

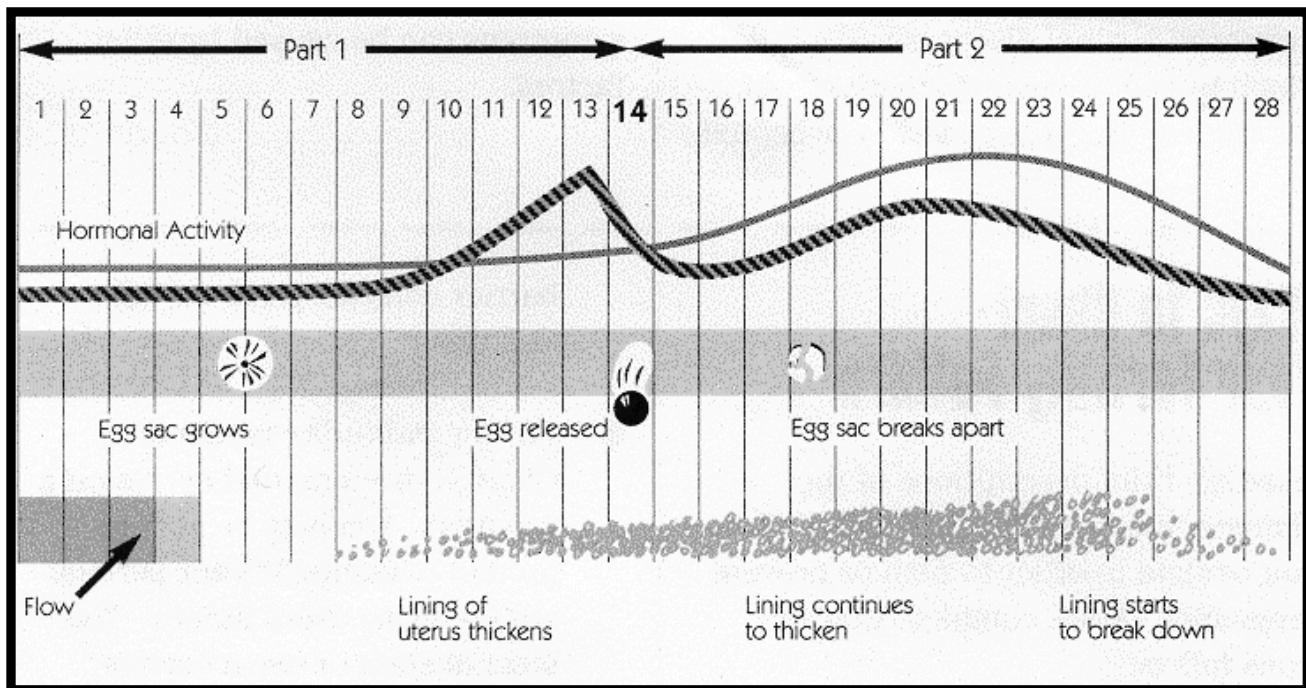
Irregular Menses

What do I need to know about normal menstrual cycles?

The menstrual cycle is the process that prepares the uterus for pregnancy. If fertilization of an egg does not occur, menses (the period) will begin. Females usually begin to have periods around age 12 (menarche) and stop having periods around age 50 (menopause). The **average** length of the menstrual cycle is 28 days, however in reality the normal menstrual cycle may vary in length from 26-35 days. Menstruation (bleeding) usually lasts 3-5 days. Menstrual cycles have two phases. The first, or proliferative phase, may vary from 13-20 days and ends when ovulation occurs. This phase varies from one woman to another and may also differ from month to month. The second, or secretory phase, begins after ovulation and ends when the period starts. This phase generally lasts 14 days for all women.

What happens in the body during the menstrual cycle?

Menstruation is controlled by a complex series of hormonal interactions between the thyroid, adrenal and pituitary glands, hypothalamus and the ovaries. For simplicity we will use an average 28-day cycle to explain the sequence of events that occur during the menstrual cycle. The first day of bleeding is counted as day one. By day seven, pituitary hormones have begun to trigger the development of an egg in the ovary. Estrogen secreted by the developing egg begins to stimulate the development of the uterine lining. When the egg approaches maturity, the ovary releases a burst of estrogen and progesterone. Other pituitary hormones cause the mature egg to be released from the ovary (ovulation) about day 14. A woman is usually unable to tell that ovulation has occurred. Simultaneously, during ovulation, the estrogen levels drop and progesterone levels begin to rise. The egg travels through the fallopian tube toward the uterus. If fertilization does not take place, the egg disintegrates within 2-3 days and the progesterone level drops. The drop in progesterone causes the uterine lining to begin breaking down on days 23-25 and a few days later bleeding starts as the lining is shed from the uterus.



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What causes periods to change or stop?

Menstrual period changes are usually a symptom of some underlying physical or hormonal imbalance. Changes in the amount or timing of hormones released by the thyroid, adrenal and pituitary glands, or hypothalamus may cause the ovary to delay or skip ovulation. Without ovulation a period will not occur. However the same changes in hormones may trigger bleeding at abnormal times (in the middle of a cycle or several weeks late) or in abnormal amounts (very light or very heavy).

One of the most common causes of anovulation (failure to ovulate) is body weight. Low body weight may cause a prolonged absence of periods. Excessive body weight tends to cause abnormal bleeding. Sudden changes in exercise levels or in body weight may cause temporary changes in bleeding patterns.

Emotional stress and physical illness are also common causes of menstrual irregularities although the menstrual changes may not occur at the time of the perceived stress. Prescribed medications and herbal preparations may also affect menstrual patterns by changing the interaction and transmission of the body's natural hormones. Occasionally the thyroid, pituitary or adrenal gland may malfunction and produce too little or too much hormone. Abnormal bleeding can also be caused by physical changes in the uterus or ovaries, such as abnormal development of tissue in the uterine lining or muscle, or ovarian cysts. Pregnancy or infection may also cause spotting or bleeding to occur.

How are irregular periods evaluated?

The initial evaluation will include a review of your personal medical and family history and a detailed review of your menstrual and sexual history. Report any other physical symptoms (sudden changes in weight or body hair, nipple discharge, fatigue, mood changes, etc.) that you may be experiencing to your health care provider. The physical exam will usually include measurement of your blood pressure and body weight. The health care provider may also palpate (feel) the thyroid gland in your neck, examine your heart and lungs, perform a breast exam, palpate the abdomen and do a vaginal and internal pelvic exam. Depending on the medical history and findings of the physical exam several blood tests may be ordered. An ultrasound study of your uterus and ovaries may also be ordered. An ultrasound study provides pictures of the internal organs by recording the patterns of sound waves as they reflect off the uterus and ovaries. It is not a painful test.

How are irregular periods treated?

Immediate treatment will usually involve the use of the hormones, estrogen and progesterone. A short course of progesterone is often prescribed if there has been a prolonged absence of periods. When the prescription is completed, a period will usually occur within two – three weeks. If there has been very irregular spotting or excessive bleeding birth control pills containing both hormones may be prescribed. This will usually stop the bleeding within a few days. Your health care provider may recommend that birth control pills be continued for a few months.

Additional treatment will be directed toward a specific diagnosis if the physical exam and test results identify a cause. This may mean addressing weight issues, changing exercise patterns and eating habits, or taking medication to control abnormal thyroid, pituitary or adrenal function. Sometimes, no specific cause can be identified. As long as a thorough evaluation has ruled out serious illness, not finding a specific cause can be reassuring. Treatment can then be directed at controlling the symptoms.

Will my irregular menstrual cycles affect my fertility?

Without ovulation, a woman cannot become pregnant. Sometimes factors affecting the menses disappear later in life. For example, if body weight is related to the irregular periods, and weight returns to a normal range, the menses may spontaneously become more regular and fertility will be normal. If menses are persistently irregular, fertility medications may be used to regulate the menstrual cycle and achieve conception.

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>