



Living Healthy[®] with Diabetes





At Blue Cross Blue Shield of Massachusetts we know that living with diabetes can be challenging. But there are many things you can do to stay as healthy as possible. This brochure contains information about avoiding the complications of diabetes and living well.

What You Can Do

- Know how to care for yourself to prevent complications
- Know when to call your doctor for advice

Remember, early treatment can help keep complications from getting worse. So read over this information carefully. If you have questions, call your doctor or health care professional.

Both Blue Cross Blue Shield of Massachusetts and Blue Care[®]65 cover diabetes services according to the specifics of your individual coverage. If you have questions about your coverage, please call Member Service at the phone number on the front of your ID card.

Information for this booklet has been provided by the Massachusetts Department of Public Health.

3 Important Steps for Controlling Diabetes



While diabetes cannot be cured, it can be controlled. Working with your doctor and following these important steps are your best bet in avoiding the immediate and long-term complications of diabetes, as well as helping you feel better and more in control. It is most important that you check your blood sugar levels regularly, get routine tests and adopt healthy lifestyle habits. Know your numbers!

1. Check Your Blood Sugar

- **Test your blood sugar regularly.**

Checking your blood sugar at home will let you know how you're doing. It will tell you and your doctor whether any changes are needed in your diet, exercise or medication plans.

- **Get your Hemoglobin A1c (HbA1c) checked.**

HbA1c is a blood test given by your doctor that measures your average blood sugar for the last three months. Consider the HbA1c like a “batting average” that summarizes your blood sugar measurement over time. You should have your HbA1c checked as directed by your doctor. The American Diabetes Association recommends HbA1c testing every three to six months. (The target number for this test is under 7%.)

2. Get Routine Tests

- **Lipid profile – yearly.**

Controlling your lipids reduces your risk of heart disease and stroke.

The test measures:

- LDL (“bad”) cholesterol (Target = under 100)
- HDL (“good”) cholesterol
- Total cholesterol
- Triglycerides

- **Urine protein – yearly.**

Checking your urine protein helps identify early kidney problems.

- **Blood pressure – at every visit**

Controlling your blood pressure reduces your risk of heart disease and stroke. (Target = less than 130/85)

- **Foot exam – at every visit**



3 Important Steps for Controlling Diabetes

2. *Get Routine Tests (continued)*

- **Dilated eye exam – yearly.**
This test can identify eye problems early so that they may be treated and their progression slowed.
- **Flu shot – yearly.**
- **Pneumonia vaccine – once in lifetime** (unless requested more frequently by your doctor)

3. *Adopt Healthy Lifestyle Habits*

- **Eat a diabetes-healthy diet every day.** Make sure to follow the meal plans prescribed by your doctor or diabetes educator.
- **Exercise daily.** Regular exercise, including such simple activities as walking, improves blood sugar control, lowers the risk of heart disease and can help control weight. In addition, regular exercise helps you feel better and more in control.
- **Manage your weight.** Eat healthy and stay active!
- **Manage your medications.** Take your medications as directed by your doctor and in response to your blood sugar.
- **Check your feet everyday.** Notify your doctor of any open sores that do not heal.
- **If you smoke, talk with your doctor about quitting!**



Hemoglobin A1c (HbA1c) is a blood test that measures average blood sugar over the past three months. It's the best way to watch your blood sugar over time. Checking your HbA1c regularly tells you if you need to make changes in your diabetes management plan. The American Diabetes Association (ADA) guidelines suggest a target goal of less than 7%. Keeping your HbA1c at or below the recommended level can decrease your risk of developing long-term complications of diabetes.

What You Can Do

- Ask your doctor how often you should have your HbA1c checked. The ADA recommendation is every 3-6 months.
- Know your test results so you stay informed about how well you are controlling your diabetes. The chart below will tell you what your numbers should be.

If Your Hemoglobin A1c is:

Your Average Blood Sugar for the Last 3 Months should be:

4.0%-6.0%	60-120 mg/dl
6.1%-7.0%	121-150 mg/dl
7.1%-8.0%	151-180 mg/dl
8.1%-9.0%	181-210 mg/dl
9.1%-10.0%	211-240 mg/dl
10.1%-11.0%	241-270 mg/dl
11.1%-12.0%	271-300 mg/dl
12.1%-13.0%	301-330 mg/dl
13.1%-14.0%	331-360 mg/dl
Greater than 14%	Greater than 360



Preventing Heart and Vascular Disease

People with diabetes are at greater risk for heart and vascular problems. These problems may include:

- Narrowing or Blocked Arteries
- Heart Attack
- Stroke
- Chest Pain or Angina
- Peripheral Vascular Disease
- One of the best ways to prevent these problems is by making sure you control your cholesterol levels.

About Cholesterol

Cholesterol is a waxy, fat-like substance found in body cells. Our bodies need some cholesterol to function properly. Cholesterol is carried in packages called lipo-proteins. There are two main types of lipo-proteins:

- LDL (Low Density Lipo-protein) – These are the bad guys. They can get stuck inside blood vessel walls.
- HDL (High Density Lipo-protein) – These are the good guys. They actually sweep cholesterol from the arteries and carry it back to the liver where it is reprocessed or eliminated.

About Triglycerides

Triglycerides are another type of fat circulating in the blood and stored in the tissues. Much of the body's fat is stored in the form of triglycerides, which can be used later as energy.



What You Can Do

- Get a fasting lipid (cholesterol and triglyceride) profile at least once a year, or as directed by your doctor.
- Eat a balanced diet that is low in fat and cholesterol.
- Increase your intake of fruits, vegetables and fiber.
- If you drink alcohol, do so in moderation.
- Eat smaller portions.
- Bake, broil, roast or steam your food – don't fry!
- Eat lean cuts of meat.
- Learn how to read food labels. Your health care professional can guide you.
- Maintain blood sugar levels as close to normal as possible.
- Make exercise a part of your daily routine.
- Don't smoke or use other tobacco products.

*Know Your Numbers**

Ideal levels of cholesterol and triglycerides for diabetics are:

Total Cholesterol:	Less than 200
HDL Cholesterol:	Greater than 40 (this is the good stuff, so more is better)
LDL Cholesterol	100 or Lower
Triglycerides:	Less than 150

**Guidelines taken from American Diabetes Association and the National Cholesterol Education Program (NCEP).*



Diabetes and Your Eyes

Diabetes can damage your eyes. Diabetic eye disease includes a group of problems that can affect those with diabetes. Most people who have had diabetes for more than 10 years have some eye damage. If left untreated, diabetic eye disease can cause a loss of vision and may sometimes lead to blindness. Having a complete eye exam once a year is important. It might save your sight!

Diabetic Eye Diseases

- **Cataract:** the lens of the eye becomes cloudy
- **Glaucoma:** the pressure inside the eye rises and damages the optic nerve
- **Retinopathy:** the blood vessels in the back of the eye become weak and bleed, causing damage to the retina

What You Can Do

How to Protect Your Eyes

- Have an eye exam with dilated pupils at least once a year, even if you see well now.
- Keep your blood sugar normal. If your doctor has given you pills or insulin for your diabetes, make sure you take them regularly.
- Test your blood sugar and record the results, so you can discuss them with your doctor.
- Have your blood pressure checked often. If you have been given blood pressure pills, make sure you take them even if you feel fine. High blood pressure can quickly make eye problems worse.
- Call your doctor at once if you have blurred vision, double vision, dark spots, trouble seeing at night, or pain or pressure in your eyes.
- If you need treatment, be sure you are seen by an ophthalmologist (an MD who treats eye diseases).
- Don't smoke! If you do smoke, talk with your doctor about quitting.



Diabetes can lead to serious foot injuries. Poor blood sugar control can lead to:

- Nerve damage and loss of feeling
- A cut or sore that you are not aware you have
- Decreased blood supply and slower, more difficult healing

What You Can Do

How To Check Your Feet

- Wear your glasses.
- Sit down in good light.
- Take off your shoes and socks.
- Use a mirror to look at areas that are hard to see (like the soles of your feet).
- If you have trouble seeing your entire foot, ask someone to help you.

What To Look For

Call your doctor or podiatrist if you have:

- Foot injuries that do not heal within three days
- Swelling
- Redness
- Areas “hot” to touch
- Pain
- Blisters or bleeding
- Calluses, corns or plantar warts
- Ingrown toenails
- Rashes
- Dry skin (cracks between toes)
- Unusual itching
- Change in color (from pale to deep purple or red)
- Thick, rough or hard areas
- Areas of very shiny skin
- Bad smell



Diabetes and Your Feet

What You Can Do (continued)

How To Care For Your Feet

- Keep your blood sugar in control.
- Wash your feet every day with warm water and soap. Dry well, especially between the toes.
- Look at the tops and bottoms of your feet for red areas or sores.
- If your feet are dry, use lotion, but not between the toes.
- If your feet sweat, use powder.
- File your nails straight across after washing your feet. Smooth them with an emery board.
- If you have nerve disease, check with your doctor to see if it is safe to trim your own nails.
- Wear cotton or wool socks or stockings.
- Exercise with your doctor's consent.
- Always wear shoes or slippers that fit well. Check shoes for rocks or other objects before you put them on.
- Make sure your doctor or health care provider checks your feet at each visit.
- Ask your doctor to check the sense of feeling and pulses in your feet at least once a year.

Remember:

- Do not smoke! If you do smoke, talk to your doctor about quitting.
- Do not walk barefoot.
- Do not use chemicals such as alcohol, peroxide or iodine on your feet.
- Do not cut corns or calluses with a razor blade.
- Do not bathe in water that is too hot. Check the water temperature with your arm or elbow before getting into the tub or shower.
- Do not go out in cold weather without wearing warm shoes or boots.
- Do not use an electric heating pad or a hot water bottle on your feet.
- Do not get sunburned. Cover your feet to protect them from the sun.
- Do not wear tight-fitting shoes; wrinkled or tight stockings; tight sandals, straps, garters, or bandages.



Diabetes can lead to kidney damage. When your kidneys are damaged your blood is not filtered properly and waste products build up in your body. Early kidney damage may have no symptoms.

Later symptoms may include:

- Swelling of the feet
- Loss of appetite
- Skin problems
- Poor blood sugar control
- Tiredness

There are things you can do to reduce your chances of developing kidney disease and identify it early if it does develop.

What You Can Do **Protect Your Kidneys**

- Have your urine checked every year by your doctor for albumin and protein. Ask your doctor about the results; albumin should be less than 30, and protein should be negative. Even if the first test is negative, another more sensitive test may be done to check for microscopic amounts of albumin.
- Check your blood pressure at least twice a year. Ask your doctor what your results are and if they are normal for you. The target goal is 130/80 or lower.
- If your doctor has prescribed blood pressure medication for you, stay on it. Ask your doctor if you are eligible for ACE-I (angiotension-converting enzyme inhibitor), a therapy that reduces the risk of kidney failure, and if it is right for you.
- Decrease the amount of protein you eat as advised by your doctor and/or nutritionist.
- Get prompt treatment for urinary infections.
- Follow a regular exercise or activity routine and lose excess weight.
- Check your blood sugar frequently and know your target range.



Diabetes and Kidney Disease

What You Can Do (continued)

Protect Your Kidneys

- If you smoke, talk with your doctor about quitting.
- Create an action plan with your doctor to make sure you are doing what you can to stay healthy!

What Your Health Professional Can Do

- Check your urine as described above, and more frequently if tests are abnormal.
- If your doctor is concerned about your tests, he/she may test your blood to measure how well your kidneys are working.
 - Your doctor may teach you how to decrease foods containing high amounts of protein and salt.
 - Teach you how to monitor your own blood pressure.
 - Identify and treat urinary infections with antibiotics.



Regular physical activity (exercise) is an important part of staying healthy with diabetes. It can help improve blood sugar control and create overall fitness, helping your body better use the insulin it makes and lowering blood sugar levels. A diabetes educator or physical activity physiologist will tailor an individualized physical activity program to your age, what you are physically able to do, and what you like to do!

Physical activity can:

- Help your body better use the insulin it makes and lower your blood sugar levels
- Help keep the blood flowing and the heart pumping
- Lower your blood pressure, weight and cholesterol levels

Physical activity at regular intervals is most helpful in lowering blood sugar levels. Remember, most people on diabetes medication must be careful when starting a physical activity program, as both physical activity and medication lower blood sugar!

What You Can Do

- Check with your doctor before starting any physical activity program.
- Pick a time of day for your activity that is convenient and easy to fit in. That way, you're more likely to stick with it.
- Begin physical activity slowly and start with something easy, like walking.
- Check to see how your blood sugar levels are affected by the activity. Check your blood sugar before and after exercise if you use diabetes medication.
- Carry diabetes identification with you at all times.
- Carry something to eat containing sugar in case your blood sugar gets too low.
- If you have Type I diabetes and your blood sugar level is above 240 mg/dl, test your urine for ketones before exercising. If you find ketones in your urine, don't exercise until your diabetes is in better control.



Physical Activity

What Your Health Professional Can Do

- Help you understand the effect of physical activity on diabetes control
- Help you find activities you enjoy, so that you want to do them on a regular basis
- Fit your physical activity program to your specific health needs
- Teach you when to eat an extra snack before exercise

Frequently Asked Questions

Q: How long do I have to exercise?

A: Begin with a 5-10 minute warm-up of the activity, performed slowly. Gradually increase to 20 minutes of the activity and end with 5 minutes of slow-down and stretching. Generally, about 30 minutes in all, 3-5 times a week.

Q: Do I have to buy a lot of special equipment?

A: Physical activity can be as simple as walking, and does not require special equipment.

Q: How does physical activity help me lose weight?

A: Physical activity helps you lose body fat, instead of muscle, which can happen when cutting down on food alone. Physical activity helps you burn extra calories to speed up weight loss, builds and tones muscles, and helps you relax!



