

CVD risk assessment and management

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Management

[Scenario: CVD risk assessment \(/topics/cvd-risk-assessment-management/management/cvd-risk-assessment/\)](/topics/cvd-risk-assessment-management/management/cvd-risk-assessment/).

[Scenario: CVD risk less than 10% \(/topics/cvd-risk-assessment-management/management/cvd-risk-less-than-10percent/\)](/topics/cvd-risk-assessment-management/management/cvd-risk-less-than-10percent/).

[Scenario: CVD risk 10% or more \(/topics/cvd-risk-assessment-management/management/cvd-risk-10percent-or-more/\)](/topics/cvd-risk-assessment-management/management/cvd-risk-10percent-or-more/).

Background information

[Definition of CVD \(/topics/cvd-risk-assessment-management/background-information/definition-of-cvd/\)](/topics/cvd-risk-assessment-management/background-information/definition-of-cvd/).

[Burden of CVD \(/topics/cvd-risk-assessment-management/background-information/burden-of-cvd/\)](/topics/cvd-risk-assessment-management/background-information/burden-of-cvd/).

[Risk factors for CVD \(/topics/cvd-risk-assessment-management/background-information/risk-factors-for-cvd/\)](/topics/cvd-risk-assessment-management/background-information/risk-factors-for-cvd/).

[Strategies for CVD prevention \(/topics/cvd-risk-assessment-management/background-information/strategies-for-cvd-prevention/\)](/topics/cvd-risk-assessment-management/background-information/strategies-for-cvd-prevention/).

CVD risk assessment and management: Summary

- Cardiovascular disease (CVD) is an umbrella term that describes a range of conditions that affect the heart, the blood vessels, or both. It is caused by blood clots (thrombosis), or atherosclerosis.

- CVD is a significant cause of mortality and morbidity, accounting for almost a quarter of all deaths in the UK.
 - In 2016, CVD caused 21% of premature deaths (deaths in people under the age of 75 years).
- Various risk factors increase a person's risk of developing CVD.
 - Non-modifiable risk factors include older age, being male, family history of CVD, and ethnic background (for example, people of South Asian origin have an increased risk of CVD compared with people of European origin).
 - Modifiable risk factors include smoking, high blood level of non-high density lipoprotein cholesterol, lack of physical activity, unhealthy diet, alcohol intake above recommended levels, overweight and obesity.
 - Comorbidities that can increase the risk of developing CVD include: hypertension, diabetes mellitus, chronic kidney disease, dyslipidaemia, rheumatoid arthritis, influenza, serious mental health problems, and periodontitis.
- The Health Check Programme is now established in England:
 - Everyone aged 40–74 years, who has not already been diagnosed with CVD, diabetes, or chronic kidney disease, is invited every 5 years for a free health check.
 - The health check includes a CVD risk assessment, an assessment of alcohol consumption, physical activity, cholesterol level, body mass index (BMI), an assessment for dementia in those aged 65–74 years, and screening for diabetes mellitus and chronic kidney disease in those at increased risk of developing these conditions.
- A person's 10 year CVD risk should be assessed using the QRISK assessment tool every 5 years (apart from people who already have CVD or are at high risk of developing it, or people aged 85 years or over).
 - People with type 1 diabetes mellitus or chronic kidney disease (CKD) stages 3, 4, or 5 are considered at high risk, and so a CVD risk assessment is not required. However, it may help some people with these conditions to make an informed choice on whether to take a statin.
 - The calculated CVD risk is an estimate. Clinical judgement is required to adjust for factors that the risk calculator does not take into account.
- Most people will be able to reduce whatever risk they have by relevant changes in lifestyle, optimizing treatment of relevant comorbidities, and by drug treatment, if appropriate.
- All people who have had a CVD risk assessment, should be given lifestyle advice, regardless of their risk score. This should include advice about:
 - Smoking cessation.
 - Weight loss if overweight or obese.
 - Eating a healthy diet.
 - Keeping alcohol consumption within the recommended limits.
 - Being physically active.

- Statin treatment should be offered for the primary prevention of CVD to people with an estimated 10 year CVD risk of 10% or more if lifestyle interventions have not proved effective.
- Atorvastatin 20 mg a day is the recommended statin if the person decides to take drug treatment after an informed discussion about benefits and harms, after having been provided with lifestyle advice, and if there are no contraindications.

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