

ESTIMATING 10-YEAR RISK FOR MEN AND WOMEN

Risk assessment for determining 10-year risk is carried out according to Framingham risk scoring (Tables III.1–5 for men and III.1–6 for women). The risk factors included in the Framingham calculation of 10-year risk are: age, total cholesterol, HDL cholesterol, systolic blood pressure, treatment for hypertension, and cigarette smoking. The first step is to calculate the number of points for each risk factor. For initial assessment, values for total cholesterol and HDL cholesterol are required. Because of a larger database, Framingham estimates are more robust for total cholesterol than for LDL cholesterol. Note that the LDL-cholesterol level is the primary target of therapy. Total cholesterol and HDL-cholesterol values should be the average of at least two measurements obtained from lipoprotein analysis.

JNC VII recommends taking an average of several blood pressure measurements to access an accurate baseline blood pressure. The blood pressure value used in the risk score is the average of several recent values, regardless of whether the person is on antihypertensive therapy. However, if the person is on antihypertensive treatment, an extra point is added beyond points for the blood pressure reading because treated hypertension carries residual risk.

The designation “smoker” means any cigarette smoking in the past month. The total risk score sums the points for each risk factor.

The 10-year risk for myocardial infarction and coronary death is estimated from total points, and the person is categorized according to absolute 10-year risk as indicated above.

The person with multiple risk factors is assigned to one of three categories according to 10-year risk for hard CHD (myocardial infarction + CHD death): >20 percent, 10–20 percent, and <10 percent (see Table III.1–3). A person with 10-year risk >20 percent is elevated to the category of CHD risk equivalent.

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)

Appendix III-A

Distributions of Total Cholesterol, LDL Cholesterol, HDL Cholesterol, and Triglycerides in the U.S. Adult Population, NHANES III Data (1988-1994)(Serum)