

## Diseases and Conditions

# Menopause

By Mayo Clinic Staff

Menopause is defined as occurring 12 months after your last menstrual period and marks the end of menstrual cycles. Menopause can happen in your 40s or 50s, but the average age is 51 in the United States.

Menopause is a natural biological process. Although it also ends fertility, you can stay healthy, vital and sexual. Some women feel relieved because they no longer need to worry about pregnancy.

Even so, the physical symptoms, such as hot flashes, and emotional symptoms of menopause may disrupt your sleep, lower your energy or — for some women — trigger anxiety or feelings of sadness and loss.

Don't hesitate to seek treatment for symptoms that bother you. Many effective treatments are available, from lifestyle adjustments to hormone therapy.

In the months or years leading up to menopause (perimenopause), you might experience these signs and symptoms:

- Irregular periods
- Vaginal dryness
- Hot flashes
- Night sweats
- Sleep problems
- Mood changes
- Weight gain and slowed metabolism
- Thinning hair and dry skin
- Loss of breast fullness

It's possible, but very unusual, to menstruate every month right up to your last period. More likely, you'll experience some irregularity in your periods.

Skipping periods during perimenopause is common and expected. Often, menstrual periods will occur every two to four months during perimenopause, especially one to two years before menopause. Despite irregular periods, pregnancy is possible. If you've skipped a period but aren't sure you've started the menopausal transition, you may want to determine whether you're pregnant.

## When to see a doctor

Starting at perimenopause, schedule regular visits with your doctor for preventive health care and any medical concerns. Continue getting these appointments during and after menopause.

Preventive health care can include recommended screenings at menopause, such as a colonoscopy, mammography, lipid screening, thyroid testing if suggested by your history, and breast and pelvic exams.

Always seek medical advice if you have bleeding from your vagina after menopause.

Menopause can result from:

- **Natural decline of reproductive hormones.** As you approach your late 30s, your ovaries start making less estrogen and progesterone — the hormones that regulate menstruation — and your fertility declines.

In your 40s, your menstrual periods may become longer or shorter, heavier or lighter, and more or less frequent, until eventually — on average, by age 51 — you have no more periods.

- **Hysterectomy.** A hysterectomy that removes your uterus but not your ovaries (partial hysterectomy) usually doesn't cause immediate menopause. Although you no longer have periods, your ovaries still release eggs and produce estrogen and progesterone.

But surgery that removes both your uterus and your ovaries (total hysterectomy and bilateral oophorectomy) does cause menopause, without any transitional phase. Your periods stop immediately, and you're likely to have hot flashes and other menopausal signs and symptoms, which can be severe, as these hormonal changes occur abruptly rather than over several years.

- **Chemotherapy and radiation therapy.** These cancer therapies can induce menopause, causing symptoms such as hot flashes during or shortly after the course of treatment. The halt to menstruation (and fertility) is not always permanent following chemotherapy,

so birth control measures may still be desired.

- **Primary ovarian insufficiency.** About 1 percent of women experience menopause before age 40 (premature menopause). Menopause may result from primary ovarian insufficiency — when your ovaries fail to produce normal levels of reproductive hormones — stemming from genetic factors or autoimmune disease. But often no cause can be found. For these women, hormone therapy is typically recommended at least until the natural age of menopause in order to protect the brain, heart and bones.

After menopause, your risk of certain medical conditions increases. Examples include:

- **Heart and blood vessel (cardiovascular) disease.** When your estrogen levels decline, your risk of cardiovascular disease increases. Heart disease is the leading cause of death in women as well as in men. So it's important to get regular exercise, eat a healthy diet and maintain a normal weight. Ask your doctor for advice on how to protect your heart, such as how to reduce your cholesterol or blood pressure if it's too high.
- **Osteoporosis.** This condition causes bones to become brittle and weak, leading to an increased risk of fractures. During the first few years after menopause, you may lose bone density at a rapid rate, increasing your risk of osteoporosis. Postmenopausal women with osteoporosis are especially susceptible to fractures of their hips, wrists and spine.
- **Urinary incontinence.** As the tissues of your vagina and urethra lose elasticity, you may experience frequent, sudden, strong urges to urinate, followed by an involuntary loss of urine (urge incontinence), or the loss of urine with coughing, laughing or lifting (stress incontinence). You may have urinary tract infections more often.

Strengthening pelvic floor muscles with Kegel exercises and using a topical vaginal estrogen may help relieve symptoms of incontinence.

- **Sexual function.** Vaginal dryness from decreased moisture production and loss of elasticity can cause discomfort and slight bleeding during sexual intercourse. Also, decreased sensation may reduce your desire for sexual activity (libido).

Water-based vaginal moisturizers and lubricants may help. Choose products that don't contain glycerin because women who are sensitive to this chemical may experience burning and irritation. If a vaginal lubricant isn't enough, many women benefit from the use of local vaginal estrogen treatment, available as a vaginal cream, tablet or ring.

- **Weight gain.** Many women gain weight during the menopausal transition and after menopause because metabolism slows. You may need to eat less and exercise more, just to maintain your current weight.

Your first appointment will likely be with either your primary care provider or a gynecologist.

## What you can do

Because appointments can be brief, it's a good idea to prepare in advance:

- **Keep track of your symptoms.** For instance, make a list of how many hot flashes you experience in a day or week and note how severe they are.
- **Make a list of any medications, herbs and vitamin supplements you take.** Include the doses and how often you take them.
- **Have a family member or close friend accompany you, if possible.** You may be given a lot of information at your visit, and it can be difficult to remember everything.
- **Take a notebook or notepad with you.** Use it to note important information during your visit.
- **Prepare a list of questions to ask your doctor.** List your most important questions first.

Some basic questions to ask include:

- What kind of tests might I need, if any?
- What treatments are available to minimize my symptoms?
- Is there anything I can do to relieve my symptoms?
- What steps can I take to maintain my health?
- Are there any alternative therapies I might try?
- Do you have any printed material or brochures I can take with me?
- What websites do you recommend?

In addition, don't hesitate to ask questions at any time during your appointment.

## What to expect from your doctor

Some questions your doctor might ask include:

- Are you still having periods?
- When was your last period?
- How often do you experience bothersome symptoms?
- How uncomfortable do your symptoms make you?
- Does anything seem to improve your symptoms?
- Does anything make your symptoms worse?

Signs and symptoms of menopause are usually enough to tell most women that they've started the menopausal transition. If you have concerns about irregular periods or hot flashes, talk with your doctor. In some cases, further evaluation may be recommended.

Tests typically aren't needed to diagnose menopause. But under certain circumstances, your doctor may recommend blood tests to check your level of:

- **Follicle-stimulating hormone (FSH) and estrogen (estradiol)**, because your FSH levels increase and estradiol levels decrease as menopause occurs
- **Thyroid-stimulating hormone (TSH)**, because an underactive thyroid (hypothyroidism) can cause symptoms similar to those of menopause

Menopause requires no medical treatment. Instead, treatments focus on relieving your signs and symptoms and preventing or managing chronic conditions that may occur with aging. Treatments may include:

- **Hormone therapy.** Estrogen therapy remains, by far, the most effective treatment option for relieving menopausal hot flashes. Depending on your personal and family medical history, your doctor may recommend estrogen in the lowest dose needed to provide symptom relief for you. If you still have your uterus, you'll need progestin in addition to estrogen. Estrogen also helps prevent bone loss. And hormone therapy may benefit your heart if started within five years after your last menstrual period.
- **Vaginal estrogen.** To relieve vaginal dryness, estrogen can be administered directly to the vagina using a vaginal cream, tablet or ring. This treatment releases just a small amount of estrogen, which is absorbed by the vaginal tissues. It can help relieve vaginal dryness, discomfort with intercourse and some urinary symptoms.
- **Low-dose antidepressants.** Certain antidepressants related to the class of drugs called selective serotonin reuptake inhibitors (SSRIs) may decrease menopausal hot flashes. A low-dose antidepressant for management of hot flashes may be useful for women who can't take estrogen for health reasons or for women who need an antidepressant for a mood disorder.
- **Gabapentin (Neurontin).** Gabapentin is approved to treat seizures, but it has also been shown to help reduce hot flashes. This drug is useful in women who can't use estrogen therapy and in those who also have migraines.
- **Medications to prevent or treat osteoporosis.** Depending on individual needs, doctors may recommend medication to prevent or treat osteoporosis. Several medications are available that help reduce bone loss and risk of fractures.

Before deciding on any form of treatment, talk with your doctor about your options and the risks and benefits involved with each. Review your options yearly, as your needs and treatment options may change.

Fortunately, many of the signs and symptoms associated with menopause are temporary. Take these steps to help reduce or prevent their effects:

- **Cool hot flashes.** Dress in layers, have a cold glass of water or go somewhere cooler. Try to pinpoint what triggers your hot flashes. For many women, triggers may include hot beverages, caffeine, spicy foods, alcohol, stress, hot weather and even a warm room.
- **Decrease vaginal discomfort.** Use over-the-counter, water-based vaginal lubricants (Astroglide, K-Y jelly, others) or moisturizers (Replens, others). Choose products that don't contain glycerin, which can cause burning or irritation in women who are sensitive to that chemical. Staying sexually active also helps by increasing blood flow to the vagina.
- **Get enough sleep.** Avoid caffeine, which can make it hard to get to sleep, and avoid drinking too much alcohol, which can interrupt sleep. Exercise during the day, although not right before bedtime. If hot flashes disturb your sleep, you may need to find a way to manage them before you can get adequate rest.
- **Practice relaxation techniques.** Techniques such as deep breathing, paced breathing, guided imagery, massage and progressive muscle relaxation can help relieve menopausal symptoms. You can find a number of books, CDs and online offerings on different relaxation exercises.
- **Strengthen your pelvic floor.** Pelvic floor muscle exercises, called Kegel exercises, can improve some forms of urinary incontinence.
- **Eat a balanced diet.** Include a variety of fruits, vegetables and whole grains. Limit saturated fats, oils and sugars. Ask your provider if you need calcium or vitamin D supplements to help meet daily requirements.
- **Don't smoke.** Smoking increases your risk of heart disease, stroke, osteoporosis, cancer and a range of other health problems. It may also increase hot flashes and bring on earlier menopause.
- **Exercise regularly.** Get regular physical activity or exercise on most days to help protect against heart disease, diabetes, osteoporosis and other conditions associated with aging.

Many approaches have been promoted as aids in managing the symptoms of menopause, but few of them have scientific evidence to back up the claims. Some complementary and alternative treatments that have been or are being studied include:

- **Plant estrogens (phytoestrogens).** These estrogens occur naturally in certain foods. There are two main types of phytoestrogens — isoflavones and lignans. Isoflavones are found in soybeans, chickpeas and other legumes. Lignans occur in flaxseed, whole grains, and some fruits and vegetables.

Whether the estrogens in these foods can relieve hot flashes and other menopausal symptoms remains to be proved, but most studies have found them ineffective. Isoflavones have some weak estrogen-like effects, so if you've had breast cancer, talk to your doctor before supplementing your diet with isoflavone pills.

- **Bioidentical hormones.** The term "bioidentical" implies the hormones in the product are chemically identical to those your body produces. However, compounded bioidentical hormones are not regulated by the Food and Drug Administration (FDA), so quality and risks could vary. But there are many FDA-approved bioidentical formulations available in a variety of strengths at the pharmacy — talk

with your doctor to see if any of these may be a good option for you.

- **Black cohosh.** Black cohosh has been popular among many women with menopausal symptoms. But there's little evidence that black cohosh is effective, and the supplement can be harmful to the liver.
- **Yoga.** Some studies show that yoga may be effective in decreasing the number of hot flashes in perimenopausal women. Tai chi and qi gong, which are a series of slow movements and meditation, may produce similar results. It's best to take a class to learn how to perform postures and proper breathing techniques.
- **Acupuncture.** Acupuncture may have some temporary benefit in helping to reduce hot flashes.

You may have heard of — or even tried — other dietary supplements, such as red clover, kava, dong quai, DHEA, evening primrose oil and wild yam (natural progesterone cream). Scientific evidence on effectiveness is lacking, and some of these products may be harmful.

Talk with your doctor before taking any herbal or dietary supplements for menopausal symptoms. The FDA does not regulate herbal products, and some can be dangerous or interact with other medications you take, putting your health at risk.

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