

Table 3. Primary and secondary prevention approaches worldwide [MED ED: This table is very long - can it be online only?]

Guidelines by country	Primary prevention	Secondary prevention
Australia ^{6,7}	<p>No previous CVD event</p> <p>Use of absolute CVD risk calculator is key approach</p> <p>Most age <45 years at low risk unless HeFH or atrial fibrillation</p> <p>www.cvdcheck.org.au: Based on Framingham studies and validated for age 30–74 years in Australia</p> <p>Be wary of potential very high relative risk in some patients (eg HeFH, diabetic >60 years, CKD)</p> <p>Risk stratification</p> <p>High >15% risk over next five years (angina, acute myocardial infarction, CVA, transient ischaemic attack, peripheral vascular disease, heart failure)</p> <p>Intermediate 10–15% risk (treat if persists posts lifestyle changes, FH premature CVD, blood pressure above 160/100, Aboriginal or Torres Strait Islander, Maori, Pacific, South Sea Islander, South Asian, Mid-Eastern ethnicity)</p> <p>Low <10% (start meds if high risk or if risk factors present, Aboriginal or Torres Strait islander or FH CVD)</p> <p>Coronary artery calcium may help if in intermediate risk group</p> <p>Healthy lifestyle</p> <p>Assess five-year CVD risk</p> <p>Family history premature CVD, ethnic groups</p> <p>Consider lipid lowering treatment</p>	<p>Which patients?</p> <p>All patients with prior significant ASCVD event</p> <p>Previous acute myocardial infarction</p> <p>Angina pectoris</p> <p>Coronary artery bypass grafting or stenting</p> <p>CVA or transient ischaemic attack</p> <p>Symptomatic peripheral vascular disease</p> <p>High >15% absolute CVD risk</p> <p>Key interventions</p> <p>Diet and lifestyle changes especially stopping smoking</p> <p>Increasing exercise and cardiac rehabilitation (up to 25% reduction in mortality)</p> <p>Lipid lowering medications especially statins (Aspirin and blood pressure meds)</p> <p>Treat type 2 diabetes >40 years</p> <p>CKD stage 3–5</p>
Canada ²⁶	<p>No previous CVD</p> <p>Risk <10%: encourage lifestyle changes</p> <p>Re-test after five years with risk assessment</p>	<p>Previous ASCVD</p> <p>Risk ≥20%: lifestyle changes</p> <p>Encourage high intensity statin</p> <p>Consider aspirin</p> <p>Encourage compliance</p>
Joint British Societies ^{31,32}	<p>Assess 10-year risk</p> <p>Healthy lifestyle</p>	<p>Established CVD</p> <p>Statins: lower is better approach</p> <p>Target <1.8 mmol/L aspirin</p> <p>Type 2 diabetes >40 [AUTHOR: Please clarify unit?]</p> <p>CKD stage 3–5</p>
UK NICE ^{31,32}	<p>Healthy lifestyle</p> <p>Option to re-assess after lifestyle change attempt</p> <p>If 10-year risk CVD >10, offer atorvastatin 20 mg daily; same if type 2 diabetes and CKD present</p> <p>May need review and up-titration depending on response</p>	<p>Healthy lifestyle</p> <p>Start treatment with atorvastatin 80 mg daily. Can lower dose to 40 mg if interactions, adverse effects or patient preference</p> <p>Treat all type 1 diabetes with statin therapy</p> <p>High risk groups – maximum tolerated atorvastatin</p> <p>Consider annual cholesterol review</p>
New Zealand ²⁷	<p>Healthy lifestyle</p> <p>Assess five-year CVD risk</p> <p>If 5–15% consider medication treatment of modifiable risk factors: discuss with patient – informed decision</p> <p>Target LDL-C reduction of 40% if medication commenced</p> <p>Annual reviews once stabilised</p> <p>Avoid aspirin in over 70s or if five-year risk <15%</p>	<p>Five-year CVD risk of 15% considered equivalent to prior ASCVD</p> <p>Asymptomatic carotid disease, coronary disease (CAC score >400) or plaque on computed tomography angiography – risk regarded as ≥15%</p> <p>Lipid-lowering treatment strongly recommended</p> <p>Consider aspirin</p> <p>LDL-C target should be <1.8 mmol/L</p>
European Atherosclerosis Society/ European Society of Cardiology ¹⁵	<p>Healthy lifestyle</p> <p>If not FH and very high risk, aim for LDL-C reduction of 50% and goal of <1.4 mmol/L</p> <p>If FH and very high risk, aim for LDL-C reduction of 50% and consider goal of <1.4 mmol/L</p> <p>All patients at high risk, aim for LDL-C reduction of 50% from baseline and LDL-C goal of <1.8 mmol/L</p> <p>All patients at mod risk, LDL-C goal of <2.6 mmol/L should be considered</p> <p>All patients at low risk, LDL-C goal of <3.0 mmol/L may be considered</p>	<p>All high-risk patients, LDL-C reduction of 50% and goal of <1.4 mmol/L</p> <p>Patients with second vascular event <2 years on maximum statins, LDL-C goal of <1.0 mmol/L may be considered</p> <p>Same as for primary prevention</p>
American Heart Association/ACA [AUTHOR: Is this the ACC? American College of Cardiology?] ^{9,16}	<p>Healthy lifestyle</p> <p>Assess CVD in each age group</p> <p>Low risk <5%: discuss lifestyle</p> <p>Borderline 5–7.5%: consider risk enhancers to assess</p> <p>Intermediate risk 7.5% to <20%: if risk enhancers positive, consider moderate potency statin</p> <p>High >20%: add statin to lower LDL-C by 50%</p> <p>If LDL-C still >4.9 mmol/L or type 2 diabetes 40–75 years: add moderate-intensity statin</p> <p>If type 2 diabetes age 40–75 years, consider moderate-intensity statin</p>	<p>Patients have ASCVD</p> <p>Healthy lifestyle</p> <p>High intensity maximum tolerated statin</p> <p>Aim to reduce LDL-C by 50% from baseline</p> <p>If remains >1.8 mmol/L, add ezetimibe</p> <p>Option of PCSK9i if level still >1.8 mmol/L</p>

ASCVD, atherosclerotic cardiovascular disease; CAC, coronary artery calcium; CHD, coronary heart disease; CKD, chronic kidney disease; CVA, cerebrovascular accident; FH, familial hypercholesterolaemia; HDL, high-density lipoprotein; HeFH, heterozygous familial hypercholesterolaemia; LDL-C, low-density lipoprotein cholesterol; NICE, National Institute for Health and Care Excellence; PCSK9i, PCSK9, proprotein convertase subtilisin/kexin type 9 inhibitor