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National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people

Third edition

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National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people. Third edition

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Artwork by Dreamtime Public Relations and commissioned by, and used for, NACCHO purposes.

Recommended citation

National Aboriginal Community Controlled Health Organisation and The Royal Australian College of General Practitioners. National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people. 3rd edn. East Melbourne, Vic: RACGP, 2018.

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ABN: 34 000 223 807
ISBN: 978-0-86906-487-0 (Print)
ISBN: 978-0-86906-486-3 (Web)

Published March 2018

We acknowledge the Traditional Custodians of the lands and seas on which we work and live, and pay our respects to Elders, past, present and future.

National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people

Third edition

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Foreword

I am very pleased to release the third edition of the *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people* (National Guide) for use throughout Australia. The first edition was instigated and led by the National Aboriginal Community Controlled Health Organisation (NACCHO) when it was published in 2005. Our aim was to help Australian health services overcome their uncertainty about screening and other preventive health interventions so that Aboriginal and Torres Strait Islander peoples could realise health benefits. The National Guide did not merely refer to biomedical interventions. We structured preventive interventions as five types, directing users to consider the social determinants of health, thereby making the guide unique.

This third edition continues that tradition and has new topics drawn from advice we received from Aboriginal Community Controlled Health Services and users of the National Guide. Our user survey resulted in 554 responses from general practitioners (GPs) and other healthcare providers across Australia. With this feedback, we were able to commission authors with expertise on topics such as child health and wellbeing and fetal alcohol spectrum disorder, as well as on other topics important to Aboriginal and Torres Strait Islander peoples. All the revised chapters were sent to external experts and relevant peak bodies across Australia. The support we have received in developing this National Guide has been phenomenal.

We are proud of the continued collaboration between NACCHO and The Royal Australian College of General Practitioners (RACGP) to create all editions. We thank the NACCHO and RACGP teams for their passion and expertise in making this resource as valuable as it is. We are also pleased that through the promotional efforts of the RACGP and the Australian College of Rural and Remote Medicine, many GPs in general practices across Australia are aware of and are using the National Guide to support their delivery of preventive healthcare to their Aboriginal and Torres Strait Islander patients.

NACCHO and the RACGP will support the implementation of the National Guide through social media platforms and implementation workshops across Australia. We also encourage private vendors of clinical information systems to consider and support ways in which the recommendations contained within the National Guide can be incorporated in their software.

We are thankful for the support of the many peak health bodies and experts that have helped guide this revision.

On behalf of the team and contributors, we hope this National Guide will help healthcare providers take opportunities to prevent disease and illness in all their Aboriginal and Torres Strait Islander patients throughout their lifespan.

Mr John Singer
Chair
NACCHO
February 2018

Acknowledgements

This *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people* is a collaborative effort of the National Aboriginal Community Controlled Health Organisation (NACCHO) and The Royal Australian College of General Practitioners (RACGP).

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We acknowledge authors of the first and second editions, whose work formed the foundation for this third edition.

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Sponsors

The Australian Government Department of Health

Contents

Introduction

The third edition of the *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people* (National Guide) is a joint initiative of the National Aboriginal Community Controlled Health Organisation (NACCHO) and The Royal Australian College of General Practitioners (RACGP). The National Guide is a practical resource intended for all health professionals delivering primary healthcare to Aboriginal and/or Torres Strait Islander peoples. Its purpose is to provide health professionals with an accessible, user-friendly guide to best practice in preventive healthcare for Aboriginal and Torres Strait Islander patients.

Every chapter of this edition has been extensively revised, and we are pleased to include several new topics to support healthcare providers to broaden preventive care on priority health issues, such as fetal alcohol spectrum disorder, family abuse and violence, and ways to optimise child health and wellbeing. In this third edition, we continue to emphasise five types of preventive interventions: immunisation; screening for asymptomatic disease; chemoprophylaxis (using medication to prevent the onset of disease and complications of existing disease); counselling and other ways to encourage client behavioural change; and primary healthcare influences over environmental factors.

The third edition of the National Guide revision process developed several products:

- the National Guide (print and electronic), which contains evidence statements, recommendations, risk calculation tables and an outline of the development of the National Guide package
- the Evidence Base to the National Guide (electronic only), which contains the collection of evidence underpinning the guide and recommendations
- a child lifecycle summary chart (print and electronic) listing activities recommended at each age group 0–17 years
- a young people lifecycle summary chart (print and electronic) that synthesises recommendations for those aged 12–24 years
- an adult lifecycle summary chart (print and electronic) listing activities recommended at each age group from 10 years.

Note: The National Guide chapters do not contain reference lists. Please refer to the Evidence Base for reference lists.

Purpose

The National Guide is intended for all healthcare providers delivering primary healthcare to the Aboriginal and Torres Strait Islander population. This includes general practitioners (GPs), Aboriginal and Torres Strait Islander health workers and practitioners, nurses, specialists with a role in delivering preventive care, and educators and students.

The National Guide makes specific recommendations regarding the elements of a preventive health assessment across the lifecycle. The recommendations aim to prevent disease, detect early and unrecognised disease, and promote health in the Aboriginal and Torres Strait Islander population while allowing for variations based on regional and local circumstances. The health status of Torres Strait Islander peoples is very similar to that of the Aboriginal population, and the information in the National Guide can be applied to both population groups.

Why preventive health assessments are necessary

Life expectancy was around 10 years lower for Aboriginal and Torres Strait Islander people in 2010–12 when compared with other Australians.[1] There is strong evidence that the delivery of clinical preventive health services, especially within a primary healthcare context, improves health outcomes.[2]

Access to high-quality primary healthcare forms the foundation for the Australian Government's *National Aboriginal and Torres Strait Islander Health Plan 2013–2023* to improve health outcomes for Aboriginal and Torres Strait Islander people and their families.[3] However, there are often missed opportunities for the prevention of chronic disease and associated complications in the Aboriginal and Torres Strait Islander population, and systems to identify if clients are of Aboriginal and/or Torres Strait Islander origin are often variably implemented.[4,5]

When preventive opportunities are missed, this leads to a higher use of hospital care, which in turn increases health costs. The Aboriginal and Torres Strait Islander population has much higher rates of hospital admission for almost every health problem than other Australians.[6]

The social determinants of health

Some users have asked us: 'Why doesn't the National Guide include a chapter on the social determinants of health?' In short, the answer is that every chapter guides users to consider the social determinants of health – the conditions in which people are born, live, grow, work and age, and health system factors that may reduce inequities. It is often forgotten that health system factors such as access to appropriate, affordable and acceptable primary healthcare are also social determinants of health.[7]

These and other social determinants of health are mostly responsible for health inequities – the unfair, unjust and preventable disparities in health status seen between populations. Within the Australian health system, healthcare providers have a responsibility to shape their service provision to overcome barriers to healthcare access, and to enhance, and be accountable for, the quality of care they offer.[8,9]

Healthcare providers should consider the individual context of their patients, their social history, their biopsychosocial risks, the patient as a person, in order to form a therapeutic alliance and to share power and responsibility. These are the hallmarks of the patient-centred healthcare professional.[10] The social determinants of health may be broad and intersectoral,[11] but patient-centred healthcare systems 'can and do yield health equity gains'.[7]

How to use the National Guide

Using the recommendations

All health professionals delivering primary healthcare to Aboriginal and/or Torres Strait Islander clients should use the recommendations to enhance the clinical care they provide. The National Guide aims to complement the RACGP *Guidelines for preventive activities in general practice* (Red Book) by dealing with health issues that are specific to the Aboriginal and Torres Strait Islander population.

Cross-referencing with the Red Book

The chosen subject areas in the National Guide represent the key health issues that are amenable to primary healthcare intervention and contribute to morbidity and mortality in the Aboriginal and Torres Strait Islander population. Where issues common in the general Australian population have not been dealt with in this guide (eg urinary incontinence), GPs are encouraged to cross-reference with the Red Book, which is available on the RACGP website at www.racgp.org.au/redbook. The Red Book is a synthesis of evidence-based guidelines from Australian and international sources and provides recommendations for everyday use in general practice.

Using local guidelines

To optimise preventive health assessments, healthcare providers (particularly in regional and remote areas) are also encouraged to refer to local guidelines where they are appropriate and available. Many of the recommendations in the National Guide describe health problems that may be of concern only in certain regional areas. For example, trichiasis screening is only appropriate for an elderly Aboriginal client who was raised in a trachoma-endemic area (refer to Chapter 6: Eye health). In addition, many recommendations highlight the importance of clinical discretion in decision making. For example, making a decision to apply or not apply a 5% increment to the estimate of absolute cardiovascular risk will depend on the context and specific characteristics of your individual patient (refer to Chapter 11: Cardiovascular disease prevention).

Appraising current preventive practice

Healthcare providers should use the National Guide to systematically appraise current preventive practice, especially where recommendations for the general population have previously been applied to Aboriginal and Torres Strait Islander clients. Providers may also benefit by appraising certain screening activities for which there are 'Good Practice Points' (GPPs) – that is, expert opinion–based recommendations but little current evidence. Inappropriate preventive interventions may draw resources away from activities known to improve the health of the Aboriginal and Torres Strait Islander population (eg risk factor modification and immunisation programs).

Identifying your Aboriginal and Torres Strait Islander clients, and why

Implementation of preventive health assessments requires healthcare providers to identify the target population. Research shows that where general practices take systematic action to improve their identification processes, there is a corresponding increase in the numbers of correctly identified patients.[5]

Identifying Aboriginal and Torres Strait Islander status is a necessary precondition for participating in the Closing the Gap initiative agreed upon by the Australian Government and the Council of Australian Governments in 2008. Without practice awareness, a patient who is of Aboriginal and/or Torres Strait Islander origin cannot benefit from the various Australian Government measures such as the Practice Incentives Program Indigenous Health Incentive,[12] the Pharmaceutical Benefits Scheme (PBS) co-payment measure,[13] and specific Medicare rebates for assessments related to preventive health.

All health professionals have an important role in facilitating the identification of Aboriginal and Torres Strait Islander clients. In order for a person to identify as being Aboriginal and/or Torres Strait Islander and accept this being recorded on their medical records, a culturally supportive and culturally safe environment needs to be established and continuously demonstrated.

The RACGP resource for the *Identification of Aboriginal and Torres Strait Islander people in Australian general practice* aims to help health professionals identify their Aboriginal and Torres Strait Islander clients.[14] In addition, the *Five steps towards excellent Aboriginal and Torres Strait Islander healthcare* provides a simple outline to support practices to offer Aboriginal and Torres Strait Islander preventive health assessments.[15] These are available on the RACGP website at www.racgp.org.au/aboriginalhealth

Implementation of preventive health interventions

Most preventive interventions are best delivered opportunistically during clinical encounters in primary healthcare settings. Others are delivered through integrated approaches between primary healthcare providers and other services such as in the planning and delivery of breast cancer screening.

Using multiple strategies

Clinical information systems that support opportunistic screening through electronic reminders and outreach programs, such as the offer of vaccination in non-traditional settings, are proven strategies to enhance disease prevention and health promotion.

A preventive assessment may be undertaken in a single session between client and health provider, which may or may not simultaneously address other concerns the patient may have, or be delivered incrementally over a number of sessions. Whether clinic-based or community-based, systems used to deliver a preventive assessment need to support a holistic assessment of the client in recognition of the interdependence of many risk factors and determinants of disease.

Undertaking the interventions and follow-up

Implementation of a preventive health assessment should be undertaken by healthcare providers who have the capacity to undertake, or to arrange for, appropriate management of any abnormalities found during the assessment. Healthcare providers should always plan to follow up the patient who has had a preventive health assessment. Specific Medicare rebates can assist in this process. Providers should also be aware of

the potential psychosocial impact of preventive care, particularly when screening results in the diagnosis of a new condition. Informed consent should be obtained prior to undertaking screening and other preventive interventions, and adequate counselling should be provided when the patient is advised of the result.

For quality assurance, health services may also undertake 'health systems assessment' to explore their systems and processes for preventive healthcare. The Kanyini 'health systems assessment tool' (adapted from the Wagners Chronic Disease Model for health systems assessment)[16] is one example of an adapted Aboriginal-specific tool that can be used with or without a facilitator to explore clinic processes.[17]

Appropriate health policies

Supportive health policies, such as financial incentives and workforce training, can encourage healthcare providers to offer preventive health assessments. Those who have been screened may also require treatment, and consequently, an effective screening program may increase the demand for care where existing health service resources are already limited. Any plans to reduce premature and excess Aboriginal and Torres Strait Islander morbidity and mortality will require increased investment in health system capacity to manage previously unrecognised diseases.

The RACGP's *Standards for general practices* (5th edition) can be applied to assess if a practice can provide tailored information to patients on preventive care, and if it has systems for quality improvement activities.[18]

Aboriginal Community Controlled Health Services also have contractual obligations to report on national key performance indicators, several of which pertain to preventive healthcare delivery.[19] The National Guide can inform the evidence underpinning these indicators, and ensure they are 'fit for purpose' to support quality improvement. Indicators should be evidence-based, reflecting research, clinical expertise and patient values. Indicators may also unintentionally restrict clinical decision making if they prioritise the use of certain clinical tools over other equally suitable ones. Other unintended consequences may arise if indicators homogenise clinical decision making without considering the diversity of Aboriginal and Torres Strait Islander peoples and their health needs, thereby undermining patient-centred care.

Medicare rebates

Medicare rebates for preventive health assessments are available for all Aboriginal and/or Torres Strait Islander people of any age through an annual health assessment. This is possible through the Medicare Benefits Schedule (MBS) rebate item number 715. The National Guide contains advice on almost all elements of the requirements to claim this and many other rebates. Identification of your Aboriginal and Torres Strait Islander clients is essential to enable access to Medicare rebates for preventive health assessments.

The Department of Health has also developed resources that list and provide support to claiming these Aboriginal and Torres Strait Islander–specific MBS items.[20] GPs are advised to check the requirements in the current online MBS before claiming these and other MBS items supporting preventive healthcare and follow-up assessments. GPs need to be aware of, and comply with, the requirements of the specific MBS descriptors when providing services.

Primary Health Networks

Primary Health Networks (PHNs) have an important role to play in coordinating the delivery of primary healthcare within their regions. One of six priorities set by the Australian Government is for PHNs to focus on the health of Aboriginal and Torres Strait Islander peoples,[21] such as through a strengthened primary healthcare model of care, and preventive healthcare assessments. Healthcare providers can contact their local PHN to receive service support for the delivery of preventive health assessments.

The National Guide is available on the NACCHO and RACGP websites at www.naccho.org.au/resources and www.racgp.org.au/national-guide respectively.

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What's new in the third edition?

This third edition of the *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people* (National Guide) contains a thorough update of all chapters, as well as new topics developed in response to requests from National Guide users and opportunities identified by the Project Reference Group.

The National Guide aims to complement The Royal Australian College of General Practitioners' (RACGP's) *Guidelines for preventive activities in general practice*, 9th edition (Red Book) by dealing with health issues that are specific to the Aboriginal and Torres Strait Islander population. Where issues common in the general Australian population have not been dealt with in this National Guide (eg urinary incontinence), healthcare professionals are encouraged to refer to the Red Book, available at www.racgp.org.au/redbook

New topics in the third edition	
Topic	**Scope**
Fetal alcohol spectrum disorder (FASD)	Supports healthcare professionals to understand how to make a diagnosis of FASD and to provide support for those diagnosed with FASD. It provides primary and secondary prevention strategies to reduce alcohol use in pregnancy, and recommendations for women, as well as for children at risk of FASD.
Preventing child maltreatment – Supporting families to optimise child safety and wellbeing	Provides an exploration of the multiple factors contributing to the high rates of Aboriginal and Torres Strait Islander children represented in substantiated maltreatment data. Discusses the importance of comprehensive primary healthcare, incorporating culturally responsive and trauma-informed care when working with families affected by child maltreatment, and provides recommendations on screening and behavioural interventions to prevent child maltreatment.
Family abuse and violence	Provides information to support healthcare professionals to develop a high level of awareness of the risks of family abuse and violence and how to identify and provide early intervention for victims of family abuse and for perpetrators. The chapter outlines principles to help communities address the issues and work together to prevent family abuse and violence, and intervene where necessary. To be used in conjunction with the RACGP's *Abuse and violence: Working with our patients in general practice* (White Book), www.racgp.org.au/whitebook
Lung cancer	Provides recommendations on screening asymptomatic adults, including people who smoke or have previously smoked, and lifestyle risk factor counselling on the benefits of avoiding smoking and smoke exposure.
Young people lifecycle summary wall chart	This wall chart has been developed to outline specific recommendations for young people, and complements existing child and adult charts.

Key changes to existing chapters	
Topic	**Key changes**
Smoking	New recommendations include considering intermittent oral nicotine replacement therapy for pregnant women, after explaining risks and benefits; as well as establishing a system at the health service to document and routinely update the smoking status of all patients.
Overweight and obesity	New behavioural recommendations for people with overweight or obesity, such as the importance of assessing the individual context and social factors that influence weight loss; new recommendation to continue orlistat therapy beyond three months only if the individual has lost at least 5% of their initial body weight since starting drug treatment.

Key changes to existing chapters	
Topic	**Key changes**
Physical activity	New behavioural recommendations encouraging active transport and weight-bearing and resistance exercise to prevent osteoporosis. Recommendation that all women who are pregnant should be encouraged to participate in physical activity to levels outlined in the Australian guideline recommendations. Recommendation for people with cardiovascular disease, other chronic diseases, mental health issues and cancer survivors – if the condition is stable – to commence low-intensity physical activity with slow progressions in volume and intensity. Environmental recommendations to encourage health services to support physical activity by introducing physical measures, and for health professionals to consider a range of social and contextual factors that may uniquely influence an individual's level of physical activity.
Alcohol	New recommendation to advise women who are pregnant, breastfeeding or seeking pre-conception counselling and choose to drink, to breastfeed before consuming alcohol. New environmental recommendations to consider initiatives that engage young people and school-based or classroom-based education sessions as part of promoting community-led strategies to reduce alcohol supply.
Gambling	New recommendations assess the impact on children who have parents and/or siblings who are known to have problem gambling, by assessing their nutrition and growth, physical and psychosocial health and wellbeing. Recommendation to refer people with identified problem gambling to financial counselling and legal support services.
Antenatal care	Significantly updated to align with the Australian evidence-based antenatal care guidelines, and incorporates new evidence published subsequently. Examples include recommendations on immunisation as well as on screening for genitourinary and blood-borne viral infections, measurement of height and weight in pregnancy, screening for diabetes, screening for chromosomal abnormalities, screening for social and emotional wellbeing, and screening for family abuse and violence.
Child health	Includes two new topics ('Fetal alcohol spectrum disorder' and 'Preventing child maltreatment – Supporting families to optimise child safety and wellbeing') and a significant number of key changes under 'Anaemia', 'Growth failure' and 'Childhood kidney disease'.
The health of young people	A new young people lifecycle summary chart accompanies this chapter to support healthcare professionals with screening. A new modified HEEADSSS (Home, Education/Employment, Eating, Activities, Drugs and alcohol, Sexuality, Suicide and depression, Safety) assessment tool, the *Aboriginal and Torres Strait Islander youth social and emotional wellbeing assessment*, is included in this third edition to support screening for social and emotional wellbeing. New recommendations on contraception and emergency contraception are included.
The health of older people	Has a new title and new recommendations on screening for osteoporosis for people at moderate and high risk, as well as behavioural recommendations to consider the use of hip protectors for residents of aged care facilities at risk of falling; recommendations on exercise for individuals aged >50 years without osteoporosis and for those with osteoporosis. New recommendations on dementia prevention for those with risk factors for dementia are provided.
Eye health	New recommendations for visual acuity screening and counselling on the risks of diabetic retinopathy for pregnant women with pre-existing diabetes. New recommendations for a balanced diet high in fruit and vegetables to reduce the risk of developing cataract and age-related muscular degeneration. Updated recommendations on screening for trachoma, and on discussing use of chemoprophylaxis with regional trachoma control programs.
Hearing loss	New recommendation for enhanced hygiene practices to prevent cytomegalovirus. New screening recommendations, including advising parents to maintain a high index of suspicion of hearing loss in children at high risk of hearing impairment, and advising parents that absenteeism can be associated with hearing loss. Repeat neonatal hearing screening tests may be required. New behavioural, surgical and chemoprophylaxis recommendations for children with tympanostomy tubes, chronic suppurative otitis media, and otitis media with effusion.

Key changes to existing chapters	
Topic	**Key changes**
Respiratory health	New recommendations on immunisation for pneumococcal disease prevention and influenza. New behavioural recommendations, advising weight reduction for people who have asthma and obesity or overweight. New environmental recommendations for workers in high-risk workplaces, where exposure to occupational dusts and chemicals is high. New screening recommendation for people who smoke, with healthcare professionals to consider the use of a symptom questionnaire to assist with case finding in those with chronic obstructive pulmonary disease (COPD). New behavioural recommendation for people with COPD who currently smoke, to consider referral to pulmonary rehabilitation as it has been shown to reduce COPD exacerbations. New screening recommendations for preventing bronchiectasis and chronic suppurative lung disease, and for those with a history of tuberculosis.
Acute rheumatic fever and rheumatic heart disease (RHD)	Provides numerous updated immunisation, screening, behavioural, chemoprophylaxis and behavioural recommendations to support prevention, diagnosis and treatment of acute rheumatic fever and RHD.
Cardiovascular disease prevention	New screening recommendation, lowering the age of assessing for the prevalence of any Framingham or non-Framingham risk factors to age 30 years. Healthcare providers are advised to consider adding a 5% increment to the risk assessments (five-year Framingham), using their clinical judgement.
Type 2 diabetes prevention and management	New screening recommendations suggest that given the high prevalence of diabetes, use of screening tools such as AUSDRISK are likely to be of limited benefit.
Chronic kidney disease (CKD) prevention and management	New chemoprophylaxis recommendation for adults with CKD and blood pressure (BP) consistently above 140/90 mmHg, to recommend lifestyle changes plus drug treatment aiming at BP <140/90 mmHg (or systolic BP <120 mmHg when tolerated by the patient).
Sexual health and blood-borne viruses	New screening and testing recommendations for all sexually active people aged ≤30 years and sexual partners of a person with a sexually transmitted infection. New chemoprophylaxis recommendations to consider eligibility for pre-exposure prophylaxis (PrEP) for people at higher risk of human immunodeficiency virus (HIV). New recommendations for screening ages for gonorrhoea and *trichomonas vaginalis*. New immunisation recommendations for human papillomavirus (HPV).
Prevention and early detection of cancer	Lung cancer is a new topic within this chapter. In cervical cancer prevention, there are new immunisation recommendations for HPV. New screening recommendations, aligning with the renewed national cervical screening program, with the Pap smear replaced by a new HPV cervical screening test with reflex liquid-based cytology (LBC) for oncogenic HPV-positive samples. New immunisation and screening recommendations for liver cancer. New chemoprophylaxis recommendation for breast cancer includes the availability of tamoxifen, approved for subsidy under the Pharmaceutical Benefits Scheme for primary prevention of breast cancer and able to be prescribed by general practitioners as well as medical specialists.
Mental health	Recommendation to use social and emotional wellbeing assessment tools (such as K5 or Here and Now Aboriginal Assessment [HANAA]) if necessary to guide conversations. New recommendation to provide people who have close family or friends who have died by suicide with support and referral to social and emotional wellbeing services (eg Aboriginal mental health workers).

Chapter 1: Lifestyle

Smoking

Recommendations: Smoking				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	People aged >10 years	**Ask** all patients if they smoke tobacco (refer to Box 1)	Opportunistic and as part of an annual health assessment	IA
	People who currently smoke	**Assess** willingness to quit and the level of nicotine dependence to guide intervention choice (Box 2)	Opportunistic	GPP
Behavioural	People who currently smoke	**Advise** all people who smoke to quit	Opportunistic, ideally at every visit, and as part of an annual health assessment	IA
		Assist smoking cessation with multiple individual, group, telephone (eg Quitline) sessions, or text messaging (eg QuitTxt) cessation support	Opportunistic	IA
		Arrange follow-up visits	Provide at least four sessions of cessation support	IA
Chemo-prophylaxis	People who smoke aged ≥18 years	Recommend smoking cessation pharmacotherapies to nicotine-dependent non-pregnant people who are interested in quitting. First-line pharmacotherapies are nicotine replacement therapy (NRT), varenicline and bupropion	Opportunistic	IA
	Pregnant and breastfeeding women who smoke	Do not use varenicline or bupropion. If counselling is not successful, consider intermittent oral NRT (eg inhaler or lozenges) after explanation of risks and benefits	At each antenatal visit	GPP
Environmental	People aged >10 years	Establish a system at the health service for documenting and routinely updating the smoking status of all patients	As part of a systematic health service approach	IIA
	All people	Complement the above individual-based strategies with support for comprehensive public health approaches to tobacco control – for example: • posters and displays at the health service, community organisations and events • smoke-free rules at the health service, community organisations and events, and smoke-free homes and cars		IIIC

Box 1. The 5As model for behavioural and other interventions related to lifestyle risk factors

Assess – Ask about/assess behavioural health risk(s) and factors affecting choice of behaviour change goals or methods.

Advise – Give clear, specific and personalised behaviour-change advice, including information about personal health harms and benefits. This recognises that the practitioner can be a catalyst for action and enhance motivation for change.

Agree* – Collaboratively select appropriate treatment goals and methods based on the client's interest in and willingness to change their behaviour. This involves joint consideration of treatment options, consequences and client preferences, and setting management goals.

Assist – Using behaviour change techniques (self-help and/or counselling), aid the patient in achieving agreed-upon goals by acquiring the skills, confidence and social/environmental supports for behaviour change, supplemented with adjunctive medical treatments when appropriate (eg pharmacotherapy for tobacco dependence).

Arrange – Schedule follow-up contacts (in person or via telephone) to provide ongoing assistance/support and to adjust the treatment plan as needed, including referral to more intensive or specialised treatment. Follow-up visits often involve repeating the preceding four As.

*Some models omit the 'Agree' component and include an initial 'Ask' component in which risk factors are identified.

Box 2. Assessment of nicotine dependence[10]

1. How soon after waking do you have your first cigarette?
2. How many cigarettes do you have each day?
3. Have you had cravings for a cigarette, or urges to smoke and withdrawal symptoms when you have tried to quit?

Overweight and obesity

Recommendations: Overweight and obesity				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All people aged <18 years	Assess body mass index (BMI) using age-specific and sex-specific centile charts (refer to Chapter 3: Child health, and 'Resources')	Opportunistic and as part of an annual health assessment	GPP
	All people aged ≥18 years	Assess BMI and waist circumference (Box 3)	Opportunistic and as part of an annual health assessment	IB
		Specific groups associated with improved outcomes from BMI/waist conference monitoring include: • individuals seeking advice on weight management • those with conditions associated with overweight and obesity (cardiovascular disease [CVD], diabetes, stroke, gout, liver or gallbladder disease)		
Behavioural	All people aged ≥18 years	Provide advice to promote healthy eating and physical activity as per Australian guidelines (Box 4; and refer to Chapter 1: Lifestyle, 'Physical activity')	Opportunistic	IA
	Adults with overweight or obesity	Advise that modest weight loss of 5% or more has multiple health benefits, particularly lowered cardiovascular, diabetes and kidney disease risks	Opportunistic and as part of an annual health check	IA
	Adults with overweight or obesity	Develop a weight management plan that must include: • targeted information as per Australian dietary guidelines (Box 4) • goal setting • at least one follow-up consultation • an assessment of individual contextual and social factors that influence weight loss and maintenance (Box 5) • individualised strategies to support weight loss or weight maintenance, including context-specific social supports (if necessary)	Opportunistic and as part of an annual health check	IA
		Encourage regular self-weighing		IC
		Encourage a net energy deficit of 2500 kilojoules per day through combined dietary and physical activity interventions as per Australian dietary and physical activity guidelines		IA

Recommendations: Overweight and obesity				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	Adults with overweight or obesity	Consider referral to specialist services, dietician and/or exercise physiologist or telephone coaching services (refer to 'Resources') if available		GPP
		Individual or group-based psychological interventions* are recommended in combination with dietary and physical activity advice		IA
	Children with overweight or obesity	Develop a targeted weight management plan as for adults. This plan must involve at least one parent/carer and aim to change the whole family's lifestyle (refer to 'Resources')	Opportunistic and as part of an annual health check	IB
		Except in severe obesity, weight maintenance rather than weight loss is recommended for healthy growth and development Recommend referral for specialist review for children with severe obesity		IVD
Chemo-prophylaxis	People aged ≥18 years with one or more weight-related comorbidities present (severe mobility restriction, arthritis, type 2 diabetes) and a BMI ≥28 kg/m^2	Assess risk–benefit of orlistat on an individual basis and only prescribe it as part of a comprehensive obesity management plan Continue orlistat therapy beyond three months only if the person has lost at least 5% of their initial body weight since starting drug treatment. Monitor for malabsorption of fat-soluble vitamins if prolonged use is being considered	Opportunistic and as part of an annual health check	IA
Surgical	People aged ≥18 years with one or more weight-related comorbidities present (as above) and a BMI ≥35kg/m^2	Assess risk–benefit of bariatric surgery on an individual basis in conjunction with lifestyle interventions and as part of a comprehensive specialist management program	Opportunistic	IA
Environmental	Community	Advocate for multifactorial and coordinated community-based interventions to increase access to healthy and nutritious food (eg subsidised healthy food in stores)		GPP

*Cognitive-focused behavioural interventions include:
- situational control and stimulus control, avoiding cues to over-eating
- cognitive reframing and reinforcement techniques
- self-recording of calorie intake and eating behaviours
- goal setting and relapse prevention strategies.

Box 3. Combining measures to assess obesity and disease risk* in adults[9]

Classification	Body mass index (BMI) (kg/m²)	Disease risk (relative to normal measures)	
		Waist circumference Men 94–102 cm Women 80–88 cm	Waist circumference Men >102 cm Women >88 cm
Underweight	<18.5	–	–
Healthy weight	18.5–24.9	–	Increased
Overweight	25.0–29.9	Increased	High
Obesity	30.0–39.9	High to very high	Very high
Severe obesity	>40	Extremely high	Extremely high

*Risk of type 2 diabetes, elevated blood pressure and cardiovascular disease (CVD).

Box 4. Australian dietary guidelines for Australian adults[19]

Guideline 1: To achieve and maintain a healthy weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs

- Children and adolescents should eat sufficient nutritious foods to grow and develop normally. They should be physically active every day and their growth should be checked regularly.
- Older people should eat nutritious foods and keep physically active to help maintain muscle strength and a healthy weight.

Guideline 2: Enjoy a wide variety of nutritious foods from these five food groups every day

- Plenty of vegetables of different types and colours, and legumes/beans
- Fruit
- Grain (cereal) foods, mostly wholegrain and/or high-cereal varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley
- Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans
- Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat
- Choose store foods that are most like traditional bush foods*
- Enjoy traditional bush foods whenever possible*

And, drink plenty of water.

Guideline 3: Limit intake of foods containing saturated fat, added salt, added sugars and alcohol

- Limit intake of foods high in saturated fat such as many types of biscuits, cakes, pastries, pies, processed meats, commercial burgers, pizza, fried foods, potato chips, crisps and other savoury snacks.
  a. Replace high-fat foods that contain predominately saturated fats such as butter, cream, cooking margarine, coconut and palm oil with foods that contain predominately polyunsaturated and monounsaturated fats such as oils, spreads, nut butters/pastes and avocado.
  b. Low-fat diets are not suitable for children under the age of two years.
- Limit intake of foods and drinks containing added salt.
  a. Read labels to choose lower sodium options among similar foods.
  b. Do not add salt to foods in cooking or at the table.
- Limit intake of foods and drinks containing added sugars such as confectionary, sugar-sweetened soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks.
- If you choose to drink alcohol, limit intake. For women who are pregnant, planning a pregnancy or breastfeeding, not drinking alcohol is the safest option.

Guideline 4: Encourage, support and promote breastfeeding

Guideline 5: Care for your food; prepare and store it safely

*Additional recommendations specific to some Aboriginal and Torres Strait Islander communities.

Box 5. Social and contextual factors that influence disease prevention strategies

Disease prevention strategies for obesity and other lifestyle-related conditions need to be individualised, and a person-centred approach should be adopted.

- Recognise that each person's context will be different and this will shape their readiness and capacity to make lifestyle changes. The capacity to make changes will be reduced if multiple comorbid conditions are present.
- Care plans incorporating weight loss recommendations should take consideration of the following factors; where possible, implement local support services to address these factors:
  - social isolation
  - reduced health literacy
  - unemployment and financial constraints
  - limited availability of recreational facilities
  - difficulties accessing transport support
  - limited physical and economic access to healthy food (food security).
- Consider intersectoral approaches to influence the social determinants of overweight and obesity (eg partnerships with providers of recreational facilities, establishment of men's and women's groups).

Physical activity

Recommendations: Physical activity				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All people	Assess current level of physical activity and sedentary behaviours as per the Australian age-appropriate recommendations* (Box 6) Useful tools for assessment of physical activity include the UK General Practice Physical Activity Questionnaire (refer to 'Resources')	Opportunistic and as part of annual health assessment	IA
Behavioural	All people	For patients who are insufficiently active, give targeted advice and written information. This should include the following: • Determine existing preferred physical activities and invite patients to propose new activities • Ask the patient the amount/frequency of activity they feel is achievable and set activity goals aiming to achieve Australian guideline recommendations (Box 6) • Record these goals and provide patients with a written copy • Consider cognitive behavioural support and follow-up • Consider additional social support (eg buddy system, involvement in a group activity) • Encourage active transport, which means physical activity undertaken as a means of transport and not merely as a form of recreation For osteoporosis prevention, encourage regular weight-bearing and resistance exercise to maintain and increase bone density (refer to Chapter 5: The health of older people)	Opportunistic and as part of annual health assessment	IB
	Pregnant women	All women who are pregnant should be encouraged to participate in physical activity to the levels in the Australian guideline recommendations (Box 6)	During antenatal visits	IA

Recommendations: Physical activity				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	People with diabetes	For sedentary people, a gradual introduction to initial low-intensity physical activity, with slow progressions in volume and intensity, is recommended Those on insulin should be given individualised advice on avoiding hypoglycaemia when exercising (eg adjustment of carbohydrate intake, reduction of insulin dose, and choice of injection site) Consider referral to an exercise program for coaching if facilities are available	Opportunistic and as a part of annual diabetes assessment	GPP
	People with cardiovascular disease (CVD) People with other chronic diseases, mental health issues and cancer survivors	Those with recent acute coronary syndrome event or revascularisation surgery (coronary artery bypass graft [CABG], percutaneous coronary intervention [PCI]) should be advised to participate in a short period (up to 12 weeks) of supervised exercise rehabilitation If the condition is well compensated and clinically stable, recommend commencing initial low-intensity physical activity with slow progressions in volume and intensity Consider referral to an exercise physiologist for coaching if facilities are available	Opportunistic	IA IIB
Environmental	All people	Refer to appropriate community-based physical activity programs and encourage use of public facilities that promote activity (eg advocate for increased availability of sports and recreational facilities in remote communities) Encourage health services to support physical activity by introducing practical measures such as walking meetings, provision of incentives for active transport, and making it easier for clients/staff to arrive by foot or bicycle Consider a range of social and contextual factors that may uniquely influence an individual's level of physical activity (refer to Chapter 1: Lifestyle, 'Overweight and obesity': Box 5)	Opportunistic	IB

***Moderate physical activity:** Activity at a level that causes your heart to beat faster and some shortness of breath, but that you can still talk comfortably while doing. **Vigorous physical activity:** Activity at a level that causes your heart to beat a lot faster and shortness of breath that makes talking difficult between deep breaths – that is, physical activity at a heart rate of 70–85% of maximum heart rate (MHR). MHR is calculated as 220 minus age.

Box 6. The Australian physical activity and sedentary behaviour guidelines – Recommendations by age group[40]

Age group	Recommendation
Aged <5 years	**Physical activity** For health development in infants (aged 0–1 year), physical activity – particularly supervised floor-based play in safe environments – should be encouraged from birth. Toddlers (aged 1–3 years) and pre-schoolers (aged 3–5 years) should be physically active every day for at least three hours, spread throughout the day. **Sedentary behaviour** Children younger than two years of age should not spend any time watching television or using other electronic media (DVDs, computer and other electronic games). For children aged 2–5 years, sitting and watching television and the use of other electronic media (DVDs, computer and other electronic games) should be limited to less than one hour per day. Infants, toddlers and pre-schoolers (all children aged 0–5 years) should not be sedentary, restrained, or kept inactive for more than one hour at a time, with the exception of when sleeping.
Aged 5–12 years	**Physical activity** For health benefits, children aged 5–12 years should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day. Children's physical activity should include a variety of aerobic activities, including some vigorous intensity activity. On at least three days per week, children should engage in activities that strengthen muscle and bone. To achieve additional health benefits, children should engage in more activity – up to several hours per day. **Sedentary behaviour** To reduce health risks, children aged 5–12 years should minimise the time they spend being sedentary every day. To achieve this: • limit use of electronic media for entertainment (eg television, seated electronic games and computer use) to no more than two hours a day – lower levels are associated with reduced health risks • break up long periods of sitting as often as possible.
Aged 13–17 years	**Physical activity** For health benefits, young people aged 13–17 years should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day. Young people's physical activity should include a variety of aerobic activities, including some vigorous intensity activity. On at least three days per week, young people should engage in activities that strengthen muscle and bone. To achieve additional health benefits, young people should engage in more activity – up to several hours per day. **Sedentary behaviour** To reduce health risks, young people aged 13–17 years should minimise the time they spend being sedentary every day. To achieve this: • limit use of electronic media for entertainment (eg television, seated electronic games and computer use) to no more than two hours a day – lower levels are associated with reduced health risks • break up long periods of sitting as often as possible.

Box 6. The Australian physical activity and sedentary behaviour guidelines – Recommendations by age group[40] (continued)

Age group	Recommendation
Aged 18–64 years	**Physical activity** Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount. Be active on most, preferably all, days every week. Accumulate 150 to 300 minutes (2½ to 5 hours) of moderate intensity physical activity or 75 to 150 minutes (1¼ to 2½ hours) of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week. Do muscle strengthening activities on at least two days each week. **Sedentary behaviour** Minimise the amount of time spent in prolonged sitting. Break up long periods of sitting as often as possible.
Aged ≥65 years	Older people should do some form of physical activity, no matter what their age, weight, health problems or abilities. Older people should be active every day in as many ways as possible, doing a range of physical activities that incorporate fitness, strength, balance and flexibility. Older people should accumulate at least 30 minutes of moderate physical activity on most, preferably all, days. Sedentary people may need to gradually build up to 30 minutes or more. Older people who have stopped physical activity, or who are starting a new physical activity, should start at a level that is easily manageable and gradually build up to the recommended amount, type and frequency of activity. Older people who continue to enjoy a lifetime of vigorous physical activity should carry on doing so in a manner suited to their capability into later life, provided recommended safety procedures and guidelines are adhered to.

Alcohol

Recommendations: Alcohol				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All people aged ≥15 years	Ask about the quantity and frequency of alcohol consumption to detect risky/high-risk drinkers (Box 7)	During the annual health assessment or in response to potential alcohol-related disease	IA–IB
		More frequent assessment is recommended for high-risk groups (Box 8)	Opportunistic and as part of annual health assessments	I–IIIB
		Use structured questionnaires such as Alcohol Use Disorders Identification Test (AUDIT), AUDIT-C* or Indigenous Risk Impact Screen (IRIS) to assess drinking (refer to 'Resources'; note that these tools may require some adaptation to local community needs)	As part of an annual health assessment, or opportunistic	IA–IB
	People aged 10–14 years	Consider sensitive and age-appropriate alcohol intake screening in children and adolescents between the ages of 10 and 14 (refer to Chapter 4: The health of young people) Parental or carer involvement may be required and referral should be considered	As part of an annual health assessment or in response to potential alcohol-related disorders/ other risky behavior	II
	People with risky or high-risk drinking levels	Review for comorbid physical or mental health disorders and other chronic disease risk factors Perform comprehensive alcohol assessment such as AUDIT-C and consider brief intervention. For those with dependence, consider specialist referral where necessary	As part of an annual health assessment	IA
Behavioural	People with hazardous and harmful drinking levels	Offer brief interventions for the reduction of alcohol consumption as first-line treatment. Consider using tools such as FLAGS and 5As approach (refer to Box 9) Note: Brief intervention alone is not sufficient for people with severe alcohol-related problems or alcohol dependence. Strongly consider more extended intervention and/or referral	Opportunistic and as part of an annual health assessment	IA
	Women who are pregnant, breastfeeding, seeking pre-conception counselling	Advise to abstain from alcohol, explain the risks to the unborn child and emphasise the benefits of not drinking (refer to Box 7 and 'Resources') Advise breastfeeding mothers abstinence from alcohol is the safest option, especially in the first month post-partum. For those choosing to drink, alcohol intake should be limited to no more than two standard drinks per day. Try to breastfeed before drinking. Continue to promote breastfeeding	Pregnant women – at all antenatal visits, as appropriate For all others, opportunistic screening as part of an annual health assessment	IA

Recommendations: Alcohol				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Environmental		Promote community-led strategies to reduce alcohol supply, including advocacy for: • 'dry communities' in areas with high numbers of alcohol-related harms • restrictions to liquor licensing hours or changes to other licensing conditions • better, proactive policing of responsible service of alcohol • community development initiatives • initiatives to engage young people • school or classroom-based educational sessions		GPP
*Using AUDIT-C, it is recommended that those who reach a cut-off score of equal to or greater than 5 are deemed to be 'at risk', those with a score equal to or greater than 6 'high risk', and those with a score equal to or greater than 9 are potentially alcohol dependent.[33]				

Box 7. National Health and Medical Research Council (NHMRC) guidelines for safer alcohol use[19]

1. For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.
2. For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.
3. For children and young people under 18 years of age, not drinking alcohol is the safest option.
   a) Parents and carers should be advised that children under 15 years of age are at the greatest risk of harm from drinking and that for this age group, not drinking alcohol is especially important.
   b) For young people aged 15–17 years, the safest option is to delay the initiation of drinking for as long as possible.
4. Maternal alcohol consumption can harm the developing fetus or breastfeeding baby.
   a) For women who are pregnant or planning a pregnancy, not drinking is the safest option.
   b) For women who are breastfeeding, not drinking is the safest option.

Box 8. High-risk groups that require more frequent screening and close attention

- Adolescents and young adults
- Pregnant women/those planning pregnancy
- Illicit drug users/other substance misusers
- Those with a family history of alcohol dependence
- People with mental illness
- Those with medical conditions that may be worsened by alcohol consumption; conditions include:
  - cardiovascular disease (CVD)
  - arrhythmia
  - liver disease
  - diabetes
  - hypertension

Box 9. The FLAGS framework for brief intervention[18]

Feedback	• Provide individualised feedback about the risks associated with continued drinking, based on current drinking patterns, problem indicators and health status. • Discuss the potential health problems that can arise from risky alcohol use.
Listen	• Listen to the patient's response. • This should spark a discussion of the patient's consumption level and how it relates to general population consumption and any false beliefs held by the patient.
Advice	• Give clear advice about the importance of changing current drinking patterns and a recommended level of consumption. • A typical five-minute to 10-minute brief intervention should involve advice on reducing consumption in a persuasive but non-judgemental way. • Advice can be supported by self-help materials, which provide information about the potential harms of risky alcohol consumption and can provide additional motivation to change.
Goals	• Discuss the safe drinking limits and assist the patient to set specific goals for changing patterns of consumption. • Instil optimism in the patient that his or her chosen goals can be achieved. • It is in this step, in particular, that motivation-enhancing techniques are used to encourage patients to develop, implement and commit to plans to stop drinking.
Strategies	• Ask the patient to suggest some strategies for achieving these goals. • This approach emphasises the individual's choice to reduce drinking patterns and allows them to choose the approach best suited to their own situation. • The individual might consider setting a specific limit on alcohol consumption, learning to recognise the antecedents of drinking, and developing skills to avoid drinking in high-risk situations, pacing one's drinking and learning to cope with everyday problems that lead to drinking.

Gambling

Recommendations: Gambling				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All people aged >12 years	Ask clients if they participate in gambling activities (eg 'pokies', cards, roulette, blackjack and other table gambling, lotteries, sport-associated gambling, online gambling) Screen for problems by asking a single-item question such as: 'Have you or someone you are close to ever had issues with gambling?'	Opportunistic and as part of an annual health assessment	GPP
	Young people aged 12–24 years	Consider screening young people for gambling behaviours as part of general screening tools such as HEADSS (refer to Chapter 4: The health of young people)		GPP
	High-risk groups such as people with stress-related medical problems, young people or adults with mental health or substance use problems	All adults in high-risk groups should be screened for problem gambling using the single-item question Consider use of a validated measurement tool for problem gambling (refer to 'Resources')		GPP
	Children with parents/siblings who are known to have problem gambling	Assess the impact of family gambling on children, through assessing child nutrition and growth, and physical and psychosocial health and wellbeing (refer to Chapter 3: Child Health, 'Growth failure', and Chapter 4: The health of young people)	Opportunistic	GPP
Behavioural	All people identified with problem gambling	Management options for problem gambling include: • brief treatments and motivational interviewing aimed at promoting behaviour change • cognitive behavioural therapy • treatment of co-existing and complicating factors such as depression and substance abuse • referral to gambling support helplines and websites (refer to 'Resources') • referral to gambling treatment centres, financial counselling and support, legal support services	Opportunistic	GPP

Recommendations: Gambling				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Environmental	Young people aged ≥12 years	Where appropriate, engage with local school authorities and support implementation of school-based gambling prevention strategies Encourage teachers, parents and healthcare professionals to be more aware of adolescent gambling		IIIB
	Community	Adopt or support community-focused activities (eg community campaigns) that promote strategies to control gambling and reduce related harms		GPP

Chapter 2: Antenatal care

Smoking cessation

Recommendations: Smoking cessation				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women	Regularly assess smoking status and remind patients to limit/avoid exposure to cigarette smoke	At first and subsequent antenatal visits	IA
Behavioural	Pregnant women who smoke	Offer interventions to assist smoking cessation, including brief advice and more intensive, multi-component interventions (refer to Chapter 1: Lifestyle, 'Smoking')	At first and subsequent antenatal visits	IB
Chemo-prophylaxis	Pregnant women who have not quit smoking after advice and psychosocial support	Consider nicotine replacement therapy (NRT) if smoking cessation counselling is not successful If women are interested in using NRT, discuss potential benefits and risks. These include the effectiveness of NRT at assisting quitting, and the limited evidence about safety of NRT considered in the context of the known harms of continued smoking Use intermittent forms of NRT (gum, inhaler, lozenges, spray) rather than continuous (patches), to reduce the total dose of nicotine	At each antenatal visit	IIB

Genitourinary and blood-borne viral infections

Recommendations: Genitourinary and blood-borne viral infections				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women <25 years and all pregnant women from communities with a high prevalence of sexually transmitted infections (STIs), including those in outer regional and remote areas	Offer chlamydia testing, with a nucleic acid amplification test (eg PCR) of a first-void urine, or endocervical swab, or self-collected vaginal swab or tampon specimen Consider repeat screening later in pregnancy in areas of high prevalence	At first antenatal visit	IIIC GPP
	Pregnant women who have known risk factors or who live in or come from communities with a high prevalence of gonorrhoea, including those in outer regional and remote areas	Offer testing for gonorrhoea, with a nucleic acid amplification test (eg PCR) of a first-void urine, or endocervical swab, or self-collected vaginal swab or tampon specimen Consider repeat screening later in pregnancy in areas of high prevalence	At first antenatal visit	GPP
	Pregnant women with symptoms of trichomoniasis	Offer testing for trichomoniasis, with a nucleic acid amplification test (eg PCR) of a vaginal swab or tampon specimen Screening asymptomatic pregnant women for trichomoniasis is not recommended	On presentation	IIIB
	Pregnant women with symptoms of bacterial vaginosis (BV)	Offer testing for BV, with microscopy of a high vaginal swab Screening asymptomatic pregnant women for BV is not recommended	On presentation	IIB
	All pregnant women	Offer either antenatal screening for Group B streptococcus (GBS) colonisation (using microscopy and culture of a self-collected vaginal–rectal swab) or an assessment of risk factors for GBS transmission during labour	Screening at 35–37 weeks' gestation Risk factor assessment during labour	IIB–IIIC
		Offer serological testing for syphilis, with a treponemal-specific enzyme immunoassay test (eg *Treponema pallidum haemagglutination assay* [TPHA] or fluorescent treponemal antibody absorption [FTA-ABS]) Consider repeat screening later in pregnancy in areas of high prevalence	At first antenatal visit	IIB GPP

Recommendations: Genitourinary and blood-borne viral infections				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women	Offer serological testing for HIV, with a combined HIV antigen and antibody test	At first antenatal visit	IIB
		Offer serological testing for hepatitis B virus (HBV) surface antigen	At first antenatal visit	IA
	Pregnant women with risk factors for hepatitis C virus (HCV), including intravenous drug use, tattooing and body piercing, and incarceration	Offer serological testing for HCV antibodies Note: If HCV antibodies are detected, a HCV RNA PCR test is required to indicate whether HCV infection is past or current Routine screening of pregnant women without risk factors for HCV is not recommended	At first antenatal visit	IIIC
	All pregnant women	Offer testing for asymptomatic bacteriuria with a mid-stream urine microscopy and culture In areas with limited access to pathology testing, dipstick tests may be used to exclude asymptomatic bacteriuria but positive results must be confirmed by mid-stream urine culture	At first antenatal visit	IA GPP
Environmental	Pregnant women with positive results for a genitourinary or blood-borne infection	Ensure adequate recall systems are implemented for follow-up Recommend partner treatment and contact tracing for STIs (Refer to Chapter 14: Sexual health and blood-borne viruses)		GPP

Nutrition and nutritional supplementation

Recommendations: Nutrition and nutritional supplementation				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women	Measure height and weight and calculate BMI Advise women about appropriate weight gain during pregnancy (Box 1) Repeated weighing during pregnancy is recommended only when clinical management is likely to be influenced	At the first antenatal visit At subsequent visits if clinically indicated	IIB IB GPP
	All pregnant women	Offer a full blood examination to assess for anaemia	At first antenatal visit, 28 and 36 weeks' gestation	GPP
	Pregnant women with risk factors for vitamin D deficiency (limited sun exposure, dark skin, BMI >30 kg/m^2)	Consider serology testing for vitamin D levels, particularly in the non-summer months	At first antenatal visit	GPP
Behavioural	All pregnant women	Provide information on the benefits of a healthy diet in pregnancy and give practical, tailored advice on healthy eating (refer to Chapter 1: Lifestyle, 'Overweight/obesity')	Early in pregnancy	GPP
Chemo-prophylaxis	All pregnant women and those considering pregnancy	Recommend 500 mcg of oral folic acid daily to reduce the risk of newborn neural tube defects	At least one month prior to pregnancy and for the first 12 weeks of pregnancy	IA
	Women with diabetes	Recommend a higher dose of 5 mg of folic acid orally daily to reduce the risk of newborn neural tube defects	At least one month prior to pregnancy and for the first 12 weeks of pregnancy	IIIC
	Pregnant women with proven vitamin D deficiency	Offer vitamin D supplementation because of potential benefits for a woman's long-term health	At diagnosis	GPP
	Pregnant women with proven iron deficiency Pregnant women who are not iron deficient	Offer iron supplementation (oral or intravenous with the dose titrated according to the clinical situation) Routine iron supplementation is not recommended	At diagnosis	IIB
	All pregnant women	Offer iodine supplementation with 150 mcg/day	At first antenatal visit	GPP

Box 1. Institute of Medicine recommended weight gain during pregnancy by pre-pregnancy BMI[4]

BMI (kg/m2)	<18.5	18.5–24.9	25.0–29.9	≥30.0
Recommended weight gain during pregnancy (kg)	12.7–18.1	11.3–15.9	6.8–11.3	5–9

Adapted from Australian Health Ministers' Advisory Council. Clinical practice guidelines: Antenatal care – Module 1. Canberra: Department of Health and Ageing, 2012, Table 7.3.

Diabetes

Recommendations: Diabetes				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women who do not have diagnosed diabetes	Measure fasting plasma glucose to screen for pre-existing diabetes (Box 2) If not feasible to obtain a fasting blood test, alternatives include random blood glucose or HbA1c (refer to Chapter 12: Type 2 diabetes)	At first antenatal visit	GPP
	All pregnant women who do not have diagnosed diabetes	Perform a 75 g two-hour oral glucose tolerance test (GTT) If a two-hour GTT is consistently difficult to achieve, consider alternative tests such as a random or fasting plasma glucose	Between 24–28 weeks gestation	GPP GPP
	Women diagnosed with gestational diabetes who are now post-partum	Perform a 75 g fasting glucose tolerance test to assess for the presence of diabetes	At six weeks post-partum	GPP
Behavioural	Pregnant women with diabetes	Offer advice and resources to promote good glycaemic control throughout pregnancy – encourage healthy diet and exercise Consider referral to specialist services, and consult specific management guidelines for ongoing care (refer to 'Resources')	At diagnosis	GPP
	Non-pregnant women who have a past history of gestational diabetes	Advise women about their future risks of developing diabetes and give advice on preventive strategies, including healthy diet, exercise and weight control (refer to Chapter 1: Lifestyle, and Chapter 12: Type 2 diabetes) Screen for diabetes with a fasting blood glucose (refer to Chapter 12: Type 2 diabetes)	At post-partum checks and as part of an annual health assessment	GPP

Box 2. World Health Organization and International Association of Diabetes and Pregnancy Study Group criteria for diagnosis of diabetes in pregnancy[54]

Diagnosing diabetes in pregnancy: One or more of the following criteria are met	
Measure	**Criteria**
Fasting plasma glucose	≥7.0 mmol/L
Two-hour plasma glucose	≥11.1 mmol/L following a 75 g oral glucose load
Random plasma glucose	≥11.1 mmol/L in the presence of diabetes symptoms

Diagnosing gestational diabetes: One or more of the following criteria are met at any time during pregnancy	
Measure	**Criteria**
Fasting plasma glucose	5.1–6.9 mmol/L
One-hour plasma glucose	≥10 mmol/L following a 75 g oral glucose load
Two-hour plasma glucose	8.5–11.0 mmol/L following a 75 g oral glucose load

Summary of other antenatal care screening and activities

Recommendations: Summary of other antenatal care screening and activities				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women	Discuss and plan the schedule of antenatal visits with the pregnant woman based on her individual needs For an uncomplicated pregnancy, 10 visits are recommended for women having their first pregnancy, and seven visits for women having subsequent pregnancies	At first antenatal visit	IB
		Offer an ultrasound scan to determine gestational age and detect multiple pregnancies	Best performed between 8 weeks and 13 weeks + 6 days' gestation	IIB
		Assess blood pressure	At first and subsequent antenatal visits	IIB
		Test for proteinuria* Use an automated urinary dipstick analyser, if available, as it is more accurate than visual inspection of a dipstick result If a urinary dipstick is positive for protein, further assessment with a 24-hour urinary protein or protein:creatinine ratio is required	At first antenatal visit Repeat at subsequent visits if clinically indicated – for example, for women with high blood pressure or kidney disease	GPP
		Auscultate for heart murmurs Have a low threshold for referral for echocardiography and assessment in areas with a high prevalence of rheumatic heart disease	At first antenatal visit	GPP
		Advise women to have an oral health check and treatment if required (refer to Chapter 8: Oral and dental health)	At first antenatal visit	IB
		Offer cervical screening if due (refer to Chapter 15: Prevention and early detection of cancer)	During first trimester	GPP
		Offer all women rubella serology testing to check their levels of immunity Follow up women with low rubella immunity after delivery to offer rubella immunisation	At first antenatal visit	IIB

Recommendations: Summary of other antenatal care screening and activities				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women	Check blood group and antibodies	At first visit and 28-week visit	IIB
		Offer an ultrasound scan to assess for fetal morphology abnormalities and placental location†	At 18–20 weeks	IIB
		Assess background level of risk of chromosomal abnormalities such as Down syndrome, based on age, family history, past obstetric history and other risk factors Discuss the purpose and implications of screening for chromosomal abnormalities to promote an informed decision‡	At first antenatal visit	GPP
	Pregnant women who choose first trimester screening for chromosomal abnormalities	Offer combined screening for chromosomal abnormalities with ultrasound assessment of nuchal translucency thickness, and serological testing for free beta-human chorionic gonadotrophin and pregnancy-associated plasma protein A	Combined screening: blood tests: 9–13 weeks + 6 days' gestation Ultrasound assessment: 11–13 weeks + 6 days' gestation	IIB
	Pregnant women who present after first trimester and choose to have second trimester blood tests to screen for chromosomal abnormalities	Offer screening for chromosomal abnormalities with second trimester serological testing for estriol, free beta-human chorionic gonadotrophin, and alpha fetoprotein (triple test), or with inhibin A added (quadruple test)	14–20 weeks' gestation	IIB
	Pregnant women who have a positive first or second trimester screening test, or a high baseline risk of congenital abnormalities because of risk factors, and who choose to have a second trimester diagnostic test	Offer chorionic villus sampling before 14 weeks, or amniocentesis after 15 weeks		IIB

Recommendations: Summary of other antenatal care screening and activities				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women	Ask women about psychosocial factors, including past and current life stressors (housing, finances, grief and loss), family and social supports, and previous or current mental health disorders (refer to Chapter 17: Mental health)	Early in pregnancy, and during subsequent visits if clinically indicated	GPP
		Use the Edinburgh Postnatal Depression Scale or another validated perinatal mental health assessment tool to assess women for symptoms of depression and anxiety during the antenatal period,§ and follow up women who screen positive Ask about women's exposure to family violence (refer to Chapter 16: Family abuse and violence) If a woman discloses that she is experiencing violence, respond immediately taking into account the woman's safety and that of children in her care, her individual circumstances and preferences, confidentiality and privacy, family and community structures and support, and local services	Early in pregnancy, and during subsequent visits if clinically indicated	IIB
Immunisation	All pregnant women	Review influenza immunisation status and offer where appropriate (refer to Chapter 9: Respiratory health, 'Influenza') Offer a booster dose of adult pertussis vaccine (dTpa) to all women in the third trimester. This is to help protect infants against pertussis before they commence immunisations at two months of age	Opportunistic; influenza vaccination can be given at any time during pregnancy Pertussis vaccine is recommended in third trimester	GPP

*Risk factors for pre-eclampsia include age >40 years, first or multiple pregnancy, BMI >30, diabetes, vascular or kidney disease, personal or family history of pre-eclampsia, raised blood pressure at first visit, pregnancy interval >10 years.

†There is emerging evidence that measurement of cervical length at this ultrasound may detect those women at increased risk of preterm delivery and may offer an opportunity for intervention, such as progesterone pessaries.[62] However, there is currently insufficient evidence to recommend this as routine practice.

‡First trimester combined screening is with nuchal translucency thickness ultrasound and serological testing for free beta-human chorionic gonadotrophin and pregnancy-associated plasma protein A. Non-invasive prenatal testing (NIPT) involves testing maternal plasma for cell-free DNA, and can be undertaken after 10 weeks' gestation. While NIPT is more accurate than other approaches to screening, it is also more expensive, and testing is currently not covered by Medicare and therefore incurs significant out-of-pocket costs for women ($500 or more).[59]

For women who present after the first trimester, second trimester screening with serological testing can be offered, but is less accurate than first trimester screening options. Second trimester screening involves serological testing for oestriol, free beta human chorionic gonadotrophin and alpha fetoprotein (triple test) or with inhibin A added (quadruple test). Second trimester diagnostic tests for congenital abnormalities include chorionic villus sampling or amniocentesis.

§The Edinburgh Postnatal Depression Scale is a validated screening tool that includes 10 questions and leads to a score that indicates levels of risk of depression. The tool and guidance on its interpretation and use can be found on the beyondblue website at www.beyondblue.org.au/health-professionals/perinatal-mental-health/perinatal-mental-health-questionnaires and in the beyondblue Perinatal Clinical Practice Guidelines.[60] The Kimberley Mums Mood Scale (KMMS) is a perinatal mental health assessment tool designed and validated specifically for use with Aboriginal women from the Kimberley region. The tool, as well as training and support materials, are available at http://kimberleymumsmoodscale.weebly.com

National Guide lifecycle chart | Child

RACGP Royal Australian College of General Practitioners

NACCHO National Aboriginal Community Controlled Health Organisation
Aboriginal health in Aboriginal hands
www.naccho.org.au

Screening/assessment	How often?	Who?	Page*	Age (months)							Age (years)		
				Newborn	2	4	6	9	12	18	24	2–5	6–14	14–17
Child health														
Immunisation														
Vaccination	As per National Immunisation Program Schedule (NIPS)	All children	33											
Catch-up schedule	Opportunistically	Children behind in vaccination schedule	33											
Anaemia														
Nutritional history	6–9 months and 18 months	All children	35											
Perform haemoglobin test	6–9 months and 18 months (increase frequency if iron deficiency anaemia [IDA] is diagnosed); use age-appropriate haemoglobin levels to diagnose IDA Repeat test after six months; continue six-monthly testing if anaemia persists, in conjunction with age-appropriate treatment and review until age five years	Children in other areas with risk factors (refer to Chapter 3: Child health) All children aged >6 months from communities with a high prevalence of IDA	35											
Growth failure														
Growth monitoring	One week, six weeks, four, six, 12 and 18 months, and yearly to age five years	All children Use age-appropriate and sex-appropriate Centers for Disease Control and Prevention and World Health Organization growth charts	37											
Childhood kidney disease														
Check skin for scabies and impetigo and treat according to guidelines	Annually and opportunistically	Children living in areas with high rates of infectious skin disease	39											
Assess need for imaging tests	At first episode of urinary tract infection (UTI)	Children with first UTI	39											
Albumin–creatinine ratio (ACR)	At age 10 years or at puberty (whichever is earlier) after 2–5 years' diabetes duration, and annually thereafter	Children with pre-pubertal and pubertal onset diabetes	39											
Fetal alcohol spectrum disorder														
Assess child growth and development, particularly head circumference, hearing and vision	Annually and opportunistically	All children (refer to Chapter 3: Child health, 'Fetal alcohol spectrum disorder')	42											
Assess child development and behaviour using a validated assessment tool, including for child social and emotional wellbeing Refer to a paediatrician for developmental assessment, or a child development service for multidisciplinary assessment	Annually and opportunistically	All children exposed to alcohol in the prenatal period, if there is a parental or clinician concern about the child not meeting normal developmental milestones	42											
Screen for prenatal alcohol exposure as well as cognitive, language and behavioural problems	On initial contact with child protection, police or justice system	All children at high risk for fetal alcohol spectrum disorder (FASD), including children coming into contact with the child protection, police or justice systems	42											
Preventing child maltreatment														
Conduct routine monitoring of developmental milestones (refer to Chapter 3: Child health, 'Growth failure')	Annually and opportunistically	All children	44											
Assess the risk of child maltreatment and the need for support (refer to Chapter 3: Child health, 'Preventing child maltreatment')	Annually and opportunistically	All families	44											
Eye health														
Visual acuity														
General eye examination	Newborn and at 3–6 months	Infants (age 3–6 months)	66											
Screen for visual acuity	Annually and opportunistically or before school entry	Children aged 3–5 years	66											
Hearing loss														
Vaccination (rubella, measles, *Haemophilus influenzae* type b, meningococcus)	NIPS and state/territory schedules	Children aged <15 years	68											
13-valent pneumococcal conjugate vaccination (13vPCV)	NIPS and state/territory schedules	Infants aged two, four and six years (and 18 months in high-risk areas)	68											
Influenza vaccine	Annually pre-influenza season Prioritise provision of vaccination to high-risk groups in the pre-influenza season months (March–April)	People aged >15 years Children aged six months to five years All individuals aged ≥6 months with a chronic disease	68											
Universal neonatal hearing screening program	Prior to one month	Newborns	68											
Ear examination	Annually and opportunistically	Children aged <15 years	68											
Monitor for hearing loss	Annually and opportunistically Annually	Children aged <5 years and older children at high risk of hearing impairment Youth aged >15 years	69											
Oral and dental health														
Oral health review	Annually and opportunistically Annually	Children aged 0–5 years Children and youth aged 6–18 years	74											
Undertake oral health review as part of regular health check and offer appropriate oral hygeine advice to minimise oral bacterial levels	6–12-monthly	Children with past rheumatic heart disease and cardiovascular abnormalities	74											
Respiratory health														
Influenza														
Influenza vaccine	Annually pre-influenza season Prioritise provision of vaccination to high-risk groups in the pre-influenza season months (March–April)	People aged >15 years Children aged six months to five years All individuals aged ≥6 months with a chronic disease	79											
Sexual health and blood-borne viruses														
Hepatitis C virus (HCV)														
HCV serology testing	18 months and repeat if positive	Infants born to HCV-infected mothers	103											
Hepatitis B virus (HBV)														
Hepatitis B vaccination	At birth prior to leaving hospital and at two, four and six months	Neonates and infants	102											
Hepatitis B immunoglobulin (HBIG) and vaccination	HBIG within 12 hours and HBV within 24 hours	Babies born to mothers who are hepatitis B virus surface antigen (HBsAg) positive	102											

Age-specific Condition-specific

*Page number refers to print version of the *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people*

Chapter 3: Child health

Immunisation

Recommendations: Immunisation				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation*	All children	Conduct regular review of all infants and children and offer vaccination	As per National Immunisation Program Schedule (NIPS)[23] and relevant state and territory immunisation schedules	IA
		Use the 'catch-up' schedule for all children behind in their vaccination schedule	Opportunistic	IA
	Pregnant women	Offer influenza vaccination	At any stage of pregnancy	IA
		Offer diphtheria/tetanus/pertussis (dTpa) vaccination	Third trimester of each pregnancy (28–32 weeks)	IA
	Women planning pregnancy and those post-delivery	Vaccinate with measles, mumps, rubella, with or without varicella as appropriate >28 days prior to conception or as soon as possible following delivery. Serological status should be checked post-vaccination	28 days prior to conception or post-delivery where serological immunity is inadequate	IA
Environmental		Implement provider/system-based interventions Review vaccination status at every clinic visit and make a documented plan for the next vaccination	Every visit	IA
		Ascertain local clinic vaccination rates via audits of health records and Australian Immunisation Register (AIR) records		IA
		Implement recall and reminder systems and computer prompts for staff and patients to address immunisation gaps, particularly in the first 12 months of age		IA
		Implement an adverse events reporting system		IA

Recommendations: Immunisation				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Environmental		Increase access to vaccinations via: • fast-tracking children presenting for immunisation • training and reminders for staff to screen and offer vaccinations • providing home visits and mobile clinics for immunisation If resources are limited, focus particularly on vaccinations due in the first 12 months	Every visit	IA
		Increase community demand for vaccinations by: • promotion of vaccination to parents, childcare staff, Aboriginal and Torres Strait Islander community workers such as Aboriginal and Torres Strait Islander liaison officers • use of posters and other visual materials in public places • personalised health records • giving all parents/carers a record in card or book form of their child's immunisation status • commencing promotional activities for parents in the antenatal period and in places attended by parents of very young babies	Ongoing	IA
*Vaccination should be implemented according to best practice recommendations of the NIPS[23] and relevant state and territory immunisation schedules.				

Anaemia

Recommendations: Anaemia				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All children	Take a nutritional history asking specifically about intake of iron-rich foods such as meat and fortified cereals, leafy green vegetables, vitamin C intake with meals and cow's milk intake	At age 6–9 months and repeat at 18 months	GPP
	Children with the following risk factors: • history of low birth weight (LBW) or preterm birth • maternal anaemia • twin • failure to thrive • chronic infections • cow's milk intake <1 year of age	Perform haemoglobin (Hb) via point-of-care capillary sample or venous blood (including blood film)*†	Test at 6–9 months and repeat at 18 months	GPP
		Use age-appropriate Hb levels to diagnose anaemia*[1,15]	Test more frequently if IDA is diagnosed	IIC
	All children >6 months of age from communities with a high prevalence of iron deficiency anaemia (IDA)		Repeat test after six months; continue six-monthly testing if anaemia persists, in conjunction with appropriate treatment, and review until age five years	GPP
Behavioural	Babies born without risk factors for IDA	Recommend exclusive breastfeeding until six months of age	Opportunistic	IB
	Babies born with LBW (<2500 gm), prematurity (<37 weeks,) or to mothers who had maternal anaemia	Recommend exclusive breastfeeding until four months of age		GPP
	All babies at around 4–6 months	Introduce iron-enriched infant cereals, pureed meat, poultry and fish, or cooked tofu and legumes Also discuss withholding cow's milk until 12 months of age and avoidance of tea		IB

Recommendations: Anaemia				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	Normal birth weight term babies <6 months with IDA risk factors	Consider oral iron supplementation in consultation with a paediatrician		GPP
	Breastfed premature and low birth weight infants	Provide oral iron supplement from one month to four months of age‡	Opportunistic and as part of routine postnatal care	GPP
	Children six months to 16 years in areas with high rates of hookworm infections	Consider use of single-dose albendazole as part of a systematic child health surveillance program in consultation with local public health units Refer to Australian *Therapeutic guidelines* for dosing regimen[58]	Every six months	GPP
Environmental	Children with IDA	Include children on recall registers for regular review and Hb repeat testing post-treatment and, if Hb normal, six-monthly until not considered at risk		GPP
	Communities with a known high prevalence of IDA	Advocate for and support nutritional programs that remove financial barriers to improved nutrition and improve the range and accessibility of healthy foods alongside the food strategies recommended above (refer also to Chapter 1: Lifestyle, 'Overweight/obesity')	Immediately and ongoing	IA

*The Kimberley Aboriginal Medical Services and the Central Australian Rural Practitioners Association define anaemia in children aged 6–12 months as being Hb <105 g/L, children aged 1–4 years as Hb <110g/L, and children aged 5–7 years as Hb <115g/L.

†There are some state and territory jurisdictional differences in the screening for anaemia, and local guidelines should be consulted.

‡Dosing schedules for iron supplementation can be found in the *Therapeutic guidelines* and on the website of the Royal Children's Hospital Melbourne (refer to 'Resources').

Growth failure

Recommendations: Growth failure				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All children	Recommend growth monitoring (including weight, length, head circumference, nutritional and psychosocial assessment) to coincide with child health visits for immunisation (Box 1) Use age and sex-appropriate Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) growth charts to monitor growth*	At age one week, six weeks, four, six, 12 and 18 months, then yearly to age five years Opportunistic as part of an annual health assessment from ages 5–18 years Monitor weight more frequently if there are concerns	IA
	Preterm children and children with specific conditions (eg trisomy 21)	Recommend growth monitoring as above using condition-specific growth charts	As above	GPP
Behavioural	All children	Discuss growth monitoring findings with the family, explaining how weight gains are linked to good health and always link the discussion with any nutritional intervention currently being undertaken	Opportunistic	IA
		Assess developmental milestones (gross motor, fine motor, speech and language, social interactions) with growth monitoring checks Consider using parent report questionnaires and questions in the patient-held record† (refer to Chapter 3: Child health, 'Fetal alcohol spectrum disorder') Maintain a high index of suspicion in children with the following risk factors: possible fetal alcohol syndrome, microcephaly, convulsions and prematurity	At age one week, six weeks, four, six, 12 and 18 months, then yearly to age five years	IA
	Mothers	Promote breastfeeding by discussing the health benefits, use of peer support, face-to-face health professional and postnatal home visits	Opportunistic	IB
	All families	Provide nutrition education counselling targeting both families and community workers	Opportunistic	IB

Recommendations: Growth failure				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	All families	Counselling should focus on behaviour change, be community driven and integrated with other preventive child health programs Consider referral to a dietitian if simple measures are not helpful		GPP
	Children in families experiencing socioeconomic hardship or psychosocial stress	Provide home visiting support by referral to an early intervention program Ensure regular communication between primary healthcare staff and other agencies so that nutritional support programs are integrated with psychosocial support	Opportunistic	IA GPP
Chemo-prophylaxis	Children living in areas with high rates of helminth infections	Recommend anti-helminth treatment with a single dose of albendazole Refer to the Australian *Therapeutic guidelines* for dosing regimen[63]	Opportunistic	IA
Environmental		Community food supplementation programs may be used on a short-term basis to overcome lack of food security, providing they have the support of the community and are part of a multifaceted intervention		IA

*There are two main sets of sex-specific growth charts used in Australia: WHO charts for children aged 0–2 years, and CDC charts for children aged 2–18 years. The CDC charts include body mass index for age charts for those aged 2–18 years.[2,3] Correction for prematurity should continue until at least two years of age. Correction for prematurity must be made until 18 months of age for head circumference, two years for weight and 40 months for height. Measure length if <2 years and height if >2 years. Be sure equipment is calibrated and the taking of measurements is performed accurately.[22,23]

†There is no consensus on the correct developmental assessment tool to use with Aboriginal and Torres Strait Islander children, and none have been validated in Aboriginal and Torres Strait Islander populations. Parent-reported developmental assessment tools such as the Ages and Stages Questionnaire (ASQ) or Parents' Evaluation of Developmental Status (PEDS), or objective tools such as Denver Developmental Screening Test (DDST), may be used.

Box 1. Conducting a growth-monitoring action plan

- Document carer concerns and the barriers they perceive to breastfeeding and healthy nutrition.
- Explore issues of finances, transport, home storage (fridge) availability, numbers of people living at home, food preferences, food preparation equipment availability, facilities to maintain hygiene and hygiene practices.
- Involve the carer in coming up with solutions to problems, and focus on finding solutions that are practical and context-specific, paying particular attention to family needs and resources.
- Give information about appropriate weaning foods and amounts.
- Consider linking child to a team approach involving Aboriginal health workers, community nurse, family support worker and dietitian if there are indications that the child is at risk of failure to thrive or showing early signs of growth faltering.
- Begin the next health check by reviewing the previous action plan.

Childhood kidney disease

Recommendations: Childhood kidney disease				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All children without a high-risk condition	Routine urinalysis or blood pressure screening for kidney disease is not recommended unless there is a clinical indication		IA
	Children with a high-risk condition (obese/ overweight, renal disease, congenital heart disease, strong family history)	Routine urinalysis and blood pressure surveillance is advisable. For children with diabetes, refer below	Opportunistic	GPP
	Children with asymptomatic proteinuria	Routine renal ultrasound examination is not recommended		IA
	Children living in areas with high rates of infectious skin disease (scabies and impetigo)	Check the skin for scabies and impetigo and treat according to management guidelines (refer to 'Resources')	Opportunistic and as part of annual health assessment	GPP
	Children with first episode urinary tract infection (UTI)	Assess need for imaging tests based on treatment response within 48 hours and whether atypical features are present (Box 2)		IB
	Children with pre-pubertal and pubertal onset diabetes	Check albumin to creatinine ratio (ACR) using single voided specimen, morning specimen preferred. Abnormal screening tests should be repeated as microalbuminuria may be transient Check blood pressure annually	At age 10 years or at puberty (whichever is earlier), after 2–5 years' diabetes duration, then annually thereafter	IA
Behavioural	Children who have had at least one episode of UTI	Identify and correct predisposing factors for recurrence (including constipation, dysfunctional elimination syndromes, poor fluid intake, and delays in voiding)	As needed	IA
Chemo-prophylaxis	Children living in areas with high rates of infectious skin disease (scabies and impetigo)	Treat household contacts of someone with scabies with 5% permethrin cream if aged >2 months, and sulphur 5% or crotamiton cream if aged <2 months In communities where there are outbreaks of infected scabies, offer all household contacts of people with impetigo a single dose of benzathine penicillin G (refer to 'Resources')	As needed	IIIC

Recommendations: Childhood kidney disease				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	Children with recurrent UTIs	There is insufficient evidence to routinely recommend probiotic therapy or cranberry products for the prevention of recurrent UTIs		IA
		Routine prophylactic antibiotics are not required, even if the child has vesicoureteric reflux	If used: daily for 12 months, then review	IA
	Children with asymptomatic bacteriuria	Antibiotics are not recommended		IA
Environmental	Children living in areas with high rates of infectious skin disease (scabies and impetigo)	Promote good hygiene practices at home Refer to relevant housing support services to reduce overcrowding and promote access to adequate washing facilities Recommend the regular use of community swimming pools	Opportunistic	GPP IB
		Community-based interventions that use screening and immediate treatment of skin sores and scabies in targeted age groups should be combined with simultaneous treatment of the whole community for scabies (refer to 'Resources')		IA

Box 2. Investigations for children with first UTI/pyelonephritis[23]

Atypical (any of the following)

- patient seriously ill
- poor urine flow
- abdominal or bladder mass
- raised creatinine
- septicaemia
- failure to respond to treatment with suitable antibiotics within 48 hours
- infection with non–*Escherichia coli* organisms

Infants aged <6 months: MCUG* if atypical UTI or recurrent UTIs
Children aged <3 years: Renal ultrasound during acute infection + DMSA scan† in 4–6 months
Children aged ≥3 years: Renal ultrasound during acute infection

Typical (ie does not meet any of above atypical criteria)

Infants aged <6 months: Renal ultrasound within six weeks
Children aged ≥6 months: No investigations required

DMSA, dimercaptosuccinic acid; MCUG, micturating cystourethrogram; UTI, urinary tract infection
*MCUG should not be performed routinely, but should be considered if there is dilatation on ultrasound or poor urine flow.
†DMSA scan – an intravenous radionuclide scan for assessing renal function.

Fetal alcohol spectrum disorder

Recommendations for women

Recommendations: Fetal alcohol spectrum disorder – Recommendations for women				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Women who are pregnant or planning pregnancy	Screen for risky drinking and alcohol use by taking an appropriate history. This can also involve use of the Alcohol Use Disorders Identification Test – Consumption (AUDIT-C) questionnaire or other tools to assess risky drinking (refer to Chapter 1: Lifestyle, 'Alcohol')	At diagnosis of pregnancy and in each trimester	IB
Behavioural	All women of childbearing age	Provide advice consistent with National Health and Medical Research Council (NHMRC) recommendations on reducing alcohol related health risks (refer to Chapter 3: Child health, 'Childhood kidney disease', and Chapter 9: Respiratory health) Provide contraceptive advice	As part of annual health assessment Opportunistic	IB
	Women who report any alcohol use prior to or during pregnancy	Conduct brief intervention (Box 3) to reduce alcohol consumption and use motivational interviewing techniques (refer to 'Resources' for recommended tools)	On each antenatal visit	IIB
	Women with drug and alcohol use problems	Provide referral to an addiction medicine specialist or alcohol/drug treatment service for counselling, withdrawal management and pharmacotherapy	On each antenatal visit Opportunistic	IB GPP
Environmental	Communities where high-risk alcohol use is prevalent	Promote broader community-level strategies to reduce alcohol. These include: • advocacy for 'dry' communities • floor pricing on alcohol • support for restrictions to liquor licensing laws • support for community-led programs that strengthen and support families, and that build capacity in community members and health organisations		GPP

Recommendations for children at risk

Recommendations: Fetal alcohol spectrum disorder – Recommendations for children at risk				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All children	Assess child growth and development, particularly head circumference, hearing and vision (refer to Chapter 3: Child health, 'Growth failure')	Opportunistic and as part of annual health assessment in low-risk, non–alcohol-exposed pregnancies	GPP
	All children exposed to alcohol in the prenatal period (AUDIT-C score >0 in any trimester), if there is parental or clinician concern about the child not meeting normal developmental milestones (refer to 'Resources')	Assess child development and behaviour using a validated assessment tool including for child social and emotional well being (refer to 'Resources') Refer to a paediatrician for developmental assessment, or a child development service for multidisciplinary assessment (Figure 1)	Opportunistic and as part of annual health assessment	GPP
	All children at high risk for FASD, including children coming into contact with the child protection, police or justice systems	Screen for prenatal alcohol exposure Screen for cognitive, language, and behavioural problems	On initial contact with child protection, police or justice systems	GPP
Behavioural	Families or carers supporting a person living with FASD School-aged children with FASD	Refer to a parent/caregiver support program Refer to allied health specialist or therapy-focused services, especially those offering interventions targeting executive function (eg mental processes involved in planning, attention, remembering instructions and managing multiple tasks)		IIC GPP IIB
	Children with FASD	Consider specialist referral (paediatrician, child/adolescent psychiatrist, neurologist) to assess the need for medications for hyperactivity, sleep or mood disorders, seizures or behavioural problems		IIIB

Box 3. The FLAGS framework for brief intervention (to guide practitioners to sensitively and appropriately ask about alcohol)

Feedback	Provide individualised feedback about the risks associated with continued drinking, based on current drinking patterns, problem indicators, and health status. Discuss the potential health problems that can arise from risky alcohol use.
Listen	Listen to the patient's response. This should spark a discussion of the patient's consumption level and how it relates to general population consumption and any false beliefs held by the patient.
Advice	Give clear advice about the importance of changing current drinking patterns and a recommended level of consumption. A typical five to 10 minute brief intervention should involve advice on reducing consumption in a persuasive but non-judgemental way. Advice can be supported by self-help materials, which provide information about the potential harms of risky alcohol consumption and can provide additional motivation to change.
Goals	Discuss the safe drinking limits and assist the patient to set specific goals for changing patterns of consumption. Instil optimism in the patient that his or her chosen goals can be achieved. It is in this step, in particular, that motivation-enhancing techniques are used to encourage patients to develop, implement and commit to plans to stop drinking.
Strategies	Ask the patient to suggest some strategies for achieving these goals. This approach emphasises the individual's choice to reduce drinking patterns and allow them to choose the approach best suited to their own situation. The individual might consider setting a specific limit on alcohol consumption, learning to recognise the antecedents of drinking, and developing skills to avoid drinking in high-risk situations, pacing one's drinking and learning to cope with everyday problems that lead to drinking.

Reproduced from Haber P, Lintzeris N, Proude E, Lopatko O. Guidelines for the treatment of alcohol problems. Canberra: Department of Health and Ageing, 2009. Available at www.health.gov.au/internet/main/publishing.nsf/Content/0FD6C7C289CD31C9CA257BF0001F96BD/$File/AustAlctreatguidelines%202009.pdf [Accessed 15 January 2017].

Figure 1. Diagnostic criteria and categories for fetal alcohol spectrum disorder (FASD)

Diagnostic criteria	Diagnostic categories	
	FASD with 3 sentinel facial features	FASD with <3 sentinel facial features
Prenatal alcohol exposure	Confirmed or unknown	Confirmed
Neurodevelopmental domains • Brain structure/neurology • Motor skills • Cognition • Language • Academic achievement • Memory • Attention • Executive function, including impulse control and hyperactivity • Affect regulation • Adaptive behaviour, social skills or social communication	Severe impairment in at least 3 neurodevelopment domains	Severe impairment in at least 3 neurodevelopmental domains
Sentinel facial features • Short palpebral fissure • Smooth philtrum • Thin upper lip	Presence of 3 sentinel facial features	Presence of 0, 1 or 2 sentinel facial features

Reproduced from Bower C, Elliott E, on behalf of the Steering Group. Report to the Australian Government Department of Health: Australian guide to the diagnosis of fetal alcohol spectrum disorder (FASD). Perth: Telethon Kids Institute; Canberra: Department of Health, 2016.

Preventing child maltreatment – Supporting families to optimise child safety and wellbeing

Recommendations: Preventing child maltreatment – Supporting families to optimise child safety and wellbeing				
Preventive intervention type	**Target population**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All pregnant women	Assess risk of child maltreatment by exploring psychosocial risk factors such as alcohol and other drug use, personal history of family abuse and violence (Box 4; and refer to Chapter 16: Family abuse and violence), housing adequacy, engagement with and accessibility of antenatal care, and supportive factors including social and family supports	At first and subsequent antenatal visits (refer to Chapter 2: Antenatal care)	GPP
	All children	Conduct routine monitoring of developmental milestones (refer to Chapter 3: Child health, 'Growth failure')	Opportunistic and as part of a routine health assessment	GPP
	All families	Assess the risk of child maltreatment and the need for support (Box 4) Offer referral to a culturally informed parenting program where services are available as a universal precaution in the prevention of child maltreatment (refer to 'Resources')	Opportunistic and as part of an annual health assessment	GPP
	Families identified as being at risk (Box 4)	Conduct a comprehensive psychosocial assessment, including mental health, trauma, alcohol and other drug use (refer to Chapter 4: The health of young people, and Chapter 17: Mental health), and assess for the availability of social supports with an emphasis on building trust and engagement with healthcare (refer to 'Resources')	Opportunistic	
Behavioural	Children with identified developmental delay, behavioural disturbance, harmful child–parent interactions	Recommend referral to community paediatrician for comprehensive health, behaviour and development assessment Consider referral to other services depending on the specific developmental issue such as mental health, speech (refer to Chapter 3: Child health, 'Growth failure'). Complete GP Management Plan and Team Care Arrangements and/ or GP Mental Health Treatment Plan as appropriate to facilitate access to MBS-funded specialist services	Opportunistic	GPP

Recommendations: Preventing child maltreatment – Supporting families to optimise child safety and wellbeing				
Preventive intervention type	**Target population**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	Families identified as being at risk (Box 4)	Offer referral to Aboriginal and Torres Strait Islander–specific support services, including a home visiting program where available Consider offering referral to a culturally informed parenting program if available (refer to 'Resources')	Opportunistic	III–2 GPP
	Children when there are serious concerns or evidence of maltreatment, including neglect	Notify child protection services as per jurisdictional requirements (refer to 'Resources') Become familiar with health and support services for Aboriginal and Torres Strait Islander peoples in your area, particularly family support services Involve extended family members and/ or culturally specific support services whenever possible	Opportunistic	GPP
Environmental		Health professionals should consider attending cultural competence training programs and become familiar with principles of trauma-informed practice (refer to 'Resources')		GPP

Box 4. Family risk factors for child maltreatment

- Significant parental mental health issues, trauma, and alcohol or other drug issues
- History of family violence
- Parental experience of child protection services
- Homelessness or risk of homelessness
- Parental incarceration
- Social isolation

Chapter 4: The health of young people

Social emotional wellbeing

Recommendations: Social emotional wellbeing				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All young people aged 12–24 years	Conduct a Social Emotional Wellbeing (SEW) assessment using a strengths-based approach, to obtain a holistic assessment of health and to determine risk factors affecting wellbeing Useful tools include a table of adolescent development stages (Appendix 1); the HEEADSSS assessment tool (Appendix 2); and the Aboriginal and Torres Strait Islander Youth SEW assessment (modified HEEADSSS; Appendix 3a) with its question guide (Appendix 3b)	Opportunistic and as part of an annual health check	GPP
Note: A strengths-based approach focuses on the strengths and capabilities of an individual and the community; advocates for a positive sense of cultural identity; and acknowledges that there is potential for change, growth and success.				

Unplanned pregnancy

Recommendations: Unplanned pregnancy				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All young people aged 12–24 years	Ask if sexually active, conduct a social emotional wellbeing assessment, and identify at-risk sexual behaviours (eg unprotected sexual intercourse – refer to Chapter 14: Sexual health and blood-borne viruses, Box 1)	Opportunistic and as part of an annual health check	GPP
Behavioural	All young people aged 12–24 years	Provide anticipatory guidance and sexual health education (refer to Chapter 14: Sexual health and blood-borne viruses), tailoring the information to the young person's needs Discussion should include the following: • sexual development and sexual feelings • prevention of unplanned pregnancies • resisting sexual and peer pressure • methods of reversible contraception, access to and use of emergency contraception	Opportunistic and as part of an annual health check	GPP
	Young people who are considering initiating sexual activity or who are sexually active	Provide contraceptive services		III–2B
		Recommend use of and/or provide condoms Discuss the proper methods for condom usage Discuss and offer hormonal contraception Discuss advance emergency contraception	Opportunistic and as part of annual health check	I
	Young people engaging in risky sexual behaviour	Use individual behaviour change techniques such as brief interventions (eg information giving, motivational interviewing) and cognitive behavioural therapy	Opportunistic	III–3C
		Offer or refer to theory-based pregnancy prevention/education programs to improve knowledge and increase contraceptive use. Examples include social cognitive theory,* motivational interviewing program, AIDS Risk Reduction Model (Box 1)		IA
	Parents or guardians of young people	Provide health guidance to parents and other guardians regarding youth sexual health following the principles of anticipatory guidance†	Opportunistic	GPP
Chemo-prophylaxis	Young females who are sexually active or considering initiating sexual activity	Assess suitability for, and offer, hormonal contraception. Methods include the oral contraceptive pill (OCP) and long-acting reversible contraception (LARC) (ie progestogen-only injections, progestogen-only subdermal implants, progestogen-only intrauterine devices)	Opportunistic and as part of annual health check	GPP

Recommendations: Unplanned pregnancy				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	Young females who are sexually active or considering initiating sexual activity	Offer advance emergency contraception	Opportunistic and as part of annual health check	IA
	Young females who have had unprotected intercourse	Conduct a detailed history to assess the context Discuss and recommend emergency contraception as necessary Arrange for appropriate follow-up	Opportunistic	IIB
Environmental		Promote youth-friendly primary healthcare services		GPP

*Social cognitive theory is a learning theory based on the idea that people learn by watching what others do and will not do.

†Anticipatory guidance is a developmentally based counselling technique that focuses on a young person's stage of development. Counselling is focused toward gaining a better understanding of young people's physical growth, psychosocial and psychosexual development. It emphasises the importance of the young person becoming actively involved in decisions regarding their healthcare.[17]

Box 1. The AIDS Risk Reduction Model[55]

This model has three stages, and is based on several other behaviour change theories, including the Health Belief Model, 'efficacy' theory, emotional influences and interpersonal processes. The three stages outlined below are behaviour labelling, commitment to change and taking action.

Stage	Influences
1. Recognition and labelling of one's behaviour as high risk	• Knowledge of sexual activities associated with human immunodeficiency virus (HIV) transmission • Believing that one is personally susceptible to contracting HIV • Believing that having acquired immune deficiency syndrome (AIDS) is undesirable • Social norms and networking
2. Making a commitment to reduce high-risk sexual contacts and to increase low-risk activities	• Cost and benefits • Enjoyment (eg will the changes affect my enjoyment of sex?) • Response efficacy (eg will the changes successfully reduce my risk of HIV infection?) • Self-efficacy • Knowledge of the health utility and enjoyability of a sexual practice, as well as social factors (group norms and social support), are believed to influence an individual's cost and benefit and self-efficacy beliefs
3. Taking action. This consists of three phases: a) information seeking b) obtaining remedies c) enacting solutions Depending on the individual, phases may occur concurrently or phases may be skipped	• Social networks and problem-solving choices (self-help, informal and formal help) • Prior experiences with problems and solutions • Level of self-esteem • Resource requirements of acquiring help • Ability to communicate verbally with sexual partner • Sexual partner's beliefs and behaviours

Illicit drug use

Recommendations: Illicit drug use				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	All young people (aged 12–24 years)	Review hepatitis B immunisation and immune status and offer vaccination where indicated (refer to Chapter 14: Sexual health and blood-borne viruses)	As per Australian standard vaccination schedule	GPP
Screening	All young people	Assess for presence of risk factors for illicit drug use (Box 2)	As part of annual health check	GPP
	Young people with risk factors for drug use (Box 2)	Administer one of the following questionnaires to ascertain drug use: • CRAFFT screening tool (age ≤21 years) • Indigenous Risk Impact Screen (IRIS) tool (age ≥18 years) • Substances and Choices Scale (age 13–18 years) (Refer to 'Resources')	Opportunistic and as follow-up of annual health check	IIIB
		Test for blood-borne viruses and sexually transmitted infection (STI) (refer to Chapter 14: Sexual health and blood-borne viruses)		GPP
Behavioural	Young people with multiple risk factors for drug use (Box 2)	Refer for preventive case management where services are available*	Opportunistic	IB
	Young people who are using illicit drugs	Provide brief interventions (eg in conjunction with administration of one of the above screening questionnaires) (refer also to evidence base Chapter 1: Lifestyle, 'Introduction', 5As framework)	Opportunistic	IIIB
		Refer to drug education programs based on social learning theories (eg Life Skills Training program, peer education, youth sport and recreation programs)	Opportunistic	IIB
	Families of young people who are using illicit drugs	Consider referral where appropriate to parent education programs and family intervention therapy to encourage healthy family development and reduction of parent–adolescent conflict	Opportunistic	IIB
	Young people who are using injecting drugs	Refer to needle and syringe exchange programs where appropriate	Opportunistic	IB

Recommendations: Illicit drug use				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Environmental		Promote school completion		GPP
		Promote access to community and school-based drug education programs (based on social learning theories)		IB
		Promote youth-friendly primary healthcare services		GPP
		Support increased access to youth workers Support community-driven illicit drug use prevention programs (especially valuable for inhalant abuse)		IIB
		Support and promote community engagement strategies such as mentorship		IB
		Support supervised injecting centres		IIB

*Preventive case management involves the coordinated delivery of intensive services tailored to meet a range of developmental needs. It requires intensive case management through coordinating family intervention, after-school activity, mentoring, tutoring, individual psychiatric assessment and counselling. The approach therefore requires complex coordination across a range of service types such as health, juvenile justice, education and substance abuse. Key aspects are to assess needs, identify relevant services, coordinate service delivery and monitor outcomes. The young person (and if possible, the family) should be involved in developing the service delivery objectives.[60] This can be similar to developing a care plan for people with chronic conditions.

Box 2. Risk factors for illicit drug use[56,60,61]

Individual influences

- Not completing secondary school
- Unemployment
- Delinquency
- Residing in remote and very remote areas
- Favourable attitudes to drug use
- Sensation seeking and adventurous personality
- Relationships with peers involved in drug use
- Low involvement in activities with adults

Family influences

- Parental conflict
- Parent–adolescent conflict
- Parental attitudes to drug use and rules around drug use
- Alcohol and drug problems in the family

Environmental influences

- Perceived and actual level of community drug use
- Community disadvantage and disorganisation
- Availability of illicit substances within the community
- Positive media portrayal of drug use
- Decreased presence of law enforcement

Appendix 1. Stages of adolescent development[1]

	Early (10–13 years)	Middle (14–17 years)	Late (18–21 years)
Central question	'Am I normal?'	'Who am I?' 'Where do I belong?'	'Where am I going?'
Major developmental issues	• Coming to terms with puberty • Struggle for autonomy commences • Same-sex peer relationships all important • Mood swings	• New intellectual powers • New sexual drives • Experimentation and risk taking • Relationships have self-centred quality • Need for peer group acceptance • Emergence of sexual identity	• Independence from parents • Realistic body image • Acceptance of sexual identity • Clear educational and vocational goals, own value system • Developing mutually caring and responsible relationships
Main concerns	• Anxieties about body shape and changes • Comparison with peers	• Tensions between family and adolescent over independence • Balancing demands of family and peers • Prone to fad behaviour and risk taking • Strong need for privacy • Maintaining ethnic identity while striving to fit in with dominant culture	• Self-responsibility • Achieving economic independence • Deciding on career/ vocation options • Developing intimate relationships
Cognitive development	• Still fairly concrete thinkers • Less able to understand subtlety • Daydreaming common • Difficulty identifying how their immediate behaviour impacts on the future	• Able to think more rationally • Concerned about individual freedom and rights • Able to accept more responsibility for consequences of own behaviour • Begins to take on greater responsibility within family as part of cultural identity	• Longer attention span • Ability to think more abstractly • More able to synthesise information and apply it to themselves • Able to think into the future and anticipate consequences of their actions

Reproduced from Chown P, Kang M, Sanci L, Newnham V, Bennett DL. Adolescent health GP resource kit: Enhancing the skills of general practitioners in caring for young people from culturally diverse backgrounds. 2nd edn. Westmead, NSW: NSW Centre for the Advancement of Adolescent Health and Transcultural Mental Health Centre, 2008. Available at www.health.nsw.gov.au/kidsfamilies/youth/Pages/gp-resource-kit.aspx [Accessed 20 November 2017].

Appendix 2. HEEADSSS assessment[28,99]	
Assessment area	**Questions**
H – Home	**Explore home situation, family life, relationships and stability** Where do you live? Who lives at home with you? Who is in your family (parents, siblings, extended family)? What is your/your family's cultural background? What language is spoken at home? Does the family have friends from outside its own cultural group/from the same cultural group? Do you have your own room? Have there been any recent changes in your family/home recently (moves, departures, etc)? How do you get along with your mum and dad and other members of your family? Are there any fights at home? If so, what do you and/or your family argue about the most? Who are you closest to in your family? Who could you go to if you needed help with a problem?
E – Education/ employment	**Explore sense of belonging at school/work and relationships with teachers/peers/ workmates, changes in performance** What do you like/not like about school/work? What are you good at/not good at? How do you get along with teachers/other students/workmates? How do you usually perform in different subjects? What problems do you experience at school/work? Some young people experience bullying at school, have you ever had to put up with this? What are your goals for future education/employment? Any recent changes in education/employment?
E – Eating/ exercise	**Explore how they look after themselves, eating and sleeping patterns** What do you usually eat for breakfast/lunch/dinner? Sometimes when people are stressed they can overeat, or under-eat. Do you ever find yourself doing either of these? Have there been any recent changes in your weight? In your dietary habits? What do you like/not like about your body? *If screening more specifically for eating disorders, you may ask about body image, the use of laxatives, diuretics, vomiting, excessive exercise, and rigid dietary restrictions to control weight.* What do you do for exercise? How much exercise do you get in an average day/week?
A – Activities/ peer relationships	**Explore their social and interpersonal relationships, risk-taking behaviour, as well as their attitudes about themselves** What sort of things do you do in your free time out of school/work? What do you like to do for fun? Who are your main friends (at school/out of school)? Do you have friends from outside your own cultural group/from the same cultural group? How do you get on with others your own age? How do you think your friends would describe you? What are some of the things you like about yourself? What sort of things do you like to do with your friends? How much television do you watch each night? What's your favourite music? Are you involved in sports/hobbies/clubs/other activities?

Appendix 2. HEEADSSS assessment[28,99]	
Assessment area	**Questions**
D – Drug use/ cigarettes/ alcohol	**Explore the context of substance use (if any) and risk-taking behaviours** Many young people at your age are starting to experiment with cigarettes/drugs/alcohol. Have any of your friends tried these or other drugs such as marijuana, injecting drugs, other substances? How about you, have you tried any? *If 'Yes', explore further.* How much do you use and how often? How do you (and your friends) take/use them? Explore safe/unsafe use, binge drinking and so on. What effects do drug taking/smoking/alcohol have on you? Has your use increased recently? What sort of things do you (and your friends) do when you take drugs/drink? How do you pay for the drugs/alcohol? Have you had any problems as a result of your alcohol/drug use (with police, school, family, friends)? Do other family members take drugs/drink?
S – Sexuality	**Explore their knowledge, understanding, experience, sexual orientation and sexual practices – look for risk-taking behaviour/abuse** Many young people your age become interested in romance and sometimes sexual relationships. Have you been in any romantic relationships or been dating anyone? Have you ever had a sexual relationship with a boy or a girl (or both)? *If 'Yes', explore further.* [If sexually active] What do you use to protect yourself (condoms, contraception)? What do you know about contraception and protection against STIs? How do you feel about relationships in general or about your own sexuality? [For older adolescents] Do you identify yourself as being heterosexual or gay, lesbian, bisexual, transgender or questioning? Have you ever felt pressured or uncomfortable about having sex?

Appendix 2. HEEADSSS assessment[28,99]	
Assessment area	**Questions**
S – Suicide/ self harm/ depression/ mood	**Explore risk of mental health problems, strategies for coping and available support** Sometimes when people feel really down they feel like hurting themselves, or even killing themselves. Have you ever felt that way? Have you ever deliberately harmed or injured yourself (cutting, burning or putting yourself in unsafe situations – eg unsafe sex)? What prevented you from going ahead with it? How did you try to harm/kill yourself? What happened to you after this? What do you do if you are feeling sad, angry or hurt? Do you feel sad or down more than usual? How long have you felt that way? Have you lost interest in things you usually like? How do you feel in yourself at the moment on a scale of 1 to 10? Who can you talk to when you're feeling down? How often do you feel this way? How well do you usually sleep? It's normal to feel anxious in certain situations. Do you ever feel very anxious, nervous or stressed (eg in social situations)? Have you ever felt really anxious all of a sudden? For a particular reason? Do you worry about your body or your weight? Do you do things to try and manage your weight (eg dieting)? Sometimes, especially when feeling really stressed, people can hear or see things that others don't seem to hear or see. Has this ever happened to you? Have you ever found yourself feeling really high energy or racy, or feeling like you can take on the whole world?
S – Safety **S – Spirituality**	**Explore sunscreen protection, immunisation, bullying, abuse, traumatic experiences, risky behaviours; and beliefs, religion** What helps you relax, escape? What gives you a sense of meaning?

Appendix 3a. Aboriginal and Torres Strait Islander Youth Social Emotional Wellbeing (SEW) assessment[27]		
Original HEEADSSS 'domain' and description	**Social emotional wellbeing topic and description**	**Comments**
	General We want to find out about the young person's background, beliefs, experiences and connection to culture. We also want to hear about their hopes or plans for the future. This is an important part of the assessment and may overlap with the other areas	**Non-Indigenous health professionals must not engage in the cultural aspects of this discussion unless they have good local Aboriginal and/ or Torres Strait Islander knowledge and connections and excellent rapport with the young person**
Home Explore the home situation, family life, relationships and stability	**Home** We want to find out about where the young person is living and with whom; family life, relationships and stability We want to know if the young person feels safe in their environment We also want to identify any overcrowding that is causing problems	There are social and wellbeing benefits to living with a supportive network of people. Therefore, it is important to ask about overcrowding that is causing problems, rather than assuming that it is a problem by definition

Appendix 3a. Aboriginal and Torres Strait Islander Youth Social Emotional Wellbeing (SEW) assessment[27]		
Original HEEADSSS 'domain' and description	**Social emotional wellbeing topic and description**	**Comments**
Education/ employment Explore sense of belonging at school/ work and relationships with teachers/peers/ workmates, changes in performance	**Learning/work** We want to find out about: • How the young person is going at school and/or work • Relationships with teachers/peers/ workmates • Whether there have been big changes in how they are going at school or work • Whether they feel safe at school/work • Whether they have any plans for when they finish school or for their career	
Eating/exercise Explore how they look after themselves, eating and sleeping patterns	**Eating/exercise** We want to find out about: • Food and eating habits, whether they eat bush tucker, whether they are getting enough to eat • Who does the food shopping and cooking • What kind of exercise they get during a week, how often and how much. This can include playing sports, going to a gym, walking to the shops or bus stop, walking/ riding a bicycle to school or work • Whether there has been any recent change in weight and if this is something the young person had planned or not	Food insecurity is recognised as a determinant of poor health in the Aboriginal and Torres Strait Islander population[100,101] The One21seventy child health audit includes evidence of concern regarding food security[102]
Activities/peer relationships Explore their social and interpersonal relationships, risk-taking behaviour, as well as their attitudes about themselves	**Hobbies, interests and friendships** We want to find out about: • How the young person gets along with other young people • How they are socialising • What kind of interests they have • Whether they do things safely (eg wears a bicycle helmet, puts on a seat belt, uses sunscreen and wears sunglasses) • Whether they are taking part in any high-risk behaviours, including gambling	If there are risk-taking behaviours/ activities, we need to: • Check whether the young person has broken the law or been involved with the juvenile justice system • Refer for youth-specific counselling If the young person seems to be socially isolated, we need to conduct a mental health assessment

Appendix 3a. Aboriginal and Torres Strait Islander Youth Social Emotional Wellbeing (SEW) assessment[27]		
Original HEEADSSS 'domain' and description	**Social emotional wellbeing topic and description**	**Comments**
Drug use/cigarettes/ alcohol Explore the context of substance use (if any) and risk-taking behaviours	**Substance use, including cigarettes, alcohol and other drugs** We want to find out if the young person is smoking, drinking alcohol or using other drugs If so, we want to find out about: • Whether they are being pressured into it • What they are using, how and when they use, how much they are smoking/ drinking/using, how often, if there have been any problems • If the people they spend time with smoke, drink or use substances	
Suicide/self-arm/ depression/mood Explore risk of mental health problems, strategies for coping and available support	**Mental health** We want to find out about the young person's mood, whether there is ongoing stress in their life, whether there has been anything hurtful or traumatic happen to them recently or in the past If the young person has a mood problem, you must assess if they are at risk of self-harm or suicide	
Sexuality Explore their knowledge, understanding, experience, sexual orientation and sexual practices. Look for risk-taking behaviour/ abuse	**Sexual health and sexuality** We want to discuss the young person's sexual health, whether they have had or are having sex, what their sexual orientation is and how they feel about themselves If the young person has had or is having sex, we want to know if: • They are using any kind of protection or contraception • They are consenting to it or being pressured	
Safety and spirituality Explore sunscreen protection, immunisation, bullying, abuse, traumatic experiences, risky behaviours Explore beliefs, religion: • What helps them relax, escape? • What gives them a sense of meaning?	Immunisation status is usually checked as part of ongoing clinical care. Ask about it only if it is not already known	Safety issues have been considered across all areas and not as a separate topic Spirituality has been considered as part of cultural connectedness

Appendix 3a. Aboriginal and Torres Strait Islander Youth Social Emotional Wellbeing (SEW) assessment[27]		
Original HEEADSSS 'domain' and description	Social emotional wellbeing topic and description	Comments
	Finishing off We complete this assessment by checking with the young person if there is anything else they wish to talk about	

Appendix 3b: Aboriginal and Torres Strait Islander Youth Social Emotional Wellbeing (SEW) assessment: Question guide[27]	
Topic area	Possible questions
General Explore background, beliefs, experiences and connection to culture	• Can you tell me about yourself? • Where's country for you? Where are you from? Where is your family from? • Do you visit country or your family's country? • Do you like where you are from? • Do you feel connected with your culture? How close do you feel to your culture? • Do you feel connected with your community? How close do you feel to your community? • Do you take part in any cultural and/or community activities (eg NAIDOC events, ceremonies, hunting, art and crafts)? If so, how often? • Do you speak any Aboriginal and/or Torres Strait Islander languages? • Do you have any beliefs that are important to you (religious or spiritual)? • Have you been through ceremony? **[Do not ask this question unless you have good local Aboriginal and/or Torres Strait Islander knowledge and connections and excellent rapport with the young person]** • What do you hope for in your life? • Have you faced, or do you face, prejudice or racism? [If 'Yes', explore details]
Home Explore the home situation, family life, relationships and stability. We also want to identify any overcrowding that is causing problems	• Can you tell me about where you live? • Where do you live? (What type of place, how many rooms, is this where you live all the time? Is there any chance you will need to move?) • Do you stay at more than one place? [If 'Yes'] What is it like for you moving around? • Do you have your own room? • Can you tell me about your family/the people you are living with? • How many people live with you at the moment? • How are things going at home or where you live? • Who are you closest to in your family? • Do you get along with your family? Do your family members get along with each other? • Do you have any worries about your family or friends? • Do you have children? (What age?) • Do you feel safe at home or where you are staying? • Are there ever times you feel like leaving home? • Have there been any changes at home lately (moves, departures, travelling to and from home/community etc)?

Appendix 3b: Aboriginal and Torres Strait Islander Youth Social Emotional Wellbeing (SEW) assessment: Question guide[27]	
Topic area	**Possible questions**
Learning/ work Explore how the young person is going at school/ work and relationships with teachers/ peers/ workmates; whether there have been significant changes	• Do you go to school/study or work? • What year are you in/what job do you do? • How are you going at school/work? Or Are you happy at school/work? [Explore] If not, why? • Have you been missing or not going to school/work, or often turning up late? • Are you keeping up with your schoolwork? Do you need any help? How are your grades? Or What are your school reports like? • Do you get along with your teachers/boss and other students/workmates? [Explore] • How are your friends or other students or workmates treating you? Or Do you have any problems at school/work, like getting bullied? • Do you feel safe at school/work? • Does your family encourage or help you with your studies/sport/work? • What would you like to do when you leave school/you're older? Or What job/career plans do you have?
Eating/ Exercise Explore food and eating habits and physical activity	• What do you usually eat and drink over a whole day? Or Tell me what you ate yesterday? [Explore type of food and amount, bush tucker] • What do you like to eat? • Do you get enough to eat? • Who shops for the food/groceries? Who does the cooking? • Has your weight or diet changed lately? • How do you feel about the way you look? [Explore the possibility of eating disorders] • During a usual or typical week, what kind of exercise do you do? • Do you play sport or do any exercise? [Explore what kind, including traditional dance, how often and for how long] • Do you ride your bike or walk to get around? [Explore informal physical activity]
Hobbies, interests and friendships Explore relationships with other young people, how they are socialising, whether they are engaging in any high-risk behaviours	• Who do you hang around with? (Brothers, sisters, cousins, aunties, uncles or friends from school?) [Explore for social isolation] • Do you like your friends, and how much time do you spend hanging out with them? • Have you ever been pressured into anything by your peers? • What do you (and your friends) do in your free/spare time? What do you do on the weekend? • Do you wear bike helmets, seatbelts? Do you use sunglasses and sunscreen? • Do you do anything that gets you into trouble, or could get you into trouble? Have you ever been in trouble with the police? • Do you play the pokies, cards or bet online? [If 'Yes'] How do you pay for it? Or What do you spend your money on?

National Guide lifecycle chart | Young people

RACGP Royal Australian College of General Practitioners

NACCHO National Aboriginal Community Controlled Health Organisation
Aboriginal health in Aboriginal hands
www.naccho.org.au

Screening/assessment	How often?	Who?	Page*	Age (years) 10–14	15–17	18–19	20–24
Lifestyle							
Smoking							
Smoking status	Annually and opportunistically	People aged ≥10 years	10				
Assess willingness to quit and level of nicotine dependence to guide intervention choice	Opportunistically	People who currently smoke	10				
Overweight and obesity							
Body mass index (BMI) using age-specific and sex-specific centile charts	Annually and opportunistically	People aged <18 years (refer to Chapter 3: Child health)	12				
BMI and waist circumference	Annually and opportunistically	People aged ≥18 years	12				
Physical activity							
Assess level of physical activity and sedentary behaviour as per Australian age-appropriate recommendations	Annually and opportunistically	All people	16				
Alcohol							
Quantity and frequency	Annually	People aged ≥15 years	20				
Comprehensive alcohol assessment	Opportunistically	High-risk groups (refer to Chapter 1: Lifestyle, 'Alcohol')	20				
Gambling							
Screen by asking a single-item question	Annually and opportunistically	People aged ≥12 years (refer to Chapter 1: Lifestyle, 'Gambling')	23				
Antenatal care (For pregnant girls aged <15 years, follow recommendations for people aged ≥15 years)							
General antenatal care and screening	**Refer to Chapter 2: Antenatal care**	**Refer to Chapter 2: Antenatal care**	**30**				
Ask about psychosocial factors and screen for depression and anxiety using a validated perinatal mental health assessment tool	Early in pregnancy and at subsequent visits	All pregnant women	32				
Ask about exposure to family abuse and violence (FAV) and respond immediately if a woman discloses FAV	Early in pregnancy and at subsequent visits	All pregnant women	32				
Smoking cessation							
Regularly assess smoking status and remind patients to limit/avoid exposure to cigarette smoke	First visit and subsequent antenatal visits	All pregnant women	25				
Genitourinary and blood-borne virus (BBV) infections							
Offer either screening for Group B streptococcus (GBS) colonisation or an assessment of risk factors for GBS transmission during labour	At 35–37 weeks' gestation	All pregnant women	26				
Chlamydia testing	First antenatal visit and consider screening later in pregnancy in areas of high prevalence	Pregnant women aged <25 years and all pregnant women from communities with high prevalence of sexually transmitted infections (STIs)	26				
Gonorrhoea testing	First antenatal visit and consider repeat screening later in pregnancy in areas of high prevalence	Pregnant women who have known risk factors or who live in or come from communities with a high prevalence of gonorrhoea, including those in outer regional and remote areas	26				
Offer syphilis, human immunodeficiency virus (HIV) and hepatitis B testing	First antenatal visit	All pregnant women	27				
Offer serological testing for hepatitis C virus (HCV) antibodies	First antenatal visit	Pregnant women with risk for HCV, including intravenous drug use, tattooing and body piercing, and incarceration	27				
Asymptomatic bacteriuria test	First antenatal visit	All pregnant women	26				
Bacterial vaginosis test	On presentation	Pregnant women with symptoms of bacterial vaginosis	26				
Trichomoniasis test	On presentation	Pregnant women with symptoms of trachomoniasis	26				
Nutrition and nutritional supplementation							
Measure height and weight and calculate BMI	At first visit; at subsequent visits only if clinically indicated	All pregnant women	28				
Full blood examination to assess for anaemia	First antenatal visit and at 28 and 36 weeks	All pregnant women	28				
Consider serology testing for vitamin D levels	First antenatal visit	Pregnant women with risk factors for vitamin D deficiency	28				
Diabetes							
Fasting plasma glucose	First antenatal visit	Pregnant women who do not have diagnosed diabetes	29				
75 g two-hour oral glucose tolerance test (OGTT)	Between 24 and 28 weeks	Pregnant women who do not have diagnosed diabetes	29				
75 g fasting OGTT	At six weeks postpartum	Women diagnosed with gestational diabetes who are now postpartum	29				
Health of young people							
Social emotional wellbeing							
Social emotional wellbeing (SEW) assessment, using a strengths-based approach, to obtain a holistic assessment of health and determine risk factors affecting wellbeing	Annually and opportunistically	All people aged 12–24 years	46				
Unplanned pregnancy							
Ask if sexually active, conduct SEW assessment and identify at-risk sexual behaviours	Annually and opportunistically	All people aged 12–24 years	47				
Illicit drug use							
Review hepatitis B immunisation and immune status and offer vaccination where indicated	Australian standard vaccination schedule	All people aged 12–24 years	49				
Assess risk factors for illicit drug use (using Box 2, Chapter 4: The health of young people, 'Illicit drug use')	Annually	All people aged 12–24 years	50				
Administer questionnaire (eg CRAFFT screening tool, Indigenous Risk Impact Screen [IRIS] tool or Substances and Choices Scale) to ascertain drug use	Opportunistically	Young people with risk factors for drug use	49				
Test for BBVs and STIs	Opportunistically	Young people with risk factors for drug use (refer to Chapter 14: Sexual health and blood-borne viruses)	49				
Eye health							
Visual acuity							
Ask about vision	Every 1–2 years	All age groups	66				
Near and far visual acuity assessment	Annually and opportunistically	People aged >40 years and people with poor vision	66				
Referral to ophthalmologist	Opportunistically	Where problems identified	66				
Visual acuity and retinal assessment	Annually	People with diabetes	66				
Conduct eye examination by dilated fundus examination or retinal digital imaging and counsel clients about risk of diabetic retinopathy	First trimester (refer to Chapter 6: Eye health)	Pregnant women with pre-existing diabetes	66				
Trachoma							
Community screening program	National guideline recommendations	People living where trachoma is endemic (refer to Chapter 6: Eye health)	67				
Hearing loss							
Vaccination (rubella, measles, *Haemophilus influenzae* type b, meningococcus)	National Immunisation Program Schedule (NIPS) and state/territory schedules	Children aged <15 years	68				
Test for rubella immunity and syphilis serology and recommend enhanced hygiene practices for cytomegalovirus prevention	Refer to Chapter 2: Antenatal care	All pregnant women	68				
Ear examination	Annually and opportunistically	Children aged <15 years	68				
Monitor for hearing loss and maintain high suspicion of hearing loss	Annually	Children aged <5 years and older children at high risk of hearing impairment; people aged 15 years	69				
Monitor for hearing impairment, provide advice re free hearing assessment and refer where needed	Opportunistically	All people aged ≤50 years	69				
Oral and dental health							
Oral health review, including assessment of teeth, gums and oral mucosa	Annually First antenatal visit Every two years	People aged 6–18 years; adults with poor oral health and/or risk factors for dental disease (refer to Chapter 8: Oral and dental health) All pregnant women Adults with good oral health	74				
Oral health review and oral hygiene advice to minimise oral bacteria levels	Six-monthly	People with history of rheumatic heart disease and cardiovascular abnormalities	74				
Respiratory health							
Pneumococcal disease							
Immunisation: refer to Chapter 9: Respiratory health, 'Pneumococcal disease prevention'			76				
Influenza							
Influenza vaccine	Annually pre-influenza season Part of routine antenatal care (refer to Chapter 2: Antenatal care)	Children aged six months to five years; people aged ≥15 years; people aged >6 months with chronic illness; healthcare providers Women who are pregnant or planning a pregnancy	79				
Asthma							
Consider early detection strategies		All people	81				
Chronic obstructive pulmonary disease							
Influenza vaccine	Annually pre-influenza season	People with an established diagnosis of chronic obstructive pulmonary disease (COPD)	83				
23-valent pneumococcal polysaccharide vaccine (23vPPV)	Refer to Chapter 9: Respiratory health, 'Pneumococcal disease prevention'	People with an established diagnosis of COPD	83				
Spirometry to assess for presence of airflow obstruction	Opportunistic	All people presenting with symptoms, especially shortness of breath, chronic bronchitis and recurrent acute bronchitis	83				

Age-specific Condition-specific

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National Guide lifecycle chart | Young people

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Screening/assessment	How often?	Who?	Page*	Age (years) 10–14	15–17	18–19	20–24
Bronchiectasis and chronic suppurative lung disease							
Ensure timely immunisation provided	NIPS and state/territory schedules	All children and adults, including pregnant women	84				
Review after acute respiratory infection (ARI) episode	3–4 weeks post-episode, then two-weekly until symptoms resolve or the patient is referred	People with pneumonia and lower ARIs (refer to Chapter 9: Respiratory health, 'Bronchiectasis and chronic suppurative lung disease')	84				
Consider bronchiectasis diagnosis and repeat chest X-ray; specialist referral (refer to Chapter 9: Respiratory health)	Opportunistically	People with recurrent lower ARIs	84				
Clinically assess for chronic lung disease symptoms and undertake spirometry	Opportunistically	People with history of tuberculosis	84				
Acute rheumatic fever and rheumatic heart disease							
Vaccination (routine childhood and adult vaccinations, annual influenza vaccination as per NIPS, and pneumococcal vaccination)	As per national guidelines	People with a history of acute rheumatic fever (ARF) or known rheumatic heart disease (RHD)	87				
Take a comprehensive medical history and family history for cardiovascular disease (CVD)	Annually and opportunistically	Individuals coming from high-risk groups or living in high-risk settings for ARF/RHD; all pregnant women	87				
Maintain a high index of clinical suspicion of streptococcal pharyngitis in people presenting with a sore throat	As presented	All people in high-risk communities where Group A streptococcus (GAS) infections are common and ARF is prevalent	87				
Assess for overcrowding and refer to social support services for housing assistance if indicated	Opportunistically	People living in communities where GAS infections are common and ARF is prevalent	88				
Refer for echocardiography and subsequent follow-up	As per management guidelines (refer to Chapter 10: Acute rheumatic fever and rheumatic heart disease)	People with past ARF or murmurs suggestive of valve disease	87				
Cardiovascular disease							
Assess smoking status, physical activity, nutrition, BMI, waist circumference	Annually and opportunistically	People aged 12–17 years	89				
Assess smoking status, physical activity, nutrition, BMI, waist circumference, blood pressure (BP), family history of premature CVD, diabetes risk and psychosocial and socioeconomic risk factors	Annually and opportunistically	People aged 18–29 years without vascular risk factors	89				
Assess above and serum lipids and screen for chronic kidney disease (CKD)	Annually and opportunistically	People aged 18–29 years with either family history of premature CVD or CKD, overweight, smoking, diabetes, elevated BP	89				
Type 2 diabetes							
Fasting plasma glucose or random venous blood glucose or glycosylated haemoglobin (HbA1c)	Annually	People aged ≥18 years and/or adults with any high-risk conditions	94				
Consider testing according to clinical context	Opportunistically	People aged <18 years with overweight/obesity	94				
Chronic kidney disease							
Screen for CKD risk factors (smoking, obesity, hypertension, diabetes, history of acute kidney injury, family history of kidney disease)	Annually	People aged 18–29 years without CKD risk factors	96				
Screen for CKD with estimated glomerular filtration rate (eGFR) and albumin–creatinine ratio (ACR)	Two-yearly (more frequently if CKD risk factor present)	People aged 18–29 years with risk factors (refer to Chapter 13: Chronic kidney disease prevention and management); all people aged ≥30 years	96				
Sexual health and blood-borne viruses							
General advice							
Screen for STIs and BBVs	Annually and re-screen three months after positive test	All people with risk factors for STI or BBV; all sexually active people aged ≤30 years	99				
Screen for other STIs	Upon diagnosis and re-screen in three months	People diagnosed with an STI	99				
Contact tracing	Every positive screen	Sexual partners of a person with an STI	99				
Sexually transmitted infections							
Chlamydia							
Recommend nucleic acid amplification test (NAAT) (refer to Chapter 14: Sexual health and blood-borne viruses)	Annually Annually First visit First visit and third trimester Opportunistic Annually or 3–6-monthly if high risk	People aged 15–30 years if sexually active People aged ≥30 years if sexually active and at high risk All pregnant women Pregnant women at high risk of STI Women who are having a termination of pregnancy Men who have sex with men	101				
Gonorrhoea							
Recommend gonorrhoea NAAT (refer to Chapter 14: Sexual health and blood-borne viruses)	Annually Annually Annually or 3–6-monthly if high risk Annually	Sexually active people aged 15–30 years Pregnant women who are at risk Men who have sex with men All people aged ≥30 years if sexually active and at high risk	101				
Trichomonas vaginalis							
Recommend NAAT (refer to Chapter 14: Sexual health and blood-borne viruses)	Opportunistically	Sexually active people aged ≤30 years where local prevalence rates are high or in regional/remote areas	101				
Syphilis							
Recommend syphilis serology	First antenatal visit and repeat at 28 weeks if positive, in a high prevalence area, or risk factors for STIs are present	All pregnant women	101				
Recommend syphilis serology	Annually or 3–6-monthly if high risk	Men who have sex with men; others at high risk of STI	101				
Blood-borne viruses							
HBV							
Hepatitis B vaccination (refer to Chapter 14: Sexual health and blood-borne viruses)							
HBV post-exposure prophylaxis	Within 72 hours (or 14 days for sexual contact)	Individual exposed to person who is HBsAg, positive or who is at high risk and unable to be identified and tested rapidly	102				
Offer HBV screening, including hepatitis B virus surface antigen (HBsAg) and hepatitis B surface antibody (HBsAb)	Opportunistically	Non-vaccinated or unknown vaccine status; people at high risk for BBVs; healthcare workers	102				
Human papilloma virus (HPV)							
HPV vaccination (also refer to Chapter 15: Prevention and early detection of cancer, recommendations for cervical cancer)	As per *The Australian immunisation handbook*	Young people prior to first sexual activity; women who are sexually active; females who are sexually active and not yet vaccinated	103				
Hepatitis A virus							
Hepatitis A vaccination if non-immune	Two doses at zero and six months	Men who have sex with men; injecting drug users; people with chronic HBV and HCV infection	103				
HCV							
HCV serology testing	Annually and opportunistically	People at high risk of contracting HCV	103				
HIV							
HIV serology testing	First antenatal visit 3–6-monthly	All pregnant women Men who have sex with men; others at high risk of BBVs	103				
Cancer							
Cervical							
Promote HPV vaccination for prevention of cervical cancer	As per NIPS	All people aged 9–18 years, ideally age 11–13 years, prior to onset of sexual activity Women and men aged >19 years only if individual risk and benefit assessment indicates	105				
4-valent human papilloma virus (4vHPV) vaccine (not subsidised; refer to state/territory rules re catch-up program)	As per *The Australian immunisation handbook*	Men who have sex with men, but should take into account likelihood of past exposure to HPV and risk of future exposure	105				
Refer to Chapter 15: Prevention and early detection of cancer, cancer for asymptomatic under-screened women and women with recent abnormal Pap smears			105				
Liver							
Recommend hepatitis B vaccine as per NIPS	At birth, and at two, four and six months	All people	107				
Screen for HBV and HCV if indicated	Refer to Chapter 14: Sexual health and blood-borne viruses, 'Recommendations'	All people	107				
Abdominal ultrasound, alpha-fetoprotein screening for hepatocellular carcinoma (HCC) as part of specialist management plan	Six-monthly	People with chronic hepatitis B who are: aged >50 years, or have cirrhosis, or have a family history of HCC	107				
Specialist review and consider ongoing screening for HCC with an abdominal ultrasound +/– alpha-fetoprotein	Protocols vary, refer to guidelines	People with advanced liver disease (cirrhosis) not due to chronic hepatitis B	107				
Colorectal (bowel)							
Ask about family history of colorectal cancer in order to estimate the individual risk of developing colorectal cancer	Annually	All people	112				
Provide lifestyle risk factor counselling on the benefits of regular physical activity, maintaining healthy weight, alcohol intake in the low-risk range, restricting energy intake and dietary fat (refer to Chapter 1: Lifestyle), including the consumption of vegetables and sources of dietary fibre	Annually	All people	112				
Lung							
Provide lifestyle risk factor counselling on the benefits of avoiding smoking and exposure to smoke	Annually and opportunistically	All people	117				
Family abuse and violence							
Establish a high level of awareness of the risks of FAV and actively case find by taking a social history and asking sensitively about the potential for FAV	Opportunistic and as part of an annual health assessment	Victims of FAV, perpetrators of FAV	118				
Assess for risk of FAV as part of a comprehensive antenatal assessment	At least once in every pregnancy	Pregnant women	118				

Age-specific Condition-specific

*Page number refers to print version of *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people*

Appendix 3b: Aboriginal and Torres Strait Islander Youth Social Emotional Wellbeing (SEW) assessment: Question guide[27]	
Topic area	**Possible questions**
Substance use, including cigarettes Explore use, type, amount, frequency, consequences. Explore if the people they spend time with smoke, drink or use substances	• Do people around you smoke or drink? • Do you smoke or drink? How much and how often? • What about drugs? • Are people around you doing drugs? What type and how often? • Have you tried drugs before? [If 'Yes'] Are you still taking them? What type and how often? • [If currently using] Does this affect relationships, school, work or other responsibilities? How are you paying for it? Has this ever got you into trouble (getting into fights or in trouble with the police)? • Are you, or have you been, pressured into it?
Mental health Explore mood, stress, and trauma. Assess suicide risk if there are mood problems	• How have you been feeling lately? • Have you been feeling sad, stressed, nervous or worried? [This question is not necessary if the young person has filled out a mental health tool such as the Kessler Psychological Distress Scale (K-10) or K-5 questionnaire.][103] • Are you still enjoying things as much as usual? • How have you been sleeping? How much sleep do you get each night? • Has your eating been OK? • Has anything traumatic or hurtful happened to you lately or in the past? • Do you have thoughts about hurting yourself? Have you ever tried to hurt yourself? [If 'Yes', explore how serious the injury was] • Have you had any thoughts about suicide? [If 'Yes'] Have you tried to end your own life? [Try to find out if this is a current problem] **[Do not ask this question routinely. Ask this only if the young person has risk factors for suicide.*]**
Sexual health and sexuality	• [If the young person appears not to have not gone through puberty] Have you noticed any body changes? • [For females] Are you having periods? Is everything going OK with your monthly or period? • Do you have a boyfriend or girlfriend? • Have you ever slept with them or had sexual intercourse? How about with other people (boys/girls or males/females)? • What do you use for protection? • [For females] Do you take anything to stop you from getting pregnant (eg pill or Implanon)? • Are you attracted to boys/males or girls/females, or are you unsure? Do you feel comfortable with your sexuality or feelings? • Has anyone ever taken advantage of you or used you? Have you ever felt uncomfortable or pressured about having sexual intercourse?
Finishing off	• Do you have any other concerns? Or Is there anything else you want to talk about? Or Is there anything else that is worrying you that we have not talked about?

*Risk factors for suicide: past history of intentional self-harm; history of mood or mental health problems; hazardous alcohol consumption or use of other recreational drugs.

Chapter 5: The health of older people

Osteoporosis

Recommendations: Osteoporosis				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All postmenopausal women and men over 50 years of age	Assess risk factors for osteoporosis (Box 1)	As part of an annual health assessment	IIB
	People at moderate and high risk (Box 1)	Measure bone mineral density (BMD)* by dual-energy X-ray absorptiometry (DXA) scanning on at least two skeletal sites, including the lumbar spine and hip, unless these sites are unsuitable (eg due to hip prosthesis) If DXA confirms osteoporosis then manage as high risk (refer to recommendations below for behavioural, chemoprophylaxis and environmental interventions)	At baseline, then as needed, depending on baseline BMD and management Repeat if it will change management, generally no more frequently than second yearly	IA
Behavioural	All postmenopausal women and men >50 years of age at all levels of risk	Advise adequate dietary calcium intake: 1300 mg/day for women >50 and men >70 years of age; 1000 mg/day for men 50–70 years of age	Opportunistic and as part of an annual health assessment	IA for bone loss, III–2 for fracture prevention
		Recommend smoking cessation (refer to Chapter 1: Lifestyle, 'Smoking')		IA
		Advise adequate but safe sunlight exposure as a source of vitamin D		IIC
		Avoid excessive alcohol consumption		IIC
	Residents of aged care facilities (RACFs) at risk of falling	Consider the use of hip protectors to lower the risk of harm related to a fall		IA
	Individuals >50 years of age without osteoporosis	Recommend regular high-intensity weight-bearing exercise if appropriate. Recommend progressive resistance training and balance training. Resistance exercise should be regular (2–3 days per week), moderate–vigorous, progressive and varied	Opportunistic	IA
	Individuals with osteoporosis	Recommend low-impact, high-intensity progressive resistance and balance training Frequency as above Examples of low-impact activities include standing activities with one foot always on the floor		

Recommendations: Osteoporosis				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	All postmenopausal women and men >50 years of age at all levels of risk	Calcium and vitamin D supplementation are not recommended for routine use in non-institutionalised older people		IC
	People at high fracture risk: • with previous fragility fracture • T-score of –2.5 or less† • on long-term corticosteroids with a T-score of 1.5 or less	Consider specific anti-osteoporosis medication: • bisphosphonates‡ • denosumab§ • oestrogen replacement Consider calcium supplementation in people at high risk being treated with specific osteoporosis medications, if their dietary calcium intake is <1300 mg daily People being treated with a specific osteoporosis medication should have vitamin D supplementation prior to commencement if their level is <50 nmol/L	At diagnosis	IB for denosumab in men IA for all others
Environmental	People at high risk of fracture	Consider a multifactorial falls reduction program (refer to 'Recommendations: Falls')	At diagnosis	ID

*Bone densitometry testing is available on the Medicare Benefits Schedule (MBS) for the following groups:
- people >70 years of age
- people with one or more fractures occurring after minimal trauma
- follow-up of people with established low BMD
- people with one of the following medical conditions putting them at increased risk
  - prolonged glucocorticoid therapy
  - conditions associated with excess glucocorticoid secretion
  - male hypogonadism
  - female hypogonadism lasting more than six months before the age of 45 years
  - primary hyperparathyroidism
  - chronic liver disease
  - chronic renal disease
  - proven malabsorptive disorders
  - rheumatoid arthritis
  - conditions associated with thyroxine excess.[32]

†A T-score of –2.5 or lower is diagnostic of osteoporosis, and a T-score between –1.0 and –2.5 is diagnostic of osteopenia.
‡Bisphosphonates are subsidised under the Pharmaceutical Benefits Scheme (PBS) for the following conditions:
- concurrent use of oral corticosteroids (>7.5 mg/day prednisone or equivalent) for three months or more and a BMD T-score of –1.5 or less
- people aged ≥70 years with a BMD T-score or –2.5 or less
- any person with a radiologically confirmed fracture due to minimal trauma.[30]

§Denosumab is subsidised under the PBS for:
- people aged ≥70 years with a BMD T-score or –2.5 or less
- any person with a radiologically confirmed fracture due to minimal trauma.[30]

Notes:
1. The recommendations for sun exposure vary by latitude, skin colour and time of year. For more information, refer to 'Resources'.
2. Refer to clinical practice guidelines for specific treatment recommendations.[8]

Box 1. Risk levels for osteoporosis[8]

Average risk	Moderate risk	High risk
All postmenopausal women and men aged >50 years	Aged >70 years	Previous fracture due to minimal trauma
	Aged 60–70 years and any of the following: • family history of osteoporotic fractures • history of falls • smoking • high alcohol intake (>4 standard drinks per day for men and >2 for women) • prolonged immobility or poor mobility (eg unable to leave the house or do housework) • low body weight (BMI <20) and unintentional weight loss • medical conditions causing secondary osteoporosis, such as – endocrine disorders: hypogonadism, hyper-parathyroidism, hyperthyroidism, Cushing's syndrome – premature menopause – anorexia nervosa or >1 year amenorrhoea before age 45 years, not related to pregnancy – inflammatory conditions (eg rheumatoid arthritis) – malabsorption (eg coeliac disease) – chronic kidney or liver disease – multiple myeloma or monoclonal gammopathies – HIV and its treatment – diabetes type 1 and type 2 • on medications such as – prolonged glucocorticoid use (>7.5 mg for >3 months) – anti-convulsants – aromatase inhibitors – anti-androgens – excessive thyroxine – possibly selective serotonin reuptake inhibitors (SSRIs)	Vertebral fractures with minimal trauma These fractures should be ruled out if clinically suspected due to loss of height >3 cm, kyphosis or back pain

Falls

Recommendations: Falls				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All people aged ≥50 years at all risk levels	Assess for risk factors for falls (Box 2). If at high risk, refer for multifactorial falls assessment – refer to below	Annually	IA
	Residents of aged care facilities (RACFs)	RACF staff should screen for risk factors for falls to allow for an individualised fall prevention plan	On admission, then six-monthly	IIB
	People with a past history of falls or at high risk	Recommend a detailed assessment, including the following: • cardiac and neurological disease assessment • medication review • assessment of vision, gait and balance • home environment assessment, possibly most effective if conducted by an occupational therapist	Opportunistic	IA
	Those with falls due to carotid sinus hypersensitivity	Consider referral for pacemaker insertion	As needed	IIC
	Those with vision threatening cataract disease	Referral for cataract surgery (first eye)	As needed	IIC
Behavioural	All people aged ≥50 years	Recommend regular exercise, which may include the following modalities: • multicomponent group exercise (defined as targeting at least two of the following: strength, balance, endurance and flexibility) • individually prescribed multicomponent exercise to be carried out at home as per Australian physical activity guidelines (refer to Chapter 1: Lifestyle, 'Physical activity': Box 6) • tai chi as a group exercise	As part of an annual health assessment	IA
	People at high risk	Recommend gait, balance and functional coordination exercises as part of a multifactorial intervention	As part of an annual health assessment	IIC

Recommendations: Falls				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	People aged ≥50 years with known vitamin D deficiency or inadequate exposure to sunlight	Consider vitamin D supplementation (refer also to 'Osteoporosis' section)	As part of an annual health assessment	IC
	People at high risk taking medications	Review the number and type of medications and assess whether they may increase falls risk	At least annually and recommend six-monthly for people taking four or more medications	IIB
		If taking psychotropic medications, review the indications and consider gradual withdrawal if clinically appropriate	Opportunistic and as part of an annual health assessment	IIC
		Consider a home medication review by a pharmacist	Annually or when there is a clinical need	IIB
	People in RACFs	Arrange medication review by a pharmacist	Annually	IIA
		Consider vitamin D supplementation (refer to 'Recommendations: Osteoporosis')	Ongoing	IA
Environmental	All people aged >50 years at moderate to high risk of falls	Arrange for home assessment and modification, preferably by an occupational therapist	Once off for those with poor vision Opportunistic for all others	IA
	People in RACFs who are at high risk of falls	Consider use of hip protectors to lower the risk of harm related to a fall (refer to 'Recommendations: Osteoporosis')	Opportunistic	IIB

Box 2. Risk factors for falls

Risk factors for falls in older people include:[45]

- increasing age
- past history of falls
- neurological conditions: stroke, Parkinson's disease, peripheral neuropathy
- multiple medications
- psychotropic medications
- impaired balance, gait and mobility
- reduced muscle mass
- visual impairment
- cognitive impairment
- depression
- fear of falling
- low levels of physical activity

Dementia

Recommendations: Dementia				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Asymptomatic people	Dementia screening is not routinely recommended		IIC
	People with any of the following: • symptoms such as memory loss or behaviour change • concerned family members • history of repeated head trauma • Down syndrome • elevated cardiovascular risk • depression or a history of depression	Over several consultations, obtain history from the person and their family, and perform a comprehensive physical examination Consider administration of one of the following cognitive screening tests: • Mini Mental State Examination (MMSE) • General Practitioner Assessment of Cognition (GPCOG) • Kimberley Indigenous Cognitive Assessment-Cog (KICA-Cog) or modified KICA-Cog (Refer to 'Resources')	Opportunistic	IIIC
Behavioural	People with risk factors for dementia including excessive alcohol intake, tobacco smoking, hypertension, diabetes, depression	Recommend the following for prevention and early intervention: • regular physical activity (150 minutes per week of moderately intense walking or equivalent) • increased social engagement and activities • cognitive training and rehabilitation • diet – Mediterranean diet has been shown to be effective • smoking cessation	Opportunistic	GPP
Chemo-prophylaxis	People without a confirmed diagnosis of dementia	Anti-dementia drugs are not recommended		IB

Chapter 6: Eye health

Visual acuity

Recommendations: Visual acuity				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Infants	Conduct a general eye examination. Refer to an ophthalmologist if the red reflex is absent or any other abnormality is found	Before three months of age and again between three and six months of age	GPP
	Children aged 3–5 years	Screen for visual acuity Refer if visual acuity is less than 6/9 in either eye for a three-year-old and 6/9 or less in either eye for a 4–6-year-old	As part of a routine health assessment at or before school entry	GPP
	All age groups	Ask about vision. Complete an eye examination and test visual acuity if any problems are identified Include testing for near visual acuity from age 40 onwards Refer to an optometrist and/or ophthalmologist if problems are identified	Every 1–2 years as part of a routine health assessment	GPP
	People with diabetes	Undertake visual acuity and retinal assessment by a trained assessor This includes the use of retinal photography by trained primary healthcare staff combined with external review by an ophthalmologist	Yearly	IA IA
	Pregnant women with pre-existing diabetes	Conduct an eye examination and counsel clients about the risks of diabetic retinopathy (DR)	Prior to conception	III–2B
		Conduct an eye examination by dilated fundus examination or retinal digital imaging	In the first trimester	III–2B
		The need for further retinal examinations should be guided by results of earlier examinations	In the second and third trimesters	IV
		Provide ongoing ophthalmic follow-up in the post-partum period	For 6–12 months postpartum	III–2B
Behavioural	People who currently smoke	Advise smoking cessation to reduce the risk of developing cataracts (refer to Chapter 1: Lifestyle, ‘Smoking’)	Opportunistic	IIIC
	All people	Recommend reduced ocular exposure to ultraviolet B light to reduce risk of cataract (eg wearing a hat and sunglasses when outdoors)	Opportunistic	IIIC
	All people	Recommend a balanced diet high in fruit and vegetables to reduce the risk of developing cataract and age-related macular degeneration	Opportunistic	IIB

Trachoma and trichiasis

Recommendations: Trachoma and trichiasis				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	People living where trachoma is endemic (>5% prevalence of active trachoma in young children or >0.1% of the population have trichiasis)	Implement a community screening program in partnership with regional population health units to assess the population prevalence of active trachoma Ongoing community screening is not required once prevalence is below 5% in children aged 5–9 years for five consecutive years	As per national guideline recommendations (refer to 'Resources')	GPP
	Adults aged >40 years raised in trachoma-endemic area	Perform eye examination to ascertain corneal scarring and/or the presence of trichiasis*	Two-yearly age 40–54 years, yearly age ≥55 years	GPP
		For those identified to have trichiasis, refer to an ophthalmologist for surgery		IIIB
Behavioural	All children from trachoma-endemic areas	Recommend to families the importance of the following in the prevention and control of trachoma: • facial cleanliness of children • safe and functional washing facilities at home, in childcare and at school • regular screening, and treatment of infection	Opportunistic and as part of an annual child health check	IIB
Chemo-prophylaxis	People living where trachoma is endemic (>5% prevalence of active trachoma in young children)	Treat case and all household contacts, discuss with regional trachoma control program to plan and deliver treatment to community, depending on community prevalence/cluster pattern Treat children who have been opportunistically found to have evidence of active trachoma infection and treat all household contacts	As per state and territory protocols	IA
Environmental	All people	Assess the safety and functionality of the bathroom and washing facilities, and the housing situation for overcrowding, and refer to social support services for housing assistance if indicated (refer to Chapter 7: Hearing loss)		GPP
	Remote communities	Implement joint health promotion strategies with state/territory government public health units and local shire councils for maintaining functional washing facilities and other environmental health standards	As per state/ territory government plans	GPP

*Trichiasis is diagnosed when at least one eyelash rubs on the eyeball, or there is evidence of recently removed eyelashes because of eyelash in-turning.[72]

Chapter 7: Hearing loss

Recommendations: Hearing loss				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	Children aged <15 years	Vaccination is recommended to prevent infections that may lead to congenital or acquired hearing loss (rubella, measles, *Haemophilus influenzae* type b, meningococcus) (refer to Chapter 3: Child health)	As per National Immunisation Program Schedule (NIPS) and state/ territory schedules	I–A
		Pneumococcal conjugate vaccination (13vPCV) is recommended during infancy to prevent invasive disease, pneumonia and acute otitis media (AOM)* (refer to Chapter 9: Respiratory health)	At age six weeks, and at age four, six and 18 months, as per NIPS	I–IIA
		Annual influenza vaccination (inactivated virus) is recommended for any person aged ≥6 months who wishes to reduce the likelihood of becoming ill with influenza. Vaccination may reduce the incidence of AOM as a secondary complication of influenza (refer to Chapter 9: Respiratory health)	As per NIPS and state/territory schedules	IA
	All pregnant women	Offer testing for rubella immunity and syphilis serology to prevent infections that may lead to congenital hearing loss (refer to Chapter 2: Antenatal care) Recommend enhanced hygiene practices for cytomegalovirus (CMV) prevention (Box 1)	Refer to Chapter 2: Antenatal care	
Screening	Newborn infants	Ensure parents of newborn infants are aware of the universal neonatal hearing screening program being implemented in each state and territory and have had their newborn screened for congenital hearing impairment Advise parents that infants can fail hearing tests at a subsequent age and at-risk children should be periodically tested to three years of age	Prior to age one month. If missed, prior to age three months If pass but still at high risk, periodic tests to age three years	I–B
	Children aged <15 years	Encourage parents to be aware of child developmental milestones in the early detection of hearing loss (Box 2). Parental or teacher suspicion of hearing loss should always be investigated (Box 3). Where relevant, provide advice regarding free hearing assessment†	Opportunistic, and as part of annual health check	GPP
		Conduct ear examinations (including pneumatic otoscopy or video otoscopy and tympanometry) in order to detect unrecognised acute or chronic otitis media. If detected, refer to clinical practice guidelines for management (refer to 'Resources')	Opportunistic and as part of annual health check	GPP

Recommendations: Hearing loss				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Children aged <5 years and older children at high risk of hearing impairment‡	Maintain a high index of suspicion of hearing loss as there is a high prevalence of undetected hearing loss and disadvantage among Aboriginal and Torres Strait Islander school-age children	Opportunistic and as part of annual health check	GPP
	Children aged <5 years and older children at high risk of hearing impairment‡	Use the following audiological tools to monitor for hearing loss: simplified parental questionnaires (Box 2), and three-monthly pneumatic otoscopy or video otoscopy and tympanometry (in children aged >4 months). Note: These methods do not assess hearing Note: Pneumatic otoscopy or video otoscopy and tympanometry are used to identify otitis media and document duration (with possible conductive hearing loss). Refer to clinical practice guidelines for the identification and management of persistent otitis media with effusion (OME) or recurrent AOM§ (refer also to 'Resources'). Those with suspected hearing loss (or caregiver concerns) should be referred as per Box 3	Opportunistic and as part of regular health check	GPP
	Children at school entry	The routine hearing screening of all children upon commencement of their first year of compulsory schooling may have limited public health value and is not encouraged. Regular surveillance is preferred Advise parents that absenteeism is associated with hearing loss		GPP
	Adults aged >15 years	Monitor for hearing impairment by questioning, provide advice regarding free hearing assessment,† and make referrals when appropriate Hearing screening is not recommended for persons aged >50 years Inform families of increased risk of hearing loss among incarcerated people	As part of annual health check	GPP
Behavioural	Pregnant women and postnatal period	Promote exclusive breastfeeding for at least three months (and preferably to six months) to reduce the risk of infants acquiring AOM	Opportunistic, antenatal and postnatal checks, and as part of annual health check	IA
		Refer women to breastfeeding support programs if needed		IA
	Pregnant women and postnatal period	Advise pregnant women of risk of CMV infection, particularly when exposed to young children, and emphasise the importance of handwashing (Box 1) Advise that risk of AOM increases with use of pacifiers	Opportunistic, antenatal and postnatal checks, and as part of annual health check	IIA

Recommendations: Hearing loss				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	All people who smoke	Promote smoking cessation and the need to avoid children being exposed to cigarette smoke, as passive exposure increases the risk of acute, recurrent and chronic otitis media (refer to Chapter 1: Lifestyle, 'Smoking cessation') Note: Avoidance of smoke exposure has other health benefits but has not been shown to reduce exposure to or prevent respiratory infections	Opportunistic and as part of annual health check	I–A
	All people	Swimming (sea, clean fresh water or chlorinated) should be permitted, including in children with a prior history of otitis media (all forms)	Opportunistic	IA
	Children with tympanostomy tubes (TTs) or chronic suppurative otitis media (CSOM)	Children with TTs may continue to swim unless there is a prior association with discharge after swimming Children with CSOM do not benefit from swimming, but swimming should not be discouraged	Opportunistic	IC III–3
	All people	A video otoscope may assist in helping patients and families to understand ear disease. This may lead to greater engagement in its prevention and management	Opportunistic	GPP
		Inform families of the importance of frequent and thorough nose-blowing, facial cleanliness, handwashing and drying of children in order to prevent the transmission of infectious disease	Opportunistic	IB
		Promote frequent handwashing in day-care centres and preschools		IB
Surgical	Children with hearing loss associated with recurrent AOM or OME	Consider referral for TTs (or grommets) to reduce hearing impairment in children with OME and increase otitis-free duration in children with recurrent AOM. Adenoidectomy may further improve outcomes Interventions at surgery (saline washouts at surgery, topical antibiotics/steroids) or after insertion of TTs (topical drops, and prolonged oral antibacterial/steroids) reduces the risk of TT otorrhoea, particularly in high-risk groups Antibiotic eardrops are effective in treating TT otorrhoea	Opportunistic	IA

Recommendations: Hearing loss				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	Children aged <15 years Children aged <2 years or bilateral AOM or AOM with perforation	The use of prophylactic antibiotics in order to prevent the onset of AOM is not recommended, except in children at risk of recurrent AOM or tympanic membrane perforation, such as those aged <2 years, with bilateral AOM or AOM with perforation, or children living in high risk populations Antibiotics for OME reduce prevalence of OME at age 2–6 months but have not been shown to improve hearing	Opportunistic	IA
		The use of prophylactic antiviral drugs in those with confirmed influenza may also prevent the onset of AOM but neuraminidase inhibiters are not recommended as a primary reason for AOM prevention following influenza	Opportunistic	IA
		Probiotics are not currently recommended for the prevention of AOM Note: Some probiotics may be effective in the prevention of AOM episodes in European children	Two to three times daily	ID
	Children aged <15 years Children aged <2 years or bilateral AOM or AOM with perforation	Zinc supplementation is associated with mixed benefit for AOM prevention and is not currently recommended	One dose per week for four weeks	IC
		Vitamin D may reduce recurrence of AOM but is not currently recommended based on current evidence	1000 IU per day	IID
		Autoinflation may be an option for preventing hearing loss associated with OME in children aged >4 years	3x per day	IC
		Antihistamines, decongestants or combination, or topical steroids for OME, are not effective in resolving OME or improving hearing and are not recommended When combined with oral antibiotics, oral steroids improve OME resolution in the short term only, and have not been shown to improve hearing at six weeks		IA

Recommendations: Hearing loss				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Environmental	Children aged <15 years	Assess children at **high risk of hearing impairment**‡ with regard to their housing situation (ie if overcrowding is likely, functional condition of housing) and refer to social support services for housing assistance if indicated (Box 4)	Annual	IIIC
	All people	Inform families of the danger of loud noise (and for prolonged periods), especially for children with a history of ear disease (refer to 'Resources')	Opportunistic	GPP

*Aboriginal and Torres Strait Islander children in high-risk areas are recommended to also receive 13vPCV as a 'booster dose' between 18 and 24 months of age as indicated for the prevention of invasive pneumococcal disease. High-risk areas include the Northern Territory, Queensland, South Australia and Western Australia. Booster dose of 13vPCV is not recommended for children in New South Wales, ACT, Victoria and Tasmania.[21]

†The Australian Government's Hearing Service Program[119] enables eligible Australians to receive funded rehabilitative hearing services, including hearing and communication assessment, support and fitting of amplification. There are two client service groups: Community Service Obligation (CSO) and Voucher. **Voucher client group**: a wide range of approved private providers, including Australian Hearing, provide services under the Voucher program. People who are eligible for these services include Australian citizens or permanent residents who are pensioner concession cardholders, Veterans Affairs cardholders, recipients of a Centrelink sickness allowance or a dependent of these eligibility groups; Australian Defence Force members; National Disability Insurance Scheme participants, or people who are referred by Disability Employment Services. **CSO client group**: Australian Hearing is the sole provider of services under the CSO stream. This includes children and young adults aged <26 years; Voucher-eligible adults who have complex hearing and communication needs, including greater degrees of hearing loss and additional disabilities; Aboriginal and Torres Strait Islander adults aged ≥50 years; Aboriginal and Torres Strait Islander participants in the remote area Community Development Programme; and Aboriginal and Torres Strait Islander adults who meet Voucher program eligibility criteria but who are being seen at one of Australian Hearing's Outreach locations.

‡High risk of hearing impairment: those from socioeconomically deprived communities and from regions with a high prevalence of otitis media; and individual children in any community if they have bilateral AOM or AOM with perforation, or have CSOM or AOM and are aged <2 years, or have persistent OME or recurrent AOM.

§Recurrent AOM: the occurrence of three or more episodes of AOM in a six-month period, or occurrence of four or more episodes in the last 12 months.[2]

Box 1. Hygiene practices recommended by the Centers for Disease Control and Prevention to reduce risk of cytomegalovirus infection for women who are pregnant or planning to become pregnant[122]

- Thoroughly wash hands with soap and warm water after activities such as:
  - nappy changes
  - feeding or bathing young child
  - wiping child's runny nose or drool
  - handling child's toys
- Do not share food, drinks, eating utensils used by young children
- Do not put a child's dummy in your mouth
- Do not share a toothbrush with a young child
- Avoid contact with saliva when kissing a young child
- Clean toys, countertops and other surfaces that come in contact with urine or saliva

Also refer to 'Resources'

Box 2. Hearing-related growth milestones in children[2,120,121]

Simplified parental questionnaires can elicit a child's progress through the following hearing-related growth milestones:

- **3–6 months:** not communicating by vocalising or eye gaze; not starting to babble
- **9 months:** poor feeding or oral coordination; no gestures (pointing, showing, waving); no two-part babble (eg gaga)
- **12 months:** not babbling; no babbled phrases that sound like talking
- **20 months:** only pointing or using gestures (ie not speaking); no clear words; cannot understand short requests
- **24 months:** using <50 words, not following simple requests; not putting words together; most of what is said is not easily understood
- **30 months:** no two-word combinations
- **36 months:** speech difficult to understand; no simple sentences
- **48 months:** speech difficult to understand; not following directions involving two steps
- **60 months:** difficulty telling parent what is wrong; cannot answer questions in a simple conversation

Box 3. Criteria for referral of children with persistent or recurrent otitis media, suspected hearing loss, hearing-related problems elicited through simplified parental questionnaires (Box 1), and/or caregiver concerns[2]

Age of child	Referral to
<3 years	Major regional hearing centre to determine the level of loss
<5 years and older children at high risk of hearing impairment*	Paediatrician and an audiologist (for appropriate developmental assessment and hearing tests) and ear, nose and throat (ENT) specialist for surgical restoration of hearing (eg tympanostomy tubes); advise parent of strategies to improve communication, advise child's school
<15 years	Audiologist (or ENT specialist) for full hearing assessment

*High risk of hearing impairment refers to children from socioeconomically deprived communities and from regions with a high prevalence of otitis media.[8]

Box 4. Definition of overcrowded housing circumstances[113]

Households that do **not** meet these requirements are deemed to be overcrowded:

- There should be no more than two persons per bedroom
- Children aged <5 years of different sexes may reasonably share a bedroom
- Children aged ≥5 years of opposite sex should have separate bedrooms
- Children aged <18 years and the same sex may reasonably share a bedroom
- Single household members aged >18 years should have a separate bedroom, as should parents or couples

Chapter 8: Oral and dental health

Recommendations: Oral and dental health				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Children aged 0–5 years	Undertake an oral health review including the assessment of teeth, gums and oral mucosa, as part of a regular health check (Box 1)	Opportunistic and as part of an annual health check	GPP
	People aged 6–18 years		Annually	GPP
	Adults with poor oral health and/or risk factors for dental disease (Box 2) People with diabetes, immunosuppression, haematological conditions, bleeding disorders or anticoagulant therapy		Annually	GPP
	All pregnant women		At first antenatal visit (refer to Chapter 2: Antenatal care)	GPP
	Adults with good oral health		Two-yearly	GPP
	Those with past history of rheumatic heart disease and cardiovascular abnormalities	Undertake an oral health review as part of a regular health check (Box 1) and offer appropriate oral hygiene advice to minimise oral bacterial levels	Six-monthly	GPP
Chemo-prophylaxis	Children aged 0–5 years	Recommend use of fluoride-containing toothpaste at least once daily, from the time the teeth start to erupt*	Opportunistic	IA
	Children aged 0–5 years where families have evidence of dental caries and/or poor oral hygiene	Application of fluoride varnish from the age of two years, by dental team or trained GP where appropriate If resources do not permit, then recommend daily use of fluoride toothpaste and provide dietary advice	At least every six months and for a period of not less than 24 months	IB
	People aged >5 years at high risk of dental caries (Box 2)		2–4 times per year for professional application	IB
	People at high risk of endocarditis (rheumatic heart disease, previous infective endocarditis, prosthetic cardiac valves, certain forms of congenital heart disease, cardiac transplantation)	Recommend antibiotic prophylaxis prior to dental procedures – refer to management guidelines for specific advice	Opportunistic	GPP
Environmental	Communities	Advocate for fluoridation of community water supply		IB

*Use a smear of paste for children aged <2 years and a pea-size amount for children ≥2 years. Toothpaste with a fluoride concentration of 1000 parts per million (ppm) is recommended unless there is a risk of fluorosis.

Box 1. Advice for good oral health practices[26]

While review with dental professionals is recommended to comprehensively assess for caries risk and the presence of disease, the following general principles are recommended for non-dental professionals:

Assessment

- Visually inspect teeth for evidence of caries, periodontal disease, assessment of maternal caries and/or poor oral hygiene
- Assess oral hygiene practices and consumption of sucrose and sweetened drinks, especially in baby bottles, 'honey on the dummy' or other sweet substances such as glycerine on the dummy, and intake of sugared medicines
- Assess access to fluoridated water supply

Advice

- Brush teeth twice daily with a soft toothbrush and fluoride toothpaste and advise to spit, not rinse, excess paste
- Advise about the hazards of high carbohydrate and acidic snacks and drinks taken between meals
- Advise against high and regular consumption of black cola, sweetened fizzy drinks and sports drinks, with water being the preferred drink
- Promote breastfeeding, with weaning to a baby cup, not a bottle
- If bottles are used, advise against the use of any fluid apart from water and do not put baby to sleep with a bottle
- Advise about smoking cessation and limiting alcohol consumption
- Use sugar-free chewing gum for saliva stimulation
- Use a mouth guard when playing contact sport
- Recommend regular dental check-up

Box 2. Risk factors for dental disease

- Poor oral hygiene practices – for example, no/irregular toothbrushing, use of hard toothbrush, no use of fluoride toothpaste, incorrect brushing technique
- Poor diet and nutrition – for example, high and regular consumption of sucrose-and-carbohydrate-containing foods and drinks, especially black cola, sweetened fizzy drinks
- Salivary composition and flow: if poor, there is less protective effect from saliva
- Low exposure to fluoride
- Xerostomia or dry mouth can also contribute to development of dental caries. Risk factors for xerostomia include use of common medications, including antidepressants, antihypertensives, anticoagulants, antiretrovirals, hypoglycaemics, non-steroidal anti-inflammatory drugs, and steroid inhalers; radiotherapy and chemotherapy for cancers of the head and neck; Sjogren's syndrome; human immunodeficiency virus (HIV) infection; and diabetes, particularly in people with poor glycaemic control
- High consumption of acidic foods and drinks such as sports drinks and juices, can contribute to tooth erosion; bulimia is also an erosion risk factor
- General risk factors for periodontal disease include smoking, diabetes, advancing age, stress, and poor oral hygiene
- Tobacco smoking and alcohol consumption are risk factors for the development of oral cancer; the risk is enhanced when smoking and alcohol consumption occur at the same time
- HIV infection can also contribute to a greater risk of periodontal disease, oral ulceration and cancer
- Other modifying risk factors can include age, socio-economic status and access to oral health services

Chapter 9: Respiratory health

Pneumococcal disease prevention

Recommendations: Pneumococcal disease prevention				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	All children	Recommend 13-valent pneumococcal conjugate vaccine (13vPCV) at two, four and six months of age	As part of the routine childhood vaccination schedule	IA
	Aboriginal and Torres Strait Islander children aged 12–18 months in Queensland, Northern Territory, Western Australia and South Australia	Recommend an additional 13vPCV dose		IA
	Medically at-risk children aged <5 years regardless of geographical location (Box 1)	Recommend an additional 13vPCV at age 12–18 months*		IA
		Recommend 23-valent pneumococcal polysaccharide vaccine (23vPPV) at age four years		IA
	Medically at-risk children aged 5–18 years (Box 1)	Recommend second dose of 23vPPV Time period varies according to risk – Category A (five years after the first dose) and Category B (10 years after the first dose) (Box 1); consult *The Australian immunisation handbook* for details		IA
	Aboriginal and Torres Strait Islander children aged 15 years in Northern Territory	Recommend 23vPPV (this should be considered the first adult dose)		IA
	Those aged >18 years with the **highest increased risk** of invasive pneumococcal disease (Box 1, Category A conditions)	Recommend 13vPCV	Schedule is complex – refer to *The Australian immunisation handbook*	IA
	Those aged >18 years with **increased risk** of invasive pneumococcal disease (Box 1, Category B conditions)	Recommend 23vPPV	Give and repeat vaccination five years later. A third dose may be needed at age 50 years (refer to *The Australian immunisation handbook*)	IA

Recommendations: Pneumococcal disease prevention				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	Aboriginal and Torres Strait Islander people aged ≥50 years	Recommend 23vPPV	Give as part of annual health assessment and repeat vaccination five years later Provide no more than three adult doses in lifetime	
Environmental	Communities	Reduce environmental risk factors for pneumococcal disease, such as exposure to tobacco smoke, overcrowding, poor nutrition, lack of breastfeeding, poor respiratory hygiene, contact with chidren/pets, sudden changes in temperature		IIIB
		Promote primary care, community-based strategies to improve pneumococcal vaccination uptake and timeliness, particularly using reminder/recall systems, provider prompts, provider audit and feedback		IB
		Activities should also focus on increasing community awareness of benefits and timeliness of vaccines and enhancing access to vaccination services (home visits, clinics in public settings, reduced costs)		GPP
*For any child, only one booster dose of 13vPCV is required in the second year of life.				

Box 1. Conditions associated with an increased risk of invasive pneumococcal disease (IPD) in children and adults, by severity of risk*[1]

Category A: Conditions associated with the highest increased risk of IPD

- Functional or anatomical asplenia
- Immunocompromising conditions, including:
  - congenital or acquired immune deficiency
  - immunosuppressive therapy (including corticosteroid therapy ≥2 mg/kg per day of prednisolone or equivalent for more than one week)
  - radiation therapy, where there is sufficient immune reconstitution for vaccine response to be expected
- Haematological and other malignancies
- Solid organ transplant
- Human immunodeficiency virus (HIV) infection (including acquired immune deficiency syndrome [AIDS])
- Chronic renal failure, or relapsing or persistent nephrotic syndrome
- Proven or presumptive cerebrospinal fluid leak
- Cochlear implants
- Intracranial shunts

Category B: Conditions associated with an increased risk of IPD

- Chronic cardiac disease, particularly cyanotic heart disease or cardiac failure in children
- Chronic lung disease, including:
  - cystic fibrosis
  - severe asthma in adults (requiring frequent hospital visits and use of multiple medications)
- Diabetes mellitus
- Down syndrome
- Alcoholism
- Chronic liver disease
- Tobacco smoking

*Please refer to the full and most up-to-date table (Table 4.13.1) in *The Australian immunisation handbook*[1] for details.

Influenza prevention

Recommendations: Influenza prevention				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	Aboriginal and Torres Strait Islander people at high risk of influenza-related complications: Children aged ≥6 months to <5 years Youth and adults aged >15 years	Offer vaccination to high-risk groups in the pre-influenza season months (March–April)	Annual	IIB
	All individuals aged ≥6 months with a chronic disease	Prioritise provision of vaccination to high-risk groups in the pre-influenza season months (March–April)	Annual	IIC
	Healthcare providers	Offer influenza vaccine in the pre-influenza season months for the prevention of influenza (March–April)	Annual	GPP
	Women who are pregnant or planning a pregnancy	Offer immunisation at the first antenatal visit or with pre-conception counselling	Part of routine antenatal care (refer to Chapter 2: Antenatal care)	IIB
	All others aged ≥6 months for whom it is desired to reduce the likelihood of becoming ill with influenza	Offer influenza vaccine in the pre-influenza season months	Annual	GPP
	Children aged <6 months	Influenza vaccination **not** recommended		GPP
Behavioural	Those at higher risk of complications due to smoking and/or obesity	Encourage weight loss and/or smoking cessation		GPP
	Household contacts of a person with influenza	Recommend good hygiene practices, such as frequent handwashing and covering the mouth on coughing or sneezing, to decrease the spread of influenza, particularly from children to other household members	Opportunistic	IIIC

Recommendations: Influenza prevention				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	Healthcare workers	Minimise exposure risk to patients by adhering to infection control guidelines In addition to standard infection control procedures, personal protective equipment is recommended during influenza pandemics		
Chemo-prophylaxis	Healthy adults	Neuraminidase inhibitors (NIs) are generally not indicated for the prevention of influenza		IIB
	People at high risk of influenza complications where there are high levels of circulating virus	Consider using NIs for high-risk individuals in close contact with someone with a proven case of influenza (ideally initiated within 48 hours)	Opportunistic	GPP
Environmental		Primary care, community-based strategies to improve vaccination levels, particularly using reminder/ recall systems, provider prompts, provider audit and feedback should be implemented		IB
	Communities	Activities should also focus on increasing community awareness of benefits and timeliness of vaccines for vaccinations (media campaigns) and enhancing access to vaccination services (home visits, clinics in public settings, reduced costs)		GPP

Asthma

Recommendations: Asthma				
Prevention intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All people	Routine screening for asthma is not recommended Early detection strategies should be considered (eg clinical vigilance, detailed history considering mimics of asthma, and spirometry when symptoms are suggestive of asthma)		GPP
Behavioural	Children	Maternal dietary restrictions during breastfeeding or pregnancy are not recommended for the prevention of asthma		III–IIB
	All	A high intake of fruit and vegetables should be recommended to those with a high risk of asthma*	Opportunistic	III–IIID
	All	Advise weight reduction for people with obesity and overweight	Opportunistic	III–IIB
Chemo-prophylaxis	Children at risk of asthma	Immunotherapy is not recommended for the prevention of asthma	Opportunistic	IIB
		Inhaled corticosteroids are not recommended for the prevention of asthma	Opportunistic	IIB
	Children and adults with asthma, including pregnant women	Assess whether asthma preventer therapies are indicated and optimise asthma control (refer to 'Resources' for recommended guidelines)	Opportunistic and as part of annual health assessment	IA
Environmental	Infants at risk of exposure to environmental tobacco smoke (ETS) both in-utero and in the postnatal period	Advise and assist pregnant women to avoid smoking (refer to Chapter 2: Antenatal care) Advise parents/carers who smoke about the harms of ETS and the need to limit childhood exposure, particularly in confined spaces (eg homes and motor vehicles) (refer to Chapter 1: Lifestyle, 'Smoking')	Opportunistic	III–IA
	Children and adults at risk of exposure to ETS	Recommend strategies to promote a smoke-free environment	Opportunistic	III–IA
	People with or at risk of asthma	Advise families that interventions to reduce exposure to airborne allergens such as house dust mites and pets do not prevent asthma or improve outcomes for people with asthma	Opportunistic	IA
	People with or at risk of asthma who currently smoke	Provide smoking cessation advice to people who smoke (refer to Chapter 1: Lifestyle, 'Smoking')	Opportunistic	III–IA

Recommendations: Asthma				
Prevention intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Environmental	Workers in high risk workplaces, where exposure to occupational dusts and chemicals are likely	Conduct routine medical surveillance for new onset of asthma Discuss implications of work, exposure, economic balance and, if necessary, seek advice from occupational health physician Recommend complete avoidance of exposure to the occupational hazard. Use respiratory protective equipment as a 'last resort' option if complete avoidance is not possible	Opportunistic	III–IIIB
*Risk factors include a family history (particularly maternal) of asthma and allergies, a past history of atopy and food allergies in early life, obesity, low birth weight, in-utero tobacco exposure, tobacco smoking, ETS, environmental pollution, work-related exposures.[3,18,23,29]				

Chronic obstructive pulmonary disease

Recommendations: Chronic obstructive pulmonary disease				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	People with an established diagnosis of chronic obstructive pulmonary disease (COPD)	Offer influenza vaccine in the pre-influenza season months (March–April) for the prevention of influenza	Annually	IB
		23-valent pneumococcal polysaccharide vaccine (23vPPV) is recommended for the prevention of invasive pneumococcal disease and lower respiratory tract infections	Refer to Chapter 9: Respiratory health, 'Pneumococcal disease prevention'	IIC
Screening*	People aged >35 years who currently smoke or are ex-smokers	Check for symptoms of COPD as part of a targeted, active case-finding approach. Consider the use of a symptom questionnaire to assist with case finding (refer to 'Resources')	Opportunistic	IIB
	All others presenting with symptoms, especially shortness of breath, chronic bronchitis (cough and sputum) and recurrent acute bronchitis	If symptoms of COPD are present, spirometry is indicated to assess for the presence of airflow obstruction and to assess its severity	Opportunistic	IA
		Spirometry is not recommended to screen healthy adults who do not report respiratory symptoms		IA
Behavioural	All people	Advise of the importance of not smoking to prevent COPD (refer to Chapter 1: Lifestyle, 'Smoking')	Opportunistic	IA
	People with an established diagnosis of COPD who currently smoke	Smoking cessation reduces the rate of decline of lung function. Counselling and treatment of nicotine dependence should be offered to all people who smoke, regardless of the degree of airflow obstruction (refer to Chapter 1: Lifestyle, 'Smoking')	Opportunistic	IA
		Consider referral to pulmonary rehabilitation as it has been shown to reduce COPD exacerbations		
Chemo-prophylaxis	People with an established diagnosis of COPD	Pharmacotherapy does not modify decline in lung function but is beneficial in decreasing symptoms associated with COPD, providing an initial increase in lung function, improving quality of life, and preventing future exacerbations of disease		IA
Environmental	All people	Advise that risk factors for COPD (eg occupational exposures, environmental tobacco smoke and indoor and outdoor air pollution and irritants) should be minimised. This may include strategies such as ensuring adequate ventilation when cooking with solid fuels, avoidance of irritants and reduction of emissions in the workplace (refer also to recommendations in Chapter 1: Lifestyle, 'Smoking')		IIIC

*Targeted case finding has been included under the category of screening, given its importance in the diagnosis of those people with symptoms.

Bronchiectasis and chronic suppurative lung disease

Recommendations: Bronchiectasis and chronic suppurative lung disease				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/strength of evidence**
Immunisation	All children and adults, including pregnant women	Ensure timely immunisation is provided	As per National Immunisation Program Schedule (NIPS) and state and territory schedules	IA
Screening	People with pneumonia and lower acute respiratory infections (ARIs) (particularly hospitalised episodes)	Ensure primary healthcare providers review the patient after the ARI episode If wet or productive cough* is present, consider the diagnosis of bronchiectasis/ chronic suppurative lung disease (CSLD).‡ Recommence antibiotics and undertake investigations as per management guidelines (refer to 'Resources') or refer to a specialist (Box 2)	3–4 weeks post-episode, then two-weekly until symptoms resolve or the patient is referred	IA (antibiotics efficacy in treatment of wet cough in children) III–IIB (screening for bronchiectasis post–lower ARI episode)
	People with recurrent lower ARIs (in children, this is >2 episodes of hospitalised chest X-ray proven pneumonia ever), and/or with persistent chronic (>4 weeks) wet cough†	Consider a diagnosis of bronchiectasis. Repeat a chest X-ray Refer children to a specialist if there is persistent wet cough and/or abnormal CXR (Box 2)	Opportunistic	III–II (screening for bronchiectasis post–lower ARI episode) IA (antibiotics efficacy in treatment of wet cough in children) GPP B (for effectiveness of screening and antibiotics in adults)
	People with history of tuberculosis	Clinically assess for chronic lung disease symptoms,‡ and undertake spirometry	Opportunistic	III–II
	Adults with chronic obstructive pulmonary disease (COPD)	Undertake spirometry (refer to Chapter 9: Respiratory health, 'Chronic obstructive pulmonary disease'). Assess for bronchiectasis symptoms and consider referral to specialist if: • there is a history of daily sputum production • sputum has persistent infection, especially with *Pseudomonas aureginosa* • there are increasing exacerbations • there is lung function decline	Opportunistic	III–II (screening for bronchiectasis in adults with COPD)

Recommendations: Bronchiectasis and chronic suppurative lung disease				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/strength of evidence**
Behavioural	All Infants	Promote and encourage breastfeeding	At postnatal checks	III–IIB (breastfeeding protective)
	All children	Promote good hygiene practices to reduce burden of infections (refer to Chapter 7: Hearing loss)	Opportunistic	GPP B
	People with CSLD or known bronchiectasis	Assess cough severity, quality of life, and exacerbating factors. Undertake regular review to prevent and manage complications and comorbidities (Box 3)	Three-monthly clinic review Six-monthly specialist review	GPP B
	Infants at risk of exposure to environmental tobacco smoke both in-utero and in the postnatal period	Advise and assist pregnant women to avoid smoking (refer to Chapter 2: Antenatal care) Advise parents/carers who smoke about the harms of environmental tobacco smoke and the need to limit childhood exposure, particularly in confined spaces (eg homes and motor vehicles) (refer to Chapter 1: Lifestyle, 'Smoking')	Opportunistic	IIIC
	Mothers with, or at risk of having, babies with low birth weights and/or premature infants	Promote increased access to comprehensive antenatal care (refer to Chapter 2: Antenatal care)	Opportunistic	GPP III–IIC (premature and low birth weight infants developing CSLD)
	People with CSLD or known bronchiectasis	Consider maintenance antibiotics on discussion with the person's specialist	As per clinical practice guidelines	IA

*Cough is usually underreported.[41]

†Children do not usually produce sputum and hence the term 'wet cough' (rather than 'productive cough') is used.[1]

‡Bronchiectasis refers to symptoms of CSLD in the presence of high-resolution computed tomography (HRCT) chest scan findings of airway dilatation when clinically stable.[2] CSLD is diagnosed when symptoms and/or signs of bronchiectasis are present without availability of an HRCT to confirm bronchiectasis, or, in children, without the HRCT features of bronchiectasis.[2] These symptoms and/or signs are recurrent (>3 episodes) wet or productive cough, each lasting for >4 weeks, with or without other features (eg exertional dyspnoea, symptoms of airway hyper-responsiveness, recurrent chest infections, growth failure, digital clubbing, hyperinflation or chest wall deformity).[2]

Box 2. In children, triggers for referral to a specialist[1]

Triggers include one or more of the following:

- persistent wet cough not responding to four weeks of antibiotics
- >3 episodes of chronic (>4 weeks) wet cough per year responding to antibiotics
- a chest radiograph abnormality persisting >6 weeks after appropriate therapy.

Box 3. Reviewing patients who have chronic suppurative lung disease/bronchiectasis[1]

Regular review consists of at least an annual review in adults and six-monthly in children. A multidisciplinary team is preferable, especially at the initial evaluation.

The review includes assessment of:

- severity, which includes oximetry and spirometry
- sputum culture (when available) for routine bacterial and annual mycobacterial culture
- management of possible complications and comorbidities, particularly for gastroesophageal reflux disease/aspiration, reactive airway disease/asthma, chronic obstructive pulmonary disease (COPD), otorhinolaryngeal disorders, urinary incontinence, mental health and dental disease; less commonly, patients require assessments for sleep-disordered breathing and cardiac complications
- adherence to therapies and knowledge of disease processes and treatments.

Chapter 10: Acute rheumatic fever and rheumatic heart disease

Recommendations: Acute rheumatic fever and rheumatic heart disease				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	People with a history of acute rheumatic fever (ARF) or known rheumatic heart disease (RHD)	Administer routine childhood and adult vaccinations plus annual influenza vaccination as per the National Immunisation Program Schedule (refer also to Chapter 3: Child health) Provide pneumococcal vaccination	As per national guidelines	II
Screening	Individuals coming from high-risk groups or living in high-risk settings for ARF/RHD All pregnant women	Take a comprehensive medical history, and family history for cardiovascular disease Cardiac auscultation to screen for RHD is not recommended due to poor sensitivity and specificity. The diagnosis of RHD must be made by echocardiography Echocardiography is not currently recommended for population-based screening for RHD	Opportunistic and as part of routine health assessment	GPP
	All individuals with a past history of ARF, or cardiac murmurs suggestive of valve disease	Refer for echocardiography and subsequent follow-up. Refer to management guidelines for specific advice	As per management guidelines	GPP
Behavioural	People with a past history of ARF or known RHD	Emphasise the importance of early treatment for sore throat and prevention of skin infections (refer to Chapter 3: Child health, 'Childhood kidney disease') Advise about healthy lifestyle (smoking, diet, exercise, dental health) and the need for regular clinical reviews (refer to Chapter 1: Lifestyle, and Chapter 8: Oral and dental health) Offer contraceptive advice to females of child-bearing age in order to avoid unintended pregnancy (refer to Chapter 4: The health of young people) Provide community-based health promotion about ARF/RHD	Opportunistic and annually	GPP
Chemo-prophylaxis	All people in high-risk communities where Group A streptococcus (GAS) infections are common and ARF is prevalent	Maintain a high index of clinical suspicion of streptococcal pharyngitis in people presenting with a sore throat Take a throat swab to confirm a diagnosis of streptococcal pharyngitis and consider empirical treatment with single-dose intramuscular benzathine penicillin G or the less-preferred option of 10 days of oral penicillin V while awaiting test results	As presented	GPP

Recommendations: Acute rheumatic fever and rheumatic heart disease				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	All people with confirmed GAS pharyngitis	Treat as above There is no evidence to support treating family contacts of those with GAS pharyngitis	As presented	IA
	All people with ARF/RHD	A new diagnosis of ARF or RHD should be notified to the communicable disease control unit in jurisdictions where these conditions are notifiable diseases Recommend long-term prophylactic antibiotics (either benzathine penicillin every 21–28 days or the less-preferred option of daily oral penicillin V) for the prevention of recurrent rheumatic fever attacks Explain the importance of long-term antibiotics to both the affected individual and their family/carers Include patient details in local patient information or medical record recall systems and, with consent, send details to the ARF/RHD centralised register	Opportunistic and as presented	GPP
		Categorise patients according to the severity level of their disease (priority levels 1–4) (Box 1). This is necessary to plan the review and follow-up frequency tailored to patients	As per individual recall plan	IA
	People with established RHD	Provide antibiotic prophylaxis for dental and other high-risk procedures	As required	GPP
Environmental	People living in communities where GAS infections are common and ARF is prevalent	Assess for overcrowding and refer to social support services for housing assistance if indicated (refer also to Chapter 7: Hearing loss) If high rates of impetigo and underlying scabies, manage as per local healthy skin guidelines (refer to 'Resources')	Opportunistic	IIIB

Box 1. Priority classifications for developing management plans[9]

Classification	Criteria
Priority 1 (severe)	People with any of the following: • severe valvular disease • moderate or severe valvular lesion with symptoms • mechanical prosthetic valves, tissue prosthetic valves and valve repairs including balloon valvuloplasty
Priority 2 (moderate)	Any moderate valve lesion in the absence of symptoms and with normal LV function
Priority 3 (mild)	ARF with no evidence of rheumatic heart disease (RHD), **or** trivial to mild valvular disease
Priority 4 (inactive)	Patients with a history of acute rheumatic fever (ARF; no RHD) for whom secondary prophylaxis has been ceased
For more detailed information on specific management plans for each priority area, consult RHD Australia guidelines (refer to 'Resources')[9].	

National Guide lifecycle chart | Adult

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Screening/assessment	How often?	Who?	Page*	Age (years) 10–14	15–17	18–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	≥55
Lifestyle														
Smoking														
Smoking status	Annually and opportunistically	People aged ≥10 years	10											
Assess willingness to quit and level of nicotine dependence to guide intervention choice	Opportunistically	People who currently smoke	10											
Overweight and obesity														
Body mass index (BMI) using age-specific and sex-specific centile charts	Annually and opportunistically	People aged <18 years (refer to Chapter 3: Child health)	12											
BMI and waist circumference	Annually and opportunistically	People aged ≥18 years	12											
Physical activity														
Assess level of physical activity and sedentary behaviour as per Australian age-appropriate recommendations	Annually and opportunistically	All people	16											
Alcohol														
Quantity and frequency	Annually	People aged ≥15 years	20											
Comprehensive alcohol assessment	Opportunistically	High-risk groups (refer to Chapter 1: Lifestyle, 'Alcohol')	20											
Gambling														
Screen by asking a single-item question	Annually and opportunistically	People aged ≥12 years (refer to Chapter 1: Lifestyle, 'Gambling')	23											
Antenatal care (For pregnant girls aged <15 years, follow recommendations for people aged ≥15 years)														
General antenatal care and screening	**Refer to Chapter 2: Antenatal care**	**Refer to Chapter 2: Antenatal care**	**30**											
Ask about psychosocial factors and screen for depression and anxiety using a validated perinatal mental health assessment tool	Early in pregnancy and at subsequent visits	All pregnant women	32											
Ask about exposure to family abuse and violence (FAV) and respond immediately if a woman discloses FAV	Early in pregnancy and at subsequent visits	All pregnant women	32											
Smoking cessation														
Regularly assess smoking status and remind patients to limit/avoid exposure to cigarette smoke	First visit and subsequent antenatal visits	All pregnant women	25											
Genitourinary and blood-borne virus (BBV) infections														
Offer either screening for Group B streptococcus (GBS) colonisation or an assessment of risk factors for GBS transmission during labour	At 35–37 weeks' gestation	All pregnant women	26											
Chlamydia testing	First antenatal visit and consider screening later in pregnancy in areas of high prevalence	Pregnant women aged <25 years and all pregnant women from communities with high prevalence of sexually transmitted infections (STIs)	26											
Gonorrhoea testing	First antenatal visit and consider repeat screening later in pregnancy in areas of high prevalence	Pregnant women who have known risk factors or who live in or come from communities with a high prevalence of gonorrhoea, including those in outer regional and remote areas	26											
Offer syphilis, human immunodeficiency virus (HIV) and hepatitis B virus (HBV) testing	First antenatal visit	All pregnant women	27											
Offer serological testing for hepatitis C virus (HCV) antibodies	First antenatal visit	Pregnant women with risk for HCV, including intravenous drug use, tattooing and body piercing, and incarceration	27											
Asymptomatic bacteriuria test	First antenatal visit	All pregnant women	26											
Bacterial vaginosis test	On presentation	Pregnant women with symptoms of bacterial vaginosis	26											
Trichomoniasis test	On presentation	Pregnant women with symptoms of trachomoniasis	26											
Nutrition and nutritional supplementation														
Measure height and weight and calculate BMI	At first visit; at subsequent visits only if clinically indicated	All pregnant women	28											
Full blood examination to assess for anaemia	First antenatal visit and at 28 and 36 weeks	All pregnant women	28											
Consider serology testing for vitamin D levels	First antenatal visit	Pregnant women with risk factors for vitamin D deficiency	28											
Diabetes														
Fasting plasma glucose	First antenatal visit	Pregnant women who do not have diagnosed diabetes	29											
75 g two-hour oral glucose tolerance test (OGTT)	Between 24 and 28 weeks	Pregnant women who do not have diagnosed diabetes	29											
75 g fasting OGTT	At six weeks postpartum	Women diagnosed with gestational diabetes who are now postpartum	29											
Health of older people														
Osteoporosis														
Assess risk factors for osteoporosis	Annually	All postmenopausal women and men aged >50 years	60											
Dual-energy X-ray absorptiometry on at least two skeletal sites to measure bone density	Baseline, then two-yearly if needed	People at moderate and high risk (refer to Chapter 5: The health of older people)	60											
Falls														
Assess for risk factors for falls	Annually On admission, then six-monthly	People aged ≥50 years at all risk levels Aged care residents	63											
Detailed assessment including cardiac, neurological, medication, vision/gait/balance, home environment	Opportunistically	People with a history of falls or at high risk	63											
Referral for pacemaker	As needed	Falls due to carotid sinus hypersensitivity	63											
Referral for cataract surgery (first eye)	As needed	Vision-threatening cataract disease	63											
Dementia														
Obtain history, perform comprehensive physical examination and consider cognitive screening test (refer to Chapter 5: The health of older people)	Opportunistically	People with: memory loss, behaviour change, concerned family, history of repeated head trauma, Down syndrome, elevated cardiovascular disease (CVD) risk, depression or history of depression	65											
Eye health														
Visual acuity														
Ask about vision	Every 1–2 years	All age groups	66											
Near and far visual acuity assessment	Annually and opportunistically	People aged >40 years and people with poor vision	66											
Referral to ophthalmologist	Opportunistically	Where problems identified	66											
Visual acuity and retinal assessment	Annually	People with diabetes	66											
Conduct eye examination by dilated fundus examination or retinal digital imaging and counsel clients about risk of diabetic retinopathy	First trimester (refer to Chapter 6: Eye health)	Pregnant women with pre-existing diabetes	66											
Trachoma														
Community screening program	National guideline recommendations	People living where trachoma is endemic (refer to Chapter 6: Eye health)	67											
Trichiasis														
Eye examination	Two-yearly (age 40–54 years); annually (age ≥55 years)	Adults aged >40 years raised in trachoma endemic area	67											
Refer to ophthalmologist		People with trichiasis	67											
Hearing loss														
Vaccination (rubella, measles, *Haemophilus influenzae* type b, meningococcus)	National Immunisation Program Schedule (NIPS) and state/territory schedules	Children aged <15 years	68											
Test for rubella immunity and syphilis serology and recommend enhanced hygiene practices for cytomegalovirus prevention	Refer to Chapter 2: Antenatal care	All pregnant women	68											
Ear examination	Annually and opportunistically	Children aged <15 years	68											
Monitor for hearing loss and maintain high suspicion of hearing loss	Annually	Children aged <5 years and older children at high risk of hearing impairment; people aged ≥15 years	69											
Monitor for hearing impairment, provide advice re free hearing assessment and refer where needed	Opportunistically	All people aged ≤50 years	69											
Oral and dental health														
Oral health review, including assessment of teeth, gums and oral mucosa	Annually First antenatal visit Every two years	People aged 6–18 years; adults with poor oral health and/or risk factors for dental disease (refer to Chapter 8: Oral and dental health) All pregnant women Adults with good oral health	74											
Oral health review and oral hygiene advice to minimise oral bacteria levels	Six-monthly	People with history of rheumatic heart disease and cardiovascular abnormalities	74											
Respiratory health														
Pneumococcal disease														
Immunisation: refer to Chapter 9: Respiratory health, 'Pneumococcal disease prevention'			76											
Influenza														
Influenza vaccine	Annually pre-influenza season Part of routine antenatal care (refer to Chapter 2: Antenatal care)	Children aged six months to five years; people aged ≥15 years; people aged >6 months with chronic illness; healthcare providers Women who are pregnant or planning a pregnancy	79											
Asthma														
Consider early detection strategies		All people	81											
Chronic obstructive pulmonary disease														
Influenza vaccine	Annually pre-influenza season	People with an established diagnosis of COPD	83											
23-valent pneumococcal polysaccharide vaccine (23vPPV)	Refer to Chapter 9: Respiratory health, 'Pneumococcal disease prevention'	People with an established diagnosis of COPD	83											
Check for symptoms of chronic obstructive pulmonary disease (COPD) as part of targeted approach	Opportunistic	People aged >35 years who currently smoke or are ex-smokers	83											
Spirometry to assess for presence of airflow obstruction	Opportunistic	All people presenting with symptoms, especially shortness of breath, chronic bronchitis and recurrent acute bronchitis	83											
Bronchiectasis and chronic suppurative lung disease														
Ensure timely immunisation provided	NIPS and state/territory schedules	All children and adults, including pregnant women	84											
Review after acute respiratory infection (ARI) episode	3–4 weeks post-episode, then two-weekly until symptoms resolve or the patient is referred	People with pneumonia and lower ARIs (refer to Chapter 9: Respiratory health, 'Bronchiectasis and chronic suppurative lung disease')	84											
Consider bronchiectasis diagnosis and repeat chest X-ray; specialist referral (refer to Chapter 9: Respiratory health)	Opportunistically	People with recurrent lower ARIs	84											
Clinically assess for chronic lung disease symptoms and undertake spirometry	Opportunistically	People with history of tuberculosis	84											
Undertake spirometry; assess for bronchiectasis and consider referral to specialist where needed (refer to Chapter 9: Respiratory health, 'Bronchiectasis and chronic suppurative lung disease')	Opportunistically	Adults with COPD	84											
Acute rheumatic fever and rheumatic heart disease														
Vaccination (routine childhood and adult vaccinations, annual influenza as per NIPS, and provide pneumococcal vaccination)	As per national guidelines	People with a history of acute rheumatic fever (ARF) or known rheumatic heart disease (RHD)	87											
Take a comprehensive medical history and family history for CVD	Annually and opportunistically	Individuals coming from high-risk groups or living in high-risk settings for ARF/RHD; all pregnant women	87											
Maintain a high index of clinical suspicion of streptococcal pharyngitis in people presenting with a sore throat	As presented	All people in high-risk communities where Group A streptococcus (GAS) infections are common and ARF is prevalent	87											
Assess for overcrowding and refer to social support services for housing assistance if indicated	Opportunistically	People living in communities where GAS infections are common and ARF is prevalent	88											
Refer for echocardiography and subsequent follow-up	As per management guidelines (refer to Chapter 10: Acute rheumatic fever and rheumatic heart disease)	People with past ARF or murmurs suggestive of valve disease	87											

Age-specific Condition-specific

*Page number refers to print version of *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people*

National Guide lifecycle chart | Adult

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Cardiovascular disease														
Assess smoking status, physical activity, nutrition, BMI, waist circumference	Annually and opportunistically	People aged 12–17 years	89	A	A									
Assess smoking status, physical activity, nutrition, BMI, waist circumference, blood pressure (BP), family history of premature CVD, diabetes risk and psychosocial and socioeconomic risk factors	Annually and opportunistically	People aged 18–29 years without vascular risk factors	89			A	A	A						
Assess above and serum lipids and screen for chronic kidney disease (CKD)	Annually and opportunistically	People aged 18–29 years with either family history of premature CVD or CKD, overweight, smoking, diabetes, elevated BP	89			C	C	C						
Assess for Framingham and non-Framingham risk factors and clinically high-risk conditions (refer to Chapter 11: Cardiovascular disease prevention)	Annually	People aged 30–74 years	89						A	A	A	A	A	A
When using the Framingham risk equation, consider adding 5% to the calculated five-year risk score; use clinical judgement (refer to Chapter 11: Cardiovascular disease prevention)	Annually	People aged 30–74 years in communities where local risk factor prevalence rates and CVD incidence rates are high (eg remote areas)	90						A	A	A	A	A	A
Advise lifestyle risk reduction as needed	Review risk every two years	People with low absolute five-year CVD risk (<10%)	90						A	A	A	A	A	A
Advise lifestyle risk reduction as needed with intensive intervention support (refer to Chapter 1: Lifestyle)	Review according to clinical context	People with moderate or high absolute five-year CVD risk (>10%)	90						A	A	A	A	A	A
Review individual risk factor profile (in particular, sub-optimal BP and lipids levels) and recommend commencing BP-lowering treatment and/or lipid-lowering medication unless contraindicated (refer to Chapter 11: Cardiovascular disease prevention)	Review according to clinical context	People at moderate absolute CVD risk: 10–15% five-year CVD risk	91						A	A	A	A	A	A
Recommend commencing both a BP-lowering medication and lipid-lowering medication regardless of risk factor levels unless contraindicated (refer to Chapter 11: Cardiovascular disease prevention)	Review according to clinical context	People at high absolute CVD risk: >15% five-year CVD risk or presence of any clinically high-risk conditions	91						A	A	A	A	A	A
Type 2 diabetes														
Fasting plasma glucose or random venous blood glucose or glycosylated haemoglobin (HbA1c)	Annually	People aged ≥ 18 years and/or adults with any high-risk conditions	94			A	A	A	A	A	A	A	A	A
Consider testing according to clinical context	Opportunistically	People aged <18 years with overweight/obesity	94	C	C									
Chronic kidney disease														
Screen for CKD risk factors (smoking, obesity, hypertension, diabetes, history of acute kidney injury, family history of kidney disease)	Annually	People aged 18–29 years without CKD risk factors	96			A	A	A						
Screen for CKD with estimated glomerular filtration rate (eGFR) and albumin–creatinine ratio (ACR)	Two-yearly (more frequently if CKD risk factor present)	People aged 18–29 years with risk factors (refer to Chapter 13: Chronic kidney disease prevention and management); all people aged ≥30 years	96			C	C	C	A	A	A	A	A	A
Sexual health and blood-borne viruses														
General advice														
Screen for STIs and BBVs	Annually and re-screen three months after positive test	All people with risk factors for STI or BBV; all sexually active people aged ≤30 years	99		C	C	C	C	C	C	C	C	C	C
Screen for other STIs	Upon diagnosis and re-screen in three months	People diagnosed with an STI	99		C	C	C	C	C	C	C	C	C	C
Contact tracing	Every positive screen	Sexual partners of a person with an STI	99		C	C	C	C	C	C	C	C	C	C
Sexually transmitted infections														
Chlamydia														
Recommend nucleic acid amplification test (NAAT) (refer to Chapter 14: Sexual health and blood-borne viruses)	Annually	People aged 15–30 years if sexually active	101		C	C	C	C	C	C	C	C	C	C
	Annually	People aged ≥30 years if sexually active and at high risk												
	First visit	All pregnant women												
	First visit and third trimester	Pregnant women at high risk of STI												
	Opportunistic	Women who are having a termination of pregnancy												
	Annually or 3–6-monthly if high risk	Men who have sex with men												
Gonorrhoea														
Recommend gonorrhoea NAAT (refer to Chapter 14: Sexual health and blood-borne viruses)	Annually	Sexually active people aged 15–30 years	101		C	C	C	C	C	C	C	C	C	C
	Annually	Pregnant women who are at risk												
	Annually or 3–6-monthly if high risk	Men who have sex with men												
	Annually	All people aged ≥30 years if sexually active and at high risk												
Trichomonas vaginalis														
Recommend NAAT (refer to Chapter 14: Sexual health and blood-borne viruses)	Opportunistically	Sexually active people aged ≤30 years where local prevalence rates are high or in regional/remote areas	101		C	C	C	C						
Syphilis														
Recommend syphilis serology	First antenatal visit and repeat at 28 weeks if positive, in a high prevalence area, or risk factors for STIs are present	All pregnant women	101		C	C	C	C	C	C	C	C	C	C
Recommend syphilis serology	Annually or 3–6-monthly if high risk	Men who have sex with men; others at high risk of STI	101		C	C	C	C	C	C	C	C	C	C
Blood-borne viruses														
HBV														
Hepatitis B vaccination (refer to Chapter 14: Sexual health and blood-borne viruses)			102		C	C	C	C	C	C	C	C	C	C
HBV post-exposure prophylaxis	Within 72 hours (or 14 days for sexual contact)	Individual exposed to person who is HBsAg positive or who is at high risk and unable to be identified and tested rapidly	102		C	C	C	C	C	C	C	C	C	C
Offer HBV screening, including hepatitis B virus surface antigen (HBsAg) and hepatitis B surface antibody (HBsAb)	Opportunistically	Non-vaccinated or unknown vaccine status; people at high risk for BBVs; healthcare workers	103		C	C	C	C	C	C	C	C	C	C
Human papilloma virus (HPV)														
HPV vaccination (also refer to Chapter 15: Prevention and early detection of cancer, recommendations for cervical cancer)	As per *The Australian immunisation handbook*	Young people prior to first sexual activity; women who are sexually active; females who are sexually active and not yet vaccinated	103		C	C	C	C						
Hepatitis A virus														
Hepatitis A vaccination if non-immune	Two doses at zero and six months	Men who have sex with men; injecting drug users; people with chronic HBV and HCV infection	103		C	C	C	C	C	C	C	C	C	C
HCV														
HCV serology testing	Annually and opportunistically	People at high risk of contracting HCV	103		C	C	C	C	C	C	C	C	C	C
HIV														
HIV serology testing	First antenatal visit	All pregnant women	103		C	C	C	C	C	C	C	C	C	C
	3–6-monthly	Men who have sex with men; others at high risk of BBVs												
Cancer														
Cervical														
Promote HPV vaccination for prevention of cervical cancer	As per NIPS	All people aged 9–18 years, ideally age 11–13 years, prior to onset of sexual activity	105	A	A	C	C	C	C	C	C	C	C	C
		Women and men aged >19 years only if individual risk and benefit assessment indicates												
4-valent human papilloma virus (4vHPV) vaccine (not subsidised; refer to state/territory rules re catch-up program)	As per *The Australian immunisation handbook*	Men who have sex with men, but should take into account likelihood of past exposure to HPV and risk of future exposure	105		C	C	C	C	C	C	C	C	C	C
Cervical screening test (HPV)	From age 25 years or two years after sexual activity, whichever is later, and regardless of HPV vaccine status	Asymptomatic women aged 25–69 years who have ever been sexually active	105					C	C	C	C	C	C	C
Exit cervical screening test (HPV) for those who have been regularly screened	Exit test for age 70–74 years	Asymptomatic women aged 70–74 years who have ever been sexually active	105											C
Refer to Chapter 15: Prevention and early detection of cancer, cancer for asymptomatic under-screened women and women with recent abnormal Pap smears			106			C	C	C	C	C	C	C	C	C
Liver														
Recommend hepatitis B vaccine as per NIPS	At birth, and at two, four and six months	All people	107		C	C	C	C	C	C	C	C	C	C
Screen for HBV and HCV if indicated	Refer to Chapter 14: Sexual health and blood-borne viruses, 'Recommendations'	All people	107	C	C	C	C	C	C	C	C	C	C	C
Abdominal ultrasound, alpha-fetoprotien screening for hepatocellular carcinoma (HCC) as part of specialist management plan	Six-monthly	People with chronic hepatitis B who are: aged >50 years, or have cirrhosis, or have a family history of HCC	107	C	C	C	C	C	C	C	C	C	C	C
Specialist review and consider ongoing screening for HCC with an abdominal ultrasound +/– alpha-fetaproten	Protocols vary, refer to guidelines	People with advanced liver disease (cirrhosis) not due to chronic hepatitis B	107	C	C	C	C	C	C	C	C	C	C	C
Breast														
Ask about family history of breast cancer to ascertain individual risk, and discuss 'breast awareness'	Annually	All women	109	A	A	A	A	A	A	A	A	A	A	A
Recommend mammography screening and provide information to allow an informed decision based on individual risk and preferences	Two-yearly	Women aged 50–74 years at, or slightly above, average risk	109								C	C	A	A
Advise referral to a family cancer clinic for risk assessment, possible genetic testing and development of a management plan	Annually	Women at potentially high risk	109					C	C	C	C	C	C	C
Colorectal (bowel)														
Ask about family history of colorectal cancer in order to estimate the individual risk of developing colorectal cancer	Annually	All people	112			A	A	A	A	A	A	A	A	A
Screen according to risk category (1, 2 or 3); refer to Chapter 15: Prevention and early detection of cancer, 'Recommendations: Prevention and early detection of colorectal (bowel) cancer'			112									C	C	C
Provide lifestyle risk factor counselling on the benefits of regular physical activity, maintaining healthy weight, alcohol intake in the low-risk range, restricting energy intake and dietary fat (refer to Chapter 1: Lifestyle), including the consumption of vegetables and sources of dietary fibre	Annually	All people	113	A	A	A	A	A	A	A	A	A	A	A
Prostate														
Recommend individualised discussion with patient based on assessment of risks and benefits	If requested	Asymptomatic men at average and potentially higher risk due to family history (refer to Chapter 15: Prevention and early detection of cancer)	116								C	C	C	C
Lung														
Provide lifestyle risk factor counselling on the benefits of avoiding smoking and exposure to smoke	Annually and opportunistically	All people	117		A	A	A	A	A	A	A	A	A	A
Family abuse and violence														
Establish a high level of awareness of the risks of FAV and actively case find by taking a social history and asking sensitively about the potential for FAV	Opportunistic and as part of an annual health assessment	All people	118	C	C	C	C	C	C	C	C	C	C	C
Assess for risk of FAV as part of a comprehensive antenatal assessment	At least once in every pregnancy	Pregnant women	118	C	C	C	C	C	C	C	C	C	C	C
Mental health														
Depression														
For those with a higher risk of depression, ask about symptoms of depression	As part of annual health assessment	People in whom depression risk is greater (refer to Chapter 17: Mental health, Box 1)	120		C	C	C	C	C	C	C	C	C	C
Suicide prevention														
Consider asking about past and current suicidal ideation and intent as part of a comprehensive medical history	Opportunistically	People with history of self-harm, mood disorders, hazardous alcohol consumption or misuse of other drugs, or who are close to someone who has recently died by suicide	122		C	C	C	C	C	C	C	C	C	C

A Age-specific C Condition-specific

*Page number refers to print version of *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people*

Chapter 11: Cardiovascular disease prevention

People without an established diagnosis of cardiovascular disease

Recommendations for people without an established diagnosis of cardiovascular disease				
Prevention intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	People aged 12–17 years	Assess smoking status, physical activity, nutrition, body mass index (BMI) and waist circumference (refer to Chapter 1: Lifestyle) Advise lifestyle risk reduction accordingly (refer to Chapter 1: Lifestyle)	Opportunistic and as part of annual health check	GPP
	People aged 18–29 years without any vascular risk factors	Assess smoking status, physical activity, nutrition, BMI, and waist circumference Also assess blood pressure (BP), family history of premature cardiovascular disease (CVD) (particularly in a first-degree relative aged <55 years), diabetes risk (refer to Chapter 12: Type 2 diabetes prevention and early detection), psychosocial risk factors (refer to Chapter 17: Mental health) and socioeconomic risk factors Advise lifestyle risk reduction accordingly (refer to Chapter 1: Lifestyle)	Opportunistic and as part of annual health check	GPP
	People aged 18–29 years with one or more of the following present: • family history of premature CVD • chronic kidney disease (CKD) • overweight/ obesity • smoking • diabetes • elevated BP	Assess risk factors as above* Also assess serum lipids and screen for CKD (refer to Chapter 13: Chronic kidney disease prevention and management) Advise lifestyle risk reduction accordingly (refer to Chapter 1: Lifestyle)	Opportunistic and as part of annual health check	GPP
	People aged 30–74 years†	Assess for the presence of any Framingham or non-Framingham risk factors and clinically high-risk conditions (Box 1) If no clinically high-risk conditions present, calculate absolute five-year CVD risk using the Framingham Risk Equation (FRE) (Appendix A: Australian cardiovascular risk charts)	As part of a health assessment and review according to level of risk (refer below)	IA

Recommendations for people without an established diagnosis of cardiovascular disease				
Prevention intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	People aged 30–74 years in communities where local risk factor prevalence rates and CVD incidence rates are high (eg remote areas)	When using the FRE, consider adding 5% to the calculated five-year CVD risk score‡	As part of a health assessment and review according to level of risk (refer below)	GPP
	People aged 30–74 years	There is insufficient evidence to recommend routine CVD risk screening with additional tests such as coronary artery calcium scores, C-reactive protein, Ankle Brachial Pressure Index (ABPI), 24-hour ambulatory BP monitoring. Such tests may have some use in people identified at intermediate risk, and the decision to conduct these tests should be based on clinical judgement§		IA
Behavioural	People with low absolute five-year CVD risk (<10%)	Advise lifestyle risk reduction as needed for the following (refer to Chapter 1: Lifestyle): • physical activity • weight loss • smoking cessation • salt reduction to less than 4 gm salt/ day (1600 mg sodium/day) • diet rich in fruit and vegetables, whole grain cereals, nuts and seeds, legumes, fish, lean meat, poultry, low-fat dairy products, and limiting saturated and trans fat intake • limit alcohol intake to ≤2 standard drinks/day	Review risk every two years	IA
	People with the following: • absolute five-year CVD risk moderate or high (≥10%) • presence of any clinically high-risk conditions (Box 1)	Advise lifestyle risk reduction as above Provide intensive intervention support (refer to Chapter 1: Lifestyle)	Review according to clinical context	IB

Recommendations for people without an established diagnosis of cardiovascular disease				
Prevention intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	People at low absolute risk: <10% five-year CVD risk and with BP persistently ≥160/100 mmHg	Consider commencing a BP-lowering medication unless contraindicated	Review according to clinical context	GPP
	People at moderate absolute CVD risk: 10–15% five-year CVD risk	Review individual risk factor profile (in particular, sub-optimal BP and lipids levels) and recommend commencing BP-lowering treatment and/or lipid-lowering medication unless contraindicated[ll]	Review according to clinical context	IB
	People at high absolute CVD risk: >15% five-year CVD risk or presence of any clinically high-risk conditions (Box 1)	Recommend commencing both a BP-lowering medication and lipid-lowering medication regardless of risk factor levels unless contraindicated[ll]	Review according to clinical context	IB
		Aspirin is not routinely recommended for primary prevention of CVD[#]		IB
	Patients with atrial fibrillation (AF) without prior CVD	Determine the cause of AF and manage rate and rhythm control. Assess and manage CVD risk as above. Consider oral anticoagulant treatment if: • valvular heart disease is present or • a CHA_2DS_2-VASc score of ≥2 (Box 2) is present and • risk of bleeding is low		IA

*Although absolute CVD risk assessment using the FRE is currently not validated for people aged <30 years, a multifactorial assessment of CVD risk factors is still recommended to guide management decisions. Treatment on the basis of elevated single risk factors may still be appropriate depending on the clinical context.

†Although the FRE is validated for people aged 30–74 years, the Australian absolute risk charts start from age 35 years. Some calculators embedded in clinical software and the CARPA charts (refer below) can be used to assess risk in those aged 30–34 years.

‡It is important to distinguish between absolute and relative risk increase. While the absolute risk remains constant at 5%, the relative risk increase will vary depending on the baseline risk. For example, if the initial risk estimate is 5%, an absolute increase of 5% equates to a 100% relative risk increase. If the initial risk estimate is 10%, an absolute increase of 5% equates to a relative risk increase of 50%. If the initial risk estimate is 15%, an absolute increase of 5% equates to a relative risk increase of 33%.

§At the time of writing, there are no Medicare Benefits Schedule rebates for coronary artery calcium scores, highly sensitive C-reactive protein, or 24-hour ambulatory BP monitoring.

llSpecific choice of BP and lipid-lowering agents and guidelines on treatment targets is beyond the scope of this guideline. In general, however, low-dose dual BP therapy is preferred as first-line therapy because treatment effects are at least as beneficial and tolerance is greater than when using higher dose single-agent treatment. Refer to 'Resources' for links to specific management guidelines. If BP or lipid levels are extreme or non-responsive to treatment, further investigation for underlying causes is recommended.

#The US Preventive Services Task Force makes a level IB recommendation for the use of aspirin in people aged 50–59 years at moderate to high CVD risk for the primary prevention of CVD and colon cancer if there is no increased risk of bleeding.[36] This is not currently recommended in Australian guidelines, and clinical judgement is recommended in making decisions for aspirin use. Further trials are currently underway to more comprehensively understand the risks and benefits of aspirin in primary CVD and cancer prevention (refer also to Chapter 15: Prevention and early detection of cancer).

Box 1. Framingham and non-Framingham cardiovascular disease (CVD) risk factors

Framingham Risk Equation factors*†[19]	Non-Framingham Risk Equation factors§[20]	Clinically high-risk conditions[20]
• Age • Gender • Smoking status • Systolic blood pressure • Total cholesterol‡ • HDL cholesterol‡ • Diabetes status • Left ventricular hypertrophy (LVH)†	• Obesity (BMI >30 kg/m^2 and/or waist circumference >102 cm men, >88 cm women) • Family history of CVD before age 55 years in a mother, father or sibling • Presence of albuminuria‖ • Atrial fibrillation • Impaired fasting glucose ≥6.1 mmol and <7.0 mmol or glucose intolerance (two-hour glucose ≥7.8 mmol and ≤11.0 mmol) • Socioeconomic hardship • Depression/other psychosocial stress • Excessive alcohol intake	• Extreme risk factor elevations (SBP ≥180 or DBP ≥110, total cholesterol >7.5 mmol/L) • Type 2 diabetes and aged >60 years • Type 2 diabetes and albuminuria‖ • Moderate to severe chronic kidney disease (eGFR <45 ml/min/1.73 m^2 or persistent proteinuria) • Familial hypercholesterolaemia

BMI, body mass index; DBP, diastolic blood pressure; eGFR, estimated glomerular filtration rate; SBP, systolic blood pressure

*The 1991 Framingham Risk Equation (FRE) is intended for people without CVD. The most recently recorded pre-treatment measures for BP or lipids should be used to estimate CVD risk in people already receiving treatment. Where this is not possible, clinicians should make decisions on use of pharmacotherapy based on discussions with the patient and consideration of the individual context.

†It is preferable to assess for LVH on the basis of echocardiography criteria rather than via an electrocardiogram.

‡A reasonable estimation of risk can be obtained from a non-fasting lipid sample in most circumstances.

§There are many additional risk factors that are independently associated with increased CVD risk, such as C-reactive protein, coronary calcium scores, and plasma homocysteine levels. Measurement of such factors can be costly and invasive, and there is limited evidence to suggest that assessment of these risk factors substantially improves risk prediction over those listed in Box 1.

‖Albuminuria is defined as an albumin excretion rate >20 mcg/min or urinary albumin to creatinine ratio >2.5 mg/mmol in males and >3.5 mg/mmol in females.

Box 2. Stroke risk assessment in people with atrial fibrillation*

Risk factors	Score
Congestive heart failure	1
Hypertension	1
Age ≥75 years	2
Age 65–74 years	1
Diabetes mellitus	1
Stroke/transient ischaemic attack/thromboembolism	2
Vascular disease	1
Sex female	1

*Consider oral anticoagluant treatment when total CHA_2DS_2-VASc score ≥2. Calculators are also available to assess harms from bleeding (refer to 'Resources').

People with an established diagnosis of cardiovascular disease

Recommendations for people with an established diagnosis of cardiovascular disease				
Prevention intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	People with CVD	Calculation of the absolute CVD risk using the FRE is not recommended. Five-year risk of a subsequent CVD event is assumed to be high		
Behavioural	People with CVD	Intensive lifestyle risk factor management as for patients without an established diagnosis of CVD (refer to 'Recommendations for people without an established diagnosis of cardiovascular disease')	Review at every visit	IB
		A tailored cardiac rehabilitation program should be offered to all people post–myocardial infarction and other acute coronary syndromes, and to those who have undergone re-vascularisation procedures	Post-CVD event	IA
Chemo-prophylaxis	People with CVD	Commence blood pressure (BP)-lowering treatment if systolic BP is >120–130 mmHg unless contraindicated by symptomatic hypotension*	Lifelong	IA
		Commence lipid-lowering treatment with a statin at any cholesterol level unless contraindicated*	Lifelong	IA
		Commence low-dose aspirin treatment (75–150 mg) unless contraindicated. Consider alternative antiplatelet agents such as clopidogrel (75 mg) if aspirin hypersensitivity is present For people with ischaemic stroke combination, aspirin/dipyridamole may also be considered	Lifelong	IA
	People with recent acute coronary heart disease	Recommend dual antiplatelet therapy (clopidogrel or ticagrelor) in combination with aspirin	For 12 months	IA
	People with stroke/transient ischaemic attack	Oral anticoagulant treatment is recommended if atrial fibrillation or cardio-embolic stroke is present unless contraindicated. Consultation of specific management guidelines is recommended (refer to 'Resources')	Lifelong	IA

*Specific choice of BP and lipid-lowering agents and guidelines on treatment targets is beyond the scope of this guideline. Refer to 'Resources' for links to specific management guidelines. If BP or lipid levels are extreme or non-responsive to treatment, further investigation for underlying causes is recommended.

Chapter 12: Type 2 diabetes prevention and early detection

Recommendations: Type 2 diabetes prevention and early detection				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Adults aged ≥18 years, particularly adults with any of the following high-risk conditions: • previous impaired glucose tolerance (IGT) or impaired fasting glucose (IFG) (Box 2) • history of gestational diabetes mellitus • history of polycystic ovary syndrome • history of cardiovascular disease • current antipsychotic medication use	Measure fasting plasma glucose or random venous blood glucose or HbA1c A laboratory test is preferable, but finger prick (point-of-care) testing is an alternative Perform oral glucose tolerance test (OGTT) in those with equivocal results The 2012 World Health Organization or International Diabetes Federation criteria should be used to diagnose type 2 diabetes (Box 1) Given the high prevalence of diabetes, use of screening tools such as AUSDRISK is likely to be of limited benefit	Annually as part of adult health check	IIB GPP
	People aged <18 years with overweight or obesity	Consider the potential for early onset type 2 diabetes and consider testing according to clinical context (refer also to Chapter 1: Lifestyle, 'Overweight and obesity')	Opportunistic	GPP
Behavioural	All people	Measure body mass index (BMI) and waist circumference (refer to Chapter 1: Lifestyle: 'Overweight and obesity') Advise minimum of 30 minutes moderate activity on most days (refer to Chapter 1: Lifestyle, 'Physical activity') Encourage diet rich in vegetables, fruits, legumes, high-fibre cereals, fish and lean meats. Limit fats, salt, sugar and alcohol (refer to Chapter 1: Lifestyle, 'Overweight and obesity') For people overweight or obese, refer to Chapter 1: Lifestyle, 'Overweight and obesity'	Opportunistic and as part of annual health assessment	IA
	People with BMI ≥35 kg/m^2	Advise intensive lifestyle modification as above Discuss risks and benefits of bariatric surgery and consider referral if services are available (refer to Chapter 1: Lifestyle, 'Overweight and obesity')	Opportunistic	IIIC

Recommendations: Type 2 diabetes prevention and early detection				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	People with a high-risk condition (refer above)	Advise intensive lifestyle modification as above If lifestyle modification is unable to be achieved, the use of metformin, acarbose, or orlistat has been shown to delay or prevent the onset of diabetes. However, these medications all have potential risks. None are Pharmaceutical Benefits Scheme (PBS) funded for people without diagnosed diabetes, and their use is not recommended	Opportunistic	IB
Environmental	Communities	Advocate for multifactorial and coordinated community-based interventions to increase access to healthy and nutritious food and promotion of increased physical activity (refer to Chapter 1: Lifestyle: 'Overweight and obesity' and 'Physical activity')		GPP

Box 1. Diagnostic definitions of type 2 diabetes[46]

Diabetes can be diagnosed on any of the following criteria:

- Fasting plasma glucose (FPG) ≥7.0 mmol/L
- 75 g oral glucose tolerance test (OGTT) with FPG ≥7.0 mmol/L and/or two-hour plasma glucose ≥11.1 mmol/L
- Glycated haemoglobin (HbA1c) ≥6.5%/48 mmol/mol
- Random plasma glucose ≥ 11.1 mmol/L in the presence of classical diabetes symptoms

Asymptomatic individuals with a single abnormal test should have the test repeated to confirm the diagnosis unless the result is unequivocally elevated.

Where a random plasma glucose level ≥5.6 mmol/L and <11.1 mmol/L is detected, an FPG should be measured, an OGTT performed, or an HbA1c measured.

Box 2. Prediabetes: Diagnostic definitions of impaired fasting glucose (IFG) and impaired glucose tolerance (IGT)[11]

The presence of prediabetes is defined according to the results of a two-hour oral glucose tolerance test (OGTT).

IFG:

- fasting glucose 6.1–6.9 mmol/L, **and**
- two-hour glucose <7.8 mmol/L

IGT:

- fasting glucose <7 mmol/L, **and**
- two-hour glucose ≥7.8 mmol/L and ≤11 mmol/L

Chapter 13: Chronic kidney disease prevention and management

Recommendations: Chronic kidney disease prevention and management				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	People aged 18–29 years without any chronic kidney disease (CKD) risk factors	Screen for CKD risk factors (smoking, obesity, hypertension, diabetes, history of acute kidney injury, family history of kidney disease)	As part of an annual health assessment	IIIB
	All people aged ≥30 years People aged 18–29 years with one or more of the CKD risk factors in Table 1	Screen for CKD with estimated glomerular filtration rate (eGFR) and urinary albumin–creatinine ratio (ACR; first void specimen preferred) If urine ACR is raised, repeat once or twice over three months (first void specimens if possible). For further quantification, consider collecting a timed specimen	Every two years (at least annual if CKD risk factor present)	IIIC
Behavioural	Adults with any risk factors for CKD (refer above)	Offer individualised, structured education about risk factor avoidance and management	Opportunistic	IIIB
		Offer smoking cessation support (refer to Chapter 1: Lifestyle, 'Smoking') Advise avoidance of exposure to environmental tobacco smoke	Opportunistic	IIIB
		Encourage regular physical exercise appropriate to physical ability and medical history (refer to Chapter 1: Lifestyle, 'Physical activity')	Opportunistic	IIB
		If overweight or obese, encourage weight loss Offer group diet and exercise sessions if available, especially for patients with type 2 diabetes (refer to Chapter 1: Lifestyle, 'Overweight and obesity')	Opportunistic	IB
		Advise limiting dietary sodium intake to less than 100 mmol/day (6 g salt per day)	Opportunistic	IIIB
	Adults with CKD stages 1–3 (Table 2)	Lifestyle risk factor management as above	Opportunistic	As above for each risk factor
		Encourage a balanced diet rich in fruit, vegetables and dietary fibre	Opportunistic	IIC
		Advise consumption of the recommended daily intake of protein for adults (0.75 g/kg/day)	Opportunistic	IIC
		Advise against salt substitutes that contain high amounts of potassium	Opportunistic	GPP

Recommendations: Chronic kidney disease prevention and management				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	Adults with CKD stages 1–3 (Table 2)	A daily fluid intake of 2–2.5 L (including the fluid content of foods) is generally considered sufficient, although this might need to be varied according to individual circumstances	Opportunistic	IIIC
Chemo-prophylaxis	All persons with CKD	Regularly review medications to identify and avoid those with potential nephrotoxicity Advise patients taking an angiotensin-converting enzyme (ACE) inhibitor or angiotensin II receptor blocker (ARB) plus diuretic to avoid non-steroidal anti-inflammatory drugs (other than low-dose aspirin if indicated)	Opportunistic at every medication change	GPP
	Adults with albuminuria (Table 3)	Advise treatment with an ACE inhibitor or ARB, regardless of eGFR or blood pressure (BP) level. The goal is >50% reduction in albumin excretion without symptomatic hypotension Concurrently advise minimising salt intake to <6 g per day	At diagnosis	IA
		An ACE inhibitor and ARB should not normally be prescribed together		IIB
	Adults with CKD and diabetes	Blood glucose control in patients with CKD and diabetes should be optimised, aiming for an individualised glycated haemoglobin (HbA1c) target that takes into account factors such as capacity and safety considerations	Opportunistic	IA
	Adults with CKD and BP consistently above 140/90 mmHg	Recommend lifestyle changes as noted above, plus drug treatment aiming at BP <140/90 mmHg. Note that aiming towards systolic BP <120 mmHg has shown additional benefit when well tolerated by the patient (The number of drugs required to achieve target BP tends to increase with declining GFR)	Opportunistic BP check at every visit	IA
		In patients with diabetes or albuminuria, commence antihypertensive treatment with an ACE inhibitor or, if not tolerated, an ARB		IA
	Adults with CKD	Patients with CKD who are not receiving dialysis should be offered statin therapy to reduce the risk of vascular events	At diagnosis	IA
Environmental	Communities with high prevalence of scabies and pyoderma	Support the implementation of population-based strategies for reduction of scabies and pyoderma among children (refer to Chapter 3: Child health, and Chapter 10: Acute rheumatic fever and rheumatic heart disease)		IIIB

Table 1. Risk factors for chronic kidney disease[38]	
Modifiable	**Non-modifiable**
• Smoking • Obesity (BMI >30 kg/m^2) • Hypertension • Diabetes • Severe socioeconomic disadvantage	**Aboriginal or Torres Strait Islander aged >30 years** • Stage 5 CKD or hereditary kidney disease in a first-degree or second-degree relative • History of acute kidney injury • Established vascular disease
BMI, body mass index; CKD, chronic kidney disease	

Table 2. Stages of chronic kidney disease		
Stage	**Description**	**GFR (ml/min/1.73 m^2)**
1	Kidney damage* with normal or increased GFR	>89
2	Kidney damage* with mild reduced GFR	60–89
3A	Moderately reduced GFR	45–59
3B	Moderately reduced GFR	30–44
4	Severely reduced GFR	15–29
5	Kidney failure	<15 or dialysis

GFR, glomerular filtration rate

*Kidney damage includes pathological abnormality or a marker of damage such as abnormalities in blood tests, urine tests or imaging studies degree[1].

Table 3. Definitions of normal albumin excretion, microalbuminuria and macroalbuminuria				
	Gender	**Normal albumin excretion**	**Microalbuminuria**	**Macroalbuminuria**
Urinary albumin–creatinine ratio (ACR)	Male	<2.5 mg/mmol	2.5–25 mg/mmol	>25 mg/mmol
	Female	<3.5 mg/mmol	3.5–35 mg/mmol	>35 mg/mmol
Urinary albumin excretion per 24 hours	Either	<30 mg/24 hours	30–300 mg/24 hours	>300 mg/24 hours

Chapter 14: Sexual health and blood-borne viruses

General prevention advice

Recommendations: General prevention advice				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening/ testing	All sexually active people aged ≤30 years People with risk factors for sexually transmitted infections (STIs) and blood borne viruses (BBVs) (Box 1)	Screen for chlamydia, gonorrhoea and, if a high prevalence area, trichomoniasis (refer below) Offer screening for human immunodeficiency virus (HIV), syphilis and hepatitis B virus (HBV) (refer below)	Annually	GPP I
		Consider offering females a human papillomavirus (HPV) test for cervical cancer screening (refer to Chapter 15: Prevention and early detection of cancer)	Opportunistic	GPP
	People diagnosed with an STI	Review STI risk factors and, if not already done, screen for other STIs according to local prevalence guidelines Screen for BBVs if risk factors present (refer below and Box 1)	Upon diagnosis, and re-test for all three months post-treatment	GPP
	Sexual partners of a person with an STI	Ensure contact tracing is undertaken at time of diagnosis Contact should be offered screening for STIs, HIV, syphilis and HBV, and be offered immediate treatment for the STI the index case had Options include 'partner referral', possibly including patient-delivered partner therapy; or 'provider referral' in consultation with the local sexual health team*	Every new diagnosis of an STI	GPP
	All sexually active patients	Provide sexual health counselling, including proactive discussion of issues of sexuality (Box 2)	Opportunistic	II
Behavioural	All sexually active patients	Patients should be advised to use condoms in new relationships until both partners have had an STI check	Opportunistic	GPP
	People at higher risk of hepatitis B or C infection (Box 1)	Provide counselling on harm minimisation and promote peer education strategies around safer sex and injecting drug use	Opportunistic and as part of annual health check	GPP

Recommendations: General prevention advice				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	People with substance use	Conduct brief motivational interviewing to reduce use of illicit drugs, harm with injection of drugs, risky alcohol use and risk of BBV infection and STIs, particularly for those unlikely to attend specialist treatment	Opportunistic	GPP
	People with exposure to HIV, occupational or non-occupational	Assess post-exposure risk using national guidelines and provide post-exposure prophylaxis (PEP) within 72 hours of the risk exposure when indicated (refer to 'Resources')	Opportunistic	GPP
Chemo-prophylaxis	People at high risk of non-occupational HIV exposure, including men who have sex with men, intravenous drug users, and partners of HIV-positive people	Consider eligibility for pre-exposure prophylaxis (PreP) (refer to 'Resources')	Opportunistic	III
	Condom access	Ensure access to condoms (preferably free, private and available at all hours)	Opportunistic	GPP
Environmental	People with opioid dependence	Refer to an opioid substitution therapy program for all interested individuals, including those in prison, rehabilitation and detention centres	As early as possible in dependence situation	III
	People who inject drugs	Needle and syringe programs should be made available to all populations, including prison populations	Opportunistic	IIA

*With **patient referral**, the index case contacts their own sexual contacts. In this circumstance, the health provider gives guidance on the advice to be translated to partners. This may also include 'patient-delivered partner therapy' (such as azithromycin for chlamydia). Another form of contact tracing is through **provider referral**, whereby the patient provides the healthcare provider with the contact details for their sexual partners. This allows for confidential contact tracing and is the method of choice for serious infections such as HIV.

Sexually transmitted infections

Recommendations: Sexually transmitted infections				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening – chlamydia	All people aged 15–30 years if sexually active All people aged >30 years if sexually active and at high risk (Box 1)	Recommend nucleic acid amplification tests (NAAT) via: • (for women) endocervical swab if having a concurrent speculum examination, or self-administered vaginal swab, or first void urine • (for men) first void urine	Annually	GPP (to age 25 years) GPP (25–29 years)
	All pregnant women		First visit	
	Pregnant women at high risk of STI (Box 1)		First visit and again in third trimester	
	Women having a termination of pregnancy		Opportunistic	
	Men who have sex with men in the presence of other risk factors (Box 1)	Recommend first void urine, throat and anal swab for chlamydia NAAT	Annually or 3–6-monthly if high risk (Box 1)	GPP
Screening – gonorrhoea	All people aged 15–30 years if sexually active Pregnant women who are at risk All people aged >30 years if sexually active and at high risk (Box 1)	Recommend gonorrhoea NAAT via samples as for chlamydia Include screening for chlamydia infection (as above)	Annually	GPP
	Men who have sex with men	Recommend gonorrhoea NAAT using first void urine Include throat swab NAAT and culture, plus anal swab NAAT and culture	Annually or 3–6-monthly if high risk (Box 1)	GPP
Screening – trichomoniasis	All sexually active people aged ≤30 years in regional/remote areas or where local prevalence rates are high	Recommend NAAT for women (as above) and first void urine NAAT for men	Annually	GPP
Screening – syphilis	All pregnant women	Recommend syphilis serology (refer to Chapter 2: Antenatal care)	At first visit Repeat at 28 weeks' gestation if in a high prevalence area, or if risk factors for STIs are present	II–IV
	Men who have sex with men Others at high risk of STI (Box 1)	Recommend syphilis serology	Annually or 3–6-monthly if high risk (Box 1)	IB

Blood-borne viruses

Recommendations: Blood-borne viruses				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation – hepatitis B virus (HBV)	Neonates	Recommend hepatitis B vaccination as per National Immunisation Program Schedule (NIPS)	At birth prior to leaving hospital, and at two, four and six months	I GPP
	Babies born to mothers who are hepatitis B virus surface antigen (HBsAg) positive	Recommend HBV immunoglobulin and vaccination at birth Complete primary course of vaccination, followed by testing for anti-HBs and HBsAg at age 3–12 months after completing vaccination	Hepatitis B immunoglobulin (HBIG) ideally within 12 hours and certainly within 48 hours of birth. HBV vaccine preferably within 24 hours and certainly within seven days of birth	I
	Adults who have not previously been vaccinated against hepatitis B and are non-immune	Recommend hepatitis B vaccination	Three doses – refer to *The Australian immunisation handbook*	IB
	Healthcare workers, sex workers, those at risk of severe or complicated disease, haemodialysis patients, sexual partners and household contacts of people recently identified as hepatitis B carriers.	Test people for sero-conversion	4–8 weeks after the last dose	GPP
	Individuals exposed to a person who is HBsAg positive or who is at high risk of HBV infection and is unable to be identified and tested rapidly	Offer HBV post-exposure prophylaxis (PEP) (HBIG and primary course of vaccination) for non-immune people	Initiate within 72 hours (or 14 days for sexual contact)	IIC
	People with hepatitis C virus (HCV) infection or chronic liver disease who are non-immune to hepatitis B	Recommend hepatitis B vaccination	Three doses – refer to *The Australian immunisation handbook*	IIC

Recommendations: Blood-borne viruses				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation – human papillomavirus (HPV)	Young people prior to first sexual activity Females who are sexually active and have not yet been vaccinated	Recommendations vary with age, sexual orientation and gender (consult *The Australian immunisation handbook*, chapter 4.6 for more information)	Children aged 9–18 years – refer to *The Australian immunisation handbook*	GPP
Immunisation – hepatitis A virus (HAV)	Men who have sex with men Injecting drug users People with chronic HBV or HCV infection	Recommend testing for hepatitis A immunity and offer hepatitis A vaccination if non-immune	Two doses – refer to *The Australian immunisation handbook*	GPP
Screening – HBV	Non-vaccinated or vaccine status unknown People at high risk for BBVs (Box 1) Healthcare workers	Offer HBV screening with: • HBsAg (a marker of acute or chronic infection) • hepatitis B surface antibody (HBsAb) (marker of immunity either from vaccine or infection) If non-immune, offer hepatitis B vaccination as above	Opportunistic and as part of an annual health assessment	GPP
	All pregnant women	Recommend HBV screening to allow timely HBV vaccination and HBIG for infant at birth (if necessary), and offer antiviral treatment for mother during pregnancy if HBsAg positive and HBV DNA >106 copies/ml (refer to Chapter 2: Antenatal care)	At first antenatal visit	I–III
Screening – HCV	People at high risk for contracting hepatitis C infection (Box 1)	Offer HCV serology testing	Opportunistic and as part of annual health assessment	IIIA
	Infants born to HCV-infected mothers	Offer HCV serology testing	Age 18 months (repeat if positive)	IIIA
Screening – human immunodeficiency virus (HIV)	Pregnant women	Offer HIV serology testing	At first antenatal visit	III–IV
	Men who have sex with men, and others at high risk of BBVs (Box 1)		As part of annual health assessment and 3–6-monthly	

Box 1. Risk factors for sexually transmitted infections and blood-borne viruses[6]

Risk factors for sexually transmitted infections (STIs)

- Age <30 years
- Age <39 years and sexual network relates to a remote community
- Multiple current partners
- High rate of partner change
- Engaging in group sex
- New partner
- Using condoms inconsistently
- Live in and have sex with people from areas with a high incidence of STIs
- Having sex while under the influence of drugs and alcohol
- Having sex in exchange for money or drugs
- Prison incarceration
- Victims of sexual assault
- Men who have sex with men where any of the above risk factors are also present

Risk factors for blood-borne viruses (BBVs)

- Prison incarceration – current or past
- Blood transfusion prior to 1990
- Tattoos or piercings not performed professionally
- Cultural practices
- Current or past injecting drug use
- Household member with HBV
- Sexual partner with HBV, HCV or HIV
- Infants of mothers infected with HBV, HCV or HIV
- Persons born in regions with a ≥2% prevalence of chronic HBV infection
- Candidates for immunosuppressive therapy

HBV, hepatitis B virus; HCV, hepatitis C virus; HIV, human immunodeficiency virus

Box 2. Strategies and questions for asking about sexually transmitted infection risk[6]

- Ask a health worker of the same gender to help
- Ask someone experienced in your clinic for ideas
- Use simple explanations before asking screening risk questions – for example:
  - *In our region there are a lot of infections you can get from sex. Some can stop you having kids. Most people don't know they have them, but there are good medicines to fix them. So, I'm going to ask you some questions now about sex, to see whether it's a good idea to check you for them with a simple pee and blood test.*
  - Questions: *Do you have a regular partner? Any other partners? Were your partner(s) male or female? Where was he/she from? How many partners have you had in the last six months? Did you use condoms? What kind of sex did you have?*

Chapter 15: Prevention and early detection of cancer

Prevention and early detection of cervical cancer

Recommendations: Prevention and early detection of cervical cancer				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	Adolescents (girls and boys) aged 9–18 years	Promote human papillomavirus (HPV) vaccination for the prevention of cervical cancer – ideally age 11–13 years, prior to onset of sexual activity (Can be accessed through National Immunisation Program [NIP] – school vaccination programs or through clinic/ community services for those aged 10–15 years, timing depending on state or territory) Vaccination up to age 18 years is recommended but should include discussion of potential benefit based on risk of previous exposure	As per National Immunisation Program Schedule (NIPS) (varies between states and territories)	IIB
	Women and men aged ≥19 years (not subsidised through the NIPS – check state/territory rules regarding catch-up programs)	Vaccination of all women and men against HPV is not recommended – conduct individual risk and benefit assessment	As per *The Australian immunisation handbook*	IIB
	Men who have sex with men (not subsidised through the NIPS – check state/territory rules regarding catch-up programs)	4vHPV vaccine recommended for men who have not been vaccinated, but should take into account likelihood of past exposure to HPV and risk of future exposure	As per *The Australian immunisation handbook*	IIB
Screening	Asymptomatic women aged 25–69 years who have ever been sexually active	Offer cervical screening test (HPV) from age 25 years (or two years after commencing sexual activity, whichever is later) regardless of whether HPV vaccination has been given Note: As of 1 December 2017, Pap smears are no longer recommended as a screening test for cervical cancer	Every five years	II, III–IIA
	Asymptomatic women aged 70–74 years who have ever been sexually active	Exit cervical screening test (HPV) for those who have been regularly screened	Exit test between ages 70 and 74 years	III–IIA

Recommendations: Prevention and early detection of cervical cancer				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Asymptomatic under-screened women – women who are 30 years of age and have never been screened or women aged ≥30 years who are at least two years late for cervical screening	Offer clinician-collected cervical screening test (HPV). If declined, recommend self-collected sample and explain slightly lower accuracy of testing. Inform clients on the recommendation for clinician-collected liquid-based cytology (LBC) sample or colposcopy if self-collected sample is oncogenic HPV positive	Promote cervical screening if overdue, and then routine five-yearly screening if negative	II, III–IIA
	Women with recent abnormal Pap smears, previously treated for high-grade squamous intraepithelial lesion (HSIL), or at high risk of cervical abnormalities (eg immune suppression, in-utero exposure to diethylstilbestrol [DES])	Screening recommendations are more complex and recommend consultation of guidelines for higher risk groups – refer to 'Resources'	Follow-up intervals vary by condition	II, III–IIC
Behavioural	All women	Assess smoking status and advise that smoking increases risks of cervical dysplasia and cervical cancer (refer to Chapter 1: Lifestyle, 'Smoking')	As part of annual health assessment	III–IIB
		Offer a sexual health review (refer to Chapter 14: Sexual health and blood-borne viruses)	As part of annual health assessment	GPP

Prevention and early detection of primary liver (hepatocellular) cancer

Recommendations: Prevention and early detection of primary liver (hepatocellular) cancer				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Immunisation	All people	Recommend hepatitis B vaccination as per the National Immunisation Program Schedule (NIPS) and also offer immunisation to any non-infected, non-immune individuals (refer to 'Recommendations' in Chapter 14: Sexual health and blood-borne viruses, and in Chapter 3: Child health)	Refer to Chapter 3: Child health, and Chapter 14: Sexual health and blood-borne viruses Shortly after birth, and at age two, four and six months Catch-up program for non-immune people (may be funded in some jurisdictions)	Refer to Chapter 14
Screening	All people	Screen for hepatitis B and C if indicated (refer to Chapter 14: Sexual health and blood-borne viruses, 'Recommendations')	Chapter 14: Sexual health and blood-borne viruses	Refer to Chapter 14
	People with chronic hepatitis B who are: Aboriginal and/or Torres Strait Islander >50 years, or have cirrhosis, or have a family history of hepatocellular carcinoma (HCC)	Recommend abdominal ultrasound, alpha-fetoprotein screening for HCC as part of specialist management plan	Six-monthly	III–IIC
	People with advanced liver disease (cirrhosis) not due to chronic hepatitis B	Recommend specialist review and consider ongoing screening for HCC with an abdominal ultrasound +/– alpha-fetoprotein	Protocols vary (consult clinical guidelines for more detail – refer to 'Resources')	III–IIC
Behavioural	Adolescents and adults	Assess quantity and frequency of alcohol consumption and advise about safer levels of alcohol consumption to reduce long-term risk of alcohol-related harm (refer to Chapter 1: Lifestyle, 'Alcohol'; and Chapter 4: The health of young people)	As part of annual health check	IIIB

Recommendations: Prevention and early detection of primary liver (hepatocellular) cancer				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	People with overweight/ obesity	Advise of the risks of liver disease and promote weight reduction strategies (refer to Chapter 1: Lifestyle, 'Overweight and obesity')	Opportunistic and as part of annual health check	GPP
	People at higher risk of hepatitis B or C infection	Provide counselling on harm minimisation and promote peer education strategies around safer sex and injecting drug use where relevant (refer to Chapter 14: Sexual health and blood-borne viruses)	Opportunistic and as part of annual health check	GPP
	People with chronic liver disease or chronic hepatitis infection	Provide counselling regarding risks of alcohol consumption	6–12-monthly, as required	GPP
Chemo-prophylaxis	People with chronic hepatitis B infection	Assess disease severity and suitability for anti-viral treatment Regular monitoring for disease progression is recommended	Refer to Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) management guidelines listed in 'Resources', and/or contact local services for advice	IB
	People with chronic hepatitis C infection	Assess disease severity and suitability for anti-viral treatment	Refer to ASHM management guidelines listed in 'Resources', and/or contact local specialist services for advice	IIB

Prevention and early detection of breast cancer

Recommendations: Prevention and early detection of breast cancer				
Prevention intervention type	**Who is at risk?***	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All women	Ask about family history of breast cancer to ascertain the individual risk of developing breast cancer (refer to Box 1 and to 'Resources' for online calculator and more detail)	As part of annual health assessment	GPP
		Discuss 'breast awareness' rather than promoting regular breast self-examination and ask women to promptly report persistent or unusual changes Note: Women with symptoms should be investigated rather than screened for breast cancer		II, III–IIC
	Women aged 40–49 years at or slightly above average risk*	Routine mammographic screening is not recommended If requested, provide information about mammographic screening to allow an informed decision based on individual risk and preferences		I, III–IIB
	Women aged 40–49 years at moderately increased risk*	Consider annual mammography starting at age 40 years if relative with breast cancer aged <50 years Consider referral to family cancer clinic or specialist cancer clinic, where available, for further assessment of risk of developing cancer and advice about genetic testing, screening and prevention	Every 1–2 years	GPP
	Women aged 50–74 years at or slightly above average risk*	Recommend mammography screening and provide information to allow an informed decision based on individual risk and preferences Consider use of a decision aid to facilitate these discussions (refer to 'Resources')	Every two years	I, III–IIB
	Women aged 50–69 years at moderately increased risk*	Recommend routine mammography screening. Consider annual mammography if relative with breast cancer aged <50 years Consider referral to family cancer clinic or specialist cancer clinic for further assessment of risk of developing cancer and advice about genetic testing, screening and prevention	Every 1–2 years	GPP
	Women at potentially high risk of breast cancer*	Advise referral to a family cancer clinic for risk assessment, possible genetic testing and development of a management plan	When calculated to be at potentially high risk	GPP
		Screening may involve magnetic resonance imaging (MRI) if aged <50 years, ultrasound, mammography and clinical breast examination. Specialist referral is required to claim a Medicare rebate for MRI	Consider annual screening depending on specialist advice	III–IIB

Recommendations: Prevention and early detection of breast cancer				
Prevention intervention type	**Who is at risk?***	**What should be done?**	**How often?**	**Level/ strength of evidence**
Behavioural	All women	Provide lifestyle risk factor counselling on the benefits of regular physical activity, maintaining healthy weight, alcohol intake in the low-risk range, avoiding smoking, restricting energy intake and dietary fat (refer to Chapter 1: Lifestyle)	As part of annual health check assessment (refer to Chapter 1: Lifestyle)	III–IIB
	Pregnant and breastfeeding women	Advise that breastfeeding has been shown to reduce the risk of breast cancer, and support women to breastfeed their infants (refer also to Chapter 3: Child health, 'Anaemia')	During and following pregnancy	III–IIB
	Women on combined hormone replacement therapy (HRT)	Advise about risks and benefits of combined HRT. In particular, advise about increased risk of breast cancer with continuous use for >5 years	When considering commencing HRT and every six months for women on combined HRT	I, III–IIA
Chemo-prophylaxis	Women at potentially high risk, and women aged >35 years at moderate risk	Consider specialist referral to discuss preventive treatment with tamoxifen or raloxifene Tamoxifen is approved for subsidy under the PBS for the primary prevention of breast cancer and is able to be prescribed by GPs as well as medical specialists	When calculated to be at potentially high risk, and as needed	I, III–IIB
*Refer to Box 1 for risk categories.				

Box 1. Breast cancer risk categories based on family history[56]

1. At or slightly above average risk

Covers more than 95% of the female population

As a group, risk of breast cancer up to age 75 is between 1 in 11 and 1 in 8. This risk is no more than 1.5 times the population average.

- No confirmed family history of breast cancer
- One 1° relative diagnosed with breast cancer at age 50 or older
- One 2° relative diagnosed with breast cancer at any age
- Two 2° relatives on the same side of the family diagnosed with breast cancer at age 50 or older
- Two 1° or 2° relatives diagnosed with breast cancer, at age 50 or older, but on different sides of the family (ie one on each side of the family)

2. Moderately increased risk

Covers less than 4% of the female population

As a group, risk of breast cancer up to age 75 is between 1 in 8 and 1 in 4. This risk is 1.5 to 3 times the population average.

- One 1° relative diagnosed with breast cancer before the age of 50 (without the additional features of the potentially high-risk group – refer to category 3)
- Two 1° relatives, on the same side of the family, diagnosed with breast cancer (without the additional features of the potentially high-risk group – refer to category 3)
- Two 2° relatives, on the same side of the family, diagnosed with breast cancer, at least one before the age of 50, (without the additional features of the potentially high-risk group – refer to category 3)

3. Potentially high risk

Covers less than 1% of the female population

As a group, risk of breast cancer up to age 75 is between 1 in 4 and 1 in 2. Risk may be more than 3 times the population average. Individual risk may be higher or lower if genetic test results are known.

- Women who are at potentially high risk of ovarian cancer
- Two 1° or 2° relatives on one side of the family diagnosed with breast or ovarian cancer plus one or more of the following on the same side of the family:
  - additional relative(s) with breast or ovarian cancer
  - breast cancer diagnosed before the age of 40
  - bilateral breast cancer
  - breast and ovarian cancer in the same woman
  - Jewish ancestry
  - breast cancer in a male relative.
- One 1° or 2° relative diagnosed with breast cancer at age 45 or younger plus another 1° or 2° relative on the same side of the family with sarcoma (bone/soft tissue) at age 45 or younger.
- Member of a family in which the presence of a high-risk breast cancer gene mutation has been established.

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Prevention and early detection of colorectal (bowel) cancer

Recommendations: Prevention and early detection of colorectal (bowel) cancer				
Preventive intervention type	**Who is at risk?***	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All adults	Ask about family history of colorectal cancer (Box 2) in order to estimate the individual risk of developing colorectal cancer	As part of an annual health assessment	GPP
	Category 1: People near average risk age 50–74 years (Box 2)	Promote client participation in the National Bowel Cancer Screening Program using the immunochemical faecal occult blood test (iFOBT) kit that is received through the mail for eligible ages iFOBT tests can be sourced through pathology centres or purchased through other organisations for those people who wish to do two-yearly bowel screening prior to full implementation of the screening program in 2020, or for those aged 45–49 years who have one family member with colorectal cancer Refer all abnormal results for appropriate diagnostic evaluation, usually with a local colonoscopy provider	iFOBT screening every two years in age range 50–74 years For people in this category with one relative with colorectal cancer, consider starting screening from age 45 years	IA PP
	People near average risk aged 75–85 years	If requested, discuss risks and benefits of screening using iFOBT, as any benefit is likely to be small due to higher risks of complications and lower benefits if previously screened. These discussions should take into account individual circumstances, such as overall health and comorbidities If positive iFOBT test, refer for appropriate diagnostic evaluation, usually with colonoscopy	Population screening not recommended. If asked, consider iFOBT every two years depending on individual circumstances and patient choice	IC
	Category 2: People at moderate risk (Box 2)	Recommend iFOBT then colonoscopy screening, starting from age 40 years (Computed tomography [CT] colonography may be considered if colonoscopy is contraindicated)	iFOBT screening every two years in age range 40–50 years Colonoscopy should be performed every five years from ages 50 to 74 years	III–IIC

Recommendations: Prevention and early detection of colorectal (bowel) cancer				
Preventive intervention type	**Who is at risk?***	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Category 3: Those at potentially high risk (Box 2)	Start iFOBT then colonoscopy screening from age 35 years (CT colonography may be offered if colonoscopy is contraindicated) Consider referral to a genetic centre for hereditary cancer syndromes, especially for those with three people with colorectal cancer on the same side of the family (Refer to 'Resources' for specific recommendations for screening for those with familial cancer syndromes – these groups require much earlier screening, some from adolescent years)	iFOBT screening every two years in age range 35–45 years Colonoscopy should be performed every five years in age range 45–74 years Consider referral at the time of determining the individual is at high risk, or later if not done initially	III–IIC
	Past history of adenoma	Undertake surveillance colonoscopy	Time frame for surveillance colonoscopy varies depending on risk (refer to 'Resources')	I, III–IIA
	History of inflammatory bowel disease (ulcerative colitis or Crohn's disease)	Undertake surveillance colonoscopy	Time frame for surveillance colonoscopy varies depending on risk (refer to 'Resources')	II, III–IIB
Behavioural	All people	Provide lifestyle risk factor counselling on the benefits of regular physical activity, maintaining healthy weight, alcohol intake in the low-risk range, restricting energy intake and dietary fat (refer to Chapter 1: Lifestyle) Also recommend the consumption of vegetables and sources of dietary fibre as these foods may be protective. Recommend consuming only moderate amounts of red meat, minimising the consumption of charred and processed meats	As part of an annual health assessment	III–IIC

Recommendations: Prevention and early detection of colorectal (bowel) cancer				
Preventive intervention type	**Who is at risk?***	**What should be done?**	**How often?**	**Level/ strength of evidence**
Chemo-prophylaxis	Following complete removal of adenoma at colonoscopy, or non-syndromic familial cancer patients	Assess bleeding risk and, if no contraindications, consider low-dose (100 mg) daily aspirin (in consultation with a specialist) Benefit may be increased when concurrent elevated cardiovascular disease (CVD) risk is present (refer to Chapter 11: Cardiovascular disease prevention)	At time of diagnosis	IIB
	For those at high risk due to familial cancer syndromes, in particular Lynch syndrome	Unless contraindicated, recommend daily aspirin (evidence that low-dose 100 mg/day is as effective as high dose)	At time of diagnosis, specialist consultation. Usually from age 25 years for those with Lynch syndrome carrier status	I, IIA
	For people aged 50–69 years at average risk of colorectal cancer	Discuss evidence that low-dose aspirin (100–300 mg per day), commencing at age 50–70 years for at least 2.5 years, reduces risk of colorectal cancer 10 years after commencement, and reduces risk of cardiovascular events in a shorter time frame (refer to Chapter 11: Cardiovascular disease prevention). Combined reduction of colorectal cancer and cardiovascular risks outweighs the risk from bleeding complications. Benefit for cancer prevention may be longer lasting with longer duration of use Consider 10-year life expectancy and CVD risk, and avoid in those with high risk of bleeding, renal impairment and uncontrolled hypertension Less evidence for colorectal cancer prevention for women aged >65 years, but women this age with CVD risk factors are likely to also benefit Refer to 'Resources' for further information	Consider discussing from age 50 years, taking into account individual preferences and risk–benefit profile, including access to services if complications Consider breath testing for *Helicobacter pylori* and treatment if positive before commencing aspirin	IB PP
	For people at moderate (Category 2) or high risk (Category 3) without a familial syndrome	Consider 100 mg aspirin daily in those without high risk of bleeding, renal impairment or uncontrolled hypertension Consider *H. pylori* testing, and treatment if positive, before commencing aspirin	Discuss risks and benefits as in above.	PP

*Refer to Box 2 for risk categories.

Box 2. Risk categories for colorectal cancer based on family history[94]

Category 1	Category 2	Category 3
Those at near average risk based on family history (95–98% of population; risk slightly below to up to two times average risk, 10% lifetime risk)	**Those at moderately increased risk based on family history (2–5% of population; risk three-fold to six-fold average risk, 15–30% lifetime risk)**	**Those at potentially high risk based on family history (<1% of population; risk seven-fold to ten-fold average risk, 30–40% lifetime risk)**
No first-degree or second-degree relative with colorectal cancer One first-degree relative with colorectal cancer diagnosed at age ≥55 years One first-degree and one second-degree relative with colorectal cancer diagnosed at age ≥55 years	One first-degree relative with colorectal cancer diagnosed at age <55 years Two first-degree relatives with colorectal cancer diagnosed at age ≥55 years One first-degree relative and at least two second-degree relatives with colorectal cancer diagnosed at age ≥55 years	At least three first-degree or second-degree relatives with colorectal cancer, with at least one diagnosed at age <55 years At least three first-degree relatives with colorectal cancer diagnosed at age ≥55 years

Early detection of prostate cancer

Recommendations: Early detection of prostate cancer				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Asymptomatic men at average risk	Population-based screening is not recommended. If patients request information, discussion needs to provide information of risks and benefits of prostate-specific antigen (PSA) testing to allow an informed decision Consider using a decision aid tool to facilitate these discussions (refer to 'Resources')	Population screening not recommended. For male patients aged 50–69 years who request information and screening, consider PSA testing every two years after obtaining informed consent	I, III–IID
	Asymptomatic men at potentially higher risk due to family history	Recommend individualised discussion with patient based on assessment of risks and benefits If requested, following these discussions, consider PSA testing from age 40 or 45 years, depending on risk of patient (refer to clinical practice guidelines in 'Resources' for risk estimates and recommendations)		GPP

Prevention of lung cancer

Recommendations: Prevention of lung cancer				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Asymptomatic adults, including people who smoke or who are ex-smokers	Population-based screening of either high-risk or low-risk people with either chest X-ray or low-dose computed tomography (CT) is not recommended at this time. Further evidence from screening studies in high-risk individuals may change this recommendation in the future		IID
Behavioural		Provide lifestyle risk factor counselling on the benefits of avoiding smoking and exposure to second-hand smoke (refer to Chapter 1: Lifestyle, 'Smoking')	At least during annual health assessment; refer to Chapter 1: Lifestyle, 'Smoking'	III–IIB

Chapter 16: Family abuse and violence

Recommendations: Family abuse and violence				
Prevention intervention type	**Target group**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	Victims of family abuse and violence (FAV)* Perpetrators of FAV	Establish a high level of awareness of the risks of FAV and actively case find† by taking a social history and asking sensitively about the potential for FAV	Opportunistic and as part of an annual health assessment	IIIA
	Pregnant women	Assess for the risk of FAV as part of a comprehensive antenatal assessment (refer to Chapter 2: Antenatal care)	At least once in every pregnancy	GPP
Behavioural	Victims of FAV, and women and children at risk of FAV (high-risk groups include women of young age, with history of substance abuse, marital difficulties and economic hardship)	Assess for social and emotional wellbeing (refer to Chapter 17: Mental health) Refer to local social support services (refer to 'Resources')	Opportunistic	GPP
	Pregnant women who are at high risk of, or are victims of, FAV	Promote regular health professional contact via nurse, Aboriginal health worker or practitioner-initiated home visits (refer to Chapter 2: Antenatal care)	Assess regularly in antenatal period and continue until child is aged two years (using specially trained staff and addressing safety issues)	GPP
	Perpetrators of FAV	Engage perpetrators in men's behaviour change programs (refer to 'Resources')	Opportunistic	GPP
	Victims and perpetrators of FAV where there is high household use of alcohol and other drugs	Assess for alcohol and other drug-related harm and work to limit use (refer to Chapter 1: Lifestyle, 'Alcohol'; and Chapter 4: The health of young people)	Opportunistic and as part of an annual health assessment	GPP
	Healthcare providers	Implement service-level systems and protocols to train and support staff in identifying and responding to FAV‡ Offer support services to staff experiencing stress from working with victims/ perpetrators of FAV	Opportunistic and annually as part of staff professional development activities	GPP

Recommendations: Family abuse and violence				
Prevention intervention type	**Target group**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Environmental	Children of high school age and adolescents	Encourage the implementation of school-based programs to promote development of healthy personal relationships	As part of school curriculum	GPP
	Community	Create referral pathways for crises support, women's support groups, emergency shelter and legal assistance by establishing partnerships with local community organisations Support community and government initiatives to reduce alcohol-related harm (eg price, access restrictions; refer to Chapter 1: Lifestyle, 'Alcohol')		GPP

*The term 'family abuse and violence' (FAV) encompasses domestic violence, intimate partner violence or abuse, the effects on children and perpetrator issues. Abuse and violence may involve physical, psychological, financial harms, social isolation, sexual abuse and violence, stalking, and use of digital technologies to inflict harm.

†Case finding refers to actively asking women about FAV if they show signs of abuse or are in high-risk groups, or when they present with symptoms such as depression, anxiety, headaches, drug and alcohol and many other issues that FAV is associated with.

‡Make FAV assessments a 'part of everyday care' through eHealth record prompts, posters in clinics, routine enquiry through social history, and provide brief intervention. Streamline referral pathways to community services, and provide onsite behavioural supports, including safety planning, mental health supports and follow-up.

Chapter 17: Mental health

Prevention of depression

Recommendations: Prevention of depression				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All people aged ≥15 years	Universal screening for depression is not recommended. Identify those people in whom the risk of depression is greater (Box 1)	As part of annual health assessment	IB GPP
	People in whom depression risk is greater (Box 1)	For those with a higher risk of depression, ask about symptoms of depression. Consider using one of the 'social and emotional wellbeing' or mental health assessment tools to guide the conversation. Options include the Kessler Psychological Distress Scale (K-5) (Box 2), the Here and Now Aboriginal Assessment (HANAA) tool, the Patient Health Questionnaire 9 (PHQ-9), PHQ-9 adapted (Box 3), and the PHQ-2 (refer to 'Resources')		GPP
Behavioural	All people aged ≥15 years	Behavioural interventions are not recommended for primary prevention of depression		ID
Chemo-prophylaxis	All people aged ≥15 years	Medications are not recommended for primary prevention of depression		GPP
Environmental	All people aged ≥15 years	Community-based psychosocial programs are not recommended for primary prevention of depression		IC

Box 1. People in whom depression risk is greater[24]

- Exposure to adverse psychosocial events, such as unemployment, divorce or poverty
- A previous history of depression or suicide attempts
- A history of physical or sexual abuse
- A history of substance misuse
- Presence of other chronic diseases, including chronic pain
- Multiple presentations to health services may also be an indicator of depression

Factors that make it more likely that depression will be missed include:

- Limited consultation time
- Presentations of mostly physical or atypical symptoms
- Health professional attitudes – for example, the belief that nothing can be done, or that depression is a normal response to stress
- Communication difficulties

Box 2. K-5 questionnaire to measure psychological distress[14]

Instructions
The following five questions ask about how you have been feeling in the last four weeks. For each question, mark the circle under the option that best describes the amount of time you felt that way.

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
1. In the last four weeks, about how often did you feel nervous?	1	2	3	4	5
2. In the last four weeks, about how often did you feel without hope?	1	2	3	4	5
3. In the last four weeks, about how often did you feel restless or jumpy?	1	2	3	4	5
4. In the last four weeks, about how often did you feel everything was an effort?	1	2	3	4	5
5. In the last four weeks, about how often did you feel so sad that nothing could cheer you up?	1	2	3	4	5

The total score is obtained by adding the score for each item. Minimum score = 5; maximum score = 25. Psychological distress can be classified as: low: 5–7; moderate: 8–11; high: 12–14; very high: 15–25.

Box 3. PHQ-9 questions, adapted for potential screening of Aboriginal men in central Australia for depression

Questions		None	A little bit	Most of the time	All of the time
In the last two weeks, how often have you been feeling the following:					
1	Have you been feeling slack, not wanted to do anything?	0	1	2	3
2	Have you been feeling unhappy, depressed, really no good, that your spirit was sad?	0	1	2	3
3	Have you found it hard to sleep at night, or had other problems with sleeping?	0	1	2	3
4	Have you felt tired or weak, that you have no energy?	0	1	2	3
5a[$]	Have you not felt like eating much even when there was food around?	0	1	2	3
5b[$]	Have you been eating too much food?	0	1	2	3
6	Have you been feeling bad about yourself, that you are useless, no good, that you have let your family down?	0	1	2	3
7	Have you felt like you can't think straight or clearly, it's hard to learn new things or concentrate?	0	1	2	3
8a[$]	Have you been talking slowly or moving around really slow?	0	1	2	3
8b[$]	Have you felt that you can't sit still; you keep moving around too much?	0	1	2	3
9	Have you been thinking about hurting yourself or killing yourself?	0	1	2	3
					Total score (0–27)

[$]Note: Scores for depressive symptoms – record only the highest in each of these sub-questions. Scoring (from the non-adapted PHQ-9): <5 = minimal; 5–9 = mild; 10–14 = moderate; 15–19 = moderately severe; 20–27 = severe.

Prevention of suicide

Recommendations: Prevention of suicide				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Screening	All people	Screening for suicide risk is not routinely recommended		IC
	People with any one of the following: • past history of intentional self-harm • history of mood disorders and other mental health problems • hazardous alcohol consumption or misuse of other drugs • close to someone who has recently died by suicide (postvention)	Consider asking about past and current suicidal ideation and intent as part of a comprehensive medical history (Box 4)	Opportunistic	GPP
Behavioural	All people	No specific behavioural interventions are recommended for the prevention of suicide		IC
	People with a history of self-harm or suicide attempts People who have close friends or family who have died by suicide	Provide support and referral to social and emotional wellbeing services (particularly access to Aboriginal mental health workers) and other locally available community support groups	Ongoing	IIIC
Chemo-prophylaxis	All people	Medication is not recommended for the prevention of suicide beyond a clinically indicated use for diagnosed conditions (eg major mental illness)		IB
Environmental	Communities	Advocate for community-based strategies to remove access to lethal methods of self-harm, both in the community and the household	Ongoing	IC
		Advocate for community-led health-promotion programs that holistically address the multifactorial nature of cultural, social and emotional wellbeing (eg sports events, caring for country programs, healthy lifestyle festivals)	Ongoing	GPP

Recommendations: Prevention of suicide				
Preventive intervention type	**Who is at risk?**	**What should be done?**	**How often?**	**Level/ strength of evidence**
Environmental	Health services	Provide education so that primary healthcare professionals can recognise and respond to psychosocial distress and depression	Ongoing	IC
		Take steps to enhance access to mental health and drug and alcohol services, and social and emotional wellbeing services, through integration with primary healthcare services	Ongoing	GPP

Box 4. Ways of asking about suicide

Have you ever felt like this before?

Have you ever felt so bad that you've hurt yourself or tried to kill yourself?

Many people when they feel this bad have thought about hurting themselves or even killing themselves. Has this happened to you?

Other people with similar problems sometimes lose hope. Has this happened to you?

Have you thought about how you would kill yourself?

Have you made any plans?

What stops you from doing that?

And as a follow-up question to many of the others: *Can you tell me more about that?*

Asking about suicide intent does not make it more likely

Resources

Chapter 1: Lifestyle

Smoking

- Australian Government, Quitnow – provides apps, factsheets, and details of media campaigns, including specific Aboriginal and Torres Strait Islander resources, www.quitnow.gov.au
- Australian Indigenous Alcohol and Other Drugs Knowledge Centre – detailed information on resources, publications, programs and projects for Aboriginal and Torres Strait Islander communities, www.aodknowledgecentre.net.au/aodkc/aodkc-tobacco
- Cancer Council Victoria, *Tobacco in Australia: Facts and issues* (2016) – a comprehensive review of the major issues in smoking and health in Australia, www.tobaccoinaustralia.org.au
- Commonwealth of Australia, *Medicines to help Aboriginal and Torres Strait Islander people stop smoking: A guide for health workers* (2011), email IndigenousTobacco@health.gov.au to obtain a copy
- Menzies School of Health Research, Tobacco Control Audit Tool – assists health services to undertake continuous quality improvement audits of tobacco control activities, www.menzies.edu.au/page/Resources/Tobacco_Control_Audit_Tool
- Quitline, phone 13 7848 or 13QUIT to arrange a free call back and follow-up phone calls
- QuitTxt, www.quitcoach.org.au/QuitTextInformation.aspx
- The Royal Australian College of General Practitioners, *Supporting smoking cessation: A guide for health professionals* (2011, updated 2014), www.racgp.org.au/your-practice/guidelines/smoking-cessation

Overweight and obesity

Weight, BMI and waist assessment

- Centers for Disease Control and Prevention, Growth charts, www.cdc.gov/growthcharts/cdc_charts.htm
- Department of Health, Helpful tips for measuring waist circumference, http://healthyweight.health.gov.au/wps/portal/Home/get-started/are-you-a-healthy-weight/how-do-you-measure-your-waist-circumference/!ut/p/a0/04_Sj9CPykssy0xPLMnMz0vMAfGjzOJ9LFydPbxMDD3djQMMDDzdnEP8Q8OcjNy9DPULsh0VAWZyjas
- World Health Organization, BMI charts for children:
  - Children aged 5–19 years, www.who.int/growthref/who2007_bmi_for_age/en/index.html
  - Children aged under <5 years, www.who.int/childgrowth/standards/bmi_for_age/en/index.html

Department of Health fact sheets

- Dietary guidelines for adults brochure, www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55g_adult_brochure.pdf
- Dietary guidelines for children brochure, www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55f_children_brochure.pdf
- Healthy drinks resource package, www.health.gov.au/internet/publications/publishing.nsf/Content/sugar-drinks-toc
- Poster, www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/indigenous_australian_dietary_guidelines_poster_HiRes.pdf

Resources for assisting with addressing social needs

- Health pathways (New Zealand):
  - www.healthpathwayscommunity.org/About.aspx (generic information)
  - www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/quest-integrated-care-new-zealand-timmins-ham-sept13.pdf (case study on integrated health and social care)
- RedLink, www.facs.nsw.gov.au/about_us/media_releases/media_release_archive/new-era-in-redfern-towers

Other fact sheets and resource kits

- Apunipima Cape York Health Council, Food tips for being a healthy weight, www.apunipima.org.au/images/Nutrition_Resources/Weight.PDF
- Heart Foundation, Obesity fact sheet, https://heartfoundation.org.au/images/uploads/publications/NAHU-Obesity.pdf
- Queensland Health, Overweight children, www.healthinfonet.ecu.edu.au/uploads/resources/17652_17652_2012.pdf
- NSW Health, Healthy kids resources for health professionals, https://pro.healthykids.nsw.gov.au

Free Get Healthy telephone coaching services for residents in New South Wales, Queensland and South Australia

- New South Wales, www.gethealthynsw.com.au
- Queensland, www.gethealthyqld.com.au
- South Australia, www.sahealth.sa.gov.au/wps/wcm/connect/Public+Content/SA+Health+Internet/Healthy+living/Get+healthy

Physical activity

Assessment of physical activity

- Department of Health, UK, General Practice Physical Activity Questionnaire, www.gov.uk/government/publications/general-practice-physical-activity-questionnaire-gppaq

Heart Foundation

- Physical activity fact sheet for Aboriginal and Torres Strait Islander communities, https://heartfoundation.org.au/images/uploads/publications/NAHU-Physical-activity.pdf
- How to be active as a family, information sheet, https://heartfoundation.org.au/images/uploads/publications/PA_Tips.pdf
- Sitting less:
  - Adults, www.heartfoundation.org.au/images/uploads/publications/PA-Sitting-Less-Adults.pdf
  - Children, www.heartfoundation.org.au/images/uploads/publications/PA-Sitting-Less-Child.pdf
- Increasing Aboriginal and Torres Strait Islander participation in cardiac rehabilitation, www.heartfoundation.org.au/images/uploads/main/Cardiac_rehab_INF-082-P_6__factsheet.pdf

Department of Health/Department of Health and Ageing

- Girls make your move, https://campaigns.health.gov.au/girlsmove/get-started
- Caring for kids staff resource, www.health.gov.au/internet/main/publishing.nsf/Content/CAE59058071BEF98CA257BF0001A8E48/$File/Staff%20Handbook.pdf
- Physical activity for families, www.health.gov.au/internet/main/publishing.nsf/Content/F01F92328EDADA5BCA257BF0001E720D/$File/brochure%20PA%20Guidelines_A5_Families.PDF

Other

- Australian Diabetes Council, Physical activity and diabetes, http://diabetesnsw.com.au/wp-content/uploads/2014/12/ATSI-12-Physical-activity-and-diabetes.pdf
- Better Health Channel, Aboriginal health – Barriers to physical activity, www.betterhealth.vic.gov.au/health/healthyliving/aboriginal-health-barriers-to-physical-activity

Alcohol

- Alcohol Use Disorders Identification Test (AUDIT) tool, http://at-ease.dva.gov.au/professionals/files/2012/12/Audit-AUDIT-Tool.pdf
- Brief intervention resources:
  - Brady M, Hunter E. *Talking about alcohol with Aboriginal and Torres Strait Islander patients*. 3rd edn. Canberra: Department of Health and Ageing, 2009 (a flipchart that includes tear-off prescription pads), www.healthinfonet.ecu.edu.au/key-resources/promotion-resources?lid=14793
  - Lee K, Freeburn B, Ella S, Miller W, Perry J, Conigrave K, editors. *Handbook for Aboriginal alcohol and drug work*, Sydney: University of Sydney, 2012, http://sydney.edu.au/medicine/addiction/indigenous/resources
- Center for Quality Assessment and Improvement in Mental Health, AUDIT-C tool, www.cqaimh.org/pdf/tool_auditc.pdf
- Department of Health, Australian Standard drink definition and calculator, www.health.gov.au/internet/alcohol/publishing.nsf/Content/standard
- Department of Health, Information for health professionals assessing alcohol consumption in pregnancy using AUDIT-C, www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/wwtk-audit-c
- Haber P, Lintzeris N, Proude E & Lopatko O. *Quick reference guide to the treatment of alcohol problems: Companion document to the guidelines for the treatment of alcohol problems*. Canberra: Department of Health and Ageing, 2009, http://alcohol.gov.au/internet/alcohol/publishing.nsf/Content/864FDC6AD475CB2CCA257693007CDE3A/$File/treatqui.pdf
- National Health and Medical Research Council, guidelines for safer alcohol use, www.nhmrc.gov.au/_files_nhmrc/publications/attachments/ds10-alcohol.pdf
- Queensland Health, Indigenous Risk Impact Screen (IRIS), www.health.qld.gov.au/atod/prevention/iris.asp

Gambling

- Gambling Help Online, online counselling, information and support service for problem gambling issues. Includes contact details for local face-to-face counselling and support, www.gamblinghelponline.org.au
- Monash University, Problem Gambling Research and Treatment Centre (PGRTC), 'Guideline for screening, assessment and treatment in problem gambling', www.med.monash.edu.au/sphc/pgrtc/guideline/index.html
- National telephone counselling services:
  - Gambling Helpline, 1800 858 858
- National Debt Helpline, 1800 007 007

Chapter 2: Antenatal care

- Australian Health Ministers' Advisory Council. Clinical practice guidelines: Antenatal care – Modules I and II, www.health.gov.au/internet/main/publishing.nsf/Content/phd-antenatal-care-index
- Australasian Diabetes in Pregnancy Society, 'ADIPS consensus guidelines for the testing and diagnosis of hyperglycaemia in pregnancy in Australia and New Zealand', www.adips.org/downloads/2014ADIPSGDMGuidelinesV18.11.2014_000.pdf

- Kimberley Aboriginal Medical Services Council, 'Diabetes in pregnancy', www.kamsc.org.au/wp-content/uploads/2015/04/mcp-Diabetes-in-Pregnancy.pdf
- King Edward Memorial Hospital, 'Clinical practice guideline: Vitamin D deficiency in pregnancy', www.kemh.health.wa.gov.au/development/manuals/O&G_guidelines/sectionb/1/b1.1.9.pdf
- beyondblue, Clinical practice guidelines on depression and related disorders in the perinatal period, www.beyondblue.org.au/health-professionals/clinical-practice-guidelines
- National Health and Medical Research Council (NHMRC), Australian guidelines to reduce health risks from drinking alcohol, www.nhmrc.gov.au/_files_nhmrc/publications/attachments/ds10-alcohol.pdf
- National Health and Medical Research Council (NHMRC), Iodine, Public statement: 'Iodine supplementation for pregnant and breastfeeding women', www.nhmrc.gov.au/_files_nhmrc/publications/attachments/new45_statement.pdf

Chapter 3: Child health

Immunisation

- Australian Techinical Advisory Group on Immunisation (ATAGI), *The Australian immunisation handbook*, 10th edition (2017 update), www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home
- SA Health, Immunisation calculator ('catch-up' schedule), https://immunisationcalculator.sahealth.sa.gov.au

Anaemia

- Royal Children's Hospital Melbourne, 'Iron preparations and therapy', www.rch.org.au/genmed/clinical_resources/Oral_Iron_Preparations
- World Health Organization, *Iron deficiency anaemia: Assessment, prevention, and control: A guide for programme managers*, www.who.int/nutrition/publications/en/ida_assessment_prevention_control.pdf

Growth failure

Growth charts for growth monitoring from the Royal Children's Hospital Melbourne:

- Growth charts, www.rch.org.au/childgrowth/Growth_Charts
- Down syndrome growth charts, www.rch.org.au/links/Growth_Charts_for_Down_Syndrome

Childhood kidney disease

- Caring for Australasians with Renal Impairment (CARI), Chronic kidney disease guidelines, www.cari.org.au/CKD/ckd_guidelines.html
- Central Australian Rural Practitioners Association (CARPA), Remote primary health care manuals, www.remotephcmanuals.com.au/home.html
- Centre for Disease Control, Department of Health (NT), *Healthy Skin Program: Guidelines for community control of scabies, skin sores and crusted scabies in the Northern Territory*, http://digitallibrary.health.nt.gov.au/prodjspui/bitstream/10137/698/1/Healthy%20Skin%20Program%202015.pdf
- Flynn JT, Kaelber DC, Baker-Smith CM, et al. Clinical practice guideline for screening and management of high blood pressure in children and adolescents. Pediatrics 2017;140(3), http://pediatrics.aappublications.org/content/early/2017/08/21/peds.2017-1904

Fetal alcohol spectrum disorder

- Department of Health, 'Information for health professionals on assessing alcohol consumption in pregnancy using AUDIT-C', www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/wwtk-audit-c
- Mental Health Commission, Government of Western Australia, 'An introduction to fetal alcohol spectrum disorders (FASD)' (updated e-learning module), http://aodelearning.mhc.wa.gov.au/course/index.php?categoryid=6
- Telethon Kids Institute, Australian and New Zealand FASD Clinical Network, https://alcoholpregnancy.telethonkids.org.au/resources/health-professionals/australian-fasd-clinical-network
- Telethon Kids Institute and Department of Health, *Australian guide to the diagnosis of fetal alcohol spectrum disorder (FASD)*, https://alcoholpregnancy.telethonkids.org.au/alcohol-pregnancy-and-breastfeeding/diagnosing-fasd/australian-guide-to-the-diagnosis-of-fasd/

Specific resources to conduct brief interventions

- Department of Health, *Guidelines for the treatment of alcohol problems* (includes FLAGS brief intervention model), www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/guidelines-treat-alc-09
- Department of Health, Women Want to Know, www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/wwtk-resources
- Drug and Alcohol Office WA, 'Strong Spirit Strong Future: Promoting healthy women and pregnancies', A culturally secure training and education resource for health professionals (WA only); for training, email AOD.training@mhc.wa.gov.au
- National Drug and Alcohol Research Centre, University of NSW, *Supporting pregnant women who use alcohol or other drugs: A guide for primary health care professionals*, https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/Supporting%20Pregnant%20Women%20who%20use%20Alcohol%20or%20Other%20Drugs%20Resource.pdf
- NSW Health, 'Information for health professionals: Advising Aboriginal women about alcohol and pregnancy', https://yourroom.health.nsw.gov.au/publicationdocuments/1.FASD-guide-for-health-workers.pdf
- NT Government, Remote Alcohol and Other Drugs Workforce Program, 'Yarning about alcohol and pregnancy: Staff advice card', www.remoteaod.com.au/sites/default/files/images/Yarning%20about%20Alcohol%20and%20Pregnancy%20Advice%20Card%202015.pdf

Validated screening tools for child development and social and emotional wellbeing

- Department of Health, National framework for universal child and family health services, 'Developmental surveillance and health monitoring',_www.health.gov.au/internet/publications/publishing.nsf/Content/nat-fram-ucfhs-html~framework~core-elements~development_

Specific tools

- Ages and Stages Questionnaires (ASQ), http://agesandstages.com
- Royal Children's Hospital Melbourne, Centre for Community Health, 'Parents' Evaluation of Developmental Status (PEDS)', www.rch.org.au/ccch/resources_and_publications/Monitoring_Child_Development

Assessing child developmental milestones (0–5 years)

- Centers for Disease Control and Prevention, CDC's milestone tracker (application for IOS to assess developmental milestones in children aged two months to five years), https://itunes.apple.com/us/app/cdcs-milestone-tracker/id1232718688?mt=8
- Doctor Guidelines, 'Child development assessment – Developmental milestones and Denver Developmental Screening Test', http://doctorguidelines.com/2016/08/03/child-development-assessment-developmental-milestones-and-denver-developmental-screening-test

- Queensland Health, 'The "Red Flag" early intervention referral guide for children 0–5 years' (developed by Queensland Health, adapted by the Central Queensland Hospital and Health Service), www.health.qld.gov.au/__data/assets/pdf_file/0015/160701/red-flag-a3-poster-banana.pdf

Other resources for information about FASD

- FASD Hub Australia, https://fasdhub.org.au
- National Organisation for Fetal Alcohol Spectrum Disorders (NOFASD Australia), http://www.nofasd.org.au

Preventing child maltreatment

- Australian Indigenous HealthInfoNet, Cultural competence training – an extensive list of resources, www.healthinfonet.ecu.edu.au/cultural-ways-home/cultural-ways-workforce/training
- Australian Institute of Family Studies – Australian Government site with extensive resources, including population data, research and reviews relating to children and families, https://aifs.gov.au
- Australian Institute of Family Studies, 'Mandatory reporting of child abuse and neglect', https://aifs.gov.au/cfca/publications/mandatory-reporting-child-abuse-and-neglect
- Australia's National Research Organisation for Women's Safety (ANROWS), *Implementing trauma-informed systems of care in health settings: The WITH study. State of knowledge paper*, http://media.aomx.com/anrows.org.au/s3fs-public/WITH%20Landscapes%20final%20150925.PDF
- Center on the Developing Child, Harvard University – extensive resources regarding the science of early childhood development and its application at individual and societal levels, http://developingchild.harvard.edu

Community directories

- Explore a community directory for social support services in your jurisdiction – an example of a search engine in Townsville, https://webapps.townsville.qld.gov.au/CommunityDirectory/Category/Index/Community%20Directory

Parenting programs

Specific program information is available at the following sites, which may also be searched for local availability:

- Triple P program, www.triplep-parenting.net.au
- Tuning in to Kids, www.tuningintokids.org.au
- Circle of Security International, www.circleofsecurityinternational.com

Chapter 4: The health of young people

- Australian National University, SA Health, 'Y health – Staying deadly' – with sample template for an Aboriginal and Torres Strait Islander Youth Health Check, http://files.aphcri.anu.edu.au/reports/Final%20report_Y%20Health%20Staying%20Deadly.pdf
- Center for Adolescent Substance Abuse Research, CRAFFT screening tool (for clinicians), www.ceasar-boston.org/CRAFFT/index.php
- Center for Adolescent Substance Abuse Research, Self-administered CRAFFT, www.ceasar-boston.org/CRAFFT/selfCRAFFT.php
- Indigenous Risk Impact Screen (IRIS) tool and brief intervention – tool made available only after participation in a training workshop; more information, http://insightqld.org/indigenous
- Substances and Choices Scale Manual, http://optforwellbeing.org/sites/default/files/sacs/SACSusermanual2010.pdf
- Substances and Choices Scale Questionnaires, http://optforwellbeing.org/professionals/publications-and-resources/substances-and-choices-scale-sacs

Chapter 5: The health of older people

Osteoporosis

- Garvan Institute, Garvan Fracture Risk Calculator, www.garvan.org.au/promotions/bone-fracture-risk/calculator/index.php
- Osteoporosis Australia, guidelines for exercise in preventing and treating osteoporosis, www.osteoporosis.org.au/exercise
- Osteoporosis Australia, sun exposure recommendations, www.osteoporosis.org.au/vitamin-d
- The Royal Australian College of General Practitioners (RACGP), *Osteoporosis prevention, diagnosis and management in postmenopausal women and men over 50 years of age*, 2nd edn, www.racgp.org.au/your-practice/guidelines/musculoskeletal/osteoporosis
- The Royal Australian College of General Practitioners (RACGP), 'Osteoporosis risk assessment, diagnosis and management', www.racgp.org.au/download/Documents/Guidelines/Musculoskeletal/osteoporosis-algorithm.pdf
- SunSmart, SunSmart app, advice for sun protection according to location and weather forecast information, www.sunsmart.com.au/tools/interactive-tools/free-sunsmart-app
- University of Sheffield, FRAX (Fracture Risk Assessment Tool), www.shef.ac.uk/FRAX/tool.aspx?country=31

Dementia

- Alzheimer's Australia, Dementia Collaborative Research Centres, *Dementia risk reduction: A Practical guide for general practitioners*, www.dementia.unsw.edu.au/images/dcrc/pdf/drrgps.pdf
- Australian National University Alzheimer's Disease Risk Index (AUS-ADRI), self-assessed report on Alzheimer's disease risk factor exposure for individuals who wish to know their risk profile and areas where they can reduce their risk, https://anuadri.anu.edu.au
- General Practitioner Assessment of Cognition (GPCOG), online screening tool for cognitive impairment, www.gpcog.com.au
- Guideline Adaptation Committee, *Clinical practice guidelines and principles of care for people with dementia: Recommendations*, http://sydney.edu.au/medicine/cdpc/documents/resources/LAVER_Dementia_Guidleines_recommendations_PRVW5.pdf
- Independent Hospital Pricing Authority (IHPA), Standardised Mini-Mental State Examination (MMSE), www.ihpa.gov.au/sites/g/files/net636/f/publications/smmse-tool-v2.pdf
- Western Australia Centre for Health and Ageing (WATCHA), Kimberley Indigenous Cognitive Assessment (KICA):
  - A cognitive assessment tool for Aboriginal and Torres Strait Islander people who may have had little formal schooling. The standard KICA is used for people from remote parts of Australia. A modified version (mKICA) can be used for people from urban or regional areas. Interpreters may be required if the person is not fluent in English, www.perkins.org.au/wacha/our-research/indigenous/kica
  - The full KICA tool includes history and a carer report, as well as the cognitive screen (KICA-Cog) and the pictures required to perform the assessment. There is also an instruction booklet and videos of the assessment being performed.

Chapter 6: Eye health

Trachoma and trichiasis

- Australian Indigenous HealthInfoNet, Eye health resources, www.healthinfonet.ecu.edu.au/other-health-conditions/eye/resources
- Australian Institute of Health and Welfare, *Indigenous eye health measures 2016*, www.aihw.gov.au/reports/indigenous-australians/indigenous-eye-health-measures-2016
- Centre for Eye Research Australia (CERA), Melbourne School of Population and Global Health, University of Melbourne, *National Indigenous Eye Health Survey: Minum barreng (Tracking eyes) – Full report*, http://mspgh.unimelb.edu.au/__data/assets/pdf_file/0004/1984144/niehs_full_report.pdf
- Communicable Diseases Network Australia (CDNA), *CDNA Guidelines for the public health management of trachoma in Australia*, www.health.gov.au/internet/main/publishing.nsf/Content/D02F0C1C2AB90509CA257C66001C089C/$File/Trachoma-SoNG.pdf
- Department of Health, MBS Online, Medicare Benefits Schedule – Item 715: Aboriginal and Torres Strait Islander peoples health assessment, www9.health.gov.au/mbs/search.cfm?q=715&Submit=&sopt=I
- Department of Health, MBS Online, Medicare Benefits Schedule – Item 12325: Aboriginal and Torres Strait Islander peoples assessment of visual acuity and bilateral retinal photography with a non-mydriatic retinal camera, www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=12325&qt=item&criteria=diabetic%20retinopathy#assocNotes
- Housing for Health, *Housing for Health: The guide*, Information about the links between health and the living environment, www.housingforhealth.com
- Indigenous Eye Health, Melbourne School of Population and Global Health, University of Melbourne, http://mspgh.unimelb.edu.au/centres-institutes/centre-for-health-equity/research-group/indigenous-eye-health#about
- Indigenous Eye Health, Melbourne School of Population and Global Health, University of Melbourne, *Check today, see tomorrow* resource kit, http://mspgh.unimelb.edu.au/centres-institutes/centre-for-health-equity/research-group/indigenous-eye-health/diabetes-eye-care/overview#resource-kit
- Indigenous Eye Health, Melbourne School of Population and Global Health, University of Melbourne, *Diabetes eye health: A guide for health professionals*, http://mspgh.unimelb.edu.au/__data/assets/pdf_file/0005/2209676/Diabetes-eye-health.pdf
- Lions Outback Vision, *Diabetic retinopathy screening manual,* www.outbackvision.com.au/wp-content/uploads/2017/03/161212-lov.man_.002-diabetic-retinopathy-screening-manual.pdf
- National Health and Medical Research Council (NHMRC), *Guidelines for the management of diabetic retinopathy*, www.nhmrc.gov.au/_files_nhmrc/file/publications/synopses/di15.pdf
- Vision 2020, Our work, www.vision2020australia.org.au/our-work
- World Health Organization (WHO), Trachoma grading card, showing simplified trachoma grading system; includes high-quality clinical pictures of trachoma and trichiasis, www.who.int/blindness/publications/trachoma_english.jpg
- World Health Organization (WHO), Trachoma, Information on the global initiative to eradicate trachoma, www.who.int/trachoma/en

Chapter 7: Hearing loss

- Centers for Disease Control and Prevention, 'Cytomegalovirus (CMV) and congenital CMV infection', www.cdc.gov/cmv/overview.html
- Centers for Disease Control and Prevention, non-specific recommendations about handwashing, www.cdc.gov/handwashing/index.html
- *Recommendations for clinical care guidelines on the management of otitis media in Aboriginal and Torres Strait Islander populations*, www.health.gov.au/internet/main/publishing.nsf/Content/B8A6602C7714B46FCA257EC300837185/$File/Recommendation-for-clinical-guidelines-Otitis-Media.pdf
- Deafness Forum of Australia, 'Fact sheet: Noise destroys your hearing', www.hearingawarenessweek.org.au/images/Noise%20Destroys%20FACT%20SHEET.pdf
- Therapeutic Guidelines, eTG complete, Antibiotic, Version 14, 2010, https://tgldcdp.tg.org.au/topicTeaser?guidelinePage=Antibiotic&etgAccess=true

Chapter 8: Oral and dental health

General oral health promotion information:

- Australian Indigenous HealthInfoNet, health promotion resources, www.healthinfonet.ecu.edu.au/other-health-conditions/oral/resources/health-promotion
- Australian Dental Association Queensland, oral health resources, www.adaq.com.au/adaq/oral-health
- Dental Health Services Victoria, manuals and toolkits, www.dhsv.org.au/oral-health-resources/guides-and-resources
- NSW Government, resources for Aboriginal and Torres Strait Islander peoples, www.health.nsw.gov.au/oralhealth/Pages/resources-aboriginal-and-torres-strait-islander-people.aspx
- University of Adelaide, key oral health promotion resources, www.adelaide.edu.au/arcpoh/oral-health-promotion/resources
- Smiles for life: A national oral health curriculum, learning modules on oral health for health professionals, www.smilesforlifeoralhealth.com
- University of Adelaide, Dental Practice Education Research Unit, information pamphlets for oral health, www.arcpoh.adelaide.edu.au/dperu/special

Chapter 9: Respiratory health

Asthma

Clinical practice guidelines: Australia

- National Asthma Council Australia, *Australian asthma handbook version 1.2*, www.asthmahandbook.org.au – Section on 'Managing asthma in Aboriginal and Torres Strait Islander people', www.asthmahandbook.org.au/populations/atsi-peoples/management

Clinical practice guidelines: International

- British Thoracic Society, Scottish Intercollegiate Guidelines Network, *British guideline on the management of asthma: A national clinical guideline*, www.brit-thoracic.org.uk/document-library/clinical-information/asthma/btssign-asthma-guideline-2016
- Global Initiative for Asthma (GINA), www.ginasthma.org

Education flipcharts

- Menzies School of Health Research, Asthma in adults, www.menzies.edu.au/page/Resources/Asthma_in_Adults
- Menzies School of Health Research, Asthma (short wind in children), www.menzies.edu.au/page/Resources/Asthma_short_wind_in_children

Chronic obstructive pulmonary disease

- Thoracic Society of Australia and New Zealand, *The COPD-X plan: Australian and New Zealand guidelines for the management of chronic obstructive pulmonary disease (includes Concise guide for primary care and Stepwise management of stable COPD),* www.copdx.org.au
- Lung Foundation Australia, Indigenous lung health checklist and General lung health checklist COPD screening questionnaires, http://lungfoundation.com.au/lung-health-checklist
- Lung Foundation Australia, Primary care respiratory toolkit (includes spirometry calculator and lung age estimator), http://lungfoundation.com.au/health-professionals/clinical-resources/copd/primary-care-respiratory-toolkit
- Global Initiative for Chronic Obstructive Lung Disease (GOLD), http://goldcopd.org

Bronchiectasis and chronic suppurative lung disease

- Thoracic Society of Australia and New Zealand, *Chronic suppurative lung disease and bronchiectasis in children and adults in Australia and New Zealand: Clinical practice guideline,* www.thoracic.org.au/journal-publishing/command/download_file/id/36/filename/TSANZ-ChronicSuppurativeLungDisease-Guidelines-2016-web.pdf
- Menzies School of Health Research, Chronic suppurative lung disease/bronchiectasis (chronic lung sickness) flipchart, www.menzies.edu.au/icms_docs/158417_Chronic_Suppurative_Lung_DiseaseBronchiectasis_Chronic_Lung_Sickness.pdf
- Menzies School of Health Research, Chronic lung sickness (bronchiectasis) flipchart, www.menzies.edu.au/page/Resources/Chronic_lung_sickness_Bronchiectasis

Chapter 10: Acute rheumatic fever and rheumatic heart disease

- Department of Health, Northern Territory, *Healthy skin program: Guidelines for community control of scabies, skin sores, tinea and crusted scabies in the Northern Territory*, http://digitallibrary.health.nt.gov.au/prodjspui/bitstream/10137/698/1/Healthy%20Skin%20Program%202015.pdf
- RHD Australia, *The Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (2nd edition)*, plus phone apps and other resources, www.rhdaustralia.org.au/arf-rhd-guideline
- RHD Australia, handy tips on administration of benzathine penicillin prophylaxis, www.rhdaustralia.org.au/administering-bicllin

Chapter 11: Cardiovascular disease prevention

Absolute risk calculation

- National Vascular Disease Prevention Alliance (NVDPA), Australian absolute cardiovascular disease risk calculator (refer to Appendix A: Australian cardiovascular risk charts, in this National Guide) and the Framingham Risk Equation (FRE) calculator modified to align with Australian guidelines, www.cvdcheck.org.au

- Although the FRE is validated for people aged 30–74 years, these charts start from age 35 years. Some calculators embedded in clinical software and the CARPA charts (refer below) can be used to assess risk in 30–34 year olds. For people aged 75 years and older without previous CVD, it is recommended to input 74 years of age to obtain a minimum risk score.

  Remote Primary Health Care Manuals (RPHCM), STM 4. Chronic diseases, 'Assessing and reducing cardiovascular risk, https://docs.remotephcmanuals.com.au/review/g/manuals2017-manuals/d/20315.html?page=2

- The Indigenous-specific charts are identical to the NVDPA resources except for two features:
  - the corresponding colour has had a 5% absolute risk loading added (ie the lowest risk colour has been changed from <5% to <=9%)
  - the lower age limit has been changed from 35 years to 20 years. Although the FRE is validated for people aged 30–35 years, there are no empirical data assessing its use for those aged 20–29 years.

Blood pressure and lipid management guidelines

- National Heart Foundation, *Guideline for the diagnosis and management of hypertension in adults: 2016*, www.heartfoundation.org.au/images/uploads/publications/PRO-167_Hypertension-guideline-2016_WEB.pdf
- National Vascular Disease Prevention Alliance (NVDPA), *Absolute cardiovascular disease risk management: Quick reference guide for health professionals*, www.cvdcheck.org.au/pdf/Absolute_CVD_Risk-Quick_Reference_Guide.pdf

Blood pressure and lipid resources for patients

- National Heart Foundation, cholesterol facts for Aboriginal communities, https://heartfoundation.org.au/images/uploads/publications/NAHU-Cholesterol.pdf
- NPS MedicineWise, a range of blood pressure management resources, www.nps.org.au/conditions/heart-blood-and-blood-vessel-conditions/blood-pressure/for-health-professionals/for-your-patients/indigenous-resources

Oral anticoagulant management calculators and recommendations

- Cardiovascular Expert Group, Therapeutic guidelines: Cardiovascular. Version 6. Melbourne: Therapeutic Guidelines Limited, 2012.
- CHA_2DS_2VASc/HAS-BLED/EHRA atrial fibrillation risk score calculator, www.chadsvasc.org
- NPS MedicineWise, 'Warfarin and how to take it', decision aid on starting oral anticoagulants, www.nps.org.au/medical-info/consumer-info/warfarin

Chapter 13: Chronic kidney disease prevention and management

- Kidney Health Australia, *Chronic kidney disease (CKD) management in general practice: Guidance and clinical tips to help identify, manage and refer patients with CKD in your practice*, 3rd edition, http://kidney.org.au/cms_uploads/docs/ckd-management-in-gp-handbook-3rd-edition.pdf
- Kidney Health Australia, Caring for Australasians with Renal Impairment (CARI), guidelines, www.cari.org.au

Chapter 14: Sexual health and blood-borne viruses

Sexually transmitted infections and blood-borne viruses resources

- Australasian Society for HIV Medicine (ASHM), *HIV, viral hepatitis and STIs: A guide for primary care*, https://ashm.blob.core.windows.net/ashmpublic/HIV_Viral_Hepatitis_and_STIs_a_Guide_for_Clinical_Care_(4th_Edition).pdf

- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), *HIV pre-exposure prophylaxis: Clinical guidelines*, http://viruseradication.com/journal-details/Australasian_Society_for_HIV,_Viral_Hepatitis_and_Sexual_Health_Medicine_HIV_pre-exposure_prophylaxis:_clinical_guidelines#main
- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), *Antiretroviral guidelines*, http://arv.ashm.org.au/arv-guidelines/prep-resources-for-clinicians
- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), *Australian national guidelines: Post-exposure prophylaxis after non-occupational and occupational exposure to HIV*, 2nd edition, www.pep.guidelines.org.au
- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), *Australian contact tracing guidelines*, http://contacttracing.ashm.org.au
- Australasian Sexual Health Alliance, *Australian STI management guidelines for use in primary care*, www.sti.guidelines.org.au/populations-and-situations/aboriginal-and-torres-strait-islander
- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), *B positive: All you wanted to know about hepatitis B: A guide for primary care providers*, www.hepatitisb.org.au
- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), search for BBV and STI training online or at a specific location, www.ashm.org.au/training
- Hepatitis C Virus Infection Consensus Statement Working Group, *Australian recommendations for the management of hepatitis C virus infection: A consensus statement* (August 2017), www.hepcguidelines.org.au
- The Kirby Institute, *Bloodborne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander people: Annual surveillance report 2016*, https://kirby.unsw.edu.au/sites/default/files/kirby/report/ATSIP_2016-Aboriginal-Surveillance-Report_UPD170116.pdf

STIs – State-specific resources

- Queensland: Sexual health clinical management guidelines, www.health.qld.gov.au/clinical-practice/guidelines-procedures/sex-health/guidelines
- Western Australia: Silver book – *Guidelines for managing sexually transmitted infections and blood-borne viruses*, http://silverbook.health.wa.gov.au/Default.asp?PublicationID=1&SectionID=74
- Northern Territory: *Central Australian Rural Practitioners standard treatment manual 2015*, https://docs.remotephcmanuals.com.au/review/g/manuals2017-manuals/d/20317.html?page=1 updated

STIs – International resources

- British Association for Sexual Health and HIV (BASHH), *Sexually transmitted infections: UK national screening and testing guidelines*, www.bashh.org/documents/59/59.pdf
- Scottish Intercollegiate Guidelines Network (SIGN), *Management of genital Chlamydia trachomatis infection: A national clinical guideline*, www.sign.ac.uk/assets/sign109.pdf

Drug use resources

- NSW Government Department of Health, *Drug and alcohol psychosocial interventions professional practice guidelines*, www1.health.nsw.gov.au/PDS/pages/doc.aspx?dn=GL2008_009
- Drug and Alcohol Office, *A counsellor's guide to working with alcohol and drug users*, 2nd edition, www.researchgate.net/profile/Ali_Dale/publication/265422520_A_Counsellor%27s_Guide_to_Working_with_Alcohol_and_Drug_Users_2_nd_edition/links/54d556b00cf2970e4e64bd91/A-Counsellors-Guide-to-Working-with-Alcohol-and-Drug-Users-2-nd-edition.pdf
- National Institute for Health and Care Excellence (NICE), *Drug misuse in over 16s: Psychosocial interventions*, Clinical Guideline 51, www.nice.org.uk/guidance/CG51/NICEGuidance

- World Health Organization, *Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence*, http://whqlibdoc.who.int/publications/2009/9789241547543_eng.pdf

Chapter 15: Prevention and early detection of cancer

Prevention and early detection of cervical cancer

- Cancer Council Australia, *National Cervical Screening Program: Guidelines for the management of screen-detected abnormalities, screening in specific populations and investigation of abnormal vaginal bleeding*, http://wiki.cancer.org.au/australia/Guidelines:Cervical_cancer/Screening
- Department of Health, National Cervical Screening Program – clinical guidelines and resources for cervical screening program from 1 December 2017, www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/cervical-screening-1
- The Australian Technical Advisory Group on Immunisation (ATAGI), *The Australian immunisation handbook*, Chapter 4.6: Human papillomavirus, www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-6

Prevention and early detection of primary liver (hepatocellular) cancer

- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), guidelines on hepatitis B diagnosis and treatment for primary care, including quick reference guides and information about training, www.ashm.org.au/HBV
- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), guidelines on hepatitis C diagnosis and treatment for primary care, including quick reference guides and information about training, www.ashm.org.au/HCV
- The Australian Technical Advisory Group on Immunisation (ATAGI), *The Australian immunisation handbook*, Chapter 4.5: Hepatitis B, www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-5

Prevention and early detection of breast cancer

- Cancer Australia, Familial Risk Assessment – Breast and Ovarian Cancer (FRA-BOC), online calculator, with additional family risk information, https://canceraustralia.gov.au/clinical-best-practice/gynaecological-cancers/familial-risk-assessment-fra-boc
- Cancer Australia, 'Advice about familial aspects of breast cancer and epithelial ovarian cancer', https://canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/advice-about-familial-aspects-breast-cancer-and-epithelial-ovarian-cancer
- Cancer Council Australia, Family cancer clinics in Australia – counselling and information for families with a history of cancer on risk of inheriting cancer, screening recommendations, cancer risk reduction strategies, and genetic testing where appropriate, www.cancer.org.au/about-cancer/causes-of-cancer/family-cancers/family-cancer-clinics-in-australia.html
- BreastScreen Australia, BreastScreen and you: Information about mammographic screening – screening decision tools to help discussion when considering risk and benefit from breast screening, www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/breastscreen-and-you

Prevention and early detection of colorectal (bowel) cancer

- Cancer Council Australia, *Clinical practice guidelines for the prevention, early detection and management of colorectal* cancer, https://wiki.cancer.org.au/australia/Guidelines:Colorectal_cancer

- Cancer Council Australia, *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer*, information on familial risk of colorectal cancer:
  - 'Introduction: risk and screening based on family history of colorectal cancer', https://wiki.cancer.org.au/australia/Guidelines:Colorectal_cancer/Risk_and_screening_based_on_family_history
  - 'Colorectal cancer risk according to family history', https://wiki.cancer.org.au/australia/Clinical_question:Family_history_and_CRC_risk
  - 'Screening strategies for people with a family history of colorectal cancer', https://wiki.cancer.org.au/australia/Guidelines:Colorectal_cancer/Screening_based_on_family_history
- Cancer Council Australia, *Clinical practice guidelines for surveillance colonoscopy* – surveillance following removal of adenomas, following surgery for colorectal cancer or for those with inflammatory bowel disease, http://wiki.cancer.org.au/australia/Guidelines:Colorectal_cancer/Colonoscopy_surveillance

Early detection of prostate cancer

- National Health and Medical Research Council (NHMRC), 'PSA testing for prostate cancer in asymptomatic men: Information for health practitioners', www.nhmrc.gov.au/_files_nhmrc/publications/attachments/men4d_psa_testing_asymptomatic_men_140304.pdf
- Prostate Cancer Foundation of Australia, and Cancer Council Australia PSA Testing Guidelines Expert Advisory Panel, *Clinical practice guidelines: PSA testing and early management of test-detected prostate cancer*, 'PSA testing strategies', http://wiki.cancer.org.au/australia/Guidelines:PSA_Testing/PSA_Testing_strategies
- The Royal Australian College of General Practitioners (RACGP), 'Should I have prostate cancer screening?' – information sheet to guide discussions on prostate cancer testing, www.racgp.org.au/download/Documents/Guidelines/prostate-cancer-screening-infosheetpdf.pdf

Prevention of lung cancer

- Cancer Council Australia, *Clinical practice guidelines for the prevention and diagnosis of lung cancer*, http://wiki.cancer.org.au/australia/Guidelines:Lung_cancer/Prevention_and_diagnosis

Chapter 16: Family abuse and violence

- 1800RESPECT (1800 737 732), 24-hour, national sexual assault, domestic family violence counselling service – information and support to Aboriginal health workers and general practitioners, as well as telephone counselling service for patients and their families, www.1800respect.org.au
- *Australian Family Physician* (*AFP*), relevant articles:
  - 'Family violence across the life cycle', www.racgp.org.au/afp/2014/november/family-violence-across-the-life-cycle
  - 'Identifying and responding to men who use violence in their intimate relationships', www.racgp.org.au/afp/2016/april/identifying-and-responding-to-men-who-use-violence-in-their-intimate-relationships
  - 'Intimate partner violence', www.racgp.org.au/afp/2011/november/intimate-partner-violence
- Australian Institute of Health and Welfare, Australian Institute of Family Studies, *Family violence prevention programs in Indigenous communities*, Closing the Gap Clearinghouse resource sheet no. 37, www.aihw.gov.au/getmedia/c0e5bdde-e9c4-4a1f-808e-256191835cde/ctgc-rs37.pdf.aspx?inline=true
- National Family Violence Prevention Legal Services, www.nationalfvpls.org/images/files/Membership_Details_National_FVPLS_Forum-_JULY_2014.pdf

- The Royal Australian College of General Practitioners (RACGP) resources:
  - *Abuse and violence: Working with our patients in general practice* (White Book), www.racgp.org.au/whitebook
  - White Book, Chapter 5: Dealing with perpetrators in clinical practice, www.racgp.org.au/your-practice/guidelines/whitebook/chapter-5-dealing-with-perpetrators-in-clinical-practice
  - Professional Development Program on Family Violence, www.racgp.org.au/familyviolence (login required)
  - Webinar: Working with men who use violence in their relationships, www.racgp.org.au/education/courses/faculty-webinars/national/men-who-use-violence

Chapter 17: Mental health

Prevention of depression

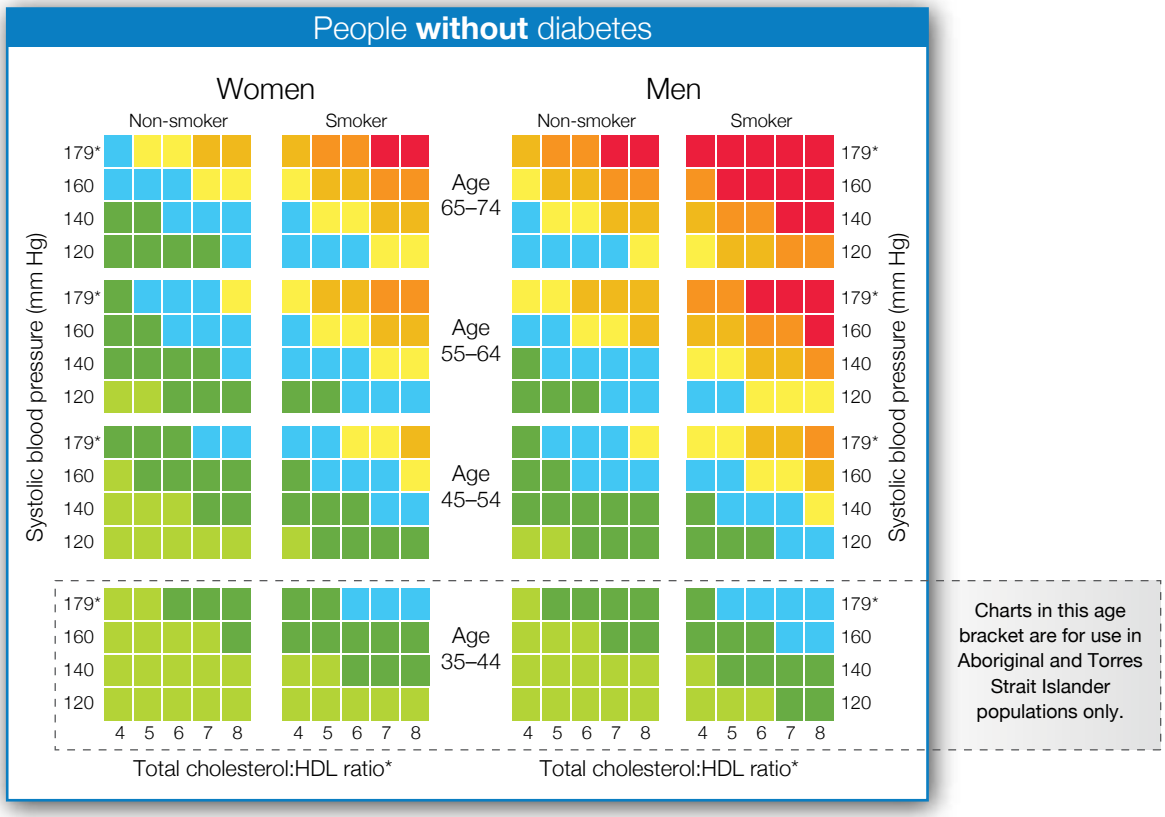
- beyondblue, Aboriginal and Torres Strait Islander mental health resources, www.beyondblue.org.au/who-does-it-affect/aboriginal-and-torres-strait-islander-people
- Black Dog Institute, www.blackdoginstitute.org.au
- Brown AD, Mentha R, Rowley KG, Skinner T, Davy C, O'Dea K. Depression in Aboriginal men in central Australia: Adaptation of the Patient Health Questionnaire 9. BMC Psychiatry 2013;13(1):271, https://bmcpsychiatry.biomedcentral.com/articles/10.1186/1471-244X-13-271
- Department of Health, Kessler Psychological Distress Scale (K5), www.pmhc-mds.com/doc/pmhc-scoring-k5.pdf
- eheadspace – online resource for young people wanting advice on mental health, www.eheadspace.org.au
- Head to Health – Australian digital mental health resources, https://headtohealth.gov.au
- Here and Now Aboriginal Assessment (HANAA) tool – to obtain copy of HANAA tool and guidelines, email Winthrop Professor Aleksandar Janca (aleksandar.janca@uwa.edu.au) or Assistant Professor Zaza Lyons (zaza.lyons@uwa.edu.au)
- Lifeline, www.lifeline.org.au
- The Royal Australian College of General Practitioners (RACGP), General Practice Mental Health Standards Collaboration – for training in mental health for general practitioners, www.racgp.org.au/education/gpmhsc
- Telethon Kids Institute, Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice, www.telethonkids.org.au/globalassets/media/documents/aboriginal-health/working-together-second-edition/working-together-aboriginal-and-wellbeing-2014.pdf

Prevention of suicide

- Royal Australian and New Zealand College of Psychiatrists, Aboriginal and Torres Strait Islander mental health, http://indigenous.ranzcp.org
- The Royal Australian College of General Practitioners (RACGP) resources:
  - *Suicide prevention and first aid: A resource for GPs*, www.racgp.org.au/education/gpmhsc/gp-resources/suicide-prevention/
  - *After suicide: A resource for GPs*, www.racgp.org.au/education/gpmhsc/gp-resources/after-suicide
- Telethon Kids Institute, Indigenous suicide rate by postcode 2001–2012, www.indigenoussuicidepreventionmaps.com.au/suicides

- Telethon Kids Institute, *Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice*, www.telethonkids.org.au/globalassets/media/documents/aboriginal-health/working-together-second-edition/working-together-aboriginal-and-wellbeing-2014.pdf
- University of Western Australia, Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project (ATSISPEP), www.atsispep.sis.uwa.edu.au
- University of Western Australia, Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project (ATSISPEP) fact sheets on Aboriginal and Torres Strait Islander suicide, and a comprehensive list of organisations and screening tools for use in mental health and social and emotional wellbeing work in Indigenous communities, www.atsispep.sis.uwa.edu.au/resources#ui-id-21
- University of Western Australia, *Solutions that work: What the evidence and our people tell us – Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project*, www.atsispep.sis.uwa.edu.au/__data/assets/pdf_file/0006/2947299/ATSISPEP-Report-Final-Web.pdf

Appendix A: Australian cardiovascular risk charts



* In accordance with Australian guidelines, patients with systolic blood pressure ≥180 mm Hg, or a total cholesterol of >7.5 mmol/L, should be considered at clinically determined high absolute risk of CVD.

Risk level for 5-year cardiovascular (CVD) risk

High risk	Moderate risk	Low risk
≥30%	10–15%	5–9%
25–29%		< 5%
20–24%		
16–19%		

How to use the risk charts

1. Identify the chart relating to the person's sex, diabetes status, smoking history and age. The charts should be used for all adults aged 45 years or over (and all Aboriginal and Torres Strait Islander adults aged 35 - 74 years) without known history of CVD and not already known to be at clinically determined high risk.
2. Within the chart choose the cell nearest to the person's age, systolic blood pressure (SBP) and total cholesterol (TC):HDL ratio. For example, the lower left cell contains all non-smokers without diabetes who are 34-44 years and have a TC:HDL ratio of less than 4.5 and a SBP of less than 130 mmHg.
3. The colour of the cell that the person falls into provides their five year absolute cardiovascular risk level (see legend above for risk category). People who fall exactly on a threshold between cells are placed in the cell indicating higher risk.

* In accordance with Australian guidelines, patients with systolic blood pressure ≥180 mm Hg, or a total cholesterol of >7.5 mmol/L, should be considered at clinically determined high absolute risk of CVD.

Risk level for 5-year cardiovascular (CVD) risk

High risk	Moderate risk	Low risk
≥30%	10–15 %	5–9%
25–29%		<5%
20–24%		
16–19%		

Notes: The risk charts include values for SBP alone as this is the most informative of conventionally measured blood pressure parameters for cardiovascular risk.

For specific groups, additional guidance includes:
The Framingham Risk Equation has not been validated for all population groups, the assessment score should be interpreted with caution in the following groups:

- The Framingham Risk Equation may **underestimate CVD risk** in Aboriginal and Torres Strait Islander peoples (EBR Grade D); adults with diabetes aged between 45 and 60 years (EBR Grade C); adults aged over 74 years (CBR) however, available evidence suggests that this approach will provide an estimate of minimum cardiovascular risk.
- The Framingham Risk Equation is likely to **underestimate CVD risk** in adults with socioeconomic deprivation (an independent risk factor for cardiovascular disease) (PP) or depression (PP).
- The predictive value of the Framingham Risk Equation **has not been specifically assessed** in adults who are overweight or obese (EBR Grade D).
- The **increased risk of cardiovascular events and all-cause mortality**, in addition to thromboembolic disease including stroke, should be taken into account for adults with atrial fibrillation (particularly those aged over 65 years) (PP).

Reproduced from the Heart Foundation. Australian cardiovascular risk charts. Melbourne: National Heart Foundation, [no date]. Available at https://www.heartfoundation.org.au/images/uploads/publications/aust-cardiovascular-risk-charts.pdf [Accessed 19 February 2018]; reproduced with permission of the National Stroke Foundation.

Appendix B: Abbreviations and acronyms

7vPCV	7-valent pneumococcal conjugate vaccine
10vPCV	10-valent pneumococcal conjugate vaccine
13vPCV	13-valent pneumococcal conjugate vaccine
23vPPV	23-valent pneumococcal polysaccharide vaccine
AAP	American Academy of Pediatrics
AATSIHS	Australian Aboriginal and Torres Strait Islander Health Survey
ABPI	Ankle Brachial Pressure Index
ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Service
ACE	angiotensin-converting enzyme
ACR	albumin–creatinine ratio
ADHD	attention deficit hyperactivity disorder
AF	atrial fibrillation
AHW	Aboriginal health worker
AIDS	acquired immune deficiency syndrome
AIHW	Australian Institute of Health and Welfare
AIR	Australian Immunisation Register
AMPs	alcohol management programs
ANU-ADRI	Australian National University Alzheimer's Disease Risk Index
AOM	acute otitis media
AOMwiP	acute otitis media with perforation
AOMwoP	acute otitis media without perforation
APGAR	Appearance, Pulse, Grimace, Activity, Respiration
APSGN	acute post-streptococcal glomerulonephritis
ARB	angiotensin II receptor blocker
ARF	acute rheumatic fever
ARIs	acute respiratory illnesses
ASD	autism spectrum disorder
ASHM	Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine
ASO	anti-streptolysin O
ATAGI	Australian Technical Advisory Group on Immunisation
ATSISPEP	Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project
AUDIT-C	Alcohol Use Disorders Identification Test
AUSDRISK	Australian Type 2 Diabetes Risk Assessment Tool

BBGS	Brief Bio-social Gambling Screen
BBV	blood-borne virus
BCG	Bacillus Calmette-Guerin
BMD	bone mineral density
BMI	body mass index
BOLD	Burden of Obstructive Lung Disease
BP	blood pressure
BV	bacterial vaginosis
CABG	coronary artery bypass graft
CAC	coronary artery calcification
CARI	Caring for Australasians with Renal Impairment
CARPA	Central Australian Rural Practitioners Association
CDC	Centers for Disease Control and Prevention
CDP	Community Development Programme
CFT	Children's Friendship Training
CKD	chronic kidney disease
CMV	cytomegalovirus
COAG	Council of Australian Governments
COPD	chronic obstructive pulmonary disease
CP NMDS	Child Protection National Minimum Data Set
CRAFFT	Car, Relax, Alone, Forget, Friends, Trouble (screening tool)
CRP	C-reactive protein
CSF	cerebrospinal fluid
CSLD	chronic suppurative lung disease
CSOM	chronic suppurative otitis media
CT	computed tomography
CVD	cardiovascular disease
DBP	diastolic blood pressure
DES	diethylstilbestrol
DME	diabetic macular oedema
DR	diabetic retinopathy
DRE	digital rectal examination
DSM-5	*Diagnostic and statistical manual of mental disorders*, 5th edition
dTpa	diphtheria/tetanus/pertussis
DXA	dual energy X-ray absorptiometry
ECG	electrocardiogram

eGFR	estimated glomerular filtration rate
EGM	electronic gaming machine
ENDS	electronic nicotine delivery systems
ENT	ear nose and throat
ESKD	end-stage kidney disease
ESR	erythrocyte sedimentation rate
ETS	environmental tobacco smoke
FAP	familial adenomatous polyposis
FAS	fetal alcohol syndrome
FASD	fetal alcohol spectrum disorder
FAV	family abuse and violence
FEV_1	forced expiratory volume in one second
FLAGS	Feedback, Listen, Advice, Goals, Strategy
FRAX	Fracture Risk Assessment Tool
FRE	Framingham Risk Equation
FTA-ABS	fluorescent treponemal antibody absorption
FTT	failure to thrive
FVC	forced vital capacity
GAS	Group A streptococcus
GBS	Group B streptococcus
GDM	gestational diabetes mellitus
GEM	growth and empowerment measure
GFR	glomerular filtration rate
GINA	Global Initiative for Asthma
GOLD	Global Initiative for Chronic Lung Disease
GP	general practitioner
GPCOG	general practitioner assessment of cognition
GPP	Good Practice Point
GTT	glucose tolerance test
HANAA	Here and Now Aboriginal Assessment
Hb	haemoglobin
HbA1c	glycosylated haemoglobin
HBcAb	hepatitis B core antibody
HBIG	hepatitis B immunoglobulin
HBsAb	hepatitis B surface antibody
HBsAg	hepatitis B virus surface antigen
HBV	hepatitis B virus

HCC	hepatocellular carcinoma
HCV	hepatitis C virus
HDL	high density lipoprotein
HEEADSSS	Home, Education/Employment, Eating, Activities, Drugs and alcohol, Sexuality, Suicide and depression, Safety
HITS	Hurt, Insult, Threaten, Scream
HIV	human immunodeficiency virus
HNPCC	hereditary non-polyposis colorectal cancer
HPV	human papillomavirus
HRCT	high-resolution computed tomography
HRT	hormone replacement therapy
hsCRP	high sensitivity C-reactive protein
HSIL	high-grade squamous intraepithelial lesion
ICD-10	International Classification of Diseases, 10th Revision
IDA	iron deficiency anaemia
IFG	impaired fasting glucose
iFOBT	immunochemical faecal occult blood test
IGT	impaired glucose tolerance
IPD	invasive pneumococcal disease
IRIS	Indigenous Risk Impact Screen
IUD	intrauterine device
K-10	Kessler Psychological Distress Scale
KICA	Kimberley Indigenous Cognitive Assessment
KMMS	Kimberley Mums Mood Scale
LARC	long-acting reversible contraception
LBC	liquid-based cytology
LBW	low birth weight
LVH	left ventricular hypertrophy
MBS	Medicare Benefits Schedule
MCUG	micturating cystourethogram
MMN	multiple micronutrient
MMSE	Mini Mental State Examination
MN	micronutrient
MRI	magnetic resonance imaging
MSM	men who have sex with men
MST	Multisystemic Therapy

NAAT	nucleic acid amplification test
NACCHO	National Aboriginal Community Controlled Health Organisation
NATSIHMS	National Aboriginal and Torres Strait Islander Health Measures Survey
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NCVSP	National Children's Vision Screening Project
NEHS	National Eye Health Survey
NHMRC	National Health and Medical Research Council
NI	neuraminidase inhibitor
NICE	National Institute for Health and Care Excellence
NIEHS	National Indigenous Eye Health Survey
NIP	National Immunisation Program
NIPS	National Immunisation Program Schedule
NIPT	non-invasive prenatal testing
NNH	number needed to harm
NNT	number needed to treat
NRT	nicotine replacement therapy
NTHi	non-typeable *H. influenzae*
NVDPA	National Vascular Disease Prevention Alliance
NZGG	New Zealand Guidelines Group
OAMT	opioid agonist maintenance treatment
OGTT	oral glucose tolerance test
OME	otitis media with effusion
OOHC	out of home care
OST	opioid substitution therapy
PBS	Pharmaceutical Benefits Scheme
PCHL	permanent congenital hearing loss
PCI	percutaneous coronary intervention
PCR	polymerase chain reaction
PCV	pneumococcal conjugate vaccine
PEP	post-exposure prophylaxis
pFAS	partial fetal alcohol syndrome
PGRTC	Problem Gambling Research and Treatment Centre
PGSI	problem gambling screening index
PHiD-CV10	10-valent pneumococcal *H. influenzae* protein D conjugated vaccine
PHQ-9	Patient Health Questionnaire
PIP	Practice Incentives Program

POCT	point-of-care testing
ppm	parts per million
PrEP	pre-exposure prophylaxis
PSA	prostate-specific antigen
QAAMS	Quality Assurance for Aboriginal and Torres Strait Islander Medical Services
QIV	quadrivalent vaccine
RACF	residents of aged care facilities
RACGP	The Royal Australian College of General Practitioners
RCT	randomised controlled trial
RHD	rheumatic heart disease
RIVUR	Randomized Intervention for Children with Vesicoureteral Reflux
s100	Section 100 scheme
s85	Section 85 scheme
SACS	Substances and Choices Scale
SBP	systolic blood pressure
SD	standard deviation
SEW	Social Emotional Wellbeing (assessment)
SIDS	sudden infant death syndrome
SIGN	Scottish Intercollegiate Guidelines Network
SSRI	selective serotonin reuptake inhibitor
STI	sexually transmitted infection
TGA	Therapeutic Goods Administration
TM	tympanic membrane
TPHA	Treponema pallidum haemagglutination assay
TT	tympanostomy tube
UK	United Kingdom
URTI	upper respiratory tract infection
US	United States
USPSTF	US Preventive Services Task Force
UTI	urinary tract infection
VE	vaccine effectiveness
VSA	volatile substance use
VUR	vesico-ureteric reflux
WHO	World Health Organization

RACGP

Royal Australian College *of* General Practitioners

Healthy Profession.
Healthy Australia.

NACCHO

National Aboriginal Community Controlled Health Organisation

Aboriginal health in Aboriginal hands

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