THE heart TRUTH

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | National Institutes of Health | National Heart, Lung, and Blood Institute | The Office on Women's Health

The Heart Truth Professional Education Campaign: LDL Goals and Drug Therapy Cut-Points in Women

General Information:

- Any person at high risk or moderately high risk who has lifestyle-related risk factors (eg, obesity, physical inactivity, elevated triglycerides, low HDL-C, or metabolic syndrome) is a candidate for therapeutic lifestyle changes to modify these risk factors regardless of LDL-C level.
- Metabolic syndrome: Current American Heart Association/National Heart, Lung, and Blood Institute diagnosis *in women* requires three of the following five criteria:
  - Central obesity as measured by waist circumference greater than or equal to 35 inches
  - Fasting blood triglycerides greater than or equal to 150 mg/dL
  - Blood HDL cholesterol less than 50 mg/dL
  - Blood pressure greater than or equal to 130/85 mmHg
  - Fasting glucose greater than or equal to 100 mg/dL

References:

Grundy SM, Cleeman JI, Bairey Merz N, et al. Implications of recent clinical trials for the National Cholesterol Education Program Adult Treatment Panel III guidelines. Circulation 2004; 110:227-239.

Grundy SM, Cleeman JI, Daniels SR, et al. Diagnosis and management of the metabolic syndrome: an American Heart Association/National Heart, Lung, and Blood Institute scientific statement. Circulation 2005; 112:2735-52.

Mosca L, Appel LJ, Benjamin EJ, et al. Evidence-based guidelines for cardiovascular disease prevention in women. Circulation 2004; 109:672-93.

Risk Status	Method of Assessing Risk Status	Goal LDL-C Level*	Consider Drug Therapy
High Risk: >20% 10-year risk of CHD event **NOTE:** No additional risk calculation is indicated for patients with CHD or equivalent risk conditions. Attempts to use the CHD risk calculator for these patients may seriously underestimate risk.	Patients with CHD or equivalent risk conditions have a >20% risk of CHD events. High risk patients include those with: • Known CHD • Noncoronary forms of atherosclerotic disease - Peripheral arterial disease - Abdominal aortic aneurysm - Carotid artery disease (transient ischemic attacks or stroke of carotid origin or >50% obstruction of a carotid artery) • Diabetes **OR** • 2+ risk factors with calculated 10-year risk for CHD >20% (includes patients with end stage renal disease) (see below)	• <100 mg/dL • Optional goal < 70 mg/dL • When LDL-lowering drug therapy is employed, it is advised that intensity of therapy be sufficient to achieve at least a 30% to 40% reduction in LDL-C levels.	• ≥100 mg/dL • If baseline LDL-C is < 100 mg/dL, institution of an LDL-lowering drug is a therapeutic option on the basis of available clinical trial results.
Moderate Risk: 2+ risk factors, 10-20% 10-year risk of CHD event	Use Electronic 10-year risk calculators available at www.nhlbi.nih.gov/guidelines/cholesterol for patients at moderate risk. Risk factors include : • Cigarette smoking • Hypertension (BP ≥140/90 mm Hg or on antihypertensive medication) • Low HDL cholesterol (<40 mg/dL) • Family history of premature CHD (CHD in male first-degree relative <55 years of age; CHD in female first-degree relative <65 years of age) • Age ≥ 55 years	• <130 mg/dL • When LDL-lowering drug therapy is employed, it is advised that intensity of therapy be sufficient to achieve at least a 30% to 40% reduction in LDL-C levels.	• ≥130 mg/dL • For moderately high-risk persons, when LDL-C level is 100-129 mg/dL, at baseline or on lifestyle therapy, initiation of an LDL-lowering drug to achieve an LDL-C level <100 mg/dL is a therapeutic option on the basis of available clinical trial results.
Moderate Risk: 2+ risk factors, <10% 10-year risk of CHD event	Use Electronic 10-year risk calculators available at www.nhlbi.nih.gov/guidelines/cholesterol for patients at moderate risk. Risk factors include : • Cigarette smoking • Hypertension (BP ≥140/90 mm Hg or on antihypertensive medication) • Low HDL cholesterol (<40 mg/dL) • Family history of premature CHD (CHD in male first-degree relative <55 years of age; CHD in female first-degree relative <65 years of age) • Age ≥ 55 years	• <130 mg/dL • When LDL-lowering drug therapy is employed, it is advised that intensity of therapy be sufficient to achieve at least a 30% to 40% reduction in LDL-C levels.	• ≥160 mg/dL
Lower Risk: Zero or one risk factor	Almost all people with zero or one risk factor have a 10-year risk <10%. 10-year risk assessment in people with zero or one risk factor is thus not necessary.	• <160 mg/dL • When LDL-lowering drug therapy is employed, it is advised that intensity of therapy be sufficient to achieve at least a 30% to 40% reduction in LDL-C levels.	• ≥190 mg/dL • 160-189 mg/dL; LDL-lowering drug optional

* Goal LDL-C levels are targets for drug therapy. An LDL-C level of <100 mg/dL is considered "optimal" for all women, and should be encouraged through lifestyle changes