directly to those who need it.

Because progestin-only EC products like Plan B One-Step and Next Choice are more effective the earlier they are taken, experts recommend that women obtain emergency contraception in advance of needing it, and have it on hand in case a contraceptive fails or an accident happens.

*Last revised: August 2010*

## Resources

<sup>1</sup> Henshaw SK. Unintended pregnancy in the United States. *Family Planning Perspectives* 1998; 30: 24-29.

<sup>2</sup> Fine P, Mathe, H, Ginde S, Cullins V, Morfesis J, Gainer E. Ulipristal Acetate Taken 48-120 Hours After Intercourse for Emergency Contraception. *American College of Obstetricians and Gynecologists*. February 2010.

<sup>3</sup> The United States Code of Federal Regulations, Title 45, Part 46, Subpart B, Section 46.202, Subsection (f) states "Pregnancy encompasses the period of time from implantation until delivery."

<sup>4</sup> Marions L, et al. Effect of emergency contraception with levonorgestrel or mifepristone on ovarian function. *Contraception* 2004; 69: 373-377; Marions L, et al. Emergency contraception with mifepristone and levonorgestrel: mechanism of action. *Obstetrics and Gynecology* 2002; 100: 65-71; Hapangama D, et al. The effects of peri-ovulatory administration of levonorgestrel on the menstrual cycle. *Contraception* 2001; 63: 123-129; Durand, M et al. On the mechanisms of action of short-term levonorgestrel administration in emergency contraception. *Contraception* 2001; 64: 227-234.

<sup>5</sup> J and Raymond E. Emergency Contraception: A Last Chance to Prevent Unintended Pregnancy. August 2010.

<sup>6</sup> Croxatto HB, et al. Pituitary-ovarian function following the standard levonorgestrel emergency contraceptive dose or a single 0.75-mg dose given on the days preceding ovulation. *Contraception* 2004; 70: 442-450; Ortiz ME, et al. Postcoital administration of levonorgestrel does not interfere with post-fertilization events in the new-world monkey *Cebus apella*. *Human Reproduction* 2004; 19: 1352-1356; Muller AL, et al, Postcoital treatment with levonorgestrel does not disrupt postfertilization events in the rat. *Contraception* 2003; 67: 415-419.

<sup>7</sup> Piaggio, G et al, Timing off emergency contraception with levonorgestrel or the Yuzpe regimen. *The Lancet* 1999; 353:721.