

Depo-Provera[®] (DMPA)**What is Depo-Provera[®] IM and depo-subQ Provera?**

Depo-Provera[®] (DMPA) is a long-acting hormonal form of birth control. It contains medroxyprogesterone acetate, which is similar to the natural progesterone produced by the ovaries during the second half of the menstrual cycle. The intramuscular is given by injection (shot) in the buttock or upper arm muscle. The subcutaneous is given in the abdomen or thighs. Injections must be received on a regular basis every 12 weeks.

How effective is it?

DMPA is one of the most effective methods of hormonal birth control available. When injections are received every 12-13 weeks, with perfect use, the effectiveness rate is over 99%. With typical use, effectiveness is three pregnancies per 100 women.

How does it work?

DMPA works because it prevents the release of an egg from the ovary; thus there is nothing to be fertilized by the sperm and a pregnancy cannot occur. Cervical mucus is thickened and it also thins the lining of the uterus, which would make the uterus less hospitable to a fertilized egg should ovulation occur.

What are the side effects and risks of using DMPA?

DMPA, like all other medications, has many potential side effects. Each woman's response to the medication will differ, depending on her own body chemistry. It is impossible to predict who will or will not experience a certain effect. It is important to remember that once the medication is injected, side effects cannot be neutralized or reversed. Side effects include:

Bone Density - Women who use DMPA may lose significant bone mineral density. Bone loss is greater with increasing duration of use and may not be completely reversible. It is unknown if use of DMPA during adolescence or early adulthood, a critical period of bone development, will reduce peak bone mass and increase the risk of osteoporotic fracture in later life. DMPA should be used as a long-term birth control method (e.g., longer than two years) only if other birth control methods are inadequate.

Smoking may further decrease the levels of calcium stored in the bone. It is very important that a woman's diet contain adequate calcium intake (1200-1500 mg per day). Although there are no studies addressing whether or not calcium and vitamin D may lessen bone marrow density (BMD) loss in women using DMPA, all patients should have adequate calcium and vitamin D intake. Calcium supplements may be used if one cannot attain the recommended dietary intake. Talk to a registered dietitian or your provider if you have any questions about calcium supplements.

Menstrual Changes - This is the most common side effect experienced. The amount of bleeding may vary from irregular or unpredictable spotting and light bleeding to no bleeding at all. With increasing duration of use, frequency and length of bleeding episodes usually decrease. In clinical studies, 40% of the women reported no menstrual bleeding after one year of use. Occasionally a woman will experience daily bleeding or bleeding may be heavier than a usual period, and this should be reported to the health care clinician. This side effect is related to the effect of the DMPA on the ovaries and uterine lining.

Depression – DMPA may cause moodiness and feelings of depression. This may be worse in women who have had depression in the past and may make it more difficult to treat active depression. If a woman is on antidepressant medications, she should discuss this carefully with all of her health care providers.

Weight Gain – Weight gain is common in many women on medroxyprogesterone acetate, however this effect is not consistent for all women. The average weight gain is approximately 3½ - 5 pounds in the first year and eight pounds after two years of use. A healthy diet and regular exercise will help decrease weight gain.

Other Effects – Other side effects that may occur include; headaches, dizziness, acne, abdominal/pelvic pain or discomfort, nervousness, decreased libido, acne, injection site reactions and fatigue. If you experience any of these side effects or others that you think may be related to the DMPA, you should contact your health care clinician.

What about the ability to become pregnant at a later time?

These effects on the ovaries and uterus are reversible and regular menstrual cycles usually return 3-10 months after the last injection. Pregnancy will generally occur within 12-18 months after discontinuing DMPA injections. The length of time DMPA is used for contraception has no effect on how long it takes to become pregnant. It is recommended that injections be discontinued one year before a pregnancy is desired. If pregnancy occurs 1-2 months after a medroxyprogesterone acetate injection, the newborn may be at an increase risk of low birth weight and in turn, an increased risk of death. Physical abnormalities have been reported with the use of DMPA in the first trimester of pregnancy.

What are the benefits of DMPA?

- Provides safe, long acting, highly effective contraception without requiring a woman to think about her birth control method on a daily basis or at the time of intercourse.
- Offers convenience and privacy.
- Does not contain estrogen; estrogen is the other hormone found in combination birth control and there are women who, for medical reasons, cannot take medications containing estrogen; has no effect on blood clotting.
- Is reversible.
- Can be used by nursing mothers without impacting milk supply when initiated at least six weeks after nursing begins.
- May decrease pain associated with ovulation, menstruation and endometriosis.
- Decreases risk of endometrial cancer and ovarian cancer.
- Has no demonstrated interactions with antibiotics and most other medications, including anti-seizure medications except aminoglutethimid, used in selected cases of adrenal problems.

Note: DMPA does not provide any protection against sexually transmitted infection (STI), including gonorrhea, chlamydia, genital herpes, genital warts, syphilis, hepatitis, and HIV. Women are urged to use condoms consistently to decrease risk of STI transmission.

Are there women who should not use DMPA?

Each woman should be evaluated individually. Determining factors include past medical history, family history and findings of a physical exam. A woman should not receive a DMPA injection if she:

- Thinks she might be pregnant.
- Has had vaginal bleeding without a known cause and has not been medically evaluated.
- Is actively receiving treatment for, or has a history of, breast cancer.
- Has a known allergy to medroxyprogesterone acetate or any of its other ingredients.
- Is receiving treatment for an active blood clot, or current or past history of a thromboembolic disorders, or cerebral vascular disease.
- Has significant liver disease.

It is also important to tell your health care clinician if you have a history of other health problems such as:

- Additional risk factors for osteoporosis including metabolic bone disease, chronic alcohol or tobacco use, anorexia nervosa, a strong family history of osteoporosis, or chronic use of drugs that can reduce bone mass, such as anticonvulsants or corticosteroids
- Blood clots in your legs, lungs or eyes
- Heart attack or stroke
- Migraine headaches
- Depression
- Irregular menstrual periods
- Seizures
- Diabetes
- High blood pressure
- Kidney or liver disease
- Abnormal breast exams
- Asthma
- Regular use of prescription or over-the-counter medications.

When do I need to repeat my injection?

When you receive the first injection, you will be given a date 12 weeks later. That is the date your next injection is due. If necessary you may receive the injection up to 14 days early or up to seven days late. However, if you have not received your injection within 13 weeks after the last injection, you must immediately begin using an alternative method of birth control or abstain from intercourse. Pregnancy testing will be required before you can receive another DMPA injection.

To schedule an appointment for a physical exam evaluation for DMPA use, or to receive a DMPA injection, you may call 333-2700 and select Women's Health.

Reference

Depo-Provera[®] Contraceptive Injection Patient Information; Pharmacia & UpJohn Company, 2007 Hatcher, RA et, al., Contraceptive Technology. (19th ed) Ardent Media Inc. New York. 2007

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.uiuc.edu>