Fact Sheets for Families

High Blood Pressure

We usually associate high blood pressure (hypertension) with adults. However, hypertension often begins in childhood, and children with high blood pressure are very likely to become adults with high blood pressure. Recent studies show that high blood pressure is on the rise in American children and adolescents. Like the increase in Type 2 (adult-type) diabetes among children, the increase in hypertension is linked to the epidemic of childhood obesity. Hypertension can cause damage to the heart, kidneys, brain and eyes.

What is hypertension in children?

There is no set of established blood pressure ranges to indicate high, borderline, normal or low readings for children. Instead, normal ranges vary based on a number of factors such as age, gender and height. Blood pressure above the 90th and below the 95th percentile for gender, age and height is considered "high-normal" or pre-hypertension. A blood pressure level at or above the 95th percentile is defined as hypertension. This means that 95 percent of children at the same age, gender and height have blood pressure below this number.

What are the types of hypertension?

Primary hypertension, also called essential hypertension, has no known cause, and is more common in adults. **Secondary hypertension** is caused by a separate underlying condition and is the more common type to occur in children. Underlying causes include kidney disease, heart disease, endocrine disorders such as diabetes, obesity, excessive salt intake, lack of physical activity, lead poisoning, etc.

What problems does hypertension cause?

High blood pressure is a sign of an overworked heart and blood vessels. If it continues for some time or becomes worse, the extended pressure can lead to heart failure, stroke, and damage to the kidneys, eyes and other organs.



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How is hypertension treated?

The goal of treatment for children with hypertension is to reduce blood pressure to the 95th percentile (or the 90th percentile if other conditions are present). Increases in blood pressure can be prevented and often controlled by changes in lifestyle, including weight reduction (for overweight children) and regular physical activity. These changes need to be family-based, rather than just targeting the child. Participating in sports, restricting processed, high-fat and high-salt foods, and providing a balanced, nutritious diet will also help. If hypertension cannot be controlled through lifestyle changes, medication may be needed. The drug treatment will depend on the causes of hypertension and response to treatment.

When should we screen for hypertension?

Since hypertension is often without symptoms, early detection is important. A new report recommends that screening children for high blood pressure begin at age 3. Blood pressure of children younger than 3 years should be measured if they were born preterm or at low birth weight, had a difficult or prolonged hospital stay, have congenital heart disease or any other condition that can cause high blood pressure, or receive medications that increase blood pressure.

When should you call a health care provider?

Call your child's health care provider if your child has high blood pressure and develops a persistent, severe headache, dizziness, shortness of breath, visual disturbances or unusual fatigue. (AAP, 2004)

Can medication be given in child care?

If your child needs medications during child care hours or has other special health needs, talk to your provider about the program's policies related to medication administration and the inclusion of children with special health concerns.

References and Resources

The Fourth Report on the Diagnosis, Evaluation, and Treat-ment of High Blood Pressure in Children and Adolescents. Pediatrics, August 2004, Volume 114, Number 2, Part 3 of 3.

American Academy of Pediatrics, Caring for young baby and young child birth to age 5. Fourth Edition, 2004.