

## Plan B One-Step Emergency Contraception

An emergency contraceptive pill (ECP), also known as post-coital contraception or the morning-after pill, is available at McKinley Health Center. This medication is called Plan B One-Step. Emergency contraceptive pills utilize a medication that is similar to a hormone produced by the ovaries. The hormone produced by the ovaries is progesterone and a similar component in Plan B One-Step is levonorgestrel (a progestin). Plan B, a two dose regimen, was approved by the FDA for use in the United States in 1999. Plan B One-Step, a one dose regimen, was approved by the FDA in 2009, and is approved for over-the-counter use in women over 17 years of age.

Plan B One-Step provides a significant decrease in the risk of pregnancy when taken within 3 days (72 hours) however recent research shows Plan B One-Step continues to provide some effectiveness when taken up to 5 days (120 hours). Consider the use of emergency contraception if any of the following have occurred:

- Consensual, unprotected vaginal intercourse
- Condom broke or came off
- Three or more hours late taking progesterone only pills (mini pill)
- Missed one or more birth control pills during week one of a 21 day or 28 day pill pack
- Missed three or more birth control pills during weeks two or three of a 21 day or 28 day pill pack
- Two or more days late starting new pill pack, vaginal ring or patch
- Nuvaring® has been out of the vagina for three hours or longer (weeks one, two or three)
- Patch (Ortho Evra) has been off 24 hours or longer (weeks one, two or three)
- Diaphragm slipped out of place
- Depo-Provera injection was more than 13 weeks ago
- On antibiotics (in the previous seven days) during your current cycle of pills, patch or ring

It is important to consider the use of emergency contraception if forced/nonconsensual, unprotected penetration of the vagina has occurred within the previous five days (120 hours). For your health and safety it is essential to confide in a health professional if forced or unwanted sexual contact occurred. Treatment to prevent sexually transmitted diseases is advised, and resources are available for emotional support.

### What Is a Normal Menstrual Cycle?

To make an informed decision regarding the need for emergency contraception, it helps to have an understanding of the normal menstrual cycle and its relationship to fertility. The degree of pregnancy risk depends on where you are in the menstrual cycle. Most women have a period every 26-35 days. It is normal for a menstrual cycle to vary slightly in length from month to month. Menstrual cycles have two phases. The first phase may vary from 13-20 days in length and ends when ovulation occurs. This phase varies from one woman to another and may also differ slightly from month to month. The second phase is about the same length in all women. Generally, after ovulation occurs, the menses will start in 14 days.

For the sake of simplicity, we will use a 28-day cycle to explain the pattern of ovulation. The first day of menstrual bleeding is counted as DAY ONE of the menstrual cycle. Menstrual bleeding usually lasts 3-5 days. By day seven, pituitary hormones begin to trigger the development of an egg in a follicle within the ovary. As a follicle ripens, it secretes estrogen, which begins to stimulate the development of a lining inside the uterus. Other pituitary hormones cause the egg to be released from the ovary (ovulation) on approximately day 14 of the cycle. For most women, ovulation does not cause any symptoms. Ovulation completes the first phase of the cycle. The egg travels through the fallopian tube toward the uterus. Simultaneously, during ovulation, the estrogen level drops and progesterone levels begin to rise. This causes additional changes in the uterine lining, preparing it for implantation should fertilization occur.

If sperm fertilizes the egg, it may implant in the thick, spongy lining that has been developing in the uterus. This may establish a pregnancy. If fertilization does not take place, the egg disintegrates within 2-3 days. The progesterone level drops as the egg disintegrates. Around days 23-25, the spongy uterine lining begins to break down and in a few days is shed from the uterus as the next menstrual period begins, completing the second phase of the menstrual cycle.

## **What Is The Risk of Pregnancy After Unprotected Intercourse?**

It is impossible to predict with accuracy the risk of pregnancy. Even when a woman usually has a predictable cycle, factors such as stress, illness, changes in exercise levels and travel can upset the ovulation pattern. In general, it is not likely for pregnancy to occur if intercourse takes place during the menstrual period.

Sperm can live inside the uterus and fallopian tubes for 2-7 days. Fertilization of an egg is more likely to happen if intercourse occurs before or during ovulation. Because the life span of an egg is only 24-72 hours, intercourse that occurs after ovulation is less likely to result in pregnancy. As a general guideline, for those with a menstrual cycle 26-35 days in length, the greatest risk of pregnancy exists from day eight through day 21.

## **How Does Plan B Work?**

Plan B One-Step works through delaying or preventing ovulation, by interfering with fertilization (inhibiting the movement of the egg or the sperm through the fallopian tube). The FDA package insert also states that Plan B One-Step may inhibit implantation by altering the lining of the uterus. It is not effective if the process of implantation has begun. Plan B One-Step will NOT cause a miscarriage. Plan B One-Step does not provide any protection or treatment against sexually transmitted diseases. Pregnancies occurring despite treatment do not have an increased risk of adverse outcome.

**Plan B One-Step should be taken as soon as possible after unprotected intercourse.**

## **How Effective Is It?**

Plan B One-Step may reduce the risk of pregnancy by 95% when taken within the first 24 hours after unprotected intercourse and by 61% when taken between 48-72 hours. Recent research indicates that taking Plan B One-Step between 72 and 120 hours after unprotected intercourse continues to provide some protection against unwanted pregnancy. Plan B One-Step is not as effective as using consistent contraception with each act of intercourse and should not be considered a routine contraceptive method. Plan B One-Step is effective only for this particular act of intercourse and does not provide any protection against pregnancy as a result of previous acts of unprotected intercourse and will not provide any contraceptive protection during the remainder of this menstrual cycle. It is very important to use a consistent method of birth control for the remainder of this cycle.

## **Who Should Not Take Plan B One-Step? What about Drug Interactions?**

Plan B One-Step should not be used if a woman is pregnant or suspects that she may already be pregnant. Plan B One-Step should also not be used if there is a history of allergy or hypersensitivity to any of the ingredients of Plan B One-Step. If a woman has a history of recent, abnormal vaginal bleeding that has not been evaluated, Plan B One-Step should not be used at this time.

No studies have been done on Plan B One-Step and the interaction with other medications. However, for women taking daily progestin-only birth control pills there is a theoretical decrease in the effectiveness of the birth control pill when a woman is on certain anti-seizure drugs (Dilantin, Mesantoin, Peganone, Felbatol, Tegretol, Phenobarbital), or on Rifampin, used to treat tuberculosis. No specific interactions have been noted with concurrent antibiotic use. It is not known whether the efficacy of Plan B One-Step is affected by any of these medications. Do not skip any dose of a regular medication in order to take Plan B One-Step. Women with diabetes may notice a brief change in blood sugar levels, but it would not be necessary to alter insulin levels.

## **What Are The Side Effects? How Will It Affect My Period?**

The manufacturer reports that nausea is the most common side effect; however, very few women have actually reported significant nausea or vomiting. Eating small frequent meals for the next 24 hours may help decrease these symptoms. Report any severe side effects to your health care provider.

Other side effects include fatigue, headache, abdominal pain or cramps, dizziness, breast tenderness, diarrhea and moodiness. These side effects would not be expected to last more than two days after taking Plan B One-Step.

Changes in the menstrual cycle can be expected. Some women will experience spotting a few days after taking Plan B One-Step. Because Plan B One-Step may delay ovulation, you may be at risk of pregnancy in the first few days after treatment. You should use an effective method of contraception for the remainder of this menstrual cycle and thereafter.

Women report that the menses may start a few days early or may be delayed a few days. The amount of menstrual flow may be either lighter or heavier than usual. A pregnancy test should be done if no period occurs within three weeks of using Plan B One-Step or if the menses is very light. Pregnancy tests are available in the Health Resource Centers at McKinley Health Center (Main Lobby – Information/HRC counter) and at the Illini Union, OASIS, Room 40, (lower level).

If for any reason medical care is needed before a normal period has occurred, the health care provider should be advised that emergency contraception has been used recently. The provider may wish to do a screening pregnancy test before prescribing certain medications or treatments. If there is a sudden onset of severe abdominal pain, medical care should be obtained immediately.

## Instructions

Plan B One-Step consists of only one pill. It should be taken as soon as possible (within 72 hours) with food.

If for some reason you take Plan B One-Step while you are on the active birth control pills, using the patch or ring, you should go ahead and restart your method the day after Plan B One-Step is taken.

You must use a back up method of birth control until you have taken seven consecutive days of birth control pills or seven days use of the ring, patch or Depo-Provera.

Information about the various methods of birth control is available on the McKinley web site ([www.mckinley.illinois.edu](http://www.mckinley.illinois.edu)), through the On-line Birth Control Education Class, in Women's Health and in the Health Resource Centers at McKinley Health Center (Main Lobby – Information/HRC counter) and at the Illini Union, OASIS, Room 40, (lower-level). Women's health exams and testing for sexually transmitted diseases are recommended and are available to students by appointments in the Women's Health Clinic of McKinley Health Center.

Women's Health walk-in hours for questions are 2:45 – 4:15 p.m., Monday – Friday.

## References

*FDA package insert, Plan B One-Step.*

*Hatcher, R.A., Trussel, J., Stewart, F., et al. (2011). Contraceptive Technology (19th Ed). New York: Irvington Publishers, Inc.*

*Hatcher RA, Ziemann M et al. Managing Contraception for Your Pocket. Tiger, Georgia: Bridging the Gap Foundation, 2010-2012.*

<http://www.planbonestep.com/>

*Trussell, J., Raymond, E.G., Cleland, K. Emergency Contraception: A Last Chance to Prevent Unintended Pregnancy. Office of Population Research, Princeton University. Feb, 2018.*

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.illinois.edu/>