

# **Cardiovascular Risk Calculation**

**Patient-Centered Education From the National Lipid Association** 

#### What Are Cardiovascular Risk Calculators?



Cardiovascular risk calculators are simple tools that can help you and your provider estimate your future risk of a heart attack or stroke so you can take steps to reduce your risk *before* symptoms occur. If you do *not* have cardiovascular disease at present, or diabetes, LDL ("bad") cholesterol of 190 mg/dl or higher, 3 or more heart disease risk factors, or chronic kidney disease, but are between 20-79 years old and have 2 major risk factors, your risk of a heart attack or stroke may be elevated. A "risk calculator" can help you become aware of your risk level. Once you know your risk number (expressed as the percent chance of heart attack or

stroke in 10 years), you will be guided to the best ways to lower your risk with diet and lifestyle changes and, if needed, medications.

always discuss your risk score, and the best ways to lower your risk, with your provider.

Risk calculators are generally accurate. They have been created by studying risk factors and rates of heart attack or stroke in large populations in the U.S.

To measure your risk, you or your provider simply access one of several free risk calculators available on the web (see websites below) or in your electronic health record, and enter the following information: your age, gender, race (in some), cholesterol numbers, blood pressure, smoking and diabetes status. One risk calculator also uses test results from a blood marker of inflammation, and family heart disease history. Once your information is entered, the calculator instantly computes your risk of heart attack and stroke over 10 years and compares it to a same-aged man or woman with no risk factors. If you are under age 60, some risk calculators will also predict your *lifetime* risk of heart attack or stroke. The score obtained from any cardiovascular risk calculator is an estimate only. You should

## Benefits of Risk Calculators for Estimating Future Cardiovascular Risk

Risk calculators are backed by strong data from large U.S. population studies, and are cost-effective and generally accurate

Risk calculators will estimate your risk based on major risk factors, including blood pressure, cholesterol, diabetes, smoking, age and gender

Newer risk calculators will estimate your combined risks of heart attack and stroke

Newer risk calculators have improved the estimation of stroke and heart attack risk in African Americans

Risk calculators will estimate your risk of heart attack and stroke over 10-years and, if you are under age 60, over your expected lifetime

#### **For Additional Information**

http://www.my.americanheart.org http://www.framinghamheartstudy.org http://www.reynoldsriskscore.org

## Limitations of Risk Calculators for Estimating Future Cardiovascular Risk

Risk calculators may not predict cardiovascular risk as accurately as imaging studies, and may overestimate risk if you are older than age 65

Most risk calculators do not typically factor in new or emerging risk factors that your provider may have detected

Risk calculators cannot estimate your risk of needing a stent or bypass surgery

Currently available risk calculators may predict risk less accurately in Hispanics, American Indians, Asians, South Asians and Pacific Islanders

Risk calculators should not be used to estimate your lifetime risk of cardiovascular disease after age 60

<b>Courtesy of the National Lipid Association and Your Provi</b>	de
Your 10 Year Risk Score Is Currently	

%	☐ Higher Than	☐ About	L
	Average	Average	

Average