

The European Society of Hypertension Guidelines in Children and Adolescents recommended that blood pressure should be measured in children starting from age 3 years. Blood pressure is a vital sign of human health. It is measured by noninvasive methods that are available at all levels of health care and is simple and economical. The harm that can be done by missing a high blood pressure clearly exceeds any inconvenience in taking a blood pressure measurement. The prevalence of arterial hypertension among children and adolescents is 3–5%, and lower in neonates and infants (ranging from 0.2% to 0.8%). It increases with age, reaching about 10–13% in 18-year-olds. An elevated blood pressure is the most significant potentially reversible cardiovascular risk factor, so detecting an elevated blood pressure is critical to preventing cardiovascular disease and promoting a healthy lifestyle. Blood pressure must, of course, first be measured, especially since an elevated blood pressure may not cause symptoms and go on unnoticed.

Blood pressure should be measured three times in children and adolescents with an interval of 3 minutes apart, and then the average of the last two readings should be evaluated to determine the child's or adolescent's blood pressure levels. A calculator to evaluate blood pressure in children and adolescents has been developed as a useful instrument for paediatricians and other clinical professionals working with children and young people in Europe and elsewhere. The calculator is based on the 2016 European Society of Hypertension guidelines for the management of high blood pressure in children and adolescents which can be accessed free of charge in this link. <https://hyperchildnet.eu/blood-pressure-calculator/>