

Dyslipidemia Risk Assessment

CHILD AND TEEN CHECKUPS (C&TC) FACT SHEET FOR PRIMARY CARE PROVIDERS

C&TC Requirements

General

A *risk assessment* for dyslipidemia is required at the following C&TC visits, to determine if laboratory testing or other evaluation or treatment is indicated:

- At age 2, 4, 6 and 8 years of age.
- At least once between the following age ranges: 9-11 years, 12-16 years, and 17-20 years of age.

Universal dyslipidemia blood testing is *not* required for C&TC; however, children with positive risk factors should receive appropriate laboratory testing.

Personnel

Review and interpretation of the dyslipidemia risk assessment should be completed by a licensed health care professional (physician, nurse practitioner, physician assistant, or a qualified registered nurse who has completed the 3-day C&TC Comprehensive Training provided by the Minnesota Department of Health).

Documentation

Document that risk assessment for dyslipidemia was done, along with appropriate counseling and follow-up. Document any laboratory tests that were ordered. It is not necessary to list lab test results on the C&TC documentation form, but they should be documented elsewhere in the patient's health record.

For documentation examples, refer to the [C&TC Provider Documentation Forms \(www.dhs.state.mn.us\)](http://www.dhs.state.mn.us).

Procedure

Risk Assessment

The following recommended risk factors can be identified through the personal and family health history and physical measurements (American Academy of Pediatrics, 2017):

- Parent, grandparent, aunt or uncle, or sibling with myocardial infarction (MI); angina; stroke; or coronary artery bypass graft (CABG)/stent/angioplasty at <55 years in males and <65 years in females.
- Parent with total cholesterol ≥ 240 mg/dL or known dyslipidemia.
- Patient has diabetes, hypertension, or body mass index (BMI) ≥ 95 th percentile or smokes cigarettes.
- Patient has a moderate- or high-risk medical condition.

Provide appropriate counseling and follow-up based on results of the risk assessment.

Laboratory testing

For children with dyslipidemia risk factors and a *healthy* BMI:

Measure a fasting lipid profile twice. Draw the second fasting lipid profile no sooner than two weeks and no later than three months after the first lipid profile. An average of the two results should be used to make determinations regarding further evaluation and treatment (American Academy of Pediatrics, 2011).

For children with dyslipidemia risk factors and an *elevated* BMI:

A fasting lipid profile and additional laboratory testing may be indicated. The child's BMI and personal and family health history should factor into the medical decision making regarding specific testing.

Management

Refer to [Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents Summary Report \(www.ncbi.nlm.nih.gov\)](#).

More Information

C&TC guidelines for dyslipidemia follow Bright Futures recommendations related to risk assessment, but differ regarding universal dyslipidemia blood testing. The AAP recommends a routine dyslipidemia laboratory screening on all children and youth at 9-11 years and 17-21 years. However, the U.S. Preventive Services Task Force found insufficient evidence for universal screening.

Anticipatory Guidance

There is strong evidence that good nutrition starting at birth has potential for decreasing future risk of cardiovascular disease. Breastfeeding has been found to provide sustained cardiovascular benefits. (American Academy of Pediatrics, 2011). For children and young people two years of age and older, counsel following the [2015 Dietary Guidelines for Americans](#). Clinical tools for nutrition and physical activity counseling are available on [Let's Go! Toolkits \(www.letsgo.org\)](#).

Professional Recommendations

American Academy of Pediatrics

Risk assessment for dyslipidemia should be done at 2, 4, 6, and 8 years, and between 12-16 years. Universal lipid screening using the non-fasting, non-HDL total cholesterol should be performed once pre-puberty (at 9 to 11 years) and once post-puberty (at 17 to 21 years) (American Academy of Pediatrics, 2011).

U.S. Preventive Services Task Force

The USPSTF issued an "I" statement in 2016 indicating that "Current evidence is insufficient

to assess the balance of benefits and harms of screening for lipid disorders in children and adolescents 20 years or younger" (United States Preventive Services Task Force, 2016).

Resources

Minnesota Department of Human Services

- [Minnesota Health Care Programs Provider Manual C&TC Section \(www.dhs.state.mn.us\)](#)

Minnesota Department of Health

- [Child and Teen Checkups \(www.health.state.mn.us\)](#)

Centers for Disease Control and Prevention

- [Preventing Heart Disease \(www.cdc.gov\)](#)

References

- American Academy of Pediatrics. (2011). Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report. Pediatrics, 128(supplement 5), 213-256.
- Pediatrics, A. A. (2017). Evidence and Rationale. In S. J. Hagan JF, Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 4th ed. (p. 285). Oak Grove Village, IL: American Academy of Pediatrics.
- United States Preventive Services Task Force. (2016). Screening for Lipid Disorders in Children and Adolescents: US Preventive Services Task Force Statement. JAMA, 316(6), 625-633.

For More Information

The Child and Teen Checkups (C&TC) program is administered through a partnership between the Minnesota Department of Human Services and the Minnesota Department of Health.

For questions about this fact sheet or to obtain this information in a different format, call 651-201-3760 or email health.childteencheckups@state.mn.us.

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