High Blood Pressure in Children

What is high blood pressure?
Blood pressure is the force of blood against the inside walls of the arteries—the blood vessels that carry blood from the heart to the rest of the body. There are many different reasons why this force can increase. When this happens, it is called high blood pressure (also called hypertension [hi-per-TEN-shun]).

Over time, high blood pressure can damage your child’s arteries, reducing blood flow to the organs, and making the heart work harder. If not controlled, high blood pressure can lead to heart disease, stroke, kidney disease, blindness, and other health problems.

How is high blood pressure diagnosed?
Your child’s healthcare provider will check your child’s blood pressure at every office visit. A blood pressure cuff is wrapped around your child’s arm. The cuff is attached to a machine or gauge that pumps air into the cuff. The cuff is inflated to stop the flow of blood. The pressure of the blood is measured as air is slowly released from the cuff and blood begins to move through the blood vessels again.

Your child’s healthcare provider will note whether or not your child’s blood pressure is normal, borderline high, or high for their age, height, and gender. If it’s borderline high or high, it will be checked several times to see if the high blood pressure happens on a regular basis.

Blood pressure is measured with two numbers and is commonly written as 120/80 mm Hg (or 120 over 80 millimeters of mercury). The first number is the systolic [si-STAHL-lik] pressure, or the force of blood that comes with a heartbeat. The second number is the diastolic [dy-uH-STAHL-lik] pressure, or the force of blood between heartbeats.

What causes high blood pressure?
In adults, high blood pressure develops over many years. This is called primary (or essential) high blood pressure. In children, it is more common for high blood pressure to be caused by a medical condition such as kidney or heart disease. This is called secondary high blood pressure. Certain things can raise your child’s risk for high blood pressure. These are called risk factors.

Risk factors that can be changed include:
• Not being active
• Being overweight or obese
• Eating a diet high in salt or fat
• Smoking
• Being stressed or anxious

Risk factors that can’t be changed include:
• Family health history
• Ethnicity/race
• Medical conditions
What are the symptoms of high blood pressure?

High blood pressure does not cause symptoms in most children or adults. However, sometimes children with high blood pressure may have:

- Headaches
- Nausea
- Dizziness
- Blurry vision
- Nose bleeds

How is high blood pressure treated?

If your child has primary high blood pressure, the healthcare provider will recommend simple changes that you and your child can make at home. These include:

- **Being active every day.** Regular activity is one of the best ways to keep high blood pressure under control. Encourage your child to be active for at least 60 minutes every day.
- **Weight control.** Carrying extra weight can increase your child’s blood pressure. Losing even a few pounds can lower your child’s blood pressure and help keep it under control.
- **Diet.** Eating a healthy diet that includes 8-10 servings of fresh vegetables and fruits every day can lower your child’s blood pressure. Cutting back on salt, sugar-sweetened drinks, and premade foods that come in cans, boxes, and bags will also help. Ask your child’s healthcare provider for a copy of the Intermountain fact sheet *High Blood Pressure and DASH Diet* for suggestions on family-friendly, low-sodium food choices.

**Smoking.** The smoke and nicotine from cigarettes, vapes, e-cigarettes, and hookahs can harm your child’s arteries and increase blood pressure. The best thing you can do for your health and your child’s health is to quit using nicotine and tobacco. Ask your healthcare provider for a copy of Intermountain’s booklet, *Quitting Tobacco: Your Journey to Freedom* to help you kick the habit.

**Stress.** Help your child learn healthy ways to deal with stress. Exercise, dance, playing an instrument, or arts and crafts are some healthy ways for children and teens to express their emotions.

If these simple changes are not enough to control your child’s primary high blood pressure, medicine may be recommended. It is very important that your child take their blood pressure medicine every day, even if they don’t seem sick.

Sometimes a child’s blood pressure will stay high, even with medicine and diet and exercise changes. If this is the case, and your child has other health problems, more tests may be needed to find the best way to manage your child’s high blood pressure.

If your child has secondary high blood pressure, your child may need blood and urine tests, and an ultrasound to evaluate and manage the health condition that is causing the high blood pressure.

If your child’s high blood pressure is not treated, it could damage their heart, kidneys, eyes, and other organs.