Postmenopausal Health

Most women who read this publication are interested in the issues surrounding perimenopause. However, the time after the menopause transition (postmenopause) must be understood as well. Decisions made at perimenopause or when induced menopause occurs affect a woman's health for the rest of her life.

After menopause, women may experience changes due to aging that may or may not be related to declining hormone levels. These changes may include serious health conditions such as heart disease, osteoporosis, and cancer. It is best to determine risks for developing these diseases as early as possible, so that preventive strategies can be employed.

Heart Disease

Many women think of heart disease as a man's disease. In reality, heart disease is the number-one killer of women in North America. After age 55, more than half of all deaths in women are caused by cardiovascular disease. While a man's risk for heart disease increases significantly after age 45, a woman's risk increases after menopause, whatever her age.

There is no evidence of a direct link between a woman's internal estrogen levels and heart disease. Nevertheless, coronary heart disease rates in postmenopausal women are two to three times higher than those in premenopausal women the same age, leading some to suggest that the body's estrogen provides some protective benefits. A careful assessment of a woman's heart disease risk factors is very important at menopause.

Women who experience premature menopause, natural or induced, may have an even greater risk for heart disease.

Heart disease is often detected later in women than in men because women's symptoms can be different than men's. Confusion also exists because chest pain without heart disease is very common in younger women. However, as women age, chest pain is more likely to be related to heart disease.

Studies have identified several factors that increase a woman's risk for heart disease (see Box on page 27). The higher the risk, the more aggressive the preventive strategy should be.

Heart disease and cardiovascular disease are umbrella terms used to describe many conditions related to the circulatory system, both inside and outside the heart. Heart health refers to the health of the entire cardiovascular system, not just the heart itself.

Coronary arteries supply the heart muscle with nutrients and oxygen. Coronary artery disease (sometimes called coronary heart disease) refers to damaged or diseased blood vessels that supply blood to the heart. It is the most common form of heart disease. Coronary artery disease is caused by the build-up of fatty deposits (plaque) in the lining of coronary blood vessels, causing reduced blood flow. When one of these arteries is completely blocked, depriving the heart muscle of oxygen, a heart attack occurs.

Outside the heart, diseased blood vessels can cause adverse conditions such as stroke, high blood pressure, and poor circulation, which can lead to difficulty walking and even to loss of limbs.

Maintaining Heart Health

While some risk factors cannot be changed, others can be controlled or modified to create a more heart-healthy lifestyle. The following are some risk factors that can be changed.

Don't smoke. Of all the lifestyle factors that can be changed, smoking cessation has the greatest impact on saving lives. Smokers are considerably more likely to have a heart attack than nonsmokers. But there's good news. When a woman stops smoking, no matter how long or how much she smoked, her risk of heart disease drops rapidly. There are many other good reasons not to smoke, including increased vitality, improved appearance, and decreased risk of lung disease.

Exercise regularly. A sedentary lifestyle of physical inactivity is almost as great a risk factor for heart disease as smoking because of diminished circulation and weight gain.

Maintain healthy weight or lose weight if overweight. Women who keep their weight at recommended levels have up to 50% less risk for heart disease. Women who are significantly overweight can reduce health risks substantially by losing 10% of their weight.

Reduce stress. A stressful lifestyle increases risk of heart disease and many other health problems. Exercise, meditation, and relaxation techniques can significantly reduce stress.

Control blood pressure. High blood pressure (hypertension) is defined as an arm cuff reading greater than 140/90 mm Hg. It is preferable to keep blood pressure below that level. Even mild elevations can double the risk of stroke or heart attack. High blood pressure becomes more common with aging. In fact, more than half of all women over age 65 are affected.

Black women are especially susceptible. Regular testing is important because high blood pressure rarely causes symptoms.

High blood pressure can be controlled by eating a healthy diet, limiting the intake of salt and alcohol, exercising on a regular basis, and reducing stress. Controlling weight is also important; losing just 5 to 10 pounds (2.5 to 4.5 kg) often brings blood pressure down to normal. If these measures alone fail to control blood pressure, several prescription medications are available to enhance the beneficial effects of these lifestyle modifications.

Control cholesterol. Abnormal levels of cholesterol in the blood can cause a build-up of plaque on the inner walls of the arteries that supply blood to the heart and the rest of the body. This is called atherosclerosis or hardening of the arteries. Plaque slows blood flow and can block the vessel entirely. If this happens to a blood vessel in the heart, a heart attack can occur. If this happens to a blood vessel in the brain, a stroke can occur.

Bringing cholesterol levels to within normal limits has an enormous impact on heart disease risk. Total cholesterol should be less than 200 mg/dL (5.17 mmol/L). Other goals include maintaining high levels of high-density lipoprotein cholesterol (HDL, the "good cholesterol") and low levels of low-density lipoprotein cholesterol (LDL, the "bad cholesterol"). Target levels for HDL are at least 40 mg/dL (1.03 mmol/L); for LDL, optimal levels are less than 100 mg/day (2.59 mmol/L).

Cholesterol-healthy tips include eating food with little or no cholesterol or animal fat and avoiding hydrogenated oil and trans-fatty acids found in foods and prepared foods with a long shelf-life. Exercising on a regular basis and controlling weight are also beneficial.

Heart Disease Risk Factors for Women

- Advancing age, especially after 65
- Black race/ethnicity
- Cigarette smoking
- Physical inactivity
- High blood pressure
- Abnormal cholesterol levels
- Stress
- Diabetes
- Drinking more than three alcoholic beverages daily
- Family history: A close blood relative who had a stroke; a father or brother who had a heart attack before age 55; a mother or sister who had a heart attack before age 65
- Weight more than 20% over ideal
- Premature menopause, especially if reached before 35

When diet and exercise alone aren't enough, a cholesterol-lowering prescription medication can be added. Estrogen therapy can also increase HDL and lower LDL, but it is no longer recommended for preventing heart disease, as it was in the past.

Control triglycerides. Most fats in the blood exist as triglycerides. A healthy level of less than 150 mg/dL (1.69 mmol/L) can usually be maintained through limiting alcohol intake, avoiding food with fat and sugar, exercising regularly, keeping weight under control, and not smoking.

A sedentary lifestyle is almost as great a risk factor for heart disease as smoking.

Prevent diabetes. People with diabetes (high levels of blood sugar) are two to four times more likely to develop cardiovascular disease. Even when blood sugar (glucose) levels are under control, diabetes increases the risk for heart disease and stroke. About two-thirds of people with diabetes die of heart or blood vessel disease. Midlife women should be screened for diabetes if they are at high risk (family history of diabetes, obesity, personal history of gestational diabetes, or member of a high-risk ethnic group). Women who have diabetes are strongly urged to work with their healthcare providers to manage the disease and to modify any other risk factors they can.

Diet, exercise, and weight control are especially important for any woman with diabetes or at high risk for diabetes. Overweight women can improve their blood sugar control by losing weight. Medication may also be needed to control blood sugar.

Treatment Options

In addition to a healthy lifestyle, there are many FDA-approved prescription medications to treat specific conditions and help prevent heart disease. Highly effective therapies, such as diuretics, are available for controlling high blood pressure. For normalizing cholesterol, statins are the preferred therapy.

Previously, estrogen therapy was thought to reduce the risk of heart disease, primarily because of its beneficial effects on cholesterol. However, more recent studies have shown that some types of hormone therapies increase the risk of heart disease, blood clots, and stroke (see ET/EPT Risks on page 48). Thus, current recommendations are that estrogen should not be used to prevent heart disease. Also, a woman with heart disease should not begin estrogen therapy without a careful consideration of the risks.

Nonprescription therapies are also used by many women to lower their risk of heart disease. Consuming soy foods or supplements (25 mg soy protein daily) may improve cholesterol levels. Studies have found that daily low-dose "baby" aspirin (81 mg) lowers a woman's risk if she is at high risk for heart disease. More research is needed before low-dose daily aspirin can be recommended for healthy women. Vitamin E, once thought to lower risk, has been proven ineffective in many studies. The role of B vitamins (including folic acid) and vitamin C in the prevention of heart disease is still being studied.

Osteoporosis

Postmenopausal osteoporosis is a disease in which the bone mineral content of the skeleton has decreased to a point the bone has become fragile and at higher risk for fractures. Fractures of the spine called "vertebral compression fractures" are the most frequent type of osteoporotic fracture, and most do not cause noticeable symptoms. However, women who have multiple fractures or who have severe or recent fractures may experience chronic back pain. In severe cases, loss of height or curvature of the upper back may result. Having had one recent spine fracture substantially increases the risk for more fractures in the immediate future.

Hip fractures related to osteoporosis, although not as frequent as spine fractures, are more serious. Nearly one-quarter of hip fracture victims over age 50 die within 1 year of their fracture, typically from pneumonia due to lack of mobility. About one-third become permanent nursing home residents. Only about one-third of survivors are able to return to independent living.

Bones grow during childhood and adolescence, reaching their strongest point (peak bone mass) between the ages of 20 and 30. From then on, bone loss occurs gradually for the remainder of life. In most women, bone loss accelerates during the first few years after menopause, which may be related to the decline in estrogen levels that occurs at that time.

Osteoporosis can be caused by an inadequate amount of bone made during growth years or by an increased rate of bone loss in adulthood – or both. Several risk factors increase a woman's vulnerability to osteoporosis (see Box).

Detecting Osteoporosis

Early detection of bone loss can lead to treatment that may restore lost bone mass and reduce the chance of fracture. Osteoporosis has no early warning signs, so it's not usually detected without special testing until it has become advanced and fracture occurs.

Prolonged and severe pain in the middle of the back is a possible indicator of osteoporotic spine fractures. Changes in the shape of the spine and loss of height are additional signs. While it's normal to lose some height while aging, most experts agree that a loss of 1.5 inches (3.8 cm) or more is cause for concern.

Standard x-rays are not sensitive enough to reveal osteoporosis until a considerable amount of bone has already been lost. Measuring bone mineral density (BMD) is the best way to evaluate bone strength and predict fracture risk. Today, BMD is measured in ways that are not only more accurate than standard x-ray, but are also safe and painless. NAMS recommends BMD testing for the following:

- All women over age 65;
- Younger postmenopausal women with at least one of the following risk factors for fracture: fracture since menopause, family history of spine or hip fracture, weight less than 127 pounds (58 kg);
- Women of any age with medical causes of bone loss, such as use of oral (not inhaled) steroids such as prednisone for longer than 6 months, vitamin D deficiency, or endocrine disorders such as hyperparathyroidism.

Osteoporosis Risk Factors

- Being older than 65
- Family history of osteoporosis, especially a hip fracture in her mother
- Previous fracture
- Use of certain bone-robbing prescription medicines, especially steroids and long-term use of antiseizure drugs
- Caucasian or Asian race/ethnicity (but Asian Americans may not be at risk)
- Female gender
- Weight under 127 pounds (58 kg)
- Sedentary lifestyle
- Lack of adequate calcium and vitamin D
- Cigarette smoking
- Heavy alcohol consumption (more than 7 oz per week)
- Absence of menstrual periods during the reproductive years for longer than 6 months (excluding pregnancy and lactation)
- Certain diseases, such as hyperthyroidism
- Menopause, especially if premature

Bones are strongest between the ages of 20 and 30.

Measuring BMD in other women may sometimes be recommended on an individual basis, but it is not cost-effective for large populations.

Dual-energy x-ray absorptiometry (DEXA) is the preferred technology for measuring bone density. It measures spine, hip, or total body BMD, providing reliability while exposing a women to only 10% of the radiation in a chest x-ray. DEXA can determine the presence and severity of osteoporosis and predict the risk of developing osteoporosis and fracture. It is sometimes used to monitor the effects of treatments, although this is controversial.

Ultrasound, which does not require radiation, is used to measure bone density in peripheral body sites, such as the wrist or heel. Ultrasound measurements can be used to predict fracture risk; however, they cannot be used to make the diagnosis of osteoporosis or to monitor the effects of therapy.

Throughout life, bone is constantly renewed, with old bone being broken down and new bone being formed – a process called bone remodeling. Lab tests can measure bone breakdown products in the blood and urine. Although these measurements are not helpful for diagnosis of osteoporosis, they may be useful in monitoring response to osteoporosis treatment.

Prevention & Treatment

The primary goal of osteoporosis therapy is to prevent fractures by stopping or slowing loss of bone mass, maintaining bone strength, and minimizing or eliminating factors that contribute to falls.

Maintaining a healthy lifestyle, including regular weight-bearing exercise and adequate intake of calcium and vitamin D, is a preventive measure that helps improve overall health and may slow bone loss in the early postmenopausal years and reduce fracture risk. Reducing risk for falls is also an important strategy for preventing fractures. A healthy lifestyle is sufficient for many women.

A healthy lifestyle also will enhance the positive effects of prescription therapies for women who require them. With prescription therapy, bone loss resumes after therapy is stopped, and long-term use may be needed. However, studies have not evaluated the available therapies' safety or effectiveness over many years of use.

The following are the primary prescription medications available for osteoporosis management.

Bisphosphonates are nonhormonal, bone-specific drugs that decrease the activity of bone-dissolving cells. *Pros:* These drugs preserve bone density and bone strength as well as reduce fracture risk. *Cons:* Because food reduces their absorption, bisphosphonates must be taken on an empty stomach, with water only, and at least 30 minutes before drinking other liquids, eating, or taking other medicines. Weekly dosing of some bisphosphonates has made this more tolerable (a once yearly bisphosphonate injection is being studied). However, the long-term safety of these drugs has not yet been determined.

Bisphosphonates in general use are alendronate, risedronate, and etidronate.

- Alendronate (Fosamax tablets) is approved in the United States and Canada for postmenopausal osteoporosis prevention and treatment. It significantly increases bone density in the spine and hip and decreases the risk of spine and nonspine fractures.

Alendronate is available in both daily and once-weekly doses.

- Risedronate (Actonel tablets) is also approved for postmenopausal osteoporosis prevention and treatment. It is similar to alendronate in its effect on bone density and fracture reduction. Risedronate has been shown to significantly reduce hip fractures in women with osteoporosis. It also reduces the risk of spine fractures after 1 year of therapy. Risedronate is also available in daily and once-weekly dosages.
- Etidronate (Didronel tablets) is FDA-approved for the treatment of another bone disorder, Paget's disease. Nevertheless, some clinicians prescribe it in lower doses for postmenopausal osteoporosis. In Canada, it is approved for osteoporosis treatment. Also in Canada, an etidronate plus calcium product is available (Didrocal). When prescribed for osteoporosis, etidronate must be taken cyclically (2 weeks out of every 3 months) to prevent abnormalities in bone mineralization.

Raloxifene, marketed as Evista tablets, is approved in the United States and Canada for the prevention and treatment of osteoporosis. Raloxifene is in a class of drugs called SERMs (selective estrogen receptor modulators), which act like estrogen in some parts of the body and an antiestrogen in other parts. *Pros:* Raloxifene increases bone density, although to a lesser degree than estrogen or alendronate, and it significantly decreases the risk for spine fractures. It does not appear to harm the breast or uterus. Ongoing research may reveal beneficial actions beyond bone. *Cons:* Unlike estrogen, raloxifene does not help with short-term menopause symptoms, such as hot flashes, and actually causes hot flashes in some women. Like estrogen, it cannot be used in women with a history of blood clots or during periods of prolonged immobilization.

Studies have shown that estrogen therapy (ET) increases bone mass and decreases the risk for fractures of the spine and hip. Estrogen's benefits are not reduced when a progestogen is added for women with a uterus (known as EPT). Many ET and EPT products have been proven effective and are FDA-approved for preventing (not treating) postmenopausal bone loss. *Pros:* ET/EPT provides other potential benefits, such as reducing hot flashes, insomnia, and vaginal dryness. *Cons:* Because of the increased risk of heart disease, blood clots, stroke, and breast cancer associated with long-term use of ET/EPT, other osteoporosis therapy options should also be considered. (See Prescription Therapies on page 42 for more on pros and cons.)

Calcitonin is a drug available as a nasal spray (Miacalcin) or as an injection (Calcimar, Miacalcin). It is a hormone, but not a hormone like estrogen. It is approved in the United States and Canada for the treatment (not the prevention) of osteoporosis in women at least 5 years past menopause. *Pros:* Therapy results in slight gains in spine bone density, but the gains are less than that seen with estrogen or bisphosphonates. It also significantly decreases spine fractures and may reduce pain from these fractures. Calcitonin is relatively safe and has no serious side effects. *Cons:* Minor nose irritation has been observed with the nasal spray. It has not been shown to prevent fractures at sites other than the spine. Calcitonin is less potent than the other options, and should only be used by women who are unable to use other treatments. It is not an effective drug during the first few years after menopause.

Menopause is not associated with increased cancer risk.

Parathyroid hormone (PTH) is the newest osteoporosis therapy. Marketed as teriparatide (Forteo), this drug is FDA-approved for treating osteoporosis in women at high risk for a fracture. *Pros:* PTH is the first type of drug that actually stimulates new bone formation. The end result is better bone strength. Most side effects, such as nausea, dizziness, and leg cramps, are mild. *Cons:* Daily injections are needed. A small risk for a rare but serious cancer of the bone has been found in some animal studies but not in humans.

Several other drugs are sometimes prescribed by clinicians for treating bone loss, but none are FDA-approved for this use. Phytoestrogens (plant-derived products that act like estrogen) offer some promise, but more research is needed (see Complementary & Alternative Medicine on page 51). New therapies are being studied and may be approved in the near future.

Cancer

Menopause is not associated with increased cancer risk. However, some cancer rates typically increase with age, so postmenopausal women should be informed about the most common cancers that may affect them. Also, some of the therapies used to treat menopause symptoms are associated with an increased or a decreased risk for certain types of cancer.

Each year, thousands of women are cured of cancer, and those diagnosed today have a much better chance of living longer than in the past. In North America, about two out of every five women diagnosed with cancer will be alive 5 years after diagnosis. Even more women are reducing their risk by learning to be "cancer smart." Being informed and discussing concerns with a healthcare provider are key steps toward optimal health. The most common types of cancer for women are presented in the following sections.

Breast Cancer

Breast cancer is perhaps the cancer women fear most. This fear comes from the possibility of dying from the disease, but also from the rigorous demands of treatment and the probability of cancer recurrence. Many midlife women have personally seen relatives or friends go through breast cancer treatment or have lost loved ones to the disease.

Breast cancer is the second highest cause of cancer death in North American women. Fortunately, the percentage of women dying from breast cancer has started to decline in recent years. Smaller, less-advanced cancers can now be detected earlier with mammography. U.S. statistics show that if breast cancer is detected while still localized, the 5-year survival rate is 96% – a dramatic improvement from 72% in the 1940s. The same improvements in cancer survival have also been seen in Canadian women. Several risk factors for breast cancer have been identified (see Box on page 33).

Role of ET/EPT. Current data support a link between estrogen therapy, either alone (ET) or combined with a progestogen (EPT), and an increased risk of breast cancer, particularly after several years of use. In the Women's Health Initiative (WHI), EPT use increased the risk by 26% after 5 years of use, which is eight more cases annually per 10,000 women compared with those not using hormones. (See Box on page 49.) The increased breast cancer risk was one of the reasons why the trial was stopped early. Based on those and other results, all ET and EPT products should be considered contraindicated in women with known or suspected breast cancer as well as in those with a history of breast cancer. Long-term use is also a concern. However, shorter term use of ET/EPT during perimenopause to relieve hot flashes and other menopause-related symptoms does not appear to increase breast cancer risk.

Early detection. Since many breast cancer risk factors cannot be altered, early detection is the best strategy. Once a woman reaches adulthood, it is recommended that she examine her breasts monthly and also undergo examination by her healthcare provider during her regular physical checkup. If anything unusual is found, such as a lump or nipple discharge, a mammogram (breast x-ray) and clinical follow-up are appropriate. Mammograms are often recommended as a screening test, even when nothing unusual is found.

Recommendations for mammography screening intervals vary. Some experts recommend annual mammograms beginning at age 40 as well as before starting hormone therapy; others recommend longer intervals.

Several factors affect the value of mammograms in detecting breast cancer. In premenopausal women, mammograms are harder to read and have more false positives. Women with fibrocystic (lumpy) breasts or breast implants have more dense breasts, making abnormalities more difficult to detect. Hormone therapy also makes breasts appear more dense on a mammogram. The best time for both a manual exam and a mammogram is immediately after monthly menstrual bleeding (if menstruating) or after withdrawal bleeding from EPT because breasts are less dense then. Ultrasound is frequently used to further investigate suspicious mammogram findings.

Although most breast lumps are noncancerous, all lumps should be evaluated. A biopsy may be necessary to rule out cancer. Studies repeatedly show that early diagnosis of breast cancer is linked to higher cure rates.

Factors That Increase Breast Cancer Risk

- Age: Nearly half of all cases occur in women 65 years and older. Current estimates predict that by age 50, 2% of U.S. and Canadian women will have developed breast cancer – by 60, about 5%; by 70, about 7%; and by 80, about 10%.
- Genetics: A woman's risk of developing breast cancer is also increased if her mother, sister, or daughter had the disease, especially if before menopause. However, most breast cancers occur in women without a positive family history.
- Onset of menstrual periods before age 12.
- Never having children.
- Having a first child after age 30.
- Personal history of female cancer (such as breast or uterus) or, possibly, colon cancer.
- Having had one or more previous breast biopsies, especially if any showed a change in cell tissue known as atypical hyperplasia. (The breast biopsy itself does not increase cancer risk.)
- Late menopause (after age 55).
- Being more than 20% over ideal weight after menopause, especially if more than 40 pounds (18.2 kg) were gained since menopause.
- Drinking alcohol: More than two drinks daily increases risk by about 40%.
- Lack of exercise (less than 4 hours each week).
- Diet low in vegetables and fruit.
- Radiation treatment for cancer.
- Use of postmenopausal hormone therapy.
- Never breastfeeding (breastfeeding has been shown to have a protective effect).

Endometrial (Uterine) Cancer

Cancer can affect the inside lining of the uterus, called the endometrium. Fewer than 3 in 100 women past age 50 will develop endometrial cancer in their remaining lifetime, and far fewer will die from the disease. When detected early, women with endometrial cancer have a 5-year survival rate of 95%.

Risk factors for developing endometrial cancer include use of estrogen without progestogen, use of tamoxifen, menarche (starting periods) earlier than age 12, late menopause, not ovulating regularly during menstrual years (excluding pregnancy and lactation), infertility or never being pregnant, obesity, diabetes, gallbladder disease, and, perhaps, high blood pressure and hereditary colon cancer. Previous pregnancy and oral contraceptive use appear to provide some protection against endometrial cancer.

Annual pelvic exams are recommended for all women. If a woman has risk factors for endometrial cancer, including unexplained abnormal uterine bleeding, an endometrial biopsy will probably be recommended as well. The Pap smear, which is so effective in detecting cervical cancer, is not a reliable test to detect uterine cancer. Transvaginal ultrasound and sonohysterography (an ultrasound view of the uterus filled with salt water) are being used by some clinicians to determine the thickness of the endometrium and to look for endometrial cancer and other causes of postmenopausal bleeding.

Role of ET/EPT. Using estrogen without a progestogen, also called “unopposed estrogen therapy” or ET, for 3 years or more has been associated with a marked increase in endometrial cancer. Most endometrial cancers that appear while taking unopposed ET are low-grade cancers and do not reduce a woman’s lifespan if detected early and cured with a hysterectomy. Adding the proper type and amount of progestogen to estrogen counteracts the increased risk of endometrial cancer, reducing the risk to the level of taking no hormones at all. All women with an intact uterus should use a progestogen with ET (see Prescription Therapies on page 42).

Cervical Cancer

The death rate from cervical cancer has dropped sharply in the United States and Canada, but it remains a serious concern. Today, 25% of all new cases and more than 40% of all deaths from cervical cancer occur in U.S. women over age 60. In Canada, about 29% of all new cases occur in women over age 60, and 64% of all deaths occur in women over age 55. The incidence rate is about 11 per 100,000 in black women and about 7 per 100,000 in white women. If diagnosed early, cervical cancer is highly treatable; the 5-year survival rate is 91%.

Neither menopause nor postmenopausal hormone therapy has been linked to increased cervical cancer risk. Cigarette smoking, however, is associated with a higher risk.

Cervical cancer is now understood to be caused by the human papillomavirus (HPV), an infection acquired primarily through sexual relations. Most HPV infections, however, do not lead to cancer. The likelihood for HPV infection increases with the following: sexual intercourse at an early age, multiple sexual partners, sexual partners who have had multiple partners, smoking, and HIV infection. In both men and women, HPV infection is sometimes associated with benign (noncancerous) growths in the genital area, called genital warts (condyloma). Most women who carry the virus have no signs or symptoms of HPV.

The Pap smear is a screening test to detect abnormal change in the cells of the cervix. It is a simple office procedure in which cells are swabbed from the cervix and analyzed under a microscope. Properly performed, the test can detect abnormal cells before they become cancerous. The cure rate in women with precancerous lesions is nearly 100%. Sometimes, a woman will need a closer look at the cervix through an instrument called a colposcope and, possibly, a biopsy prior to treatment. Despite the importance of the Pap smear, about one-half of US women diagnosed with cervical cancer have never had the test.

An annual pelvic exam and Pap smear are recommended to check for cervical changes. Women without cervical cancer risk factors who have had three consecutive normal Pap smears may be tested less often, but they should continue to have annual pelvic exams. If a Pap smear shows abnormalities or if the woman has a history of cancer or a weak immune system, testing may be needed more often than once a year.

Although the Pap smear evaluates the cervix (opening to uterus), this test may be recommended after a hysterectomy (in which the cervix is typically removed along with the uterus) to detect precancers in the vagina and in any remaining cervical tissues.

Ovarian Cancer

Statistics show that U.S. and Canadian women have a low incidence of cancer of the ovaries. Ovarian cancer represents about 4% of all cancers, yet it causes more deaths than any other cancer of the reproductive system, primarily because it is usually diagnosed at an advanced and less curable stage. When ovarian cancer is detected early, 95% of women survive at least 5 years.

Ovarian cancer risk is not affected by menopause, but the risk does increase with age, particularly in women without children or in those with a family history of breast or ovarian cancer. Some studies have reported an association with use of talcum powder in the genital area, but no conclusive evidence exists. Lowered risk of ovarian cancer is associated with previous pregnancy, past use of birth control pills, and bilateral tubal ligation (tubes “tied” to prevent pregnancy). Studies on the association of hormone therapy with ovarian cancer risk are inconsistent. Most show no association or a modest increase in risk.

No satisfactory screening tests for ovarian cancer are currently available. Pap smears rarely detect ovarian cancer. Transvaginal ultrasound and a blood test for the tumor marker CA125 have been used to screen women at high risk for ovarian cancer, but studies have not proven the value of this approach. To help detect changes in the ovaries, an annual pelvic exam is recommended, especially for women over age 40.

Decisions made at menopause will affect a woman's health for the rest of her life.

Lung Cancer

Today, lung cancer has surpassed breast cancer as the leading cause of cancer death in North American women. The number of newly diagnosed cases continues to rise. These alarming statistics reflect the increasing numbers of women who smoke cigarettes, by far the most important risk factor in developing this disease. Unfortunately, there is no effective screening test for lung cancer.

Of all the lifestyle-related risk factors that can be changed, smoking cessation has the greatest impact on reducing lung cancer deaths. Exposure to second-hand tobacco smoke also poses health risks. One study reports that the risk of lung cancer is approximately 30% higher for wives of smokers than for wives of nonsmokers.

Colon & Rectal Cancer

After lung and breast cancer, colorectal cancer is the next most common cause of cancer death in U.S. and Canadian women. It includes cancers of the colon (the lower part of the intestine) and the rectum (the part of the intestine that leads from the colon to the anus). Colorectal cancer is not associated with menopause but with age; colorectal cancer incidence is six times higher in women aged 65 years and older compared with women aged 40 to 64 years. Other nonmodifiable risk factors include a family history of colorectal cancer or having colorectal polyps or inflammatory bowel disease.

Colorectal cancer risk may be lowered through smoking cessation, exercise, healthy diet (high in fruits and vegetables, low in fats), high calcium intake (1,200 mg/day), or taking daily aspirin or a nonsteroidal anti-inflammatory drug (such as ibuprofen). Studies have shown that ET/EPT may be protective against colorectal cancer. However, ET/EPT should not be used solely for this purpose because harm likely exceeds benefits.

Colon cancer begins as precancerous colon polyps and can be prevented if the polyps are detected and removed. When colorectal cancer is found early, 90% of those treated will survive at least 5 years.

Women aged 50 and older should be screened for colorectal cancer. Several screening tests are available: annual testing of stool for blood (called a fecal occult blood test); a flexible sigmoidoscopy (a test to view inside the rectum and lower colon) every 5 years, either with or without the yearly fecal occult blood test; double-contrast barium enema every 5 years; and a colonoscopy (which views areas beyond the reach of the sigmoidoscope) every 10 years. The screening option selected depends on the woman's level of risk for colorectal cancer. Women at high risk may need more frequent testing. Regardless of the screening option selected, a digital rectal examination should be part of a woman's annual physical exam.