



## Cardiovascular Disease - Primary Prevention: Resource Guide for Physicians

### Risk Assessment Resources

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There are a number of tools to assist in determining a patient's risk to cardiovascular disease (CVD). Each tool varies in the risk factors, time frame and CVD outcomes. There are known limitations to each of the risk tools, and the risk categories are based on consensus rather than by scientific evidence.

NOTE: The Framingham (FRS), or any CVD risk assessment tool, is a risk estimation only of a patient's CVD risk. Since these scores are plus or minus several percentage points, it is important to consider modifying the risk estimation based on other known risk factors (e.g., family history, ethnicity) and a practitioner's clinical judgement.

Older risk tools used only hard endpoints (e.g., coronary heart disease (CHD) deaths) to calculate one's risk. Newer risk tools have expanded their endpoints to include more CVD outcomes. One study estimated that using CVD as an endpoint instead of CHD in the FRS has increased the number of patients into the high-risk group leading to a 2.3-fold increase in the need for lipid-lowering treatment.<sup>1</sup>

#### ► Risk Assessment Tools

- **Canadian Cardiovascular Society:** estimates the 10-year risk of developing CVD, with paper-base and an online calculator, using FRS.  
Website: [www.ccsguidelineprograms.ca/index.php](http://www.ccsguidelineprograms.ca/index.php) - under dyslipidemia program
- **Framingham Heart Study:** a FRS risk calculator for various CVD outcomes (e.g., CVD, CHD) and time frames (e.g., 10-year risk, 30-year risk).  
Website: [www.framinghamheartstudy.org](http://www.framinghamheartstudy.org)
- **Cardiovascular Risk/Benefit Calculator:**  
Website: [www.bestsciencemedicine.com/chd/calc2.html](http://www.bestsciencemedicine.com/chd/calc2.html)
- **The University of Edinburgh Cardiovascular Risk Calculator:** a risk calculator that estimates 10-year CVD risk using the FRS, ASSIGN or the Joint British Societies / British National Formulary. Includes risk calculators that also estimate the 10-year risk for CHD, heart attack or stroke.  
Website: [www.cvrisk.mvm.ed.ac.uk/index.htm](http://www.cvrisk.mvm.ed.ac.uk/index.htm)
- **The United Kingdom Prospective Diabetes Study (UKPDS):** a risk calculator that estimates the 10-year CHD and stroke risk for adults with type 2 diabetes.  
Website: [www.dtu.ox.ac.uk/riskengine/](http://www.dtu.ox.ac.uk/riskengine/)
- **QRISK2:** a risk calculator that estimates the 10-year risk of a heart attack or stroke.  
Website: [www.qrisk.org/](http://www.qrisk.org/)



## Lifestyle Management Resources

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### ► Smoking

- **QuitNow Services:** provides free help to quit smoking.  
Telephone: 8-1-1 and ask for QuitNow, Website: [www.quitnow.ca](http://www.quitnow.ca)
- **BC Smoking Cessation Program:** helps patients to stop smoking or stop using other tobacco products by helping them with the cost.  
Website: [www.health.gov.bc.ca/pharmacare/stop-smoking/](http://www.health.gov.bc.ca/pharmacare/stop-smoking/)

### ► Physical Activity

- **Canadian Physical Activity and Sedentary Behaviour Guidelines:** provides patients with guidelines and resources to help become more active from the Canadian Society for Exercise Physiology.  
Website: [www.csep.ca](http://www.csep.ca) – under Guidelines.
- **Physical Activity Line (PAL):** provides free physical activity counselling, resources and information.  
Telephone: (Toll Free) 1-877-725-1149 or (Lower Mainland) 604-241-2266, website: [www.physicalactivityline.com](http://www.physicalactivityline.com)

### ► Healthy Diet

- **Dietitian Services at HealthLinkBC (formerly Dial-A-Dietitian):** provides free nutrition information and resources.  
Telephone: 8-1-1, Website: [www.healthlinkbc.ca/healthyeating/](http://www.healthlinkbc.ca/healthyeating/)

### ► Others

- **HealthlinkBC:** provides health information and resources to help patients.  
Telephone: 8-1-1, Website: [www.healthlinkbc.ca](http://www.healthlinkbc.ca)
- **Public Health Agency of Canada:** provides resources to help patients make wise choices about healthy living, including increasing physical activity and eating well.  
Website: [www.phac-aspc.gc.ca/](http://www.phac-aspc.gc.ca/)
- **Heart & Stroke Foundation of BC & Yukon:** provides resources on heart diseases and stroke.  
Website: [www.heartandstroke.bc.ca](http://www.heartandstroke.bc.ca)
- **St Paul's Heart Centre:** provides information on the prevention of cardiovascular disease. As well, it has a Healthy Heart Program Prevention Clinic for those with a referral. Referral form accessible on their website.  
Website: [www.heartcentre.ca](http://www.heartcentre.ca)
- **Personal Health Risk Assessment Incentive (14066):** This General Practice Services Committee (GPSC) fee is payable to the general or family practitioner who undertakes a Personal Health Risk Assessment with a patient belonging to one of the at-risk populations (smoker, unhealthy eating, physically inactive, obese), either as part of proactive care or in response to a request for preventive care from the patient.  
Website: [www.gpsc.bc.ca/billing-fees/complete-guide](http://www.gpsc.bc.ca/billing-fees/complete-guide)



## Statins – Resources for a Patient Discussion

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- **Cardiovascular Risk/Benefit Calculator:** from James McCormack  
Website: [www.bestsciencemedicine.com/chd/calc2.html](http://www.bestsciencemedicine.com/chd/calc2.html)
- **Cardiovascular Prevention Decision Aids (Statin & Aspirin):** from the Mayo Clinic  
Website: [www.shareddecisions.mayoclinic.org/](http://www.shareddecisions.mayoclinic.org/)
- **NNT - Statin for heart disease prevention without prior heart disease:** from the NNT  
Website: [www.thennt.com/](http://www.thennt.com/)

## Other BC Guidelines

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- **BC Guidelines**  
Website: [www.BCGuidelines.ca](http://www.BCGuidelines.ca)
  - Hypertension Diagnosis and Management
  - Diabetes Care
  - Chronic Kidney Disease - Identification, Evaluation and Management of Adult Patients
  - Stroke and Transient Ischemic Attack - Management and Prevention
  - Overweight and Obese Adults: Diagnosis and Management

## References

1. Armstrong DW, Brouillard D, Matangi MF. The effect of the change in the Framingham Risk Score calculator between the 2006 and 2009 Canadian lipid guidelines. *Can J Cardiol.* 2011;27(2):167-70.