


Absolute cardiovascular disease risk assessments



What is the problem?

- Cardiovascular disease (CVD) is a major cause of death in Australia with over 43,000 deaths attributed to CVD in 2017⁽¹⁾. CVD exacts a heavy morbidity and mortality burden as well as accounting for 11% of total hospital admitted patient expenditure in Australia⁽²⁾.
- Modifiable CVD risk factors account for 90% of the risk of myocardial infarction, indicating that CVD is largely preventable⁽³⁾.
- The uptake of absolute CVD risk assessments by health professionals is still suboptimal in Australia⁽⁴⁻⁶⁾.
- People at high risk of CVD are missing out on guideline recommended blood pressure and lipid lowering therapy^(7, 8).



What is an absolute CVD risk assessment?

- Absolute CVD risk assessment is an integrated approach that brings together the cumulative risk of multiple cardiovascular risk factors to estimate the combined risk of experiencing a heart attack or stroke in the next five years.
- Due to the cumulative effects of multiple risk factors, creating even a moderate reduction in several risk factors is more effective in reducing overall CVD risk than a major reduction in a single CVD risk factor alone⁽⁹⁾.



What is involved?

A comprehensive absolute CVD risk assessment is known to patients as a Heart Health Check and should be conducted by a doctor, involving the following:

- 1 HISTORY:** Take a clinical and social history, undertake physical examination, check smoking status and request pathology results as needed for risk calculation e.g. blood pressure, blood cholesterol, blood glucose.
- 2 OTHER RISK FACTORS:** Consider other risk factors which have not been formally included in the risk calculator but may influence risk and management options e.g. family history of premature CVD, alcohol intake, ethnicity, BMI and waist measurement, nutrition status, renal function, depression.
- 3 ASSESS RISK:** Assess absolute risk of a heart attack or stroke in the next 5 years by entering the patient's risk factors into the validated Australian risk calculator at www.cvdcheck.org.au.
- 4 MANAGE RISK:** Manage risk by providing lifestyle advice and support including smoking cessation, nutritional and physical activity related advice, prescribe blood pressure and/or cholesterol lowering medicines where appropriate and counsel on new medicines.
- 5 ONGOING CARE:** Provide ongoing care – reassess absolute CVD risk every 6 to 24 months according to baseline risk and monitor individual CVD risk factors.



What about risk in younger adults?

- Younger adults often have low estimated absolute CVD risk, but the presence of at least one major risk factor by middle age is associated with increased lifetime CVD risk and reduced survival free of morbidity compared to those with optimal risk factors.¹⁰
- Although formal absolute CVD risk assessment is not recommended by guidelines for people under 45 years, increasing awareness about CVD risk factors among younger adults is important.
- Speak to younger adults about their risk factors for CVD, particularly ones they can modify (smoking, high cholesterol, blood pressure, obesity, physical inactivity, nutrition and alcohol intake).
- The earlier they address these risk factors, the lower their expected absolute risk of CVD when they get older.



What else can be done?

- Support the primary prevention of CVD in Australia by raising awareness of CVD risk factors and the importance of screening.
- Encourage everyone 45 years and over (from 30 for Aboriginal and Torres Strait Islander peoples) without established CVD to have an absolute CVD risk assessment. Use your networks to promote this with your colleagues, patients, family and friends.
- Work with your colleagues to implement strategies and events that promote the importance of good heart health.

For more information visit heartfoundation.org.au or call our Helpline on **13 11 12**.

References

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