

Hypertension (High Blood Pressure) in Older Adults

High blood pressure, or hypertension, occurs when the force of blood against artery walls is consistently too high.

Index

- [What is Hypertension?](#)
- [How is it measured?](#)
- [Blood pressure risk categories](#)
- [Measuring blood pressure from home](#)
- [Risk Factors](#)
- [Healthy Lifestyle Behaviours](#)
- [Treatments / Medications](#)
- [Special Considerations for Older Adults](#)
- [Related Videos and Infographics](#)

What is Hypertension?

High blood pressure, or hypertension, occurs when the force of blood against artery walls is consistently too high.

Common in older adults, high blood pressure is the number one risk factor for stroke and a significant risk factor for heart disease.

How is it measured?

Your Blood Pressure reading has two numbers:

An example of a healthy reading is 115 over 76.

The top number (115) is the systolic blood pressure, which measures the pressure on your artery walls when your heart beats or contracts.

The bottom number (76) is the diastolic blood pressure, which measures the pressure on your artery walls between beats when your heart relaxes.

Ask your doctor or other healthcare provider to check your blood pressure. You can also self-measure at local pharmacies and with home blood pressure devices, but it is challenging to get accurate results without careful preparation.

Blood pressure risk categories

- Low risk is below 120 over 80.
- Medium risk is 121 to 134 over 80 to 84
- High risk is above 135 over 85.

Measuring blood pressure from home

Your doctor may ask you to self-measure using a blood pressure monitor from home.

Tips for getting accurate results:

- Make sure you purchase a reliable monitor. You can find a list of recommended devices on the Hypertension Canada website.
<https://hypertension.ca/public/recommended-devices>
- Do not exercise, smoke, or drink coffee or alcohol for 30 minutes before the test.
- A full bladder can affect the measurement.

- Sit quietly for 5 minutes before the test.
- Sit with your back supported on a chair with your feet on the floor (not cross-legged).
- Support your arm so your elbow is at the level of your heart.
- Don't talk during the test.
- Measure your blood pressure according to the machine's instructions. Wait a minute, then take a second reading. If the readings are close, average them. If not, repeat and average the three readings.
- Remember to record your blood pressure readings and the time of day when they are taken.

The variations in blood pressure measurements are not surprising. Blood pressure is typically lowest in the morning and then steadily rises. It responds dynamically to meals, drinks, movements, and moods.

Risk factors that make you more likely to have high blood pressure include:

1. Being over age 55
2. Having biological family members with high blood pressure, cardiovascular disease, or diabetes.
3. Having certain medical conditions, including metabolic syndrome, chronic kidney disease, obstructive sleep apnea, or thyroid disease.
4. Being overweight.
5. Needing more exercise.
6. Eating foods high in sodium.
7. Smoking .
8. Drinking too much.
9. Being over-stressed.

Healthy Lifestyle Behaviours

Exercise regularly, maintain a balanced diet, reduce alcohol consumption, refrain from smoking, and manage stress to help decrease high blood pressure.

Treatments / Medications

Classes of commonly prescribed blood pressure medications:

Angiotensin-converting enzyme (ACE) inhibitors block the production of the angiotensin II hormone, which the body uses to manage blood pressure. When the medicine blocks angiotensin II, your blood vessels don't narrow.

Angiotensin II receptor blockers (ARBs) block this same hormone from binding with receptors in the blood vessels. ARBs work like ACE inhibitors to keep blood vessels from narrowing.

Calcium channel blockers prevent calcium from entering the muscle cells of the heart and blood vessels. This action allows the vessels to relax.

Diuretics (water or fluid pills) flush excess sodium from your body, reducing the amount of fluid in your blood.

Beta blockers block the effects of the hormone epinephrine, also known as adrenaline, and help the heart beat slower and with less force.

Renin inhibitors inhibit the renin activity responsible for hydrolyzing angiotensinogen to angiotensin I, reducing the formation of angiotensin II and reducing blood pressure.

Special Considerations for Older Adults

Recent research suggests that reducing systolic blood pressure to less than 130 may not be appropriate for frail people or those over 75. In older adults, isolated systolic hypertension occurs when the first number (systolic) is 130 or higher but the second number (diastolic) is less than 80. It is caused by the stiffening of the

major arteries due to age, which can lead to serious health issues. Symptoms include shortness of breath, dizziness upon standing quickly, and an increased risk of falls.

High blood pressure, or hypertension, is a major health problem that is common in older adults.

The good news is that most people can control their blood pressure with healthy lifestyle changes and medication.

Sources:

High blood pressure <https://www.heartandstroke.ca/heart-disease/risk-and-prevention/condition-risk-factors/high-blood-pressure>

High Blood Pressure

(Hypertension) <https://my.clevelandclinic.org/health/diseases/4314-hypertension-high-blood-pressure>

Some home blood pressure monitors aren't accurate

<https://www.health.harvard.edu/blog/home-blood-pressure-monitors-arent-accurate-201410297494>

Isolated systolic hypertension: A health concern?

<https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/expert-answers/hypertension/faq-20058527>

New research supports the move to raise the blood pressure target for frail older people

<https://evidence.nihr.ac.uk/alert/new-research-supports-the-move-to-raise-the-blood-pressure-target-for-frail-older-people/>

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