

Foreword by  
CNN's Jill Dougherty  
FEATURED INTERNATIONAL JOURNALIST

# The Healthy Woman



## A Complete Guide for All Ages

*Easy to understand information from the  
nation's leaders in women's health*



U.S. Department of Health and Human Services,  
Office on Women's Health

## More praise for *The Healthy Woman*

“This women’s health book is a must read! It offers information in a way that is easy to understand and easy to apply to everyday life. Included are tips to stay fit and healthy, lower your risk of disease, as well as tips for managing many conditions common to women.”

—Dorothy “Dot” Richardson, MD, Two-time Olympic Gold Medalist in softball, Vice Chair of the President’s Council on Physical Fitness and Sports

“This helpful, thorough guide gives women the tools they need to be proactive about their own health, as well as the health of their children and loved ones.”

—Margit Ragland, Health Director, *Family Circle*

“Optimum health is key to being an empowered woman, and *The Healthy Woman* is an important new empowerment tool. The content is reliable, straightforward, and engaging. Every woman should have a copy on her nightstand!”

—Lorraine Cole, PhD, CEO, YWCA USA

“The keys to good health and disease prevention are spelled out plainly in this must-have resource for today’s woman. If you only read one book this year, you owe it to yourself to make it this one!”

—Donna Richardson Joyner, Fitness Expert, Member of the President’s Council on Physical Fitness and Sports

“*The Healthy Woman* is full of straightforward, reliable information that can help any woman take charge of her health.”

—Wendy Naugle, Deputy Editor, Health, *Glamour*

“*The Healthy Woman* is a ready reference that answers the questions many of us have about our health and well-being.”

—Eleanor Hinton Hoyt, President & CEO, Black Women’s Health Imperative

# The Healthy Woman

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**A Complete Guide for All Ages**



U.S. Department of Health and Human Services,  
Office on Women's Health

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The Office on Women's Health within the U.S. Department of Health and Human Services promotes health equity for women and girls by educating health professionals and motivating behavior change in consumers through the dissemination of health information.



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This is the Official U.S. Government edition of this publication and is herein identified to certify its authenticity. Use of the ISBN 978-0-16-077183-5 is for the U. S. Government Printing Office Official Editions only. The Superintendent of Documents of the U.S. Government Printing Office requests that any reprinted edition be labeled clearly as a copy of the authentic work with a new ISBN.

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Internet: [bookstore.gpo.gov](http://bookstore.gpo.gov) Phone: toll free (866) 512-1800; DC area (202) 512-1800  
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

ISBN 978-0-16-077183-5

# Acknowledgments

**The Department would like to thank the numerous departmental scientists and staff who served as expert reviewers of this guide, representing the following agencies:**

Office of the Secretary, U.S. Department of Health and Human Services

Office of Public Health and Science

Centers for Disease Control and Prevention

Health Resources and Services Administration

U.S. Food and Drug Administration

Centers for Medicaid and Medicare Services

Indian Health Service

U.S. Administration on Aging

U.S. Environmental Protection Agency

National Institutes of Health

National Cancer Institute; National Center for Complementary and Alternative Medicine; National Heart, Lung, and Blood Institute; National Institute of Allergy and Infectious Diseases; National Institute of Arthritis and Musculoskeletal and Skin Diseases; *Eunice Kennedy Shriver* National Institute of Child Health and Human Development; National Institute on Deafness and Other Communication Disorders; National Institute of Mental Health; National Institute of Neurological Disorders and Stroke; National Institute on Aging; National Institute of Dental and Craniofacial Research; National Institute of Diabetes and Digestive and Kidney Diseases; Warren Grant Magnuson Clinical Center of the National Institutes of Health

**The Department also thanks the following individual expert reviewers for their contributions:**

Suganya Sockalingam, Executive Director, TeamWorks

Cathy Carothers, BLA, IBCLC, RLC, Director of Marketing, International Lactation Consultants Association

Linda Smith, BSE, FACCE, IBCLC, RLC, Director, Bright Future Lactation Centre, Ltd.

Amy Spangler, MN, RN, IBCLC, RLC, President, Amy's Baby Company

Gina Ciagne, CLC (Certified Lactation Counselor), Director, Breastfeeding and Consumer Relations, Lansinoh Laboratories, Inc.

Cheryl Scacheri, MS, CGC, Director, Genetic Counseling Program, Genomic Medicine Institute, Cleveland Clinic Lerner Research Institute

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# Foreword



A few years back I was at my doctor's office, talking with the nurse, asking for some advice. She told me, "Listen to your body."

I sat there and stared at her. I understood the words but I had no idea what she was talking about. "I don't listen to my body," I joked. "I tell my body what to do!" We both laughed but I was serious.

I always felt my body was something to be pushed and prodded into shape, deprived of sleep if necessary, deprived of food if I wanted to fit into a slinky dress. But here was a nurse telling me to be kind to my body. Listen to it. Follow its lead. Let it decide—not just my brain.

It took me a long time to really get it: that my body is me. That it's the only one I have. That it won't last forever. And that, by listening to my body, I can learn how to protect it, strengthen it, and, most of all, enjoy it, delight in it.

That's what this book is all about. Straight-ahead information on the things we can do to stay healthy, tests we should get to monitor our health, how to cope with disease, and how to talk with our doctors. Simply put, how to take charge of our own health.

It's the book I wish I'd had on a sunny day in October 1999, when I sat in another doctor's office, pen and notebook in hand, and heard him tell me I had breast cancer. After years of working as a CNN correspondent, reporting on civil wars and political upheaval, I thought I was ready for the news. I would just jot the information down, do some research, find treatment, and get on with my life.

I could hardly hold the pen. My hand shook. My heart was beating out of my chest.

Later that day, a bit calmer, I began to search for information on breast cancer. Even though my doctor was very helpful and began mapping out possible treatment strategies, I knew that, ultimately, I was the one who would have to decide which options to pursue and for that I needed information. I went to the bookstore, but one look at the rows and rows of books on every conceivable aspect of health and cancer completely overwhelmed me.

On the Internet it was even more confusing. Literally hundreds of millions of hits and links to different Web sites, with no guarantee that the information you find is trustworthy. What I needed was a guide, just like this one, written and reviewed by experts who know what they are talking about.

My experience taught me so much more than the details of cancer. I learned that I had a right, a responsibility to myself, to find the best doctors I could. If I could “shop ’til you drop” for a pair of shoes, I could shop until I dropped to find the doctor I trusted, a doctor who treated me like an adult, who respected me and my opinions. I got a second opinion ... and even a third opinion. I almost gave up, but you know what? The last doctor I saw was absolutely the one I had dreamed of finding, who was positive and fun and made me feel that, ultimately, I would be all right.

I was lucky because the person I loved was there with me all the way, but I also learned that, even if I weren’t so lucky, I didn’t have to face things alone. I joined a breast cancer support group and some of my best memories are of the six of us, all with bald heads—sporting baseball caps, bandanas, or wigs—finding ways to laugh together, even during some of our darkest days.

Finally, I learned that my nurse was right; I really should “listen to my body.” If I really love myself and want to live a healthy life—physically and mentally—there are things I can do to help make that happen. Sure, I don’t always want to get a mammogram and no, I don’t always want to make time for physical activity. And yes, there are things I sometimes am afraid to discuss with my doctor. But I can tell you from my own experience: there is nothing more empowering than being in control of decisions about my health. And, I am happy to say, there is nothing more fabulous than being a healthy woman!

**Jill Dougherty**

U.S. Affairs Editor

CNN International

# Taking Charge of Your Health

Have you ever walked out of your doctor's office after a visit confused about what she or he just told you? If your answer is yes, you are not alone. Health issues can be complex and hard to understand.

At the same time, it seems that we are being asked to do more and more to improve our health. There are almost daily news reports about advice on eating certain foods or exercising to prevent certain diseases. Keeping track of all this information can seem overwhelming. And the sometimes conflicting advice clouds our understanding even more. Plus, if you have a family, you are likely making health choices not only for yourself, but also for them!

Although the matter of health can be challenging, there are ways to make it easier. To start, it is important to learn about the things you can and can't control.

## **Understanding risk factors: Learning what you can and can't control**

Part of learning how to take charge of your health involves understanding your risk factors for different diseases. Risk factors are things in your life that increase your chances of getting a certain disease.

Some risk factors are beyond your control. You may be born with them or exposed to them through no fault of your own. Risk factors that you have little or no control over include your:

- family history of a disease
- sex



- ancestry
- age
- health—having one health problem may raise your risk of having another (for instance, having diabetes increases your chances of getting heart disease)

Risk factors you can control include:

- what you eat
- how much physical activity you get
- whether you use tobacco
- how much alcohol you drink
- whether you use illegal drugs
- whether you use your seatbelt

In fact, it has been estimated that almost 35 percent of all U.S. early deaths in 2000 could have been avoided by changing just three behaviors:

- stopping smoking

- eating a healthy diet (for example, eating more fruits and vegetables and less red meat)
- getting more physical activity

### **Having more than one risk factor**

You can have one risk factor for a disease or you can have many. The more risk factors you have, the more likely you are to get the disease.

One doctor has suggested thinking of multiple risk factors for a disease in terms of your chances of breaking a leg when leaving a building.\* If you're a healthy person and don't have any risk factors for, say, heart disease, it's like leaving the building on the ground floor. In this case, your chances of breaking a leg are small.

But let's say you have one risk factor for heart disease: diabetes. Now it's like leaving the building by jumping from the second floor. Your chances of breaking a leg are now greater. If you also have another risk factor, such as high blood pressure, it's like jumping from the third floor. If you also smoke tobacco, now you're jumping from the fourth floor.

To lower your risks, all you have to do is come down the stairs. In the case of heart disease, that means taking steps such as quitting smoking and controlling your blood pressure through healthy eating, physical activity, and taking medications.

### **Inheriting risk—your family health history**

Rarely, you can inherit a mutated gene that alone causes you to get a disease. Genes control chemical reactions in our bodies. If you inherit a faulty gene, your

body may not be able to carry out an important chemical reaction. For instance, a faulty gene may make your blood unable to clot. This problem is at the root of a rare bleeding disorder.

More often, you can inherit genes from one or both of your parents that put you at higher risk of certain diseases. But having a gene for a certain disease does not mean you will get it. There are many unknown factors that may raise or lower your chances of getting the disease.

You can't change your genes, but you can change behaviors that affect your health, such as smoking, inactivity, and poor eating habits. People with a family health history of chronic disease may have the most to gain from making lifestyle changes. In many cases, making these changes can reduce your risk of disease even if the disease runs in your family.

Another change you can make is to have screening tests, such as mammograms and colorectal cancer screening. These screening tests help detect disease early. People who have a family health history of a chronic disease may benefit the most from screening tests that look for risk factors or early signs of disease. Finding disease early, before symptoms appear, can mean better health in the long run.

### **How do I find out my disease risks?**

It is important to talk to your doctor or nurse about your individual health risks, even if you have to bring it up yourself. And it's important for your doctor to know not just about your health, but your family health history as well. Come to health care visits armed with information about you, your children, siblings,

parents, grandparents, aunts and uncles, and nieces and nephews, including:

- major medical conditions and causes of death
- age of disease onset and age at death
- ethnic background
- general lifestyle information like heavy drinking and smoking

Your doctor or health professional will assess your risk of disease based on your family health history and other risk factors. He or she may also recommend things you can do to help prevent disease, such as getting more physical activity, changing your diet, or using screening tests to detect disease early.

Web sites also can help you calculate your risks of getting certain diseases, some of which are listed on page 426 of the Appendix. **These online tools should never replace the information from or advice of a doctor or nurse.**

### **How this book can help you**

In this book, we discuss the risk factors for major diseases that affect women—both those that you can control and those you can't. If it is possible to control a risk factor to lower your chances of getting a disease, we will tell you how. We will also discuss diseases for which causes and risk factors are not yet understood.

This book also explains:

- what happens to your body with certain diseases

- tips for handling many diseases and health conditions
- how to stay healthy during key phases of your life, such as during pregnancy and menopause
- how to communicate with doctors and nurses
- the screenings, tests, and immunizations women need
- where to find more health information that you can trust

In each chapter, besides important health tips, you will also find personal stories from women across the country. You may find that some of their experiences are similar to what you may be going through. Hopefully, these stories will show you that you are not alone.

### **How this book can help you help your family**

As you learn about diseases that affect women, you will learn how to improve your family's health as well. Diseases such as heart disease, cancer, and stroke can, of course, affect men as well as women. Steps you can take to reduce your chances of getting these diseases can also apply to the men in your life. And because heart disease may start as early as childhood due to poor eating habits and lack of physical activity, your efforts may help your children lead longer and healthier lives.

What you do today counts—for you and your loved ones. Take charge of your health! ■

\*Edwards A. Communicating risks through analogies. *BMJ*. 2003;327:749.







# Heart Disease

We used to think of heart disease as a man's problem. Now we know that it is the number one killer of women, just as it is of men. Yet women are more likely than men to be both underdiagnosed and undertreated. Fortunately, you have the power to impact your heart health in many ways! Commit to a healthy lifestyle that includes heart-healthy eating, regular physical activity, and not smoking. Understand the warning signs of a heart attack, because they can be different for women than for men. Let your doctor be your partner in helping you. And no matter how old you are, take action to protect your heart.

## **A woman's disease**

Many women may not be aware that they are at risk of heart disease. Many doctors also make the mistake of thinking that heart disease strikes men more often than women. In fact, some research shows that doctors are more likely to diagnose and treat heart disease in a man than a woman, even if the two have the same symptoms.

Another problem is that until about 15 years ago, women were often not included in heart disease research. We assumed that the results of research involving men applied to women as well. Now we know this is not the case.

Still, we have learned a lot about heart disease in women—how to find out if you have the disease, how to treat it, and, most important, how to prevent it.



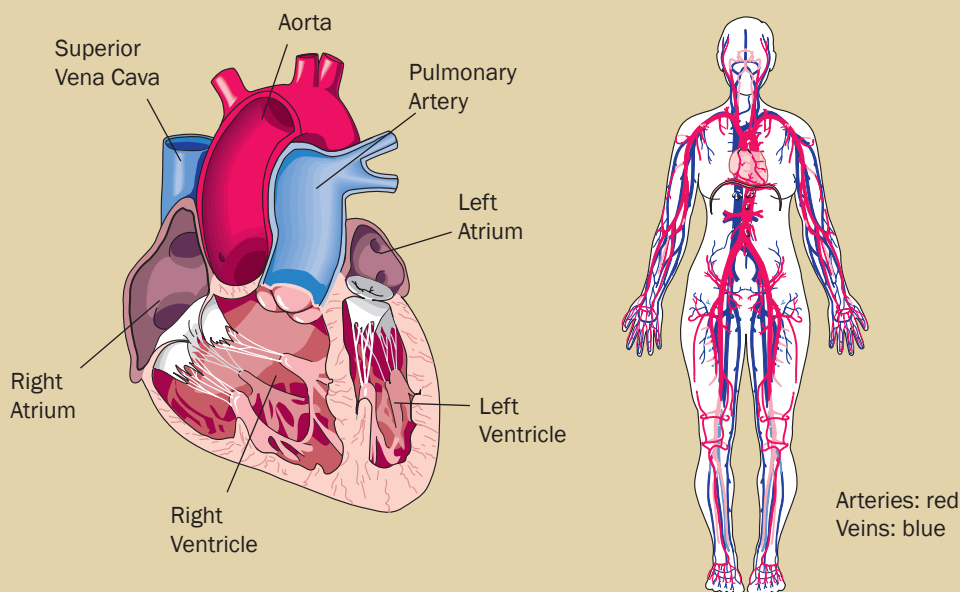
## **Coronary artery disease (CAD)**

When people talk about heart disease, they usually mean coronary artery disease (CAD). It is the most common type of heart disease. With CAD, plaque builds up on the walls of the arteries that

## How Your Heart Works

Your heart is a fist-sized muscle in the middle of your chest. An electrical system regulates its pumping action. With each heartbeat, blood is pumped through a large network of blood vessels. The blood supplies oxygen and nutrients to all the cells. It also picks up carbon dioxide and waste products from the cells. Arteries are the blood vessels that carry oxygen-rich blood away from the heart to all the parts of the body. The coronary arteries supply fresh blood to the heart itself, so it can work. Blood vessels that return blood from the body to the heart are called veins (vayns).

The heart has four chambers. The two upper chambers are called atria (AY-tree-uh). The two lower chambers are called ventricles. A system of inlet and outlet valves works to keep the blood flowing in the right direction.



carry blood to the heart. Over time, this buildup causes the arteries to narrow and harden, called atherosclerosis (a-thuh-roh-skluh-ROH-suhss). When this happens, the heart does not get all the blood it needs. This can lead to:

- **Angina** (an-JEYE-nuh)—chest pain or discomfort that happens when the heart doesn't get enough blood.
- **Heart attack**—happens when a clot mostly or completely blocks blood

flow to the heart muscle. Without blood the heart will start to die. If a person survives a heart attack, the injured area of the heart muscle is replaced by scar tissue. This weakens the pumping action of the heart.

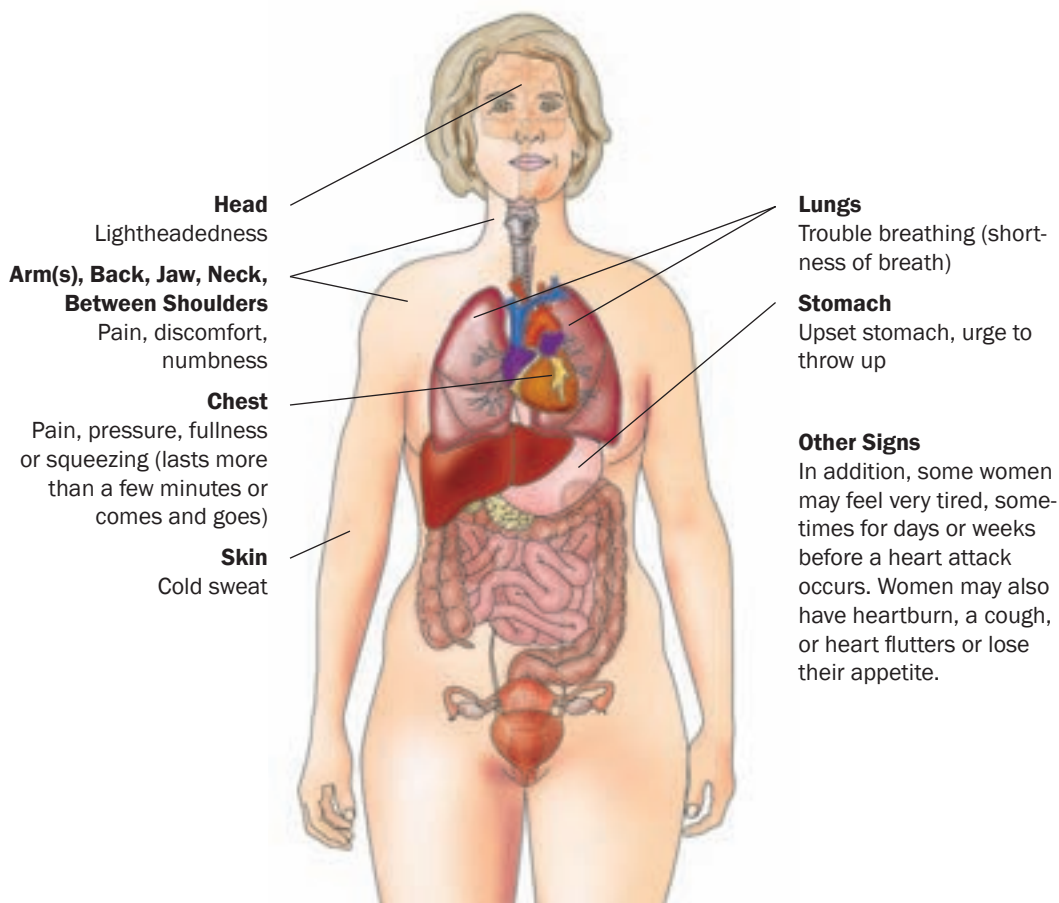
**Although there are different types of heart disease, the main type discussed here is coronary artery disease.**

## Heart Attack: Warning Signs

Many people think a heart attack is sudden and intense, like a “movie” heart attack, where a person clutches his or her chest and falls over.

The truth is that many heart attacks start slowly, as a mild pain or discom-

fort. If you feel such a symptom, you may not be sure what’s wrong. Your symptoms may even come and go. Even those who have had a heart attack may not recognize their symptoms, because the next attack can have entirely different ones.



If you think that you are having a heart attack, you must act quickly to prevent disability or death. **Wait no more than a few minutes—5 at most—before calling 911.** Treatments for opening clogged arteries work best when given within the first hour after a heart attack starts.

Women are more likely than men to die of a heart attack. One reason is that

women often have less-common heart attack symptoms, which might be misdiagnosed by a woman or even her doctor. If you think you’re having a heart attack, don’t let anyone tell you that you’re overreacting or to wait and see. Get emergency help right away. Ask for tests that can show if you are having a heart attack. It’s better to be safe than sorry.

## Who is at risk of getting heart disease?

Risk factors are conditions or habits that make you more likely to develop heart disease. The more risk factors you have, the greater your chances of getting heart disease. Some risk factors, such as your age or family history, cannot be changed. But many risk factors can be changed by making simple changes in the way you live.

## Risk factors that you can change

### Abnormal blood cholesterol and triglyceride levels

Cholesterol (koh-LESS-tur-ol) and triglycerides (treye-GLIH-suh-ryds) are types of fat found in your blood and other parts of the body. They are carried in the blood by lipoproteins (lip-uh-PROH-teens). Your body needs small amounts of these substances to work well. But too much can lead to plaque buildup on your artery walls. In fact, plaque is made up mostly of unused cholesterol.

A blood test will help measure your levels of:

- **Low-density lipoprotein (LDL) or “bad” cholesterol**—High levels lead to buildup of cholesterol in arteries.

### Unique to Women

- Low HDL cholesterol is more dangerous than having high LDL cholesterol.
- High triglycerides combined with low HDL cholesterol can mean a very high risk of heart disease.

### Risk factors that you can change (pages 18–25):

- Abnormal blood cholesterol and triglyceride levels
- High blood pressure
- Cigarette smoking
- Diabetes
- Being overweight or obese
- Metabolic syndrome
- Lack of physical activity
- Heavy alcohol use
- Sleep apnea

### Risk factors that you cannot change (page 26):

- Age (55 years and older for women)
- Family history of early heart disease

### Other possible risk factors (pages 26–28):

- Depression, anxiety, and stress
- Lower income
- Not enough sleep

- **High-density lipoprotein (HDL) or “good” cholesterol**—High levels are good. HDL cholesterol travels from other parts of your body to your liver, where it is processed to be removed from the body. This lowers the total cholesterol level in the body.
- **Total cholesterol**—LDL cholesterol plus HDL cholesterol
- **Triglycerides**

Ask your doctor for the results of your blood test and find out your risk in the

table below. These numbers help measure your chances of getting heart disease. Nearly half of U.S. women are at borderline high or high risk of heart disease.

Some people have a tendency toward high cholesterol. But most cases of high cholesterol and triglyceride levels are from eating unhealthy foods, not exercising, and other lifestyle choices. In many cases, adopting a heart-healthy lifestyle can lower total cholesterol, LDL cholesterol,

and triglyceride levels. In addition, moderate physical activity for at least 30 minutes on 5 or more days of the week can raise your HDL cholesterol levels. This can help reduce your heart disease risk.

If lifestyle changes do not bring your cholesterol and triglyceride levels back to normal, your doctor may prescribe one or more of these types of medicines:

- statins
- bile acid resins (REZ-ins)

### Cholesterol and Triglyceride Levels and Heart Disease Risk

Cholesterol and triglyceride levels are measured in milligrams (mg) per deciliter (dL) of blood.

#### Total Cholesterol Level

Less than 200 mg/dL

200–239 mg/dL

240 mg/dL and above

#### Risk Group

Desirable

Borderline high

High

#### LDL Cholesterol Level

Less than 100 mg/dL

100–129 mg/dL

130–159 mg/dL

160–189 mg/dL

190 mg/dL and above

#### Risk Group

Optimal (ideal)

Near optimal/above optimal

Borderline high

High

Very high

#### HDL Cholesterol Level

Less than 40 mg/dL

60 mg/dL and above

#### Risk Group

High

Somewhat protective

#### Triglyceride Levels

Less than 150 mg/dL

150–199 mg/dL

200 mg/dL and above

#### Risk Group

Desirable

Borderline high

High

- fibrates
- cholesterol absorption inhibitors

### **Cholesterol Test: How Often?**

Have your blood cholesterol and triglyceride levels tested at least once every 5 years and your blood pressure checked every 1 to 2 years.

### **High blood pressure (hypertension)**

Blood pressure is the force your blood makes against the walls of your arteries. Your blood pressure is highest when your heart pumps blood into your arteries. This is called systolic (siss-TOL-ihk) pressure. It is lowest between beats, when the heart relaxes. This is called diastolic (deye-uh-STOL-ihk) pressure.

Your blood pressure varies throughout the day. But if your blood pressure stays above normal most of the time, then you have high blood pressure, or hypertension. If your blood pressure is borderline high, then you have prehypertension. This means that you don't have high blood pressure now but are likely to develop it in the future.

High blood pressure is called the “silent killer” because you can have no symptoms. But years of high blood pressure can damage artery walls, causing atherosclerosis and heart disease. High blood pressure is a common problem among women, especially African American women.

If you have hypertension or prehypertension, you may be able to lower your blood pressure by:

- losing weight if you are overweight or obese

- getting 30 minutes of moderate-intensity physical activity on most days of the week
- limiting alcohol to one drink per day
- quitting smoking if you smoke
- eating foods that are good for your heart
- reducing stress

If lifestyle changes do not lower your blood pressure back to normal, your doctor may prescribe medicine. Some types commonly used to treat hypertension include:

- diuretics (deye-yoo-RET-ihks)
- beta blockers
- calcium channel blockers
- angiotensin (an-jee-oh-TEN-suhn) converting enzyme (ACE) inhibitors
- angiotensin II receptor blockers (ARBs)

If you have hypertension or prehypertension, you should also know that you may be at increased risk of developing type 2 diabetes (see Diabetes section on page 21). You should get tested for type 2 dia-

### **Special Concerns for African American Women**

African Americans often do not respond well to ACE inhibitors or ARBs when these drugs are used by themselves. But African American patients do respond well to either type of drug if it is used in combination with another medicine for treating hypertension, such as a diuretic or calcium channel blocker.

## Blood Pressure Categories

	Systolic (mmHg)*	Diastolic (mmHg)*
Normal	Less than 120	Less than 80
Prehypertension	120–139	80–89
Hypertension	140 or higher	90 or higher

\*mmHg means millimeters of mercury.

betes if your blood pressure readings:

- are too high
- are borderline high
- have been steadily increasing for the last several years but are still in the normal range

### Cigarette smoking

The more you smoke, the higher your risk of heart disease. In fact, about half of all heart attacks in women are due to smoking. What's more, if you smoke and also take birth control pills, you are at high risk of heart disease.

If you are among the nearly 1 in 5 women in the United States who smokes, now is the time to quit. Talk to



your doctor if you need help. There are medicines that can help you quit. Counseling and support groups can also be helpful.

### Diabetes

Diabetes is a disease in which blood glucose (sugar) levels are too high. Type 2 diabetes—the most common type—usually begins after the age of 40, often in people who are overweight or obese. Uncontrolled diabetes can damage artery walls, leading to atherosclerosis and heart disease. In fact, uncontrolled diabetes raises a woman's risk of heart disease more than it does for a man. Also, women with diabetes do not recover as well from a heart attack as men with diabetes do.

If you have type 2 diabetes and are overweight or obese, you might be able to lower your blood glucose levels back to normal by losing weight. If this doesn't work, your doctor might give you medicines or insulin, a hormone that lowers blood glucose levels.

For more information on type 2 diabetes, see the *Type 2 Diabetes* chapter on page 69.

### Being overweight or obese

The more overweight you are, the higher your risk of heart disease—even if you have no other risk factors. Being overweight or obese also raises your chances of developing diabetes, high blood pressure, and high blood cholesterol.

Being overweight or obese is common

among women in the United States, especially among African American and Hispanic women.

How do you know if you are overweight or obese? Use the chart below to find your height and weight. The point at which the two meet is your body mass index (BMI).

	Normal weight						Overweight					Obese			
BMI	19	20	21	22	23	24	25	26	27	28	29	30	35	40	45
Height	Weight (lb.)														
4'7"	82	86	90	95	99	103	108	112	116	120	125	129	151	172	194
4'8"	85	89	94	98	103	107	112	116	120	125	129	134	156	178	201
4'9"	88	92	97	102	106	111	116	120	125	129	134	139	162	185	208
4'10"	91	96	100	105	110	115	119	124	129	134	138	143	167	191	215
4'11"	94	99	104	109	114	119	124	128	133	138	143	148	173	198	222
5'0"	97	102	107	112	118	123	128	133	138	143	148	153	179	204	230
5'1"	100	106	111	116	122	127	132	137	143	148	153	158	185	211	238
5'2"	104	109	115	120	126	131	136	142	147	153	158	164	191	218	246
5'3"	107	113	118	124	130	135	141	146	152	158	163	169	197	225	254
5'4"	110	116	122	128	134	140	145	151	157	163	169	174	204	232	262
5'5"	114	120	126	132	138	144	150	156	162	168	174	180	210	240	270
5'6"	118	124	130	136	142	148	155	161	167	173	179	186	216	247	278
5'7"	121	127	134	140	146	153	159	166	172	178	185	191	223	255	287
5'8"	125	131	138	144	151	158	164	171	177	184	190	197	230	262	295
5'9"	128	135	142	149	155	162	169	176	182	189	196	203	236	270	304
5'10"	132	139	146	153	160	167	174	181	188	195	202	207	243	278	313
5'11"	136	143	150	157	165	172	179	186	193	200	208	215	250	286	322
6'0"	140	147	154	162	169	177	184	191	199	206	213	221	258	294	331
6'1"	144	151	159	166	174	182	189	197	204	212	219	227	265	302	340
6'2"	148	155	163	171	179	186	194	202	210	218	225	233	272	311	350
6'3"	152	160	168	176	184	192	200	208	216	224	232	240	279	319	359
6'4"	156	164	172	180	189	197	205	213	221	230	238	246	287	328	369
6'5"	160	169	177	186	194	202	211	219	228	236	245	253	295	337	380
6'6"	164	173	182	190	199	208	216	225	234	242	251	260	303	346	390
6'7"	169	178	186	195	204	213	222	231	240	249	251	266	311	355	400

BMI calculators can be found at some of the Web sites listed at the end of this chapter.



Once you have found your BMI, check it against the ranges below:

Normal weight: BMI = 18.5–24.9

Overweight: BMI = 25–29.9

Obese: BMI = 30 or higher

For women, a waist size of more than 35 inches also increases heart disease risk. This is because fat located in the abdomen increases atherosclerosis more than fat located in other areas, such as the hips.

If you are overweight, obese, or your waist size is more than 35 inches, losing weight can help prevent health problems like heart disease and diabetes. Work with your doctor to create a weight-loss plan that stresses heart-healthy foods and regular physical activity.

### **Metabolic syndrome**

Having metabolic (met-uh-BOL-ihk) syndrome doubles your risk of getting heart disease or having a stroke. You have it if you have any 3 of these 5 risk factors:

- waist measurement of more than 35 inches
- triglyceride level more than 150 mg/dL
- HDL cholesterol level less than 50 mg/dL
- systolic blood pressure greater than or equal to 130 mmHg or diastolic blood pressure greater than or equal to 85 mmHg
- blood glucose level after fasting for at least 8 hours of greater than 110 mg/dL

Taking steps to eliminate these risk factors will improve your heart and, overall, health.

### **Lack of physical activity**

Lack of physical activity increases your heart disease risk, even if you have no other risk factors for heart disease. It also increases your chances of developing high blood pressure and diabetes and of being overweight or obese. If finding time to be physically active seems like an impossible challenge, take heart. As little as 30 minutes of moderate-intensity physical activity on most, if not all, days of the week helps protect your heart. You can even split this time into three segments of at least 10 minutes each.

### **Drinking alcohol**

Heavy drinking causes many heart-related problems. More than 3 drinks per day can raise blood pressure and triglyceride levels. Too much alcohol also can damage the heart muscle, leading to heart failure. Overall, people who drink heavily on a regular basis have more heart problems than either moderate drinkers or nondrinkers.

However, moderate drinkers are less likely to develop heart disease than people who don't drink any alcohol or who drink too much. Red wine drinkers in particular seem to be protected to some degree against heart disease. Red wine contains flavonoids (FLAY-vuh-noidz), which are thought to prevent plaque buildup. Red grapes, berries, apples, and broccoli also contain flavonoids.

Drinking more than one drink per day increases the risks of certain cancers, including breast cancer. And if you are pregnant, planning to become pregnant, or have another health condition that could make alcohol use harmful, you should not drink.

## Alcohol

If you drink alcohol, drink no more than one drink per day. One drink is counted as:

- 5 ounces of wine
- 12 ounces of beer
- 1½ ounces of 80-proof hard liquor



With the help of your doctor, decide whether moderate drinking to lower heart attack risk outweighs the possible increased risk of breast cancer or other medical problems. If you do decide to drink alcohol, remember that moderation is the key.

## Sleep apnea

Has anyone ever told you that you snore? Loud snoring can be a sign of sleep apnea (AP-nee-uh), a sleep disorder that can raise your chances of having a heart attack. With obstructive sleep apnea—the most common type—the tissue in the back of the throat relaxes and blocks airflow to your lungs. This lowers the oxygen level in your blood, which makes your heart work harder and often leads to high blood pressure. Also, these repeated pauses in breathing cause fragmented sleep, which results in daytime sleepiness.

Women are more likely to develop obstructive sleep apnea after menopause.

## Heart-Healthy Eating

Eating a healthy diet is a powerful way to impact your heart health. It can lower and possibly eliminate many key risk factors for heart disease, including:

- high cholesterol and triglyceride levels
- high blood pressure
- diabetes
- obesity and overweight

When striving to eat heart healthy, a special eating plan called the DASH eating plan can help guide your food choices. It also will help lower your blood pressure if it is too high. DASH stands for Dietary Approaches to Stop Hypertension. The DASH eating plan:

- stresses low-cholesterol foods that are good for your heart, such as fruits and vegetables; whole-grain breads and other foods; low-fat (1 percent) or fat-free milk and dairy products; nuts, seeds, and beans; and moderate amounts of skinless poultry and fish\*
- is rich in magnesium, potassium, calcium, protein, and fiber
- is low in saturated fat, *trans* fat, and total fat
- limits red meat, sweets, and sugary drinks

\*Oily fish like salmon, herring, and tuna contain omega-3 fatty acids, which have been shown to reduce your risk of dying of heart disease. Also, taking omega-3 fatty



Other things that may increase the risk of obstructive sleep apnea are:

- being overweight or obese
- smoking
- using alcohol or sleeping pills
- a family history of sleep apnea

If you think that you have sleep apnea, talk with your doctor. Your doctor might suggest a sleep test to see how severe your sleep apnea is. Mild cases often can be helped by lifestyle changes, such as losing weight and not drinking alcohol before bed. If you have severe obstructive sleep apnea or another type, your doctor may suggest other treatments, such as using a machine that props open your airway during sleep or having surgery.



A SPECIAL DEVICE HELPS PEOPLE WITH SLEEP APNEA BREATHE FREELY AND SLEEP SOUNDLY.

acids in capsule form might help women with heart disease or high triglyceride levels. If you have these problems, ask your doctor if you should take omega-3 supplements. If you need to lower your blood pressure, eating less sodium also might help. Sodium is found in table salt and processed foods, such as canned soups, snacks, and deli meats. Many grocery stores sell salt substitutes that provide the flavor of salt without the sodium.

Another eating plan, called the Therapeutic Lifestyle Changes (TLC) eating plan, is designed for people whose LDL cholesterol levels are too high. The TLC eating plan will help to reduce your LDL cholesterol and lower your chances of developing heart disease. If you already have heart disease, it will lessen your chances of a heart attack and other heart-related problems. On the TLC eating plan, you should eat as follows:

- Less than 7 percent of the day's total calories from saturated fat. Lowering saturated fat is the most important dietary change for reducing blood cholesterol.
- Less than 200 mg of dietary cholesterol a day.
- No more than 25 to 35 percent of daily calories from total fat (includes saturated fat calories).
- Just enough calories to reach or maintain a healthy weight. (Ask your doctor or registered dietitian what is a reasonable calorie level for you.)

For more information on heart-healthy eating, see the *Nutrition* chapter on page 317.

## Risk factors that you cannot change

### Age

Women develop heart disease about 10 to 15 years later than men. This is because until you reach menopause, your ovaries make the hormone estrogen, which protects against plaque buildup. But once you reach menopause, your ovaries stop making estrogen and your risk of developing heart disease goes up. By age 70, women have about the same chances of developing heart disease as same-aged men.

Even apart from the increased risk brought on by menopause, getting older is a risk factor for heart disease in women. With age, arteries stiffen and thicken. Also, systolic blood pressure often goes up. These and other changes contribute to plaque buildup in artery walls.

### Family history of early heart disease

Women with a father or brother who developed heart disease before age 55 are more likely to develop heart disease. Women with a mother or sister who developed heart disease before age 65 are also more likely to develop the disease. These trends suggest that you can inherit genes that increase your risk of heart disease. Still, young women with a family history appear to be less aware of

**Other conditions such as chronic kidney failure can raise your risk of heart disease. Discuss your health and your risk with your doctor. This information will help your doctor decide how best to care for you.**

their risks and less careful about living a heart-healthy lifestyle than men with a family history.

## Other possible risk factors

### Depression, anxiety, and stress

Negative emotions—such as depression, anxiety, and anger—have all been shown to increase your chances of developing or dying of heart disease. We don't know why this is so. Perhaps being depressed, anxious, or angry leads to behaviors that put your heart health at risk, such as smoking, drinking, and eating high-fat foods. It is also possible that negative emotions affect the body in ways that trigger atherosclerosis or blood clot formation within arteries.

Stress also appears to be linked to heart health in some way. Here are some examples:

- **Work stress.** Feelings that you have little control over what happens to you at work or that you are not being rewarded enough for the work that you do have been linked to getting heart disease.
- **Stress at home.** If you are caring for a disabled or ill spouse, the stress of this role may raise your risk of heart attack.
- **Combined stress.** Being stressed both at work and at home has been shown to increase your chances of having a heart attack or severe angina more than either type of stress by itself.
- **Low social support.** People with few friends or family to help them deal with stress are more likely to develop heart disease.



If you're unhappy with your life or feel distressed in some way, talk to your doctor. Although we don't know if treating emotional problems or reducing stress can lower your chances of getting heart disease, doing so can boost your emotional health and overall well-being.

For more information on managing stress, see the *Mental Health* chapter on page 207.

### **Lower income**

Research shows that lower income adults have an increased risk of heart disease. Also, children born into lower income families are more likely to have heart disease in adulthood. There are many possible reasons for this link. For instance, low-income adults are less likely to be physically active and eat a heart-healthy diet, and they are more likely to smoke.

It can be difficult to eat a heart-healthy diet in lower income neighborhoods. Many of these neighborhoods lack a

grocery store that sells fresh fruits and vegetables. Or if they do, these items may be too costly. People in some of these neighborhoods have dealt with these problems by forming food co-ops that buy fresh fruits and vegetables in bulk and then sell them at low prices.

Also, it can be difficult to be physically active in neighborhoods that are unsafe. Some communities have dealt with this problem by creating physical activity programs at local recreation centers or churches. Contact your local parks department and churches to see if any such programs exist in your community.

### **Not enough sleep**

Most adults need 7 to 9 hours of sleep to feel well rested during the day. Your heart needs a good night's sleep too. Sleeping 5 hours or less each night doubles the risk of high blood pressure for people between the ages of 32 and 59. One reason for this may be that feeling cranky, tired, and stressed due to lack of sleep makes it harder to follow a heart-



healthy lifestyle. Try these tips to get the good quality sleep your heart needs:

- Go to bed and wake up at the same time each day (even weekends).
- Engage in a relaxing activity before bed, such as reading or taking a bath.
- Make sure your bedroom is dark, quiet, and cool.
- Use your bed for sleep and sex only.
- Don't eat or become physically active for several hours before sleep.
- Avoid alcohol, caffeine, and nicotine close to bedtime.

### **Can menopausal hormone therapy prevent heart disease?**

Some research has shown that women who start estrogen or certain types of hormone therapy around the time of menopause are less likely to get heart disease. But a very large study by the U.S. National Institutes of Health (NIH) had different results. The NIH research found that:

- Estrogen alone didn't affect the risk of a heart attack. Estrogen did increase the risk of stroke. Estrogen also increased the risk of blood clots in the legs.
- Estrogen plus progestin may have slightly increased the risk of a heart attack. Progestin is a man-made form of the female hormone progesterone (proh-JESS-tuh-rohn). Estrogen plus progestin raised the risk of stroke and blood clots in the legs and lungs.

Researchers continue to study this issue. The age at which menopausal hormone therapy is started may be the key to whether this therapy reduces your chances

of getting heart disease. Most of the women in the NIH study did not start menopausal hormone therapy until after the age of 60, yet menopause happens for most women after the age of 45. Some experts think that many of the women in the NIH study may have already developed atherosclerosis because of many years in which their estrogen levels were low. This would explain why estrogen did not protect against heart disease in the study.

More research on younger women may support the use of some kind of menopausal hormone therapy to prevent heart disease. And more research will be needed to ensure that the benefits of such a therapy outweigh its risks.

For now, the safest option for menopausal hormone therapy is to stick with the lowest dose for the shortest time to treat menopausal symptoms or prevent osteoporosis (OSS-tee-oh-puh-ROH-suhss), but not to prevent heart disease. For more information on menopausal hormone therapy, see the *Healthy Aging* chapter on page 221.

### **Can antioxidant or folic acid supplements prevent heart disease?**

Antioxidants (an-tee-OKS-uh-duhnts), such as beta carotene and vitamins A, C, and E, and folate are substances found naturally in many foods. They can also be taken as dietary supplements, either in pill form or added to food. Some early research suggested that taking antioxidant supplements might prevent atherosclerosis. But more recent research has

not found this to be the case. The best way to get your antioxidants is by eating fruits, vegetables, whole-grain products, and nuts.

As with antioxidants, some early research suggested that taking folic acid supplements might reduce the risk of heart disease. But more recent research has not found this to be the case. Currently, the American Heart Association does not recommend that women use folic acid supplements to prevent heart disease. Even so, you need some folic acid in your diet to help your body make blood cells. Folic acid also is very important for women who are or plan to become pregnant.



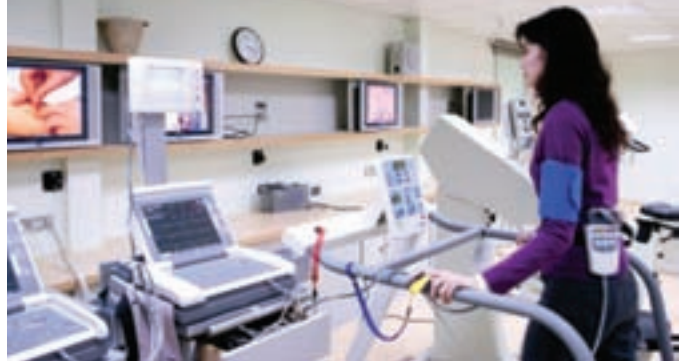
## Questions to Ask Your Doctor or Nurse

**Getting answers to these questions will give you vital information about your heart health and what you can do to improve it. You may want to bring this list with you to your visit with your doctor or nurse.**

1. What is my risk of heart disease?
2. What is my blood pressure? What does it mean for me, and what do I need to do about it?
3. What are my cholesterol numbers? (These include total cholesterol, LDL or “bad” cholesterol, HDL or “good” cholesterol, and triglycerides.) What do they mean for me, and what do I need to do about them?
4. What are my “body mass index” and waist measurement? Do they indicate that I need to lose weight for my health?
5. What is my blood glucose level, and does it mean I’m at risk of diabetes?
6. What other screening tests for heart disease do I need? How often should I return for checkups for my heart health?
7. What can you do to help me quit smoking?
8. How much physical activity do I need to help protect my heart?
9. What is a heart-healthy eating plan for me? Should I see a registered dietitian or qualified nutritionist to learn more about healthy eating?
10. How can I tell if I’m having a heart attack?

## Diagnosing heart disease

If your doctor suspects that you have heart disease, there are a number of tests that she can perform to find out for sure. You may get just one test or more than one. It's normal to feel worried or anxious before having tests. Tell your doctor if your fears are keeping you from getting the tests you need.



SOME TESTS, SUCH AS ELECTROCARDIOGRAPHY AND ECHOCARDIOGRAPHY, ARE DONE WHILE EXERCISING TO SEE HOW THE HEART PERFORMS UNDER STRESS.

Test	What it tells your doctor
Electrocardiography (ih-lek-troh-kar-dee-OG-ruh-fee), or ECG or EKG	Shows how well your heart performs under the stress of physical activity using electrodes placed on the body
Perfusion imaging	A safe, radioactive substance is injected into the blood and viewed with a special camera to look for blockage in your coronary artery or damage to your heart muscle due to a heart attack
Echocardiography (ek-oh-kar-dee-OG-ruh-fee)	Sound waves create a moving picture of your heart as it beats, which can show if your heart is damaged or not getting enough blood
Coronary angiography (an-jee-OG-ruh-fee)	Detects problems in blood flow in a coronary artery using x-ray and a dye that is injected into the blood
Blood tests	Show if you've had a heart attack by detecting substances that are released into the blood when the heart muscle is damaged
Computed tomography (tuh-MOG-ruh-fee) (CT)	Uses x-ray to show plaque buildup and to detect early stages of atherosclerosis
Computed tomography angiography	Uses x-ray to produce three-dimensional pictures of the heart and its coronary arteries to detect blockages
Gated single photon (FOH-ton) emission computed tomography, or gated SPECT	A safe, radioactive substance is injected into the blood and viewed with a special camera to look for problems with blood flow to the heart, heart damage, or problems pumping blood throughout the body

## Treating heart disease

If you have heart disease, it is extremely important to control it. You can help to do this by:

- eating a heart-healthy diet
- quitting smoking if you smoke
- getting regular physical activity
- losing weight if you are overweight or obese

- reducing stress
- taking medicines as directed by your doctor

For more information on healthy eating, see the *Nutrition* chapter on page 317. For more information on physical activity, see the *Fitness* chapter on page 337.



## Medicines

Along with making lifestyle changes, you may need medicines to help control your heart disease. These medicines can include:

- cholesterol-lowering medicines
- beta blockers, calcium channel blockers, or ACE inhibitors to lower blood pressure and lighten the workload for the heart

At times, other medicines may be needed:

- Antiplatelet medicines stop blood cells called platelets from clumping together and forming clots.
- Anticoagulants stop clots from forming in your arteries and blocking blood flow.
- Nitrates, such as nitroglycerin (neye-truh-GLISS-ur-uhn), widen the coronary arteries, which helps lessen chest pain.
- Thrombolytic (throm-buh-LIT-ihk) agents break up blood clots that form during a heart attack. The sooner these drugs are given to someone having a heart attack, the better they are at preventing heart damage.

## Special procedures or surgery

If lifestyle changes and medicines do not improve your heart disease symptoms, your doctor may suggest special procedures or surgery. These include:

- **Angioplasty** (AN-jee-uh-plass-tee). This procedure is usually done right away if coronary angiography shows problems in blood flow in a coronary artery. A thin tube with a balloon at one end is threaded into a coronary artery that has narrowed because of plaque buildup. Once in place, the balloon is inflated to push the plaque against the artery wall. This opens the artery more so that blood can flow freely.
- **Stent.** A stent is a mesh tube used to hold open a narrowed or weakened artery. It is put in place during an angioplasty. Some stents are coated with a medicine to keep arteries from narrowing or becoming blocked again. Not all people who have angioplasty need a stent.
- **Coronary artery bypass surgery.** In this procedure, a short piece of vein or artery from another part of your



### Aspirin

One well-known antiplatelet medicine is aspirin. In fact, aspirin is given right away to anyone suspected of having a heart attack. Your doctor may also suggest that you take aspirin every day if you are at risk of heart disease. If you are younger than 65 years and are at low risk of heart disease, your doctor will probably not suggest that you take aspirin.

Aspirin may not be good for some women because it can cause side effects. These include bleeding in the stomach, intestines, and brain. If you're thinking about using aspirin to treat or prevent heart problems, talk with your doctor first.

body is used to reroute blood around a blockage in a coronary artery. This restores blood flow to the heart.

### **Other types of heart disease**

Other types of heart disease that affect many women include heart failure and arrhythmias (uh-RITH-mee-uhz). These can result from coronary artery disease or other problems.

#### **Heart failure**

Heart failure happens when the heart can't pump enough blood throughout the body. Heart failure doesn't mean that your heart has stopped or is about to stop working. It means that your heart can't fill with enough blood or pump with enough force, or both.

Heart failure develops over time as the pumping action of the heart grows weaker.

It's more common in people older than 65 years. Coronary artery disease, high blood pressure, and diabetes are leading causes.

Heart failure can affect the left side, the right side, or both sides of the heart. Most cases involve the left side, in which the heart can't pump enough blood to the rest of the body. As a result, blood and fluid back up in the lungs and you feel short of breath.

When the right side of the heart is affected, blood backs up in the body, causing swelling, mainly in the lower legs and ankles. If both sides of the heart are failing, which is often the case, you also feel tired and weak because not enough blood is flowing to your muscles.

Heart failure usually can't be cured. Treatment often involves making lifestyle changes and taking medicines. If you have severe heart failure, you may need a mechanical heart pump or a heart transplant.

#### **Arrhythmia**

An arrhythmia is a problem with the speed or rhythm of the heartbeat caused by a disorder in the heart's electrical system. There are many types of arrhythmias. Most are harmless, but some can be serious or even life threatening.

The most common type of serious arrhythmia is atrial fibrillation (fib-ruh-LAY-shuhn), or AF. With AF, the walls of the atria quiver very fast (called fibrillation) instead of beating normally. As a result, blood isn't pumped into the ventricles as it should, and it pools in the atria. This can cause blood clots to form in the atria. If a clot breaks off, it might get stuck in a blood vessel and cut off blood supply to the brain. This is a type of stroke. People with AF sometimes take blood thinners to prevent clots and medicines to slow the heart rate.



Arrhythmias that start in the ventricles can be very dangerous. With ventricular fibrillations (v-fib), blood is not pumped out to the body. If the heart stops pumping entirely, the condition is known as sudden cardiac arrest. In a sudden cardiac arrest, a person will faint within seconds and die within minutes if not treated quickly.

### Cardiac Arrest

A sudden cardiac arrest is not the same as a heart attack. In a heart attack, the heart usually does not suddenly stop beating. But sudden cardiac arrest may happen during recovery from a heart attack.

### Living with heart disease

If you are taking medicines or have undergone special procedures or surgery to treat coronary artery disease, you still need to stick with those healthy lifestyle changes to keep plaque from clogging up your arteries again. Follow your doctor's advice on what foods to eat, how to ease back into a physical activity routine if you have had surgery, and how to reduce stress. And if you smoke, it is vital that you quit.

Taking care of your emotional health is also important. People with heart disease are often depressed, especially those who have had a heart attack. If you have heart disease and find yourself feeling depressed or "blue," talk with your doctor about ways to get help.

Treating depression may do more than just help you feel better emotionally. If you have had a heart attack, antidepressants



Sudden cardiac arrest requires immediate treatment with a defibrillator (dee-FIB-ruh-lay-tur), a device that sends an electrical shock to the heart to restore normal rhythm.

**If you suspect that someone is in sudden cardiac arrest, call 911 immediately.** With every minute of delay in providing defibrillation, the chances of surviving sudden cardiac arrest drop rapidly.

sants may lower your chances of having a second heart attack or dying of heart disease. So don't wait to seek help if you are feeling down.

### Good news about heart health

More women are becoming aware that they are at risk of heart disease, which is the crucial first step. Even better, more women are also taking heart-healthy action.

If you haven't already joined this growing trend of heart-savvy women, now is the time to start. Urge your children and other family members to join you in your efforts to lower heart disease risk. Living heart healthy takes effort. But the rewards can mean a healthier, longer life for you and your loved ones. ■

# One Woman's Story

On a Wednesday I told my doctor that my right hand had been numb for about a month. He agreed that it sounded like carpal tunnel syndrome. But he also suggested I have an electrocardiogram (ECG or EKG), which turned out to be abnormal. On hearing this, I figured it was due to rushing and not eating breakfast or lunch.

The next day I stayed home from work. I couldn't say exactly why—just that I felt extra sensitive and couldn't imagine being around a lot of people. The same thing happened on Friday. I left my laptop open at work with unfinished spreadsheets neatly displayed. I left personal letters, without stamps, waiting to be mailed. This was not at all like me.

After an errand, I could no longer dismiss the feelings of radiating pain—heartbeats of pain. My chest felt heavy. It felt like a pair of really big hands was squeezing my chest, like an elephant's enormous feet were pressing outward on my chest. When my husband came home I told him my back and chest hurt and that I needed to go to the hospital.

Blood tests at the hospital showed that I had not had a heart attack, and the cardiologist said, "You're young and a woman. I think it's probably acid reflux, and women have abnormal EKGs. Let's schedule a stress/echo test this week. Since it's the weekend, you'll feel better at home."

I didn't believe for one minute that I had acid reflux. But did I say anything? No. But it's easy to feel stupid against someone in a position of authority.

As it turns out, much worse back pain sent me back to the hospital. I had an angiogram, and the next day I signed papers for open-heart surgery or another angiography with stent deployment. My life was forever changed that day, the day I was told I had coronary artery disease—premature heart disease, which I inherited from my father, who died young.

My mission is to send a warning to women. We must make ourselves our number one cause and, as with me, be given another chance at life. You are your own best advocate and you deserve to be heard.

Lois

La Habra, California

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**We must make  
ourselves our  
number one cause  
and, as with me,  
be given another  
chance at life.**

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## For More Information...

### **Office on Women's Health, HHS**

200 Independence Ave SW, Room 712E  
Washington, DC 20201

Web site: [www.womenshealth.gov/heart](http://www.womenshealth.gov/heart)  
[www.womenshealth.gov/faq/heartdis.htm](http://www.womenshealth.gov/faq/heartdis.htm)  
Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### **National Heart, Lung, and Blood Institute Health Information Center, NIH**

PO Box 30105  
Bethesda, MD 20824-0105  
Web site: [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)  
[www.hearttruth.gov](http://www.hearttruth.gov)  
Phone number: (301) 592-8573,  
(240) 629-3255 TTY

### **Office of Women's Health, FDA**

5600 Fishers Ln  
Rockville, MD 20857  
Web site: [www.fda.gov/womens](http://www.fda.gov/womens)  
Phone number: (888) 463-6332

### **WISEWOMAN – Well-Integrated Screen- ing and Evaluation for Women Across the Nation, CDC**

4770 Buford Hwy NE, MS K-77  
Atlanta, GA 30341-3717  
Web site: [www.cdc.gov/wisewoman](http://www.cdc.gov/wisewoman)  
Phone number: (800) 232-4636,  
(888) 232-6348 TTY

### **American Heart Association**

7272 Greenville Ave  
Dallas, TX 75231  
Web site: [www.americanheart.org](http://www.americanheart.org)  
Phone number: (800) 242-8721

### **Sister to Sister**

4701 Willard Ave, Suite 223  
Chevy Chase, MD 20815  
Web site: [www.sistertosister.org](http://www.sistertosister.org)

### **Texas Heart Institute Heart Information Center**

PO Box 20345  
Houston, TX 77225-0345  
Web site: [www.texasheartinstitute.org/HIC](http://www.texasheartinstitute.org/HIC)  
Phone number: (800) 292-2221



# Type 2 Diabetes

About 9.7 million women in the United States have diabetes. Most women and men diagnosed with diabetes have type 2 diabetes. Type 2 diabetes used to be called adult-onset diabetes. But now we know that people can develop type 2 diabetes at any age—even during childhood or adolescence.

The good news is that doctors know a lot about managing diabetes. You can lead a long and healthy life with diabetes. Getting treatment and taking care of yourself can help prevent health problems. In fact, your doctor will want you to take an active part in your diabetes care.

## **What is diabetes?**

Diabetes is a disorder of metabolism—the way your body uses digested food for growth and energy. Much of the food you eat is broken down into glucose, the form of sugar in the blood. Glucose is the main source of fuel for your body.

After digestion, glucose enters your bloodstream. Then glucose goes to your body's cells to be used for energy. For glucose to enter into your cells, insulin must be present. Insulin is a hormone produced by your pancreas (PAN-kree-uhss), a large gland behind your stomach.

When you eat, your pancreas automatically produces the right amount of insulin to move glucose from your blood into your cells. But if you have type 2 diabe-





tes, your body's system for producing energy doesn't work correctly. One or both of the following things can happen:

- Your cells don't respond properly to your own insulin, a condition called insulin resistance.
- Your pancreas makes little or no insulin.

As a result, glucose builds up in your blood and passes out of your body in your urine. Your body loses its main source of fuel, even though your blood contains large amounts of glucose.

You could have type 2 diabetes and not know it. In fact, sometimes type 2 diabetes has no warning signs at all.

- Of the 1.3 million women aged 18 to 44 years with diabetes, one-half million don't know they have it.
- Of the 4 million women aged 65 years and older with diabetes, 1 million don't know they have it.

Another form of diabetes, type 1 diabetes, formerly called juvenile diabetes or insulin-dependent diabetes, is usually first diagnosed in children, teenagers, or young adults. In type 1 diabetes, cells in the pancreas no longer make insulin because the body's immune system has attacked and destroyed them. People with type 1 diabetes must take insulin by injection or with an insulin pump.

### **Know your risk of type 2 diabetes**

The following factors put you at risk for type 2 diabetes. Some of these factors are not under your control. But you can control a number of the risk factors and lower your chances of getting type 2 diabetes. To learn your risk of type 2 diabetes, place a check mark beside each item that applies to you. Then show this list to your doctor and ask whether you should be tested for diabetes.

#### **Risk factors you can't control**

- I am age 45 or older.
- My family background is African American, American Indian/Alaska Native, Hispanic, Asian American, or Pacific Islander.\*
- I have had gestational (jess-TAY-shuhn-uhl) diabetes, or I gave birth to a baby weighing more than 9 pounds. (See page 71 for gestational diabetes information.)
- I have a parent, brother, or sister with diabetes.
- I have polycystic ovary syndrome, also called PCOS.
- I have had blood vessel problems affecting my heart, brain, or legs.



### Risk factors you can control

- I am overweight. (See page 22 of the *Heart Disease* chapter for the Body Mass Index chart.)
- I am fairly inactive. I exercise fewer than three times a week.
- My blood pressure is 140/90 mmHg or higher, or I have been told that I have high blood pressure.
- My cholesterol (koh-LESS-tur-ol) levels are not normal. My HDL (good) cholesterol is below 35 mg/dL, and/or my triglyceride (treye-GLIH-suh-ryd) level is above 250 mg/dL.
- I have been told that I have higher than normal blood glucose levels, also called pre-diabetes, impaired glucose tolerance, or impaired fasting glucose.
- The skin around my neck or in my armpits looks dark, thick, and velvety, a skin condition associated with insulin resistance called acanthosis nigricans (ak-an-THOH-suhss NIG-ruh-kanz).
- I have blood vessel problems affecting my heart, brain, or legs.

*\*If you're an African American, Hispanic, American Indian/Alaska Native, Asian American, or Pacific Islander woman, you're more than twice as likely as a Caucasian woman to get type 2 diabetes.*

### What is gestational diabetes?

Gestational diabetes is a type of diabetes that first develops during pregnancy and usually disappears on delivery. It increases the mother's risk of developing diabetes later in life. For more information on how it is diagnosed and treated, see the *Pregnancy* chapter on page 169.

### What is metabolic (met-uh-BOL-ihk) syndrome?

Metabolic syndrome is a group of conditions that increases your risk of developing type 2 diabetes, heart disease, or a stroke. If you have any three of the following five conditions, you have metabolic syndrome, also called insulin resistance syndrome:

- a large waistline: 35 inches or more
- high triglyceride levels: 150 mg/dL or higher
- low HDL cholesterol levels: below 50 mg/dL
- high blood pressure levels: 130/85 mmHg or higher
- above-normal fasting blood glucose levels: 100 mg/dL or higher

### Preventing or delaying type 2 diabetes

A major research study has shown that type 2 diabetes can be prevented or delayed in people at high risk of diabetes, including women with a history of gestational diabetes. People who participated in the study

- lowered their intake of fat and calories
- exercised about 30 minutes a day, 5 days a week

These efforts resulted in a modest weight loss and prevented or delayed diabetes. If you are at risk of diabetes, making these same lifestyle changes to help prevent or delay diabetes is important.

## Warning signs of type 2 diabetes

You might have no warning signs at all. Or you might have these signs:

- increased thirst
- increased hunger
- fatigue
- increased urination, especially at night
- weight loss
- blurred vision
- sores that don't heal
- tingling or numb feet or hands

## Diagnosing type 2 diabetes

Your doctor can use any of the following ways to diagnose type 2 diabetes:

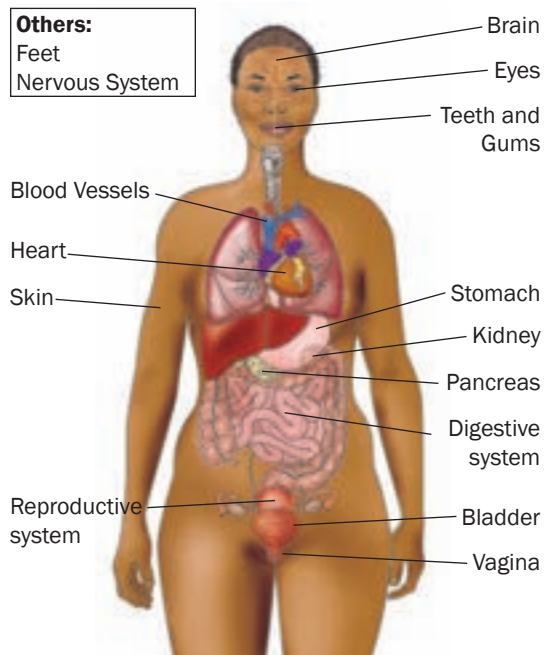
- A fasting plasma glucose test measures your blood glucose level after you have gone at least 8 hours without eating. Experts recommend this test for diagnosis.
- An oral glucose tolerance test measures your blood glucose level after you have gone at least 8 hours without eating and 2 hours after you drink a glucose-containing beverage.
- In a random plasma glucose test, your doctor checks your blood glucose level at any time of the day without regard to when you last ate. Your doctor will also ask about signs and symptoms of diabetes.

If the results of any of these tests show you have diabetes, your doctor will confirm the results by testing you again on a different day.

## Health effects of type 2 diabetes

Over time, high blood glucose levels can lead to serious health problems with your eyes, kidneys, nervous system, feet, skin, teeth, and gums. But the most serious problems, especially for women with diabetes, are problems with the heart and blood vessels. Such problems can lead to heart disease, heart attacks, and strokes. Diabetes is a more common cause of heart disease in women than in men. When heart disease occurs in women with diabetes, the damage can be worse than it is in men with diabetes. The good news is that you can prevent or delay serious problems by taking care of your health.

## Body Parts That Can Be Affected by Type 2 Diabetes



TYPE 2 DIABETES CAN AFFECT MANY PARTS OF YOUR BODY, BUT YOU CAN DO A LOT TO TAKE CARE OF YOURSELF AND PREVENT HEALTH PROBLEMS.

## Fasting\* Blood Glucose Numbers (mg/dL) and What They Mean

Blood glucose numbers	What they mean
From 70 to 99	Normal
From 100 to 125	Pre-diabetes, also called impaired fasting glucose
126 and above on more than one test	Diabetes

\*Note: Fasting means not eating or drinking for at least 8 hours.

## What Women With Type 2 Diabetes Need to Know

<b>Urinary tract infections</b>	<ul style="list-style-type: none"> <li>You might have an increased risk of urinary tract infections. (See the <i>Urologic and Kidney Health</i> chapter on page 251.)</li> </ul>
<b>Bladder problems</b>	<ul style="list-style-type: none"> <li>You might have an increased risk of urinary incontinence. (See the <i>Urologic and Kidney Health</i> chapter on page 251.)</li> </ul>
<b>Fungus or yeast infections</b>	<ul style="list-style-type: none"> <li>If you are overweight and have high blood glucose levels, you might be at increased risk of fungus or yeast infections. These infections can occur in the vagina and genital area, under the breasts, or under skin folds.</li> </ul>
<b>Menstrual cycle</b>	<ul style="list-style-type: none"> <li>Changes in your hormone levels before, during, and after your menstrual cycle can affect your blood glucose levels. Talk with your doctor about how to adjust your medicines and meal plan to keep your blood glucose levels on target.</li> </ul>
<b>Birth control</b>	<ul style="list-style-type: none"> <li>Talk with your doctor about which birth control method would be best for you. (See the <i>Reproductive Health</i> chapter on page 153.)</li> </ul>
<b>Sexual dysfunction</b>	<ul style="list-style-type: none"> <li>You might experience decreased sexual desire, trouble becoming aroused or having an orgasm, or pain during intercourse.</li> </ul>
<b>Pregnancy</b>	<ul style="list-style-type: none"> <li>Meet with your doctor several months before you try to get pregnant. Your doctor can help you make a plan for getting your blood glucose on target before conception.</li> <li>Keeping your blood glucose as close to normal as possible before you get pregnant and during your pregnancy is the most important thing you can do to stay healthy and have a healthy baby. (See the <i>Pregnancy</i> chapter on page 169.)</li> </ul>
<b>Breastfeeding</b>	<ul style="list-style-type: none"> <li>Breastfeeding is highly recommended for the babies of women with diabetes. (See the <i>Breastfeeding</i> chapter on page 187.)</li> </ul>
<b>Menopause</b>	<ul style="list-style-type: none"> <li>As you start to go into menopause, swings in hormone levels can lead to swings in blood glucose levels.</li> <li>Changes in hormone levels with menopause can lead to lower blood glucose levels. You might need lower doses of your diabetes medicine. (See the <i>Healthy Aging</i> chapter on page 221.)</li> </ul>

## How to prevent or delay heart disease and other health problems

You can lower your chances of having heart disease and other health problems by managing the ABCs of diabetes.

Goals for the ABCs of Diabetes	
<p><b>A is for the A1C blood glucose test.</b> The result shows your average blood glucose level for the past 2 to 3 months.</p>	<ul style="list-style-type: none"> <li>• Aim for lower than 7 percent.</li> <li>• Your doctor may ask you to aim for lower than 6 percent.</li> </ul> <p><b>Ask your doctor what goal is best for you.</b>  <b>Write your goal here: _____.</b></p>
<p><b>B is for Blood pressure.</b></p>	<ul style="list-style-type: none"> <li>• Aim for lower than 130/80 mmHg.</li> </ul>
<p><b>C is for Cholesterol.</b></p>	<ul style="list-style-type: none"> <li>• Aim for:            LDL cholesterol: lower than 100 mg/dL            HDL cholesterol: higher than 50 mg/dL            Triglycerides: lower than 150 mg/dL</li> </ul>



### Questions to Ask Your Doctor About Your A1C Test Result

- What was the result of my latest A1C test?
- What does the result mean in terms of my risk of long-term health problems?
- What can I do to lower my risk of long-term health problems?

### Managing diabetes

Taking care of diabetes requires a team approach involving you, your doctor, a diabetes educator, a nurse, a dietitian, other health care providers, and other specialists as needed. You are an important part of the team because you will be making the decisions about your food, physical activity, and other important parts of your daily diabetes care.



## Treatments for Type 2 Diabetes

<b>Meal planning</b>	<ul style="list-style-type: none"> <li>• Ask for a personalized meal plan, tailored to your daily routine, from a registered dietitian.</li> <li>• Your dietitian can show you how to include your favorite foods in your meal plan.</li> <li>• Choosing sensible serving sizes will help keep your blood glucose levels on target.</li> <li>• If you want to lose weight, your dietitian can design a meal plan to help you reach your goal.</li> <li>• If you choose to drink alcoholic beverages, talk with your doctor about personalized guidelines. In general, most women with diabetes should limit themselves to one drink a day or less.</li> </ul>
<b>Physical activity</b>	<ul style="list-style-type: none"> <li>• Before you start an exercise program, ask your doctor what kinds of physical activity would be best for you.</li> <li>• Moderate aerobic physical activity, at least 3 days a week, can help you reach your target blood glucose levels and your body weight goal, and lower your risk of heart and blood vessel disease.</li> <li>• Resistance exercise, three times a week, is also recommended for women with type 2 diabetes.</li> </ul>
<b>Medicines</b>	<ul style="list-style-type: none"> <li>• There are three types of diabetes medicines: pills, insulin (taken by injection or with an insulin pump), and other injectable medicines.</li> <li>• You might need a combination of medicines to control your blood glucose levels.</li> <li>• You also might need medicines for other medical conditions, such as high blood pressure or high cholesterol. Talk with your doctor about birth control methods.</li> <li>• Ask your doctor whether you should take aspirin every day to prevent a heart attack or a stroke.</li> </ul>

### All about your blood glucose levels

Keeping blood glucose levels on target day to day will help you feel better and help delay or prevent long-term health problems. You can check your own blood glucose levels using a blood glucose meter. Your doctor or diabetes educator can show you how to use a meter. Goals for most women are shown below.

### Blood Glucose Targets for Most Women With Diabetes

When	Target levels
Before meals	70 to 130 mg/dL
1 to 2 hours after the start of a meal	Less than 180 mg/dL



No one expects you to reach your blood glucose targets all the time. But the clos-

er you get to your goals, the more you will lower your risk of health problems. Every step helps.

Blood glucose levels rise and fall many times during the day and night. The chart on the next page can help you understand why. Remember—sometimes you won't be able to explain why your blood glucose is up or down.



## What Factors Make Blood Glucose Levels Rise or Fall?

<p><b>Reasons blood glucose levels rise</b></p> 	<ul style="list-style-type: none"> <li>• Eating a meal or a snack</li> <li>• Eating more food or more carbohydrates than usual</li> <li>• Being physically inactive</li> <li>• Having an infection, surgery, injury, or being ill</li> <li>• Being under stress</li> <li>• Having changes in hormone levels, such as during certain times in your menstrual cycle</li> <li>• Taking certain medicines (side effects)</li> <li>• Taking too little diabetes medicine or not taking your diabetes medicine</li> </ul>
<p><b>Reasons blood glucose levels fall</b></p> 	<ul style="list-style-type: none"> <li>• Missing or delaying a meal or a snack</li> <li>• Eating less food or fewer carbohydrates than usual</li> <li>• Being physically active</li> <li>• Drinking alcoholic beverages, especially on an empty stomach</li> <li>• Having changes in hormone levels, such as during menopause</li> <li>• Taking certain medicines (side effects)</li> <li>• Taking too much diabetes medicine</li> </ul>

### Low blood glucose

Low blood glucose, also called hypoglycemia (heyeh-poh-glyeh-SEE-mee-uh), happens when your blood glucose is too low to provide enough energy for your body's activities. Low blood glucose can make you feel shaky, nervous, sweaty, dizzy, or confused.

Low blood glucose can occur

- as a side effect of diabetes medicines that lower blood glucose levels
- if you miss or delay a meal
- if you eat less than usual
- if you're more active than usual

Eating or drinking something with carbohydrates, such as glucose tablets or fruit juice, can bring your blood glucose level back to normal. Ask your doctor how to handle low blood glucose.



### Keeping track of your health

You and your health care team will work together to keep track of your health. During your office visits, you'll review your blood glucose records, talk about your medicines, meal plans, a physical activity routine, and other concerns. You can use the following reminder list of diabetes checkups and discuss other things to do to make sure you get the best diabetes care.

## Diabetes Checkups

- **A1C test.** Have this blood glucose test at least twice a year. Your result will tell you what your average blood glucose level was for the past 2 to 3 months.
- **Blood pressure.** Have your blood pressure checked every time you visit your doctor.
- **Blood fat (lipid) lab tests.** Get a blood test at least once a year to check your cholesterol and other blood fats. These test results will help you plan how to prevent heart disease, heart attack, and stroke.
- **Kidney function tests.** Get a urine test once a year to check for protein. Get a blood test at least once a year to measure the amount of creatinine (kree-AT-uh-noon). The results of these tests will tell you how well your kidneys are working.
- **Dilated eye exam.** See an eye care professional once a year for a complete eye exam.
- **Dental exam.** See your dentist twice a year for a cleaning and checkup.
- **Foot exam.** Ask your health care provider to check your feet at least once a year to make sure your foot nerves and your blood circulation are OK.
- **Flu shot.** Get a flu shot each year.
- **Pneumonia (noo-MOH-nyuh) vaccine.** Get a pneumonia vaccination. If you're older than 64 and your vaccine was more than 5 years ago, get another one.

Be sure to ask your doctor or diabetes educator if you have questions about what to do during these special times:

**When you're ill.** Illness can raise blood glucose levels. Your doctor may suggest you check your blood glucose levels more often at these times. Ask your doctor for other special instructions about taking your diabetes medicines when you're ill.

**When you travel.** When you travel, always carry the following with you:

- your diabetes medicines
- your diabetes supplies for checking your blood glucose
- food for snacks, a meal, and for treating low blood glucose

Never put your diabetes medicines or supplies in your checked baggage.

**When you change time zones.** If you'll be changing time zones, meet with your doctor or diabetes educator several weeks ahead of time to learn how to adjust your diabetes medicines, especially if you take insulin.



**When you take a long car trip.** If you take diabetes medicines that can cause low blood glucose, check your blood glucose before you drive to make sure it's in the normal range. Stop and check your blood glucose every 2 hours. If your blood glucose is low, eat or drink something. Low blood glucose can be dangerous when you're driving because you can pass out.

### **Diabetes and your emotions**

Sometimes having a chronic disease like type 2 diabetes leads to emotional upset. You might feel angry, afraid, guilty, or overwhelmed. It's normal to feel this way. Perhaps you're the one in your family who takes care of everyone else. Maybe you worry about how you'll have time to take care of yourself.

Depression, a serious medical condition that's more than feeling sad (see the *Mental Health* chapter on page 207), is common in women with diabetes. Depression can get in the way of taking care of yourself. If you're depressed, talk with your doctor. Treatment can help.

You can learn how to cope with having diabetes, manage stress, and find support. Share your concerns with your doctor.



Some women enjoy going to support groups where they can talk with others who have diabetes. Or you can get help from family and friends.

### **Paying for Diabetes Care**

If you're worried about the cost of your diabetes care and need financial assistance, ask your doctor for help in finding resources. Medicare helps pay for diabetes equipment, supplies, and other services. Call (800) MEDICARE for more information.

### **Living well with type 2 diabetes**

You can learn how to live a full and active life with diabetes. Taking care of yourself can help delay or prevent diabetes-related health problems. Your health care team can provide care and guidance during all of the stages of your life. ■



# One Woman's Story

**I**n 2007, I was on top of the world for a change with respect to my health. With a new focus on health once I hit age 40 and knowledge of my family history of high blood pressure, cancer, and diabetes, I knew I needed to make some life changes. I didn't want to struggle with those same health problems. I paid attention to what I was eating and was physically active four to five times a week. I was even able to stop taking my blood pressure medicine. I thought things were going great.

Then at my annual physical, the doctor ran some blood tests and scheduled me to come back in a few days. I went back, expecting to get an all-clear. The last thing I expected to hear was that I now have type 2 diabetes. I was in complete shock! I said to the doctor, "What? That can't be right. I've been doing all the right things." I went into shutdown mode mentally. The words just kept echoing in my head. The doctor kept talking as if this was not a life-changing statement, and there was no sense of concern on her part. I was given a monitor and told I could use it or not and wasn't given very much more information except to stay away from potatoes, rice, and starches. She never mentioned working with a dietitian, following a healthy lifestyle regimen, or finding support groups. I left the office feeling like I had been punched in the stomach. I called my mom, who also has type 2 diabetes, and she was a great help to me. She told me to get on the Internet and seek out support groups in my area that would be able to help me navigate life with diabetes.

I am fortunate that I am able to control my diabetes with a personalized eating plan and physical activity. I do not have to take insulin at this point. It has been a long journey, but I am moving through this transition in a positive direction with a positive outlook. And I am taking much-needed steps to find a new doctor to help me continue to control my diabetes—someone who can inform me and support me in my efforts.

*Sandra*

**Las Vegas, Nevada**

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**I called my mom,  
who also has type  
2 diabetes, and  
she was a great  
help to me.**

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## For More Information...

### **Office on Women's Health, HHS**

200 Independence Ave SW, Room 712E  
Washington, DC 20201

Web site: [www.womenshealth.gov/faq/diabetes.htm](http://www.womenshealth.gov/faq/diabetes.htm)

Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### **Division of Diabetes Translation, CDC**

4770 Buford Highway NE, MS K-10  
Atlanta, GA 30341-3717

Web site: [www.cdc.gov/diabetes](http://www.cdc.gov/diabetes)

Phone number: (800) 232-4636,  
(888) 232-6348 TTY

### **National Diabetes Education Program, NIH**

1 Diabetes Way

Bethesda, MD 20814-9692

Web site: [www.ndep.nih.gov](http://www.ndep.nih.gov)

Phone number: (888) 693-6337

### **National Diabetes Information Clearinghouse, NIH**

1 Information Way

Bethesda, MD 20892-3560

Web site: [www.diabetes.niddk.nih.gov](http://www.diabetes.niddk.nih.gov)

Phone number: (800) 860-8747

### **Office of Women's Health, FDA**

5600 Fishers Ln  
Rockville, MD 20857

Web site: [www.fda.gov/womens](http://www.fda.gov/womens)  
[www.fda.gov/womens/taketimetocare/diabetes](http://www.fda.gov/womens/taketimetocare/diabetes)

Phone number: (888) 463-6332

### **American Association of Diabetes Educators**

200 W Madison St, Suite 800  
Chicago, IL 60606

Web site: [www.diabeteseducator.org](http://www.diabeteseducator.org)

Phone number: (800) 832-6874 to find a  
diabetes educator

### **American Diabetes Association**

1701 N Beauregard St

Alexandria, VA 22311

Web site: [www.diabetes.org](http://www.diabetes.org)

Phone number: (800) 342-2383

### **American Dietetic Association**

120 S Riverside Plaza, Suite 2000

Chicago, IL 60606-6995

Web site: [www.eatright.org](http://www.eatright.org)

Phone number: (800) 877-1600 ext.5000



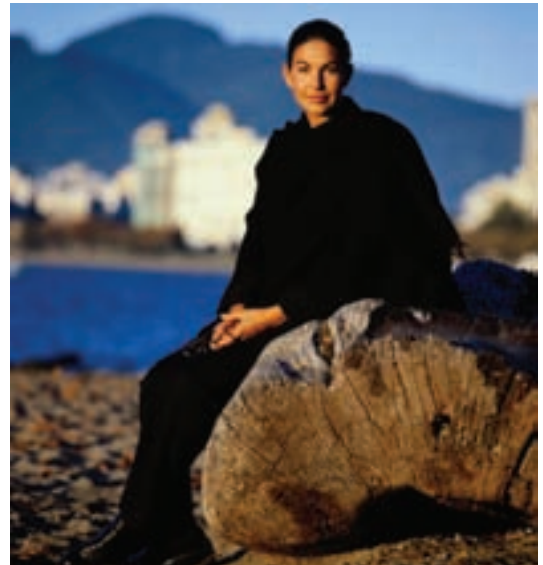


# Sexually Transmitted Infections

You probably have heard of sexually transmitted infections (STIs)—also called sexually transmitted diseases, or STDs. But if you are like many women, you might not know that much about how STIs could impact your health. You might not think you need to worry about STIs. Yet STIs are a major public health concern in the United States, where an estimated 19 million new infections occur each year. STIs affect people of all backgrounds and economic levels. And women have more frequent and more serious complications from STIs than men. Thankfully, most STIs are preventable. Taking a few protective steps can lower your risk of getting an STI.

## **What is a sexually transmitted infection (STI)?**

A sexually transmitted infection (STI) is an infection you can get by having intimate sexual contact with someone who already has the infection. STIs can be caused by viruses, bacteria, and parasites. Many STIs have mild or no symptoms. So you can have an STI and not even know it. Most STIs can be found by simple tests, but routine testing is not widespread. So many cases of STIs go undiagnosed and untreated, which can lead to serious health problems—particularly for women.



**One partner can expose you to many diseases. You are at risk of getting all of the STIs that your partner's past and present partners have had.**



### **STIs are easily passed through intimate sexual contact**

STIs are spread during vaginal or anal intercourse, oral sex, and genital touching. It is possible to get some STIs without having intercourse. Here are some other reasons STIs spread so easily:

- You can't tell if a person has an STI by the way he or she looks.
- Talking about sex is awkward for some people. They may not bring up safe sex or STIs with their partners.
- Many STIs have no or only mild symptoms. So many people don't know that they have an STI or that they are putting their partners at risk.
- If you have unprotected sex, you may be exposed to the STIs that your partner's past and present partners have had. This is true even if you have been sexually active with only one person.
- Myths and false beliefs about STIs put people at risk of getting and passing on STIs.



### **TRUE statements about STIs:**

- You CAN get an STI without having intercourse.
- You CANNOT get HIV from sitting on toilet seats.
- Birth control pills DO NOT protect from STIs.



### **STIs: Dangerous to women**

Both men and women get STIs. But women have more frequent and more serious complications from STIs than men. Overall, untreated STIs can cause cancer, infertility, pregnancy problems, and other health problems in women. Women also need to be concerned about STIs for these reasons:

- Mild symptoms can be mistaken for “nothing” or something else, such as a urinary tract infection or vaginal yeast infection.
- A woman’s ability to protect herself from STIs depends on whether she is able to get her partner to use a condom. Women who don’t feel they can choose to use a condom are at greater

risk of getting STIs because they may feel forced to take part in unsafe sexual practices. This is true for women in relationships and for women who are victims of sexual assault.

- Some STIs increase a woman’s risk of getting HIV/AIDS and other STIs because they irritate the vagina. Some cause open sores. This makes it easier for semen or vaginal fluid carrying HIV or other STIs to get inside a woman’s body.
- Having prior STIs raises a woman’s risk of future STIs. The reasons for this are complex and include biological, behavioral, and social issues.
- Silent and harmful STIs, such as chlamydia, affect young women at higher rates.
- Women of color have STIs at higher rates than other women. In 2005, the rate of reported chlamydia was 7 times greater in black women and almost 5 times greater in American Indian/Alaska Native women than in white women. These differences might reflect limited access to quality health care, higher rates of poverty, and other health issues among these women.

### **Will I get an STI?**

The answer depends on whether you take steps to reduce your risks. Keep in mind that more than half of Americans will have an STI at some point in their lifetime.

## Learning more: Types of STIs

More than 25 infections are known to be passed through sexual contact. The STIs discussed here are among the most common and dangerous to women.

Types of STIs			
Bacterial vaginosis (BV)	How you get it	Symptoms	How to find out if you have it
<p>BV is the most common vaginal infection in women of childbearing age. With BV, the normal balance of bacteria in the vagina is changed so that there are more “harmful” bacteria and fewer “good” bacteria. Antibiotics are used to treat and cure BV.</p>	<p>Not much is known about how women get BV. Any woman can get BV. But BV rarely occurs in women who have never had vaginal sex. Having BV can increase a woman’s risk of getting an STI, including HIV. These things put you more at risk for BV:</p> <ul style="list-style-type: none"> <li>• Having a new or many sex partners</li> <li>• Douching</li> <li>• Using an intrauterine device (IUD) for birth control</li> <li>• Not using a condom</li> </ul>	<p>You cannot get BV from such objects as toilet seats, bedding, or swimming pools.</p> <p>Most women have no symptoms. Women with symptoms may have:</p> <ul style="list-style-type: none"> <li>• Vaginal itching</li> <li>• Pain when urinating</li> <li>• Discharge with a fishy odor</li> </ul>	<p>Your doctor will test a sample of fluid from your vagina. Your doctor also may be able to see signs of BV, like a grayish-white discharge, during an exam.</p>
Chlamydia	How you get it	Symptoms	How to find out if you have it
<p>Chlamydia is the most frequently reported STI caused by bacteria. It is a “silent” disease because 75 percent of infected women and at least half of infected men have no symptoms. Severe complications can result from untreated chlamydia. Antibiotics are used to treat and cure chlamydia.</p>	<p>Women and men can get chlamydia by having vaginal, anal, or oral sex with an infected person.</p> <p>An infected mother can also pass chlamydia to her baby during childbirth.</p>	<p>Most women have no symptoms. If symptoms do occur, they usually appear within 1 to 3 weeks of exposure. Symptoms, if any, include:</p> <ul style="list-style-type: none"> <li>• Abnormal vaginal discharge</li> <li>• “Burning” when passing urine</li> <li>• Bleeding between periods</li> <li>• Lower abdominal pain</li> <li>• Low back pain</li> <li>• Nausea</li> <li>• Fever</li> <li>• Pain during sex</li> </ul>	<p>Your doctor can tell if you have chlamydia by testing your urine or by testing a swab sample taken from the infected site, such as the cervix.</p>



## Types of STIs

Genital herpes	How you get it	Symptoms	How to find out if you have it
<p>Genital herpes is caused by the herpes simplex viruses type 1 (HSV-1) and type 2 (HSV-2). Most genital herpes is caused by HSV-2.</p> <p>About 1 in 4 women in the United States have had HSV-2 infection.</p> <p>The virus will stay in the body forever. But outbreaks, for people who have them, tend to be less severe and occur less often over time. Also, antiviral therapy can shorten outbreaks and make them less severe, or keep them from happening.</p>	<p>Genital herpes is spread through genital-to-genital or genital-to-oral contact. It spreads most easily when an infected person has open sores. But you also can get herpes from an infected person who has no symptoms. You do not need to have intercourse to get herpes.</p> <p>You cannot get herpes from objects such as toilet seats, bathtubs, or towels.</p>	<p>Most people have mild or no symptoms. For people who have “outbreaks,” the symptoms are clear:</p> <ul style="list-style-type: none"> <li>• Small red bumps, blisters, or open sores show up where the virus entered the body, such as the penis, vagina, or mouth</li> <li>• Vaginal discharge</li> <li>• Fever</li> <li>• Headache</li> <li>• Muscle aches</li> <li>• Pain when passing urine</li> <li>• Itching, burning, or swollen glands in the genital area</li> <li>• Pain in legs, buttocks, or genital area</li> <li>• Symptoms may go away and then come back. Sores heal after 2 to 4 weeks.</li> </ul> <p>Your doctor can tell you if you have genital herpes by looking at the sores and by taking a sample from the sore for lab testing.</p>	<p>It can be hard to tell if you have herpes without symptoms. Blood tests can help detect herpes when there are no symptoms or between outbreaks.</p>

## Types of STIs

Gonorrhea	How you get it	Symptoms	How to find out if you have it
<p>Gonorrhea is caused by a type of bacteria that thrives in warm, moist areas of the reproductive tract. It also can grow in the mouth, throat, eyes, and anus.</p> <p>Most women who have gonorrhea have <i>no symptoms</i>. Untreated gonorrhea can lead to serious health problems.</p> <p>Antibiotics are used to cure gonorrhea. But gonorrhea has become more and more resistant to antibiotics, which means the drugs do not work as well or at all. Still, it's important to get tested and treated by a doctor.</p>	<p>You can get gonorrhea through contact with an infected vagina, penis, anus, or mouth. It is spread through semen and vaginal fluid during unprotected sexual contact with a person who has it. Touching infected sex organs, and then touching your eyes can cause an eye infection.</p> <p>An infected pregnant woman can pass gonorrhea to her baby during vaginal delivery.</p> <p>You cannot get gonorrhea from shaking hands or sitting on toilet seats.</p>	<p>Most women have <i>no symptoms</i>. When a woman does have symptoms, they most often appear within 10 days of becoming infected. Symptoms can include:</p> <ul style="list-style-type: none"> <li>• Pain or burning while passing urine</li> <li>• Yellowish and sometimes bloody vaginal discharge</li> <li>• Bleeding between periods</li> <li>• Pain during sex</li> <li>• Heavy bleeding during periods</li> </ul> <p>These signs can be mistaken for a urinary tract infection or another vaginal infection.</p> <p>Gonorrhea that affects the anus might cause discharge, soreness, bleeding, itching, or painful bowel movements. Infections in the throat could cause a sore throat. With eye infection, symptoms may include redness, itching, or discharge from the eye.</p>	<p>Your doctor can tell if you have gonorrhea by testing your urine or by testing a swab sample taken from the infected site, such as the cervix.</p>

## Types of STIs

Hepatitis B	How you get it	Symptoms	How to find out if you have it
<p>Hepatitis B (HBV) is one type of viral hepatitis. With hepatitis, the liver does not work well.</p> <p>In most people, HBV gets better on its own. Long-lasting hepatitis (chronic) can lead to scarring of the liver, liver failure, and liver cancer. Chronic HBV can be suppressed with some antiviral drugs. But these drugs don't work for all people.</p> <p><b>Vaccines are available for hepatitis A and B.</b></p>	<p>HBV is spread by exposure to an infected person's blood. This can happen by having vaginal, anal, or oral sex with someone who is infected. It also can be passed from an infected mother to her baby during vaginal childbirth or through sharing needles with an infected person. You also can get HBV by sharing personal items, such as razors or toothbrushes, with an infected person.</p> <p>You cannot get hepatitis through casual contact, such as shaking hands, hugging, or kissing.</p>	<p>Some people with viral hepatitis have no signs of infection. Others might have:</p> <ul style="list-style-type: none"> <li>• Low-grade fever</li> <li>• Headache</li> <li>• Muscle aches</li> <li>• Tiredness</li> <li>• Loss of appetite</li> <li>• Nausea</li> <li>• Vomiting</li> <li>• Diarrhea</li> <li>• Dark-colored urine and pale bowel movements</li> <li>• Jaundice</li> </ul>	<p>Your doctor can tell if you have viral hepatitis through blood tests and a medical exam.</p>

## HIV/AIDS

For complete information, see the *HIV/AIDS* chapter on page 139.

Pubic lice	How you get it	Symptoms	How to find out if you have it
<p>Also called "crabs," pubic lice are parasites found in the genital area on pubic hair and sometimes on other coarse body hairs. Pubic lice are common. They are different from head lice. Special shampoos and medicines are used to kill pubic lice.</p>	<p>Pubic lice usually are spread through sexual contact. Intercourse does not need to occur. Rarely, pubic lice are spread through contact with an infected person's sheets, towels, or clothes.</p> <p>Pubic lice CANNOT be spread by sitting on a toilet seat. Animals do not get or spread pubic lice.</p>	<p>Symptoms of pubic lice include:</p> <ul style="list-style-type: none"> <li>• Itching in the genital area</li> <li>• Visible nits (lice eggs) or crawling lice (which look like crabs when viewed with a magnifying glass)</li> </ul>	<p>Doctors can tell if a person has pubic lice by looking closely at the pubic hair for nits or young or adult lice.</p>

## Types of STIs

Human papillomavirus (HPV) and genital warts	How you get it	Symptoms	How to find out if you have it
<p>There are more than 100 types of HPV, 30 of which are passed through sexual contact. The types of HPV that infect the genital area are called genital HPV.</p> <p>HPV is very common. Most sexually active people will have it at some point in their lives.</p> <p>Some types of genital HPV are “high risk,” which means they put a woman at greater risk of getting cervical cancer. “High risk” does not have to do with the risk of getting HPV. Low-risk types of HPV do not cause cervical cancer. But low-risk types of HPV may cause genital warts.</p> <p><i>There is no treatment or cure for HPV. But a new HPV vaccine protects women against some HPV types that cause cancer or warts. (See page 134 for more information.)</i></p>	<p>Genital HPV is passed by skin-to-skin and genital contact, mainly during vaginal and anal intercourse. It might also be possible to pass it during oral sex.</p>	<p>HPV usually has no symptoms.</p> <p>Both low-risk and high-risk types of HPV can cause growths on the cervix and vagina. These often are invisible.</p> <p>Low-risk types of HPV can cause genital warts. Warts can form weeks, months, or years after sexual contact with a person who has genital HPV. They can grow inside and around the outside of the vagina, on the vulva and cervix, groin, and in or around the anus. Warts can be raised or flat, alone or in groups, small or large, and sometimes they are shaped like a cauliflower.</p> <p>High-risk types of HPV may cause cervical changes that, if not treated, may progress into cervical cancer.</p>	<p>A Pap test can find changes on the cervix that are caused by HPV infection. Women who have had the HPV vaccine still need to have a regular Pap test.</p> <p>An HPV test, which is a DNA test that detects high-risk types of HPV, may be done for women who are older than 30 or for women who are younger than 30 who have abnormal Pap test results. An abnormal Pap test result does not mean for sure that a woman has HPV or cervical cancer. Follow-up tests are needed to confirm any diagnosis.</p> <p>Having genital warts is another way a doctor can tell if a person has an HPV infection.</p>

## Types of STIs

Syphilis	How you get it	Symptoms	How to find out if you have it
<p>Syphilis is caused by a type of bacteria. It progresses in stages. Without treatment, the infection will continue to progress, possibly leading to death.</p> <p>Syphilis can be cured with an antibiotic. Penicillin is the preferred drug to treat syphilis at all stages. Doctors can use other medicines for people who cannot take penicillin.</p>	<p>Syphilis is spread during vaginal, anal, or oral sex through contact with an open sore or contact with a skin rash of an infected person. The bacteria can enter the body through the penis, anus, vagina, mouth, or through broken skin. It can be spread during the first two stages of the disease.</p> <p>An infected pregnant woman also can pass syphilis to her baby during pregnancy and childbirth.</p> <p>Syphilis is not spread by contact with toilet seats, doorknobs, swimming pools, hot tubs, bathtubs, shared clothing, or shared food and drinks.</p>	<p>In the primary stage, a single, painless sore appears about 10 to 90 days after infection. It can appear in the genital area, tongue, lips, or other parts of the body. The sore will heal with or without treatment.</p> <p>The secondary stage starts 3 to 6 weeks after the sore appears. Symptoms can include:</p> <ul style="list-style-type: none"> <li>• Skin rash with rough, red or reddish-brown spots both on the hands and feet that usually does not itch and clears on its own</li> <li>• Fever</li> <li>• Sore throat and swollen glands</li> <li>• Patchy hair loss</li> <li>• Headaches and muscle aches</li> <li>• Weight loss</li> <li>• Tiredness</li> </ul> <p>In the latent stage, symptoms go away, but can come back. When symptoms come back, the infection can be passed to others. People without treatment may or may not move to the late stage.</p> <p>In the late stage, the infection spreads and can cause damage throughout the body. Some people may die.</p>	<p>A doctor can tell if a person has syphilis in a number of ways:</p> <ul style="list-style-type: none"> <li>• Recognizing the signs and symptoms and confirming with tests</li> <li>• Looking at the fluid from a sore or swollen lymph node under a microscope</li> <li>• Testing the patient's blood in the lab</li> </ul>

## Types of STIs

Trichomoniasis	How you get it	Symptoms	How to find out if you have it
<p>This infection, also called “trich,” is caused by a parasite. It usually is passed through sexual contact. But it also can be picked up from contact with damp, moist objects.</p> <p>Antibiotics are used to treat and cure trichomoniasis.</p>	<p>The parasite can be passed through penis-in-vagina intercourse or vulva-to-vulva contact with an infected partner. Women can get the disease from infected men or women.</p> <p>It also can be passed if the genital area comes in contact with damp towels, wet clothing, toilet seats, or other moist objects where the parasites are present.</p>	<p>Many women do not have symptoms. Symptoms, which usually appear 5 to 28 days after exposure, can include:</p> <ul style="list-style-type: none"> <li>• Yellow, green, or gray vaginal discharge (often foamy) with a strong odor</li> <li>• Discomfort during sex or when passing urine</li> <li>• Itching and discomfort in the genital area</li> <li>• Lower stomach pain (rarely)</li> </ul>	<p>A doctor will do a pelvic exam and lab test to tell if a person has trichomoniasis. The doctor sometimes can see small, red sores inside the vagina or on the cervix. The doctor also will take a fluid sample from the vagina and look for the parasite under a microscope or send the sample to a lab for testing, or use other lab tests.</p>

**If you have any symptoms of an STI, stop having sex and contact your doctor right away.**

### Treating STIs

The treatment depends on the type of STI. For some STIs, treatment may involve using medicine or getting a shot. For STIs that cannot be cured, like genital herpes, treatment can ease symptoms. During treatment, follow all of your doctor’s orders and avoid sex during treatment or an outbreak. And be sure to finish all the medicine your doctor gives you, even if your symptoms go away. With most STIs, your sexual partner(s) should be treated, too. This can keep you from getting the STI again or your partner from passing it to other people. Remember, the sooner an STI is found, the easier it is to treat and the less likely you will have health complications.

### How untreated STIs can affect your health

You might be too shy to talk to your doctor about your risk of STIs or any symptoms you might be having. But not talking to your doctor could be far worse than any embarrassment you might feel. Untreated STIs can cause severe health problems for women, such as pelvic inflammatory disease, infertility, ectopic pregnancy, widespread infection to other parts of the body, cancer, organ damage, and even death.

### STIs and pregnancy

STIs can cause many of the same health problems for pregnant women as for women who are not pregnant. Moreover, STIs during pregnancy can cause early labor, cause the water to break early, and cause infection in the uterus after the birth. STIs also can cause problems for the unborn baby. Some STIs can cross the placenta and infect the baby while

## What is pelvic inflammatory disease (PID)?

Pelvic inflammatory disease, or PID, is a broad term used to describe an infection of a woman's pelvic organs. Many types of bacteria can cause PID. Often, PID is a complication of untreated STIs—mainly chlamydia and gonorrhea. Damage from PID can cause a woman to become infertile (not able to become pregnant). In fact, about 1 in every 5 women with PID becomes infertile. PID also can cause chronic pelvic pain and ectopic pregnancy (pregnancy in the fallopian tube, which can be life threatening). It can be hard to tell if a woman has PID because there are no specific tests for PID and she might have mild or no symptoms. Women who have symptoms might have:

- pain in the lower belly area
- fever
- unusual vaginal discharge, which may smell bad
- pain during sex
- bleeding between periods
- pain during pelvic exam

A doctor will ask about symptoms and can perform a pelvic exam and tests to tell if a woman has PID. Once found, PID can be cured with antibiotics. But any damage already done to a woman's reproductive organs before treatment cannot be reversed. So early treatment of PID is important. A woman should see her doctor right away if she thinks she might have an STI or PID.

it is in the uterus. Others can be passed from a pregnant woman to the baby during delivery. The harmful effects to babies range from low birth weight, to chronic liver disease, to stillbirth. Some of these problems can be prevented if the mother has routine prenatal care, which includes screening tests for STIs at various points during the pregnancy. Other problems can be treated if the infection is found at birth or within a few days after birth.

### **STIs and breastfeeding mothers**

Some STIs can be passed to your baby through breastfeeding. And some medi-

cines used to treat STIs can pass to your baby through your breast milk. Talk to your doctor about whether you should breastfeed if you have an STI. (See page 199 of the *Breastfeeding* chapter for more information.)

### **How to protect yourself from STIs**

Even though STIs pass easily from person to person, there are steps you can take to lower your risk of getting an STI. The following steps work best when used together—no single strategy can protect you from every single type of STI.

- **Don't have sex.** The surest way to avoid getting any STI is to practice abstinence, which means not having vaginal, oral, or anal sex. Keep in mind that some STIs, such as genital herpes, can be spread without having intercourse.
- **Be faithful.** Having sex with one uninfected partner who only has sex with you will keep you safe from STIs. Both partners must be faithful *all the time* to avoid STI exposure. This means that you have sex only with each other and no one else. The fewer sex partners you have, the lower your risk of being exposed to an STI.
- **Use condoms correctly and EVERY time you have sex.** Use condoms for all types of sexual contact, even if penetration does not take place. Condoms work by keeping blood, a man's semen, and a woman's vaginal fluid—all of which can carry STIs—from passing from one person to another. Use protection from the very beginning to

## How to Use Condoms Correctly

Both male and female condoms are highly protective when used correctly. But don't use them both at the same time! They do not stay in place when used together. Read the instructions and practice a few times before using condoms for the first time. Also, follow these guidelines:

### Male condom

Use male condoms made of latex, or polyurethane if you or your partner is allergic to latex. "Natural" or "lambskin" condoms don't protect against STIs. Use male condoms for vaginal, anal, or oral sex.

- Keep male condoms in a cool, dry place. Storing condoms where it can get hot, such as in the car or your wallet, can cause them to break or tear.
- Check the wrapper for tears and to make sure the condom is not too old to use. Carefully open the wrapper—don't use your teeth or fingernails. Make sure the condom looks okay to use. Don't use a condom that's gummy, brittle, discolored, or has even a tiny hole.
- Put on the condom as soon as the penis is erect, but before it touches the vagina, mouth, or anus.
- Use only lubricants made with water (such as, K-Y Jelly™, Astroglide™, AquaLube™, glycerine). Oil-based lubricants, such as Vaseline™, can weaken the condom. The lubricant is put on the outside of the condom. It helps to keep the condom from tearing. Don't regularly use lubricants with spermicide called nonoxynol-9 (N-9), which might make it easier for an STI—including HIV—to get into your body.





the very end of each sex act, and with every sex partner. And be prepared: Don't rely on your partner to have protection.

- **Know that certain birth control methods—and other methods—don't protect against STIs.** Birth control methods including the pill, shots, implants, intrauterine devices (IUDs), diaphragms, and spermicides will not protect you from STIs. They only can help keep you from getting pregnant.

Still, many women who use these forms of birth control don't use condoms. If you use one of these birth control methods, make sure to also use a condom with every sex act. Also, don't use contraceptives that contain the spermicide nonoxynol-9 (N-9). N-9 can irritate the vagina, which might make it easier for an STI—including HIV—to get into your body. Keep in mind that women who are unable to become pregnant can get STIs.

- After sex, pull out the penis while it is still erect, holding the condom firmly at the base of the penis so it does not slip off.
- Use a new condom if you want to have sex again or in a different way.

### Female condom

The female condom (Reality™) is made of the plastic polyurethane. It has a ring on each end. The inside ring holds the condom in place inside the vagina. The outer ring stays outside the vagina so it covers the labia. Use female condoms for vaginal sex if your partner can't or won't use a male condom.

- Check the wrapper for tears and to make sure the condom is not too old to use. Open the wrapper carefully—don't use your teeth or fingernails. Make sure the condom looks okay to use.
- Put the condom into the vagina up to 8 hours before having sex, but before the penis touches the vagina. The condom cannot disappear inside your body.
- It is okay to use water or oil-based lubricants. The lubricant is put on the inside and outside of the condom.
- After sex, remove the condom before standing up. Grasp the outside ring and twist the condom to trap in fluid and gently remove.
- Use a new condom if you want to have sex again or in a different way.





You might have heard of other ways to keep from getting STIs—such as washing genitals before sex, passing urine after sex, douching after sex, or washing the genital area with vinegar after sex. These methods **DO NOT** prevent the spread of STIs.

- **Talk with your sex partner(s) about using condoms before having sex.** This way, you can set the ground rules and avoid misunderstandings during a moment of passion. Hopefully, you and your partner will agree to use condoms all the time. But know this: You can control their use by making it clear that you will not have any type of sex at any time without a condom. Remember, it's your body, and it's up to you to make sure you are protected.
- **Don't assume you're at low risk for STIs if you have sex only with women.** Some common STIs are spread easily by skin-to-skin contact. Also, most women who have sex with

women have had sex with men, too. So a woman can get an STI from a male partner, and then pass it to a female partner.

- **Don't abuse drugs or alcohol. Heavy drinking and drug use can put you at greater risk of STIs.** Drinking too much and using drugs are linked to sexual risk-taking, such as having sex with more than one partner and not using condoms. Drug users who share needles risk exposure to blood-borne infections that also can be passed sexually, such as HIV and hepatitis B. Drinking too much alcohol or using drugs puts you at risk of sexual assault and possible exposure to an STI.
- **Get tested for STIs.** If either you or your partner has had other sexual partners in the past, get tested for STIs before becoming sexually active. Don't wait for your doctor to ask you about getting tested—ask your doctor! Many tests for STIs can be done at the same time as your regular pelvic exam.
- **Have regular checkups and pelvic exams—even if you think you're healthy.** During the checkup, your doctor will ask you a lot of questions about your lifestyle, including your sex life. This might seem too personal to share. But answering honestly is the only way your doctor is sure to give you the care you need. Your doctor might also do a Pap test to check for signs of cancer in your cervix. Ask your doctor how often you need a Pap test. Also, ask your doctor if the HPV vaccine is right for you. (See page 134 for more information.)

## **After diagnosis: What to do if you have an STI**

Finding out that you have an STI might be difficult to face, especially if the source of your STI is an unfaithful partner or if it cannot be cured. For many, coping with the emotional side of having an STI is more difficult than managing the physical effects. But once you know what you are up against, you can start treatment right away and take steps to keep you and your partner(s) healthy.

### **Let partners know**

Although you might not want to tell anybody about your STI, informing *all* your sexual partner(s) is the only way to stop the STI from getting passed to others or possibly reinfecting you. If your partner has other partners, they should be notified too. There are a few ways to do this:

1. Tell your partner(s) yourself and urge your partner(s) to get treated for the STI. For gonorrhea or chlamydial infection, you might be able to give your partner the needed medicine without him seeing a doctor. This is called expedited partner therapy (EPT). EPT is a last-resort option for partner(s) who won't or can't see a doctor. EPT is not possible in all states. If your partner is unwilling to seek treatment, ask your doctor if EPT is possible where you live.
2. Ask your doctor or the clinic where you were diagnosed to notify your sexual partner(s) anonymously. That means they won't disclose your name.

3. Tell your main partner, but ask that your medical provider inform all other or past partners.
4. Ask your doctor for help if you fear that notifying your partner(s) might lead to a violent or abusive reaction.

### **Follow treatment orders**

Different STIs are treated differently. Follow your doctor's orders and finish any medicine you are given to cure or manage the infection. Even if your symptoms go away, you still need to finish all the medicine. Your doctor also will instruct you to not have sex until you and your partner(s) have finished treatment and until symptoms, such as sores, have completely cleared. You might also need to get a follow-up test after treatment to make sure the infection is cured. Doing these things is the only way to be sure your STI is treated and won't be passed to other people.



## Be responsible sexually

Whether you are in a long-term relationship or involved with somebody new, it's up to you to act responsibly when

it comes to your and your partner's(s') sexual health. This means:

- talking honestly about your having an STI, so that your current or fu-

## Frequently Asked Questions About the HPV Vaccine

### I've never heard of the HPV vaccine. What is it?

Many women don't know about the HPV vaccine and question whether it is something they need. That's because the HPV vaccine came out in 2006. It is the first vaccine to prevent cervical cancer and other diseases caused by certain types of genital human papillomavirus (HPV). The vaccine protects women against four HPV types, which together cause 70 percent of cervical cancers and 90 percent of genital warts. It does not treat existing HPV infections. The vaccine is given through a series of three shots over a 6-month period. Getting the vaccine is important, because more than half of sexually active women and men are infected with HPV at some point in their lives.



### Who should get this vaccine?

It is recommended for 11- to 12-year-old girls, and it can be given to girls as young as 9—an age when most girls are not yet sexually active. It is also recommended for 13- to 26-year-old females who have not yet received or completed the vaccine series.

### How long does vaccine protection last?

So far, we know that protection from HPV lasts at least 5 years in women who have been vaccinated.

### I'm older than 26. Why isn't the vaccine recommended for me—or for men?

So far, the vaccine has been widely tested only in 9- to 26-year-old females. Research is just beginning to look at whether the vaccine also is safe and effective in women older than 26. Researchers also are working to find out if the vaccine will prevent HPV in men and boys.

### I'm pregnant. Should I get the HPV vaccine?

Pregnant women should not get the HPV vaccine until after the baby is born. There is not enough research to know how the vaccine might affect pregnant women and their unborn babies.

### After I get the HPV vaccine, do I still need to be screened for cervical cancer?

Yes. There are three reasons why. First, the vaccine does not protect against all HPV types that cause cancer. Second, women who don't get all the vaccine doses (or at the right time) might not be fully protected. Third, women may not fully benefit from the vaccine if they got it after acquiring one or more of the four HPV types.

ture partner(s) can make an informed choice whether or not to be intimate with you

- abstaining from sexual contact during treatment or when you have symptoms, such as warts or sores

### **Take care of your emotions**

If you recently found out that you have an STI, you might feel like you're the only one or that you're now "different" from other people. You might feel embarrassed, a sense of "dirtiness," shame, or guilt. These feelings might keep you from wanting to seek treatment or telling your partner(s). You also might worry about getting better or that an STI will keep you from having a long-lasting romantic relationship in the future. Rest assured that these feelings are normal at first and will lessen over time. The following tips might also help you to adjust to the diagnosis:

- Learning the facts about the STI will help put your situation in perspective and give you a sense of greater control over your health and well-being.
- Talking to a trusted friend or loved one will ease stress.



- Connecting with a support group can help you to feel less alone and to see how others have dealt with similar situations in a positive way.

Keep in mind that stigma is behind many of the negative feelings that surround STIs. If you are living with an STI, try not to become a victim of stigma yourself. The more you know about STIs, the better control you will have over your sexual health. At the same time, knowing more can make it easier to talk about STIs with a loved one. ■

# One Woman's Story

**A**t the start of my sophomore year, I couldn't have been more prepared to take on the year. I spent the summer interning and training for a race with my sister. I felt accomplished and healthy. But my first test of the year changed everything.

My yearly Pap showed abnormal cells, so we ran an HPV test, which confirmed that I have human papillomavirus (HPV). The next step was to see a gynecologist and have a colposcopy.

I was sure I would die from cervical cancer. If not, stress would do me in. I spent hours with the nurse practitioner, getting medical leave for doctor's appointments, worrying about how to cover the cost of procedures and doctor's visits, and coping with possibly spreading HPV to my boyfriend.

At some point, my sister sent a card with a few encouraging words. "Don't let three letters define you," she wrote. Her words helped me through the most difficult parts.

Telling my mom I wasn't sure how I got HPV was extremely hard. I was disappointed in myself, and it felt even worse that my mom might be too. Telling friends, who used to know everything about me, that I had a

doctor's appointment without elaborating or talking with my boyfriend about how HPV impacts him were the most challenging moments in those relationships.

This year I've had two Pap tests, two colposcopies, and an undying sense of guilt for bringing this on my family and boyfriend. I feel guilty because I knew how to prevent STIs. I can only be reassured knowing that when cell changes are monitored, cervical cancer is rare. I can't go back and change the past, but I can prevent this from getting worse. I choose what defines me, and this is not it.

*Kathleen*

**Toms River, New Jersey**

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**Don't let three  
letters define you.**

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## For More Information...

### **Office on Women's Health, HHS**

200 Independence Ave SW, Room 712E

Washington, DC 20201

Web site: [www.womenshealth.gov/faq/stdsgen.htm](http://www.womenshealth.gov/faq/stdsgen.htm)

Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### **Division of STD Prevention, CDC**

1600 Clifton Rd NE

Atlanta, GA 30333

Web site: [www.cdc.gov/std](http://www.cdc.gov/std)

Phone number: (800) 232-4636,  
(888) 232-6348 TTY

### **American College of Obstetricians and Gynecologists**

409 12th St SW, PO Box 96920

Washington, DC 20090-6920

Web site: [www.acog.org](http://www.acog.org)

Phone number: (202) 863-2518 Resource  
Center

### **American Social Health Association**

PO Box 13827

Research Triangle Park, NC 27709

Web site: [www.ashastd.org](http://www.ashastd.org)

Phone number: (800) 227-8922 STI  
Hotline

### **CDC National Prevention Information Network**

PO Box 6003

Rockville, MD 20849-6003

Web site: [www.cdcnpin.org](http://www.cdcnpin.org)

Phone number: (800) 458-5231

### **Planned Parenthood Federation of America**

434 W 33rd St

New York, NY 10001

Web site: [www.plannedparenthood.org](http://www.plannedparenthood.org)

Phone number: (800) 230-7526





# Breastfeeding

As a mother, one of the best things that only you can do for your baby is to breastfeed. Breastfeeding is more than a lifestyle choice—it is an important health choice, and any amount of time that you can do it will help both you and your baby. Enjoy the special bond with your baby as he or she stares into your eyes and warmly nuzzles against your skin while breastfeeding—it’s an amazing feeling!

## **Breastfeeding is best**

It is best to give your baby only breast milk for the first 6 months of life. This means not giving your baby any other food or drink—not even water—during this time. Drops of liquid vitamins, minerals, and medicines are, of course, fine, as advised by your baby’s doctor. It is even better if you can breastfeed for your baby’s first year or longer, for as long as you both wish. Solid iron-rich foods, such as iron-fortified cereals and pureed vegetables and meats, can be started when your baby is around 6 months old. Before that time, a baby’s stomach cannot digest them properly. Solids do not replace breastfeeding. Breast milk stays the baby’s main source of nutrients during the first year. Beyond one year, breast milk can still be an important part of your child’s diet.

Breastfeeding is normal and healthy for infants and moms. Breast milk has disease-fighting cells called antibodies that help protect infants from germs, illness, and even sudden infant death syndrome (SIDS).



## **Breast milk is different from infant formula**

- Colostrum (koh-LOSS-truhm), the thick, yellow first breast milk that you make during pregnancy and just after birth, will give your baby the best start at life. It is known as “liquid gold.” It is rich in nutrients and antibodies to protect your baby as he or she first enters the world. Although your baby gets only a small amount of colostrum at each feeding, it matches the amount his or her tiny stomach can hold. A

## Breastfeeding Is Linked to a Lower Risk of These Health Problems

In infants:	In mothers:
<ul style="list-style-type: none"> <li>• Ear infections</li> <li>• Stomach viruses</li> <li>• Respiratory infections</li> <li>• Atopic dermatitis (ay-TOP-ihk DUR-muh-TEYE-tuhss)</li> <li>• Asthma (in young children)</li> <li>• Obesity</li> <li>• Type 1 and type 2 diabetes</li> <li>• Childhood leukemia (loo-KEE-mee-uh)</li> <li>• Sudden infant death syndrome (SIDS)</li> <li>• Necrotizing enterocolitis (NE-kroh-teye-zeeng en-tur-oh-koh-LEYE-tuhss), a disease that affects the gastrointestinal tract in preterm infants</li> </ul>	<ul style="list-style-type: none"> <li>• Type 2 diabetes</li> <li>• Breast cancer</li> <li>• Ovarian cancer</li> <li>• Postpartum depression</li> </ul>

Studies are still looking at the effects of breastfeeding on osteoporosis (OSS-tee-oh-puh-ROH-suhss) and weight loss after birth.

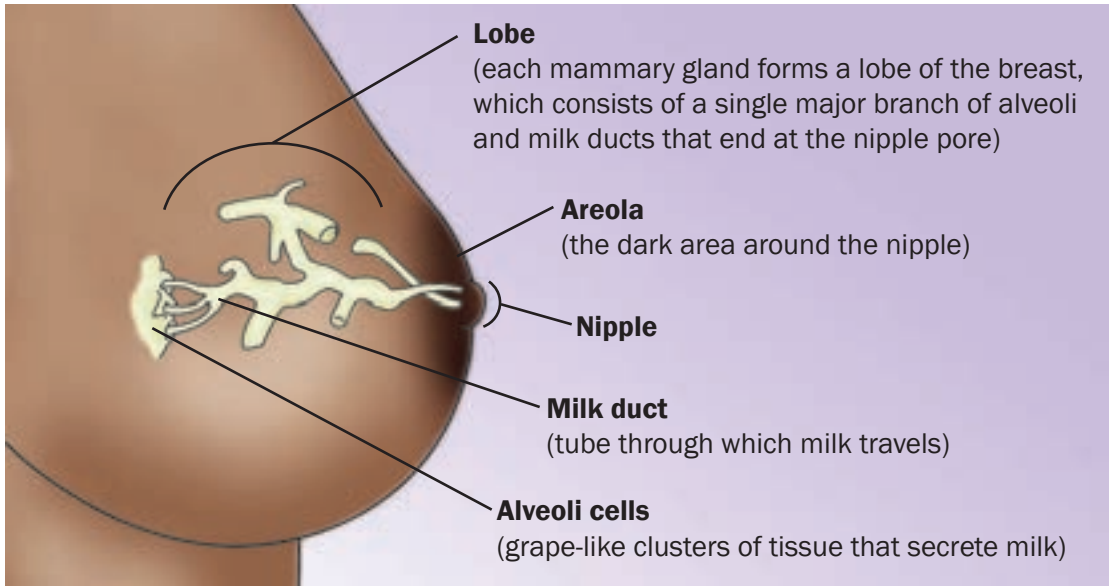
newborn stomach is only the size of a large marble at first! Colostrum is exactly what a new baby needs at first.

- Your milk changes over time to meet your baby's needs. Your breast milk that begins to be made by the third to fifth day after birth has just the right amount of fat, sugar, water, and protein that is needed for your baby's growth. It will be a thinner type of milk, but just as full of all of the nutrients and antibodies for your baby.
- Infant formula cannot match the exact chemical makeup of human milk, especially the cells, hormones, and antibodies that fight disease.
- For most babies, breast milk is easier to digest than formula. It takes time for their stomachs to adjust to digesting proteins in formula because they are made from cow's milk.

### How the breast makes milk

There are special cells inside your breasts that make milk. These cells are called alveoli (al-VEE-uh-leye). When your breasts become fuller and more tender during pregnancy, this is a sign that the alveoli are getting ready to work. Some women do not feel these changes in their breasts and some women experience breast changes after their baby is born. If you have a question about your breast changes, you can ask your health care provider or a lactation consultant.

The alveoli make milk in response to the hormone prolactin, which rises when the baby suckles. Another hormone, oxytocin (oks-ee-TOH-suhn), causes these small muscles around the cells to contract and move the milk through a series of small tubes called milk ducts. The milk ducts are located underneath the nipple and areola (air-ee-OH-luh), which is the darker skin that circles your nipple.



### Babies knows how to latch and feed

Did you know that an alert, healthy newborn infant can latch on to the mother's breast with little or no help? Babies are born knowing how to find the breast and suckle all by themselves. All they need is a chance to practice. The more milk your baby removes from the breasts, the more milk you will make. Immediately after birth, ask the hospital to delay unnecessary procedures, if possible, and to allow you and your partner some quiet time to snuggle with your baby during the first hour or two.

### Learning to “dance”

Learning to breastfeed is like learning to dance. It is best to wait until you and your baby are calm.

- Hold your baby, wearing only a diaper, skin-to-your-skin up against your bare chest and upright with his or her head under your chin. Your baby will be comfortable in that cozy valley between

your breasts. You can ask your partner or a nurse to place a blanket across your baby's back and bring your bedcovers over you both. Your skin temperature will rise to warm your baby.

- Softly talk to your baby and massage him or her with gentle strokes.
- When awake, your baby will move his or her head back and forth, looking



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and feeling for the breast with his or her mouth and lips. Your baby might even look up at you and make eye contact. This is an important time for your baby to learn that you are his or her mother, so enjoy this special time by talking or singing softly to your baby.

- Support his or her neck and shoulders with one hand and hips with the other as he or she twists and turns in an effort to find your breast.

### **As your baby looks for your breast**

- Support your baby with your arms so that you both are comfortable.
- Allow your breast to hang naturally and, when your baby feels it with his or her cheek, he or she will open his or her mouth wide and reach it up and over the nipple.
- Your baby's head should be tilted back slightly to make it easy to suck and swallow. With his or her head back and mouth open, the tongue is naturally down and ready for the breast to go on top of it.
- You will see that, at first, your baby's nose is lined up opposite your nipple. As his or her chin presses into your breast, his or her wide, open mouth will get a large mouthful of breast for a deep latch.
- Allow your baby's arms to hug your breast.
- Do not put your hands on your baby's head. As it tilts back, you can support your baby's upper back and shoulders with the palm of your hand and pull your baby in close.



EXAMPLE OF A GOOD LATCH

### **Signs of a good latch**

- How it feels is more important than how it looks. The latch feels comfortable to you, without hurting or pinching.
- Your baby's chest is against your body and he or she does not have to turn his or her head while drinking.
- You see little or no areola, depending on the size of your areola and the size of your baby's mouth. If areola is showing, you will see more above your baby's lip and less below.
- When your baby is positioned well, his or her mouth will be filled with breast.
- The tongue is cupped under the breast, although you might not see it.
- You hear or see your baby swallow. Some babies swallow so quietly, a pause in their breathing may be the only sign of swallowing.
- You see the baby's ears "wiggle" slightly.
- Your baby's lips turn out like fish lips, not in. You may not even be able to see the bottom lip.
- Your baby's chin touches your breast.

## Ask for help if you need it!

Once you have started to breastfeed, keep trying! There are many people who can support you in your effort to give your baby the best start. Some may already have been helping you during your pregnancy and birth.

**International Board Certified Lactation Consultant (IBCLC)** – also called a “lactation consultant,” this person is a credentialed health care professional with the highest level of knowledge and skill in breastfeeding support. IBCLCs help mothers to breastfeed comfortably by helping with positioning, latch, and a wide range of breastfeeding concerns. Ask your hospital or birthing center for the name of a lactation consultant who can help you. You also can contact the International Lactation Consultant Association, which has a lactation consultant directory. (See page 205 for contact information).

**Breastfeeding Peer Counselor or Educator** – a breastfeeding counselor who can teach others about the benefits of breastfeeding and help women with basic breastfeeding challenges and questions. A “peer” means a person has breastfed her own baby and is available to help other mothers. You can find a peer counselor with the Women, Infants and Children (WIC) Program or mother-to-mother support group meetings from the La Leche League resources at the end of this chapter, or call the National Breastfeeding Helpline. Some breastfeeding educators have letters after their names like CLC (Certified Lactation Counselor) or CBE (Certified Breastfeeding Educator). These are not the same as IBCLCs but still can be quite helpful.

**Doula (DOO-lah)** – a woman who is professionally trained and experienced in giving social support to birthing families during pregnancy, labor, and birth and at home during the first few days or weeks after birth. Doulas help women physically and emotionally, and those who are trained in breastfeeding can help you be more successful with breastfeeding after birth.

**Pediatrician** – a medical doctor who focuses on treating babies, children, and teens.

**OB/GYN or obstetrician/gynecologist** – a medical doctor who focuses on treating women’s reproductive health issues before, during, and after pregnancy.

**Certified Nurse-Midwife** – a health professional who provides care to women during pregnancy, labor, and birth. Midwives can also provide breastfeeding advice.

## Practice makes perfect

- During the early days and weeks during breastfeeding, you and your baby are both learning how to breastfeed. Take your time and be patient. Breastfeed as often and as long as your baby wants. Soon you will both be experts!
- As your baby gets older, you will be able to hold your baby close to you at

**Call the National Breastfeeding Helpline at (800) 994-9662 to talk to a trained peer counselor for answers to common questions and problems.**

your breast with his or her mouth at your nipple and your baby will latch on easily.

- What works well for one feeding might not work well at the next. Try different positions until you find one that works for both of you.

### **Problems latching**

If your baby is having trouble latching, you can gently stroke your baby's lips with your nipple until he or she opens

his or her mouth really wide and keeps it open. Then you can pull your baby close so that the chin and lower jaw moves into your breast first to take a large mouthful of breast.

Get help if you are having trouble. (See page 191 for a list of people who can help you.)

### **Tips for Making Breastfeeding Work**

1. Breastfeed early and often. Breastfeed as soon as possible after birth, within the first hour of life. If you had a vaginal birth you can hold your baby and breastfeed right away. If you had a c-section or general anesthesia after the birth for a surgery, tell your doctor and nurse that you want to breastfeed as soon as you are both in the recovery room.
2. Breastfeed at least 8 to 12 times every 24 hours to make plenty of milk for your baby.
3. Keep your baby in your hospital room with you (also called "rooming in") so you can see your baby's first signs of being hungry. When babies are hungry they become more alert and active, may put their hands or fists to their mouths, make sucking motions with their mouth, or turn their heads looking for the breast. Crying is a late sign of hunger.
4. Make sure you are both comfortable and follow your baby's lead after he or she is latched well onto the underside of the breast, not just the nipple. Some babies take both breasts at each feeding, while others only take one breast at a feeding. Help your baby finish the first breast, as long as he or she is still sucking and swallowing. Your baby will let go of the breast when he or she is finished, and often falls asleep. Offer the other breast if he or she seems to want more. Let your baby decide when to stop nursing.
5. Keep your baby close to you. Remember that your baby is not used to this new world and needs to be held very close to his or her mother. Being skin-to-skin with you helps babies cry less, and stabilizes the baby's heart and breathing rates.
6. Avoid using pacifiers, bottles, and supplements of infant formula in the first few weeks unless there is a medical reason to. It's best just to breastfeed to get the milk process running smoothly and to keep your baby from getting confused while he or she is learning to breastfeed.



## Breastfeeding holds

Some moms find that the following positions are also helpful ways to get comfortable and support their babies in

finding a good latch. You also can use pillows under your arms, elbows, neck, or back to give you added comfort and support.



**1. Cradle Hold** – an easy, common hold that is comfortable for most mothers and babies. Hold your baby with his or her head on your forearm and his or her whole body facing yours.



**2. Cross Cradle or Transitional Hold** – useful for premature babies or babies with a weak suck because it gives extra head support and may help babies stay latched. Hold your baby along the opposite arm from the breast you are using. Support your baby's head with the palm of your hand at the base of his or her neck.



**3. Clutch or “Football” Hold** – useful for mothers with large breasts, flat or inverted nipples, overactive let-down, or who had a c-section. It is also helpful for babies who prefer to be more upright. This hold allows you to better see and control your baby's head and keeps the baby away from a c-section incision. Hold your baby at your side, lying on his or her back, with his or her head at the level of your nipple. Support baby's head with the palm of your hand at the base of the head.



**4. Side-Lying Position** – useful for mothers who had a c-section or to help any mother get some extra rest or sleep while the baby breastfeeds. This hold allows you to rest or sleep while your baby nurses. Lie on your side with your baby facing you. Pull your baby close so your baby faces your body.

## What if...

**You have pain?** Many moms report that breasts can be tender at first until both they and their baby find comfortable breastfeeding positions and a good latch. Once you have done this, breastfeeding should be comfortable. If it hurts, your baby may be sucking on only the nipple. Gently break your baby's suction to your breast by placing a clean finger in the corner of your baby's mouth and try again. Your nipple also should not look flat or compressed when it comes out of your baby's mouth. It should look round and long, or the same shape as it was before the feeding.

**You or your baby are frustrated?** Take a short break and hold your baby in an upright position. Consider holding him or her skin-to-your-skin. Talk, sing, or provide your finger for sucking for comfort. Try to breastfeed again in a little while.

**Your baby has a weak suck, or makes only tiny suckling movements?** Break your baby's suction and try again. He or she may not have a deep enough latch to remove the milk from your breast. Talk with a lactation consultant if your baby's suck feels weak or if you are not sure he or she is getting a good feeding of milk. Your baby might have a health problem that is causing the weak suck.

**You have other concerns?** Contact a lactation consultant or your doctor for help.

## Making plenty of milk

Your breasts will easily make and supply milk directly in response to your baby's needs. The more often and effectively a baby breastfeeds, the more milk will be made. Babies are trying to double their weight in a few short months, and their tummies are small, so they need many feedings to grow and to be healthy.

- You can expect at least 8 to 12 feedings in a 24-hour day
- In the first few days after birth, your baby will likely want to breastfeed about every hour or two in the daytime, and a couple of times at night during which your baby can have one longer sleep stretch.
- Babies develop their own feeding schedules. Some babies feed every hour for 2-6 hours and then sleep for a longer period, and others will breast-

feed every 2-3 hours day and night.

Follow your baby's cues for when he or she is ready to eat.

## How to know baby gets enough milk

Many babies, but not all, lose a small amount of weight in the first days after birth. Your baby's health care provider will check his or her weight at your first visit after you leave the hospital. Make sure to visit your baby's health care provider within 3 to 5 days after birth and then again at 2 to 3 weeks of age for checkups. You also can tell if your baby is getting plenty of milk by keeping track of the number of wet diapers and diapers with bowel movements.

**Most mothers can make plenty of milk for their baby. If you think you are having a milk supply problem, talk to a lactation consultant.**



## Minimum Number of Wet Diapers and Bowel Movements in a Baby's First Week (It Is Fine if Your Baby Has More)

Baby's age (1 day = 24 hours)	# of wet diapers	# of bowel movements	Color & texture of bowel movements
Day 1 (first 24 hours after birth)	1	The first one usually occurs within 8 hours after birth	Thick, tarry, and black
Day 2	2	3	Thick, tarry, and black
Day 3	5–6	3	Looser, greenish to yellow
Day 4	6 or more	3	Yellow, soft and watery
Day 5	6 or more	3	Loose, seedy yellow color
Day 6	6 or more	3	Loose, seedy yellow color
Day 7	6 or more	3	Larger amounts of loose, seedy yellow color

Some babies will switch to less frequent but large bowel movements at about 6 weeks of age.

### Common Concerns and Solutions

Most breastfeeding concerns can be prevented, and, if an issue arises, there are many ways to treat it right away by calling on a lactation consultant or other health care provider. Getting plenty of rest and fluids, reducing stress, and eating a healthy diet will also help you feel better and be able to cope with any early challenges you might face after your baby is born.

#### Other signs that your baby is getting plenty of milk are:

- Baby is mostly content and gaining weight steadily after the first week of age. From birth to 3 months, typical weight gain is 2/3 to 1 ounce each day.
- Baby is passing clear or pale yellow urine, not deep yellow or orange. Baby has at least three stools every 24 hours after day 1.
- Baby alternates short sleeping periods with wakeful, alert periods. Baby is satisfied and content after feedings.

- Your breasts feel softer after you feed your baby.

Consult your baby's health care provider if you are concerned about your baby's weight gain.



### Ways to Wake Your Baby to Breastfeed

In the early weeks after birth, you should wake your baby to feed if 4 hours have passed since the beginning of the last feeding. You can:

- Remove any blankets.
- Change your baby's diaper.
- Place your baby skin-to-skin.
- Massage your baby's back, abdomen, arms, and legs.

## Babies With Special Needs

Some babies have health problems that make it more challenging to breastfeed. You can stay firm with your choice to breastfeed and get help from a lactation consultant. Breast milk and early breastfeeding are still best for both the health of you and your baby, especially if your baby is premature or sick. Even if your baby can't breastfeed directly from you, it's best to express or pump your milk and give it to your baby with a cup or bottle. Be sure to continue lots of skin-to-skin contact with your baby.

Some of the most common health problems at birth are:

- being born early, or being premature
- Down syndrome
- heart defect
- jaundice
- cleft lip or palate
- tongue-tied
- needing to be in the intensive care unit

## Pumping and hand expression

If you must be away from your baby, it will be important to remove milk during the times your baby normally would feed to make sure you will continue to make enough milk for him or her. Milk can be removed through a breast pump or by hand. When pumping or hand expressing milk, you can help your milk to start flowing by having a picture of your baby, a baby blanket, or other piece of your baby's clothing that has your baby's scent on it close by. You also can apply



a warm, but not hot, moist compress to the breast, gently massage the breasts, or sit quietly and think of a relaxing setting. It is best to wash your hands before pumping your breast milk and to make sure the area where you are pumping is also clean. After each pumping, you can refrigerate your milk, place it in a cooler or insulated cooler pack, or freeze it in small (2 to 3 ounce) batches for the baby to be fed later. You can keep germs from getting into the milk by washing your pumping equipment with soap and water and letting it air dry.

## Human Milk Banks

If you can't breastfeed and still want to give your baby human milk, the best place to go is to a milk bank that can dispense donor human milk to you if you have a prescription from your doctor. Many steps are taken to ensure the milk is safe. Go to the **Human Milk Banking Association of North America (HMBANA)** resource listed in the resource section on page 205.

Ways to Express Your Milk			
Type	How it works	What's involved	Average cost
Hand expression	You use your hand to massage and compress your breast to remove milk.	Requires practice, skill, and coordination.  Gets easier with practice; can be as fast as pumping.  Good if you are seldom away from baby or need an option that is always with you.	Free, unless you need help from a breastfeeding professional who charges for her services.
Manual pump 	You use your hand and wrist to operate a hand-held device to pump the milk.	Requires practice, skill, and coordination.  Useful for occasional pumping if you are away from baby once in a while.	\$30 to \$50
Automatic, hospital-grade pump 	Runs on battery or plugs into an electrical outlet.	Easy to use.  Can pump one breast at a time or both breasts at the same time.  Double pumping may collect more milk in less time, so it is helpful if you are going back to work or school full-time.  Need places to clean and store the equipment between uses.	\$150 to \$250 or more

### Going back to work

Breastfeeding keeps you connected to your baby, even when you are away at work, and your baby will continue to receive the best nutrition possible.

- After you have your baby, arrange with your employer to take as much time off as you can, because it will help you and your baby get into a good breastfeeding routine and help you make plenty of milk.
- If you can't breastfeed your baby directly during your work breaks, plan to leave your expressed or pumped milk for your baby. The milk can be given to your baby by the care-

giver with a bottle or cup. Some babies don't like bottles; they prefer to breastfeed. So be patient and give your baby time to learn this new way of feeding. Babies may better learn other ways of feeding from their dad or another family member.

- You can help your baby practice bottle-feeding by giving him or her a bottle occasionally after he or she is around 4 weeks old and well used to breastfeeding. During



these practice times, offer just a small amount (an ounce or two) of milk once a day.

- Talk with your employer about breastfeeding, such as why breastfeeding is important, why pumping is necessary, and how you plan to fit pumping into your workday, such as during lunch or other breaks. You could suggest making up work time for time spent pumping milk. If your day care is close to your job, try to arrange to go there to breastfeed your baby during work time.
- Request a clean and private area where you can pump your milk, preferably some place other than the bathroom. You also need a place to wash your hands and your pump parts.
- You can start pumping and storing your milk before you go back to work so that you have lots of milk stored and ready for the first week when you are away from your baby. It is helpful to copy your baby's feeding schedule when coming up with your pumping schedule. Pumping patterns are affected by your breast size and milk storage capacity, so pay attention to your breasts. When they start to feel full, pump until your milk stops spraying and then for a few more minutes each time. Don't wait until they are very full and swollen. Expect each breast to make about 1 ounce of milk every hour.
- Some states have laws that say employers have to allow you to breastfeed at your job, set up a space for you to breastfeed, and/or allow paid or unpaid time for breastfeeding or pumping.

To see if your state has a breastfeeding law for employers check on the La Leche League International Web site listed in the resource section on page 205. Even if your state does not have breastfeeding laws, most employers support breastfeeding employees when they explain their needs.



### **Breastfeeding in Public**

The federal government and many states have laws that allow women to breastfeed anyplace they are usually allowed to be. If you still feel uncomfortable breastfeeding in public you can:

- Wear clothes that allow easy access to your breasts, such as tops that pull up from the waist.
- Breastfeed your baby in a sling. Slings or other soft infant carriers are especially helpful for traveling—making it easier and in keeping your baby comforted and close to you.
- Slip into a women's lounge or dressing room to breastfeed.

It's usually helpful to breastfeed your baby before he or she becomes fussy so that you have time to get into a comfortable place or position to feed.

## Common Q&As

### **If I have small breasts or very large breasts, can I still breastfeed?**

Of course! Breast size is not related to the ability to produce milk for a baby. Breast size is due to the amount of fatty tissue in the breast and the milk storage capacity of your breast. Small breasts make plenty of milk; they just do not store a lot of milk. Therefore, babies will breastfeed often from a mother with smaller breasts. Large breasts make plenty of milk too.

### **Can I still breastfeed if I had breast surgery?**

How much milk you can produce depends on how your surgery was done and where your incisions are, and the reasons for your surgery. Women who have had incisions in the fold under the breasts are less likely to have problems making milk than women who have had incisions around or across the areola, which can cut into milk ducts and nerves. Women who have had breast implants usually breastfeed successfully. If you ever had surgery on your breasts for any reason, talk with a lactation consultant. If you are planning breast surgery, talk with your surgeon about ways he or she can preserve as much of the breast tissue and milk ducts as possible.

### **Can I breastfeed if I become ill?**

Yes! Most common illnesses, such as colds, flu, or diarrhea, can't be passed through breast milk, and your milk will have antibodies in it to help protect your baby from getting the same sickness.

**Can I take medicines while breastfeeding?** Although almost all medicines pass into your milk in small amounts, most

medicines have no effect on the baby and are compatible with continuing to breastfeed. The list of medicines that you should not take while breastfeeding is very short. Discuss any medicines you are taking with your doctor and also ask before you start taking new medicines, including prescription and over-the-counter drugs, vitamins, and dietary or herbal supplements. For some women with chronic health problems, stopping a medicine can be more dangerous than the effects it will have on the breastfed baby. The American Academy of Pediatrics has more detailed information on this topic. See page 430 for contact information.

### **Do I need a special diet while breastfeeding?**

Women often try to improve their diets while they are pregnant. Staying with this improved diet after your baby is born will help you stay healthy, which will help your mood and energy level. You can eat the same number of calories that you ate before becoming pregnant, which helps weight loss after birth. But every mother's needs are unique. There are no special foods you should avoid and no special foods that will help you make more milk.



If you follow a vegan diet or one that does not include any forms of animal protein, you or your baby might not get enough vitamin B<sup>12</sup> in your bodies. In a baby, this can cause symptoms such as loss of appetite, slow motor development, being very tired, weak muscles, vomiting, and problems with the blood. You can protect your and your baby's health by taking vitamin B<sup>12</sup> supplements while breastfeeding.

All mothers should drink enough fluids to stay well hydrated for their own health. But fluid intake does not affect the amount of milk you are making. Always drink when you are thirsty. If your urine is dark yellow you should drink more fluids. Excessive caffeine intake (more than five 5-ounce cups of coffee or caffeinated soft drinks per day) can cause the baby to be fussy and not able to sleep well, but moderate caffeine intake (fewer than five 5-ounce cups) usually doesn't cause a problem for most breastfeeding babies.



You also should avoid drinking large quantities of alcohol. If you have an occasional drink of alcohol, you should wait for about 2 hours to pass before breastfeeding. Also, many babies don't like the taste of your milk after you have had an occasional drink and will breastfeed more when the alcohol is out of your system.

For more information on healthy eating, see the *Nutrition* chapter on page 317 and the MyPyramid Web site listed in the resource section on page 205.

### **Can my baby be allergic to my milk?**

Research shows that a mother's milk is affected only slightly by the food in her diet. Breastfeeding mothers can eat whatever they have eaten during their lifetimes and do not need to avoid certain foods. Babies love the flavors of foods that come through in your milk. Sometimes a baby may be sensitive to something you eat, such as dairy products like milk and cheese. Symptoms in your baby of an allergy or sensitivity to something in your diet include some or all of these:

- green stools with mucus (MYOO-kuhss), diarrhea, vomiting
- rash, eczema (EG-zuh-muh), dermatitis, hives, dry skin
- fussiness during and/or after feedings
- crying for long periods without being able to feel consoled
- sudden waking with discomfort
- wheezing, coughing

Babies who are highly sensitive usually react to the food the mother eats within minutes or within 4 to 24 hours afterward. These signs do not mean the baby is allergic to your milk itself, only to something you are eating. If you stop eating whatever is bothering your baby or eat less of it, the problem usually goes away on its own. You also can talk with your baby's doctor about his or her symptoms. If your baby ever has problems breathing, call 911 or go to your nearest emergency room.

**Will physical activity affect my breast milk?** Regular physical activity helps you stay healthy, feel better, and have more energy. It does not affect the quality or quantity of your breast milk or your baby's growth. If your breasts are large or heavy, it may help to wear a comfortable support bra or sports bra during physical activity. (See page 346 of the *Fitness* chapter for more information.)



**Do I have to restrict my sex life while breastfeeding?** No. But, if you are having vaginal dryness, you can try more foreplay and water-based lubricants. You can feed your baby or express some milk before lovemaking so your breasts will be more comfortable and less likely to leak. During sex, you also can put pressure on the nipple when it lets down, or have a towel handy to catch the milk.

**Do I still need birth control if I am breastfeeding?** Breastfeeding can delay the return of normal ovulation and menstrual cycles. But, like other forms of birth control, breastfeeding is not a sure way to prevent pregnancy. You should talk with your doctor or nurse about birth control choices that are compatible with breastfeeding, including the lactational amenorrhea (ay-men-uh-REE-uh) method (LAM).

**Can I breastfeed if I smoke?** If you smoke tobacco, it is best for you and your baby if you try to quit as soon as possible. If you can't quit, though, it is still better to breastfeed, since your baby is at higher risk of having respiratory problems and SIDS. Breastfeeding lowers the risk of

both of these health problems in your baby. Be sure to smoke away from your baby and change clothes to keep your baby away from the secondhand smoke on your clothing.

**I heard that breast milk can have toxins in it from my environment. Is it still safe for my baby?**

Breast milk remains the best way to feed and nurture young infants and children. The advantages of breastfeeding far outweigh any possible risks from environmental pollutants. Infant formula is usually not a better choice because the formula itself, the water it is mixed with, and/or the bottles or nipples used to give it to the baby can be contaminated with bacteria or chemicals.

For more information on your health and the environment, see page 400.

**Will my baby get enough vitamin D if I breastfeed?**

All infants and children, including those who are exclusively breastfed and those who are fed formula, should have at least 200 International Units (IU) of vitamin D per day, starting during the first 2 months of life, to help them build strong bones. New research suggests that the mother should be getting 200 to 400 IU of vitamin D per day to ensure plenty of vitamin D in her milk and for her own health. You can buy vitamin D supplements for infants at a drug store or grocery store. Sunlight can be a major source of vitamin D, but it is hard to measure how much sunlight your baby gets. Ask your doctor and your baby's doctor about vitamin D.

**Does my breastfed baby need vaccines? Is it safe for me to get a vaccine when I'm breastfeeding?**

Yes. Vaccines are still important to your baby's health. Follow the schedule your doctor gives you and, if you miss any, check with him or her about getting back on track. Most nursing mothers may also receive vaccines. Breastfeeding does not affect the vaccine and vaccines are not harmful to breast milk. Breastfeeding during or after the vaccines are given can help with pain relief and soothing an upset baby.

**What should I do if my baby bites me?**

A baby can't bite and breastfeed at the same time, although many older babies will try! If your baby starts to clamp down, you can put your finger in his or her mouth and take him or her off of your breast with a firm, "No." If your baby continues to bite you, you can try a few things:

- Stop the feeding immediately so the baby is not tempted to get another reaction from you. Don't laugh. This is part of your baby's learning limits.
- Offer a teething toy, or a snack or drink from a cup instead.
- Put your baby down for a moment to show that biting brings a negative consequence. You can then pick him or her up again to give comfort.

**I just found out that I'm pregnant. Can I still breastfeed my toddler?**

Breastfeeding during your next pregnancy is not a risk to either the breastfeeding toddler or to the new developing baby. If you are having some problems in your



pregnancy, such as uterine pain or bleeding, a history of preterm labor, or problems gaining weight during pregnancy, your doctor may advise you to wean.

Some women also choose to wean at this time because they have nipple soreness caused by pregnancy hormones, are nauseous, or find that their growing stomachs make breastfeeding uncomfortable. Your toddler also may decide to wean on his or her own because of changes in the amount and flavor of your milk. He or she will need additional food and drink because you will likely make less milk during pregnancy.

If you keep nursing your toddler after your baby is born, you can feed your newborn first to ensure he or she gets the colostrum. Once your milk production increases a few days after birth you can decide how to best meet everyone's needs, especially the new baby's needs for you and your milk. You may want to ask your partner to help you by taking care of one child while you are breastfeeding. Also, you will need more fluids, healthy foods, and rest because you are taking care of yourself and two small children.



Breastfeeding is a unique experience and every mother has the potential to succeed and make it a wonderful experience. Whether you are a new or expecting mom, or a partner or family member of one, the information and resources here can help you. ■

# One Woman's Story

When Julian was born, I knew I wanted to breastfeed. And like many other new moms, I assumed it would go smoothly and that I would have fountains of milk for my sweet boy. But we didn't have the blissful start I had imagined.

He latched for the first time, and after a few breastfeeding sessions, I was the proud owner of bruised, sore nipples and was terrified the pain would just continue. While in the hospital, I saw two lactation consultants to help me with Julian's positioning, but he continued to have an "inefficient latch," which kept him from getting enough milk, slowed down my milk production, and left me with sore nipples. Another challenge I faced was having Julian away from me to be under "bili lights" to be treated for jaundice, so he received formula as a supplement. This undermined my confidence and hampered my milk production even more. So it was not surprising when we brought our bundle of joy home that, despite what

seemed to be nearly endless nursing sessions, Julian still wasn't getting enough milk and wouldn't stop crying. I was crushed when we had to give him the bottle of formula sent home from the hospital. I felt betrayed by my body and like a total failure as a mother.

The good news is that we got effective help. Our pediatrician referred us to a great lactation consultant whose "hands-on" approach helped to improve Julian's latch and rebuild my milk supply. Before I returned to work, we were able to phase out the formula supplementation. It took long, hard work, but we got there. Then, while working full time, I was able to pump enough milk to give Julian breast milk nearly all the time, using only one bottle of formula each day.

I proudly breastfed my son for 32 months and strongly feel that a child can benefit from breast milk no matter how much you can give him or her. I learned that what makes you a successful mom doesn't have anything to do with your breast milk supply and everything to do with always trying your best.

*Ann*

**Washington, D.C.**

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**Before I returned to work, we were able to phase out the formula supplementation.**

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## For More Information...

### **Office on Women's Health, HHS**

200 Independence Ave SW, Room 712E  
Washington, DC 20201

Web site: [www.womenshealth.gov/  
breastfeeding](http://www.womenshealth.gov/breastfeeding)

National Breastfeeding Helpline:  
(800) 994-9662, (888) 220-5446 TDD

### **U.S. Department of Agriculture**

3101 Park Center Dr  
Alexandria, VA 22302-1594  
Center for Nutrition Policy and Promotion

Web site: [www.mypyramid.gov/  
mypyramidmoms](http://www.mypyramid.gov/mypyramidmoms)

Phone number: (888) 779-7264

The Special Supplemental Nutrition  
Program for Women, Infants, and Children

Web site: [www.fns.usda.gov/wic](http://www.fns.usda.gov/wic)  
Phone number: (703) 305-2746

### **Division of Nutrition, Physical Activity, and Obesity, CDC**

4770 Buford Highway NE, MS K-24  
Atlanta, GA 30341-3717

Web site: [www.cdc.gov/breastfeeding](http://www.cdc.gov/breastfeeding)  
Phone number: (800) 232-4636,  
(888) 232-6348 TTY

### **Food and Drug Administration**

5600 Fishers Ln  
Rockville, MD 20857

Breast Pump Information: [www.fda.gov/  
cdrh/breastpumps](http://www.fda.gov/cdrh/breastpumps)

Infant Formula Information:  
[www.cfsan.fda.gov/~dms/inf-toc.html](http://www.cfsan.fda.gov/~dms/inf-toc.html)  
Phone number: (888) 463-6332

### **American College of Nurse-Midwives**

8403 Colesville Rd, Suite 1550  
Silver Spring, MD 20910

Breastfeeding Information:  
[www.gotmom.org](http://www.gotmom.org)

Web site: [www.mymidwife.org](http://www.mymidwife.org)

### **American College of Obstetricians and Gynecologists**

409 12th St SW, PO Box 96920  
Washington, DC 20090-6920

Web site: [www.acog.org](http://www.acog.org)

Phone number: (202) 863-2518 Resource  
Center

### **Human Milk Banking Association of North America**

1500 Sunday Dr, Suite 102  
Raleigh, NC 27607

Web site: [www.hmbana.org](http://www.hmbana.org)

### **International Lactation Consultant Association**

1500 Sunday Dr, Suite 102  
Raleigh, NC 27607

Web site: [www.ilca.org](http://www.ilca.org)  
Phone number: (919) 861-5577

### **La Leche League International**

PO Box 4079  
Schaumburg, IL 60168-4079

Web site: [www.llli.org](http://www.llli.org)

Breastfeeding and the Law: [www.llli.org/  
Law/LawUS.html](http://www.llli.org/Law/LawUS.html)

Phone number: (800) 525-3243,  
(847) 592-7570 TTY



# Mental Health

A healthy mind is as important as a healthy body to your overall well-being. Good mental health helps you feel good about yourself, connect with others, find meaning in life, and thrive at home, work, and play. Good mental health doesn't mean you will never be sad, insecure, or worried. But good mental health can help you keep problems in perspective.

Some factors that influence mental health are out of our control, such as our genes and some life events. But many are not. Just like physical activity and eating right help to keep your body healthy, you can make lifestyle choices to help keep emotionally healthy, too.

## **What is mental health?**

Mental health is how we think, feel, and act as we cope with life. It helps determine how we handle stress, relate to others, and make choices. Your mental health is shaped by the interplay of many forces. These include:

- brain chemicals
- culture
- environment
- genes
- hormones
- illness
- life events
- personality
- reproductive cycle
- society





**A woman's mental health is shaped by her body, mind, and life experiences.**

Mental health exists on a spectrum. At one end are feelings, thoughts, and behaviors that allow you to thrive. At the other are feelings, thoughts, and behaviors that disrupt life and cause distress. Your point on the spectrum will change from moment to moment as the forces that shape your mental health change. You might not notice small changes in your mental health. But the big changes are easy to see and feel, such as the highs you might feel after reaching a personal goal or the lows after losing a job.

Your personal journey through life is unique. But there are predictable stages of a woman's life cycle, from girlhood to older adulthood. At some points, a woman's mental health may be more at risk of problems, such as after having a baby or in the years just before menopause. But with each stage comes a capacity for strength and growth, too.

### **Stress matters**

We feel stressed when the demands of life and our skills and resources for coping are out of balance. We have short-term and long-term stress. Missing the

bus or arguing with a spouse can cause short-term stress. Single parenting or financial hardship can lead to long-term stress. Even some of our happiest times can be stressful, like during the holidays or having a baby. Some of the most common stressful life events include:

- death of a spouse
- death of a close family member
- divorce
- losing your job
- major personal illness or injury
- marital separation
- marriage
- pregnancy
- retirement
- spending time in jail



Social conditions such as living in poverty and dealing with racism can expose people to ongoing stress. So can discrimination or harassment at work. Stress caused by trauma, intimate partner violence, or an abusive or troubled home life during childhood can have potent and long-lasting effects on a woman's mental health. In fact, childhood sexual abuse, which is more frequent among girls, may have effects that last into adulthood—ranging from depression and anxiety to posttraumatic stress disorder (PTSD).

More familiar to many women is day-to-day stress. Stress that builds up can take a toll on your physical and mental health. Did you know that you are more likely to catch a cold during times of high stress? Long-term stress can put you at risk of more serious health problems, like depression or hypertension. Or make health problems you already have worse.

At the same time, not all stress is bad. Just enough stress keeps you focused and helps you to perform your best, such as the stress you might feel before speaking in front of a group of people. It also can prompt you to change a situation for the better, such as leaving a dead-end job. But any stress can affect your health. Pay attention to your body for signs that stress is building up. And try these tips to keep stress in check:

- Take time each day to relax and unwind, even if only for a few minutes.
- Aim for 7 to 9 hours of sleep every night.
- Eat healthy foods, which give you energy.

- Make time for physical activity, which relieves tension and boosts mood.
- Talk to friends and loved ones. They are good listeners and might offer a different way of seeing things.

### Signs of Role Strain and Stress

Juggling multiple roles is a fact of life for most women today. Sometimes, our roles as wives, partners, mothers, workers, and caregivers can feel like they are competing for our time and energy. Role strain and stress can happen easily if you take on too much, set standards that are too high, and/or don't get the support you need. But life roles can enhance and support each other, too. Research suggests that multiple roles are better for you than having just one. Look out for these signs that you are spreading yourself too thin:

- anxiety
- depression
- feeling you don't have control, or a need for too much control
- forgetfulness
- headaches
- lack of energy
- lack of focus
- low morale
- not being able to get things done
- poor self-esteem
- short temper
- trouble sleeping
- upset stomach
- withdrawal



- Make time to do things you enjoy and that fulfill you.
- Set limits. Be realistic about what you can handle at work and in your personal life. Talk to your boss if work demands are too big to handle alone. If you feel overburdened, ask family and friends for help and say “no” to requests for your time and energy. Women often put the needs of others before their own.

### **Hormone rhythms and mood**

Hormones are your body’s chemical messengers. They affect many different processes in your body. The menstrual cycle is one example. Hormones rise and fall during the month and make the menstrual cycle happen. Many women notice physical and mood changes in the week or two before their period. We know that hormones have an effect on the brain chemistry that controls feelings and mood. In particular, estrogen

appears to have a strong effect on mood and mental health. But the exact process is still unclear. We do know that depression rates for girls go up suddenly at puberty—the time when a girl’s period begins. Mood changes right after having a baby can range from mild, short-lived “blues,” which last 2 weeks or less, to major depression, which lasts longer than 2 weeks. Some women report an increase in depressive symptoms in the years before menopause.

Even though hormones are powerful, keep in mind that many factors contribute to mood. A woman’s normal hormone rhythms are only one piece of the puzzle.

### **Taking care of your mental health**

When you take care of your body, you likely strive to eat right, stay active, and take care to look your best. Your mental health needs similar care. In fact, to be healthy overall, you need to take care of both your body and mind—the two are closely connected. If you neglect caring for one, the other will suffer. These ideas will help you to care for both mind and body:

- **Build self-esteem.** Good self-esteem is linked to mental well-being, happiness, and success in many areas of life. It protects mental health during tough times. One way to build self-esteem is to value who you are and what you do. This is hard to do if you judge yourself by other people’s standards or rely on others to make you feel good about yourself. Instead, accept the qualities—both strengths and weaknesses—that make you unique



- **Set realistic standards and goals.** Take pride in your achievements, both small and big. Positive thinking also boosts self-esteem. This comes naturally to some people. But it's a skill you can learn, too. Many people are lifted up by their spirituality. It can shape beliefs and values and be a source of comfort in hard times. It can be good to tune out the outside world and connect with the spirit within you.
- **Find value and purpose in life.** People who pursue goals based on their own values and dreams enjoy stronger mental well-being. Think about your values and dreams. What makes you happy? What do you care deeply about? What are you good at? If you could change one thing in the world, what would it be? What do you dream about? How do you want your friends and family to remember you? Use your answers to set short-term and long-term goals for yourself. Keep your goals realistic. Review them every once in a while, and make changes as your values and priorities change.
- **Learn healthy ways to cope with hard times.** How do you react to stress, change, or hardship? Do you see setbacks as failures or merely bumps in the road? Do you avoid problems or look for solutions? Do you obsess about issues without taking action to resolve them? If your style needs improving, take heart: Positive coping styles and traits can be learned with some effort. If you have trouble improving thinking patterns on your own, a mental health professional can help. You might also benefit from life-

skills classes. For example, parenting classes can prepare new mothers for what to expect. Being informed helps people to understand, control, and deal with situations that are new and stressful.



### **Do I have a problem with alcohol?**

Many women drink alcohol to cope with stress. But some women drink too much. Alcohol abuse and addiction cause stress in a job and family. Answer these questions to help find out if you might have a problem:

1. Have you ever felt you should cut down on your drinking?
2. Have people criticized your drinking?
3. Have you ever felt bad or guilty about your drinking?
4. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?

Talk with your doctor about your drinking if you answered "yes" to one or more questions. Even if you answered "no" to all the questions, talk to your doctor if drinking is causing you problems with your job, relationships, health, work, or the law.

- **Build healthy relationships.** We need healthy relationships to grow, thrive, and sustain us in hard times. They also protect from loneliness and isolation, which can lead to depression. Surround yourself with people who encourage and support you. You might draw strength from your ethnic or cultural community. Relationships that cause you to feel neglected, shameful, disrespected, or afraid are not healthy. Keep in mind that just as you need people, you are needed by others. Reach out and connect.



### **What is mental illness?**

Mental illness is a collective term for a wide range of mental disorders. Mental disorders are medical conditions that disrupt how a person thinks, feels, and/or acts, resulting in distress and/or impaired functioning. Mental illness can be disabling, making it hard to meet and keep friends, hold a job, manage everyday tasks, or enjoy life. Mental illness is very common—affecting about 1 in 4 U.S. adults each year. Some mental disorders are more common in women. It's not your fault if you have mental illness. These disorders are real diseases that cannot be wished or willed away. Fortunately, recovery is possible from most mental disorders.

### **Causes of mental illness**

Most mental disorders do not have a precise cause. Rather, cause lies in a mix of the same forces that shape mental health. We do know that biology plays a key role in the development of mental disorders, as it does with all health and illness. For example, PTSD can develop

after a person is exposed to a very stressful or terrifying event. Yet not everyone who experiences trauma gets PTSD. For those who do, other factors must make them more vulnerable to PTSD. We do know that women are more likely to develop PTSD than men. We also know a link exists between some physical diseases and mental illnesses, such as between heart disease and depression. The relation between mental illness and other diseases is an area of abundant research.

Sometimes, mental illness can be a symptom of another disease. For example, depression can be a symptom of an underactive thyroid or overactive thyroid. When thyroid problems are treated, the depressive symptoms go away.

### **Faces of mental illness**

Mental illness can affect people of any age, race, ethnicity, sex, income, or background. Certain groups of people have higher rates of reported mental illness. Rates of mental illness are much higher among the homeless, the incarcerated,

and people living in poverty. African Americans are overrepresented in these vulnerable groups of people. And African Americans with mental health needs are much less likely to seek or receive professional help. American Indians and Alaska Natives have limited access to help and appear to have much higher rates of depression, including suicide. Asian Americans have been stereotyped as “mentally healthier.” But studies show rates of mental illness similar to those of other Americans. Hispanic American youths are at much greater risk of poor mental health than white youths.

### **Women and mental illness**

Being a woman puts you at greater risk of certain mental disorders, including depression, some anxiety disorders, and eating disorders. Some mental disorders show up differently in women and men. An example is attention-deficit/



hyperactivity disorder (ADHD), which can cause similar problems for both males and females. Yet different symptoms appear to be one reason ADHD is often not recognized in girls and women. Also, it's not unusual for people to have more than one mental disorder at the same time. About 15 percent of all adults who have a mental disorder in 1 year also have problems with drugs or alcohol, which makes treatment harder.

**Anxiety disorders** are the most common mental illness. They affect about 40 million American adults each year. For these people, feelings of fear, uncertainty, and anxiety do not go away and get worse over time. They may have chest pains or nightmares. They may even be afraid to leave home. Most anxiety disorders are treatable. Anxiety disorders include:

- generalized anxiety disorder (GAD)
- obsessive-compulsive disorder (OCD)
- panic disorder
- PTSD
- social anxiety disorder
- specific phobias

**Mood disorders** affect mood, energy level, and ability to function. More than 20 million American adults have a mood disorder. With depression, feelings of sadness and hopelessness do not go away. Severe depression can lead to thoughts of death or suicide. Most depressive disorders respond well to treatment. People with bipolar disorder have extreme mood swings, sometimes with normal mood in between. It is a lifelong condition that must be carefully managed. Mood disorders include:

- major depressive disorder
- dysthymia (diss-THEYE-mee-uh)—mild, chronic depression
- premenstrual dysphoric (diss-FOR-ihk) disorder (PMDD)—a severe form of premenstrual syndrome (PMS)
- postpartum depression (See page 215 for more information.)
- bipolar disorder
- seasonal affective disorder (SAD)—depressed mood triggered by the change in seasons, usually in the fall and winter

**Eating disorders** involve serious problems in eating behavior, plus extreme concern for body shape or weight. Women are much more likely than men to have eating disorders. They usually start in the teenage years, but some women seek treatment for the first time in mid-life. Getting help early is important. Eating disorders can cause heart and kidney problems and even death. The main types of eating disorders are:

- **anorexia nervosa**—an intense fear of getting fat that causes you to not eat, even though you become too thin
- **bulimia nervosa**—involves bouts of overeating followed by purging, such as by throwing up
- **binge eating**—out-of-control eating

### **Body dysmorphic disorder (BDD)**

occurs when a person is overly concerned about an imagined defect in appearance. BDD is not an eating disorder. But it may be present with an eating disorder, as well as an anxiety disorder or depression.



**Substance abuse and addiction** can occur with other mental disorders or be a stand-alone problem, which causes problems at work and in relationships. Also, people often use alcohol and drugs to cope with life problems. This use can lead to abuse and addiction. Drug and alcohol addiction is a serious, long-lasting problem. There are no easy cures. But it's possible to overcome addiction with treatment.

**Schizophrenia** is a chronic, severe, and disabling mental disorder. People who have it may hear voices, see things that aren't there, or think that others are reading or controlling their minds. They have trouble thinking logically and expressing emotion. In women, symptoms usually start in the mid-20s to early 30s. Medicines can help many of the symptoms, but it can take many tries to find the right drug. With treatment, many people improve enough to have a good quality of life.

## Pregnancy and Depression

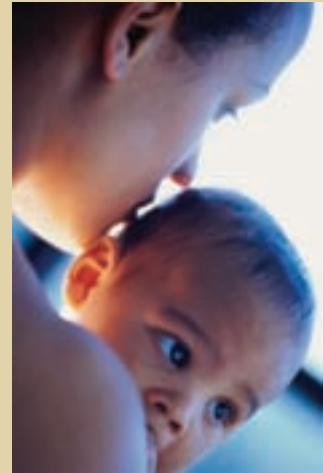
Depression is common during and after pregnancy. Pregnant women with depression can have a hard time caring for themselves. This can hurt the unborn baby. And depression that is not controlled during pregnancy triples the risk of postpartum depression (see below). You might not know you have depression because some normal pregnancy changes cause similar symptoms. So it's important to let your doctor know about any mood changes you might be having while you're pregnant.

After childbirth, many women get the “baby blues”—feeling sad, weepy, and overwhelmed for a few days. But some women develop postpartum depression, a serious but treatable condition that needs a doctor's help. Postpartum depression can happen anytime within the first year of birth. In rare cases, a woman might have a severe form called postpartum psychosis. Some women don't tell anyone about their symptoms because they feel embarrassed or guilty for having these feelings at a time when they think they should be happy. Don't let this happen to you! Postpartum depression can make it hard to take care of your new baby. Infants of mothers with postpartum depression can have delays in learning how to talk. They can have problems with emotional bonding. They also might have problems with behavior, lower activity levels, sleep problems, and distress. **Call your doctor if:**

- Your baby blues don't go away after 2 weeks.
- Depressive symptoms get more and more intense.
- Strong feelings of sadness or anger come on 1 or 2 months after delivery.
- It is hard for you to perform tasks at work or at home.
- You cannot care for yourself or your baby.
- You have thoughts of harming your baby or yourself.

Keep in mind that there are ways to treat depression during and after pregnancy. Seek help if you find yourself feeling depressed at any time.

***If you are taking medicine for depression and become pregnant, do not stop without talking to your doctor. Not using medicine that you need may be more harmful to you and your baby than using the medicine.***



**Personality disorders** are long-term patterns of thoughts and behaviors that cause serious problems with relationships and work. People with personality disorders have a hard time dealing with

everyday stresses and problems. They often have stormy relationships with other people. Borderline personality disorder (BPD) is one of 10 types of personality disorders. It has been defined as affecting

mostly young women. People with BPD have problems controlling emotion. Many, but not all, people with BPD were abused or neglected as young children.

Alzheimer's disease is not a mental illness. For more information on Alzheimer's disease, see the *Healthy Aging* chapter on page 221.

### How to know when you need help

Mental illness can be mild or severe. Even though mental illness is widespread, only about 1 in 17 Americans with mental illness is severely debilitated as a result. Many people with mild forms of mental illness might not seek help, even though their quality of life is suffering. If emotional problems interfere with daily living, you should talk to your doctor. Keep in mind that professional help might benefit you in rough times, even if you do not have a diagnosable condition.

### Stigma: A barrier to treatment and recovery

Stigma, negative ideas linked to mental illness, is the biggest barrier to getting better. Many people don't seek help for mental health problems because they are ashamed, even though treatment is available. One reason stigma persists

is because mental illness is still widely misunderstood. Here are some common myths about mental illness:

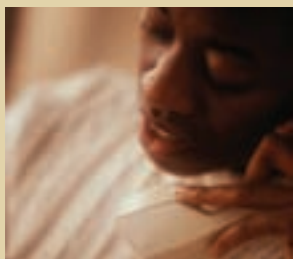
- Mental illness is not a real illness, like cancer or heart disease.
- Mental illness is caused by emotional or personal weakness.
- Children don't get mental illness.
- People with mental illness are violent.
- People with mental illness can will it away if they really want to.

Your culture also can influence whether you think it's okay to seek help. Seeking help and drawing support from loved ones who understand is the only way to get better. Don't let stigma stand in the way of getting help!

### Where to go for help

There are many types of mental health professionals. They include:

- certified alcohol and drug abuse counselors
- clinical social workers
- faith-based counselors
- licensed professional counselors
- marital and family therapists
- mental health counselors
- nurse psychotherapists



### Feeling hopeless?

If you are feeling hopeless or thinking about death or suicide, get help right away! Call this toll-free number: (800) 273-TALK (8255). You will reach the National Suicide Prevention Lifeline. This service is available to anyone, 24 hours a day, every day of the year. With help, it's possible to feel good again.



- psychiatrists
- psychologists

A good place to start looking for help is the doctor who normally cares for you. Your doctor can suggest mental health professionals based on the nature of your problem. If you do not have a regular doctor, contact a community mental health center near you. These centers can help you find a doctor or mental health counselor, even if you cannot afford to pay for care. If you don't feel comfortable with the professional you choose, it's okay to contact somebody else. Feeling comfortable with the doctor or counselor helping you is important to getting better.

### **Treating mental illness**

Today, many treatment options can help people with mental health problems and illness. Thanks to improved understanding of the brain and biology, new medicines are making it possible for people with serious disorders to work and enjoy a fulfilling life. Talking face-to-face with a mental health professional is another important tool for treating mental health problems. This is called psychotherapy. Some types are:

- behavioral therapy—seeks to change destructive behavior

- cognitive therapy—seeks to change or get rid of destructive thought patterns
- family therapy—involves every family member in the discussion and solving of problems
- group therapy—helps a small group of people with similar problems through use of a facilitator
- movement/art/music therapy—helps people to express emotions
- psychoanalysis—seeks to understand how past experiences influence mental health

Treating a mental health problem often involves more than one type of therapy, such as using medicine and behavior therapy. A problem might be helped with only a few sessions of counseling. Or treatment might last years. With severe mental illness, treatment in a hospital or outpatient clinic sometimes is necessary. Let your health care provider know if you don't begin to feel better after starting treatment. Keep in mind that recovery can take time.

### **Recovery is a journey**

The sooner a mental disorder is discovered, the better the chance for full recovery. Unlike most disabling physical illnesses, mental illness often begins early in life. Also, there is no lab test to tell if you have a problem that needs help. For these reasons, it's important to talk with your doctor about any concerns you might be having as soon as possible. This way, if you do have a mental health problem or illness, you can start treatment early and begin a journey toward feeling good again. ■

# One Woman's Story

On the day I came home from the hospital with my beautiful baby daughter, my world began to disintegrate. I was hit with intense nausea, vomiting, diarrhea, dehydration, and fainting. Breastfeeding my baby was out of the question. Every time I held her to my breast, I had to quickly lay her back down so I could run to the bathroom.

During the first 3 months of my daughter's life, I was hospitalized twice, separated for a week at a time from her and my 16-month-old son. I was transformed from a very healthy, vibrant, and physically active 30-year-old to someone unable to perform even the simplest everyday tasks. I was devastated. I was a failure as a mom and couldn't even get out of bed. I wanted to die.

During my second hospital stay, a nurse gently suggested that I might have postpartum depression. I was stunned. How could the horrible gastrointestinal symptoms I was experiencing be caused by depression? I could understand how I could be depressed because of the sickness I was suffering, but not the other way around. And I had never heard of postpartum depression. But I took her suggestion to heart and quickly sought a diagnosis, information, and help.

I started taking an antidepressant and soon felt nearly like my former self, able to take care of my babies and function around the house. I also immediately began seeing a psychologist and after about a year of therapy, I got my life back.

And not only that, I went on to have another beautiful baby girl a few years later, armed with the knowledge I needed in case postpartum depression struck again.

When I look back on that horrible time, I cringe, knowing that there are still new mothers out there who are dealing with the exact same thing. There is so much that needs to be done to spread awareness of perinatal mood disorders. I never hesitate to share my story with anyone who will listen. If I am able to reach out and help even one new mother, then what I went through will have been worth it.

*Kristin*

**Chandler, Arizona**

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**How could the horrible gastrointestinal symptoms I was experiencing be caused by depression?**

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## For More Information...

### **Office on Women's Health, HHS**

200 Independence Ave SW, Room 712E  
Washington, DC 20201  
Web site: [www.womenshealth.gov/mh](http://www.womenshealth.gov/mh)  
Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### **National Center for Posttraumatic Stress Disorder, VA**

Web site: [www.ncptsd.va.gov](http://www.ncptsd.va.gov)  
Phone number: (802) 296-6300

### **National Institute of Mental Health, NIH**

6001 Executive Blvd, Room 8184, MSC  
9663  
Bethesda, MD 20892-9663  
Web site: [www.nimh.nih.gov](http://www.nimh.nih.gov)  
Phone number: (866) 615-6464,  
(866) 415-8051 TTY

### **National Mental Health Information Center, SAMHSA**

PO Box 42557  
Washington, DC 20015  
Web site: <http://mentalhealth.samhsa.gov>  
Phone number: (800) 789-2647,  
(866) 889-2647 TDD

### **American Psychiatric Association**

1000 Wilson Blvd, Suite 1825  
Arlington, VA 22209  
Web site: [www.healthyminds.org](http://www.healthyminds.org)  
Phone number: (888) 357-7924

### **American Psychological Association**

750 First St NE  
Washington, DC 20002-4242  
Web site: [www.apa.org](http://www.apa.org)  
[www.apahelpcenter.org](http://www.apahelpcenter.org)

### **Anxiety Disorders Association of America**

8730 Georgia Ave, Suite 600  
Silver Spring, MD 20910  
Web site: [www.adaa.org](http://www.adaa.org)

### **Mental Health America**

2000 N Beauregard St, 6th Floor  
Alexandria, VA 22311  
Web site: [www.mentalhealthamerica.net](http://www.mentalhealthamerica.net)  
Phone number: (800) 969-6642,  
(800) 433-5959 TTY

### **National Alliance on Mental Illness**

Colonial Place Three  
2107 Wilson Blvd, Suite 300  
Arlington, VA 22201-3042  
Web site: [www.nami.org](http://www.nami.org)  
Phone number: (800) 950-6264

### **National Center for Girls and Women with AD/HD**

3268 Arcadia PI NW  
Washington, DC 20015  
Web site: [www.ncgiadd.org](http://www.ncgiadd.org)  
Phone number: (888) 238-8588

### **National Eating Disorders Association**

603 Stewart St, Suite 803  
Seattle, WA 98101  
Web site: [www.nationaleatingdisorders.org](http://www.nationaleatingdisorders.org)  
Phone number: (800) 931-2237

### **National Suicide Prevention Lifeline**

Web site: [www.suicidepreventionlifeline.org](http://www.suicidepreventionlifeline.org)  
Phone number: (800) 273-8255,  
(800) 799-4889 TTY

### **Postpartum Support International**

Web site: [www.postpartum.net](http://www.postpartum.net)  
Phone number: (800) 944-4773



# Violence Against Women

Women of all ages and backgrounds are at risk of many different types of violence. In fact, millions of women in this country have experienced violence. Violence greatly affects the lives and health of women: the impact can last for years—even a lifetime. But there are places to turn for help, ways to protect yourself, and hope for healing and a better future.

## **Women at risk**

Women and girls of all ages, races, cultures, religions, education levels, and sexual orientations can experience violence. Based on reported cases, U.S. women most at risk of violence are:

- American Indians/Alaskan Natives
- African Americans
- Hispanics
- girls younger than 18
- women and girls living in poverty

## **The impact of violence**

Experiencing violence can greatly impact how you feel about yourself, relationships, and the world around you. It can affect your physical and mental health. And it can change your behavior and daily life.

*No one* has the right to hurt you or make you feel afraid. Do not let feelings of fear, shame, or guilt stop you from seek-



ing help. You are not at fault, and you do not need to hide what has happened. Many people and groups are willing to help you.

## Forms of Violence

Many terms are used to describe violence against women:

- Intimate partner violence
- Domestic violence
- Spouse or partner abuse
- Wife beating
- Rape, marital rape, date rape
- Family violence
- Sexual abuse, sexual violence, sexual assault
- Molestation
- Beating, battering
- Homicide, femicide
- Dating violence, dating abuse, teen dating violence
- Indecent exposure
- Voyeurism
- Stalking
- Harassment
- Human trafficking
- Genital mutilation
- Exploitation
- Forced prostitution
- Forced pornography

## Effects of Violence on Women

### Mental health

Women hurt by violence may have:

- Depression
- Low self-esteem, loss of confidence
- Posttraumatic stress disorder (PTSD)
- Guilt or shame
- Shock and disbelief
- Anxiety and panic attacks
- Emotional numbness
- Anger
- Self-hate or self-blame
- General sense of fear
- Fear of men, being alone, going out in public, intimacy, or anything that may trigger memories of the violence
- Suicidal thoughts
- Sense of being worthless or without hope

## Effects of Violence on Women

<b>Behavior</b>	<p>Common actions after experiencing violence are:</p> <ul style="list-style-type: none"> <li>• Thoughts or acts of suicide or self-injury</li> <li>• Risky sexual behaviors, such as unprotected sex</li> <li>• Alcohol or drug abuse</li> <li>• Eating disorders</li> <li>• Avoiding doctor visits or making unnecessary doctor visits</li> </ul>
<b>Physical health</b>	<p>Common physical injuries and health problems from violence include:</p> <ul style="list-style-type: none"> <li>• Increased risk of sexually transmitted infections (STIs) and HIV, which can lead to pelvic inflammatory disease and a higher risk of cervical cancer</li> <li>• Unwanted pregnancies, or rapid, repeat pregnancies</li> <li>• Miscarriages and other reproductive problems</li> <li>• Vaginal bleeding or pelvic pain</li> <li>• Injuries such as bruises, cuts, broken bones, or internal damage</li> <li>• Back or neck pain</li> <li>• Chronic pain syndrome</li> <li>• Trouble sleeping and nightmares</li> <li>• High blood pressure or chest pain</li> <li>• Arthritis</li> <li>• High stress and lowered immune system</li> <li>• Central nervous system problems, such as headaches, seizures, or nerve damage</li> <li>• Respiratory problems, such as asthma and shortness of breath</li> <li>• Digestive problems, such as stomach ulcers and nausea</li> </ul>
<b>Economic</b>	<p>Common financial struggles due to violence are:</p> <ul style="list-style-type: none"> <li>• Loss of income from missed work or a partner who withholds money</li> <li>• Medical bills</li> <li>• Legal fees</li> <li>• Rent or moving costs of new housing</li> <li>• Extra child care and protection costs</li> </ul>
<b>Social</b>	<p>Common social issues due to violence include:</p> <ul style="list-style-type: none"> <li>• Stigma and discrimination</li> <li>• Trouble getting medical, social, and legal services</li> <li>• Strained relationships with friends and family</li> <li>• Social isolation (from family, friends, and others who could help)</li> </ul>



### Impact on children

Violence against women can also impact children. About 50 percent of men who assault their wives also physically abuse their children. Also, women who are abused are more likely to abuse their children. And children can be injured during violence between their parents.

Studies show children who witness or experience violence at home may have long-term physical, emotional, and social problems. They are also more likely to experience or commit violence in the future. Protect your children by getting help for yourself.

### Common forms of violence

Although women often fear being attacked or hurt by a stranger, they are at greatest risk of violence from people they know:

- About 25 to 30 percent of women are physically or sexually abused by a romantic partner.
- One in 6 women reports being raped or sexually assaulted in her lifetime. And nearly 70 percent are attacked

by someone they know. (Research has shown that most women do not report their rapes to police, so the actual number of women raped may be much higher.)

- Around 1 million women are stalked each year, most often by someone they know, such as an ex-husband, ex-boyfriend, or peer.

This chapter focuses on three types of common violence against women:

- intimate partner violence
- sexual violence
- stalking

### Intimate partner violence (IPV)

IPV can be a one-time event or a pattern of physical, sexual, or psychological harm by a current or former partner or spouse. It happens in both heterosexual and same-sex couples. And it can happen in nonsexual relationships. Teen dating violence has many of the same risk factors, warning signs, and effects as IPV.



<b>Forms of IPV</b>	
<b>Physical violence or threats</b>	Your partner may: <ul style="list-style-type: none"> <li>• Hurt or threaten you, possibly with a weapon</li> <li>• Become violent after alcohol or drug use</li> <li>• Destroy your things</li> </ul>
<b>Sexual abuse or threats</b>	Your partner may: <ul style="list-style-type: none"> <li>• Force you to have sex or be sexual in other ways</li> <li>• Threaten to rape or hurt you sexually</li> </ul>
<b>Psychological/emotional abuse</b>	IPV often starts with emotional abuse, then leads to physical violence. Your partner may: <ul style="list-style-type: none"> <li>• Control who you spend time with, where you go, and what you do</li> <li>• Trace your phone calls</li> <li>• Insult you and get angry about small things</li> <li>• Accuse you of cheating</li> <li>• Make fun of you</li> <li>• Control how you spend your money or refuse to give you money</li> <li>• Act jealous when you spend time with friends</li> <li>• Blame you for his or her violence</li> <li>• Use your children to manipulate you</li> <li>• Follow you when you go out</li> <li>• Try to make you afraid</li> </ul>

IPV is never okay, even if it only happens once in a while. It can be hard to admit you are in an abusive relationship or find a way out. But if your partner is hurting you, it is time to get help.

Many abused women stay with their partner out of fear or because they do not see a way out. Others stay because they love their partner and believe he or she will change. But the longer the abuse goes on, the more damage it can cause. Whether you decide to leave your partner or stay, make a safety plan in case IPV happens again. (See page 241 for “Planning Ahead.”)

If you leave, plan ahead for legal, medical, and emotional support, because IPV can escalate even after leaving a partner.



You may even need help from police and women’s shelters. They can help you find ways to protect yourself and your children.

- If you are in immediate danger, call 911.
- For 24-hour help and support, call the National Domestic Violence Hotline toll-free number listed in the resource section on page 249.

**Preventing IPV**

Help prevent IPV in your own life by seeking and building healthy relationships. Below are some signs of healthy and unhealthy relationships.

**IPV and Pregnancy**

IPV can affect the health of the mother and unborn baby. Abuse from a partner may begin, or increase, during pregnancy and can lead to:

- low-birth-weight babies and other health risks
- death of unborn and newborn babies
- homicide, which is the second leading cause of traumatic death for pregnant women and mothers with newborns

Signs of a healthy relationship	Signs of an unhealthy relationship
<ul style="list-style-type: none"> <li>• Respect for each other</li> <li>• Honesty</li> <li>• Trust and support</li> <li>• Able to compromise</li> <li>• Shared decision making</li> <li>• You are able to be yourself</li> <li>• Time spent together and apart</li> <li>• Good communication</li> <li>• Peaceful solutions to conflict</li> <li>• Anger control</li> <li>• Self-confidence and happiness</li> <li>• Feeling safe with partner, even when he or she is upset</li> </ul>	<ul style="list-style-type: none"> <li>• Disrespect</li> <li>• Blaming and lying</li> <li>• Mistrust and jealousy</li> <li>• Put-downs, insults, name calling</li> <li>• One partner controls decision making</li> <li>• “Need” to be with partner; cannot be without the other</li> <li>• Fear of partner’s temper or actions</li> <li>• Partner pressures or forces other to be sexual</li> <li>• Fights get out of control</li> <li>• Feeling worthless or bad about yourself</li> <li>• Feeling unsafe with your partner</li> </ul>

**Early warning signs of IPV**

If your partner displays one or more of the early signs below, get help early to prevent future IPV. If you start dating someone who displays warning signs, think twice about getting involved.

Does your partner or person you date:

- Get jealous when you spend time with other people?
- Act possessive?

- Have low self-esteem?
- Act aggressive?
- Create conflict, use put-downs, or argue a lot?
- Mistreat animals?
- Abuse drugs or alcohol?
- Have poor relationships with others?
- React badly to stress?
- Have extreme emotional highs and lows?



- Have a quick temper and lots of anger?
- Punch walls or throw things when angry?
- Need to be in control of the relationship?
- Have a history of bad relationships?
- abusing drugs or alcohol
- thinking violence in a relationship is all right
- strict beliefs about traditional gender roles
- having a lot of anger or hostility
- a history of partner abuse
- depression
- career or life stress, such as not having a job
- having been a victim of, or exposed to, violence as a child

### Highest risks of IPV

You cannot always predict whether your partner will become violent. But studies show some traits increase the risk of someone becoming violent with their partner. These traits include:

### Planning Ahead

If you are being abused, create a safety plan. Contact the National Domestic Violence Hotline for help.

A few ways to prepare are to:

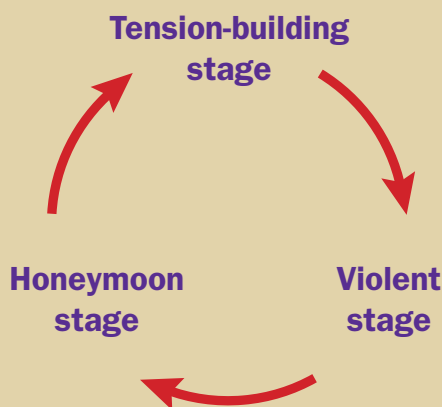
- Plan all possible escape routes from your home.
- Know your partner’s “red flags”; leave the house if you sense your partner will become violent.
- Avoid fights in rooms without access to a door or where weapons are kept.
- Find a safe place to go if you are in danger—family, friends, a shelter.
- Get a court protective order.
- Memorize emergency numbers.
- Have money available—cash kept with a friend, a separate savings account, a credit card.
- Teach your children not to get in the middle of a fight between you and your partner.
- Have a cell phone or calling card handy; do not use your home phone or cell phone to call for help if your partner can trace the numbers.
- Create a signal to use with friends and family to alert them to danger.
- Have access to important items such as extra car keys, a driver’s license, social security number, checkbook, address book or a list of important numbers, health insurance card, passport, immigration papers, copies of birth certificates for you and your children, school and medical records, and children’s favorite toys.
- Keep copies of important papers and items (including a change of clothes) with a trusted friend or relative.



Leaving an abusive partner takes courage, support, and planning. But it is possible. For your safety and the safety of

## The Cycle of Violence

IPV can follow a three-stage cycle that repeats over and over. It is called the “Cycle of Violence.”



- 1. Tension-building stage:** Tension builds over time and may include “minor” incidents such as pushing or threats. To delay movement to stage two the victim may act passive, “stay out of the way,” and avoid making the partner upset.
- 2. Violent stage:** Tension explodes, resulting in severe abuse.
- 3. Honeymoon stage:** The abuser apologizes, promises to stop the abuse, and often is very loving for a while. The abuser may feel sorry about the abuse, promise to stop and get help, and show regret and extra kindness. The victim then feels loved and believes the violence will end. The cycle then repeats.

In time, the honeymoon stage may get shorter, and the tension-building and violent stages longer.

your children, talk about your options with an IPV counselor before you leave. If the IPV is mild or has just started, get professional help before it gets worse. If you choose to stay with your partner, the abuse may get worse over time—even if you get help. So have a safety plan ready. You cannot change your partner by loving him or her more, by changing yourself, or by hoping he or she will change if you wait it out. Your partner needs to get help, but even that may not stop the abuse. A relationship should not leave you feeling scared, depressed, hopeless, worthless, or in danger. You deserve to be safe and treated well. If the abuse continues, help is just a phone call away.

## Sexual violence

Sexual violence is *all* completed or attempted sexual contact or behavior that happens without your clear, voluntary consent. No one has the right to make you be sexual, including your partner. Sexual violence can shatter a woman’s life in an instant. And it can take years to emotionally heal from the experience.

Sexual violence includes:

- Improper and unwanted touching, kissing, fondling, and groping.
- Sexual assault, such as rape or attempted rape (vaginal, oral, or anal). This includes sex when the victim is drunk, unconscious, or unable to give willing consent. It also includes unwanted sex with a partner, spouse, or date.
- Verbal, visual, or other noncontact sexual actions that force a person to join in unwanted sexual contact or attention. This includes flashing of sexual

## Elder Abuse

Elder abuse is doing something, or failing to do something, that causes harm or risks harm to a vulnerable older adult. Nearly 90 percent of the abusers are family members, most often adult children or spouses. Elder abuse also happens in places such as nursing homes and hospitals. Among the elderly, women ages 80 and older are at highest risk for being abused or neglected.

Elder abuse includes:

- physical, sexual, or emotional abuse
- financial abuse such as taking or misusing an elderly person's money or property, or tricking her into spending or investing money
- ignoring or abandoning an elderly person under your care

If you think an elderly person you know is being abused, please tell someone. Call your local adult protective services, long-term care ombudsman, or the police.

If you are being abused, you can:

- Tell someone you trust, such as a doctor or friend.
- Call the U.S. Administration on Aging's Eldercare Locator toll-free number listed in the resource section on page 249 to find a local agency that can help.
- Contact your state or local adult protective services (APS).

body parts, being shown pornography, and verbal or written sexual harassment.

Sexual violence can happen anywhere—on a date, at a party, at work, at home, or in public. The attacker may be a stranger or someone you know, such as a partner, family member, or peer. In fact, in 8 of 10 rape cases, the victims know their rapist.

Survivors may feel shame or guilt. But you are never at fault—even if you didn't fight back or say no because of fear or shock. You are *never* to blame for someone else's violence.

If you are a survivor of sexual violence, professional help and support groups are available. Even if the abuse or assault is from childhood, it may still deeply af-



fect you. You are not alone, and you do not need to hide what happened. Silence only gives the abuser more power. Help

stop sexual violence by healing yourself, speaking out, and supporting other survivors.

<b>Sexual Violence: Risk Factors</b>	
<b>Risk factors for experiencing sexual violence</b>	<ul style="list-style-type: none"> <li>• Young age—more than half of all rapes occur before age 18</li> <li>• Drug or alcohol abuse</li> <li>• Having experienced past sexual violence</li> <li>• Living in poverty</li> <li>• Having risky sex, such as unprotected sex, sex with many partners, and/or sex at a young age</li> </ul>
<b>Risk factors for becoming sexually violent</b>	<ul style="list-style-type: none"> <li>• Alcohol and drug abuse</li> <li>• Fantasies about forced sex (rape)</li> <li>• Impulsive and antisocial behavior</li> <li>• Preference for impersonal sex</li> <li>• Hostility toward women</li> <li>• Extreme male stereotyped behaviors</li> <li>• Sexual and physical abuse as a child</li> <li>• Witnessed family violence as a child</li> </ul>

**Getting help after a sexual assault**

Take steps right away if you’ve been assaulted:

- Get away from the attacker and find a safe place as fast as you can. Call 911 and report the crime.
- Call a friend or family member you trust. Or call a crisis center or a hotline, such as the National Sexual Assault Hotline toll-free number listed in the resource section on page 249.
- Do not wash, comb, or clean any part of your body. Do not change clothes if possible, so the hospital staff can collect evidence. Do not touch or change anything at the crime scene.
- Go to your nearest hospital emergency room right away. You need to be examined and treated for injuries.



- Ask if the hospital has a Sexual Assault Nurse Examiner (SANE) who can perform your exam and provide emotional support. She will collect evidence using a rape kit to find fibers, hairs, saliva, semen, or clothing the attacker may have left behind.
- You will be screened for sexually transmitted infections, offered counseling, or given other treatment.

- Most hospitals will offer emergency contraception pills to help prevent pregnancy. If it is not offered, you can request it.
- The hospital staff can call the police and contact a rape crisis center counselor.

### Ways to protect yourself

To reduce your risk of sexual violence:

- Trust your feelings. If you feel in danger, you probably are and need to get away.
- Notice what and who is around you. Know where you are going and stay in well-lit areas. Park your car in well-lit areas.
- After getting in your car, drive away. Do not sit in your car to look at items you bought or make phone calls.
- If you are in danger, blow a whistle, or yell “FIRE” instead of “help” or “rape.”
- Never leave a social event with someone you just met or do not know well.
- Never walk or jog alone at night or in secluded areas.
- Meet new dates in public places. Be careful when meeting people from Internet dating sites. Tell a friend where you are going and who you are going out with.
- Never drink anything that has been out of your sight, or that you did not see being poured from a new bottle. Date rape drugs are odorless and tasteless.
- Avoid parties where a lot of alcohol may be served, such as fratern-

nity events. Control your drinking at events.

- Keep your car and home doors locked. Lock home windows. Install home security.
- Go out in groups and have friends watch out for each other.
- Offer help to other women who may be in danger.

### Stalking

Stalking is a pattern of repeated, unwanted attention, harassment, or contact that directly or indirectly communicates a threat or scares a person.

Stalkers may:

- follow or wait for you in certain places
- appear at your home or work
- sit outside your home
- make harassing phone calls
- leave written messages or objects



## Cyberstalking

Cyberstalking is use of the Internet, e-mail, or other forms of online communications to stalk another person. It can include:

- harassment or threats in chat rooms
- e-mail, instant messages (IM), or text message threats and harassment
- improper messages on a message board or in a guest book
- tracing your computer and Internet use
- obscene or improper e-mail messages or photo attachments
- sending electronic viruses
- someone pretending to be you in a chat room

If you are cyberstalked:

- Log off right away and stay off-line for at least 24 hours.
- Send the person a clear, written warning to stop harassing you and to never contact you again.
- If the harassment continues, do not respond to anything the person writes. It gives them a sense of power and can increase the stalking.

- damage or steal your things
- harass you through the Internet, e-mail, or chat rooms
- use a hidden camera to watch you
- use computer software and hardware tools to track and harass you
- send gifts or love letters
- call all the time

Stalking is illegal, yet 1 in 12 women will be stalked in their lifetimes. It is a crime that can be hard to prove, harder to stop, and difficult to get others to take seriously. Yet 76 percent of women killed by their intimate partners were first stalked by them.

Most victims are stalked for about 1.8 years. These women often feel helpless, anxious, and depressed. They often have nightmares; feel out of control; have

trouble sleeping, eating, and concentrating; and live with constant fear. Stalking can also cause financial problems if fear or depression keeps a woman from going to work.

### **Steps to take if you are being stalked:**

- Trust your instincts. If you are, or think you may be, in danger, find a safe place to go, such as a police station, fire station, or public area.
- Plan in advance what you will do if you are in danger.
- If you cannot get out of danger, but can get to a phone, call 911.
- Get a restraining order. If the order does not stop the stalker, call a violence hotline for advice (toll-free numbers are listed in the resource section on page 249.)

- Change your online identity and all of the information in your IM or chat profile.
- Change your e-mail address and Internet service provider (ISP).
- For e-mail stalking, contact the person's ISP and file a complaint.
- Keep all e-mails or log files from the stalker for evidence.
- If you think you are in physical danger, contact the police or Federal Bureau of Investigation (FBI).



Be safe online:

- Never post online profiles or messages with details that could be used to identify or locate you (such as age, sex, address, workplace, phone number, school, teams you play on, or places you hang out).
- Do not post photos on a site that can be accessed by the public, such as in a MySpace profile, online dating profile, chat group, or blog.
- Do not tell anyone your online ID or passwords.

- Take threats seriously. File a complaint with the police. If they cannot help, call a violence hotline for advice. Until the stalkers do something they can be arrested for, police can only talk to them.
- Collect evidence for police. Record every incident. Include the time, date, and other important information.
- Keep videotapes, audiotapes, answering machine/voicemail messages, e-mail messages, photos of the person outside your home or workplace, property damage, and any letters or e-mail.
- Cut off all contact with the stalker.
- Carry a cell phone at all times.
- Secure your home with alarms and motion-sensitive lights.
- Keep your garage and car locked. Check around you before getting in

the car. Get a locking gas cap. Know safe locations you can drive to if being followed, and stay in the car and blow your horn to get attention when you stop.

- Get help. Tell police, your employer, and family, friends, and neighbors about the stalking.

Violence against women is a serious threat to health and well-being. Yet you can take important steps to reduce your risk of violence. If you have experienced violence, there are people who can help you heal emotionally and safely move on with your life. The first step is to ask for help. If you or someone you know is experiencing violence, contact the resources listed in "For more information" or talk with someone you trust. No one deserves to be hurt. ■

# One Woman's Story

When I started a new job in a different state, it was hard for me to meet new people and make friends. I became very lonely, so I turned to the Internet for help. I discovered that through online dating sites, I could easily find men willing to meet me and buy me drinks. I enjoyed the company and attention; each time I met a new person was exciting, and it made me feel attractive, sexy. I became addicted to that feeling. While at first I was cautious about meeting them in person, I later became less concerned about my own personal safety. I ignored the horror stories I heard about women disappearing or being murdered by someone they met on the Internet. All I wanted was that next time when I would get dressed up, go out with someone new, and feel on top of the world. I was blessedly lucky—at first.

I met Joe online (his name has been changed), and even though he lived 2 hours away, we arranged to meet at a halfway point. I missed all the warning signs from the start. He had me meet him at a gas station where we left his car and took mine. We went to a club, and I drank too much to drive home safely. He said he would pay for a hotel and promised he would not try anything sexual. I trusted him. He did not keep his promise, no matter how many times I said STOP. I should have screamed at the top of my lungs. I should have kicked him. I should have left and never looked back. But all I kept thinking was, “This only happens to people I hear about in the news, not me. Maybe this is my fault. Did I bring this upon myself?” I should have kicked and screamed and MADE him stop. But I didn't want to make a scene. I didn't want to drive home drunk. I didn't want to strand him there with his car halfway across town. I lay there and cried. He asked what was wrong and I told him, “You RAPED me.” He denied it and made me feel like an idiot. I never reported him.

The next morning I cursed myself all the way home for being so stupid. It took a lot of time and therapy to realize that, although it was stupid to put myself in such a dangerous situation, what happened to me was not my fault. Even now it's hard to believe that. The point of this story is not to scare anyone out of online dating. Years later I signed up for online dating again—my sense of personal safety and self-esteem intact—and I met the man of my dreams. The important thing to remember is this: don't let anything come before your personal safety. And don't be afraid to scream like crazy and cause a scene. You are worth it.

*Lisa*

**San Diego, California**

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**Don't let anything  
come before your  
personal safety.**

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## For More Information...

### **Office on Women's Health, HHS**

200 Independence Ave SW, Room 712E  
Washington, DC 20201

Web site: [www.womenshealth.gov/violence](http://www.womenshealth.gov/violence)

Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### **Administration on Aging, HHS**

1 Massachusetts Ave  
Washington, DC 20201

Web site: [www.eldercare.gov](http://www.eldercare.gov)

Eldercare Locator: (800) 677-1116

### **National Center on Elder Abuse, AOA**

c/o Center for Community Research and  
Services

University of Delaware

297 Graham Hall

Newark, DE 19716

Web site: [www.ncea.aoa.gov](http://www.ncea.aoa.gov)

Phone number: (302) 831-3525 for  
information on elder abuse,  
(800) 677-1116 to find help in your state

### **Office for Victims of Crime Resource Center, DOJ**

PO Box 6000

Rockville, MD 20849-6000

Web site: [www.ojp.usdoj.gov/ovc/ovcres](http://www.ojp.usdoj.gov/ovc/ovcres)

Phone number: (800) 851-3420

### **National Center for Victims of Crime and the Stalking Resource Center**

2000 M St NW, Suite 480

Washington, DC 20036

Web site: [www.ncvc.org](http://www.ncvc.org)

Phone number: (800) 394-2255,  
(800) 211-7996 TTY/TDD

### **National Domestic Violence Hotline**

PO Box 161810

Austin, TX 78716

Web site: [www.ndvh.org](http://www.ndvh.org)

Phone number: (800) 799-7233,  
(800) 787-3224 TTY

### **National Teen Dating Abuse Hotline**

Web site: [www.loveisrespect.org](http://www.loveisrespect.org)

Phone number: (866) 331-9474,  
(866) 331-8453 TTY

### **Rape, Abuse and Incest National Network and the National Sexual Assault Hotline**

2000 L St NW, Suite 406

Washington, DC 20036

Web site: [www.rainn.org](http://www.rainn.org)

Phone number: (800) 656-4673



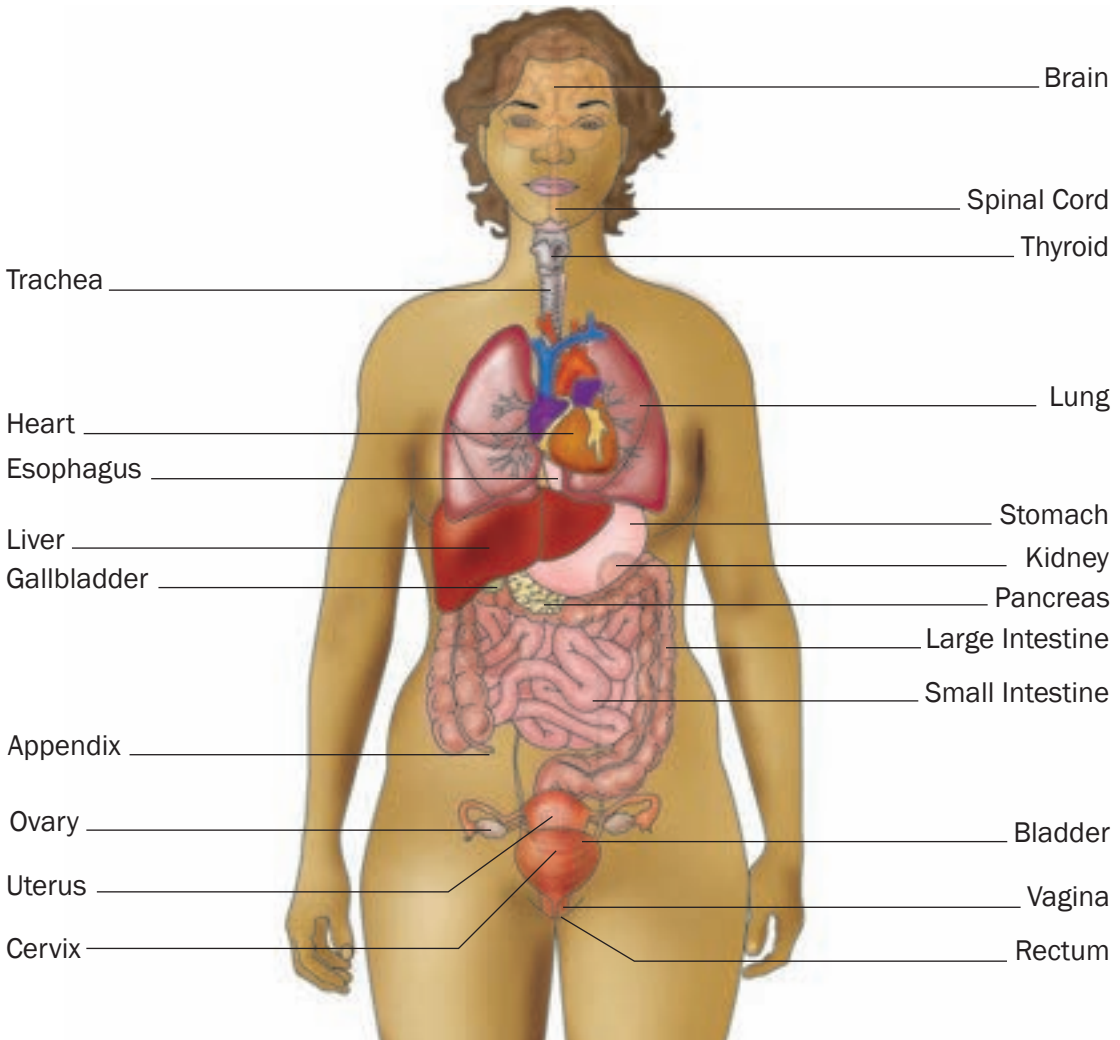


# Appendix



## **Additional Health Information and Tips**

# Know Your Body



## Women's Body Systems

**Cardiovascular and Circulatory**

**Digestive (gastrointestinal)**

**Endocrine**

**Nervous (neurologic) and Skeletal**

**Reproductive**

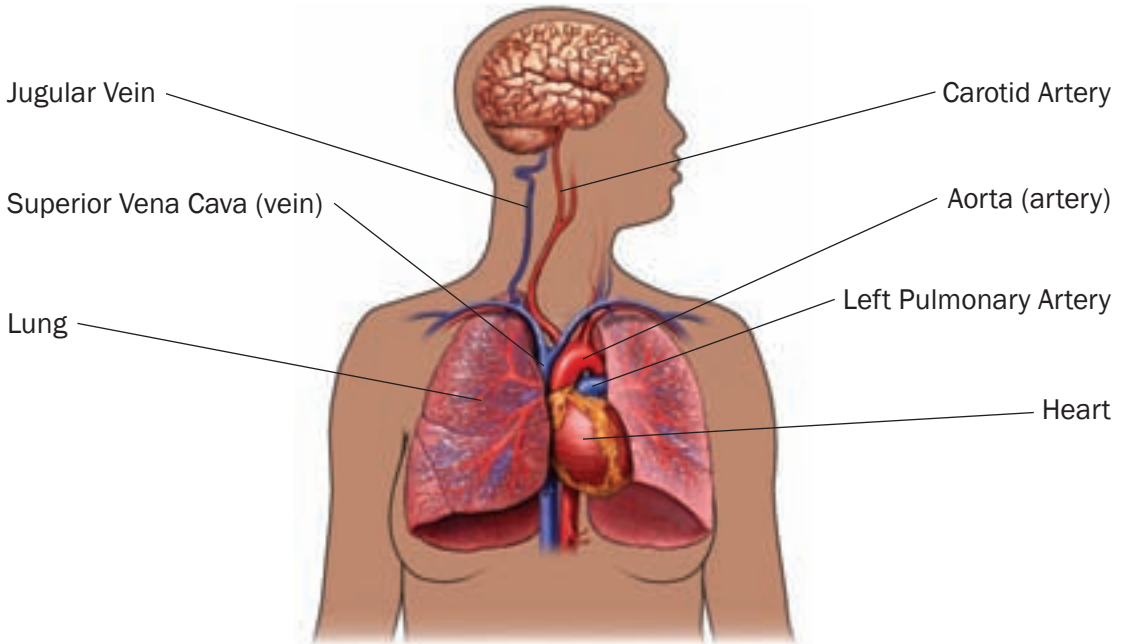
**Respiratory**

**Urinary (renal)**

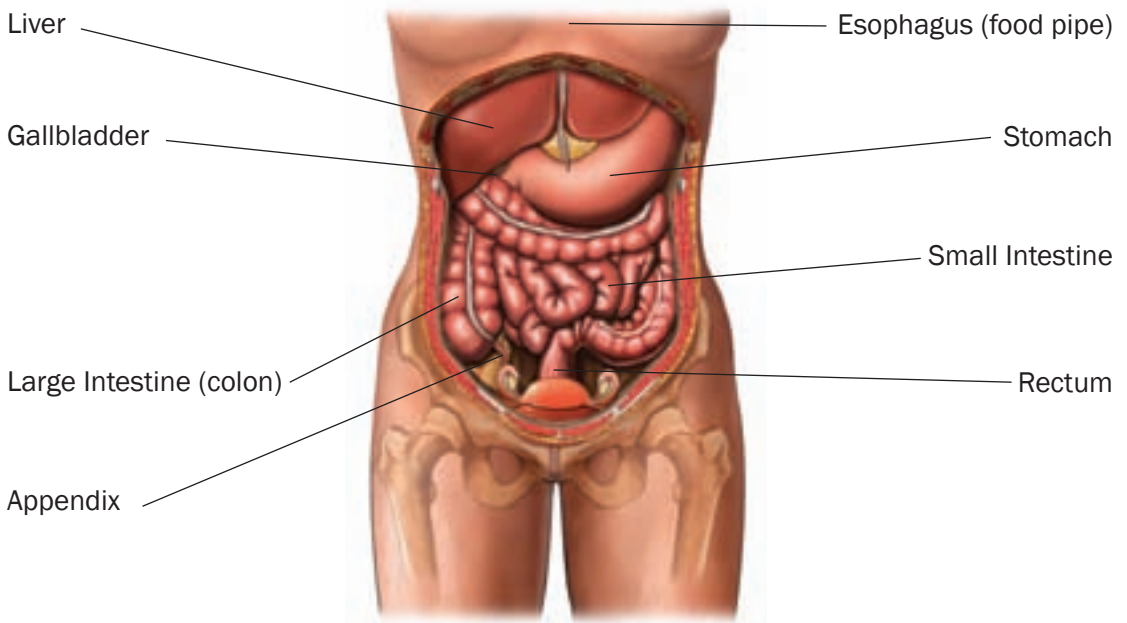
*See the systems diagrams on pages 387-390*

# Know Your Body

## Cardiovascular and Circulatory Systems



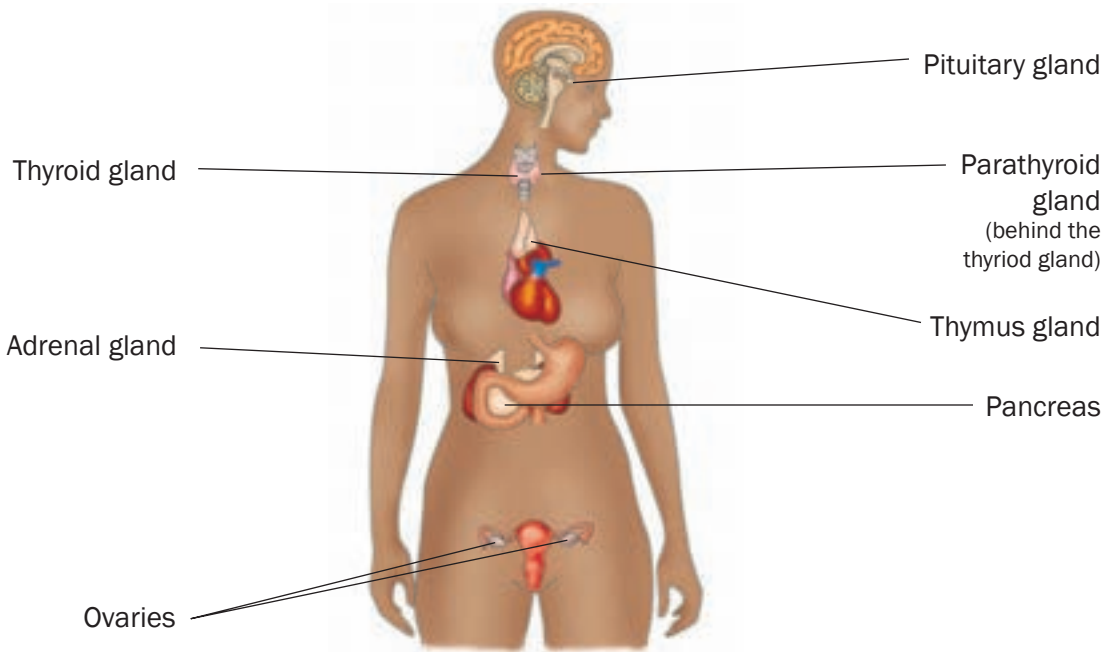
## Digestive (gastrointestinal) System



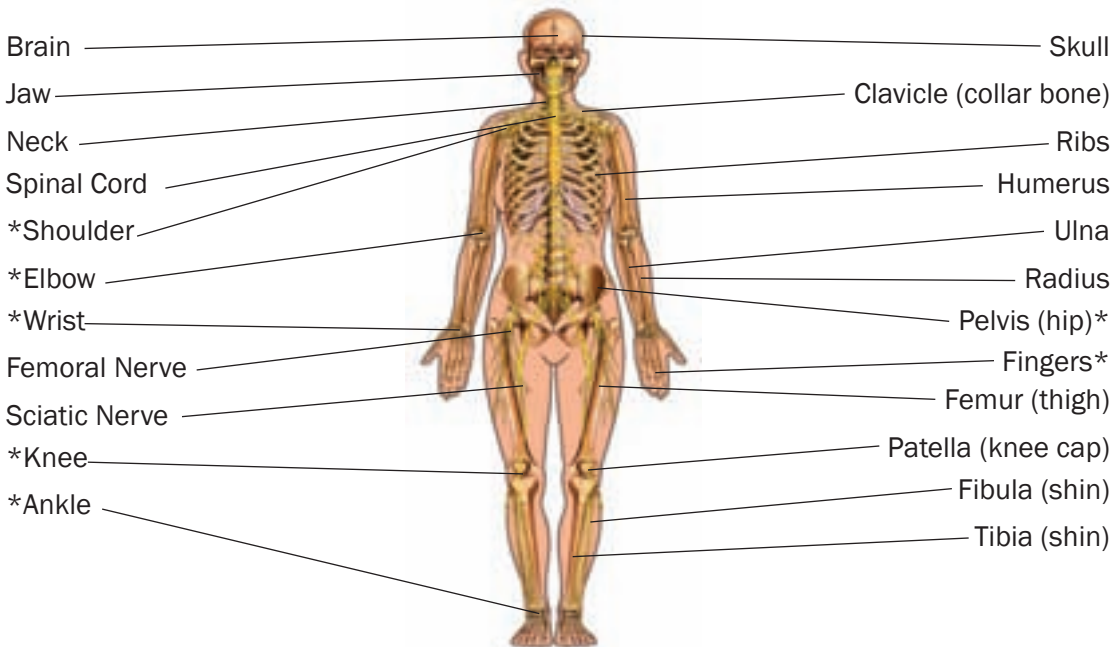


# Know Your Body

## Endocrine System



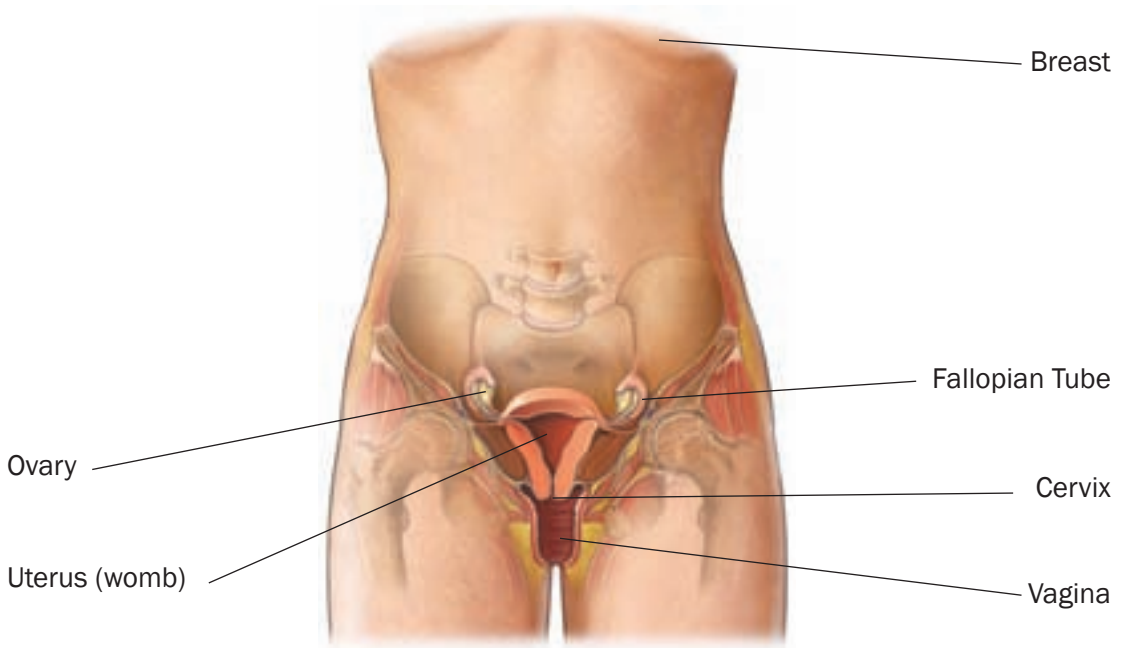
## Nervous (neurologic) and Skeletal Systems



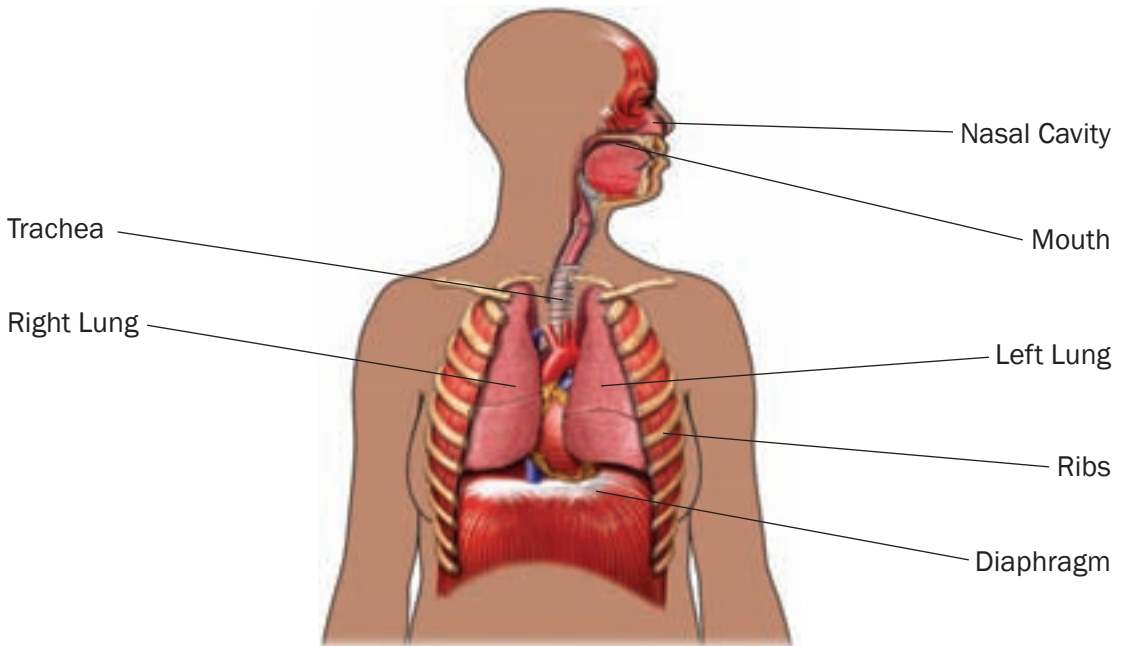
\*Major joints where arthritis or joint disease can occur.

# Know Your Body

## Reproductive System

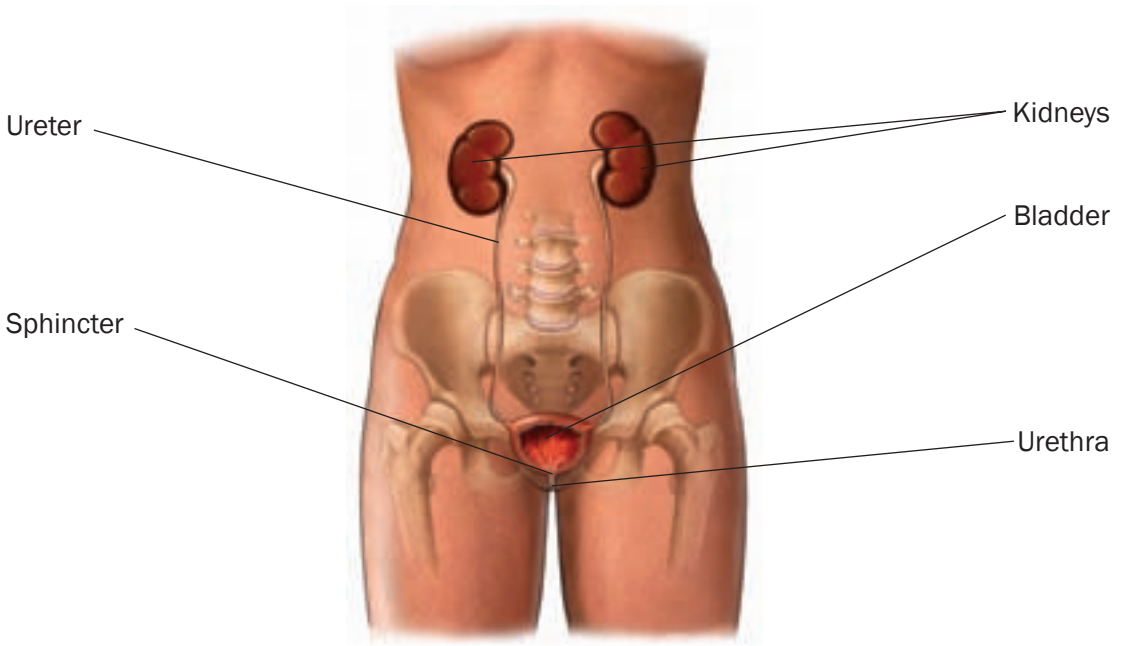


## Respiratory System



# Know Your Body

## Urinary (renal) System





# HOW TO

## Talk to Your Doctor or Nurse

Waiting in your doctor's office can make you feel nervous, impatient, or even scared. You might worry about what's wrong with you. You might feel annoyed because you're not getting other things done. Then when you see your doctor or nurse, the visit seems to be so short. You might have only a few minutes to explain your symptoms and concerns. Later that day, you might remember something you forgot to ask. You wonder if your question and its answer matter. Knowing how to talk to your doctor, nurse, or other members of your health care team will help you get the information you need.

### Tips: What to do

- **List your questions and concerns.** Before your appointment, make a list of what you want to ask. When you're in the waiting room, review your list and organize your thoughts. You can share the list with your doctor or nurse.
- **Describe your symptoms.** Say when these problems started. Say how they make you feel. If you know, say what sets them off or triggers them. Say what you've done to feel better.
- **Give your doctor a list of your medications.** Tell what prescription drugs and over-the-counter medicines, vitamins, herbal products, and other supplements you're taking.
- **Be honest about your diet, physical activity, smoking, alcohol or drug use, and sexual history.** Not sharing information with your doctor or nurse can be harmful!
- **Describe any allergies to drugs, foods, pollen, or other things.** Don't forget to mention if you are being treated by other doctors, including mental health professionals.
- **Talk about sensitive topics.** Your doctor or nurse has probably heard it before! Don't leave something out because you're worried about taking up too much time. Be sure to talk about all of your concerns before you leave. If you don't understand the answers your doctor gives you, ask again.
- **Ask questions about any tests and your test results.** Get instructions on what you need to do to get ready for the test(s). Ask if there are any dangers or side effects. Ask how you can learn the test results. Ask how long it will take to get the results.
- **Ask questions about your condition or illness.** When your illness is diagnosed, ask your doctor how you can learn more about it. What caused it? Is it permanent? What can you do to help yourself feel better? How can it be treated?
- **Tell your doctor or nurse if you are pregnant or intend to become preg-**



**nant. Some medicines may not be suitable for you.** Other medicines should be used with caution if you are pregnant or about to become pregnant.

- **Ask your doctor about any treatments he or she recommends.** Be sure to ask about all of your options for treatment. Ask how long the treatment will last. Ask if it has any side effects. Ask how much it will cost. Ask if it is covered by your health insurance.
- **Ask your doctor about any medicines he or she prescribes for you.** Make sure you understand how to take your medicine. What should you do if you miss a dose? Are there any foods, drugs, or activities you should avoid when taking the medicine? Is there a generic brand of the drug you can use? You can also ask your pharmacist if a generic drug is available for your medication.
- **Ask more questions if you don't understand something.** If you're not clear about what your doctor or nurse is asking you to do or why, ask to have it explained again.
- **Bring a family member or trusted friend with you.** That person can take notes, offer moral support, and help you remember what was discussed. You can have that person ask questions, too!
- **Call before your visit to tell them if you have special needs.** If you don't speak or understand English well, the office may need to find an interpreter. If you have a disability, ask if they can accommodate you. ■

# HOW TO

## Get a Second Opinion

Even though doctors may get similar medical training, they can have their own opinions and thoughts about how to practice medicine. They can have different ideas about how to diagnose and treat conditions or diseases. Some doctors take a more conservative, or traditional, approach to treating their patients. Other doctors are more aggressive and use the newest tests and therapies. It seems like we learn about new advances in medicine almost every day.

Many doctors specialize in one area of medicine, such as cardiology or obstetrics or psychiatry. Not every doctor can be skilled in using all the latest technology. Getting a second opinion from a different doctor might give you a fresh perspective and new information. It could provide you with new options for treating your condition. Then you can make more informed choices. If you get similar opinions from two doctors, you can also talk with a third doctor.



### Tips: What to do

- **Ask your doctor for a recommendation.** Ask for the name of another doctor or specialist, so you can get a second opinion. Don't worry about hurting your doctor's feelings. Most doctors welcome a second opinion, especially when surgery or long-term treatment is involved.
- **Ask someone you trust for a recommendation.** If you don't feel comfortable asking your doctor for a referral, then call another doctor you trust. You can also call university teaching hospitals and medical societies in your area for the names of doctors. Some of this information is also available on the Internet.
- **Check with your health insurance provider.** Call your insurance company before you get a second opinion. Ask if they will pay for this office visit.



Many health insurance providers do. Ask if there are any special procedures you or your primary care doctor needs to follow.

- **Ask to have medical records sent to the second doctor.** Ask your primary care doctor to send your medical records to the new doctor. You need to give written permission to your current doctor to send any records or test results to a new doctor. You can also ask for a copy of your own medical records for your files. Your new doctor can then examine these records before your office visit.
- **Learn as much as you can.** Ask your doctor for information you can read.

Go to a local library. Search the Internet. Find a teaching hospital or university that has medical libraries open to the public. The information you find can be hard to understand, or just confusing. Make a list of your questions, and bring it with you when you see your new doctor.

- **Do not rely on the Internet or a telephone conversation.** When you get a second opinion, you need to be seen by a doctor. That doctor will perform a physical examination and perhaps other tests. The doctor will also thoroughly review your medical records, ask you questions, and address your concerns. ■



# HOW TO

## Be Prepared for Emergencies

When disaster strikes, you may not have much time to act. To help protect loved ones, take simple steps now to prepare your family for sudden emergencies or other disasters.



### Three basic steps for disaster or emergency preparedness

**1. KNOW** what natural or other disasters could occur in your area and how to prepare for them. Learn about local evacuation routes, so that you know how to leave an area quickly. The Federal Emergency Management Agency offers information on preparedness at [www.fema.gov](http://www.fema.gov).

**2. PLAN** out on paper the steps you should take during an emergency and give family members a copy. Talk about potential disasters or emergencies and how to respond to each. Choose a meeting place, other than your home, for family members to gather in case you can't go home. Make sure you choose an “emergency

check-in” contact person and teach your children the phone number for this person.

**3. PACK** emergency supplies in your home to meet your needs for 3 days. Always keep all your important documentation together, in one place, in case you have to “grab and go” during an evacuation.

### Need to evacuate? Have a kit ready that includes:

- identification for yourself and your children, such as birth certificates and social security cards
- important personal papers, such as health insurance identification cards, immigration papers, and children's school records
- funds in the form of cash, traveler's checks, credit cards, and checkbook
- keys to the house, car, and safety deposit box or post office box
- ways to communicate, including a calling card, cell phone and extra battery, and the emergency check-in number for family members to call
- prescription medications, including written prescription orders, and supplies such as contact lens cleaner and feminine hygiene products

## Essential items for disaster preparedness

Relief workers will most likely be on the scene after a disaster, but they cannot reach everyone immediately. Gather the supplies below in case you have to stay where you are.

**Water.** Keep at least a 3-day supply of water for each person, stored in plastic containers. Each person needs 1 gallon of water each day.

**Food.** Store at least a 3-day supply of nonperishable food such as canned meat, beans, vegetables, fruit and juices; peanut butter or other high-energy food; and unsalted crackers. Keep a nonelectric can opener handy. If you have pets, stock up on canned pet food.

**Infant care.** Store baby formula and water to prepare it if a child is not breastfed. If you need to evacuate quickly, bring towels or sheets to carry a baby instead of a bulky stroller.

**Other supplies.** Make sure you have large plastic bags that seal for waterproofing important papers, a battery-powered flashlight and radio with extra batteries, and a first aid kit.

## Breastfeeding during an emergency

When an emergency occurs, breastfeeding saves lives.

- Breastfeeding protects babies from the risks of a contaminated water supply.
- Breastfeeding helps protect against respiratory illnesses and diarrhea—diseases that can be fatal in populations displaced by disaster.



The basics of breastfeeding during an emergency are much the same as they are in normal times. Continuing to breastfeed whenever the baby seems hungry maintains a mother's milk supply and is calming to both mother and baby. Visit [www.lalecheleague.org](http://www.lalecheleague.org) for information on how to breastfeed in an emergency, even if you have been giving your baby formula. (See the *Breastfeeding* chapter on page 187 for more information.)

## Food and water safety during an emergency

Food may not be safe to eat during and after an emergency. Water may not be safe to drink, clean with, or bathe in after an emergency such as a hurricane or flood because it can become contaminated with bacteria, sewage, agricultural or industrial waste, chemicals, and other substances that can cause illness or death. The Centers for Disease Control and Prevention has information about keeping your food and water safe at [www.bt.cdc.gov/disasters/foodwater](http://www.bt.cdc.gov/disasters/foodwater).

## Staying safe from violence during an emergency

After disasters, women are at greater risk of sexual assault or other violence. Visit [www.womenshealth.gov/violence](http://www.womenshealth.gov/violence) for safety tips. ■

# HOW TO

## Read Drug Labels

Medicines, or drugs, come as either prescription or over the counter (OTC). Prescription drugs are used under a doctor's care. OTC drugs can be bought and used without a doctor's prescription, and you buy them at a drugstore or grocery store. When using any kind of drug, it's really important to read the drug label for instructions. Not following the instructions can hurt your health. Read the label each time you use a new bottle of a drug, just in case there have been changes to it since the last time you used it. See the drug label below and on the next page to know what to look for. If you read the label and still have questions, call your doctor, nurse, or pharmacist for help. ■

### Prescription Drug Label

**Pharmacy name and address**

**Number used by the drugstore to identify this drug for your refills**

**Person who gets this drug**

**Instructions about how often and when to take this drug**

**Name of drug and strength of drug**

**Number of refills before certain date**

**Doctor's name**

**Drugstore phone number**

**Prescription fill date**

**Don't use this drug past this date**

**Local Pharmacy**  
123 MAIN STREET  
ANYTOWN, USA 11111 (800) 555-5555

DR. C. JONES

NO 0060023-08291 DATE 06/23/09

**JANE SMITH**  
456 MAIN STREET ANYTOWN, US 11111

**TAKE ONE CAPSULE BY MOUTH THREE TIMES DAILY FOR 10 DAYS UNTIL ALL TAKEN**

**AMOXICILLIN 500MG CAPSULES**

QTY MRG  
NO REFILLS - DR. AUTHORIZATION REQUIRED

USE BEFORE 06/23/12  
SLF/SLF

Rx ONLY

## Over-the-Counter (OTC) Medicine Label

### **Drug Facts**

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**Active ingredient (in each tablet)**  
Chlorpheniramine maleate 2 mg . . . . .

**Purpose**  
Antihistamine

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**Uses** temporarily relieves these symptoms due to hay fever or other upper respiratory allergies:

- sneezing   ■ runny nose   ■ itchy, watery eyes
- itchy throat

---

**Warnings**

**Ask a doctor before use if you have**

- glaucoma
- a breathing problem such as emphysema or chronic bronchitis
- trouble urinating due to an enlarged prostate gland

---

**Ask a doctor or pharmacist before use if you are taking** tranquilizers or sedatives

---

**When using this product**

- You may get drowsy   ■ Avoid alcoholic drinks
- Alcohol, sedatives, and tranquilizers may increase drowsiness
- Be careful when driving a motor vehicle or operating machinery
- Excitability may occur, especially in children

---

**If pregnant or breastfeeding**, ask a health professional before use.

**Keep out of reach of children.** In case of overdose, get medical help or contact a Poison Control Center right away.

---

<b>Directions</b>	
Adults and children 12 years and over	Take 2 tablets every 4 to 6 hours; not more than 12 tablets in 24 hours
Children 6 years to under 12 years	Take 1 tablet every 4 to 6 hours; not more than 6 tablets in 24 hours
Children under 6 years	Ask a doctor

---

**Other information** Store at 20-25° C (68-77° F)

- Protect from excessive moisture

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**Inactive ingredients** D&C yellow no. 10, lactose, magnesium stearate, microcrystalline cellulose, pregelatinized starch

Therapeutic substance in drug

Product type

Symptoms or diseases the drug treats

When not to use this drug, when to stop taking it, when to see a doctor, and possible side effects

Read carefully: how much to take, how often to take it, and when to stop taking it

More information on how to store the drug

Other things in the drug, such as colors or flavorings

# Environmental Health

The quality of the environment can affect women's health. Chemicals and other substances in the air, water, soil, and food may be toxic and cause health problems. The quality of the environment may have a greater impact on children than adults. This is because children are growing quickly and breathe more air, eat more food, and drink more water. Some toxins can be passed from mother to child during pregnancy or breastfeeding. If you are pregnant, nursing, or planning to become pregnant, talk to your doctor about environmental exposures you should avoid.

## Outdoor air

There are many sources of pollution outdoors, such as emissions from cars and trucks, power plants that burn fossil fuels, factories, and forest fires.

Outdoor air pollution can irritate your eyes, nose, and throat. At high levels, some outdoor air pollutants may cause more serious health problems like cancer and lung damage. Children, the elderly, and people with heart or lung conditions are more likely to be affected by some types of outdoor air pollution.

The U.S. Environmental Protection Agency (EPA) protects the quality of the air throughout the country. However, some areas may have higher levels of outdoor air pollution than others. Find out about the air quality in your community. Check the daily Air Quality Index (AQI) in your local radio, television, or newspaper forecast. You can also



find your AQI online at the EPA's Web site.

You can reduce your exposure to air pollution by limiting outdoor activities when the AQI is high. By using less energy, you can help reduce the air pollution that comes from burning fossil fuels.

- Replace incandescent lightbulbs with compact fluorescent bulbs.
- Turn off lights and appliances when they're not in use.
- Reuse and recycle to conserve raw materials and energy.
- Buy ENERGY STAR appliances.
- Choose a vehicle with good fuel economy and low emissions.
- Drive less. Carpool, walk, bike, or use public transportation if you can.

## Indoor air

Indoor air pollution can irritate your eyes, nose, and throat. It can cause headaches or make you feel dizzy or tired. These symptoms may seem similar to the symptoms of a cold or flu. But if your symptoms disappear when you are away

from home, you may have an indoor air problem.

Indoor air pollution can also lead to serious health problems, such as heart and lung diseases and cancer. These problems may develop many years after exposure or after repeated exposures to indoor air pollutants.

Children, the elderly, and people with heart or lung conditions are more likely to be affected by indoor air pollution.

Some common sources of indoor air pollution include:

- gases from burning oil, gas, coal, wood used for heating and cooking
- smoke from tobacco products
- building materials, such as asbestos insulation and products made from pressed wood
- outdoor pollutants, such as radon, which can build up indoors
- chemicals used for cleaning, pest control, and painting
- personal care products such as hair spray and nail polish remover
- biological pollutants, such as bacteria, molds, mildew, and pet dander

You can improve the air quality in your home:

- Remove sources of pollution.
- Increase the ventilation (flow of air). Run exhaust and attic fans or open doors and windows. This is especially important when using household products that contain harmful chemicals.
- Use a home air cleaner to remove pollutants, if necessary.

## Water quality

EPA sets standards for safe drinking water. Public water systems must meet these standards. Tap water, well water, and even bottled water may contain very small amounts of contaminants such as chemicals and bacteria. As long as levels are low enough to meet EPA's safety standards, your water is safe to drink.

You can take steps to make sure your water is safe to drink.

- People with weakened immune systems, infants, children, and the elderly may be more sensitive to some contaminants. Talk to your doctor about whether you need to take extra precautions.
- If your water comes from a private well, have your water tested at least once a year. Contact your local, county, or state health department for more information about water testing. Some health departments may help you with testing. If not, they can recommend a state-certified laboratory in your area.
- If your water comes from a public source, your water supplier is required to send you an annual water quality report.



## Lead

Lead exposure can cause reproductive problems, high blood pressure, muscle and joint pain, and problems with memory or concentration. Lead can harm the developing brain and nervous system of children, infants, and unborn children.

Some common sources of lead exposure include:

- lead-based paint in houses built before 1978
- soil and household dust that may contain chips or dust from lead-based paints
- water from lead-lined pipes

You can reduce your exposure to lead.

- Have your home tested for lead.
- If you plan to remove or disturb lead-based paint, hire a contractor with special training. Leave the house until renovations are complete and the house is cleaned to remove any lead dust.
- Use only cold water to cook or to make baby formula.
- Run cold water for at least 1 minute before using it.
- Use a water filter certified by NSF (National Sanitation Foundation) International to remove lead.

## Mercury

In both children and adults, high levels of mercury may affect the brain, heart, kidneys, lungs, and immune system. Children, infants, and unborn babies are most sensitive to mercury.

The most common source of exposure to mercury is fish and shellfish, which contain small amounts of mercury. Different kinds of fish contain different amounts. Women who may become pregnant, women who are pregnant or nursing, and young children should follow these guidelines:

- Don't eat shark, swordfish, king mackerel, or tilefish.
- Eat no more than 12 ounces (about 2 meals) of fish low in mercury each week. Low-mercury fish include shrimp, canned light tuna, salmon, pollock, and catfish.
- Eat no more than 6 ounces (about 1 meal) of albacore (white) tuna each week.
- Before eating fish caught in your area, check local fish safety advisories.

Mercury may also be found in thermometers, thermostats, and fluorescent lightbulbs. If these items break, people may be exposed to mercury. Do not use a vacuum to clean mercury spills. Contact





your local health department to find out how to properly clean and dispose of spilled mercury.

### **Pesticides**

Chemicals used to kill pests such as insects, rodents, and mold can also affect human health. At high levels, pesticides may cause birth defects, nerve damage, and cancer.

Small amounts of pesticides may be found in air, water, and food. EPA limits pesticides used in farming to make sure your food is safe. Pesticides used in and around your home may contribute to indoor air pollution.

You can reduce your exposure to pesticides.

- Wash and scrub fruits and vegetables under running water, peel off skins, and trim outer leaves.
- Trim fat from your meat.
- Choose organic foods, grown without the use of synthetic pesticides.

- Eat a variety of foods to avoid high exposure to a single pesticide.
- If you use pesticides in your home, follow the instructions carefully. Keep pesticides out of reach of children. ■

Resources:

#### **U.S. Environmental Protection Agency**

Web site: [www.epa.gov](http://www.epa.gov)

Indoor Air Quality Information

Clearinghouse: [www.epa.gov/iaq](http://www.epa.gov/iaq)

Phone number: (800) 438-4318

National Lead Information Center:

[www.epa.gov/lead](http://www.epa.gov/lead)

Phone number: (800) 424-5323

Safe water information where you live:

[www.epa.gov/safewater/ccr/](http://www.epa.gov/safewater/ccr/)

[whereyoulive.html](http://www.epa.gov/safewater/ccr/whereyoulive.html)

#### **Food Safety Information Center, USDA**

Web site: <http://foodsafety.nal.usda.gov>

Phone number: (301) 504-6835

#### **National Center for Environmental Health, CDC**

Web site: [www.cdc.gov/nceh](http://www.cdc.gov/nceh)

Phone number: (800) 232-4636

#### **National Institute of Environmental Health Sciences, NIH**

Web site: [www.niehs.nih.gov](http://www.niehs.nih.gov)

#### **National Poison Control Hotline**

Web site: [www.poison.org](http://www.poison.org)

Phone number: (800) 222-1222



# Avian Flu

Avian influenza (flu) is not the same as pandemic flu. A pandemic flu is a global outbreak of a flu. A pandemic can happen when a new virus appears that people have little or no immunity against and for which there is no vaccine. (Having immunity means you are resistant to, or protected against, a disease.) A new virus can spread quickly from person to person around the world, causing severe illness and even death. Although it is hard to know when the next flu pandemic will happen or how dangerous it will be, you can be informed and take steps to prepare your family. Avian flu has received a lot of attention in recent years, raising many questions about the dangers of a flu pandemic.

## **What is avian flu?**

Avian or “bird” flu is caused by influenza viruses that naturally affect birds. Wild birds carry these highly contagious viruses, but they generally do not become sick. Domesticated birds, though, are at great risk. Avian flu can cause serious illness and death for infected chickens, ducks, and turkeys.

## **Why are health officials concerned about avian flu for humans?**

Although people are not usually at risk of getting avian flu viruses, a virus called H5N1 is one of the few strains that has crossed over to infect people. The H5N1 virus is powerful, having caused the deaths of more than half of the people infected. Experts think most of these cases have been caused by contact with

infected birds. To date, there has been limited spread of the virus from person to person. The concern is that H5N1 will change into a virus that can pass from person to person more easily and more quickly. An increasing number of human cases have been found in Asian, European, and African countries. Health officials are watching the situation closely to prepare for the possibility that the virus may spread to other parts of the world.

## **Will getting a seasonal flu shot prevent me from getting avian flu?**

No. The flu shot can help protect you only from seasonal flu. No vaccine is available to protect against the H5N1 virus that has been found in people, but researchers are working on making one.

## **What are the symptoms of avian flu?**

Symptoms can include regular flu symptoms such as fever, cough, sore throat, and muscle aches. Other symptoms may include eye infections, pneumonia, and severe respiratory problems. There may be other symptoms that we do not yet know about.

## **Are there treatments available for avian flu?**

The H5N1 virus is resistant to two medicines used to treat the flu: amantadine (uh-MAN-tuh-deen) and rimantadine (rih-MAN-tuh-deen). Two other flu medicines called oseltamavir (o-suhl-TAM-uh-vihr) and zanamivir (zuh-NAM-uh-vihr) may work to treat the

flu caused by H5N1. More research is needed to test these medicines. Health researchers are also working on improving flu testing, to better detect which flu strain you have and where it came from. This will help government officials track dangerous flu viruses and help keep the public informed.

### **What can I do to help keep my family healthy?**

You and members of your family can take steps to help limit the spread of germs.

- Wash your hands with soap and warm water often.
- Use an alcohol-based hand cleanser if you don't have soap handy.
- When coughing or sneezing, cover your mouth and nose with a tissue (or your upper sleeve if you don't have a

tissue), throw used tissue away, and wash your hands afterward.

- If you are sick, stay home.
- It is also important to eat a balanced diet, drink plenty of water, get regular physical activity, and get enough rest.

### **What should I do to help my family prepare for a flu pandemic?**

Visit [www.pandemicflu.gov](http://www.pandemicflu.gov) to learn how to prepare your family. This Web site provides preparation checklists for families and businesses, information for people who deal with poultry, and the latest information on how avian flu is affecting people around the world. If H5N1 does cause a pandemic flu, this Web site will offer important safety information. You can also call the Centers for Disease Control and Prevention Hotline at (800) CDC-INFO (800) 232-4636 or (888) 232-6348 (TDD) 24 hours a day, 7 days a week. ■

**[www.pandemicflu.gov](http://www.pandemicflu.gov)  
(800) CDC-INFO or  
(888) 232-6348 (TDD)**

# Caregiver Stress

As the U.S. population ages, more people are faced with the responsibility of caring for elderly loved ones with Alzheimer's disease, cancer, or other health problems. Many parents are also raising children with severe disabilities at home. More often today, these caregivers are continuing to care for children with disabilities well into their adulthood.

The people needing care often need help with basic daily tasks. Caregivers help with a wide range of activities, including:

- cooking
- feeding
- giving medicine
- bathing
- running errands

People who do not get paid for providing care are known as informal caregivers or family caregivers. Most informal caregivers are women. Often, these women also have children to take care of and jobs outside the home.

Being an informal caregiver can have many rewards. It can give you a feeling of giving back to a loved one. It can make you feel needed and can lead to a stronger relationship with the person receiving care. However, caregiving can also take a toll on your mental and physical health.

## What is caregiver stress?

Caregiver stress is the emotional strain of caregiving. It can take many forms. For instance, you may feel frustrated and angry taking care of someone with

dementia (dih-MEN-chuh) who often wanders away or becomes easily upset. Or you may feel guilty because you think that you should be able to provide better care, despite all the other things that you have to do.

## How can I tell if caregiving is putting too much stress on me?

Caregiving may be putting too much strain on you if you have any of the following symptoms:

- sleeping too much or too little
- gain or loss of a lot of weight
- feeling tired most of the time
- loss of interest in activities you used to enjoy
- becoming easily irritated or angered
- often feeling sad
- frequent headaches, bodily pain, or other physical problems
- abuse of alcohol or drugs, including prescription drugs

Talk to a counselor, psychologist, or other mental health professional right away if your stress leads you to physically or emotionally harm the person you are caring for.

## How can caregiver stress affect my health?

Research shows that, compared with noncaregivers, caregivers:

- are more likely to have symptoms of depression or anxiety
- are more likely to have heart disease, cancer, diabetes, and arthritis

- have a weaker immune response, which can lead to frequent infections and increased risk of cancers
- have higher levels of obesity
- may be at higher risk of mental decline, including problems with memory and paying attention

### **What can I do to prevent or relieve stress?**

First, never dismiss your feelings as “just stress.” Caregiver stress can lead to serious health problems and you should take steps to reduce it as much as you can.

Tips for reducing caregiver stress:

- Ask for and accept help.
- Say “no” to requests that are draining, such as hosting holiday meals.
- Stay in touch with family and friends.
- Join a caregiver support group.
- Attend a class to learn how to take care of someone with the disease that your loved one has.
- Prioritize, make lists, and establish a daily routine.
- Set realistic goals for each day.
- Get an annual medical checkup.
- Stay active, eat a healthy diet, and try to get enough sleep.

### **What caregiving services can I find in my community?**

Caregiving services include:

- transportation
- meal delivery
- home health care services (such as nursing or physical therapy)

- nonmedical home care services (such as housekeeping or cooking)
- home modification (changes to the home that make it easier for your loved one to perform basic daily tasks, such as bathing, using the toilet, and moving around)
- legal and financial counseling

### **What can I do if I need a break?**

Taking some time off from caregiving can reduce stress. “Respite care” provides substitute caregiving to give the regular caregiver a much-needed break. Respite care may be provided by:

- home health care workers
- adult day-care centers
- short-term nursing homes

### **How do I find out about caregiving services in my community?**

Contact your local Area Agency on Aging (AAA) to learn about caregiving services where you live. AAAs are usually listed in the city or county government sections of the telephone directory under “Aging” or “Health and Human Services.” The National Eldercare Locator, a service of the U.S. Administration on Aging, can also help you find your local AAA.

Resources:

#### **Administration on Aging**

[www.aoa.gov](http://www.aoa.gov)

[www.eldercare.gov](http://www.eldercare.gov)

Eldercare Locator: (800) 677-1116

#### **Family Caregiver Alliance**

[www.caregiver.org](http://www.caregiver.org) ■

# Understanding Genetics and Your Health

Humans have between 20,000 and 25,000 genes. Most genes are the same in all people. But small differences in these genes give you a one-of-a-kind look and contribute to your personality and talents. Genes also can affect your health. To understand how, it's helpful to learn what genes do.

## Genes: Your body's blueprint

Genes, which are made up of DNA, contain the instructions your body's cells need to function. Genes are located on structures called chromosomes. Information from your genes is used to make proteins. Each cell contains thousands of proteins. Each protein has a specific job to do at a specific time for the cell to work properly.

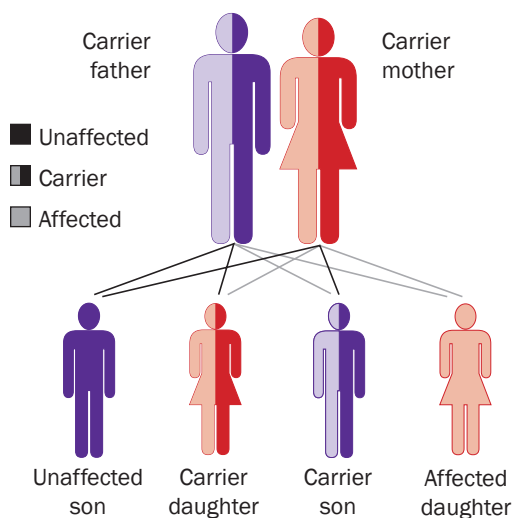
Sometimes, a gene can have something wrong with it. This is called a gene mutation or a mutated gene. A mutation causes the gene to give the wrong instructions for making a protein, so that the protein works improperly or is missing. If the mutation affects a protein that plays an important role in the body, a medical problem could result. Most gene mutations have no effect on health or development.

## Genetic disorders: The basics

The genes you are born with can affect your health in these ways:

- **Single gene disorders are caused by a mutation in one gene.** There is a pat-

## How sickle cell anemia runs in families



Two unaffected parents each carry one copy of a gene mutation for sickle cell anemia. They have one child with sickle cell anemia and three unaffected children. Two of the unaffected children inherit one copy of the gene mutation—as carriers, they can pass the sickle cell trait on to their children.

We are learning more and more about the role specific genes play in our health. For example, you may have heard about “breast cancer genes,” called *BRCA* genes. All people have *BRCA* genes. But only women and men born with mutated *BRCA* genes are at higher risk of breast cancer. Still, some women born with mutated *BRCA* genes don't get breast cancer. And most women who get breast cancer are born with normal *BRCA* genes. Keep in mind that genes themselves do not cause disease, but that mutated genes may cause health problems.

tern to the way these genetic disorders show up in families. Even though the mutated gene is passed down from parent to child, not all family members are affected. Some members are “carriers” of the mutated gene. Examples of single-gene disorders are cystic fibrosis (SISS-tik-feye-BROH-suhss) and sickle cell anemia (uh-NEE-mee-uh).

- **Chromosome disorders occur when all or part of a chromosome is missing or extra, or if the structure of one or more chromosomes is not normal.**

This can affect some of the genes. Most chromosome disorders involving whole chromosomes do not run in families. Genes can influence your risk of getting some diseases, such as breast cancer, heart disease, diabetes, and thyroid conditions. But other factors, such as lifestyle and environment, also play a role in developing these conditions. Rarely, single genes are responsible for these diseases; however, most of the time they are due to a combination of genes and environment. The role genes play in developing these conditions often is not known, but our understanding of this continues to grow through research.

### **Genetic counseling: What it is and who needs it**

Genetic counseling gives information and support to people who have, or may be at risk of, genetic disorders. Some reasons a family might seek genetic counseling are:

- a family history of a genetic condition, birth defect, chromosomal disorder, or cancer

- two or more pregnancy losses, a still-birth, or a baby who died
- a child with a known inherited disorder, birth defect, mental retardation, or developmental delay
- a woman who is pregnant or plans to become pregnant at 35 years or older
- test results that suggest a genetic condition is present
- increased risk of getting or passing on a genetic disorder because of one’s ethnic background
- people related by blood who want to have children together

Your doctor can help you find a genetic professional if you might benefit from this service. During a consultation, the genetics professional meets with a person or family to discuss genetic risks or to diagnose, confirm, or rule out a genetic condition. Sometimes, a family chooses to have genetic testing. Most of the time, testing is used to find changes that are linked to genetic disorders. The results can confirm or rule out a condition. Tests also can help to know the chances that a person will get or pass on a genetic disorder. The genetics professional can help a family decide if genetic testing is the right choice for them. ■

Some companies offer genetic tests that you can do yourself through the mail. These tests may not provide true or meaningful information. These tests might even provide harmful information to consumers. Talk to your doctor before using this type of test.

# Becoming a Research Volunteer

Today, women are living longer and healthier lives thanks, in part, to medical research. Because of research studies:

- We know what foods to eat to prevent heart disease.
- Doctors have better tools to detect health problems, such as mammograms for breast cancer.
- New drugs are available to treat diabetes, depression, and other diseases.
- We know that women respond differently than men to some drugs and medical treatments.

Important findings like these are not possible without the help of research volunteers. Many volunteers—and especially women—are needed for research studies. Whether to participate in a research study is a personal choice. Getting all the facts about the study will help you decide if volunteering is right for you.

## Frequently asked questions about research studies

### Are there different kinds of research studies?

Yes. Here are some examples.

- **Observational studies** follow one or more groups of the same people over a period of time to see how their health changes. A recent example is the Women's Health Initiative. This study tracked 93,676 postmenopausal women for about 8 years to learn more about risk factors for heart disease, cancer, and fractures.

- **Intervention studies** seek to improve people's health by finding ways to change behavior. An example would be a study to see whether teaching people how to read food labels leads to a healthier diet.
- **Clinical trials** are research studies that test new medical approaches in people. This includes new drugs and other treatments.

### Where do research studies take place?

Research studies take place in doctors' offices, cancer centers, hospitals, and clinics in towns and cities across the United States and around the world. Some studies are held in a single location. Others involve hundreds of locations at the same time. Many types of organizations and individuals sponsor (fund) research studies. Many clinical trials are sponsored by government agencies or pharmaceutical companies. Some studies require you to travel, but sometimes a blood or other sample is all that is needed to participate.

### What happens in a research study?

This depends on the type of study. For example, a study might ask you to keep track of how often you eat certain foods. Or a study might involve taking a drug and frequent visits to the doctor for tests. For all studies, you will work closely with the research team. The team will give you specific instructions according to the study's "protocol." The protocol is a carefully controlled study plan.

### **Who can participate in a research study?**

The study's protocol sets guidelines about who can participate. Sometimes, a person who is willing to participate does not qualify. If this happens to you, don't take the rejection personally. Strict participation guidelines are in place to keep participants safe and to ensure that study results are reliable.

### **Will participation in a research study help me?**

Research is not the same as treatment. Sometimes, participation in clinical trials gives you access to new treatments or drugs before they become widely available. These treatments may or may not help you. There also might be unpleasant, serious, or even life-threatening side effects. Or a study could involve not using a drug that can help you. Even if you are not helped personally, the study results could help many others in the future.

### **How will my safety be protected?**

Researchers are required to care for your well-being just like the doctors who provide your regular medical care. Also, medical research studies that involve people have federally controlled safeguards, such as an "institutional review board," or IRB. The IRB is a group of people who make sure that a trial is ethical and the rights of participants are protected. Keep in mind that "protected" doesn't mean the study is risk free.

### **What is informed consent?**

This is the process of learning the key facts about the research study before deciding whether to participate. The research team will explain all the study details to you. This includes the purpose of the study, how the trial might affect your

daily life, how long the study will last, and the potential benefits and risks of participating. It's helpful to have a friend or family member with you during this discussion. If you agree to participate after learning all the facts, you will be asked to sign an informed consent form. This is not a contract. By signing the form, you are showing that you understand what is involved.

### **Who will pay for my medical care during the trial?**

This depends on the study and your health insurance plan. Health plans do cover the costs that are part of your routine medical care. Often health plans do not cover the patient care costs related to clinical trials they deem to be "experimental." In many cases, the research team can help by talking with your plan provider. Also, many states require health plans to cover the costs for certain clinical trials, such as for new cancer treatments. There also are some government programs to help pay the costs of care. The research team can help you sort through any cost issues.

### **Can I quit after the study has begun?**

Yes. You can leave a research study at any time. But be sure to tell the research team that you are withdrawing and your reasons why. ■

### **Where do I find out about research studies?**

Talk to your doctor if you are interested in becoming a research volunteer. You also can find out about clinical trials at [www.clinicaltrials.gov](http://www.clinicaltrials.gov).





## **Important Screenings and Tests**

# Common Screening and Diagnostic Tests Explained

Test name	Definition
<b>Angiography (an-jee-OG-ruh-fee)</b>	Exam of your blood vessels using x-rays. The doctor inserts a small tube into the blood vessel and injects dye to see the vessels on the x-ray.
<b>Barium enema</b>	A lubricated enema tube is gently inserted into your rectum. Barium flows into your colon. An x-ray is taken of the large intestine.
<b>Biopsy</b>	A test that removes cells or tissues for examination by a pathologist to diagnose for disease. The tissue is examined under a microscope for cancer or other diseases.
<b>Blood test</b>	Blood is taken from a vein in the inside elbow or back of the hand to test for a health problem.
<b>Bone mineral density (BMD) test</b>	Special x-rays of your bones are used to test if you have osteoporosis, or a weakening of the bones.
<b>Bronchoscopy (brong-KOSS-kuh-pee)</b>	Exam of the lungs. A bronchoscope, or flexible tube, is put through the nose or mouth and into your trachea (windpipe).
<b>Clinical breast exam (CBE)</b>	A doctor, nurse, or other health professional uses his or her hands to examine your breasts and underarm areas to find lumps or other problems.
<b>Chest x-ray</b>	An x-ray of the chest, lungs, heart, large arteries, ribs, and diaphragm.
<b>Colonoscopy (KOH-luhn-OSS-kuh-pee)</b>	An examination of the inside of the colon using a colonoscope, inserted into the rectum. A colonoscope is a thin, tube-like instrument with a light and lens for viewing. It may also have a tool to remove tissue to be checked under a microscope for disease.
<b>Computed tomography (tuh-MOG-ruh-fee) (CT or CAT) scan</b>	The patient lies on a table and x-rays of the body are taken from different angles. Sometimes, a fluid is used to highlight parts of the body in the scan.
<b>Echocardiography (ek-oh-kar-dee-OG-ruh-fee)</b>	An instrument (that looks like a microphone) is placed on the chest. It uses sound waves to create a moving picture of the heart. A picture appears on a TV monitor, and the heart can be seen in different ways.
<b>Electrocardiography (ih-lek-troh-kar-dee-OG-ruh-fee) (ECG or EKG)</b>	A test that records the electrical activity of the heart, using electrodes placed on the arms, legs, and chest.
<b>Electroencephalography (ih-lek-troh-en-sef-uhl-OG-ruh-fee) (EEG)</b>	A test that measures the electrical activity of the brain, using electrodes that are put on the patient's scalp. Sometimes patients sleep during the test.
<b>Exercise stress test</b>	Electrodes are placed on the chest, arms, and legs to record the heart's activity. A blood pressure cuff is placed around the arm and is inflated every few minutes. Heart rate and blood pressure are taken before exercise starts. The patient walks on a treadmill or pedals a stationary bicycle. The pace of the treadmill is increased. The response of the heart is monitored. The test continues until target heart rate is reached. Monitoring continues after exercise for 10 to 15 minutes or until the heart rate returns to normal.
<b>Fecal occult blood test (FOBT)</b>	Detects hidden blood in a bowel movement. There are two types: the smear test and flushable reagent pads.

## Common Screening and Diagnostic Tests Explained

Test name	Definition
<b>Laparoscopy (lap-uh-ROSS-kuh-pee)</b>	A small tube with a camera is inserted into the abdomen through a small cut in or just below the belly button to see inside the abdomen and pelvis. Other instruments can be inserted in the small cut as well. It is used for both diagnosing and treating problems inside the abdomen.
<b>Magnetic resonance imaging (MRI)</b>	A test that uses powerful magnets and radio waves to create a picture of the inside of your body without surgery. The patient lies on a table that slides into a large tunnel-like tube, which is surrounded by a scanner. Small coils may be placed around your head, arm, leg, or other areas.
<b>Mammogram</b>	X-rays of the breast taken by resting one breast at a time on a flat surface that contains an x-ray plate. A device presses firmly against the breast. An x-ray is taken to show a picture of the breast. Mammography is used to screen healthy women for signs of breast cancer. It can also be used to evaluate a woman who has symptoms of disease. It can, in some cases, detect breast cancers before you can feel them with your fingers.
<b>Medical history</b>	The doctor or nurse talks to the patient about current and past illnesses, surgeries, pregnancies, medications, allergies, use of alternative therapies, vitamins and supplements, diet, alcohol and drug use, physical activity, and family history of diseases.
<b>Pap test</b>	The nurse or doctor uses a small brush to take cells from the cervix (opening of the uterus) to look at under a microscope in a lab.
<b>Pelvic exam</b>	A doctor or nurse asks about the patient's health and looks at the vaginal area. The doctor or nurse checks the fallopian tubes, ovaries, and uterus by putting two gloved fingers inside the vagina. With the other hand, the doctor or nurse will feel from the outside for any lumps or tenderness.
<b>Physical exam</b>	The doctor or nurse will test for diseases, assess your risk of future medical problems, encourage a healthy lifestyle, and update your vaccinations.
<b>Positron emission tomography (POZ-ih-tron ih-MISH-uhn tuh-MOG-ruh-fee) (PET) scan</b>	The patient is injected with a radioactive substance, such as glucose. A scanner detects any cancerous areas in the body. Cancerous tissue absorbs more of the substance and looks brighter in images than normal tissue.
<b>Sigmoidoscopy (SIG-moi-DOSS-kuh-pee)</b>	The sigmoidoscope is a small camera attached to a flexible tube. This tube, about 20 inches long, is gently inserted into the colon. As the tube is slowly removed, the lining of the bowel is examined.
<b>Spirometry (spuh-ROM-uh-tree)</b>	The patient breathes into a mouthpiece that is connected to an instrument called a spirometer. The spirometer records the amount and the rate of air that is breathed in and out over a specified time. It measures how well the lungs exhale.
<b>Ultrasound</b>	A clear gel is put onto the skin over the area being examined. An instrument is then moved over that area. The machine sends out sound waves, which reflect off the body. A computer receives these waves and uses them to create pictures of the body.

Note: Anesthesia (medicine to block pain or sedate you) is given during some of these tests to keep you comfortable. Be sure to talk with your doctor or nurse about what to expect during and after tests, and how to prepare for tests.

## General Screenings and Immunizations for Women

These charts are guidelines only. Your doctor will personalize the timing of each test and immunization to meet your health care needs.

Screening tests	Ages 18–39	Ages 40–49	Ages 50–64	Ages 65 and older
<b>General health:</b> Full checkup, including weight and height	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.
Thyroid test (TSH)	Start at age 35, then every 5 years	Every 5 years	Every 5 years	Every 5 years
<b>Heart health:</b> Blood pressure test	At least every 2 years	At least every 2 years	At least every 2 years	At least every 2 years
Cholesterol test	Start at age 20, discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.
<b>Bone health:</b> Bone mineral density test		Discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Get a bone mineral density test at least once. Talk to your doctor or nurse about repeat testing.
<b>Diabetes:</b> Blood glucose test	Discuss with your doctor or nurse.	Start at age 45, then every 3 years	Every 3 years	Every 3 years
<b>Breast health:</b> Mammogram (x-ray of breast)		Every 1–2 years. Discuss with your doctor or nurse.	Every 1–2 years. Discuss with your doctor or nurse.	Every 1–2 years. Discuss with your doctor or nurse.
<b>Reproductive health:</b> Pap test and pelvic exam	Every 1–3 years if you have been sexually active or are older than 21	Every 1–3 years	Every 1–3 years	Discuss with your doctor or nurse.
Chlamydia test	Yearly until age 25 if sexually active. Older than age 25, get this test if you have new or multiple partners.	Get this test if you have new or multiple partners.	Get this test if you have new or multiple partners.	Get this test if you have new or multiple partners.
Sexually transmitted infection (STI) tests	Both partners should get tested for STIs, including HIV, before initiating sexual intercourse.	Both partners should get tested for STIs, including HIV, before initiating sexual intercourse.	Both partners should get tested for STIs, including HIV, before initiating sexual intercourse.	Both partners should get tested for STIs, including HIV, before initiating sexual intercourse.
<b>Mental health screening</b>	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.
<b>Colorectal health:</b> Fecal occult blood test			Yearly	Yearly
Flexible sigmoidoscopy (with fecal occult blood test is preferred)			Every 5 years (if not having a colonoscopy)	Every 5 years (if not having a colonoscopy)

This chart lists recommended screenings and immunizations for women at average risk for most diseases. Citations for these recommendations can be found online at [www.womenshealth.gov/screeningcharts/general/citations.cfm](http://www.womenshealth.gov/screeningcharts/general/citations.cfm).

## General Screenings and Immunizations for Women

These charts are guidelines only. Your doctor will personalize the timing of each test and immunization to meet your health care needs.

Screening tests	Ages 18–39	Ages 40–49	Ages 50–64	Ages 65 and older
<b>Colorectal health (continued):</b> Double contrast barium enema (DCBE)			Every 5–10 years (if not having a colonoscopy or sigmoidoscopy)	Every 5–10 years (if not having a colonoscopy or sigmoidoscopy)
Colonoscopy			Every 10 years	Every 10 years
Rectal exam	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Every 5–10 years with each screening (sigmoidoscopy, colonoscopy, or DCBE)	Every 5–10 years with each screening (sigmoidoscopy, colonoscopy, or DCBE)
<b>Eye and ear health:</b> Complete eye exam	At least once between the ages 20 and 29 and at least twice between the ages 30 and 39, or any time you have a problem with your eye(s)	Every 2–4 years	Every 2–4 years	Every 1–2 years
Hearing test	Starting at age 18, then every 10 years	Every 10 years	Every 3 years	Every 3 years
<b>Skin health:</b> Mole exam	Monthly mole self-exam; by a doctor every 3 years, starting at age 20	Monthly mole self-exam; by a doctor every year	Monthly mole self-exam; by a doctor every year	Monthly mole self-exam; by a doctor every year
<b>Oral health:</b> Dental exam	One to two times every year	One to two times every year	One to two times every year	One to two times every year
<b>Immunizations:</b> Influenza vaccine	Discuss with your doctor or nurse.	Discuss with your doctor or nurse.	Yearly	Yearly
Pneumococcal vaccine				One time only
Tetanus-diphtheria booster vaccine	Every 10 years	Every 10 years	Every 10 years	Every 10 years
Human papillomavirus (HPV) vaccine	Up to age 26, discuss with your doctor or nurse.			
Meningococcal vaccine	Discuss with your doctor or nurse if attending college.			
Herpes zoster vaccine (to prevent shingles)			Starting at age 60, one time only. Ask your doctor if it is okay to get it.	Starting at age 60, one time only. Ask your doctor if it is okay to get it.

This chart lists recommended screenings and immunizations for women at average risk for most diseases. Citations for these recommendations can be found online at [www.womenshealth.gov/screeningcharts/general/citations.cfm](http://www.womenshealth.gov/screeningcharts/general/citations.cfm).

## Recommended Screenings, Tests, and Immunizations for Women With High Risk Factors in the Family

✓ if it applies	Does your family history include?	Then ask your doctor or nurse if you need the following screenings, tests, exams, or vaccines more often or at a younger age:
	High blood pressure	Blood pressure test
	High cholesterol	Cholesterol test
	Heart disease, premature heart disease, or heart attack	Blood pressure test, cholesterol test, exercise stress test
	Diabetes	Blood glucose test
	Breast cancer	Mammogram, ovarian cancer tests
	Endometrial cancer	Colon screening
	Ovarian cancer	Pelvic exam, ovarian cancer tests, colon screening, clinical breast exam
	Osteoporosis, bone fracture in adulthood	Bone mineral density test
	Thyroid disease or thyroid cancer	Thyroid test and/or genetic counseling
	Gum (periodontal) disease	Oral exam
	Hearing problems, deafness	Hearing test
	Vision problems, eye disease, blindness	Vision exam
	Inflammatory bowel disease; colon polyps; colon, ovarian, or endometrial cancer	Colonoscopy, sigmoidoscopy, double contrast barium enema, rectal exam, fecal occult blood test, Pap test, pelvic exam, ovarian cancer tests
	Cancer, heart disease, or any illness at an unusually young age (50 or younger)	Genetic counseling, possible early screening tests
	Two relatives with the same kind of cancer	Genetic counseling, possible early screening tests
	Birth defects or genetic disorder (you or your partner)	Genetic counseling, possible early screening tests. If you want to become pregnant, genetic counseling for you and your partner.

This chart lists screenings, tests, or exams you might need more often or earlier because of having high risk factors or things in your life that increase your chances of developing a condition or disease. Citations for these recommendations can be found online at [www.womenshealth.gov/screeningcharts/highrisk/citations.cfm](http://www.womenshealth.gov/screeningcharts/highrisk/citations.cfm).

## Recommended Screenings, Tests, and Immunizations for Women With High Individual Risk Factors

✓ if it applies	Are you?	Then ask your doctor or nurse if you need the following screenings, tests, exams, or vaccines more often or at a younger age:
	African American	Blood pressure test, cholesterol test, blood glucose test, vision exam, colonoscopy, genetic counseling for sickle cell anemia
	Latina	Blood pressure test, cholesterol test, blood glucose test, colonoscopy
	Alaska Native or Pacific Islander	Blood glucose test, pneumococcal vaccine
	American Indian	Blood glucose test, pneumococcal vaccine
	Ashkenazi Jewish descent	Genetic counseling for Tay-Sachs disease, if you want to become pregnant
	Ashkenazi Jewish descent with family history of breast or ovarian cancer	Genetic counseling for possible <i>BRCA1/2</i> mutation
	Asian American	Blood glucose test
	Age 65 or older	Bone mineral density test, flu vaccine, pneumococcal vaccine
	Between the ages of 60 and 64, weigh less than 154 lbs, and not taking estrogen	Bone mineral density test
	College age	MMR vaccine, varicella vaccine, human papillomavirus (HPV) vaccine, meningococcal vaccine
	Postmenopausal	Bone mineral density test
	Pregnant	Blood pressure test, blood glucose test, urine test, HIV test, STI tests, MMR vaccine, hepatitis B antigen test
	A nonpregnant woman of childbearing age	MMR vaccine, varicella vaccine
	A smoker	Blood pressure test, cholesterol test, bone mineral density test, oral exam, vision exam
	Overweight	Blood pressure test, blood glucose test, weight
	Living in prison	Tuberculosis (TB) test, HIV test, STI tests, hepatitis A, B vaccines
	Living in long-term care	TB test, influenza vaccine, pneumococcal vaccine
	A health care worker	TB test, influenza vaccine, pneumococcal vaccine, MMR vaccine, varicella vaccine, HIV test, hepatitis test, hepatitis B vaccine if exposed to blood

This chart lists screenings, tests, or exams you might need more often or earlier because of having high risk factors or things in your life that increase your chances of developing a condition or disease. Citations for these recommendations can be found online at [www.womenshealth.gov/screeningcharts/highrisk/citations.cfm](http://www.womenshealth.gov/screeningcharts/highrisk/citations.cfm).

**MMR:** measles, mumps, and rubella

**STI:** sexually transmitted infections



## Recommended Screenings, Tests, and Immunizations for Women With High Individual Risk Factors

✓ if it applies	Do you have or have you had?	Then ask your doctor or nurse if you need the following screenings, tests, exams, or vaccines more often or at a younger age:
	High blood pressure	Blood pressure test, cholesterol test, blood glucose test
	High cholesterol	Blood pressure test, cholesterol test, blood glucose test
	Heart disease	Blood pressure test, cholesterol test, blood glucose test, influenza vaccine, pneumococcal vaccine
	Diabetes	Blood pressure test, cholesterol test, blood glucose test, vision exam, urine test
	Gestational diabetes (diabetes during pregnancy)	Blood glucose test
	A baby weighing more than 9 lbs	Blood glucose test
	Breast cancer	Mammogram, ovarian cancer tests
	Dense breast	Digital mammogram, clinical breast exam
	Cervical, uterine, endometrial, vaginal cancer	Pap test, pelvic exam, ovarian cancer tests, colon screening
	Ovarian cancer	Pelvic exam, ovarian cancer tests, mammogram, colon screening
	Previous abnormal Pap tests	Pap test, pelvic exam, human papillomavirus (HPV) vaccine
	Early menopause (natural or surgically induced); absent or infrequent menstrual periods; advanced age; a personal history of bone fracture in adulthood; lifelong low calcium intake; lifelong inactive lifestyle or little physical activity; low body weight (less than 154 lbs), or a history of an eating disorder such as anorexia nervosa	Bone mineral density test
	An autoimmune disease (including lupus, rheumatoid arthritis, scleroderma, multiple sclerosis, psoriasis)	Thyroid test, TB test, influenza shot, MMR vaccine, pneumococcal vaccine, autoimmune screening test, bone mineral density test

This chart lists screenings, tests, or exams you might need more often or earlier because of having high risk factors or things in your life that increase your chances of developing a condition or disease. Citations for these recommendations can be found online at [www.womenshealth.gov/screeningcharts/highrisk/citations.cfm](http://www.womenshealth.gov/screeningcharts/highrisk/citations.cfm).

## Recommended Screenings, Tests, and Immunizations for Women With High Individual Risk Factors

✓ if it applies	Do you have or have you had?	Then ask your doctor or nurse if you need the following screenings, tests, exams, or vaccines more often or at a younger age:
	Chronic lung disease	Influenza vaccine, pneumococcal vaccine
	Chronic liver disease	Hepatitis A and B vaccines
	Thyroid disease	Thyroid test, influenza vaccine, pneumococcal vaccine, bone mineral density test (if hyperthyroid)
	Gum (periodontal) disease	Oral exam
	Colon polyps; inflammatory bowel disease	Colonoscopy
	Colon cancer	Endometrial cancer screening, colon cancer screening tests
	A developmental delay	Vision exam, hearing test
	Eye injury or disease	Vision exam
	Ear injury or prolonged exposure to loud noise	Hearing test
	HIV/AIDS	Oral exam, vision exam, Pap test, pelvic exam, TB test, thyroid test, STI tests, influenza vaccine, pneumococcal vaccine, hepatitis screening, hepatitis A and B vaccines
	A blood transfusion or solid organ transplant before 1992	Hepatitis C test
	Received clotting factor concentrates made before 1987	Hepatitis C test
	A blood transfusion before 1985	HIV test
	Multiple sex partners (or a partner who has or had multiple sex partners)	STI tests, HIV test, hepatitis B vaccine, Pap test, pelvic exam, human papillomavirus (HPV) vaccine
	Alcoholism	Pneumococcal vaccine, TB test, psychological screening, liver tests
	Injection drug use (IDU) or addiction	Hepatitis A and B vaccines, hepatitis C test, TB test, STI tests, HIV test, psychological screening
	A sexually transmitted infection (STI)	STI tests, HIV test, Pap test, pelvic exam, hepatitis B vaccine, HPV vaccine
	Lived or worked with someone exposed to tuberculosis (TB)	TB test
	A serious injury (cut or laceration)	Tetanus-diphtheria booster vaccine
	A baby recently (within the past few weeks or months)	Postpartum depression screening

This chart lists screenings, tests, or exams you might need more often or earlier because of having high risk factors or things in your life that increase your chances of developing a condition or disease. Citations for these recommendations can be found online at [www.womenshealth.gov/screeningcharts/highrisk/citations.cfm](http://www.womenshealth.gov/screeningcharts/highrisk/citations.cfm).



## **Health Resources for Women and Families**

# Health Resources for Women

## General health

### womenshealth.gov

200 Independence Ave SW, Room 712E  
Washington, DC 20201

Web site: [www.womenshealth.gov](http://www.womenshealth.gov)

Illnesses and Disabilities:

[www.womenshealth.gov/wwd](http://www.womenshealth.gov/wwd)

Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### Agency for Healthcare Research and Quality Clearinghouse

PO Box 8547

Silver Spring, MD 20907

Web site: [www.ahrq.gov/research/womenix.htm](http://www.ahrq.gov/research/womenix.htm)

Phone number: (800) 358-9295,  
(888) 586-6340 TDD

### ClinicalTrials.gov

ClinicalTrials.gov is a registry of clinical trials. The Web site gives you information about a trial's purpose, who may participate, locations, and phone numbers for more details.

Web site: [www.clinicaltrials.gov](http://www.clinicaltrials.gov)

### Health Resources and Services Administration Information Center

PO Box 2910

Merrifield, VA 22116

Web site: [www.hrsa.gov/WomensHealth](http://www.hrsa.gov/WomensHealth)

Phone number: (888) 275-4772,  
(877) 489-4772 TTY

### Indian Health Service

801 Thompson Ave, Suite 400

Rockville, MD 20852-1627

Web site: [www.ihs.gov/MedicalPrograms/MCH/W](http://www.ihs.gov/MedicalPrograms/MCH/W)

### MedlinePlus

MedlinePlus provides health information from the National Institutes of Health and other trusted sources. The Web site also has a medical encyclopedia, information on prescription and nonprescription drugs, and the latest health news.

Web site: [www.medlineplus.gov](http://www.medlineplus.gov)

### National Institutes of Health

9000 Rockville Pike

Bethesda, MD 20892

Web site: [www.nih.gov](http://www.nih.gov)

### Office of Minority Health Resource Center

PO Box 37337

Washington, DC 20013-7337

Web site: [www.omhrc.gov](http://www.omhrc.gov)

Phone number: (800) 444-6472

### Office of Research on Women's Health, NIH

6707 Democracy Blvd, Suite 400

Bethesda, MD 20892-5484

Web site: <http://orwh.od.nih.gov>

Phone number: (301) 402-1770

**Office of Women's Health, CDC**

1600 Clifton Rd, MS E-89  
Atlanta, GA 30333  
Web site: [www.cdc.gov/women](http://www.cdc.gov/women)  
Phone number: (800) 232-4636, (888) 232-6348 TTY

**Office of Women's Health, FDA**

5600 Fishers Ln  
Rockville, MD 20857  
Web site: [www.fda.gov/womens](http://www.fda.gov/womens)  
Phone number: (888) 463-6332

**American Academy of Family Physicians**

PO Box 11210  
Shawnee Mission, KS 66207-1210  
Web site: [www.familydoctor.org](http://www.familydoctor.org)

**American College of Obstetricians and Gynecologists**

409 12th St SW, PO Box 96920  
Washington, DC 20090-6920  
Web site: [www.acog.org](http://www.acog.org)  
Phone number: (202) 863-2518  
Resource Center

**American Medical Women's Association**

100 N 20th St, 4th Floor  
Philadelphia, PA 19103  
Web site: [www.amwa-doc.org](http://www.amwa-doc.org)

**Black Women's Health Imperative**

1420 K St NW, Suite 1000  
Washington, DC 20005  
Web site: [www.blackwomenshealth.org](http://www.blackwomenshealth.org)

**National Alliance for Hispanic Health**

1501 16th St NW  
Washington, DC 20036  
Web site: [www.hispanichealth.org](http://www.hispanichealth.org)

**National Asian Women's Health Organization**

1 Embarcadero Center, Suite 500  
San Francisco, CA 94111  
Web site: [www.nawho.org](http://www.nawho.org)

**National Women's Health Network**

514 10th St NW, Suite 400  
Washington, DC 20004  
Web site: [www.nwhn.org](http://www.nwhn.org)  
Phone number: (202) 628-7814

**National Women's Health Resource Center**

157 Broad St, Suite 106  
Red Bank, NJ 07701  
Web site: [www.healthywomen.org](http://www.healthywomen.org)  
Phone number: (877) 986-9472

**Society for Women's Health Research**

1025 Connecticut Ave NW, Suite 701  
Washington, DC 20036  
Web site: [www.womenshealthresearch.org](http://www.womenshealthresearch.org)

## **Disease Risk Calculators**

### **Heart Attack/Coronary Heart Disease risk assessment tool**

On this Web site, find out if you are at risk of having a heart attack or dying of coronary heart disease in the next 10 years. You can also check to see if you may have a group of risk factors that increase your chances of developing heart disease, stroke, and diabetes.

Web site: [www.americanheart.org/presenter.jhtml?identifier=3003499](http://www.americanheart.org/presenter.jhtml?identifier=3003499)

### **Your disease risk**

This Web site allows you to find out your risk of developing cancer, diabetes, heart disease, osteoporosis, and stroke. You can also get personalized tips for preventing these diseases.

Web site: [www.yourdiseaserisk.wustl.edu](http://www.yourdiseaserisk.wustl.edu)

### **Assess your risk of periodontal disease**

Find out on this Web site if you are at risk of developing periodontal, or gum, diseases.

Web site: [www.perio.org/consumer/4a.html](http://www.perio.org/consumer/4a.html)

# Health Resources for Men

## General health

### Men's Health, [womenshealth.gov](http://womenshealth.gov)

200 Independence Ave SW, Room 712E  
Washington, DC 20201

Web site: [www.womenshealth.gov/mens](http://www.womenshealth.gov/mens)

Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### U.S. Department of Health and Human Services

200 Independence Ave SW  
Washington, DC 20201

Web site: [www.hhs.gov/specificpopulations](http://www.hhs.gov/specificpopulations)

### Divisions of HIV/AIDS Prevention, CDC

1600 Clifton Rd NE  
Atlanta, GA 30333

Web site: [www.cdc.gov/hiv](http://www.cdc.gov/hiv)

Phone number: (800) 232-4636,  
(888) 232-6348 TTY

### Healthfinder®

PO Box 1133

Washington, DC 20013-1133

Web site: [www.healthfinder.gov/justforyou](http://www.healthfinder.gov/justforyou)

### MedlinePlus

8600 Rockville Pike  
Bethesda, MD 20894

Web site: [www.nlm.nih.gov/medlineplus/men.html](http://www.nlm.nih.gov/medlineplus/men.html)

### Men's Health, CDC

1600 Clifton Rd NE  
Atlanta, GA 30333

Web site: [www.cdc.gov/men](http://www.cdc.gov/men)

Phone number: (800) 232-4636,  
(888) 232-6348 TTY



### Men's Health Program, AHRQ

PO Box 8547

Silver Spring, MD 2090

Web site: [www.ahrq.gov/path/menpath.htm](http://www.ahrq.gov/path/menpath.htm)

Phone number: (800) 358-9295,  
(888) 586-6340 TDD

### Promoting Responsible Fatherhood, HHS

200 Independence Ave SW  
Washington, DC 20201

Web site: [www.fatherhood.hhs.gov](http://www.fatherhood.hhs.gov)

### Men's Health Network

PO Box 75972

Washington, DC 20013

Web site: [www.menshealthnetwork.org](http://www.menshealthnetwork.org)



## **Heart health**

### **National Heart, Lung, and Blood Institute Information Center, NIH**

PO Box 30105  
Bethesda, MD 20824-0105  
Web site: [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)  
Phone number: (301) 592-8573,  
(240) 629-3255 TTY

### **American Heart Association**

7272 Greenville Ave  
Dallas, TX 75231  
Web site: [www.americanheart.org](http://www.americanheart.org)  
Phone number: (800) 242-8721

## **Cancer**

### **National Cancer Institute, NIH**

6116 Executive Blvd, Room 3036A  
Bethesda, MD 20892-8322  
Web site: [www.cancer.gov](http://www.cancer.gov)  
Phone number: (800) 422-6237,  
(800) 332-8615 TTY

### **American Cancer Society**

250 Williams St  
Atlanta, GA 30303  
Web site: [www.cancer.org](http://www.cancer.org)  
Phone number: (800) 227-2345,  
(866) 228-4327 TTY

## **Mental health**

### **National Clearinghouse for Alcohol and Drug Information, SAMHSA**

1 Choke Cherry Rd  
Rockville, MD 20857  
Web site: [www.ncadi.samhsa.gov](http://www.ncadi.samhsa.gov)  
Phone number: (800) 729-6686,  
(800) 487-4889 TDD

### **National Institute of Mental Health, NIH**

6001 Executive Blvd, Room 8184,  
MSC 9663  
Bethesda, MD 20892-9663  
Web site: [www.nimh.nih.gov](http://www.nimh.nih.gov)  
Phone number: (866) 615-6464,  
(866) 415-8051 TTY

### **National Mental Health Information Center, SAMHSA**

PO Box 42557  
Washington, DC 20015  
Web site: <http://mentalhealth.samhsa.gov>  
Phone number: (800) 789-2647,  
(866) 889-2647 TDD

## **Urologic and reproductive health**

### **National Kidney and Urologic Diseases Information Clearinghouse, NIH**

3 Information Way  
Bethesda, MD 20892-3580  
Web site: [www.kidney.niddk.nih.gov](http://www.kidney.niddk.nih.gov)  
Phone number: (800) 891-5390

# Health Resources for Children

## **General health**

### **girlshealth.gov**

200 Independence Ave SW, Room 712E  
Washington, DC 20201  
Web site: [www.girlshealth.gov](http://www.girlshealth.gov)  
Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### **Building Blocks for a Healthy Future, SAMHSA**

1 Choke Cherry Rd  
Rockville, MD 20857  
Web site: [www.bblocks.samhsa.gov](http://www.bblocks.samhsa.gov)  
Phone number: (800) 694-4747 ext.4820

### **Child and Adolescent Health, AHRQ**

PO Box 8547  
Silver Spring, MD 20907  
Web site: [www.ahrq.gov/child](http://www.ahrq.gov/child)  
Phone number: (800) 358-9295,  
(888) 586-6340 TDD

### **U.S. Department of Health and Human Services**

200 Independence Ave SW  
Washington, DC 20201  
Web site: [www.hhs.gov/specificpopulations](http://www.hhs.gov/specificpopulations)

### **Family Guide to Keeping Youth Mentally Healthy and Drug Free, SAMHSA**

1 Choke Cherry Rd  
Rockville, MD 20857  
Web site: [www.family.samhsa.gov](http://www.family.samhsa.gov)

### **Food and Drug Administration Kid's Page**

5600 Fishers Ln  
Rockville, MD 20857  
Web site: [www.fda.gov/oc/opacom/kids/default.htm](http://www.fda.gov/oc/opacom/kids/default.htm)  
Phone number: (888) 463-6332



### **Girl Power! Campaign**

Web site: [www.girlpower.gov](http://www.girlpower.gov)  
Phone number: (800) 729-6686

### **MedlinePlus**

8600 Rockville Pike  
Bethesda, MD 20894  
Web site: [www.nlm.nih.gov/medlineplus/childrenandteenagers.html](http://www.nlm.nih.gov/medlineplus/childrenandteenagers.html)

### **My Bright Future: Physical Activity and Healthy Eating for Young Women, HRSA**

PO Box 2910  
Merrifield, VA 22116  
Web site: [www.hrsa.gov/womenshealth/mybrightfuture/menu.html](http://www.hrsa.gov/womenshealth/mybrightfuture/menu.html)  
Phone number: (888) 275-4772,  
(877) 489-4772 TTY

### **Safe and Healthy Kids, CDC**

1600 Clifton Rd, MS E-89  
Atlanta, GA 30333  
Web site: [www.cdc.gov/women/kids](http://www.cdc.gov/women/kids)  
Phone number: (800) 232-4636,  
(888) 232-6348 TTY

### **VERB™ It's What You Do, CDC**

1600 Clifton Rd  
Atlanta, GA 30333  
Web site: [www.verbnow.com](http://www.verbnow.com)  
Phone number: (800) 232-4636,  
(888) 232-6348 TTY

### **WISE EARS!®, NIH**

1 Communication Ave  
Bethesda, MD 20892-3456  
Web site: [www.nidcd.nih.gov/health/wise](http://www.nidcd.nih.gov/health/wise)  
Phone number: (800) 241-1044,  
(800) 241-1055 TTY

### **American Academy of Pediatrics**

141 Northwest Point Blvd  
Elk Grove Village, IL 60007  
Web site: [www.aap.org](http://www.aap.org)

### **Kidshealth.org**

Web site: [www.kidshealth.org](http://www.kidshealth.org)

### **Child abuse**

#### **Prevent Child Abuse America**

500 N Michigan Ave, Suite 200  
Chicago, IL 60611  
Web site: [www.preventchildabuse.org](http://www.preventchildabuse.org)  
Phone number: (800) 244-5373

### **Cancer**

#### **National Cancer Institute, NIH**

6116 Executive Blvd, Room 3036A  
Bethesda, MD 20892-8322  
Web site: [www.cancer.gov](http://www.cancer.gov)  
Phone number: (800) 422-6237,  
(800) 332-8615 TTY

### **Childhood asthma**

#### **American Lung Association**

61 Broadway, 6th Floor  
New York, NY 10006  
Web site: [www.lungusa.org](http://www.lungusa.org)  
Phone number: (800) 548-8252

### **Childhood diabetes**

#### **National Diabetes Information**

#### **Clearinghouse, NIH**

1 Information Way  
Bethesda, MD 20892-3560  
Web site: [www.diabetes.niddk.nih.gov](http://www.diabetes.niddk.nih.gov)  
Phone number: (800) 860-8747

#### **American Diabetes Association**

1701 N Beauregard St  
Alexandria, VA 22311  
Web site: [www.diabetes.org](http://www.diabetes.org)  
Phone number: (800) 342-2383

### **Immunizations**

#### **National Center for Immunization and Respiratory Diseases, CDC**

1600 Clifton Rd NE, MS E-05  
Atlanta, GA 30333  
Web site: [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines)  
Phone number: (800) 232-4636,  
(888) 232-6348 TTY

#### **Childhood Immunization Support Program, AAP**

141 Northwest Point Blvd  
Elk Grove Village, IL 60007  
Web site: [www.cispimmunize.org](http://www.cispimmunize.org)

#### **Immunization Action Coalition**

1573 Selby Ave, Suite 234  
St Paul, MN 55104  
Web site: [www.immunize.org](http://www.immunize.org)

## **Child nutrition**

### **Powerful Bones. Powerful Girls.**

200 Independence Ave SW, Room 712E  
Washington, DC 20201

Web site: [www.girlshealth.gov/bones](http://www.girlshealth.gov/bones)

Phone number: (800) 994-9662,  
(888) 220-5446 TDD

### **School Meals, USDA**

3101 Park Center Dr  
Alexandria, VA 22302

Web site: [www.fns.usda.gov/cnd](http://www.fns.usda.gov/cnd)

## **Safety and injury prevention**

### **U.S. Consumer Product Safety**

#### **Commission**

4330 East West Highway  
Bethesda, MD 20814

Web site: [www.cpsc.gov](http://www.cpsc.gov)

Phone number: (800) 638-2772, (800)  
638-8270 TTY

### **National Center for Injury Prevention and Control, CDC**

4770 Buford Highway NE, MS K-63  
Atlanta, GA 30341-3717

Web site: [www.cdc.gov/ncipc](http://www.cdc.gov/ncipc)

Phone number: (800) 232-4636,  
(888) 232-6348 TTY

### **National Highway Traffic Safety Administration**

1200 New Jersey Ave SE, West Building  
Washington, DC 20590

Web site: [www.nhtsa.gov](http://www.nhtsa.gov)

Phone number: (888) 327-4236,  
(800) 424-9153 TTY

### **Take A Stand. Lend A Hand. Stop Bullying Now!, HRSA**

PO Box 2910

Merrifield, VA 22116

Web site: [www.stopbullyingnow.hrsa.gov](http://www.stopbullyingnow.hrsa.gov)

Phone number: (888) 275-4772,  
(877) 489-4772 TTY

### **Safe Kids Worldwide**

1301 Pennsylvania Ave NW, Suite 1000  
Washington DC 20004

Web site: [www.safekids.org](http://www.safekids.org)

# Resources for Health Insurance

Each year, more American families find themselves without health insurance. In 2004, more than 45 million Americans didn't have health insurance. Sixteen million of them were women. These programs and resources may be able to help you and your family.

## Government resources that can help

The Centers for Medicare and Medicaid Services (CMS), a federal government agency, administers health insurance programs such as Medicare, Medicaid, and the State Children's Health Insurance Program.

### Medicare

Medicare is a health insurance program funded by the U.S. government. To qualify for these benefits, you must be 65 years old or older, or younger than 65 with certain disabilities, or a person of any age who has end-stage renal disease. (A person who has end-stage renal disease has permanent kidney failure that requires dialysis or a kidney transplant.)

Medicare has several parts. Your coverage depends on which parts of Medicare you have. Medicare Part A typically pays for your inpatient hospital expenses. Medicare Part B typically pays for your outpatient health care expenses, including doctor fees. You usually have to pay a monthly premium to be covered by Medicare Part B.

Beginning January 1, 2006, everyone who has Medicare is now eligible for



prescription drug coverage through the new Medicare Part D. This coverage is available regardless of your income and resources, your health status, or how much your prescriptions cost. It covers both brand-name and generic prescription drugs at participating pharmacies in your area. Medicare prescription drug coverage provides protection for people who have very high drug costs.

For general information, 24 hours a day, 7 days a week,

- Call toll free at (800) MEDICARE (800-633-4227) or TTY (877) 486-2048.
- Web site: [www.cms.hhs.gov/home/medicare.asp](http://www.cms.hhs.gov/home/medicare.asp)
- Web site: The Official U.S. Government Site for People with Medicare: [www.medicare.gov](http://www.medicare.gov)

If you have a limited income and resources, you may be eligible for extra help with your prescription drug costs. Almost 1 in 3 people with Medicare

qualify for having almost all of their prescription drug costs paid for by the program. To find out if you are eligible for extra help, contact the Social Security Administration.

- Call the U.S. Social Security Administration toll free at (800) 772-1213 (TTY 800-325-0778).
- Web site: [www.socialsecurity.gov](http://www.socialsecurity.gov)

### **Medicaid**

Medicaid is a health insurance program jointly funded by states, counties, and the U.S. government. Medicaid provides medical benefits to groups of low-income people that meet certain age, income, and resource requirements. People who have certain medical conditions such as blindness or who are pregnant may also qualify. Whether a person is eligible for Medicaid depends on the state where he or she lives.



In general, you should apply for Medicaid if your income is low and you or someone in your family needs health care. A qualified caseworker in your state can give you guidance about your situation. Your child may be eligible for coverage, even if you are not.

To find out more about Medicaid in your state,

- Call the toll free number for your state. A list of toll free numbers is on the CMS Web site at [www.cms.hhs.gov/medicaid/consumer.asp](http://www.cms.hhs.gov/medicaid/consumer.asp).

### **State Children's Health Insurance Program (SCHIP)**

Like Medicaid, the State Children's Health Insurance Program (SCHIP) is a partnership between the federal government and the states. SCHIP is designed to provide health insurance coverage to specific groups of low-income children. Families who earn too much money to be eligible for Medicaid but not enough money to purchase private health insurance may be eligible to get health insurance for their children.

Each state determines how its program is designed, who is eligible, what the benefits are, how costs are shared, and other features. For little or no cost, this insurance pays for children's doctor visits, immunizations, hospitalizations, and emergency room visits.

For more information about SCHIP, go to [www.cms.hhs.gov/home/schip.asp](http://www.cms.hhs.gov/home/schip.asp).

To learn whom you should contact in your state or to read specific information about eligibility in your state, go to Insure Kids Now at [www.insurekidsnow.gov](http://www.insurekidsnow.gov).



### **Other government programs and benefits**

To learn about the government benefits you may be entitled to,

- Call toll free (800) FED-INFO (800-333-4636). Calls are answered Monday through Friday, 8 AM to 8 PM, Eastern Standard Time.
- Web site: [www.govbenefits.gov](http://www.govbenefits.gov)

### **Other public government and private resources that can help**

For women who make too much money to qualify for these federal and state programs but who can't afford to pay for health insurance or costly health services, the choices are limited and difficult. Public and private resources may be able to help.

- **“Safety-net” facilities.** Community health centers, public hospitals,

school-based centers, public housing primary care, and special-need facilities. Contact your local or state health department for more information or go to [ask.hrsa.gov/pc](http://ask.hrsa.gov/pc).

- **Free clinics.** Free clinics provide health care services for the uninsured.
- **Prescription drug assistance.** Some states provide prescription drug assistance to women who cannot get Medicaid. Many drug companies will work with your doctor to provide free medicines to those in need. A list of resources can be found at [www.disabilityresources.org/RX.html](http://www.disabilityresources.org/RX.html).
- **Women with cancer.** Women with cancer can find help through a variety of government-sponsored and volunteer organizations. For accurate, up-to-date information on cancer and resources for people dealing with cancer, go to the Web site of the National Cancer Institute ([www.cancer.gov](http://www.cancer.gov)). You can also visit the Cancer Information Service of the National Cancer Institute on the Internet (<http://cis.nci.nih.gov>). To get answers to specific questions about cancer, call (800) 4-CANCER (800-422-6237), Monday through Friday, 9:00 AM to 4:30 PM to speak with a cancer information specialist. Deaf and hard-of-hearing callers with TTY equipment can call (800) 332-8615.
- **Women with HIV.** The federal Ryan White CARE Act funds health care services for women with HIV/AIDS who do not have health insurance or the financial resources to pay for care. To locate a CARE provider, contact

your local or state health department or call (800) 994-9662.

- **Group health insurance.** Some states and localities, labor unions, professional clubs, associations, and organizations offer low-cost group health insurance to their members. These plans usually cost less than individual insurance and can be worth considering.
- **Temporary insurance.** Some individuals who have been denied health insurance because of a medical condition may be able to obtain coverage through their state's "risk pools." More than 30 states provide this temporary insurance assistance. For more information, go to the Web site of the Health Insurance Resource Center at [www.healthinsurance.org/risk\\_pools](http://www.healthinsurance.org/risk_pools).

### **Protect your health insurance coverage**

If you have health insurance, you should know how to protect that insurance coverage. If you are losing your health insurance because you have lost your job, have reduced hours at work, have gotten a divorce, or have had your spouse die, you have certain rights and protections. These rights are described in the Health Insurance Portability and Accountability Act of 1996, or HIPAA.

#### **Tips: What to do**

- Obtain proof that you had previous health insurance coverage from your employer.

- Apply for COBRA, which stands for the Consolidated Omnibus Budget Reconciliation Act of 1985. COBRA requires most employers that have 20 or more employees to allow you to continue your health insurance for 18 months, but you must pay the full premium cost of the insurance. Ask your employer's human resources office about when and how you should apply for these benefits.
- Consider your health insurance situation carefully before agreeing to certain terms and conditions. It is especially important to think about your health care needs when you are separated from your spouse, divorced, or are a retiree with annuities.
- In a legal separation or divorce proceeding, you can get a court order to provide your children with health insurance under the health plan of the noncustodial parent. This act is called a qualified medical child support order.
- Act quickly to get the right information to protect you and your family. File any required forms promptly. Strict time limits often apply.

For more information about HIPAA,

- Call (866) 627-7748
- Web site: [www.cms.hhs.gov/HIPAAGenInfo](http://www.cms.hhs.gov/HIPAAGenInfo)

For more information on health insurance choices, go to the Web site of the Agency for Healthcare Research and Quality at [www.ahrq.gov/consumer](http://www.ahrq.gov/consumer). ■



## Praise for *The Healthy Woman*

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- easy-to-understand explanations • practical tips • firsthand health stories from women around the country
- charts showing which medical tests are needed and when • where to go to find more information

As the gatekeepers of their family's health, women will also find resources to help care for the men and children in their lives. Whether you are searching for ways to manage a health problem or prevent one—for you or someone you love—*The Healthy Woman: A Complete Guide for All Ages* has it all.

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ISBN 978-0-16-077183-5



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U.S. Department of Health  
and Human Services,  
Office on Women's Health