CKM Guidance

Cardiovascular-Kidney-Metabolic Disease

Preventing Adverse Outcomes in Cardiovascular Kidney Metabolic Conditions

Last content update date: 30th June 2025
File date: 23rd November 2025
Please make sure to periodically check for updated content.

Instructions:

The guidance is separated into the multiple sections.

Clicking on the yellow highlighted text will take you to the relevant section of the guidance on the guidance web site.

Clicking on a pink highlighted abbreviation will take you to the relevant abbreviation within the abbreviations section of this document.

Clicking on a blue link will open relevant external guidance in a new window for more detailed information.

Contents:

11. Screening for CKM disease in the general population

- Optimise opportunistic screening for CKM disease wherever possible
    - Diagnosis of one CKM disease should prompt at least annual screening for other CKM diseases
        - CKM diseases include:
            - Elevated blood pressure
            - Type 2 diabetes
            - Dyslipidaemia

        - CV disease including ischaemic heart disease, cerebrovascular disease, peripheral arterial disease, atrial fibrillation and heart failure
        - Chronic kidney disease
        - Metabolic dysfunction-associated steatotic liver disease (MASLD; previously termed fatty liver disease)
        - Gout
        - Obstructive sleep apnoea

    - Identify and manage CKM disease as early as possible because many people with CKM syndrome have contact with the health system with related presentations (e.g. recurrent skin infections) or incidental findings (e.g. obesity at immunisations) years before management of their CKM disease.

- Otherwise screening for CKM disease in the general population is either at assessments for people with preclinical obesity or via the cardiovascular risk assessment (CVRA). CVRA should now be started at the following ages:
    - Men with any risk factors* - 30 years of age
    - Men without risk factors* – 40 years of age
    - Women with any risk factors* – 40 years of age
    - Women without risk factors* – 50 years of age
    - *Risk factors include:
        - Māori, Pacific, South-East Asian and other non-European ethnicities
        - Socioeconomic deprivation
        - Direct family history of CKM at < 40 years of age
        - Smoker
        - Post transplant
        - History of preeclampsia or gestational diabetes
        - Long term glucocorticoid and/or antipsychotic use
        - Chronic dental and/or peridontal disease
        - Clinical features of insulin resistance e.g. acanthosis nigricans, PCOS etc.

- Screening should include:
    - Seated blood pressure to screen for high blood pressure

    - HbA1c +/- fasting glucose to screen for diabetes
        - Combining fasting glucose with HbA1c prevents the need for another confirmatory test to diagnose diabetes if the HbA1c is > 48 mmol/mol. Fasting glucose is also the preferred diagnostic test if measurement of HbA1c may be unreliable such as:
            - Any haemoglobinopathy e,g, thalassaemia, sickle cell anaemia etc.
            - Altered red cell turnover e.g. bleeding, haemolysis, severe iron deficiency
            - Second and third trimesters of pregnancy
            - Post blood transfusion
    - eGFR and Urinary ACR to screen chronic kidney disease
    - Waist circumference and BMI to screen for increased fat mass
    - Non fasting lipid studies to screen for dyslipidaemia
    - Smoking status

- If any CKM disease is found on screening then optimise treatment of all CKM disease. CVRA is no longer required as CV risk will be calculated as part of their annual CKM assessments
    - Low CV risk (5 year CV risk < 5%) → 5 yearly
    - Moderate CV risk (5 year CV risk 5 – <10%) → yearly
        - May be relaxed to 2 yearly if gout or MASLD alone
    - High CV risk (5 year CV risk ≥ 10%) → no need to repeat CV risk calculation as need to optimise treatment

- If no overt CKM disease is found on CVRA then treatment and follow up is based on 5 year CV risk
    - High CV risk (5 year CV ≥ 10%):
        - Start lipid-lowering therapy aiming for LDL cholesterol < 1.4 mmol/L
        - Strongly consider aspirin 75-150 mg daily if < 70 years and risks appear to outweigh benefits
            - Aspirin benefit harm calculators may aid decision making
        - Review and optimise CV risk factors at least annually. No need to repeat ‘traditional CVRA’
    - Moderate CV risk (5 year CV risk 5 -< 10%):

        - Strongly consider lipid-lowering therapy particularly if direct family history of CKM disease < 40 years of age OR personal history of severe mental illness with antipsychotic use aiming for LDL cholesterol < 1.8 mmol/L
        - Repeat CVRA in 2 years
    - Low CV risk (5 year CV risk < 5%) → repeat CVRA in 5 years

- ***The guidance in this section is predominantly based on the 2018 NZ Cardiovascular Disease Risk Assessment and Management for Primary Care, which can be accessed at www.tewhatuora.govt.nz/publications/cardiovascular-disease-risk-assessment-and-management-for-primary-care, and the 2023 Australian guideline for assessing and managing cardiovascular risk, which can be accessed at www.mja.com.au/journal/2024/220/9/2023-australian-guideline-assessing-and-managing-cardiovascular-disease-risk.***

↑ Back to contents

Abbreviations:

ACR
Albumin:Creatinine Ratio

BMI
Body Mass Index

CKM
Cardiovascular-Kidney-Metabolic

CV
Cardiovascular

CVRA
Cardiovascular Risk Assessment

eGFR
Estimated Glomerular Filtration Rate

HbA1c
Glycated Haemoglobin

LDL
Low-Density Lipoprotein

MASLD
Metabolic dysfunction Associated Steatotic Liver Disease (previously termed fatty liver disease)

PCOS
Polycystic Ovarian Syndrome

↑ Back to contents

↑ Back to top