

When Measuring Blood Pressure, Which Number Is Most Important?

Source: Harvard Health Letter

This question comes up often, perhaps because doctors and patients alike tend to pay more attention to the top (first) number, known as systolic pressure. It reflects the amount of pressure inside the arteries as the heart contracts. The bottom (second) number, diastolic pressure, is always lower since it reflects the pressure inside the arteries during the resting phase between heartbeats.

As it turns out, both systolic and diastolic blood pressure are important. Per the most recent guidelines, you have what's called elevated blood pressure if your systolic blood pressure reading is 120 to 129 mm Hg (which stands for millimeters of mercury). Once your systolic reading reaches 130 or higher or your diastolic reading is 80 or higher, you're considered to have high blood pressure, or hypertension.

Most people have what's known as essential or primary hypertension, which means it's not caused by a medical condition, medication, or substance. Primary hypertension can affect both systolic and diastolic pressure to a similar degree. But sometimes, especially in older people, it affects mainly the systolic pressure; this is called isolated systolic hypertension.



Why does this happen? As you age, your arteries tend to become less elastic and less able to accommodate surges of blood. Blood flowing through your arteries at high pressure can damage the inner lining of these vessels, accelerating the buildup of cholesterol-laden plaque. This further stiffens and narrows the arteries, a condition known as atherosclerosis. Because the same volume of blood has to pass through a smaller area, the systolic pressure tends to rise, while the diastolic pressure remains the same or gradually falls over time. In some people with isolated systolic hypertension, the diastolic pressure reading may drop into the 50s or even the 40s.

Most studies show a greater risk of cardiovascular disease (especially strokes) related to high systolic pressure as opposed to elevated diastolic pressure. But in 2019, an eight-year-long study involving more than 1.3 million adults found that while elevated systolic pressure had a greater effect on cardiac outcomes, high diastolic readings also affected a person's risk, regardless of the systolic reading.

If you are checking your blood pressure at home, to ensure accurate readings, sit comfortably with your back supported, your feet flat on the floor, and your arm resting on a table with your palm facing up. If needed, support your arm with a pillow so that your elbow is at the level of your heart.



