

High blood pressure (hypertension)

Section 1 of 6: The basics

Understand blood pressure numbers, diagnosis, treatment, and daily care.

What should I do now?

Call 911

Call 911 for chest pressure, severe trouble breathing, or sudden weakness, trouble speaking, or vision changes. Do not wait for a BP reading. Very high BP with these symptoms is an emergency.

Contact your care team

If the top number is above 180 or the bottom number above 120 without concerning symptoms, repeat after at least 1 minute. If still this high, contact your clinician immediately. Do not take extra medicine without instructions.

Keep your care plan

Keep your treatment and follow-up plan. Bring questions, readings, and your medication list.

SECTION 1

What is high blood pressure?

Blood pressure is the force of blood pushing against the walls of your arteries. Your heart creates this pressure as it pumps blood throughout your body.

High blood pressure, also called hypertension, means this pressure stays higher than it should over time. This makes your heart work harder and

can gradually damage your blood vessels and organs.

What do the two numbers mean?

A reading such as 120/80 contains two measurements:

- Top number - systolic: Pressure when your heart squeezes.
- Bottom number - diastolic: Pressure while your heart relaxes between beats.

Blood pressure is measured in millimeters of mercury, written as mm Hg. Either number can be too high.

Understanding your numbers

Category	Top number	Bottom number
Normal	Below 120	And below 80
Elevated	120-129	And below 80
Stage 1 hypertension	130-139	Or 80-89
Stage 2 hypertension	140 or higher	Or 90 or higher

If the numbers fall into different categories, use the higher category. For example, 125/92 is Stage 2 hypertension because the bottom number is high.

One elevated reading does not usually establish a diagnosis. Your care team looks at repeated measurements and the circumstances in which they were taken.

Why does it matter?

Over time, uncontrolled blood pressure increases the risk of:

- Heart attack and stroke.

- Thickening of the heart muscle and heart failure.
- Kidney damage.
- Vision problems.

Treatment protects your future health - even when you feel completely well.

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Section 2 of 6: Symptoms

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SECTION 2

What symptoms might I feel?

Most people with high blood pressure have no symptoms. You can feel well while your blood pressure is damaging your heart, arteries, brain, or kidneys.

This is why measuring your blood pressure matters. You cannot reliably tell whether it is high based on how you feel.

What about headaches or dizziness?

Headaches and dizziness can have many causes. They do not reliably tell you whether your blood pressure is high. Likewise, having no headache does not mean your pressure is normal.

When is it an emergency?

Call 911 for chest pain, severe shortness of breath, sudden weakness or numbness, trouble speaking, or sudden vision changes. Do not wait to check your blood pressure or drive yourself.

A top number above 180 or a bottom number above 120, together with these symptoms, can indicate a hypertensive emergency.

What if my reading is very high but I feel well?

If your top number is above 180 or your bottom number is above 120:

- Sit quietly and repeat the measurement after at least one minute.

- If it remains this high, contact your healthcare professional immediately.
- If concerning symptoms develop, call 911.

Do not take extra medication unless your care team instructs you to do so.

Do not wait for symptoms before addressing high blood pressure.

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Section 3 of 6: Diagnosis

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SECTION 3

How is high blood pressure diagnosed?

High blood pressure is usually diagnosed from repeated, properly measured readings. Your care team may use measurements from office visits, home monitoring, or a wearable blood pressure cuff.

Why are repeated measurements important?

Blood pressure changes throughout the day. Stress, pain, exercise, caffeine, and measurement technique can affect an individual reading.

Your care team reviews the pattern of readings rather than relying on one routine measurement.

Measuring at home

Use a validated automatic upper-arm monitor with a cuff that fits your arm. Bring it to an appointment so your care team can check its accuracy and your technique.

For a reliable reading:

- Avoid smoking, caffeine, and exercise for 30 minutes beforehand.
- Empty your bladder.
- Sit quietly for at least five minutes.
- Keep your back supported, feet flat, and legs uncrossed.
- Place the cuff on bare skin and support your arm at heart level.

- Do not talk during the measurement.
- Take two readings, one minute apart, and record both.

Ask your care team when and how often to measure. Bring your readings to follow-up visits.

Office and home readings may differ

White-coat hypertension means readings are high in the office but normal outside it.

Masked hypertension means readings appear normal in the office but are high at home.

Home measurements help identify these patterns. Sometimes your clinician recommends 24-hour ambulatory monitoring: a cuff you wear that automatically measures blood pressure during daily activities and sleep.

Will I need other tests?

Your clinician may order blood and urine tests to check kidney function, electrolytes, and other health risks. An EKG or additional testing may be appropriate to assess effects on the heart or investigate a possible underlying cause.

Once the diagnosis is confirmed, your care team will explain your blood pressure goal and treatment plan.

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Section 4 of 6: Treatment options

Understand blood pressure numbers, diagnosis, treatment, and daily care.

SECTION 4

How is high blood pressure treated?

Treatment lowers your blood pressure and reduces the risk of stroke, heart attack, heart failure, and kidney damage. It usually combines healthy habits with medication when needed.

For most adults, the treatment goal is below 130/80 mm Hg. Your clinician will personalize your goal based on your health and how you tolerate treatment.

1. Healthy habits

Changes that help lower blood pressure include:

- Reduce sodium: Limit salty packaged foods, processed meats, and restaurant meals.
- Choose heart-healthy foods: The DASH eating plan emphasizes vegetables, fruit, whole grains, beans, and low-fat dairy.
- Stay active: Build a regular exercise routine appropriate for your health.
- Work toward a healthy weight: Even modest weight loss can help.
- Limit or avoid alcohol.
- Get good-quality sleep and manage stress.

These habits remain important even if you take medication.

2. Blood pressure medications

Common options include:

Medication group	How it helps
ACE inhibitors or ARBs	Help blood vessels relax by blocking signals that make them tighten.
Calcium channel blockers	Relax blood vessels so blood moves through more easily.
Thiazide-type diuretics	Help the kidneys remove extra sodium and water.

Other medications may be used when you have additional heart conditions or blood pressure that remains difficult to control.

Many patients need more than one medication. Different medicines work together, sometimes in a single combination pill.

Your clinician considers your readings, cardiovascular risk, kidney function, and other conditions when deciding when to start medication.

3. Address contributing causes

Sometimes another condition or medication contributes to high blood pressure. Your care team may evaluate these causes and treat them alongside your blood pressure.

The goal is lasting control, rather than briefly lowering one reading.

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Section 5 of 6: Living with your condition

Understand blood pressure numbers, diagnosis, treatment, and daily care.

SECTION 5

Living well with high blood pressure

High blood pressure usually needs ongoing management. A normal reading while taking medication often means your treatment is working.

Take medications consistently

Take your medication as prescribed, even when you feel well. Do not stop it because your readings improve.

Tell your care team about side effects, cost, or difficulty remembering doses. They can help adjust your plan.

Keep a home blood pressure record

Measure using the technique described in Section 3 and follow your care team's schedule. Record your readings and bring them to appointments.

Look at the pattern over time. Do not change your medication based on a single reading unless your clinician has given you specific instructions.

Make healthy habits sustainable

Choose changes you can maintain: cook more meals at home, read sodium labels, walk regularly, and establish a consistent sleep routine.

Keep follow-up visits and lab appointments

Visits help your care team review your readings and adjust treatment. Some medications require blood tests to monitor kidney function and electrolytes, including potassium.

Know when to get help

Contact your care team if readings repeatedly remain above your goal or you develop dizziness, weakness, or unusually low readings.

For chest pain, severe shortness of breath, or signs of a stroke, call 911.

If your top number is above 180 or your bottom number is above 120 without symptoms, repeat the measurement after at least one minute. If it remains this high, contact your healthcare professional immediately.

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Section 6 of 6: Your next steps

Understand blood pressure numbers, diagnosis, treatment, and daily care.

SECTION 6

Your next steps

Leave each appointment knowing your blood pressure goal, medication plan, and follow-up schedule.

What should I bring?

- Your home blood pressure record.
- Your monitor, when requested, to check its accuracy.
- An updated list of medications, supplements, and over-the-counter products.
- Notes about symptoms, side effects, or missed doses.
- Questions you want to discuss.

Questions to ask your care team

- What is my blood pressure goal?
- How often and at what times should I check it?
- What does each medication do?
- Which side effects should I report?
- What should I do if I miss a dose?
- Do I need blood or urine testing?
- Could another condition be contributing to my blood pressure?

- Which readings should prompt a call?
- When is my next appointment?

Understand your follow-up plan

You may need closer follow-up after starting or changing medication. Once your blood pressure is controlled, regular visits remain important.

Do not wait until you feel unwell to manage your blood pressure. Consistent treatment protects your health over the years ahead.

Sources & further reading

AHA: Understanding blood pressure

AHA: Home blood pressure monitoring

NIH: Treatment

NIH: Living with high blood pressure

ACC: 2025 blood pressure guidelines

Updated October 2026. Educational information; your own care plan may differ. Medical illustrations are simplified examples for teaching.