Self-measurement of blood pressure

Advantages of measuring your blood pressure at home

Blood pressure changes from moment to moment. Some of the things that can affect blood pressure are body position, emotional state, physical activity and sleep. If you have high blood pressure, altering your lifestyle may be all that is required to lower it. In other cases, you may also need to take one or more medicines.

Measuring your blood pressure at home and/or at work, with your own equipment, gives your doctor a guide to what your blood pressure is outside the clinic during your usual activities. It will also help your doctor to know whether any prescribed treatment is working.

Taking your blood pressure at home will give you a better understanding of your condition and will help you to be more actively involved in your own management.

Considerations when buying a machine

We can not endorse or recommend a particular brand of equipment for measuring blood pressure. However, here are some things to consider if you decide to buy one.

- Blood pressure machines can be bought through your local pharmacy or from medical equipment suppliers.
- Choose brand names of larger companies that are familiar to either you or your doctor.
- Many of these devices have not been formally tested for accuracy so it is important to remember that they are only a guide.
- Make sure that the cuff is the right size for you if your arm is particularly large or small.
- Home blood pressure machines should be calibrated against the doctor’s mercury sphygmomanometer every six months. Ask your doctor to use yours and theirs to compare readings.
On most home blood pressure machines, the higher (systolic) blood pressure reading is measured more reliably than the lower (diastolic) blood pressure reading.

Doctors rarely change treatment on the basis of a single reading of blood pressure. It is only several consistently high readings that are likely to be important.

In general, there are two types of machines:
- aneroid
  - very accurate when regularly calibrated
  - relatively inexpensive when compared to the electronic devices
  - easy to maintain and repair
  - usually require more training to learn the method of taking a blood pressure reading
  - some people may not be able to use the machine because of hearing difficulties, poor eye sight and difficulty in turning the valve slowly enough to deflate the cuff
- digital
  - easier to use than aneroid devices
  - vary widely in reliability and cost (but usually more expensive than aneroid devices).

There are several things you can do to achieve accurate readings.

Develop a good technique.
- Undergo a practical instruction session by a trained professional (doctor, nurse or technician).
- Get the trained professional to observe your technique.
- Make sure that the machine comes with easy-to-understand instructions.
- Get a trained professional to check your technique about twice a year.

Be relaxed and comfortable when the reading is taken.
- Select a comfortable place without distractions, such as loud music or the television.
- Relax for at least five minutes before taking the recording.
- If you have been asked to measure your blood pressure while standing, wait at least two minutes after standing to record your blood pressure.
- Try to avoid drinking caffeinated drinks (such as tea, coffee or cola) or having a cigarette (if you have not yet given up smoking) in the two hours before taking a reading, as these can cause your blood pressure to rise.
- Where possible, your blood pressure should be measured under the same conditions, at about the same time of the day, in the same manner each time.
- It is useful to take a blood pressure reading at least twice on each occasion.
Record your blood pressure each time in a blood pressure record chart (don’t rely on your memory). Include comments about any stressful events or symptoms that may be relevant (see example blood pressure record chart below).

**How often should I measure my blood pressure?**

This depends on your condition and treatment, and on what your doctor thinks is most relevant for you.

Typically, over the course of a week, you may be asked to measure your blood pressure first thing in the morning, two to four hours after taking your blood pressure medicine, and just before going to bed.

Once your doctor is happy with your blood pressure levels, you should take regular readings about two to three times a week. This will help you to keep up your skills in taking accurate readings. Your doctor may also ask that you take your blood pressure while lying down and/or standing.

Your blood pressure chart should be taken to your doctor at each visit. For some people who have high blood pressure readings at the clinic, your doctor may need your own recordings to help guide treatment decisions.

Here is an example of the details that your doctor will find helpful when looking at your blood pressure record chart.

**Example blood pressure record chart**

<table>
<thead>
<tr>
<th>Date and time</th>
<th>Systolic blood pressure</th>
<th>Diastolic blood pressure</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/08/08, 7am</td>
<td>140</td>
<td>80</td>
<td>Just woke up</td>
</tr>
<tr>
<td>2/08/08, 12.30pm</td>
<td>160</td>
<td>75</td>
<td>Had the grandchildren over</td>
</tr>
<tr>
<td>2/08/08, 2pm</td>
<td>145</td>
<td>60</td>
<td>Resting, taken medication</td>
</tr>
</tbody>
</table>

A blank record chart can be downloaded from our website (available at [www.heartfoundation.org.au/Heart_Information/Heart_Conditions/Blood_Pressure](http://www.heartfoundation.org.au/Heart_Information/Heart_Conditions/Blood_Pressure)).
Further information

For more information, contact our Health Information Service by calling 1300 36 27 87 (for the cost of a local call) or emailing heartline@heartfoundation.org.au.

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