## FH can have severe consequences if left untreated. 1-3 Pediatric lipid screening is vital for improving early diagnosis 4

Familial hypercholesterolemia (FH) exists in two forms and is characterized by markedly elevated LDL-C levels from birth that can lead to premature and progressive ASCVD.<sup>3-5</sup>

**Heterozygous FH** 



LDL-C levels >190 mg/dL (adults) and >160 mg/dL (children or adolescents)<sup>6</sup> Homozygous FH (rare)

LDL-C levels ≥400 mg/dL (adults, adolescents, and children)<sup>6,7</sup> FH is currently underdiagnosed and undertreated in children<sup>4</sup>



According to a retrospective analysis, only 17.5% of eligible healthy children from a geographically representative sample in the US underwent lipid screening (N=8,444,325)\*8

## US pediatric lipid screening recommendations 14,9

All children between the ages of 9 and 11 years 14,9



At 2 years of age if the child has:4,9



A parent with total cholesterol >240 mg/dL



A family history of early-onset CAD



Underlying cardiac risk factors

## Importance of conducting early pediatric lipid screening



Less severe forms of FH may not be detected until the first CV event occurs<sup>5</sup>



Most patients with untreated HoFH develop **overt atherosclerosis before 20 years** of age and generally **do not survive** past **30 years of age**<sup>3</sup>



Pediatric lipid screening between the ages of 9 and 11 years may help avoid confounding lipid changes that transiently occur during puberty<sup>4</sup>

Don't let FH go undetected5

Screen kids for lipids9

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Short interactive story



Pediatric lipid screening animation



Audio series on FH diagnosis



\*Retrospective cohort study using the MarketScan Commercial and Medicaid Claims and Encounters databases. Eligible subjects were 2−18 years of age, standard-risk, and had ≥3 years of continuous insurance coverage; †Recommendations by the AAP, ACC, AHA, NHLBI, and NLA, in addition to an expert panel appointed by the NHLBI.<sup>4,9</sup> AAP, American Academy of Pediatrics; ACC, American College of Cardiology; AHA, American Heart Association; ASCVD, atherosclerotic cardiovascular disease; CAD, coronary artery disease; CV, cardiovascular; FH, familial hypercholesterolemia; HoFH, homozygous familial hypercholesterolemia; LDL-C, low-density lipoprotein cholesterol; NHLBI, National Heart, Lung, and Blood Institute; NLA, National Lipid Association.

1. Zimmerman J et al. J Community Genet 2019;10:229–236; 2. Alonso R et al. Vasc Health Risk Manag 2020;16:11–25; 3. Cuchel M et al. Eur Heart J 2014;35:2146–2157;

4. McGowan MP et al. *J Am Heart Assoc* 2019;8:e013225; 5. Raal FJ et al. *Atherosclerosis* 2018;277:483–492; 6. Gidding SS et al. *Circulation* 2015;132:2167–2192;

7. Cuchel M et al. Eur Heart J 2023;44:2277–2291; 8. Berger JH et al. J Am Heart Assoc 2022;11:e024197; 9. Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents; National Heart, Lung, and Blood Institute. Pediatrics 2011;128 Suppl 5:S213–S256.

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