

Home Blood Pressure Monitoring

By Dr. Rebecca White

Hypertension (high blood pressure) is a big problem in the United States, effecting 40-50% of adults. A part of treatment, whether it is diet, exercise, or medication, is tracking blood pressures. Checking your blood pressure at home can be beneficial not only by putting you in more control of your disease, but also making it easier to change treatment on the basis of your results. If you do decide to do home blood pressure monitoring, you need to be able to get a blood pressure monitor that is right for you. There are several things to think about when picking a monitor; this outlines what to look for in a monitor and the basics in using one correctly.

Selecting A Blood Pressure Monitor

1. Select a cuff that is comfortable. Make sure the lower edge of the cuff is one inch above the elbow and that you can slide one finger under the cuff. Too large of a cuff will make the blood pressure look lower than it really is while too small of a cuff falsely elevates the reading.
2. Select from the four types of monitors that are available.
 - Automatic arm cuffs fit on your upper arm and automatically inflate. Most people can use this type except for people with extremely irregular heartbeats.
 - Manual arm cuffs also fit on your upper arm but you must manually inflate the cuff. These tend to be more difficult to use if you have trouble with dexterity or strength in your hands.
 - Wrist monitors are very convenient, but more expensive and less accurate.
 - Fingertip monitors are also convenient, but less reliable.
3. Make sure the monitor you select has a display that you can easily read. You may also want to have a monitor that has a memory to store values.

Taking Your Blood Pressure

1. Before taking your blood pressure.
 - Sit quietly for at least five minutes.
 - Sit straight up without crossing your legs or ankles.
 - Make sure the arm you use is at chest (heart) level.
 - Support the arm that you use to take the measurement.
 - Wait half an hour after smoking, drinking caffeine, or exercising before taking the measurement.
2. Taking the blood pressure.
 - Remove your sleeve from your arm, or if your sleeve is loose, roll it up.
 - If you are using an arm model, rest your arm at chest level with your palm upwards. If using a wrist model keep your wrist at heart level.

- Activate the blood pressure cuff according to instructions for your model.
- If you need to repeat the measurement, wait a few minutes to do so.
- Save readings to take to your health care provider.

There are many types of monitors on the market. According to *Consumer Reports* the best automatic monitors are made by Omron (HEM-711AC, HEM-712C, HEM-712CLC, and HEM-741 CREL), and Lifesource One Step (UA-767V, UA-767VL). The price runs between \$45 and \$110. Lifesource makes good arm manual models (BPM-UA-702V, UA-702VL) costing between \$50 and \$60. Again *Consumer Reports* rates Omron (HEM-637) as making the best wrist model.

Now that you have successfully taken your blood pressure, what do the numbers mean? The top number is called the systolic pressure and measures the pressure when the heart squeezes during a beat. The bottom number is called the diastolic pressure and shows the pressure while the heart relaxes in-between beats. The higher these numbers are above normal, the harder your heart is working. It is this increased work which can eventually make the heart not work as well and eventually fail. Plan to take the readings to your health care provider. They will be able to discuss if your numbers are appropriate for you, and how to lower elevated ones.