In 2003, coronary heart disease claimed the lives of 233,886 women compared with 41,566 lives from breast cancer and 67,894 lives from lung cancer.

One in five women has some form of heart or blood vessel disease.

Nearly 39 percent of all female deaths in America occur from cardiovascular disease, which includes coronary heart disease, stroke and other cardiovascular diseases.

Presenting Sponsor:

As published in the February 2008 issue of Indianapolis Woman magazine

Getting to the HEART of the Matter

Heart disease is the No. 1 killer of women

Find out what you CAN and CANNOT control when it comes to having a healthy heart.

Learn the signs and symptoms that can save your life — or the life of someone you love.

Know that sometimes there are no warning signs at all … and what you can do about it.
The Definitions

Cardiovascular disease (CVD): Any disease that affects the heart or blood vessels including coronary heart disease, stroke, and heart failure.

Heart disease: Also known as coronary artery disease (CAD), coronary heart disease is caused by hardening of the arteries that supply oxygen to the heart muscle.

Heart attack: When blood flow to the heart becomes blocked.

Stroke: An attack that occurs when blood supply is cut off to some part of the brain.

Hypertension: High blood pressure defined as equal to or greater than 140 (systolic) over 90 (diastolic).

High Blood Pressure: When too much force or pressure is exerted against the walls of the arteries.

Truth vs. Fiction

Understand the myths that could endanger your health

by Dr. JoEllen Vrazel, Director, Office of Strategic Initiatives and Implementation, Indiana State Department of Health

Though heart disease continues to rank as the greatest killer of both men and women, the enormity of this issue seems to escape the attention of most Americans.

According to the Public Health Action Plan to Prevent Heart Disease and Stroke, numerous myths and misconceptions about heart disease keep the urgency of this issue out of the public eye.

Several myths include the belief that heart attacks and stroke primarily affect the elderly or men, that it is a quick — and relatively painless — “way to go,” and that it can be easily fixed with the latest surgical procedures and medication.

Unfortunately, these myths keep many Americans from seeking the necessary screening for the detection and treatment of heart disease. Because of this, one-half to two-thirds of those who die suddenly of heart disease had no previous recognition of the disease.

Though heart attacks and strokes may come quickly and without warning, they are the end result of a long-term disease process. We have the scientific knowledge to prevent, detect and treat cardiovascular disease and ultimately, eliminate it as the No. 1 killer.

Read on to find out how you and your family can take control, reduce your risks and increase years and quality of life.

Taking Charge

Believe it! Despite tremendous medical advances with regards to detecting and treating cardiovascular disease, it remains the No. 1 killer in Indiana and the United States.

The monetary cost of death and disability from heart disease and stroke are enormous. But, there is no way to put a price on personal suffering caused by a severe heart attack or stroke.

So, we are committed to providing you with the information necessary to take charge of your cardiovascular health. Read on. You will learn information that can save your life or that of a loved one.

In this issue, we will share some phenomenal stories of women, like you, whose lives were saved by taking advantage of free screenings offered at heart health events. Prior to screening, these women had no symptoms or heart issues; they “seemed” healthy. Learn about risk factors, preventive behaviors and screening tests to identify “silent killers” like hypertension and high cholesterol before you experience the critical signs and symptoms of an impending heart attack or stroke.

Reading is not enough. Act now. It can be the difference between life and death. Few of us imagine losing our independence and quality of life or anticipate lifelong disability due to heart disease or stroke. Take charge today by asking your doctor to complete all of the necessary screenings to detect potential cardiovascular health issues.

By acting on this information, we can prevent heart disease all together.

Judy Monroe, M.D.
State Health Commissioner
Indiana State Department of Health

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Facing the Facts
Denial often is an obstacle in preventing and treating heart attacks
by Cindy Adams, Ph.D., Nurse Practitioner and Director of the Healthy Hearts Program at The Indiana Heart Hospital

Many of us don’t think heart disease will affect us, but numbers don’t lie. Nearly a half-million women die each year from heart and vascular disease — equivalent to the number of people killed in the World Trade Center bombings every 2 1/2 days, every year.

Even more concerning is that while the death rate from coronary disease has dropped by about 50 percent in the general population between 1980 and 2002, it increased during that period for women between the ages of 35 to 54 — at a rate of 1.5 percent each year.

However, you don’t have to become a statistic.

Classic symptoms of a heart attack can include chest, shoulder, back or jaw/neck pain or pressure (possibly radiating into the arms), sweating or shortness of breath. It also is possible that none of those symptoms will occur — especially in a woman.

Unfortunately, symptoms of cardiovascular disease in women are often very subtle and may not resemble the classic sudden, gripping chest pain that drops you to your knees … like in the movies.

It is possible that a contributing factor to poor outcomes in women with heart disease is denial of these early, vague symptoms. It may feel like simple fatigue and activity intolerance. In a culture in which women constantly try to achieve a balance between a busy work-life, home-making, child-nurturing, and spouse-supporting, these subtle symptoms are easily passed off as “battle fatigue” and swept under the “carpet” of denial.

If you suspect that you could be having symptoms of a heart attack, there’s no time to second-guess yourself. Call 911 immediately.

Once a woman has a heart attack, she is more likely to become disabled by it, to suffer another heart attack and to die within the first year following the heart attack than a man. She is less likely to have bypass surgery, coronary angioplasty or participate in research trials than a man.

According to a recent study published in Circulation, the American Heart Association’s journal, there is strong evidence that participation in cardiac rehabilitation reduces disability and prolongs life after heart attack or bypass surgery. However, only 1 in 5 patients — and only 1 in 7 women — receive it!

Find out if you have access to a rehab program in your area. The Indiana Heart Hospital’s cardiac rehabilitation program, which is certified by the American Association of Cardiovascular and Pulmonary Rehabilitation, is available to all eligible patients regardless of where initial heart attack or bypass surgery was received.

If you or a loved one has recently survived a heart attack, or undergone a bypass surgery or stenting procedure, talk to your doctor about a referral to a cardiac rehabilitation program.

It’s important to be your own advocate. Ensure that your health care providers are hearing your concerns, considering all your symptoms and, when appropriate, offering follow-up treatment. Don’t be afraid to ask for a second opinion if you are not comfortable with your treatment plan.

Know and understand your risk factors and be aggressive about controlling them. Visit our online risk factor assessment Know Your Numbers site at www.hearthospital.com to get started today.

Ensure that you receive the care and attention you deserve. It may well save your life.

The ABC’s of Heart Health
Learn what it takes to be your own heart health advocate

Ask questions. Your doctor is your cardiovascular health care expert and can advise you how to keep your heart healthy. Questions to ask:

1. Am I at risk of a heart attack or stroke?
2. How much does my family history of cardiovascular disease matter?
3. How can I get my cholesterol, triglyceride and blood pressure levels to be where they should be?
4. Am I at risk for diabetes?
5. Would taking aspirin reduce my risk of a heart attack? What dosage should I take?
6. How often should I see my health care provider for checkups?

If your doctor says something you don’t understand, ask “What does that mean?” Otherwise, your health care provider may assume you know what he or she means.

Be prepared. Your time with your physician is limited. Make the most of the time by preparing a list of the two or three issues you would like to discuss with your health care provider. Don’t walk out of the door without asking your questions. If you forget to address an issue, more than likely you will have to make another appointment for this concern. Or if you think of a concern or additional questions, call your physician’s office and ask to speak with the nurse.

Communicate your concerns. If you are worried about a health issue or treatment or have questions about the care you’re getting, talk with your health care provider. If your medical costs are an issue, bring up your financial concerns with your doctor. There may be options that can help relieve some costs while getting the care you need.
Heart to Heart
Have a life-changing talk with the women you love

Heart disease is the No. 1 killer of women and is presenting itself earlier in life. In response, I’ve started a program called Heart to Heart, which encourages college-age women to lead heart-healthy lives and use key information about preventing heart disease for heart-to-heart conversations with the women they love and their doctors.

It’s easier to make lifestyle changes in your 20s before unhealthy behaviors become unhealthy habits. College-age women tend to have poor eating habits, they do not exercise enough, and far too many women in this age group are smokers. By encouraging these women to think about their heart health, it is my hope they will develop a lifetime of healthy habits.

No matter our age, it is never too late to think about our No. 1 killer. Women are the glue that holds society together. If we don’t take care of ourselves, we can’t be expected to take care of our families. Not only do many of us have careers, but we care for our husbands, children, aging parents, dogs, cats, the leaky pipes and even the family car. Before we can take care of our many responsibilities, we have to make sure we are listening to our bodies and staying as healthy as possible.

The bad news about heart disease is some risk factors can’t be changed, like gender, family history and age. The good news is many risk factors can be changed, like physical activity, high blood pressure, cholesterol, weight and smoking.

Regular exercise — even if it is just 30 minutes of brisk walking a day — carries many benefits. I can’t say I love to exercise, but I do it anyway, and it is a great stress reliever. Exercise can help reduce many of your risk factors for heart disease.

You also can greatly reduce your risk by kicking the habit. Smoking is the single most changeable risk factor for cardiovascular disease.

Through my Heart to Heart program, I hope women will educate themselves on heart disease and take the knowledge they gain to lead by example. Start by logging on www.hearttoheart.in.gov to sign my heart health pledge.

Every Hoosier can make a positive impact on the health of our state. Think about the many roles you play and the opportunities you have to promote healthy habits and have a heart-to-heart with the women you love. Together we can make a difference and improve the health of our citizens for generations to come.

In good health,

Cheri Daniels
First Lady of Indiana

Spread the Word
Encourage the women you love to adopt heart-healthy habits

Too many Indiana women lose their lives each year to heart disease. In keeping with Indiana’s commitment to support healthy, productive citizens, the First Lady of Indiana and the State Department of Health Office of Women’s Health have teamed up to focus on the issue of women’s heart health. Heart to Heart encourages women to have intimate conversations about cardiovascular disease. Its four goals aim to:

♥ Increase awareness that heart disease is the No. 1 killer of women.
♥ Empower women to reach out to and support others in living a heart healthy lifestyle.
♥ Educate women on how to live a heart healthy lifestyle.
♥ Provide a collection of resources for more information and support for women.

Heart to Heart Pledge
As a Hoosier with Heart, I pledge to support the women I love by leading by example and reminding them to take heart disease very seriously. I know that heart disease is the No. 1 killer of women, but with simple lifestyle changes, Hoosier women can live healthier, longer lives. Among other things, I will:

♥ Lead by example.
♥ Stop smoking.
♥ Exercise regularly.
♥ Eat plenty of healthy foods.
♥ Eat unhealthy foods only in moderation.
♥ Schedule a yearly check-up.
♥ Share my knowledge of heart healthy living with the women I love.
Strategies to Prevent Heart Disease

**Exercise regularly.** Regular exercise will control your weight, strengthen your heart and improve blood circulation throughout the body, as well as help raise HDL cholesterol levels. Moderate exercise (as simple as brisk walking) for half an hour on most days of the week is enough to achieve the benefits of a healthier heart and circulatory system.

**Eat heart healthy.** Eat according to the FDA’s food pyramid, with plenty of fruits, vegetables, whole grains and other foods high in nutritional value and fiber. Choose foods low in cholesterol and saturated fat, and cut down on meats such as sausage, bacon and processed cold cuts. Limit your intake of fried foods and rich sauces. Learn food substitutions for recipes in order to make healthier meals.

**Stop smoking.** You’ve heard this advice a thousand times. Now take action! See a health care professional for advice and resources on how to quit. Quitting smoking will reduce blood pressure, the tendency for blood to clot and cause artery blockages, and fatty deposits in the arteries that can cause heart attacks, among numerous other health benefits.

**Track your numbers.** Knowing your total cholesterol level, HDL and LDL cholesterol numbers, triglycerides level, glucose, BMI (Body Mass Index) and waist circumference will help you determine if you have risk factors and allow you to speak to a health care professional about how to modify them.

**Manage and reduce stress.** Take steps to reduce stressors in your daily schedule. Also, laugh and enjoy life. Laughter has been linked to the healthy function of blood vessels. Laughter is the best medicine. (See article on stress management.)

To Live Heart Healthy, Start Young

I’ve been taking my Heart to Heart initiative to college campuses across the state because heart disease is presenting earlier in life. I spoke at Purdue University to more than 100 students this fall about the importance of leading a heart healthy life. It is easier to make changes now before unhealthy behaviors become unhealthy habits.

Health screenings, provided by the Nursing Center for Family Health, were offered to students before the program and information on leading a heart healthy life was distributed. Alpha Phi sorority supported my visit, and I commend them for choosing cardiac care as their philanthropic initiative. The young women of Purdue were very enthusiastic and genuinely interested in improving their heart health. — Indiana First Lady Cheri Daniels

Gender Matters

A heart attack often expresses itself differently in women

Though most people picture the movie version of a heart attack with a person — almost always male — gripping his chest and collapsing to the floor, the reality is that many people, especially women, experience symptoms of a heart attack very differently. In fact, studies suggest that women more commonly experience back pain, nausea or fatigue.

Because a heart attack rarely strikes without warning, it is critical that we recognize the common and not-so-common signs and symptoms of a heart attack for women so that immediate action can be taken.

**Common symptoms:**
- Chest pain — Women often describe a milder form of chest pain such as pressure, tightness or an ache; however, many women do not feel any chest pain
- Shortness of breath — This is a more common symptom for women
- Sweating
- Pain in one or both arms

**No-so common symptoms** (but common for women!)
- Back, neck or jaw pain
- Indigestion
- Dizziness
- Nausea
- Vomiting
- Weakness
- Fatigue
- Lightheadedness

Because many life-saving heart attack treatments work best if given within the first hour after a heart attack begins, getting help immediately is critical. If you think you are having a heart attack, call 911 or your local emergency number immediately! Not sure? Call 911 no matter what and let a doctor decide. Ignoring the symptoms could cost you your life.

Cardiovascular Disease (or Coronary Heart Disease)

**Major risk factors:**

- **Changeable**
  - Cigarette smoking
  - Hypertension
  - Physical inactivity
  - High blood cholesterol levels

- **Not Changeable**
  - Heredity
  - Gender
  - Increasing age

**Contributing risk factors:**
- Diabetes
- Obesity
- Stress
Helping Hands
Support groups empower Joann Hofer-Varela
by Deb Wezensky

Three years ago, 36-year-old Joann Hofer-Varela celebrated the arrival of her second son during a picnic when she suddenly experienced a sharp pain stabbing through her back. Her arms went numb, and she was sweating.

“Without any prior warning signs, I could barely hold my baby,” she says. “I imagined that I had strained a muscle — I was still adjusting to breastfeeding.”

Hofer-Varela’s husband called her obstetrician as they drove home. She took a pain reliever and rested as the doctor advised. She called her husband and children, Hofer-Varela concentrated on getting well. “That night I surrendered everything I had previously clung to — my newly earned degree, moving to the United States after working in Austria, being a stay-at-home mom — this all diminished in the face of my emergency,” she says.

Hofer-Varela was amazed to learn a sudden heart attack has a 30 percent survival rate.

“Happy to be home, I alternately felt tired, confused, sad, angry and then immensely humbled for being alive,” she says.

Eight months later, her doctor determined she needed a defibrillator due to damage to her heart. She no longer was on the transplant list, but Hofer-Varela was devastated and scared to do anything.

“Being alone at home with my baby was a constant reminder of my mortality,” she says.

She learned to cope with her new reality with the help of the Women Heart support group coordinator in Indianapolis.

“She listened and understood my anger and frustration because she had been there herself,” she says. “Her understanding kept me afloat — strengthened me to talk to my family about what I was experiencing.”

Slowly, Hofer-Varela started to exercise again and joined a cardiac rehabilitation program. She exercises by doing yoga, walking, dancing and caring for her active 3-year-old and 9-year-old sons.

Get Checked
If you have heart disease, or are at risk of a heart attack, it is extremely important to get the proper diagnosis, care and treatment from your health care providers. After taking a careful medical history and doing a physical examination, your doctor may have additional tests performed:

Electrocardiogram (ECG or EKG) makes a graph of the heart’s electrical activity as it beats. This test can show any abnormalities related to your heart and arteries.

Stress test (or treadmill test or exercise ECG) can detect whether the heart is getting enough blood and oxygen.

Nuclear scan shows the working of the heart muscle as blood flows through the heart.

Echocardiography changes sound waves into pictures that show the heart’s size, shape and movement.

Cardiac catheterization is a medical procedure used to diagnose and treat certain heart conditions. Through a catheter, the doctor can perform diagnostic tests and treatments on the heart. The diagnostic tests include the following:

Coronary angiography (or angiogram or arteriography) shows an X-ray of blood flow problems and blockages in the coronary arteries.

Ventriculogram is sometimes a part of the X-ray dye test described above. It is used to get a picture of the heart’s main pumping chamber, typically the left ventricle.

Intracoronary ultrasound may be done during a cardiac catheterization to measure blood flow. It gives a picture of the coronary arteries that shows the thickness and other features of the artery wall. This lets the doctor see blood flow and any blockages.
Brain Attack
by Jeffrey W. Hilburn, M.D., Indiana Neuroscience Institute, St. Vincent Health System

By definition, a stroke or brain attack occurs when blood flow to your brain is interrupted by a blocked or burst blood vessel.

Seems highly unlikely, doesn’t it?
Many people who experience a stroke have no prior warning and may believe they are in seemingly good health. Like some of the 700,000 Americans who will suffer a stroke this year, you may find yourself thinking What is this? It can’t be. I’m too healthy, too young to be having a stroke. You may even be tempted to explain away the symptoms of this serious health threat.

You must respond to the signs and receive treatment within 3 hours of the onset of the signs and symptoms of stroke. Otherwise, you may join the 160,000 of persons who will die or the 300,000 that will be left with disability by not heeding the signs of stroke.

What women should know
Despite data showing that stroke is generally more prevalent in men than women, a recent study shows that women in mid-life, specifically those 45 to 54 years of age, are more than twice as likely as men their age to have strokes.

About 25 percent of women who have a stroke die within one year. Fifty percent of women experiencing a stroke die within 8 years. Stroke claims more women’s lives than breast cancer. Of the 4.5 million stroke survivors in the United States, more than half are women.

Despite these figures, there is still limited understanding of the risks and consequences of stroke. There are additional risk factors for women and they may experience unique stroke symptoms that differ from men. And yet, only 1.2 percent of women listed “stroke” as their “most feared diagnosis” in 2005 — putting it 10th on the list of most feared disorders.

And, if women are the traditional caregivers of the family, who gives the care if it is the woman who has the stroke? Studies show that the placement of the female spouse in an extended care unit is far more common than for the male, for whom care is usually provided at home.

Get prompt treatment
Your team of emergency room physician, neurologist, nurses and CT scan technicians will work together to diagnose and treat your stroke to establish the blood flow back to your brain as soon as possible.

For ischemic strokes, treatments that can eliminate the blockage in your blood vessels include clot busters, like t-PA; “MERCI” clot retriever; and angioplasty/stents. For hemorrhagic strokes, treatment options include surgical intervention; endovascular procedures, like “coils”; and the use of Factor IVV to promote clotting so that damage from the burst blood vessel is minimized.

Calling 911 and being transported by ambulance, where immediate care can begin, is the first critical step to effectively treat your stroke.

Better yet, keep yourself stroke-free by eliminating risk factors. The physical damage and emotional turmoil of having a stroke are preventable for nearly all of us. Learn more about stroke and then make healthy choices to remain stroke free.

Only 57 percent of Americans are aware of the warning signs of stroke. Make sure you are among them. Awareness is the first step to being your own best advocate to maintain a healthy brain.
Six weeks later, while getting ready for a birthday party, she suddenly felt unwell. Her blow dryer dropped to the floor. She became disoriented. Her left arm went numb, and her eyesight disappeared but returned after a few seconds.

Again, she didn’t mention this to anyone, hoping it would go away. Although “stroke” was in the back of her mind, Wilson didn’t think her symptoms were bad enough to be something so important.

However, she finally did see her family doctor. Her neurologist needed to discuss with her the results of an MRI. While waiting in the neurologist’s examination room, Wilson read pamphlets on the symptoms of stroke. When the doctor walked in, she looked up and said, “It’s a stroke isn’t it?”

Her doctor informed her that she, in fact, had suffered more than one stroke.

Wilson was admitted to St. Vincent Hospital, where she shared that all of her grandparents had died from heart disease, as well as her 28-year-old nephew. Her dad died in 1996 from a heart attack, and her mom died as the result of a massive stroke after being paralyzed, unable to speak and bedridden in a nursing home for 10 years.

Wilson’s heart catheterization revealed an irregular heartbeat had caused blood clots to break loose and cause the strokes. A defibrillator was implanted to prevent future strokes and heart problems.

Wilson’s story took yet another turn. Like many women, she takes advantage of free health screenings. At a 2007 “Go Red for Women Luncheon” screening, the attending doctor suggested she immediately see a vascular surgeon. After more testing, Wilson was in surgery the following day for a 90 percent blockage in her right artery. She had been unaware that she had been at very high risk for either a heart attack or a massive stroke.

Without the screening, Wilson couldn’t be the women’s heart health advocate she is today. She would like all women to be their own health advocates. She advises you to:

♥ Talk to your family. Have a family sit-down and talk about your medical history. Your life — or that of a loved one — may depend on it.
♥ Don’t feel like you don’t want to go to the doctor/hospital because you might be embarrassed if there is nothing wrong. Think about it: Don’t die of embarrassment.

Symptoms of stroke more commonly experienced by women:

♥ Sudden face and arm or leg pain
♥ Sudden hiccups
♥ Sudden nausea (feeling sick to your stomach)
♥ Sudden chest pain
♥ Sudden shortness of breath (feeling like you can’t get enough air)
♥ Sudden tiredness
♥ Sudden chest pain
♥ Sudden pounding or racing heartbeat

How to recognize that someone may be having a stroke:

♥ Ask them to smile. Does one side of the face drop?
♥ Ask them to raise both arms. Do they have difficulty keeping both arms up?
♥ Ask them to repeat a simple sentence. Do they slur the words or repeat the sentence incorrectly?

If any of the above symptoms occur, call 911 immediately. The longer you wait, the more brain damage will occur. Stroke can be treated but only if you get help right away.
Women and Strokes

Women face unique stroke risks

Strokes can affect anyone at any age. However, some risk factors are unique to women. According to the National Stroke Association, these include:

Use of birth control pills. Studies show women who take birth control pills have a higher stroke risk, especially if they are over 35 and smoke or have high blood pressure.

Pregnancy. Stroke risk increases during a normal pregnancy due to natural changes in the body, like increased blood pressure and stress on the heart.

Hormone replacement therapy. On the market for more than 40 years, this combined hormone therapy of progestin and estrogen used to relieve menopausal symptoms recently has been linked to an increased risk of stroke.

Waist size and triglyceride levels. Postmenopausal women with a waist size larger than 35.2 inches and a triglyceride (blood fat) level higher than 128 milligrams per liter may have a five-fold increased risk for stroke.

Migraines. These can increase a woman’s stroke risk three to six times, and most Americans who suffer migraines are women.

“Risk factors are cumulative,” says Dr. Steven J. Kittner, director of the Maryland Stroke Center at the University of Maryland, School of Medicine, in Baltimore. “Reducing even one risk can greatly lower your chances of having a stroke.”

To understand and control your particular stroke risk, talk to your doctor.

Check Your Pressure

High blood pressure occurs when blood exerts too much force against vessel walls.

Blood pressure often is expressed as two numbers:

The Cardiac Cycle = Systolic vs. Diastolic Blood Pressure

Systolic BP — blood pressure that occurs when the heart contracts (emptying)

Diastolic BP — blood pressure that occurs when the heart is relaxed (filling)

Hypertension: The Silent Killer

Take steps to lower your risks

by Ashlie D. Olp, M.D., Family Practice, Hoosier Family Health, P.C.

Tens of thousands of women in the United States develop high blood pressure, and many don’t know they have it.

Why is this important? Elevated blood pressure is a major risk factor for heart attack, heart failure, stroke, peripheral vascular disease and kidney disease. Your blood carries nutrients and oxygen out to the muscles and organs in your body, which is vitally important to maintaining good health.

Blood pressure is the amount of pressure in the arteries against which your heart has to contract in order to pump blood. Normal blood pressure is considered 120/80, and above 140/90 is considered high blood pressure or hypertension.

As blood pressure climbs above 140/90, the heart has to work harder and harder to pump blood through the body, and damage is done to artery walls, eventually leading to heart and blood circulation events.

However, most of the time, high blood pressure is completely without obvious symptoms. That is why it’s known as the “silent killer.” It slowly damages vital organs without you feeling any changes. The only way to know if your blood pressure is high is to check it regularly.

Here’s what you can do to lower your blood pressure:

♥ If you are overweight, which is a risk factor for high blood pressure, losing 5 to 10 percent of your total body weight will help lower it. That would mean if you weigh 200 pounds, you would need to lose 10 to 20 pounds.

♥ Follow a diet low in sodium and high in potassium, calcium and magnesium to help control your blood pressure. Including fresh fruits and vegetables in your diet will provide these nutrients.

♥ Under the advice of your health care provider, exercise regularly. It is very important for lowering blood pressure and improving your cardiovascular health in general. About 30 to 60 minutes — five or six days a week — of cardiovascular exercise is recommended for optimal health and blood pressure control.

If you implement all of these lifestyle habits and your blood pressure still is not in the healthy range, you may have a genetic predisposition to hypertension. This is not uncommon and usually requires medication to control it. Talk to your primary care doctor about both lifestyle modifications and appropriate medications for you.
Silent Intruder
Blocked artery leads to triple bypass for Mildred Morgan Ball

by Deb Wezensky

Mildred Morgan Ball took pride in her pursuit of all things athletic. She served as assistant commissioner of the Indiana High School Athletic Association for 20 years. She taught physical education and modern dance at the high school level for 17 years.

A self-described “hands-on” teacher, Ball was active every day, maintaining a healthy weight.

However, as an African-American woman, Ball knew her risks for heart disease and stroke. A former smoker, she exercised regularly and was in good shape but still had high blood pressure. So, she made regular appointments to see her cardiologist Dr. Edward Ross to monitor her blood pressure.

For some time, Ball was tired but believed it was due to her busy schedule. Experiencing a tightness in her chest, she tried to alleviate the pressure by buying a new bra. Periodically, she felt pains she attributed to gas and took Gaviscon, an over-the-counter medication for persistent acid reflux pain.

But during one of her regularly scheduled visits, a stress echo test put these symptoms into perspective.

The words “You can’t go home” rang in Ball’s ears as her physician reported she had 90 percent blockage in her main artery. Two days later — on May 28, 2007 — she underwent triple bypass surgery.

Ball says she never was afraid because she felt extremely confident in the expertise and care of her cardiologist and surgeon.

After her experience, Ball’s message to other women is straightforward: You can have no serious symptoms and still “be at risk for this silent intruder that can end your life.” She strongly urges women to seek regular checkups and follow their doctor’s advice.

Don’t assume everything is just fine, she stresses.

Examine your risk for high blood pressure

If your family has a history of high blood pressure ...

A family history of high blood pressure can increase the chances that you have it or will develop it. And if you have it, it’s possible that your children also may develop it. Blood pressure checks should be a part of your routine health care.

If you’re taking birth control pills ...

Birth control pills can be linked with high blood pressure in some women. You are more at risk if you’re overweight, had high blood pressure during pregnancy or have a predisposing condition, like mild kidney disease or a family history of high blood pressure. The combination of birth control pills and cigarette smoking may be especially dangerous. Talk to your physician about the possible risks for elevated blood pressure, and monitor your blood pressure at least twice a year.

If you’re overweight ...

Being overweight or gaining a lot of weight increases your chance of developing high blood pressure. It’s important to maintain normal weight throughout your life.

After menopause ...

At about age 55, a woman’s chance of experiencing high blood pressure becomes greater than a man’s. After menopause your chance of getting high blood pressure increases considerably.

If you’re African American ...

Studies show African-American women of all ages are much more susceptible to high blood pressure. Not only is the disease more common among African-American women, but often it’s more serious.

If you’re pregnant ...

If untreated during pregnancy, high blood pressure is dangerous for you and your baby. Careful treatment helps ensure a normal pregnancy and healthy baby. Your health care provider should keep a close watch on your blood pressure during pregnancy, especially during the last three months. If you develop hypertension during pregnancy, it usually disappears after delivery. If it doesn’t, your doctor should help you monitor and possibly treat your high blood pressure.

Reality Check

Though your health care providers always should check your blood pressure during your office visits, you can easily monitor it yourself with the following options:

♥ Purchase a blood pressure cuff; check your blood pressure at home.
♥ Before grocery shopping, stop by the in-store pharmacy.
♥ While picking up prescriptions, check your blood pressure while you wait.
♥ While shopping at your favorite discount warehouse, you more than likely can check your blood pressure.
What's On Your Plate?

Your choices can affect your chances of developing high blood pressure

by Laura Hornuth, MS, CD, Registered Dietitian, Community Nutrition Obesity Prevention

Sodium is essential in small amounts — helping to maintain the right balance of fluids in the body, transmit nerve impulses, and influence the contraction and relaxation of muscles.

Healthy adults need between 1,500 to 2,300 milligrams of sodium a day. However, studies show most Americans consume more than twice the recommended amount of sodium.

Excess sodium can have adverse effects for some people, greatly increasing their chances of developing hypertension, heart disease and stroke.

Lifestyle changes can prevent or delay the onset of high blood pressure and can lower elevated blood pressure:

♥ Lose weight if you're overweight. Dropping as few as 10 pounds can make a difference.
♥ Cut sodium to less than 2,300 milligrams (approximately 1 teaspoon of salt) per day.
♥ Be physically active. Strive for 30 minutes of moderate-level physical activity most days of the week.
♥ If you drink alcohol, drink only a moderate amount — one drink a day for women, two drinks a day for men.
♥ Try a DASH-like Diet: The Dietary Approaches to Stop Hypertension (DASH) eating plan includes whole grains, eight to 10 servings of fruits and vegetables, three servings of low-fat dairy, limited animal fat intake and increased intake of plant proteins every day.

High Sodium Foods

♥ Fast food
♥ Pizza
♥ Frozen dinners
♥ Snack items such as corn chips, potato chips, pretzels, salted popcorn and nuts
♥ Salty or smoked meats
♥ Processed cheese
♥ Instant or flavored rice and pasta mixes
♥ Canned and instant soups, canned vegetables
♥ Commercial cakes, cookies, pies and puddings
♥ Ready-to-eat cereals
♥ Instant hot cereal
♥ Sodium-heavy spices, sauces, salad dressings and mixes
♥ Foods prepared in brine such as pickles, olives and sauerkraut
♥ Prepared mustard and ketchup

When systolic and diastolic blood pressure fall into different categories, the higher category should be used to classify blood pressure status.

Source: National Heart, Lung and Blood Institute

Blood Pressure Classification for Adults

<table>
<thead>
<tr>
<th></th>
<th>Systolic (mmHg)</th>
<th>Diastolic (mmHg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal</td>
<td>Below 120</td>
<td>Below 80</td>
</tr>
<tr>
<td>Pre-hypertensive</td>
<td>Below 120-139</td>
<td>80-89</td>
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<tr>
<td>Hypertension</td>
<td>140-159</td>
<td>90-99</td>
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<tr>
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<td>180 and above</td>
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<td></td>
<td>Stage 1</td>
<td>Stage 2</td>
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<tr>
<td></td>
<td>Stage 3</td>
<td></td>
</tr>
</tbody>
</table>

Source: National Heart, Lung and Blood Institute

Tips for a healthier, lower sodium diet:

♥ Eat more fresh foods and fewer processed foods.
♥ Choose and prepare foods with little salt. At the same time, consume potassium-rich foods such as fruits and vegetables.
♥ Limit sodium-laden condiments.
♥ Prepare foods with sodium-free spices such as basil, curry, garlic, ginger, lemon, mint, parsley, pepper, rosemary and thyme.

Lifestyle changes can prevent or delay the onset of high blood pressure and can lower elevated blood pressure:

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Changing Course
Kristen Denton makes lifestyle adjustments to lower her cholesterol
by Deb Wezensky

At age 27, Kristen Denton looks and feels like a healthy, happy newlywed.
She's a busy woman who tries to follow an exercise routine to maintain a healthy weight. She works in governmental affairs at a downtown Indianapolis office while earning her masters in public affairs at Indiana University-Purdue University at Indianapolis.

Denton recently took advantage of the free health screenings at the Heart Walk Kickoff on Monument Circle. She was amazed her cholesterol registered at an extremely high level.

Surprised by the results, Denton looked to her family history. Her dad has struggled with extremely high cholesterol for years. Several other extended family members also use medication to lower their cholesterol levels.

Though this risk factor for heart disease can't be changed, she took steps to reduce the risks that she could control. Concerned about the effect elevated cholesterol would have on her heart health, she met with her family physician. They discussed the results of her follow-up cholesterol tests.

Denton now follows her doctor’s recommendations, including lifestyle changes. She’s improving her diet and increasing the amount of daily exercise she gets. Oatmeal and whole-grain breads add fiber to her diet. She watches the amount of saturated fats in her meals to reduce her cholesterol level.

Denton says she wants every woman to realize even though she looks and feels healthy, that doesn’t mean she is healthy inside and out. She also spreads the word about the potential of heart disease.

She encourages others to talk to all the women in their lives about their heart health. Being aware, she says, is a great start to a long and healthy life.

Get the facts!
Your health is your responsibility. Ask your doctor for a cholesterol test and keep a record of your numbers each time. Keep in mind:

♥ People of normal weight or “thin” people also need to have their cholesterol tested.
♥ Healthy lifestyle behaviors such as diet and exercise are important, but due to hereditary factors, cholesterol-lowering medication also may be needed.
♥ It is still important to eat a heart-healthy diet and exercise every day, even if you are on medication.
♥ Your cholesterol numbers may change after menopause. Be sure to get tested.

Cholesterol Guidelines

| LDL (Low Density Lipoprotein) Cholesterol |
|-------------------------|------------------|
| Less than 100 mg/dL | Optimal          |
| 101-129 mg/dL         | Near optimal/above optimal |
| 130-159 mg/dL         | Borderline High  |
| 160-189 mg/dL         | High             |
| 190 mg/dL and above   | Very High        |

| HDL (High Density Lipoprotein) Cholesterol |
|-------------------------|------------------|
| >60 mg/dL (for women)   | Optimal          |
| 50-60 mg/dL (for women) | Average          |

| Total Blood Cholesterol |
|-------------------------|------------------|
| Less than 200 mg/dL     | Desirable        |
| 200-239 mg/dL           | Borderline high  |
| 240 mg/dL or more       | High             |
| < 49 mg/dL (for women)  | Low (at risk)    |

Source: American Heart Association
“African Americans are more adversely affected by heart disease and stroke than any other racial group. To combat this disparity, the Association of Black Cardiologists is conducting a public education campaign called ‘Children Should Know Their Grandparents: A Guide to a Healthy Heart.’ This program encourages healthy lifestyle choices to prevent health disease and stroke and stresses the importance of sharing family medical histories.” — Public Health Action Plan to Prevent Heart Disease and Stroke

The Cholesterol Connection

Healthy diet and exercise make a difference

For many of us, the mention of the word cholesterol conjures up images of people eating oatmeal and other heart-healthy foods to battle high cholesterol levels. We often forget that a certain level of this fat-like substance, made naturally in our bodies, is essential for proper functioning of the body — such as making new cells.

However, excess cholesterol can clog arteries and significantly increase the risk of heart attack and stroke. Cholesterol levels vary based on diet, age, gender, heredity and other factors, such as physical activity level. Some of these factors can be changed to lower your cholesterol level. Know your levels and then make changes to maintain or improve your heart health.

The bad and the good

Low-density lipoproteins are necessary but levels may need to be lowered. Cholesterol is transported in the bloodstream in protein-lipid “packages” called lipoproteins. Lipoproteins are like “shuttles” that carry cholesterol to and from the liver and through the circulatory system. Low-density lipoproteins (LDL) carry cholesterol from the liver to the organs and tissues that need it. If there is more low-density cholesterol than the body needs, it is deposited in the blood vessels. Excess LDL accumulates on the artery walls as plaque, which can disrupt blood flow or completely block arteries and cause heart attacks and strokes. This is why LDLs are called “bad cholesterol.”

High-density lipoproteins are vital to your health so higher levels are desirable. In contrast to low-density lipoproteins, high-density lipoproteins (HDLs) are known as “good cholesterol.”

High-density lipoproteins seek out excess LDLs and shuttle the unused, potentially dangerous LDLs back to the liver for elimination or recycling. Therefore, high levels of HDLs provide a protective effect and are essential for cardiovascular health.

Healthy levels

Now that you know the difference between LDLs and HDLs, you can understand why it is so important to know your cholesterol levels. Thanks to improved technology, cholesterol screenings can be done quickly and in any location.

Currently, the best method for gauging the risk of heart disease or stroke based on blood cholesterol level is to look at the ratio of total cholesterol level to the level of “good” cholesterol or HDL.

“Total cholesterol” not only includes LDL and HDL levels, but also includes another kind of fat that circulates in the blood stream called triglycerides.

In control

The great news is that we do have some control over the makeup of lipoproteins and total cholesterol in our body. Eating a diet low in saturated fat and trans fats and high in fiber helps keep LDLs down.

Most importantly, there is promising research that shows that exercise increases HDL levels and decreases triglycerides. This combination can positively impact total cholesterol and provide a protective effect.

Bottom line? Healthy lifestyle behaviors can affect your cholesterol levels and overall cardiovascular health!
Embrace New Stress Busters
Mind-body connection may affect your cardiovascular health

by Dr. JoEllen Vrazel, Indiana State Department of Health

Experiencing some stress is a natural part of life — and in some cases, it can be life saving. Unfortunately, high stress levels have become a part of life for many Americans. Over time, chronic stress levels can take a toll on our health if we don’t learn to manage it in positive ways.

Poor coping skills like smoking, overeating and not taking time for exercise actually add to our stress. Unchecked stress levels can cause us to behave in ways that add to our risks for heart disease and other health issues.

A stressor is any situation that triggers a physical and emotional reaction. Your reaction is called a stress response. Stress often is used to describe negative situations; however, stress occurs with positive events as well. Although these situations may vary in intensity, your body reacts with the same set of responses.

Occasional stress can be beneficial and may encourage us to rise to the occasion to grow as individuals. However, too much stress can exceed your ability to cope and affect mental and physical functioning.

Not learning to deal with stress in positive ways can lead to coronary arterial disease, high blood pressure, chest pains, irregular heart beat and even disability. These health problems then add to your stress, and a vicious cycle begins.

Your body’s response to stress includes:

- The nervous system releases hormones such as adrenaline and cortisol into the bloodstream.
- Heart rate, breathing, blood pressure and metabolism increase.
- Blood flow increases to large muscle groups.
- Pupils dilate to improve vision.
- The liver releases glucose for energy.
- Sweat is produced to cool body.

Warning signs of chronic stress are:

- Lack of energy or apathy
- Difficulty making decisions
- Difficulty “keeping track” of things
- Feeling on edge
- A change in eating or sleeping habits
- Difficulty controlling emotions
- Using alcohol or drugs to deal with stress
We each experience stress in different ways. Your unique makeup including personality, health, life experiences and coping skills can influence how well you manage stress. If you are excessively competitive, controlling or impatient (often know as Type A personality), you may tend to have more problems coping with stress.

Over time, chronic stress and lack of coping skills can take its toll on your well-being and may lead to heart disease and stroke.

You can learn to manage stress and improve your health and overall quality of life. The first step to coping with stress is to identify the factors in your life that cause it.

In an ideal world, you would eliminate the factors leading to excess stress; however, that is not always possible. In the real world, you can practice and master some stress management skills to overcome the strain and anxiety of everyday life.

The following can help you combat stress:

**Exercise regularly.** Aim to exercise 30 minutes a day, most days of the week.

**Increase social support.** Find one positive, close friend or partner to lean on.

**Improve communication.** Take time to express your thoughts and feelings; listen to others.

**Modify unrealistic expectations.** Wonder Woman is really a fictional character.

**Find the silver lining.** Be aware of negative self-talk and train your thoughts toward positive thinking.

**Live in the present.** Enjoy the moment; stop and smell the roses.

**Be flexible.** Ask yourself, “Do I really have to be in control of this situation?”

**Laugh.** Laughter is often the best medicine and helps put things into perspective.

You also can try one or more of the following relaxation techniques to manage your stress:

**Progressive relaxation.** This involves simply tensing and relaxing muscles one by one, inhaling with contraction and exhaling with relaxation. Consciously relaxing muscles sends a message to other systems to reduce the stress response.

**Visualization.** This is effective at inducing relaxation, changing habits and improving performance. To practice this technique for relaxation, imagine yourself in a peaceful environment, and identify all the sensory qualities of it. Your body will respond as if the situation is real.

**Deep breathing.** Your breathing pattern is tied to your stress level, and deep, slow breathing is associated with relaxation. With practice, you can learn to slow your breathing, helping you to relax.

**Meditation.** This involves emptying the mind of random thoughts and consciously focusing your attention on a single point of reference. It results in a “relaxation response” that positively affects metabolism, heart rate, respiration, blood pressure and brain chemistry.

If you feel unable to manage your current level of stress, talk to your doctor right away.

**Time-management skills for stress reduction:**

- Set priorities and realistic goals.
- Budget enough time.
- Create short-term goals.
- Visualize achievement.
- Do least-favorite tasks first.
- Consolidate tasks, and delegate responsibility.
- Learn to say no.

**Common sources of stress:**

- Major life changes
- Daily hassles
- Job-related stressors
- Interpersonal and social interactions
- Psychological
  - Perfectionist attitudes
  - Obsessiveness/compulsiveness
  - Need for control
- Biological
  - Substance abuse (alcohol, drugs)
  - Nutritional excess (caffeine, sugar)
Resources for a Healthier Heart

**American Heart Association** provides educational resources on heart health and diseases for patients and health care providers. Log on www.americanheart.org.

**American Stroke Association** provides resources on stroke to increase awareness and encourage earlier diagnosis of strokes. Log on www.strokeassociation.org.

**DASH: A Diet for All Diseases Centers for Science in the Public’s Interest (CSPI)** provides practical ideas for healthy eating guidelines for better heart health. Log on www.cspinet.org/nah/dash.htm.

**Dietary Guidelines for Americans** (pages 39-42) A downloadable PDF file that provides Guidelines and advice for good dietary habits that can promote health and reduce risk for major chronic diseases. Log on www.health.gov/dietaryguidelines/.

**Division of Nutrition, Physical Activity and Obesity** provides information on topics to improve health through improving lifestyle choices. Log on www.cdc.gov/nccdphp/dnpa.

**The Emotional Survival Guide for Caregivers: Looking After Yourself and Your Family While Helping an Aging Parent** helps caregivers deal with issues surrounding responsibility to self, as well as loved one, when dealing with chronic disease.

**Heart Disease and Stroke Prevention — Center for Disease Control and Prevention** Log on www.cdc.gov/dhdsp.

**Heart Insight** is a free quarterly magazine published by the American Heart Association (AHA) and Lippincott Williams & Wilkins, for patients, their families and caregivers. Log on www.heartinsight.com to subscribe.

**The Heart of Diabetes** is a program that helps people with type 2 diabetes take action to lower their risk for cardiovascular disease. Call (800) 242-8721 or log on www.americanheart.org/diabetes.

**Heart to Heart** is a partnership between the First Lady of Indiana and the State Department of Health Office of Women's Health. Their focus is the issue of women's heart disease. Log on www.hearttoheart.in.gov and go to Heart to Heart link.

**The Indiana Heart Hospital** provides innovative services including technology which speeds diagnosis and allows for faster and more efficient heart health care, the state's only 24-hour cardiac emergency room and cardiologists on-site 24 hours a day. (317) 621-8000 or log on www.HeartHospital.com.

**Indiana State Department of Health** announces a certified wellness program that Indiana small businesses may use to qualify for a new tax credit. This tax credit seeks to recognize those businesses that are working to improve Indiana's health status by providing wellness opportunities for their employees. For more information, log on www.in.gov/isdh/programs/wellness/index.htm.

**Indiana Tobacco Quitline** Call (800) 784-8669 or log on www.indianatobaccoquitline.net.

**Indiana Tobacco Prevention & Cessation** Call (317) 234-1787 or log on www.in.gov/itpc.

**INFluence** provides an avenue by which Hoosier women (leaders in government, business, health care, education, media, and faith-based and community organizations) are educated about critical women's health issues to act as advocates for women's health in their own spheres of influence. Log on www.influence.in.gov.

**INShape Indiana** provides resources for the improvement of all Hoosiers' health. Log on www.inshape.in.gov.

**Mayo Clinic** provides guidelines on how much sodium you need, what high-sodium foods to avoid, and ways to cook without added sodium. Log on www.mayoclinic.com/health/sodium/NU00284.

**National Heart, Lung, and Blood Institute** offers a variety of educational resources on cholesterol, heart attacks, high blood pressure, peripheral arterial disease and other heart and vascular diseases. Log on www.nhlbi.nih.gov/health/public/heart/index.htm#hbp.

**National Coalition for Women with Heart Diseases** educates, informs and offers support opportunities for women who are dealing with cardiovascular diseases. For more information, log on www.womenheart.org.

**Sister to Sister** offers women free cardiac screenings to promote early detection and treatment of heart disease and increases awareness that heart disease is the No. 1 killer of women in the United States today. Log on www.sistertosister.org.

**WiseWoman** provides resources every woman can use such as general and specific health information. For more information, log on www.cdc.gov/wisewoman/resources.


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