

NON-HDL-C = TOTAL CHOLESTEROL MINUS HDL-C

The sum of Very Low Density Lipoprotein (VLDL) +LDL cholesterol is called non-HDL cholesterol. It is calculated routinely as total cholesterol minus HDL cholesterol. In persons with elevated triglycerides (TG), 200 - 499 mg/dL, most cholesterol occurring in the VLDL fraction is contained in the remnant VLDL, which is thought to be very atherogenic. The non-HDL-C level includes cholesterol carried in several atherogenic lipoproteins, such as LDL, very low-density lipoprotein (VLDL), intermediate density lipoprotein (IDL), and lipoprotein(a) (Lp(a)).

Therefore, in patients with elevated TG levels (200-499 mg/dL), treatment of the non-HDL-C level is a secondary target after the LDL-C target has been reached.

When triglycerides are ≥ 200 mg/dL, after LDL goal is reached, set secondary goal for non-HDL cholesterol for 30 mg/dL higher than LDL goal.

Comparison of LDL Cholesterol and Non-HDL Cholesterol Goals for Three Risk Categories		
Risk Category	LDL Goal (mg/dL)	Non-HDL Goal (mg/dL)
CHD and CHD Risk Equivalents (10-year risk for CHD > 20%)	Optional < 70 < 100	< 100 < 130
Multiple (2+) Risk Factors and 10-year risk $\leq 20\%$	< 130	< 160
0-1 Risk Factor	< 160	< 190

Adapted from the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) Final Report Pages II-7 – II-8.

Adult Treatment. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Public Health Service, National Institutes of Health, National Heart, Lung, and Blood Institute, NIH Publication No. 02-5215, September 2002.

Updated.

AHA/ACC Guidelines for Secondary Prevention for Patients with Coronary and other Atherosclerotic Vascular Disease: 2006 Update. Endorsed by the National Heart, Lung, and Blood Institute. J Am Coll Cardiol, 2006; 47:2130-2139.