

Lipid Screening in Children & Adolescents Guideline

Guideline History

Date Approved	05/03, 10/03, 10/05, 10/07
Date Revised	10/07
Date Reviewed	10/07
Next Review Date	10/09

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Key Points

- Goal is to identify and treat children whose hypercholesterolemia and elevated LDL predicts increased risk of CHD.
- Screen children and adolescents whose parents or grandparents at an age of 55 or younger underwent diagnostic coronary arteriography and were found to have coronary atherosclerosis (including those who have had balloon angioplasty or coronary artery bypass surgery).
- Screen children and adolescents whose parents or grandparents, at 55 or younger had a documented myocardial infarction, angina pectoris, peripheral vascular disease, cerebrovascular disease, or sudden cardiac death.
- Screen the offspring of a parent with an elevated blood cholesterol level (240 mg/dL or higher)
- For children and adolescents whose parental history is unobtainable, particularly those with other risk factors, physicians may choose to measure cholesterol levels to identify those in need of nutritional or medical advice.
- Such risk factors include smoking, obesity, DM, high blood pressure, or diets high in cholesterol and saturated fats.

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Lipid Screening in Children & Adolescents Guideline Algorithm

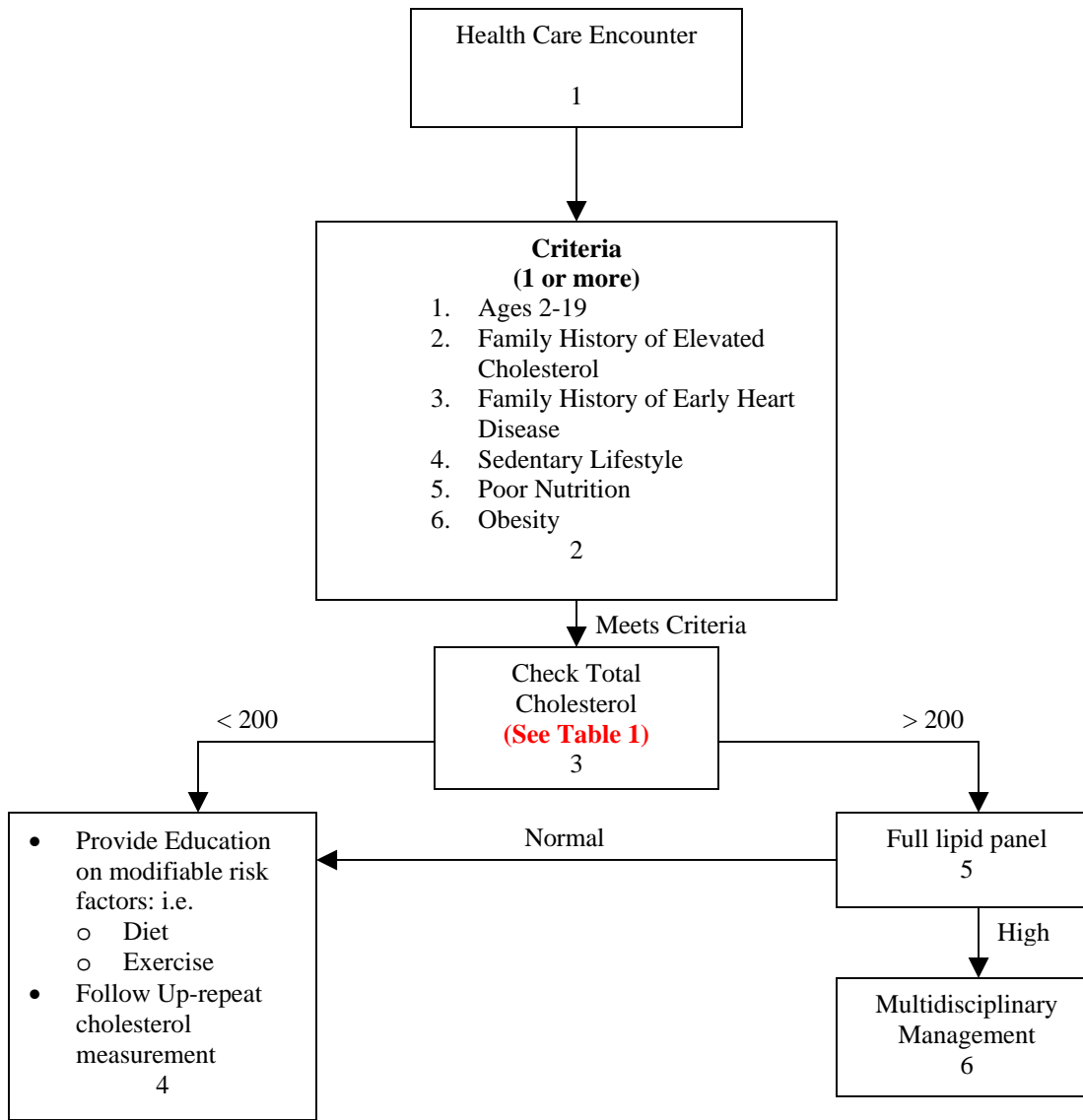


Table 1

Cholesterol Levels Ages 2-19				
Category	Cholesterol (mg/dL)	LDL (mg/dL)	HDL (mg/dL)	Triglyceride (mg/dL)
Acceptable	< 170	< 110	≥ 35	≤ 150
Borderline	170-199	110-129		
High	> 200	> 130		

Source: Adapted from NHLBI/AHA Not appropriate to test patients < 2 years of age. For those older 20 or older, use Adult Guideline

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These Guidelines are promulgated by Sentara Healthcare (SHC) as recommendations for the clinical management of specific conditions. Clinical data in a particular case may necessitate or permit deviation from these Guidelines. The SHC Guidelines are institutionally endorsed recommendations and are not intended as a substitute for clinical judgment.

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Annotations

1. Providers should attempt to identify and treat children whose hypercholesterolemia and elevated LDL predicts increased risk of CHD.
2. The NHLBI, recommends that cholesterol testing begin at age 2 for any child who has one or more of the following criteria.
 1. Family History of Elevated Cholesterol
 2. Family History of Early Heart Disease
 3. Sedentary Lifestyle
 4. Poor Nutrition
 5. Obesity
3. A cholesterol screening is a profile of the fats in the blood. Total cholesterol cutoff is 200 mg/dL.
4. Provide family with education and recommendation in regard to dietary modification, increasing physical activity, & follow up.
5. A complete lipid panel shows the actual levels of each type of fat in the blood. This panel measures the levels of:
 - Total cholesterol.
 - Triglycerides.
 - High-density lipoprotein (HDL) cholesterol.
 - Low-density lipoprotein (LDL) cholesterol.
 - Very-low-density lipoprotein (VLDL) cholesterol.
 - The ratio of total cholesterol to HDL.
 - The ratio of LDL to HDL.AHA recommends an average of three fasting lipid profiles as a baseline for guiding treatment modalities.
6. Multidisciplinary management can include: pediatricians, nurses, nutritionists, dieticians, exercise trainers, case managers, & pharmacists, etc. The National Cholesterol Education Program (NCEP) and American Heart Association (AHA) recommends an individualized/high risk and population based approach with an emphasis on assessment and management, and lifestyle modification. If medication is required they no longer fit this guideline.

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Resources

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