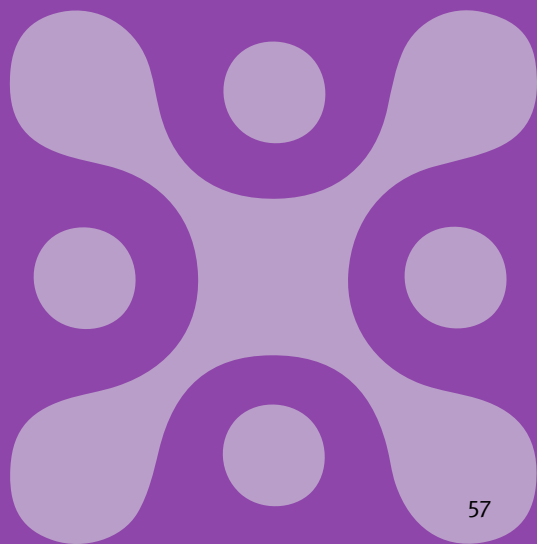


Section 2.

Child health checks



Alcohol, tobacco and other drugs (child)

Information¹

- Diseases that are caused by the use of alcohol, tobacco or other drugs (ATODs) are responsible for high morbidity and mortality rates globally
- Preventing risky behaviour and promoting healthy choices in childhood can produce positive health outcomes in adulthood
- Asking ATODs questions provides an opportunity to identify risky behaviours and support children to make healthy lifestyle choices including low risk alcohol consumption and ceasing smoking and other drugs
- Reassure the child that what they say and any discussions are confidential
- If ATODs assessment reveals a specific community wide problem consider a Population Health Unit referral for community engagement and education

Child safety notification

- If there is a suspicion of harm or neglect consider a referral to child safety. See Appendix 2: [Child safety reporting, page 513](#)

Health check recommendations

All children opportunistically from the age of 8 years

1. Procedure

- Ask the child the ATODs questions according to their age in a non-judgemental and supportive manner. See Table 1.
- The presence of parents and other authority figures may affect the answers children give. With consent and where appropriate, interview the child alone for honest answers
- Using the answers to guide you, identify if the child uses ATODs
- Provide brief intervention
- Determine if the child requires a referral and place on a follow-up and recall register if required

Table 1. ATODs questions for > 8 years of age

Questions	Explore
Does the child smoke? (cigarettes, cannabis, etc.)	<ul style="list-style-type: none"> • How often does the child smoke e.g. daily, weekly, sometimes? • How many cigarettes do they smoke? • When do they smoke? • Identify triggers e.g. when they're stressed? at school? with friends and peers? • Where do they get their cigarettes from? • Why do they smoke? • How does it make them feel?
Does the child drink any alcohol?	<ul style="list-style-type: none"> • Clarify if the child drinks beer, wine, UDLs, premix or spirits • How often does the child drink e.g. daily, weekly, sometimes? • How many drinks do they have? • When do they drink? • Identify triggers e.g. when they're stressed? at school? with friends and peers? • Where do they get their alcohol from? • Why do they drink? • How does it make them feel?
Does the child use any drugs or other substances?	<ul style="list-style-type: none"> • Clarify other substances for the child e.g. inhalants, cannabis, crystal meth, etc. • How often does the child do drugs e.g. daily, weekly, sometimes? • How much drugs do they do? • When do they do drugs? • Identify triggers e.g. when they're stressed? at school? with friends and peers? • Where do they get their drugs from? • Why do they do drugs? • How does it make them feel?

2. Results

- The preferred response to the ATODs questions is 'no'
- If the child answers 'no' provide positive feedback and reinforce their healthy lifestyle choice
- If the child answers 'yes' to any of the ATODs questions then provide brief intervention and make a referral to the appropriate service
- Depending on the context of an older child's answers, consider the impacts on their mental and sexual health. See [Sexual and reproductive health, page 31](#) and [Social-emotional well-being \(child\), page 132](#)

3. Brief intervention^{1,2}

- See [Alcohol reduction, page 7](#) and [Smoking cessation, page 42](#)
- Provide self help material for older children for any drug taking behaviour. See Resource 1.
- Offer an intensive, proactive cessation support program. See Resource 2.
- Avoid minimising their harmful behaviour and the negative health effects on the body

- Use a matrix of questions to motivate children to think critically about their ATODs use behaviour. See Table 2.
- Ask the child if they are talking to, or have someone to talk to about their ATODs use
- Encourage the child to talk to someone they feel safe with
- Encourage the child to seek help from the health service to cease ATODs use
- Provide resources from resources list

Table 2. Motivational questions^{1,2}

What are the good things about smoking, drinking alcohol or taking drugs?	What are the bad things about smoking, drinking alcohol or taking drugs?
<ul style="list-style-type: none"> • All my friends do it • Makes me look cool • Relaxes me • Gets me started • Tastes good • Keeps me awake • Gives me a boost 	<ul style="list-style-type: none"> • Costs a lot of money • Makes my chest feel tight, makes me short of breath • Can't run around, go diving or play sport because of breathlessness • Makes me cough • Gives me bad breath • Everyone asks for a smoke from me • Hate craving for a smoke • Causes cancer and damages the body • Trouble with family, school and police
What are the good things about STOPPING smoking, drinking alcohol or taking drugs?	What are the bad things about STOPPING smoking, drinking alcohol or taking drugs?
<ul style="list-style-type: none"> • Won't be breathless any more • Will have more money • Can save up for something special • Will feel stronger 	<ul style="list-style-type: none"> • Friends may not want to play with me • Not look cool

4. Referral

- If there are any concerns about the child's social-emotional well-being referral must be made to:
 - the MO/NP or
 - local Mental Health, Alcohol and Other Drugs (MHAODs) services or
 - a child safety notification made. See Appendix 2: [Child safety reporting, page 513](#)
- If any harmful drug taking behaviours are identified, refer to an appropriate source. See Table 3.

Table 3. Referral options

Queensland Health
<ul style="list-style-type: none"> • Health worker, registered nurse, psychologist or social worker • Your local Child Protection Liaison Officer or Safe Kids or Child Safety Services Regional Intake Services. See Appendix 2: Child safety reporting, page 513 • Child and Youth Mental Health Service available from: http://qheps.health.qld.gov.au/cymhs/ • ATODs available from: https://www.health.qld.gov.au/public-health/topics/atod
Other services
<ul style="list-style-type: none"> • Aboriginal and Torres Strait Islander Legal Service (Qld) Ltd available from: http://www.atsils.com.au/ • Child Safety Services available from: http://www.communities.qld.gov.au/childsafety/child-safety-services • Act for Kids available from: http://www.actforkids.com.au/ • Queensland Indigenous Family Violence Legal Service available from: http://www.qifvls.com.au/ • Contact Queensland Aboriginal and Islander Health Council (QAIHC) for details of your local Aboriginal medical service e.g. Wuchopperin, Apunipima. Available from: http://www.qaihc.com.au/ • Elder, minister or pastor • School nurse • Headspace, the national youth mental health foundation available from: www.headspace.org.au/ • Quitline 13 78 48 or available from: https://www.qld.gov.au/health/staying-healthy/atods/smoking • Royal Flying Doctor Service nurse or doctor • School Principal or student guidance officer • Family Planning Queensland available from: https://www.true.org.au/ • Kids Helpline available from: https://kidshelpline.com.au/ or phone 1800 55 1800 • Alcohol and Drug Information Service is a 24 hour telephone service available on 1800 177 833 or Turning Point an online counselling service available available from: http://www.turningpoint.org.au/

5. Follow-up

- Place the child on a recall register to monitor and support ATODs reduction if required
- Ensure all referrals are actioned
- Provide the child or parent with details for the next scheduled follow-up appointment

6. References

1. Commonwealth of Australia. 2009. Australian Guidelines to Reduce Health Risks from Drinking Alcohol. Canberra, ACT: National Health and Medical Research Council. Accessed: 2020, June. Available from: <https://www.nhmrc.gov.au/guidelines-publications/ds10>
2. Levy SJL, Williams JF. Substance Use Screening, Brief Intervention, and Referral to Treatment. *Pediatrics*; 2016; 138 (1). Accessed: 2020, June. Available from: <http://pediatrics.aappublications.org/content/138/1/e20161211.abstract>

7. Resources

1. Queensland Government alcohol, tobacco and other drugs resources available from: <https://www.health.qld.gov.au/public-health/topics/atod>
2. Alcohol and Drug Information Service is a 24 hour telephone service available from: 1800 177 833 or Turning Point an online counselling service available from: <http://www.turningpoint.org.au> or Quit HQ available from: <https://quithq.initiatives.qld.gov.au/>
3. National Alcohol Strategy 2006-2011 available from: <http://www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/nas-06-09>
4. Smoking, nutrition, alcohol, physical activity (SNAP) A population health guide to behavioural risk factors in general practice 2nd edition available from: <https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/snap>
5. Quit phone apps available for download from Apple iTunes and Google Play stores
6. RACGP: Smoking cessation: a guide for health professionals available from: <https://www.racgp.org.au/guidelines/smokingcessation>
7. Department of Health: Australian guidelines to reduce health risks from drinking alcohol available from: www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/guidelines
8. A range of fact sheets and professional development resources to support those who engage with young people affected by alcohol and other drugs available from: www.dovetail.org.au/about-us.aspx
9. OxyGen Fact sheets, curriculum resources and youth focused activities to support smoking prevention available from: <https://www.quit.org.au/thinking-about-quitting/>
10. Blurred minds, an innovative, evidence-based alcohol and drug education program for Australian secondary schools available from: <http://blurredminds.com.au/>
11. Cannabis Information and Support available from: <https://cannabissupport.com.au/>
12. Dovetail - supporting the youth alcohol and drug sector in Queensland available from: <http://www.dovetail.org.au/>

Birth information

Information

- Recording the child's birth information allows clinicians to:
 - maintain consistency with a child's personal health history as they grow and develop
 - ensure any postnatal appointments are followed up and actioned
- All information should be directly transcribed from a discharge summary or the child's Personal Health Record (PHR) booklet (baby book)

Health check recommendations

All babies at first presentation

1. Procedure

- Transfer all postnatal discharge summary or PHR information to the age appropriate well child health check form as per Table 1.
- Ask the questions as per Table 1.
- Ensure any concerns, appointments or abnormalities have been referred or followed-up. If not, refer and place the baby on a recall register

Table 1. Birth information and questions for 1–6 weeks of age

Information and questions	Explore
Discharge summary received	• If not received contact the referring or birth hospital
Birth weight	• See Body measurements (child) , page 73
Birth length	
Birth head circumference	
Gestation	• < 37 weeks is premature
Apgar score 1 minute	• Scale from 1 (not responding) to 10 (alert and active) • Measured at 1 and 5 minutes after delivery
Apgar score 5 minute	
Method of delivery	• Normal vaginal birth (NVB), caesarian section (CS), forceps or vacuum extraction
Newborn hearing test attended	• Yes or no
Immunisation status current	• Hepatitis B and/or tuberculosis vaccines • Vitamin K supplement
Neonatal Screening test (NNST) attended	• If not performed at birth hospital ensure that the test is attended to in the community
Was the baby treated for jaundice?	• If “yes” then monitor and provide brief intervention
Did the baby have problems with breathing or convulsions at birth?	• If “yes” ensure MO/NP has reviewed, parental concerns addressed and any follow-up is actioned
Was the baby ventilated	• If “yes” ensure MO/NP has reviewed, parental concerns addressed and any follow-up is actioned

2. Results

2.1 Gestation^{1,2}

- For baby born premature (< 37 weeks), be mindful that:
 - the baby is at increased risk of vaccine preventable diseases
 - the baby's immunisation schedule will alter
 - any body measurements will need to be corrected. See [Body measurements \(child\), page 73](#)

2.2 Method of delivery

- Caesarian wounds sometimes require wound care particularly in the overweight or obese
- Forceps delivery may leave marks on the sides of the baby's head
- Vacuum extraction leaves the baby with a cone or large bump on the top of the head
- Any delivery concerns should be referred to the MO/NP

2.3 Hearing test

- For abnormal hearing test results, ensure any appointments or referrals are acted upon
- For ongoing monitoring see [Ears and hearing \(child\), page 94](#)

2.4 Neonatal screening test (NNST)

- The birthing hospital will notify the parent of any abnormal test results and follow-up appointments will be arranged

2.5 Jaundice³

- Jaundice is common in newborns, usually 48 to 72 hours after birth
- As blood cells and haemoglobin are constantly being produced and destroyed, bilirubin is released
- Before baby is born, bilirubin is removed through the placenta but, once born, the baby's own liver removes the bilirubin
- This process can be difficult for a newborn's liver and bilirubin may build up causing the skin and mucous membranes to turn yellow
- As bilirubin increases, jaundice appears first on the face and head, then body, then finally the palms of the hands and soles of the feet
- A simple test is to gently press your fingertip on the tip of the baby's nose or forehead. When the finger is lifted the skin should be white if normal, or yellow if jaundice is present. See Table 2.
- Those with darker skin tones are harder to assess. Always refer if unsure
- If bilirubin concentrations increase and jaundice continues, hearing problems or brain damage may result
- Phototherapy (light therapy in the birth hospital), filtered light (a naturally well lit room at home, not direct sunlight) and breastfeeding helps the baby to eliminate bilirubin and thus reduce jaundice

- Jaundice should disappear by 2 weeks of age

Table 2. Kramar's rule to estimating jaundice in babies⁴

Zone	Effect on child	Action
1	<ul style="list-style-type: none"> • Limited to head and neck 	<ul style="list-style-type: none"> • Continue to encourage 3rd hourly breastfeeding and filtered light • Observe
2	<ul style="list-style-type: none"> • Upper trunk • Baby may be tired 	
3	<ul style="list-style-type: none"> • Lower trunk and thighs • Baby will be tired and listless 	<ul style="list-style-type: none"> • Continue to encourage 3rd hourly breastfeeding and filtered light • Refer urgently
4	<ul style="list-style-type: none"> • Over arms, legs and below knees • Baby will be tired and listless • Is at risk of cerebral palsy, deafness and brain damage 	
5	<ul style="list-style-type: none"> • Hands and feet • Baby will be tired and listless • Is at risk of cerebral palsy, deafness and brain damage 	

3. Brief intervention

- Provide the parent with anticipatory guidance for the coming months including:
 - breastfeeding or artificial feeding
 - safe sleeping and SIDS
 - milestones in the coming months
 - infant reflexes information
 - vision and hearing information
- Praise successes

4. Referral

- Ensure any birthing hospital appointments or referrals are acted upon by the parents for:
 - abnormal hearing test results
 - abnormal neonatal screening test results
- Refer to the MO/NP for any:
 - jaundice that is not resolving and continues to progress. See Table 2.
 - caesarian wounds that do not heal

5. Follow-up

- Place the child and parent on a recall register if required
- Ensure all referrals are actioned
- Provide the child, parent or carer with details of the next scheduled follow-up appointment

6. References

1. March of Dimes, PMNCH, Save the Children, WHO. CP Howson MK, JE Lawn, editor. 2012. Born Too Soon: The Global Action Report on Preterm Birth. Geneva: World Health Organization. Accessed: 2020, May. Available from: http://www.who.int/pmnch/media/news/2012/preterm_birth_report/en/
2. Australian Technical Advisory Group on Immunisation (ATAGI). 2017. The Australian immunisation handbook 10th ed (2017 update). Canberra: Australian Government Department of Health. Accessed: 2020, May. Available from: <https://www.health.gov.au/health-topics/immunisation/health-professionals>
3. Woodgate P, Jardine LA. Neonatal jaundice. BMJ Clinical Evidence; 2011; (2011:0319). Accessed: 2020, May. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3217664/>
4. Queensland Health. 2017. Maternity and Neonatal Clinical Guideline: Neonatal jaundice. Brisbane: Queensland Health. Accessed: 2020, May. Available from: <https://www.health.qld.gov.au/qcg/publications>

Birth mother's history

Information

- Information regarding the mother's health and lifestyle before, during and after pregnancy is useful to determine a baby's health risk for future chronic conditions and maternal attachment (bonding)

Child safety notification

- If there is a suspicion of harm or neglect consider a referral to child safety. See Appendix 2: [Child safety reporting, page 513](#)

Health check recommendations

All mothers of newborn babies during first postnatal visit

1. Procedure

- Ask the mother the questions and be prepared to explore further as per Table 1.
- Provide the mother with brief intervention if required
- Determine if the mother requires a referral according to the answers and place on a follow-up and recall register

Table 1. Questions to ask of a child's mother at 1–6 weeks

Questions	Explore
Was this pregnancy planned?	<ul style="list-style-type: none"> • How does mum feel toward this child? • What is the Edinburgh Post-natal Depression Scale (EPDS) score? See Resource 1.
Did the mother smoke during this pregnancy?	<ul style="list-style-type: none"> • For how long? • How many?
Is the mother still smoking?	<ul style="list-style-type: none"> • How many?
Did the mother drink alcohol or use other drugs or substances during this pregnancy?	<ul style="list-style-type: none"> • What was taken? • For how long? • How much?
Does the mother still drink alcohol or use other drugs or substances?	<ul style="list-style-type: none"> • What is taken? • How much? • How often?
Did the mother have diabetes during this pregnancy?	<ul style="list-style-type: none"> • Gestational, type 1 or 2? • Was the diabetes well managed? • Is the diabetes still well managed?
Did the mother have a complete antenatal STI screen?	<ul style="list-style-type: none"> • What were the results? • Was successful treatment given?
How many children in the mother's care?	<ul style="list-style-type: none"> • All own children? • Any support? • Finances?

2. Results

2.1 Maternal social-emotional well-being^{1,2}

- Identifying if a pregnancy is planned or unplanned can help determine a mother's preparedness for parenting and their social-emotional well-being
- Poor maternal social-emotional well-being can impact on infant attachment
- Good attachment signs include:
 - holding, cuddling, physically close and protective of baby
 - smiling and talking to baby
 - eye contact with baby
- Poor attachment signs include:
 - physically distant from baby
 - not smiling when baby in arms
 - holds baby turned facing away
 - leaves baby for long periods by themselves
 - does not talk to baby or talks negatively about them
 - does not respond to baby's cues i.e. crying
- Mothers, despite being exhausted or lacking support, will still elicit attachment signs
- Poor maternal attachment can lead to lifelong psychosocial problems starting in childhood
- Poor attachment is associated with higher levels of postnatal depression

2.2 Smoking during pregnancy and breastfeeding³

- Smoking during pregnancy is associated with an increased risk of:
 - pre-term birth
 - low birth weight
 - babies small for gestational age
 - Sudden Infant Death Syndrome (SIDS). See [Environment, page 101](#)
- Low birth weight babies are more vulnerable to infections and birth defects such as cleft lip and cleft palate
- Smoking whilst breastfeeding or around a baby is associated with:
 - ear infections
 - SIDS
 - asthma
 - chest infections such as pneumonia and bronchitis
 - slow lung growth
 - coughing

2.3 Alcohol and other drugs use during pregnancy and breastfeeding⁴

- Drinking alcohol or using illicit drugs or other substances during pregnancy increases risk of:
 - poor infant growth and mental development

- weak sucking reflex
 - breathing difficulties at birth
 - muscle weakness
 - poor sleep patterns
 - behavioural problems
 - learning difficulties
 - increased risk of congenital abnormalities of the heart and kidneys
 - poor educational outcomes, social problems and alcoholism
 - children with fetal alcohol spectrum disorder (FASD)
 - neonatal withdrawals
 - death
- Alcohol and other drugs pass from mother to baby through breast milk and affects the baby's developing brain and slows physical development
 - Alcohol, drugs and other substances can effect the way a parent cares for their baby or children such as:
 - dropping the baby
 - rolling on the baby when asleep
 - poor supervision of baby or child

2.4 Diabetes during pregnancy⁵

- Gestational diabetes mellitus (GDM) and diabetes during pregnancy is associated with babies that:
 - are large for gestational age
 - have low blood glucose levels
 - have jaundice at birth
- Babies with these features may grow into children who are at higher risk of:
 - obesity
 - hypertension
 - chronic heart disease
 - diabetes

2.5 Antenatal STI screen

- Sexually transmitted infections (STIs) can be passed from mother to fetus during pregnancy and birth
- If the mother did not have an antenatal STI screen:
 - perform a full STI screen and treat any positive results. See the current edition of the *Primary Clinical Care Manual*
 - babies need to be treated symptomatically and followed up for any positive maternal result by the MO/NP

2.6 Children in mother's care

- Asking the mother the number of children in her care will alert the clinician to issues which could impact on the family. See [Social-emotional well-being \(child\), page 132](#)

3. Brief intervention

3.1 Maternal social-emotional well-being¹

- Perform an Edinburgh Postnatal Depression Scale (EPDS). See Resource 1.
- Take this opportunity to discuss contraception and post-natal safe sexual practices. See [Sexual and reproductive health, page 31](#)

3.2 Parental and/or household smokers³

- Do not expose a baby or child to cigarette smoke
- All smokers in the home to smoke outside
- After a cigarette, wash hands and change shirt prior to handling a baby due to smoke particles persisting on these surfaces
- Offer Quitline details. See Resource 2.
- See [Smoking cessation, page 42](#)

3.3 Mothers who drink alcohol or use drugs and/or other substances⁴

- There are no safe levels of alcohol, illicit drug or substance consumption in pregnancy or while breastfeeding
- If a mother plans to fall pregnant, is pregnant, or is breastfeeding, then alcohol, illicit drugs and other substances should be avoided completely
- Many factors affect how much alcohol or illicit drugs is passed into breastmilk, including:
 - the strength and amount of alcohol consumed
 - what and how much food has been consumed
 - how much the mother weighs
 - how quickly the mother drinks alcohol
- Applications such as the Feed Safe App can help parents assess alcohol consumption and breastfeeding more accurately. See Resource 3.
- The following may reduce risk if planning to drink alcohol:
 - arrangements should be made for a carer to care for children
 - if breastfeeding, express breast milk to feed baby during alcohol intake
 - limit intake to 2 standard alcoholic drinks
- Mothers should be cautious about using cannabis during pregnancy and breastfeeding, as the long-term neurobehavioral effect of THC exposure to the child's developing brain is unclear
- For further resources, see [Alcohol reduction, page 7](#)
- If child shows signs of FASD, see [Developmental delay in children, page 347](#)
- For further safety issues related to sleeping, see [Environment, page 101](#)

3.4 Women with diabetes during pregnancy⁵

- Women who have diabetes and who become pregnant or develop gestational diabetes require close management, monitoring and follow-up
- After birth, support women to maintain a healthy lifestyle that includes diet and nutrition,

physical activity and maintenance of a healthy weight range and BMI

- See the current edition of the *Primary Clinical Care Manual* for postnatal management and intervention of mothers with diabetes
- See [Diabetes, page 357](#)

4. Referral⁶

- If there are any concerns about the child's social-emotional well-being a referral must be made to:
 - the MO/NP or
 - local Mental Health, Alcohol and Other Drugs (MHAODs) services or
 - a child safety notification made. See Appendix 2: [Child safety reporting, page 513](#)
- For an unplanned child, an EPDS score ≥ 13 or the parent child attachment (bonding) is poor then refer to:
 - a child health home visiting service
 - a psychologist, mental health or social worker
 - an attachment based parenting program e.g. Circle Of Security[®]
 - local family support services
- For smoking parents refer to:
 - Quitline 137848. See Resource 2.
 - [Smoking cessation, page 42](#)
- For mothers or parents who consume alcohol antenatally or continue to drink, or who took or continue to take illicit drugs or drugs of dependence refer to:
 - MHAODs services. See Resource 4.
 - [Alcohol reduction, page 7](#)
 - [Developmental delay in children, page 347](#)
- For a mother who had diabetes during pregnancy:
 - see [Diabetes, page 357](#)
 - ensure a 6 to 8 week oral glucose tolerance test (OGTT) is performed and followed up
 - ensure that any referrals are actioned and the patient is engaged with appropriate diabetes services
- For any mother who did not have an antenatal STI screen, refer to the current edition of the *Primary Clinical Care Manual*

5. Follow-up

- Place the mother and child on a recall register to monitor growth if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

6. References

1. Yanikkerem E, Ay S, Piro N. Planned and unplanned pregnancy: Effects on health practice and depression during pregnancy. *Journal of Obstetrics and Gynaecology Research*; 2013; 39 (1). pp 180-187. Accessed: 2020, August. Available from: <https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1111/j.1447-0756.2012.01958.x>
2. Fry MJ. Infant Mental Health and Attachment. *Journal of Child and Adolescent Psychiatric Nursing*; 2015; 28 (2). pp 63-64. Accessed: 2020, August. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/jcap.12114>
3. Hackshaw A, Rodeck C, Boniface S. Maternal smoking in pregnancy and birth defects: a systematic review based on 173 687 malformed cases and 11.7 million controls. *Human Reproduction Update*; 2011; 17 (5). pp 589-604. Accessed: 2020, August. Available from: <http://dx.doi.org/10.1093/humupd/dmr022>
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5. International Association of Diabetes and Pregnancy Study Groups Recommendations on the Diagnosis and Classification of Hyperglycemia in Pregnancy. *Diabetes Care*; 2010; 33 (3). pp 676-682. Accessed: 2020, August Available from: <http://care.diabetesjournals.org/content/diacare/33/3/676.full.pdf>
6. Matthey S, Della Vedova AM, Agostini F. The Edinburgh Postnatal Depression Scale in routine screening: errors and cautionary advice. *American Journal of Obstetrics & Gynecology*; 2017; 216 (4). p 424. Accessed: 2020, August. Available from: <http://dx.doi.org/10.1016/j.ajog.2016.11.1020>

7. Resources

1. The Edinburgh Postnatal Depression Scale (EPDS) is available from: <https://www.cope.org.au/health-professionals/health-professionals-3/calculating-score-epds/>
2. Queensland Government QUIT HQ. is available from: <https://quithq.initiatives.qld.gov.au/> or Quit Victoria available from: <https://www.quit.org.au/>
3. The Feed Safe app can inform mothers who drink alcohol of safe levels. Available from: <http://www.feedsafe.net/> at any online application store
4. Alcohol, tobacco and other drugs resources available from: <https://www.health.qld.gov.au/public-health/topics/atod>

Body measurements (child)

Information^{1,2}

- Measuring a child's weight, length or height, fontanelle and head circumference is a useful way to monitor growth and identify and act on any disruption to expected growth
- Calculating body mass index (BMI) in children is a useful way to identify:
 - underweight, overweight or obesity
 - if the child is at risk of developing chronic conditions
- The World Health Organisation (WHO) standard growth charts are used for those under 2 years of age and continued to be used from 2 years of age or changed to the Centre for Disease Control (CDC) Standard Child Growth charts

Health check recommendations

All mothers of newborn babies during first postnatal visit

All children should have their weight, length (or height) and head circumference measured according to their routine Personal Health Record (PHR) child health checks and opportunistically for all others until 15 years of age

All Aboriginal and Torres Strait Islander children should continue to have body measurements annually from 4 years of age

All children should have their fontanelles palpated at 6, 12 and 18 months of age

All children should have their BMI calculated from 2 years of age

If a child is over 10 years of age with a BMI > 85th percentile for age and sex see [Special considerations, page 142](#)

1. Procedure

- Perform the measurement as per Table 1.
- Plot the measurements on the appropriate chart for:
 - length/height for age
 - weight for height
 - body mass index for age
- Differences within the normal range of measurements are common and should not unduly concern parents
- Note any growth charts in the electronic medical records
- Allowance for gestational age for growth and development is made for children born prematurely. Children born:
 - less than 37 weeks gestation have their age corrected for 1 year
 - less than 32 weeks gestation have their age corrected for 2 years

Determining corrected age

Corrected age = baby’s gestational age in weeks (how old the baby is since birth) minus the number of weeks premature (40 - how many weeks the infant was born at)
 e.g. a 16 week old infant born premature at 32 weeks
 = 16 - (40 - 32)
 = 16 - 8
 = 8 weeks of age (corrected)

- Using the measurements ascertain the child’s BMI from 2 years of age
- If any anomalies are identified, make a referral to an appropriate clinician
- Provide brief intervention if required
- Determine if the child requires a referral or further assessment according to the measurements and place on a follow-up and recall register. See [Special considerations, page 142](#)
- For weight management resources for health professionals see Resource 1.

Table 1. Body measurements for children

Measurement	Procedure
Weight	• Weigh using baby scales or stand-on scales
Length or height	• Measure length using a measuring board or height using a stadiometer
Head circumference	• Measure using flexible tape measure
Fontanelle	• Palpate anterior and posterior fontanelles
BMI	• Over 2 years of age • Calculate using formula (see 1.5 Body mass index)

1.1 Weighing children < 2 years of age

- Ensure the baby scales are accurate and regularly calibrated
- Bare weigh all babies to 2 years of age
- Zero the scales if required
- Record the weight to the nearest gram (g)

1.2 Weighing children > 2 years of age

- Ensure the stand-on or chair scales are accurate and regularly calibrated
- Ensure the child removes all heavy clothing, shoes, jumpers etc.
- Zero scales if required
- Position the child in the centre of the scales so that their body weight is evenly distributed

- Record the weight to the nearest gram (g)

1.3 Measuring children's length < 2 years of age

- For accuracy, this measurement requires 2 people
- Ensure the measuring board is accurate. Flexible plastic portable measuring boards are less accurate
- Remove baby's shoes and any excessive clothing
- Lay baby supine (on their back) on the measuring board
- Ask the parent to place their hands on either side of the baby's head and hold the baby's crown (very top of the head) against the headboard
- Inform the parent that you will shortly extend the baby's legs and for them to ensure the crown stays against the headboard
- Ensure the shoulders and buttocks are flat against the measuring board
- Extend both the baby's legs at the hips keeping the knees flat against the board by adding a slight amount of traction (pull)
- Slide the foot plate level with the base of both the baby's feet
- The length is recorded to the nearest centimetre (cm)

1.4 Measuring children's height > 2 years of age

- Ensure the stadiometer is accurate
- Ensure the child removes their shoes
- Position the child so their head, back, buttocks and heels are against the wall
- Ask them to stand straight with weight distributed evenly, heels together, looking forward with arms hanging freely by their sides
- Pull the stadiometer measuring plate down to the top of their scalp
- Record the measurement to the nearest millimetre (mm)

1.5 Calculating body mass index (BMI)

- For over 2 years of age, calculate BMI using below calculation then plot on BMI-for-age growth charts

$$\text{BMI} = \frac{\text{Weight in kilograms (kgs)}}{\text{Height in metres squared (m}^2\text{)}}$$

- Calculate and record BMI as a percentage by plotting weight and height on a BMI chart or by using an online calculator. See Resource 1 and 2.
- Calculating BMI as a percentage is particularly important for children > 10 years

1.6 Measuring children's head circumference < 2 years of age

- Use a flexible tape measure

- Position the child laying down, sitting up or in the parent's arms
- Remove any objects from the child's hair
- Identify the broadest section of the child's skull
- Place the measuring tape evenly and firmly around the child's head, ensuring that the broadest section is measured from the frontal skull to the occiput at the rear
- Measure to nearest centimetre (cm)
- Repeat measurement
- If the two measurements differ by more than 3 mm take a third measurement
- Record the average of the 2 largest measurements

1.7 Palpating fontanelles < 18 months of age

- Sit or lay the child on examination table or have the parent hold them in their arms
- Gently palpate the anterior (front) and posterior (rear) fontanelles for openness, size, whether they are bulging or are depressed

2. Results

2.1 Interpretation

- View the current plotted result in relation to past plotted results
- For clearer interpretation the dots should be joined to form a continuous line
- Note:
 - how the line tracks and moves in relation to the surrounding centile lines
 - if many measurements are recorded over a short time there may be a jagged line
 - if few measurements are recorded, long smooth lines are evident
- A healthy child's measurement should generally, over time, follow a consistent curve in relation to surrounding centile lines

2.2 Weight gain for children to 12 months

- A general guide for weight gain variation is:
 - an initial weight loss (up to 10% of the birth weight) after birth
 - weight gains by 4–6 days of age
 - return to birth weight by 2 weeks of age
 - gains of 150–200 gms/wk up to 3 months
 - from 3 months of age children should consistently gain weight over time, tracking along their centile line

2.3 Head circumference

- Differences within the normal range of measurements are common and should not unduly concern parents

2.4 BMI for children > 2 years

- BMI categories for children using the CDC BMI-for-age standard growth charts are as follows:

- < 5th centile–underweight
- 25th to < 84th centile–healthy weight
- 85th to < 94th centile–overweight
- > 95th centile–obese

2.5 Children's fontanelles

- In infants younger than 6 months, the anterior fontanelle diameter generally does not exceed 4–5 cm
- The anterior fontanelle should feel soft and slightly depressed and some pulsation may be felt
- In a markedly depressed fontanelle the cranial bones around the edge of the fontanelle can be easily palpated. This usually indicates dehydration
- A bulging fontanelle feels tense, sometimes palpated during prolonged crying
- A bulging fontanelle with marked pulsations may indicate increased intracranial pressure due to infection
- The fontanelles should get progressively smaller beyond 6 months of age
- The anterior fontanelle closes completely by 18 months of age and posterior fontanelle by about 2 months

3. Brief intervention^{1,2}

- Discuss with parents the risks of an elevated BMI in childhood and its association with obesity in adulthood, type 2 diabetes, hypertension, stroke and depression
 - **children with a BMI > 85th % will require pathology and further investigations**
 - see [Special considerations, page <?>](#)
- Provide diet and nutrition related resources to parents of children with a low BMI. See Resources 3, 4, 5, 6, 7, 8. and 9.
- Record all information in the child's Personal Health Record booklet
- See [Overweight and obesity \(children\), page 441](#)
- See [Poor growth in children, page 474](#)
- For children whose BMI are low see [Diet and nutrition, page 16](#)
- See [Physical activity, page 26](#)

4. Referral

- Urgently refer any child if their fontanelle is bulging or depressed
- Refer to a MO/NP, child health nurse or dietitian for further investigations if the child's:
 - measurements indicate rapid growth or decline
 - measurements are above the 97th centile or below the 3rd centile
 - different body measurements vary by 2 or more centiles when compared with one another e.g. weight on the 10th centile and length on the 75th centile
 - records indicate the child has crossed 2 centiles in a downward or upward trajectory for any measurement

- BMI > 85th %. See [Special considerations, page 142](#)
- if the child’s fontanelles are too wide, close early or remain open longer than expected for age

5. Follow-up

- Place the child on a recall register to monitor growth if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

6. References

1. National Health and Medical Research Council. 2013. Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia. Melbourne: National Health and Medical Research Council. Accessed: 2020, August. Available from: <https://www.nhmrc.gov.au/guidelines-publications/n57>
2. National Health and Medical Research Council. 2013. The Australian Dietary Guidelines. Melbourne: National Health and Medical Research Council. Accessed: 2020, August Available from: <https://www.nhmrc.gov.au/guidelines-publications/n55>
3. National Health and Medical Research Council. 2013. The Infant Feeding Guidelines. Melbourne: National Health and Medical Research Council. Accessed: 2020, August. Available from: <https://www.nhmrc.gov.au/guidelines-publications/n56>

7. Resources

1. The WHO Child Growth Standards charts available from: <http://www.who.int/childgrowth/standards/en/> and the CDC standard growth charts available from: http://www.cdc.gov/growthcharts/cdc_charts.htm and weight management resources for health professionals available from: <https://pro.healthykids.nsw.gov.au>
2. Online Healthy weight calculator for children and teenagers available from: <https://pro.healthykids.nsw.gov.au/calculator/>
3. Position Statements on Dietary Fat and Overweight/Obesity available from: <https://www.heartfoundation.org.au/for-professionals/food-and-nutrition/position-statements>
4. The Heart Foundation website for healthy eating and fats and cholesterol information available from: <https://www.heartfoundation.org.au/Activities-finding-or-opinion/food-and-nutrition-position-statements> and Healthy fats for children available from: https://www.health.qld.gov.au/__data/assets/pdf_file/0023/145580/paed_fats.pdf
5. The Australian Dietary Guidelines available from: <https://www.eatforhealth.gov.au/>
6. The Queensland Government’s Staying Healthy Diet and nutrition resources available from: <http://www.qld.gov.au/health/staying-healthy/diet-nutrition/index.html>
7. The Better Health Channel available from: http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/healthy_living?open
8. Recipes at Foodwatch available from: <https://foodwatch.com.au/>
9. Queensland Health nutrition education materials available from: <https://www.health.qld.gov.au/nutrition>

Clinical measurements (child)

Breathing

- Undertaken to identify any underlying respiratory issues attributed to exposure to environmental irritants (e.g. cigarette smoke), chest infections or congenital abnormalities

Femoral pulses

- Undertaken to ascertain if there is sufficient arterial blood flow to the legs
- Insufficient flow may indicate aortic coarctation or narrowing of the aorta

Heart sounds^{1,2,3}

- Listening to (auscultating) the heart gathers information about heart valve function and anatomical defects including rheumatic heart disease (RHD)
- Aboriginal and Torres Strait Islander peoples have the highest rates of RHD in the world, often attributed to living conditions

Haemoglobin (Hb)^{2,3,4}

- Measured to identify iron deficiency anaemia due largely to poor early nutrition, infestations of parasites and infections
- Anaemia is common in Aboriginal and Torres Strait Islander children particularly in those aged 6–30 months, low birth weight and premature infants and infants weaned to poor diets
- Adolescent girls have higher iron requirements peaking at puberty due to menses
- At a time of rapid brain growth and development in infants and young children, iron deficiency is associated with developmental delay of cognitive function and leads to poor psycho-motor development

Health check recommendations

Femoral pulses in all children at each child health check to 6 months of age

Breathing and heart sounds in all children at each child health check to < 5 years of age

Test haemoglobin in all Aboriginal and Torres Strait Islander children between 6 and 9 months then again at 18 months of age

Test haemoglobin in all Aboriginal and Torres Strait Islander girls aged 10 to < 15 years of age

1. Procedure

- Ask the child or parent the clinical measurements questions or perform the appropriate measurement as per Table 1.
- The questions may provide answers requiring further clarity. Be prepared to explore answers further
- Identify if the child has measurements outside normal limits

- Provide brief intervention and resources if required
- Ensure the child is placed onto a follow-up and recall register and monitor according to requirements
- Determine if the child requires a referral according to answers and measurement results, and place on a follow-up and recall register

Table 1. Clinical measurement questions for children

Assess	Explore
Breathing	<ul style="list-style-type: none"> • Has the child had a past history of chest infections or coughing that hasn't resolved • Is the child's breathing: normal? noisy? coughing? wheeze? gurgly? laboured? breathless? • Does the child get breathless lying flat, at rest, gentle walking or vigorous walking? • Does the child wake at night breathless? • Does exposure to irritants such as smoke (from fires and cigarettes) or dust cause breathing difficulties?
Femoral pulses	<ul style="list-style-type: none"> • Palpate (feel) femoral pulses • Strong and equal (symmetrical both sides)?
Heart sounds	<ul style="list-style-type: none"> • Auscultate (listen) for heart sounds • Are the sounds normal? • Are there additional sounds such as murmurs or clicks?
Haemoglobin	<ul style="list-style-type: none"> • Measure the Hb level via a point-of-care capillary sample or venous blood

1.1 Breathing procedure

- Ascertaining a child's past history of unresolved chest infections, coughs and abnormal breathing is essential to identify and prevent future chronic chest conditions
- Observe the child's chest rise and fall
- Using a stethoscope listen to the child's chest for breathing sounds
- Record how many breaths the child takes in 1 minute

1.2 Femoral pulses procedure

- Position the child lying supine (on their back) with their inguinal (groin) area exposed
- Flex the hips and gently abduct the legs
- Place the tips of 2 or 3 fingers along the inguinal ligament midway between the iliac crest and the pubic symphysis
- Palpate both left and right femoral pulses simultaneously to make certain they are equal (symmetrical both sides) and strong
- Femoral pulses can be difficult to palpate and may take some time while repositioning fingers
- If the pulses can not be palpated refer to another clinician to assess

1.3 Heart sounds procedure

- A suitably trained clinician will check heart sounds. See Resource 1.

1.4 Haemoglobin (Hb) procedure

- Clinicians should refer to the product instructions to familiarise themselves with the type of haemoglobinometer they are using
- Ensure the haemoglobinometer is calibrated and the cuvettes have not expired

2. Results

2.1 Breathing result

- See Table 2. for respiratory rates for healthy children
- The child should not get breathless at rest or walking short distances or wake at night breathless
- It is normal to be breathless after running or playing provided the recovery to normal breathing occurs quickly
- Be mindful that children can be exposed to irritants such as cigarette smoke, open fires and dust which will exacerbate noisy breathing, breathlessness, coughing and wheezing

Table 2. Respiratory rates for healthy children⁵

Age	Breaths/minute
< 1 year	21–45
1–4 years	15–35
5–11 years	15–30
> 12 years	16–25

2.2 Femoral pulses result

- Both pulses should be strong and equal
- Femoral pulses should not be weak, unequal or absent

2.3 Heart sounds result

- Assessing heart sounds should be undertaken by an appropriately trained clinician
- Heart sounds should be free of murmurs, gallops, clicks or other abnormal sounds
- Provide the child, parent or carer with details for the next scheduled follow-up appointment

2.4 Haemoglobin result³

- See Table 3. for haemoglobin levels
- Clinical signs of low haemoglobin include:
 - pallor
 - heart murmurs

- lethargy
 - failure to thrive
 - signs of cardiac failure
 - weakness
 - shortness of breath
- Refer all children to the MO/NP if haemoglobin levels \leq lower limit

Table 3. Haemoglobin levels in children³

Age	Average Hb g/L	Lower limit Hb g/L
2 months	115	90
2–6 months	115	95
6–24 months	120	105
2–6 years	125	115
6–11 years	135	115
Girls > 12 years	140	120
Boys > 12 years	155	130

3. Brief intervention

3.1 Haemoglobin

- Provide nutritional advice encouraging foods that are iron rich or improve iron absorption:
 - breastfeeding exclusively to around 6 months
 - age appropriate infant formulas
 - red meat, beef, lamb, liver, kidneys or bush meat
 - chicken, fish, egg yolks
 - iron fortified baby cereal
 - fruit juice (improves iron absorption)
 - fresh or dried fruit and green vegetables such as spinach, silverbeet, broccoli
 - lentils, beans, grains, whole wheat, brown rice, nuts (in children over 2 years)
- Provide information on foods that should be avoided which are iron poor or inhibit absorption:
 - cow's milk < 1 year of age
 - large amounts of cow's milk > 1 years of age (> 500ml/day)
 - coconut milk, goats milk, powdered milks or soy milks
 - caffeinated drinks such as tea or coffee
 - soft drinks or cordial

3.2 Breathing

- Provide information to parents about triggers of breathing problems as per Table 4.

Table 4. Known breathing problem triggers in children under 12 years of age⁷

Avoidable triggers	Unavoidable triggers
Always avoid	Do not avoid
<ul style="list-style-type: none"> • Cigarette smoke 	<ul style="list-style-type: none"> • Exercise • Laughter
Avoid or reduce if possible	Manage
<p>Allergens</p> <ul style="list-style-type: none"> • Animals • Cockroaches • House dust mite • Moulds • Allergens at school/daycare • Pollens <p>Airborne/environmental irritants</p> <ul style="list-style-type: none"> • Cold/dry air • Fuel combustion e.g. gas heaters • Home renovation materials • Household aerosols • Moulds (airborne) • Irritants at school/daycare • Outdoor industrial and traffic pollution • Perfumes/scents/incense • Smoke e.g. any bushfires and camp fires • Thunderstorms in spring and early summer (grass pollen) <p>Certain medicines</p> <ul style="list-style-type: none"> • Aspirin and NSAIDs (in patients with aspirin-exacerbated respiratory disease) • Bee products e.g. pollen, propolis, royal jelly • Echinacea <p>Dietary triggers</p> <ul style="list-style-type: none"> • Food chemicals/additives (if person is intolerant) • Thermal effects e.g. cold drinks 	<p>Respiratory tract infections</p> <p>Certain medicines (requires close specialist supervision)</p> <ul style="list-style-type: none"> • Aspirin (when given for purpose of desensitisation) • Anticholinesterases and cholinergic agents • Beta blockers <p>Co-morbid medical conditions</p> <ul style="list-style-type: none"> • Allergic rhinitis/rhinosinusitis • Gastro-oesophageal reflux disease • Nasal polyposis • Obesity • Upper airway dysfunction <p>Physiological and psychological changes</p> <ul style="list-style-type: none"> • Extreme emotions • Hormonal changes e.g. menstrual cycle

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4. Referral

- Refer to a dietitian and the current edition of the *Primary Clinical Care Manual* for lower limit haemoglobin values
- Refer any child to the MO/NP with:
 - unequal or unidentified femoral pulses
 - unusual heart sounds
 - abnormal haemoglobin result
- Refer all children to the MO/NP who present with:
 - noisy breathing, wheezing, breathlessness

- persistent wet cough
- see [Bronchiectasis, page 264](#)

- Any child whose clinical measurements continue to be outside of normal range despite brief intervention require further investigation and should be referred to the MO/NP
- For any concerns about any child refer to a senior clinician

5. Follow-up

- Place the child on a recall register to monitor growth if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

6. References

1. RHD Australia (ARF/RHD writing group). 2020. The 2020 Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (3rd edition). Menzies School of Health Research. Accessed: 2020, Mar. Available from: <https://www.rhdaustralia.org.au/arf-rhd-guideline>
2. National Aboriginal Community Controlled Health Organisation and The Royal Australian College of General Practitioners. 2018. National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people. 3rd edn. Victoria: The Royal Australian College of General Practitioners Ltd. Accessed: 2020, August. Available from: <http://www.naccho.org.au/resources/>
3. The Royal Children's Hospital Melbourne. Anaemia: Assessment. Victoria, Australia: The Royal Children's Hospital Melbourne. Accessed: 2020, August. Available from: https://www.rch.org.au/clinicalguide/guideline_index/Anaemia_Guideline/#definition
4. Lin J C. 2018. Hematology. Chapter 34: Approach to Anemia in the Adult and Child. Ipswich: Elsevier Inc. Accessed: 2018, Sep. Available from: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,athens&db=edselp&AN=B9780323357623000342&site=eds-live>
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6. Fleming S, Thompson M, Stevens R, Heneghan C, Plüddemann A, Maconochie I, Tarassenko L, Mant D. Normal ranges of heart rate and respiratory rate in children from birth to 18 years of age: a systematic review of observational studies. *The Lancet*; 2011; 377 (9770). pp 1011-1018. Accessed: 2020, August. Available from: <http://www.sciencedirect.com/science/article/pii/S014067361062226X>
7. National Asthma Council Australia. 2019. Australian Asthma Handbook v2.0. Melbourne. Accessed: 2020, August. Available from: <http://www.asthmahandbook.org.au>

7. Resources

1. Cardiac Auscultation Reference Guide available from: <http://www.easyauscultation.com/heart-sounds>
2. Online education for this topic available from: <https://www.health.qld.gov.au/rrcsu/html/parrot-online-education>

Continence and elimination (child)

Information^{1,2,3}

- Nocturnal enuresis (bed wetting) is common in Australia with approximately 1 in 5 children wetting the bed
- 3 - 5% of children aged between 5 and 17 have daytime incontinence
- 1/3 of these children will also experience nocturnal enuresis
- Daytime wetting is more common in girls than boys
- Bed-wetting is more common in boys
- Incontinence improves with age but children do not always grow out of it
- About 1 - 3% of children experience faecal incontinence
- Most continence problems are due to biological, developmental, genetic, environmental or emotional factors, very few are due to anatomical defects
- For parents, the main concern is often the emotional and social effects on their children including feelings of embarrassment and low self esteem
- Other issues include sleep disruption, laundry workload and costs

Child safety notification

- If there is a suspicion of harm or neglect consider a referral to child safety. See Appendix 2: [Child safety reporting, page 513](#)

Health check recommendations

All children from birth to under 6 months, 4 years and 7 years of age

1. Procedure

- Ask the parent or child the age appropriate questions for the child. See Table 1.
- Children from birth to under 6 months are checked for elimination issues
- 4 and 7 year olds are checked for continence
- Children between 6 months and 3 years of age are not checked for continence or elimination issues as this age group are learning bladder and bowel control which is a normal developmental stage
- Determine if the child requires a referral for further assessment
- Ensure child is placed onto a follow-up and recall register and monitor according to requirements

Table 1. Age appropriate continence questions for children

Questions	Answers
Birth to < 6 months of age	
How many wet nappies does the baby have per day?	<ul style="list-style-type: none"> • Are the nappies full? • What colour is the urine? • Is the urine offensive to smell?
Is the parent worried about their baby's bowel movements?	<ul style="list-style-type: none"> • What is the consistency of the stools? • What colour? • How often?
4 years and 7 years of age	
Is the child independent in toileting?	<ul style="list-style-type: none"> • Handwashing?
Is the child incontinent of urine or faeces?	<ul style="list-style-type: none"> • When? Where? • What happens before and after the incident?
Does the child wet the bed?	<ul style="list-style-type: none"> • When? • Daytime sleep also?

2. Results

- Be mindful that incontinence in children can also be attributed to urogenital infections and sexual abuse
- If a continence issue is identified provide brief intervention and make a referral to an appropriate source

3. Brief intervention

3.1 Birth to < 6 months of age^{1,2,3}

- It is normal for a fully breastfed child to not have a bowel motion for several days to a week
- Bottle-fed children should have a dirty nappy daily to every few days
- Up to the age of 6 months babies should have 5 - 8 wet nappies each day, more for cloth nappies:
 - the urine should be a pale straw colour
 - the smell should not be offensive
- See [Diet and nutrition, page 16](#)

3.2 Children age 4 years and 7 years old^{1,2,3}

- Most children will gain daytime bladder control by the age of 4 years
- Nocturnal enuresis is a common problem in young children and can continue into teen years:
 - 20% of 5 year olds bed-wet
 - 7% of 7 year olds bed-wet
 - 1 - 2% of teenagers bed-wet

- Once the child is 5½ years of age they can be offered an enuresis treatment program
- By 7½ years of age enuresis begins to impact socially it is recommended the child be referred to an enuresis treatment program
- Children at these ages with disabilities or medical conditions may not be independent in toileting
- 1 - 3% of children will have faecal soiling
- Almost all cases of soiling happen because the large bowel is not emptying properly and the child's bowel is overloaded with faeces
- See [Diet and nutrition, page 16](#)

4. Referral¹

- For any suspicion of incontinence due to any abuse see Appendix 2: [Child safety reporting, page 513](#)
- For children up to 6 months of age, refer to the MO/NP or child health nurse if:
 - the urine colour is dark yellow or the baby is having < 5 wet nappies a day despite encouraging more fluids or breastfeeding
 - according to the parent the faeces is foul smelling, watery, discoloured (white, green, or bloodstained) or hard
- Refer children under 6 years of age to the child health nurse for:
 - infant elimination concerns
 - behaviour related continence and elimination concerns
- Refer early any child under 6 years of age with a known learning disability or autism where difficulties toilet training is anticipated to:
 - continence services and/or
 - the local child developmental unit
- Refer to the MO/NP and continence services for children over 4 years of age if:
 - the child who has been dry suddenly starts wetting at night
 - the wetting is frequent after school age
 - the wetting bothers the child or makes them upset or angry, or the child wants to become dry
 - a child over 4 years of age regularly wets during the day
 - a child has regular bowel accidents (skid marks or larger amounts of faeces) after the age of 4 years of age
 - toilet training has been successful then the child later starts to soil
- If you have any concerns about a child's continence refer to the MO/NP
- If the child has chronic diarrhoea, acute gastroenteritis and dehydration, or constipation refer to the current edition of the *Primary Clinical Care Manual* (PCCM)

5. Follow-up

- Place the child on a recall register to monitor growth if required
- Ensure all referrals are actioned

- Provide the parent with details for the next scheduled follow-up appointment

6. References

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4. The Royal Children's Hospital Melbourne. 2018. Urinary Incontinence - Daytime wetting. Victoria: The Royal Children's Hospital Melbourne. Accessed: 2020, August. Available from: https://www.rch.org.au/clinicalguide/guideline_index/Urinary_Incontinence_-_Daytime_wetting/

7. Resources

1. The Continence Foundation of Australia website with available from: <https://www.continence.org.au/>
2. Resources for parents and children available from: <https://continence.org.au/who-it-affects/children/bedwetting-children>
3. Tips for bedwetting children who want to enjoy a sleep over available from: <https://www.continence.org.au/resources.php/01tA0000001b1cHIAQ/tips-for-bedwetting-children-who-want-to-enjoy-a-sleepover>
4. The Continence Foundation of Australia Victorian Branch website available from: www.continencevictoria.org.au
5. One step at a time a resource for parents of children with disabilities available from: <http://www.continencevictoria.org.au/resources/children>
6. eric: The Children's Bowel and Bladder Charity available from: www.eric.org.uk
7. Australian Government Bladder Bowel website available from: www.bladderbowel.gov.au

Developmental milestones

Information

- Developmental milestones are a set of age-specific tasks that most children can do by certain age ranges
- Milestones are used to check how children are developing
- The age at which a typical developing child reaches milestones varies
- Child development refers to how a child progresses to do more complex things as they get older
- Playing with, talking to, stimulating, and reading to children assists child development

Note

- This health check is not meant as a thorough developmental screen rather a check to identify if a thorough developmental screen is required
- If there is any concern or doubt about a child's development, refer early, do not wait

Health check recommendations

All children under the age of 5 years

Within 3 months of a child entering foster care under 5 years of age

1. Procedure

- Note the developmental milestones in Table 1. and ascertain if the child has met the milestone by:
 - asking the parent
 - observing the child's interaction with the parent and environment

Parents are the best historians as to how their child is developing. Be mindful to listen to any concerns that a parent has in regards to their child

- If the child's age falls between the age brackets, refer to the previous age bracket e.g. a 15 month old would be checked against the 12 month old bracket
- Determine if the child requires a referral according to the criteria and place them on a follow-up and recall register

Table 1. Age related developmental milestones^{1,2}

6 months	
Social-emotional	<ul style="list-style-type: none"> • Smiles or squeals in response to people
Communication	<ul style="list-style-type: none"> • Babbling i.e. oohh, aahh • Recognises their name when called
Fine motor and cognition	<ul style="list-style-type: none"> • Reaching for and holding toys (palmer grasp) • Explores objects with hands, eyes and mouth • Brings hands together at midline
Gross motor	<ul style="list-style-type: none"> • Supports head when held in sitting position • Holding head and shoulders up when on tummy
9 months	
Social-emotional	<ul style="list-style-type: none"> • Shares enjoyment with others using eye contact or facial expression
Communication	<ul style="list-style-type: none"> • Gesturing e.g. pointing, waving, showing • Using 2 part babble e.g. mama, dada, gaga
Fine motor and cognition	<ul style="list-style-type: none"> • Holds objects • Gives objects when requested • Moves toys from one hand to another
Gross motor	<ul style="list-style-type: none"> • Rolling • Sits without support • Moves e.g. creeping or crawling motion • Bears weight on legs well when held upright
12 months	
Social-emotional	<ul style="list-style-type: none"> • Notices someone new • Plays early turn based games e.g. peekaboo
Communication	<ul style="list-style-type: none"> • Babbles phrases that sound like talking • Responds to familiar words e.g. puppy, mummy
Fine motor and cognition	<ul style="list-style-type: none"> • Feeds self e.g. with finger foods or holding own cup • Able to pick up small items using index finger and thumb (pincer grip)
Gross motor	<ul style="list-style-type: none"> • Moves e.g. creeping, crawling motion, bottom shuffle • Pulled to stand independently and holds on for support

These are definitive milestone cut-offs. Failing one or more criteria for a child's age indicates a delay in development and requires a comprehensive developmental screen, monitoring and follow-up. See Resource 1.

Table 1. Age related developmental milestones (continued)^{1,2}

18 months	
Social-emotional	<ul style="list-style-type: none"> • Shows interest in playing and interacting with others
Communication	<ul style="list-style-type: none"> • Words are clear • Understands short requests e.g. where is the ball?
Fine motor and cognition	<ul style="list-style-type: none"> • Scribbles with a crayon • Attempts to stack blocks after demonstration
Gross motor	<ul style="list-style-type: none"> • Attempts to walk without support • Stands alone
2 years	
Social-emotional	<ul style="list-style-type: none"> • Uses toys for their purpose e.g. cuddles a teddy rather than bangs, drops or throws toys
Communication	<ul style="list-style-type: none"> • Learning new words • Puts words together e.g. push car
Fine motor and cognition	<ul style="list-style-type: none"> • Interested in self care skills e.g. feeding or dressing
Gross motor	<ul style="list-style-type: none"> • Walks independently • Able to walk up and down stairs holding on
3 years	
Social-emotional	<ul style="list-style-type: none"> • Interest in pretend play • Notices and understands feelings in themselves and others e.g. happy or sad
Communication	<ul style="list-style-type: none"> • Familiar people understand child's speech • Uses simple sentences e.g. big car go
Fine motor and cognition	<ul style="list-style-type: none"> • Attempts self care e.g. feeding or dressing • Manipulates small objects e.g. threading beads
Gross motor	<ul style="list-style-type: none"> • Runs and jumps • Walks up and down stairs
4 years	
Social-emotional	<ul style="list-style-type: none"> • Able and willing to play co-operatively
Communication	<ul style="list-style-type: none"> • Speech easy to understand • Able to follow 2 step directions e.g get the ball and give it to me
Fine motor and cognition	<ul style="list-style-type: none"> • Toilet trained by day • Able to draw lines and circles
Gross motor	<ul style="list-style-type: none"> • Able to walk, run, climb, jump and use stairs confidently • Catches, throws and kicks a ball
5 years and over	
<ul style="list-style-type: none"> • Any milestone deficits in children over the age of 5 years will be identified in the school setting 	

These are definitive milestone cut-offs. Failing one or more criteria for a child's age indicates a delay in development and requires a comprehensive developmental screen, monitoring and follow-up. See Resource 1.

2. Results

- A fail in one or more criteria indicates a developmental delay and requires a full developmental screen undertaken by a suitably trained clinician using a screening tool such as:
 - the Parental Evaluation of Developmental Status (PEDS) for 0–6 year olds or
 - the Ages and Stages Questionnaire (ASQ) for 0–6 year olds. See Resource 1.

3. Brief intervention

- Encourage parents to interact with their children including:
 - reading
 - talking
 - physical play
- If a child is progressing well with their milestone development provide the parent with expected milestone progression information. See Resource 3.
- See [Developmental delay in children, page 347](#)

4. Referral

- Referral is based on results of quantifiable developmental screening tools i.e. the ASQ or PEDS results. Refer to a suitably qualified clinician to attend

A comprehensive developmental screen and urgent referral is required if at any age any of the following are present:

- Any parental concerns
 - Loose and floppy movements (low tone) or stiff and tense (high tone)
 - Difference in strength, movement and tone between right and left sides of body
 - Poor interaction with adults or other children
 - Lack of response to sound or visual stimuli
 - Significant loss of skills
 - Not achieving indicated developmental milestones
 - Lack of or limited eye contact
 - Any other clinical concern
- For delays in the:
 - **social-emotional domain** refer to a speech pathologist and/or occupational therapist and/or a child health nurse
 - **communication domain** refer to a speech pathologist and/or a child health nurse
 - **fine motor and cognition domain** refer to a physiotherapist and/or occupational therapist and/or a child health nurse
 - **gross motor domain** refer to a physiotherapist and/or occupational therapist and/or a child health nurse
 - See [Developmental delay in children, page 347](#)

5. Follow-up

- Place the child on a recall register to monitor growth if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

6. References

1. Child Development Program in conjunction with Brisbane North Primary Health Network. 2016. Red Flags Early Identification Guide for children aged birth to five years. Second edition. Brisbane: Queensland Health. Accessed: 2020, Mar. Available from: <https://www.childrens.health.qld.gov.au/chq/our-services/community-health-services/child-development-program/>
2. eTG complete. 2012. Management guidelines: Developmental disability. Version 3. Victoria, Australia: Therapeutic Guidelines Ltd. Accessed: 2020, August. Available from: <https://tgidcdp.tg.org.au/etgAccess>

7. Resources

3. Parent Evaluation of Developmental Status (PEDS) available from: <https://pedstest.com/index.html> and the Ages and Stages questionnaire is available from: <https://www.sciencedirect.com/science/article/pii/S1665114617300102>
4. “Red Flag” resource available from: <https://www.childrens.health.qld.gov.au/chq/our-services/community-health-services/child-development-program/>
5. Growth and development fact sheets available from: <https://www.childrens.health.qld.gov.au/chq/information-for-families/fact-sheets/>

Ears and hearing (child)

Information^{1,2,3,4}

- Untreated ear disease can cause long term hearing loss
- There can be few or no obvious signs and symptoms of hearing loss which can affect a child's:
 - speech and language
 - ability to play and develop socially and emotionally
 - ability to learn and have positive educational outcomes
- In later life hearing loss can create challenges for:
 - school completion rates
 - health literacy levels
 - vocational and job prospects
 - social isolation
 - mental health issues
- Aboriginal and Torres Strait Islander children:
 - experience the highest rates of middle ear disease and associated conductive hearing loss in Australia
 - develop these ear issues earlier, more persistently and more severely than the rest of the population
- Refer to the current edition of the *Primary Clinical Care Manual* to manage any acute ear presentations including a discharging ear

Note

- Hearing loss can significantly impact speech, language and listening skills. Ensure a child's communication milestones are assessed. See [Developmental delay in children, page 347](#)

Health check recommendations

All children have a hearing screen at birth. Any child who didn't complete testing should be followed-up

All children if clinically indicated

Aboriginal and Torres Strait Islander children < 6 years at every at every scheduled check and opportunistically

Aboriginal and Torres Strait Islander children > 6 years annually

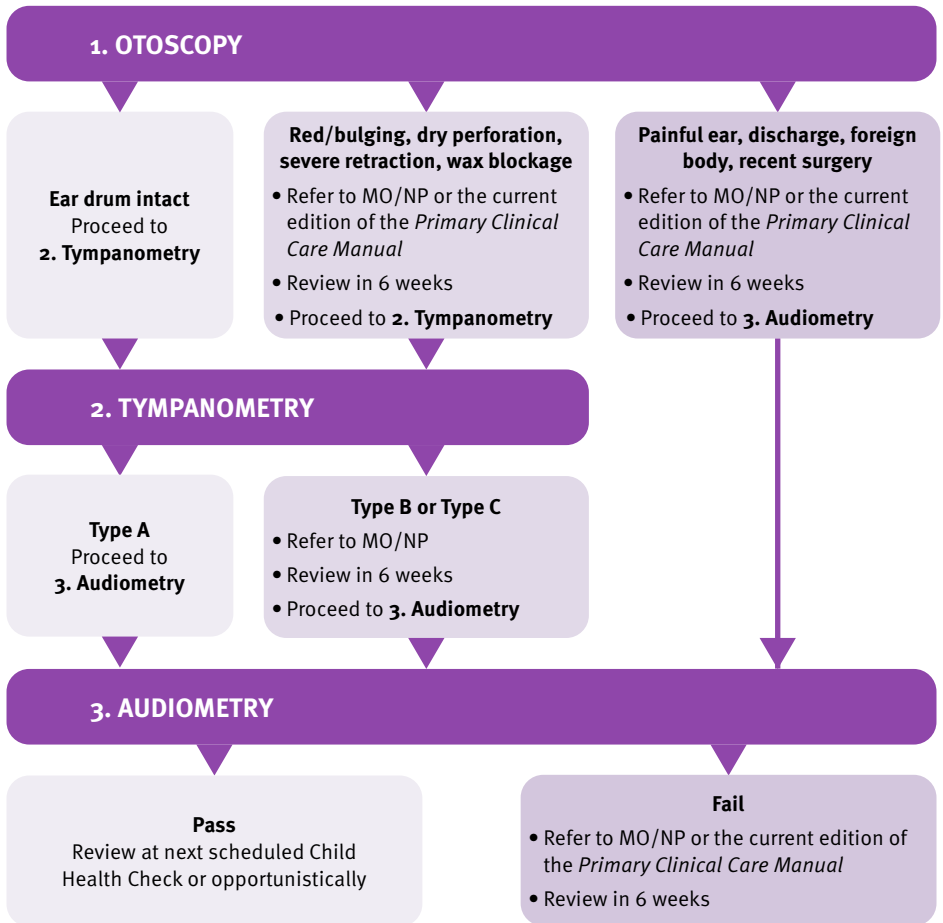
All non-Aboriginal and Torres Strait Islander children aged 5 and 12

1. Procedure

- Introduce the questions by asking about any concerns the parent or carer may have about their child's hearing
- Ask the questions according to the child's age and perform the corresponding procedures. See Table 1.
- Determine if the child requires a referral according to the criteria and place on a follow-up and recall register. See Figure 1.

Table 1. Age appropriate questions and procedures for child ears and hearing

Age	Questions	Procedure
1–6 weeks	<ul style="list-style-type: none"> • Did the infant have a newborn hearing screen? • Is the baby startled by loud noises such as a loud clap? • Has the infant been free of ear infections or discharge? 	<ul style="list-style-type: none"> • If 'no', and/or if discharge is present or reported, organise immediate MO/NP review
2–12 months	<ul style="list-style-type: none"> • Does the parent think their child can hear them? • Does the child look or turn towards sound or voices? • Is the parent happy with their child's hearing? • Has the child been free of ear infections or discharge? 	<ul style="list-style-type: none"> • If 'no', AND discharge is present or reported, organise immediate MO/NP review • Otherwise if 'no' then perform otoscopy plus tympanometry (from 6 months)
18 months to 5 years	<ul style="list-style-type: none"> • As above plus • Is the parent concerned about their child's speech and language? 	<ul style="list-style-type: none"> • As above plus include audiometry (from 3½ years)
<p>All Aboriginal and Torres Strait Islander children and children living in rural and remote locations:</p> <ul style="list-style-type: none"> • < 6 years at every scheduled check and opportunistically • > 6 years annually <p>All non-Aboriginal and Torres Strait Islander children</p> <ul style="list-style-type: none"> • aged 5 and 12 		<ul style="list-style-type: none"> • Otoscopy, tympanometry (from 6 months) and audiometry (from 3½ years)
5 to < 15 year olds	<ul style="list-style-type: none"> • Family history of genetic hearing loss? • History of frequent ear, nose and throat infections? • Speaks in loud or monotone voice? • Does not respond to name? • Watches others continuously? • Asks for statements to be repeated? • Withdraws in a group? • Has learning problems in class? • Has disruptive and impulsive behaviour? • Teacher reports hearing difficulty? • Parent /carer reports hearing difficulty? 	<ul style="list-style-type: none"> • If 'yes' to any questions then perform otoscopy, tympanometry and audiometry

Figure 1. Hearing health check review and referral procedure

2. Otoscopy^{1,2,3}

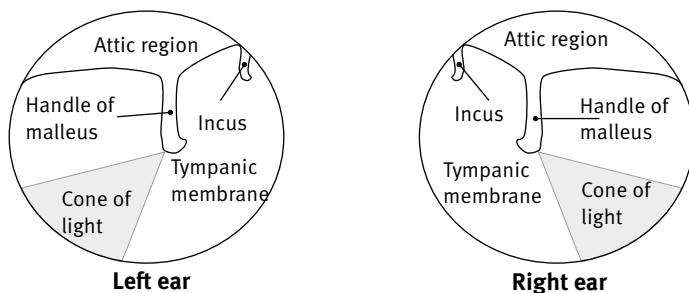
- Otoscopy is the visual examination of the ear canal and ear drum. See Figure 2.

2.1 Steps to remember

- If the child has ear pain or notable discharge, refer to the MO/NP or to the current edition of the *Primary Clinical Care Manual*
- Observe the mastoid (the bone behind the ear) and the area under the ear for infection, swelling or tenderness
- Check the pinna for size, shape, colour or lesions
- Observe the ear canal for:
 - discharge
 - redness/swelling
 - fungal infections

- lumps or bony growths
- foreign bodies (excluding grommets)
- wax
- fluid
- Inspect the tympanic membrane (eardrum) for:
 - colour:
 - transparent and shiny is normal
 - dull or opaque may represent fluid behind tympanic membrane
 - cone of light (reflection):
 - right ear at 5 o'clock and left ear at 7 o'clock
 - reflections elsewhere indicates bulging
 - the handle of the malleus
 - perforations
 - abnormalities of the attic region of each ear
 - see Figure 2.
- Repeat the procedure for the other ear

Figure 2. Visual representation of the eardrums



3. Tympanometry^{1,2,3}

- If there is discharge from ears do not proceed. Refer to the MO/NP and the current edition of the *Primary Clinical Care Manual* to manage a discharging ear
- Tympanometry is a test of middle ear function and measures:
 - ear canal volume (ECV)
 - middle ear pressure
 - middle ear compliance or movement
- See Resource 1. for further tympanometry support

3.1 Steps to remember

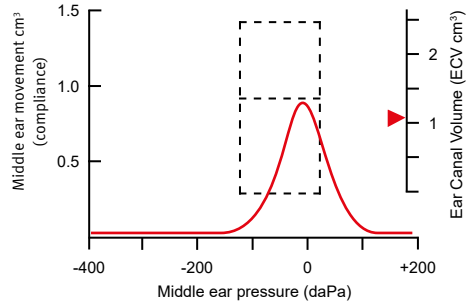
- A “Leak” or “Blockage” error can occur for many reasons:
 - clogged probe tip
 - probe tip too large or small

- head movements or swallowing
- probe tip against the ear canal wall
- debris, foreign body or wax in ear canal
- To rectify try:
 - a different sized probe tip
 - cleaning probe tip
 - reposition the probe tip in the ear canal

Figure 3. Tympanometry traces

Type A

- A peak within the normative values box
- Normal ear canal volume (ECV) = 0.3 to 1.6 cm³
- Normal middle ear movement (compliance) = 0.2–1.5 cm³
- Normal middle ear pressure = +50 to -100 daPa

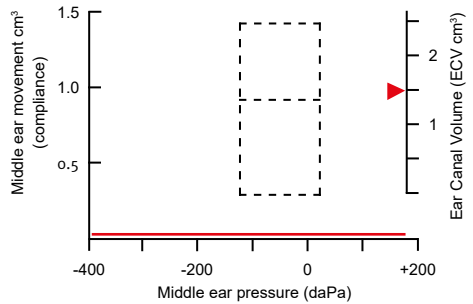


Type B

- A flat line or no peak indicates no middle ear movement or pressure
- It is important to observe the ear canal volume when interpreting Type B findings

Possible causes

- Otitis media with effusion (middle ear fluid)
- Eardrum perforation (hole) or grommet indicated by large ear canal volume
- Ear canal blockage indicated by small ear canal volume
- Wax

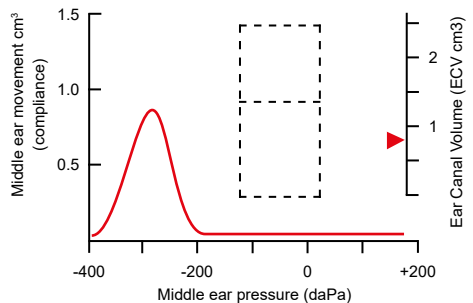


Type C

- A peak to the left of the normative values box
- Normal ear canal volume
- Normal middle ear movement
- Negative middle ear pressure

Possible causes

- Eustachian tube not working properly



4. Audiometry^{1,2,3}

- Audiometry measures the ability of the ear to:
 - detect the pitch of a sound as hertz (Hz)
 - detect the loudness of a sound as decibels (dB)
- Audiometry is a simple and quick test to identify those children at risk of hearing problems requiring further assessment

4.1 Steps to remember

- For younger children:
 - place the headphones on the desk set to 4000 Hz and 90 dB
 - present the tone and encourage them to clap, press button, etc.
 - praise with appropriate response
 - change frequency to ensure they will respond even though the sound is slightly different
 - once they are able to respond reliably, proceed with testing
- Children will look for visual cues on when to respond. Ensure:
 - the child is positioned so that they are unable to see your hands, face or the audiometer
 - the tones are presented at irregular intervals to decrease anticipation of the tone
- Set hertz (Hz) dial to 4000 Hz
- Set decibel (dB) to 50 dB
- Test one ear first
- If the child indicates they can hear the sound then reduce sound to 35 dB and repeat
- If the child indicates they can hear the sound then reduce to 25 dB and repeat
- If the child does not respond then increase by 5 dB increments until the child responds
- Do not go above 80 dB
- Record the result that the child responds to twice at the lowest perceived dB
- Repeat for the other ear
- Repeat the procedure for both ears at 2000 Hz and 1000 Hz
- To pass, the child needs to respond twice at 25 dB at 1000 Hz, 2000 Hz and 4000 Hz

5. Results

- Refer to Figure 1.

6. Brief intervention^{1,2,3,4}

- Discuss with all parents:
 - nose blowing
 - hand and face washing
 - avoiding prop bottle feeding a child

- avoiding bottle feeding a child to sleep
- avoiding leaving bottles in a child’s cot
- avoiding loud noises (especially electronic devices with earbuds or headphones)
- avoiding smoke from cigarettes or camp fires
- only swimming in running water or swimming pools
- eating healthy foods
- avoiding putting anything in child’s ears (including cotton buds)
- often there are no signs and symptoms of hearing loss
- if concerned, always come to the health centre

7. Referral

- If the child has ear pain or discharge, manage as per the current edition of the *Primary Clinical Care Manual*
- Make a referral as per Figure 1.
- If you or the parent has any concerns about a child’s hearing, refer to the MO/NP
- For any concerns related to speech, communication or listening skills, refer to speech pathology

8. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

9. References

1. Centre of Research Excellence in Ear and Hearing Health of Aboriginal and Torres Strait Islander Children. 2019. Otitis media guidelines [2017 update]. Menzies School of Health Research: Australian Government Department of Health and Ageing. Revised: 2017; Accessed: 2020, Aug. Available from: <http://otitismediaguidelines.com/draft/#/start-main>
2. Child and Youth Community Health Services. 2017. Understanding the Hearing Health Check. Brisbane: Queensland Health. Revised: Dec 2017; Accessed: 2020, August. Available from: <https://www.childrens.health.qld.gov.au/chq/our-services/community-health-services/deadly-ears/resources/>
3. Audiology Australia. 2013. Audiology Australia Professional Practice Standards–Part B Clinical Standards. Victoria: Audiology Australia. Revised: Jul 2013; Accessed: 2020, August. Available from: <https://audiology.asn.au/Home>
4. Department of Health. Australian Government. 2013. What is Otitis Media. Revised: Nov 2018; Accessed: 2020, August. Available from: <http://www.careforkidsears.health.gov.au/internet/cfke/publishing.nsf/Content/what-is-it>

10. Resources

1. Additional tympanometry support is available from Hearing Australia’s Tympanometry module for primary health providers available from: <https://www.youtube.com/watch?v=7CznW3abWNQ>
2. Care for Kids Ears available from: <http://www.careforkidsears.health.gov.au/internet/cfke/publishing.nsf>
3. Recommendations for clinical care guidelines on the management of otitis media in Aboriginal and Torres Strait Islander populations available from: <http://www.healthinfonet.ecu.edu.au/key-resources/promotion-resources/?lid=22141>
4. Growing Strong resources available from: <https://www.health.qld.gov.au/nutrition/patients#>
5. In Indigenous children, useful tools are the HATS and PLUM questionnaires available from: www.hearhappy.nal.gov.au

Environment

Information

- Exposure to environmental hazards such as: pollutants and chemicals, cigarette smoke, overcrowding, unsafe and unhygienic living arrangements, and unsafe sleeping arrangements, all influence health
- Avoiding these environmental hazards is vitally important to prevent childhood injury and illness
- The clinician can offer brief intervention that promotes positive learning and development environments where children are safe to play, explore and learn

Note

- For information regarding domestic violence see [Social-emotional well-being \(child\), page 132](#)
- For young children, the effects of unhygienic living conditions on skin conditions can be debilitating, leading to lifelong chronic conditions. Ensure to assess the skin of all household children. See [Skin \(child\), page 138](#)

Child safety notification

- If there is a suspicion of harm or neglect make a referral to child safety. See Appendices 2: [Child safety reporting, page 513](#)

Health check recommendations

All children < 15 years of age opportunistically

All Aboriginal and Torres Strait Islander children at every health check

1. Procedure

- Ask the age appropriate questions as per Table 1.
- Provide brief intervention if the parent answers other than the ideal
- Be prepared to explore the issues and refer for support
- If required place on a recall and follow-up register

Table 1. Age related environment questions

Question	Explore
Birth to under 18 months	
Where does the infant sleep?	<ul style="list-style-type: none"> • If permitted view sleeping area or cot • Assess for safety
Is the infant placed on their back to sleep?	<ul style="list-style-type: none"> • Ask
All children	
Is the child exposed to cigarette smoke?	<ul style="list-style-type: none"> • Are there smokers living with the child? • How many? • Where do smokers smoke?
How many people live in the house?	<ul style="list-style-type: none"> • The number of bedrooms? • Bedding arrangements • Observe for safety and hygiene concerns

2. Results

2.1 Exposure to cigarette smoke^{1,2}

- Children exposed to second-hand smoke experience higher rates of:
 - respiratory infections
 - middle ear infections
 - meningococcal infections
 - asthma
 - sudden infant death syndrome
- Occasional exposure to second-hand cigarette smoke, even on smoker's clothing, is harmful, especially to children

2.2 Overcrowding^{3,4}

- Overcrowding of dwellings increases the stress on kitchens, bathrooms, laundry facilities and sewerage systems
- In turn, this increases the risks of poor personal hygiene, places strain on interpersonal relationships and can expose a family to domestic violence
- Aboriginal and Torres Strait Islander children are 5 times more likely to live in overcrowded housing

2.3 Sudden unexpected deaths in infancy (SUDI) and sudden infant death syndrome (SIDS)⁵

- Between 1989 and 2012 there were 4,571 sudden unexpected deaths in infancy (including SIDS)
- The rate decreased by 80% within this same time frame with an estimated 7,990 lives saved directly attributed to risk reduction campaigns

2.4 Injury prevention⁶

- Falls, drowning, poisoning, road safety incidents, burns and scalds are amongst the

leading causes of hospital admission, death and disability for Australian children

- Injury is preventable, yet there are approximately 250 deaths and more than 50,000 child hospitalisations due to injury each year in Australia

3. Brief intervention

3.1 Exposure to cigarette smoke^{1,2,3,7}

- Babies and children should not, at any time, be exposed to **second-hand** smoke from smokers including in the house or in a confined space such as a motor vehicle
- Babies and children should not, at any time, be exposed to **third-hand** smoke from smokers, that is, cigarette vapours that adsorb onto walls, furniture, clothes, toys and other objects within 10 minutes to hours after a cigarette has been smoked:
 - toxic substances continue to be re-emitted into the air over the course of hours, weeks and months

3.2 Overcrowding

- Discuss basic hygiene principles with the parent and child including:
 - washing and drying hands after toileting, changing nappies and before food preparation and eating
 - the importance of coughing and sneezing into arm rather than hands and washing hands after blowing or wiping nose
 - the importance of oral hygiene and brushing teeth at least twice daily
 - not sharing toothbrushes and razors
 - regularly washing bed linen and clothes
 - regularly removing garbage away from living areas
 - ensuring pets are kept separate from living areas, especially where there is food preparation

3.3 SUDI, SIDS and a safe sleeping environment^{4,5,6}

- Providing safe sleeping information and strategies. See Resource 1.
- To reduce the risk of SIDS:
 - sleep baby on the back from birth
 - sleep baby with head and face uncovered
 - provide a safe cot, mattress, bedding and sleeping place
 - sleep baby in their own cot or bassinet in the same room as the parents for the first 6 to 12 months rather than bed sharing
 - avoid exposing baby to tobacco smoke before and after birth
 - encourage breastfeeding
- To provide a safe sleeping environment for an infant:
 - put baby's feet at the bottom end of the cot
 - ensure the cot meets Australian standards
 - use a firm, clean mattress that fits firmly in the cot
 - tuck bedding in securely
 - keep extra padding, quilts, doonas, duvets, pillows, cot bumpers, sheepskins and

soft toys out of the cot or sleeping place (including travel or porta-cots)

- The risk of SIDS significantly increases when:
 - the infant sleeps prone (front) or on their side
 - soft surfaces with loose bedding are present
 - a room is hot with excess clothing and bedding
 - sharing a bed (or sleeping space) especially with smokers
 - the infant is exposed to tobacco smoke
 - the infant is not immunised
 - bouncinettes, prams and strollers are used as unsupervised sleeping environments

3.4 Injury Prevention^{6,7,8}

- Discussion of the child's environment should include injury prevention and awareness strategies including:
 - the importance of supervision of small children
 - teaching children what is safe and what is not
 - fire safety e.g. stove tops, ovens and matches
 - water safety e.g. swimming pools and rivers
 - suffocation and strangulation risks e.g. plastic bags and blind cords
 - window and balcony safety e.g. falls from a height
 - kitchen safety e.g. knives
 - toys and equipment safety e.g. choking hazards on small parts or jamming fingers
 - car safety e.g. child car seat restraints
 - see Resource 2.
- Infants < 6 months of age should be kept out of direct sun:
 - outdoors protection should include clothing, sunscreen and hats
 - child sunscreen should only be applied to areas such as the face, ears and hands if these areas cannot be protected with clothing or wraps
 - see Resource 3.
- Encourage the parent to keep an updated list of emergency numbers near the telephone or in their mobile phones including:
 - Poisons Information Centre (131126)
 - local health centre
 - maternal and child health nurse
 - all-night pharmacist (if available)
 - trusted neighbours
 - relatives

4. Referral

- For any identified overcrowding or housing issues, advocate and refer the patient or family to:
 - the Department of Housing and Public Works. See Resource 4.
 - private real estate institutes

- housing co-ops
 - regional community housing providers
 - councils
- If there are any child safety concerns make a referral to the appropriate services. See Appendix 2: [Child safety reporting, page 513](#)

5. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the child, parent or carer with details for the next scheduled follow-up appointment

6. References

1. Gibson P, Chang A, et al. CICADA: Cough in Children and Adults: Diagnosis and Assessment. Australian Cough Guidelines summary statement. *Medical Journal of Australia*; 2010; 192 (5). pp 265-271. Accessed: 2020, August. Available from: <https://www.mja.com.au/journal/2010/192/5/cicada-cough-children-and-adults-diagnosis-and-assessment-australian-cough>
2. The Royal Australian College of General Practitioners (updated July 2014). 2011. Supporting smoking cessation: a guide for health professionals. Melbourne, VIC: The Royal Australian College of General Practitioners. Accessed: 2020, August. Available from: http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-publicat-document-smoking_cessation-cnt.htm
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8. Cancer Network Melanoma Guidelines Revision Working Party. 2008. Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand. Wellington: Cancer Council Australia and Australian Cancer Network, Sydney and New Zealand Guidelines Group. Accessed: 2020, August. Available from: https://wiki.cancer.org.au/australia/Guidelines:Melanoma#_ga=2.134977715.339940937.1554345438-129687582.1554345438

7. Resources

1. Safe sleeping resources available from: <http://www.sidsandkids.org/safe-sleeping/>
2. Making your Home safe resources available from: Raising Children at http://raisingchildren.net.au/articles/making_your_home_safe_for_your_child.html and <https://www.qld.gov.au/emergency/safety/children/child-safety>
3. Sun safe resources are available at: <https://www.cancer.org.au/>
4. The Department of Housing and Public Works is available from: <https://www.hpw.qld.gov.au/Pages/home.aspx>

Eyes and vision (child)

Information^{1,2}

- Undiagnosed eye and vision problems in children may lead to difficulty with learning, playing sport and confidence in dealing with social situations
- Aboriginal and Torres Strait Islander children, especially in remote areas, generally have better vision than their non-Indigenous peers
- Test all children wearing their prescribed glasses or contact lenses

Health check recommendations

All children from birth to < 15 years

All Aboriginal and Torres Strait Islander children annually

1. Procedure

- Ask the parent or child the age appropriate questions according to Table 1.
- Determine if the child requires any visual assessments
- Determine if the child requires a referral according to the procedures and place on a follow-up and recall register

During testing, observe the child's behaviour, e.g. holding head forward, frowning, blinking or squinting. This may indicate they are having difficulty seeing clearly

2. Eye appearance

- Sit child on chair. For security and compliance younger children should sit on parent's lap
- Ask the parent to hold the child's forehead if needed
- Check external and anterior eye
- With your thumb lift each eyelid (right first)
- Use a pen torch to check for scarring, cysts or styes
- Droopy eyelids (ptosis)
- Sore or watery eye (trichiasis, epiphora)
- Check conjunctiva and cornea for inflammation, swelling or discharge (conjunctivitis)
- Check pupils for asymmetry
- Abnormal movements (nystagmus)

Table 1. Age appropriate questions and procedures for child eyes and vision

Age	Procedure
1–6 weeks, 2 and 4 months	Eye appearance
1–6 weeks, 2–18 months	Red reflex
0–2 years	Fixates and follows an object
6–2 years	Corneal light reflex
3 to < 5 years, 6 and 12 year olds	Cover test Visual acuity Red reflex Fixates and follows an object
All other children between 5 and < 15 years of age	
Does child have any trouble seeing things?	If YES to any questions then perform a cover test and a visual acuity test
Does child have difficulty seeing what the teacher writes on the board?	
Does child have trouble seeing the television screen?	
Does child get a headache if they read for more than 10 minutes?	
Has child ever had an eye injury?	
Does the parent, teacher or health professional report a problem with vision, eye appearance or learning problems?	
Is there a family history of eye problems during childhood?	
Are there any current medical problems?	

3. Visual acuity test (VA)

- Place a Snellen eye chart or a Tumbling E eye chart 6 metres away (or 3 metres if using a scaled down chart) in a well lit area at eye level
- The Tumbling E eye chart is best for younger children
- Cover the eye not being tested with an occluder
- Explain to the child to state the letter you point at
- Point clearly to the letter being tested. Start at the top of the chart and go across the whole line
- Allow the child adequate time to respond
- Go along each line until the child can no longer identify letters
- If they get 3 or more incorrect letters on a line stop, go up a line and repeat

- Allow 2 attempts
- It is not necessary for the child to read the whole chart but most of the lowest line reached must be tested
- The line used to record visual acuity is the last line the child can read without making any mistakes
- Cover the right eye and check the left eye

3.1 Recording visual acuity¹

- Normal visual acuity is 6/9 for < 7 years olds and 6/6 for > 7 year olds
 - the first number refers to the distance that the child is standing away from the chart in metres
 - the second number is the lowest line that the child can read on the chart without error e.g. 6, 9, 12, 18, 24, 36 or 60. These numbers are found underneath the corresponding line on the chart

4. Fixates and follows an object

- Hold a pen or toy (for younger children) 30 cm away and slowly move it up, down, left and right in an 'H' pattern
- Watch the child's eyes track the object
- Ask the child to focus on something 6 metres away (picture). For younger children take a toy 6 metres away and observe them tracking it
- A 6 month old child should be able to fixate and follow an object at 30 cm and at 6 metres
- There should be no abnormal eye movements

5. Corneal light reflex

- Generally the child can be looking anywhere for this test
- Shine a pencil torch between the child's eyes at a distance of 30 cm
- Observe the light reflecting in both eyes
- If the reflection is in the same place on both corneas each eye is fixing on an object equally
- If the reflection is in different places on both corneas the eyes are not fixing on an object equally
- This test is a preliminary step to the cover test which will tell you which eye is affected

6. Red reflex

- Ophthalmoscopy to be done by a trained clinician
- Get the child to look at a distant point e.g. your ear, the wall
- Direct the ophthalmoscope light at the pupil from 30 cm away
- Look through the scope slowly moving back and forth, up and down until you see a red reflex (the blood at the rear of the retina)

- No red reflex may indicate a tumour, congenital cataract or haemorrhage

7. Cover test

- A cover test is performed to detect the alignment of the eyes to identify a squint (strabismus) or lazy eye (amblyopia)
- Ask the child to look at a distant target i.e. something specific more than 6 metres away, and encourage the child to keep their eyes still
- Cover their right eye with a card or piece of paper and observe the left eye
- Any corrective movement of the left eye (to re-establish fixation) indicates a squint
- Smoothly and slowly remove the card and observe the right eye
- Any movement of the right eye to establish fixation indicates a squint
- Repeat these steps for the left eye
- If needed repeat until satisfied that the test has been performed adequately
- Movements of the cover should be smooth and slow so the eye has time to fixate and blinking is not provoked
- Repeat all of the above steps for a near target e.g. your ear or a pencil

8. Referral

- Refer to the MO/NP, optometrist or ophthalmologist for any:
 - abnormal eye appearance
 - abnormal eye movement
 - reported blurriness
 - squinting to see
 - failure of child to fixate or follow an object
 - uneven eye movement
 - no red reflex
 - if the child's visual acuity is outside normal range in one or both eyes:
 - > 6/9 for under 7 year olds (i.e. 6/12, 6/18, etc)
 - > 6/6 for over 7 year olds (i.e. 6/9, 6/12, 6/18, etc)
 - eye movement during cover test is observed
 - other concerns

9. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

10. References

1. Boudville AJ, Anjou MD, Taylor HR. Eye health promotion to improve awareness and prevent vision loss among Indigenous Australians. *Health Promotion Journal of Australia*. 2013; 24 (1). pp 76-77. Accessed: 2020, August. Available from: <https://www.publish.csiro.au/paper/HE12913>
2. Taylor HR, National Indigenous Eye Health Survey Team. 2009. National Indigenous eye health survey: minimum barrang (tracking eyes): summary report. Melbourne, VIC: Indigenous Eye Health Unit, The University of Melbourne. Accessed: 2020, August. Available from: <https://healthinonet.ecu.edu.au/key-resources/publications/21333/?title=National%20Indigenous%20eye%20health%20survey%3A%20minimum%20barrang%20%28tracking%20eyes%29%3A%20summary%20report>
3. Child Health Sub-Network. Children's Health Queensland Hospital and Health Service. 2014. Child and Youth Health Practice Manual,. State of Queensland (Queensland Health). Accessed: 2020, August. Available from: <https://qheps.health.qld.gov.au/ccyfh>

11. Resources

1. Eye Health web page available from: <http://conditions.health.qld.gov.au/HealthCondition/condition/11/131/309/eye-health>
2. Health Insite Eye Health available from: http://www.healthinsite.gov.au/topics/Eye_Health
3. Australian Indigenous HealthInfoNet. Available from: https://healthinonet.ecu.edu.au/key-resources/publications/?kw=&kw=eyes&searchIn_title=1&joiner=OR&website=aih
4. Vision Australia available from: <https://www.visionaustralia.org/>
5. Indigenous Eye Health available from: <https://mspgh.unimelb.edu.au/centres-institutes/centre-for-health-equity/research-group/ieh>

General appearance

Information

- A head to toe physical observation of a child can identify issues requiring further investigations including:
 - structural abnormalities
 - injuries due to trauma
 - skin issues. See [Skin \(child\)](#), page 138

Child safety notification²

- Be alert to any general appearances that may indicate child abuse, harm or neglect such as:
 - bruises on any part of a child's body
 - bruises over soft tissue areas (bruises in children commonly occur over bony areas)
 - human bite marks
 - circular cigarette burns anywhere on body
 - lighter burns (might resemble a smiley face)
 - scalds from immersion in hot water such as feet, hands or buttocks
 - fractures of any type in children
 - grazes to genitalia
- See Appendix 2: [Child safety reporting](#), page 513

Health check recommendations

Head and face, limbs and joints for all children < 15 years of age

Genitalia up to 18 months of age for all children

1. Procedure

- Perform the age related physical observations as per Table 1.
- Provide brief intervention if any issues are identified
- Determine if the child requires a referral according to observations and place on a follow-up and recall register

1.1 Head and face¹

- Observe and/or feel:
 - what does the child's face look like generally?
 - does the child or young person have a small head (microcephaly)?
 - is there any flattened back of head (plagiocephaly)?
 - are there any facial abnormalities? e.g. thin upper lip, flattened philtrum (groove between the upper lip and nose), short palpebral fissures (eye openings)
 - check nose for alignment and structure

- check the lips for fullness and colour
- open the child's mouth and look at or feel the palate. Are there ridges? Is it flattened or raised?
- is the hair healthy and shiny or matted and dull? Are there any nits or lice?
- check the ears for size, shape, colour and the level in relation to the eyes
- are there any sores or scars?

Table 1. Age related general appearance observations for children

Area for observation	Procedure
Birth to < 15 years of age	
Head and face	• Observe and feel
Limbs and joints	• Observe and feel
Birth to < 18 months	
Genitalia	• Observe and feel

1.2 Limbs and joints (birth to < 18 months)¹

- Observe and feel:
 - general posture of the child
 - muscle tone and range of spontaneous movement
 - the general appearance of the limbs
 - for any swelling, tenderness, redness, warm or hot skin or pain around the joints
 - for any signs of injury such as bruising
 - the limbs for misalignment or incorrect anatomical position
- Identify any abnormalities of the hips:
 - lay the infant supine (on their back) on the examination table without their nappy
 - extend the infant's legs
 - ensure the pelvis is horizontal
 - keeping the hips symmetrical, extend the legs and check symmetry of knee creases
 - check for equal leg length
 - place middle fingers of each hand over the greater trochanter (outer side of hip joint) and thumbs on the inner side of the thighs
 - flex the knees and hips to right angles (90°) parallel with the midline
 - attempt to gently abduct (move away from the midline) both legs outward then adduct (move toward the midline) both legs inwards
 - note any limited or unequal movement
 - note any dislocation (listen and feel for clicking) or distress caused to the infant
- Identify any posterior abnormalities:
 - lay the infant prone (on their stomach) on the examination table without their nappy
 - observe for body symmetry, swellings, dimples, midline of back and buttock creases

- observe for any birthmarks such as mongolian blue spots
- note any hairy tufts in the midline (may indicate spina bifida occulta)
- note any dimples in the midline
- note any swelling or lumps in the midline (may indicate meningocele)
- note any deep pilonidal (top of the buttock crease) dimples
- note any evidence of trauma

1.3 Limbs and joints (18 months to < 15 years)¹

- Observe and/or feel:
 - the general appearance of the limbs
 - muscle tone and range of spontaneous movement
 - for any swelling, tenderness, redness, warm or hot skin or pain around the joints
 - for any signs of injury
 - the limbs for malalignment or incorrect anatomical position
 - the child moving, walking, weight bearing and standing
 - any abnormal walking, limping, shuffling, widely placed gait, toe walking, foot flopping, leg lagging, dragging, staggering, uncoordinated gait

1.4 Genitalia (general)¹

- Lay the infant supine (on their back) on the examination table without their nappy
- Observe and feel:
 - the appearance of the genital area
 - for evidence of rash, grazing, bruising or any other abnormality
 - for general nappy hygiene issues such as urine burns (nappy rash) or faecal matter
 - for evidence of neglect or sexual abuse
 - for congenital abnormalities, incomplete development or sexual ambiguity

1.5 Genitalia (girls)¹

- Observe the labia:
 - using 2 fingers gently separate the outer labia to reveal the inner labia and clitoris
 - note any discharge, thrush or faecal matter. This is an ideal opportunity for vaginal hygiene brief intervention
 - partially or fully fused labia may suggest the presence of a scrotum. Do not attempt to separate
 - a urinary opening that is not located below the clitoris may indicate the presence of a penis i.e. ambiguous genitalia
 - female genital mutilation (between infancy and 15 years)

1.6 Genitalia (boys)¹

- Ensure that hands are warm (when stimulated by cold or touch, the cremasteric muscle reflex causes the skin of scrotum to shrink and pull the testicles into the pelvic cavity)
- Inspect the penis for size and the placement of the urethral opening:
 - a non-erect penis at birth is 2–3 cm in length with a straight projection
 - microphallus (a small penis) may indicate other organ anomalies

- do not retract the foreskin of an uncircumcised penis more than is necessary to see the urethra
- Check if the testicles have descended by palpating the scrotum:
 - place the thumb and index fingers of one hand over the inguinal canals at the base of the scrotal sac to prevent the testicles from escaping into the inguinal canals or abdomen
 - use the other hand to gently inspect the scrotum for the presence of testicles
 - testicles in a newborn are approximately 1 cm in diameter
 - a testicle that cannot be palpated is considered as undescended or retractile and can be discovered by gently palpating the inguinal region
 - undescended testicles should descend by 3 to 6 months
 - oedema of the scrotum is common, especially after a breech delivery

2. Results

- Identify any concerns from above and provide appropriate brief intervention
- Refer as required

3. Brief intervention¹

- Brief intervention will be primarily guided by parental education and support which might include:
 - avoid retracting the foreskin of an uncircumcised penis
 - the foreskin will retract on its own accord at about 4 years of age by way of erection or childhood exploration
 - once the foreskin does retract, educate the child to clean underneath without soap. Soap will cause drying and excoriation
 - reassure and normalise any parental concerns for example:
 - normal childhood genitalia exploration
 - mongolian spots
 - nappy rash (and how to prevent)
 - plagiocephaly and progression (settles as child begins to move)

4. Referral^{1,2}

- Refer to the Appendix 2: [Child safety reporting, page 513](#) if there is any suspicion of child abuse, harm or neglect
- Refer to the current edition of the *Primary Clinical Care Manual*, a MO or NP for:
 - any swelling, tenderness, redness or pain around joints which may indicate acute rheumatic fever or rheumatic heart disease
 - any infected sores, scabies and other skin conditions
- Refer to a MO/NP or Child Health Nurse for further investigations if the following are noted:
 - thin upper lip, flattened philtrum and short palpebral fissures which may indicate fetal alcohol spectrum disorder. See [Developmental delay in children, page 347](#)
 - any cleft palate or cleft lip which may hinder a baby's feeding

- limited abduction of one or both legs or unequal leg length in newborn to 6 months
- any asymmetrical knee or buttock creases
- any pilonidal sinuses or deep dimples
- any ambiguous genitalia or fused labia
- testicles which are unable to be milked into scrotum
- one or both testicles are not palpable
- testicles felt in groin or lower abdomen
- any unexplained nodules, lumps or other concerns not mentioned here

5. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

6. References

1. Child Health Sub-Network. Children's Health Queensland Hospital and Health Service. 2014. Child and Youth Health Practice Manual, State of Queensland (Queensland Health). Accessed: 2020, August. Available from: <https://qheps.health.qld.gov.au/ccyfh>
2. COAG Health Council. 2009. Protecting Children is Everyone's Business National Framework for Protecting Australia's Children 2009–2020. Canberra, ACT: Commonwealth of Australia. Accessed: 2020, August. Available from: <https://www.dss.gov.au/our-responsibilities/families-and-children/publications-articles/protecting-children-is-everyones-business?HTML>

7. Resources

1. For further information see the current edition of Children's Health Queensland Hospital and Health Service, Child and Youth Health Practice Manual available from: <https://qheps.health.qld.gov.au/ccyfh>

Infant reflexes

Information^{1,2,3}

- Infant reflexes are tested to assess a child's neurological development and function
- Infant reflexes disappear as the child gets older and are usually absent after 6 months of age except for the blink reflex which persists throughout life
- Any infant presenting with absent reflexes or reflexes persisting past the recommended times must be referred to the MO/NP

Health check recommendations

All children from birth to 6 months as part of routine child health checks

1. Procedure

- Perform each reflex assessment
- Use the online videos to assist with reflex assessment. See Resource 1.
- Determine if the infant requires a referral according to a present or absent age related reflex and place on a follow-up and recall register

1.1 Moro reflex (1 week–2 months)^{1,2,3}

- With the infant supported in the semi-sitting position, allow the head and trunk to drop back to a 30 degree angle
- Observe the arms adduct (splay outwards) in an embracing motion followed by relaxed flexion
- The legs may follow a similar pattern of response
- This reflex diminishes in strength by 3–4 months and disappears by 6 months

1.2 Blink reflex (1 week onwards)^{1,2,3}

- Shine a light at the infant's open eyes, make a sudden sound such as a clap, or blow a puff of air close to the infant's face
- Observe a quick closure of the eyes and dorsal flexion of the infant's head
- No response to shining a light into the eyes may indicate poor light perception and should be followed up by the MO/NP
- This is a permanent reflex and should not diminish with time

1.3 Stepping reflex (1 week–2 months)^{1,2,3}

- Hold the infant upright by supporting under their arms and allow the soles of the feet to touch the surface of the table
- Observe for alternate flexion and extension of the legs in a simulated walking fashion
- Diminishes between 3–4 months and disappears before voluntary walking

1.4 Grasp or palmar reflex (1 week–3 months)^{1,2,3}

- Avoid touching the back of the infant’s hand when assessing this reflex
- Making sure the infant’s head is in midline, touch the palm of the infant’s hand with the tip of a finger
- Note the strong grasp of your finger
- Sucking also facilitates the grasp reflex as does applying light traction to the arm
- This reflex should be strongest between 1 and 2 months of age
- Weakens at by 3 months, disappears by 1 year

1.5 Rooting or sucking reflex (1 week–4 months)^{1,2,3}

- Touch one corner of the infant’s mouth
- The infant should open their mouth and turn their head in the direction of the stimulation
- If the infant has been recently fed, minimal or no response is expected
- Disappears by 3 to 4 months

1.6 Plantar or babinski reflex (1 week–6 months)^{1,2,3}

- Firmly stroke the lateral plantar surface (sole) of the infant’s foot
- The big toe should move upwards with the other toes fanning out
- This is a normal response in infants but should not be present in children older than 12 months

Table 1. Reflexes summary^{1,2,3}

Reflex	Stimulation	Response	Duration
Moro	• Sudden move, loud noise	• Startles, throws out arms and legs and then pulls them toward body	• Diminishes at 3 to 4 months, disappears by 6 months
Blink	• Flash of light or puff of air	• Closes eyes	• Permanent
Stepping	• Infant held upright with feet touching ground	• Moves feet as if to walk	• Diminishes between 3 to 4 months
Grasping	• Palms touched	• grasps lightly	• Weakens at 3 months; disappears by 1 year
Sucking or Rooting	• Cheek stroked or side of mouth touched by an object	• Turns toward source, opens mouth and sucks on object	• Disappears at 3 to 4 months
Plantar or Babinski	• Sole of foot	• Fans out toes and twists foot in	• Disappears at 9 months to 1 year

2. Result

- Note any deficits to reflexes within the scheduled time frames

3. Brief intervention

- Provide the parents with anticipatory guidance in relation to reflex progression and reflex resources. See Resource 1.

4. Referral

- Refer to the MO/NP or paediatrician if:
 - there are any age related reflex deficits
 - any infant reflexes persist beyond the recommended time frames
 - the parent has any concerns

5. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

6. References

1. Hill M A. 2019. Embryology–Newborn reflexes. NSW: UNSW Embryology. Accessed: 2020, August. Available from: https://embryology.med.unsw.edu.au/embryology/index.php/Neural_Exam_Movies#Newborn
2. Encyclopedia of Children's Health. 2019. Neonatal reflexes. Advameg, Inc. Accessed: 2020, August. Available from: <http://www.healthofchildren.com/N-O/Neonatal-Reflexes.html#ixzz3MEIcvTdu>
3. State-wide Child and Youth Clinical Network–Child Health Sub-Network. Children's Health Queensland Hospital and Health Service, editor. 2014. Child and Youth Health Practice Manual. Brisbane, QLD: State of Queensland (Queensland Department of Health). Accessed: 2020, August. Available from: https://qheps.health.qld.gov.au/__data/assets/pdf_file/0020/406415/cy-prac-manual.pdf

7. Resources

1. See example videos at Embryology–Newborn reflexes available from: https://embryology.med.unsw.edu.au/embryology/index.php/Neural_Exam_Movies#Newborn

Nutrition (child)

Information

- Many chronic conditions are attributed to poor nutrition, including:^{1,2}
 - type 2 diabetes
 - cardiovascular disease
 - renal disease
 - poor oral health
 - iron deficiency
 - anaemia
 - some forms of cancer
- Poor nutrition from in utero to 2 years of age is associated with increased risk of poor brain development and chronic conditions later in life
- It is important for parents to be healthy role models to encourage and promote breastfeeding and healthy lifelong family eating habits

Health check recommendations

All children from birth to < 15 years of age annually

1. Procedure

- Ask the parent the nutrition questions according to the child's age. See Table 1.
- Identify if the child does or does not meet adequate dietary intake. See [Diet and nutrition, page 16](#)
- Determine if the child requires a referral according to the answers and place on a follow-up and recall register

2. Results

- If at any age a child's nutritional intake is inadequate then provide support with nutritional brief intervention

3. Brief Intervention

- See [Diet and nutrition, page 16](#)

3.1 Babies aged 0 to < 6 months¹

- Encourage and support exclusive (only) breastfeeding for optimal growth, health and development until around 6 months of age and can continue breastfeeding until 2 years or older
- Formula-fed babies can have an infant formula until 1 year of age
- Breast milk and formula will provide all the iron needed for the first 6 months
- Exclusively breastfed infants do not require additional fluids or foods until 6 months of age

- For formula-fed infants, cooled boiled tap water may be used if additional fluids are needed
- See [Diet and nutrition, page 16](#)

Table 1. Age related nutrition questions for children

Question	Explore
0 to < 3 years of age	
Breastfeeding only Formula feeding only Any other food or drink	Ask the questions
6 months to < 3 years	
Eating solids Uses a bottle Uses a cup	Ask the questions
6 months to < 5 years	
Healthy food and drink Nutritionally poor food and drink Does the child always have access to food?	<ul style="list-style-type: none"> • Explore if the parent feeds the child nutritionally rich or poor foods • Details and examples are available in Diet and nutrition, page 16
5 to < 15 years	
What did the child eat yesterday? What did the child drink yesterday? Does the child always have access to food?	<ul style="list-style-type: none"> • Asking what they ate the previous day helps determine a dietary pattern • For details of serve sizes and examples see Diet and nutrition, page 16

3.2 Children from 6 months of age^{4,3}

- Children can continue to have breast milk until 2 years or older
- From around 6 months, infants should be offered a range of foods of an appropriate texture and consistency for their developmental stage to sustain growth and development
- Tips for first foods:
 - add breastmilk, formula or water to thin consistency which assists with swallowing
 - provide thicker foods as the child ages and becomes more proficient at swallowing
 - puréed iron rich meat and cereal
 - puréed vegetables, fruits, fish and eggs
 - yoghurt and cheese
 - by 9 months the baby should be having 3 regular meals each day
 - avoid takeaway foods, cakes, biscuits, lollies, ice cream and deep fried foods
 - avoid foods high in salt as they can harm babies underdeveloped kidneys
- Use visual charts to highlight sugar and fat content of food. See Resource 1.
- Reduce the chance of developing food allergy in babies with severe eczema or egg allergy by introducing:

- common allergy causing foods by 12 months in an age appropriate form i.e. well cooked egg and smooth peanut butter/paste
 - egg, peanut, cow’s milk (dairy), tree nuts, soy, sesame, wheat, fish and other seafood
 - continue to give these foods to your baby regularly (twice weekly) to maintain tolerance
 - avoid introducing a food then not giving it regularly as this may result in food allergy development
- See [Diet and nutrition, page 16](#)

3.3 Children aged 12 to 24 months¹

- Children can continue to have breastmilk until 2 years or older
- If formula-fed, the child can switch to full fat cow’s milk from 1 year of age: low-fat and reduced-fat milks are not recommended in the first 2 years of life
- Encourage only water and milk as the fluids of choice
- Avoid tea, coffee, cordials, sports and energy drinks, juice and fizzy drinks
- Offer children up to 6 small meals a day including:
 - plenty of nutritious fruit, vegetables, meats and dairy
 - eating similar healthy foods as the family
 - children under 2 years can have full fat dairy products
- Use visual charts to highlight sugar and fat content of food. See Resource 1.
- See [Diet and nutrition, page 16](#)

3.4 Children aged 2 to < 15 years¹

- Young children and adolescents need sufficient nutritious foods to grow and develop normally including:
 - a wide variety of nutritious foods
 - vegetables, legumes and fruits
 - cereals including breads, rice, pasta and noodles, preferably wholegrain
 - lean meat, fish, poultry and eggs
 - milk, yoghurt, cheese and alternatives. Reduced fat varieties should be encouraged from 2 years of age
 - water
 - foods low in salt
 - see Resource 2.
- Avoid or limit nutritionally poor foods and drinks:
 - takeaway food high in saturated fats, salt and sugar
 - foods and treats containing added sugars
 - sausage rolls, meat pies, chicken nuggets and kabanas
 - cakes, biscuits, potato chips and hot chips
 - soft drinks, cordial, fruit juice drinks, 100% fruit juice, tea/coffee, energy drinks and sports drinks
- Use visual charts to highlight sugar and fat content of food. See Resource 1.

- See [Diet and nutrition, page 16](#)

Parents who provide children with a regular diet of nutritionally poor foods and drinks predispose their children to chronic conditions later in life

4. Referral

- Consider barriers to healthy eating such as finances, location and availability of nutritious foods and refer accordingly
- Consider referrals to:
 - community nutrition team
 - dietitian
 - child health nurse or health worker
 - paediatrician or MO/NP
 - social worker
- If you have any concerns about a child's nutritional intake refer to the MO/NP

5. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

6. References

1. National Health and Medical Research Council. 2012. The Infant Feeding Guidelines. Canberra: National Health and Medical Research Council. Accessed: 2020, August. Available from: <https://www.nhmrc.gov.au/guidelines-publications/n56>
2. National Health and Medical Research Council. 2013. The Australian Dietary Guidelines. Canberra: National Health and Medical Research Council. Accessed: 2020, August. Available from: <https://www.nhmrc.gov.au/guidelines-publications/n55>
3. Australian society of clinical immunology and allergy. 2018. Parent information: Frequently asked questions (FAQ) How to introduce solid foods for allergy prevention. Balgowlah, NSW: ASCIA. Accessed: 2020, August. Available from: <https://www.allergy.org.au/patients/allergy-prevention/ascia-how-to-introduce-solid-foods-to-babies>

7. Resources

1. eat for health resource website available from: www.eatforhealth.gov.au
2. National Health and Medical Research Council (2013) Educator Guide. Canberra: National Health and Medical Research Council. Available from: http://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55b_eat_for_health_educators_guide.pdf

Oral health (child)

Information^{1,2,3,4}

- Dental caries currently affects the teeth of over 40% of Australian children
- There is an association between periodontal disease and the risk of heart disease, coronary artery disease, otitis media, diabetes, obesity and diets high in sugar and fat
- Aboriginal and Torres Strait Islander children have 50% more caries and dental decay than non-Aboriginal and Torres Strait Islander children
- Children are at highest risk of oral diseases due to a reduced capacity for self care
- Children should have a dental assessment by 2 years of age

Notes

- Children are eligible for free dental care via:
 - the Child Dental Benefits Schedule (CDBS) which provides access to benefits for basic dental services to children aged 2-17 years
 - Queensland Health Adult Oral Health Services if they are a dependant of a person holding a current Health Care Card or Pension Concession Card. See Resource 1.

Health check recommendations

All children > 6 months of age annually

1. Procedure

- Ask the parent or child the age appropriate questions. See Table 1.
- Perform a visual oral check
- If the parent answers 'no' to any questions for a child aged 0–4 years then provide brief intervention
- Ask the 5 to < 15 year old questions and provide brief intervention if required
- Determine if the child requires a referral according to the answers and place on a follow-up and recall register

Table 1. Age appropriate oral health questions and interventions for children

Question	Explore
6 months to < 18 months	
Does the child have any teeth? Does the parent clean the child's teeth?	<ul style="list-style-type: none"> • Use of a soft toothbrush? • No toothpaste? • Perform visual teeth and gum check
18 months to < 5 years	
Does the parent clean the child's teeth twice a day?	<ul style="list-style-type: none"> • Use of a soft toothbrush? • Use of a low fluoride toothpaste? • Perform visual teeth and gum check
5 years to < 15 years	
How often does the child brush their teeth? Has the child had any toothache or bleeding gums in the last 4 weeks? Has the child had a dental check up in the last 2 years?	<ul style="list-style-type: none"> • Use of a soft toothbrush? • Use of standard fluoride toothpaste? • Perform visual teeth and gum check

1.1. Visual oral check

- An oral check involves visualising all aspects of the oral cavity; teeth, gums and cheeks
- Don gloves
- Position the child comfortably
- Ensure the room is well lit or have a light available
- Lift the upper lip and lower the bottom lip to view the teeth
- Inspect the outer surfaces of the teeth
- Observe for tooth alignment, frosting (early decay), brown decay (active) and black decay (inactive)
- Using a tongue depressor inspect the oral cavity, gums and rear teeth

2. Results

- Tooth eruption times vary
- Some babies are born with an erupted incisor tooth (neonatal tooth) which is lost soon after birth
- Deciduous (baby) teeth begin to erupt at approximately 6 months of age
- Lower teeth usually erupt before the upper teeth
- Girls teeth usually erupt before boys teeth
- The teeth in both jaws usually erupt in pairs, one on the right then one on the left
- All deciduous teeth should have erupted by 3 years of age
- The gums surrounding the teeth should be pink with clearly defined and tight margins around each tooth

- The gums should be free of inflammation, swelling and bleeding
- The gums should not be tender or painful
- Loose teeth or gums that bleed spontaneously or during brushing are indicative of periodontal disease. See [Dental caries and periodontal disease, page 325](#)
- The mucous membranes inside of the cheeks should be pink, red, smooth and moist
- If at any age a child's oral health is poor, provide support with brief intervention and make the appropriate referral

3. Brief intervention

3.1 Children aged 0–5 years

- Begin cleaning children's teeth using a damp cloth as soon as they erupt as plaque will begin to form straight away
- From 6–18 months of age, in areas of fluoridated water supply, child's teeth should be brushed twice a day without toothpaste using a small soft toothbrush
- Between 18 months and 5 years of age child's teeth should be brushed twice a day with a small soft toothbrush with a small pea sized amount of low fluoride toothpaste
- A parent is responsible for cleaning a child's teeth until 8 years of age as children lack the motivation and the manual dexterity to maintain their oral health thoroughly
- Parents should develop a regular tooth brushing routine for their children from an early age
- Children should not dispense toothpaste without supervision
- Keep toothpaste out of reach of children

For children between 6 and 18 months of age living in areas with unfluoridated water supplies, teeth should be brushed twice a day with a small pea sized amount of low fluoride toothpaste by a responsible adult

Dental practitioners can provide advice about access to alternate sources of fluoride such as mouth rinses and high fluoride toothpastes

- The tooth brushing method is a circular or jiggling motion on both the inside and outside surfaces of the tooth, along the gum margins, then a scrubbing motion along the chewing surfaces
- Encourage the child to spit toothpaste out once finished
- Parents should not share toothbrushes, food utensils or place baby bottles or dummies in their own mouths. This spreads harmful oral bacteria to children which causes decay
- Breastfeeding is best for baby's teeth
- If bottle feeding, put only breastmilk, formula or water in the bottle. Hold baby close when feeding
- Do not put a baby to bed with a bottle
- Provide healthy food choices

- Water is the best choice for a drink
- Do not give children juice, sports drinks, fizzy drinks or cordials
- Limit the number of sugary or acidic snacks
- Choose fruit (apples and bananas) and vegetable (carrots and tomatoes) snacks
- Encourage annual dental visits

3.2 Children aged > 6 years

- A parent is responsible for cleaning a child's teeth until 8 years of age as children lack the motivation and the manual dexterity to maintain their oral health thoroughly
- Using a soft toothbrush the teeth should be cleaned twice a day or more frequently with standard fluoride toothpaste
- Brush all surfaces of the teeth i.e. the inside, outside and chewing/biting surfaces
- Brush to the gum margins to prevent gum disease
- When finished spit out the toothpaste, but do not rinse the mouth
- Brush before going to bed at night as saliva flow is reduced when you sleep and decay causing bacteria attack dry tooth surfaces
- Replace the toothbrush after 3–4 months or sooner if bristles become frayed with use
- It is important for everyone in the family to look after their teeth as the germs that cause tooth decay can spread from person to person
- Use dental floss or interdental cleaning products to clean between the teeth
- Make healthy food choices
- Water is the best choice for a drink
- Juice, sports drinks and cordials are high in sugar and should be avoided
- Limit the number of sugary or acidic food snacks
- Choose fruit, cheese and vegetables for snacks
- Encourage annual dental visits

4. Referral

- For any concerns identified in Table 2. refer to:
 - the current edition of the *Primary Clinical Care Manual*
 - the free government funded dental service if the child is aged from 2–17 years and is eligible for the Child Dental Benefits Schedule. See Resource 1. for eligibility criteria
 - the free government funded dental service if the child is aged from 4 to the completion of Year 10. See Resource 1. for eligibility criteria
 - a private dentist (parents can use the Child Dental Benefits Schedule entitlement)
- See [Dental caries and periodontal disease, page 325](#)

Table 2. Oral health related referral issues

Site	Problem
Teeth	<ul style="list-style-type: none"> • Malalignment • Decay (white spots, brown or black holes) • Loose or missing • Plaque buildup • Trauma • Toothache
Gums	<ul style="list-style-type: none"> • Swelling • Bleeding (spontaneously or when brushing) • Tenderness or pain • Abscess or ulcers • Thrush

5. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details for the next scheduled follow-up appointment

6. References

1. COAG Health Council. 2015. Australia's National Oral Health Plan 2015-2024. Adelaide, South Australia: COAG Health Council. Accessed: 2020, August. Available from: <http://www.coaghealthcouncil.gov.au/Publications/Reports/ArtMID/514/ArticleID/81>
2. National Aboriginal Community Controlled Health Organisation and The Royal Australian College of General Practitioners. 2018. National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people. 3rd edn. Victoria: The Royal Australian College of General Practitioners Ltd. Accessed: 2020, August. Available from: <http://www.naccho.org.au/resources/>
3. Ha D H, Amarasena N, Crocombe L. 2013. The dental health of Australia's children by remoteness: Child Dental Health Survey Australia 2009. Dental statistics and research series no. 63. Cat. no. DEN 225. Canberra: Australian Institute of Health and Welfare. Accessed: 2020, August. Available from: <https://www.aihw.gov.au/reports/dental-oral-health/the-dental-health-of-australia-s-children-by-remot/formats>
4. eTG complete. 2018. Dental caries. Victoria, Australia: Therapeutic Guidelines Ltd. Accessed: 2020, August. Available from: https://tgldcdp.tg.org.au/viewTopic?topicfile=dental-caries&guidelineName=Oral%20and%20Dental#toc_d1e111

7. Resources

1. Child Dental Benefits Schedule (CDBS) eligibility details and further information is available from: <https://www.humanservices.gov.au/individuals/services/medicare/child-dental-benefits-schedule> or available from: <https://www.health.qld.gov.au/oralhealth/services/school>
2. Oral health promotion and resources available from: <https://qheps.health.qld.gov.au/oralhealth>
3. Office of the Chief Dental Officer available from: <http://qheps.health.qld.gov.au/oralhealth>
4. Online education for this topic available from: <https://www.health.qld.gov.au/rrcsu/html/parrot-online-education>

Physical activity (child)

Information^{1,2}

- Knowing a child's level of activity allows the clinician to determine a child's risk for future health problems and provides an opportunity to intervene early
- For children, being physically active:
 - creates opportunities for fun with friends
 - reduces anti-social behaviour, including aggressive and disruptive behaviour
 - develops skills such as co-operation and teamwork
 - improves self-esteem and confidence
 - improves concentration
 - improves ability to manage anxiety and stress
 - reduces the risk of developing type 2 diabetes and cardiovascular disease
 - improves physical fitness, including co-ordination and movement skills
 - reduces unhealthy weight gain
 - builds strong muscles and bones
 - promotes healthy growth and development

Health check recommendations

All children from birth to < 15 years

1. Procedure

- Ask the age appropriate questions as per Table 1.
- Provide brief intervention if the parent answers other than the ideal
- Be prepared to explore any issues and refer for support
- Determine if the child requires a referral according to the answers and place on a follow-up and recall register if required

2. Results

2.1 Physical activity^{1,2}

- Physical activity is any activity that gets children moving, makes their breathing and heart beat faster
- Moderate intensity activity requires some effort where children can still speak easily while doing it e.g. fast walking, riding a bike or scooter and active play
- Vigorous intensity activity requires effort and makes children breathe hard and fast ('huff and puff') e.g. running, chasing and organised sports like football or netball

Table 1. Physical activity questions

Question	Explore
Birth to 1 years of age	
Does the infant do floor based play daily?	<ul style="list-style-type: none"> • Yes or no • Tummy time, rolling, crawling, cruising, etc.
1 to < 5 years of age	
Is the child physically active for at least 3 hours daily?	<ul style="list-style-type: none"> • Yes or no • What activities does the child normally do? • What about screen time?
For all children and young people aged > 5 years of age	
Was the child or young person active for more than 60 minutes a day in the last week?	<ul style="list-style-type: none"> • Add up the times a child is active • 10 minutes before school? • 30 minutes recess play? • 30 minutes lunch play? • 30 minutes after school?

2.2 Sedentary behaviour^{1,2}

- Sedentary behaviour is characterised by sitting or lying down (except for when sleeping)
- The use of electronic media or screen time is a major contributor to sedentary behaviour

3. Brief intervention

3.1 Infants 0–1 year^{1,2}

- Always work closely with the parent when providing brief intervention about diet and physical activity
- Infants should not be sedentary, restrained, or kept inactive for more than 1 hour at a time, e.g. in a stroller, car seat or high chair
- Infants aged 0–1 year should be encouraged to do floor based play (including 30 minutes of tummy time) in a safe and supervised environment
- 14 to 17 hours (for 0–3 month olds) and 12 to 16 hours (for 4–11 month olds) of good quality sleep, including naps

3.2 Toddlers 1–2 years^{1,2}

- Toddlers should be physically active every day for at least 180 minutes, spread throughout the day, more is better
- Avoid restraining toddlers for more than 1 hour at a time or sitting for extended periods e.g. in a stroller, car seat or high chair
- Sedentary screen time is not recommended
- If sedentary, engaging with parents in reading, singing, puzzles and storytelling should be encouraged
- 11–14 hours of good quality sleep, including naps, with consistent sleep and wake times

3.3 Pre-schoolers 3–5 years^{1,2}

- At least 180 minutes spent in a variety of physical activities, with at least 60 minutes of energetic play, spread throughout the day; more is better
- Not being restrained for more than 1 hour at a time or sitting for extended periods e.g. in a stroller or car seat
- Sedentary screen time should be no more than 1 hour; less is better
- If sedentary, engaging with parents in reading, singing, puzzles and storytelling should be encouraged
- 10 to 13 hours of good quality sleep, which may include a nap, with consistent sleep and wake times

3.4 Children and young people 5–17 years^{1,2}

- Children and young people should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day including:
 - a variety of moderate to vigorous aerobic activities that makes their heart beat faster
 - activities that strengthen muscle and bone at least 3 days per week
- Daily physical activity can be accumulated throughout the day
- Sedentary behaviour can counteract the benefits of being physically active
- Screen time should be limited to 2 hours per day, not including screen-based activities for educational purposes
- Discuss screen time boundaries, time limits and age appropriate content with children and young people
- Avoid screen time before sleep, and keep screens out of the bedroom
- Children (5–13 years) should have 9 to 11 hours of uninterrupted sleep per night
- Young people (14–17 years) should have 8 to 10 hours uninterrupted sleep per night
- Provide physical activity resources. See Resource 1.
- For recommendations on age related physical activity requirements see [Physical activity, page 26](#)

4. Referral

- See [Physical activity, page 26](#) for detailed information
- For any child who is identified as leading a sedentary lifestyle or is overweight or obese, see [Overweight and obesity \(children\), page 441](#)
- Refer any child to the MO/NP where there are concerns about ongoing sedentary behaviours or overweight or obesity issues despite previous brief interventions

5. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details of the next scheduled follow-up appointment

6. References

1. Okley AD, Salman J, Vella SA, Cliff D, Timperio A, Tremblay M, Trost SG, Shilton T, Hinkley T, Ridgers N, Phillipson L, Hesketh K, Parrish A-M, Janssen X, Brown M, Emmel J, Marino N. 2012. A Systematic Review to update the Australian Physical Activity Guidelines for Children and Young People. Report prepared for the Australian Government Department of Health, Commonwealth of Australia. Accessed: 2020, August. Available from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-active-evidence.htm>
2. Okley AD, Salman J, Vella SA, Cliff D, Timperio A, Tremblay M, Trost SG, Shilton T, Hinkley T, Ridgers N, Phillipson L, Hesketh K, Parrish A-M, Janssen X, Brown M, Emmel J, Marino N. 2012. A Systematic Review to inform the Australian Sedentary Behaviour Guidelines for Children and Young People. Report prepared for the Australian Government Department of Health, Commonwealth of Australia. Accessed: 2020, August. Available from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-active-evidence.htm>

7. Resources

1. Movement guidelines for children available from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines#npa05>

Social-emotional well-being (child)

Information^{1,2,3}

- Infancy is recognised as a foundational developmental period, physically, psychologically and socially
- Relationships and the quality of experiences are the ways babies and young children come to know the world and their place in it
- For children to develop into healthy adults they need to feel wanted, loved and secure
- Through relationships, young children develop social and emotional wellness, which includes: the ability to form satisfying relationships with others, play, communicate, learn, face challenges and experience emotions
- Psychosocial factors affect infant development including temperament and the quality of the parent attachment relationship
- Adverse developmental experiences during childhood and as a young person can become risk factors for later social-emotional development
- The social-emotional well-being questions aim to identify infants, children and young people who may be:
 - experiencing feelings that impact on their social and emotional well-being
 - experiencing thoughts/feelings of suicide or self-harm
 - at risk of neglect or abuse and future mental health difficulties

Child safety notification

- If there is a suspicion of harm or neglect consider a referral to child safety. See Appendix 2: [Child safety reporting, page 513](#)

Health check recommendations

All parents of children aged 0 to < 8 years

All children aged 8 to < 15 years

1. Procedure

- Ask the age appropriate questions in private. See Tables 1. and 2.
- Ask the questions in your own words or words the child understands
- Be prepared for the child or parent to debrief with you
- See [Engaging our patients, page 2](#)
- Introduce the questions by asking about any concerns the child may have
- Determine if the child requires a referral according to the answers and place on a follow-up and recall register if required

1.1 Parent questions

- Ask parents of children aged 0 to < 8 years as per Table 1.
- Observe how the child reacts or responds to the parent's cues:

- do they seek the comfort of the parent if they are hurt or scared?
- does the child respond positively to their parent?
- observe the child’s facial expressions, eye contact, vocalisations, activity and recognition of others around them
- Observe the interaction and reactions of the parent towards the child including:
 - impatience toward the child
 - unrealistic expectations e.g. a child should sleep all night and never cry
 - anger towards, yelling at or rough handling of the child
 - limited or no eye contact or communication between the parent and child
 - the parent speaking negatively, e.g. “she does this just to annoy me”, “he hates me” or “I don’t like her”
 - parent fails to respond to the child’s cues
 - the parent is anxious about the child’s behaviour

Table 1. The social-emotional well-being questions for parents

Questions	Explore
For parents of children < 8 years ask if they have any concerns about any of the following	
Coping	<ul style="list-style-type: none"> • Is the parent feeling overwhelmed, low, tired, exhausted, stressed, anxious or unable to care for child? • Financial stress? • Maternal mood?
Relationships (with family or friends)	<ul style="list-style-type: none"> • Are relationships or friendships strained? • Is there help available to mediate?
Support	<ul style="list-style-type: none"> • Does the person have a partner? Single parent? • Does the partner help around the home? With child care? With child raising? • Is family support available to help with child or to talk with?
Violence	<ul style="list-style-type: none"> • Is there any violence towards the child? • Does the parent experience any violence?
Your child’s behaviour	<ul style="list-style-type: none"> • Crying, tantrums, yelling back, hitting or swearing? • Does the parent get anxious, stressed or feel low when the child exhibits poor behaviour?

While observing, the clinician should consider “Is the relationship between the parent and child positive or negative?”

1.2 Child questions

- Asked of children aged 8 to < 15 years as per Table 2.
- The questions can be asked with or without a parent
- If a clinician is uncomfortable asking any questions refer to a senior clinician
- Some children may find the questions difficult to understand. Be prepared to use age appropriate words or rephrase the questions e.g. “is your spirit weak or strong at the moment?”

- Observe for visual cues (facial expressions, body language) being mindful of cultural aspects of communication (eye contact, bowed head)

Table 2. The social emotional well-being questions for children⁴

For children aged 8 to < 15 years	
1. How often do you feel down in the dumps or unhappy?	1. Never/hardly ever 2. Sometimes 3. Most days/every day
2. How often have you felt that life is too hard?	1. Never/hardly ever 2. Sometimes 3. Most days/every day
3. How often do you feel nervous or scared?	1. Never/hardly ever 2. Sometimes 3. Most days/every day
4. Do you worry much?	1. Never/hardly ever 2. Sometimes 3. Most days/every day
5. How often do you feel restless or hard to settle down?	1. Never/hardly ever 2. Sometimes 3. Most days/every day
6. Do events in your family upset you? e.g. domestic violence or drinking alcohol	1. Never/hardly ever 2. Sometimes 3. Most days/every day

Tally the responses to determine a score out of 18. See 2.2 Child questions

2. Results

2.1 Parent questions

- If a parent answers 'yes' to any of the areas of concern, offer brief intervention and make an appropriate referral
- If the parent answers 'no' to any of the areas of concern and the clinician has no concerns, offer information and praise successes

2.2 Child questions

- Add the scores
- If the score tallies 10 or less offer brief intervention
- If the score tallies 11 or higher:
 - offer a referral
 - offer brief intervention
 - to determine the urgency for when the child or young person needs to be seen perform:
 - a 25 item Strengths and Difficulties Questionnaire (SDQ) **or**
 - a HEADDSS assessment
 - see Resource 1.

If the parent or child talks about harming themselves or some other person they should be referred immediately to the MO/NP or mental health services. Do not leave alone or send away until their care has been handed over

3. Brief intervention

- Ask the child, young person or parent if they are talking to, or have someone to talk to about the way they feel
- Encourage them to talk to someone they feel safe with when they are worried or scared
- Discuss how certain feelings or thoughts are part of everyone's life but bad feelings and thoughts should be monitored as they can cause problems if they become so intrusive they impact on the ability to function appropriately
- Discuss how the body reacts in times of stress, fear, confusion and sadness including:
 - heart beating fast
 - sweating
 - crying
 - shaking
- Encourage the child, young person or parent to seek help if their feelings become more regular or intrusive and impact on normal functioning

4. Referral

4.1 Parent questions

- Make an immediate referral if child talks of self-harm or harm to others
- Refer to the MO/NP or mental health services if:
 - concerns are raised by the parent about the child
 - you are concerned about the parent's ability to cope
 - you observe relationship or attachment issues between the child and parent
 - you identify emotional or well-being issues for the child or young person
- Consider referring to a postnatal home visiting program if available
- Refer to Appendix 2: [Child safety reporting, page 513](#) if you have any child safety concerns
- For further referral options see Table 3.

4.2 Child questions

- Make an immediate referral if child talks of self-harm or harm to others
- Refer to the MO/NP or mental health services if:
 - after answering the questions the child scores 11 or higher
 - concerns are raised by the child
 - you identify emotional or well-being concerns for the child or young person
 - the SDQ or HEADDs assessment identifies concerns

Table 3. Referral options

Queensland Health
<ul style="list-style-type: none"> • Health worker, registered nurse, psychologist or social worker • Your local Child Protection Liaison Officer or Safe Kids or Child Safety Services Regional Intake Services. See Appendix 2: Child safety reporting, page 513 • Child and Youth Mental Health Service available from: http://qheps.health.qld.gov.au/cymhs/ or https://www.qld.gov.au/health/mental-health/help-lines/services • ATODs available from: https://www.health.qld.gov.au/public-health/topics/atod
Other services
<ul style="list-style-type: none"> • Aboriginal and Torres Strait Islander Legal Service (Qld) Ltd available from: http://www.atsils.com.au/ • Child Safety Services available from: http://www.communities.qld.gov.au/childsafety/child-safety-services • Act for Kids available from: http://www.actforkids.com.au/ • Queensland Indigenous Family Violence Legal Service available from: http://www.qifvls.com.au/ • Contact Queensland Aboriginal and Islander Health Council (QAIHC) for details of your local Aboriginal medical service e.g. Wuchopperin, Apunipima. Available from: http://www.qaihc.com.au/ • Elder, minister, spiritual advisor, priest or pastor • School nurse • Headspace, the national youth mental health foundation available from: www.headspace.org.au/ • Quitline 13 78 48 or available from: https://www.qld.gov.au/health/staying-healthy/atods/smoking • Royal Flying Doctor Service nurse or doctor • School Principal or student guidance officer • Family Planning Queensland available from: https://www.true.org.au/ • Kids Helpline available from: https://kidshelpline.com.au/ or phone 1800 55 1800 • Alcohol and Drug Information Service is a 24 hour telephone service available on 1800 177 833 or Turning Point an online counselling service available from: http://www.turningpoint.org.au/

5. Follow-up

- Place the child or parent on a recall register if required
- Ensure all referrals are actioned
- Provide the child or parent with details of the next scheduled follow-up appointment

6. References

1. The National Centre of Excellence in Youth Mental Health. Treating depression in young people: Guidance, resources and tools for assessment and management. Orygen. Accessed: 2020, August. Available from: <https://www.orygen.org.au/Education-Training/Resources-Training/Resources/Free/Clinical-Practice/Treating-depression-in-yp>
2. beyondblue. 2011. Clinical practice guidelines for depression and related disorders – anxiety, bipolar disorder and puerperal psychosis – in the perinatal period. A guideline for primary care health professionals. Melbourne: beyondblue: the national depression initiative. Accessed: 2020, August. Available from: <https://cope.org.au/wp-content/uploads/2013/12/Perinatal-Mental-Health-Clinical-Practice-Guidelines.pdf>
3. Organisation WH. 2017. Depression and Other Common Mental Disorders: Global Health Estimates. Geneva: World Health Organisation. Accessed: 2020, August. Available from: https://www.who.int/mental_health/management/depression/prevalence_global_health_estimates/en/
4. Schlesinger CM, Ober, C., McCarthy, M.M., Watson, J.D., Seinen, A. 2007. The development and validation of the Indigenous Risk Impact Screen (IRIS): a 13-item screening instrument for alcohol and drug and mental health risk. Drug and Alcohol Review, 26(2), 109-117. Accessed: 2020, August. Available from: <http://dx.doi.org/10.1080/09595230601146611>

7. Resources

1. The Strengths and Difficulties Questionnaire and how to score is available from: <http://www.sdqinfo.org/> and the HEADDSS assessment is available from: https://www.rch.org.au/clinicalguide/guideline_index/Engaging_with_and_assessing_the_adolescent_child/#HEEADSSS
2. Working with young people available from: www.beyondblue.org.au
3. Menzies resources for Aboriginal or Torres Strait Islander people <http://www.menzies.edu.au/page/Resources/>
4. Children of Parents with a Mental Illness (Australian COPMI Initiative) available from: www.copmi.net.au
5. Queensland Centre for Perinatal and Infant Mental Health available from: <https://www.childrens.health.qld.gov.au/chq/our-services/mental-health-services/qcpimh/>
6. Safe Kids available from: http://qheps.health.qld.gov.au/cairns/html/cpls_cairns.htm

Skin (child)

Information^{1,2,3}

- The skin, the body's largest organ, protects us from microbes and the elements, helps regulate body temperature and permits the sensations of touch, heat and cold
- Skin infections are many and varied, some of which can lead to chronic conditions
- *Staphylococcus aureus* is the most common cause of skin infections (e.g. boils, cellulitis and impetigo) which are:
 - often superficial
 - sometimes infectious
 - mostly not life threatening
 - usually managed with topical therapy
- *Streptococcal* skin infections can lead to acute rheumatic fever (ARF), rheumatic heart failure (RHF), acute post-streptococcal glomerular nephritis (APSGN) and chronic heart failure (CHF)
- Parasites that invade the skin (e.g. head and pubic lice and scabies) can cause infections which lead to renal complications such as chronic kidney disease (CKD)
- Mosquitoes, ticks, fleas and other insects can transmit infections (e.g. dengue fever, Ross River fever, Japanese encephalitis (JE) and Lyme disease) through unprotected skin
- Ringworm, tinea, jock rash, double skin, thrush and athlete's foot are common fungal infections
- Viral skin infections are infectious and include herpes, warts, molluscum contagiosum as well as many vaccine preventable infections such as chicken pox
- The incidence of treated basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) is 5 times more than all other cancers, although preventable through sun safety techniques

Child safety notification⁴

- Be alert to any signs that may indicate child abuse, harm or neglect such as:
 - bruises on any part of a child's body especially over soft tissue areas (bruises in children commonly occur over bony areas)
 - human bite marks
 - circular cigarette burns anywhere on body
 - lighter burns (may resemble smiley face)
 - scalds from immersion in hot water such as feet, hands or buttocks
 - fractures of any type
- See Appendix 2: [Child safety reporting, page 513](#)

Urgent^{1,2,3,5}

- Contact your local Population Health Unit if frequent community presentations occur for any of the above

All children from birth to < 15 years

1. Procedure

- Ask the parent or child if they are concerned about any skin conditions
- Do a head to toe visual inspection
- Provide brief intervention
- Determine if the child requires a referral and place on a follow-up and recall register

Table 1. Age related skin observations for children

Age	Procedure
All child < 15 years	• Head to toe observation

1.1 Infants aged 1–6 weeks

- For jaundice in this age group see [Birth information, page 63](#)
- Observe the umbilicus:
 - the umbilical stump area should be dry, clean, odourless and usually dark
 - note any discharge, redness and skin warmth
 - inspect skin folds in the umbilicus for any infected tissue
 - note any protrusion through the umbilicus or abdominal muscles (hernia) when the infant strains, coughs or cries
 - the umbilicus is usually inverted
 - an umbilical hernia forms a visible and palpable bulge and is common in infants
- Observe for Mongolian spots or other birthmarks:
 - birthmarks can be flat, raised, have regular or irregular borders and vary in colour from brown, tan, black, pale blue, pink, red or purple
 - 2 common types of birthmarks are red, vascular birthmarks (e.g. strawberry haemangiomas, port-wine stains and stork bites) and pigmented birthmarks (e.g. moles, café-au-lait spots and Mongolian spots)
 - birthmarks are mostly harmless and many fade, shrink or disappear over time
 - Mongolian spots are irregular areas of deep bluish-black to grey pigmentation and are usually found on the back, buttocks, shoulders and legs of babies
 - Mongolian spots are often mistaken for bruises and occur almost exclusively in babies with dark or olive skin and usually disappear in the preschool years

1.2 Children > 6 weeks to 15 years

- Ask the parent or the child if they have identified any skin issues. Parents are the best historians of their child's health
- Gain permission to remove clothing to better visualise skin. Older children may decide to simply lift shirts or partly remove pants

- Look thoroughly at areas where bacteria and scabies mites are more commonly found:
 - all body skin folds
 - behind knees, soles of feet and between toes
 - in creases of arms and under armpits
 - between fingers, palms of hands and wrists
 - around neck, scalp and behind ears
 - lower back and between cheeks of buttocks

2. Results

- Note skin that:
 - has sores, scabs, scars, or is broken, scratched or cut
 - is jaundiced
 - is bruised (note colour: red dark blue are newer bruises or older bruises are purple and yellow)
 - has rashes
 - has mosquito or sandfly bites
 - is itchy or irritated
 - has loss of sensation
 - has nodules or lumps
 - is sunburnt
- In particular identify any skin that may be infected:
 - red, swollen, warm, painful
 - +/- pus or exudate
- Be alert to any signs that may indicate child abuse, harm or neglect such as:
 - bruises on any part of a child's body
 - bruises over soft tissue areas (bruises in children commonly occur over bony areas)
 - human bite marks
 - circular cigarette burns anywhere on body
 - scalds from immersion in hot water such as feet, hands or buttocks
 - fractures of any type in children

3. Brief intervention¹

- Reassure and discuss any normal or common childhood skin conditions that usually settles with time or is of no concern medically:
 - Mongolian spots
 - clean umbilicus stump
- Clean any non-infected sores with soap and water and apply a cover

Teach parents and children effective hand hygiene as the single most important strategy to prevent contact related infections. See Resource 2.

4. Referral

- Report any signs that may indicate child abuse, harm or neglect. See Appendix 2: [Child safety reporting, page 513](#)
- For all suspicious or definite skin infections, rashes, lumps or nodules:
 - refer to the MO/NP
 - see the current edition of the *Primary Clinical Care Manual* and treat accordingly
 - always consider acute rheumatic fever (ARF) in rural and remote locations
 - refer to the local Population Health Unit if frequent community presentations occur for any of the above
- See [Rheumatic heart disease, page 485](#)

If a number of children are presenting to a health facility with similar skin infections, be alerted to a broader community public health concern i.e. outbreaks of APSGN. Contact your local Population Health Unit to determine a course of action

5. Follow-up

- Place the child on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details of the next scheduled follow-up appointment

6. References

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7. Resources

1. Australian Indigenous HealthInfoNet available from: <https://healthinfonet.ecu.edu.au/>
2. Handwashing resources available at Hand Hygiene Australia available from: <https://www.hha.org.au/>

Special considerations

Information^{1,2,3}

- The incidence of type 2 diabetes, and other preventable chronic conditions, among children and adolescents is increasing
- This is particularly evident among Aboriginal and Torres Strait Islander peoples where chronic conditions are greater than that experienced by non-Indigenous young people

Health check recommendations

All children > 10 years of age with a BMI > 85th percentile for age and gender (See [Overweight and obesity \(children\)](#), page 441) should be evaluated for the following co-morbidities:

- pre-diabetes
- diabetes mellitus
- dyslipidaemia
- pre-hypertension and hypertension
- Non-alcoholic Fatty Liver Disease (NAFLD)
- Polycystic Ovary Syndrome (PCOS)
- Obstructive Sleep Apnoea (OSA)
- social-emotional well-being

1. Procedure^{3,4}

- Measure the blood pressure (BP) and assess for prehypertension and hypertension:
 - measure to the nearest 2 mmHg
 - initial assessment is measured on both arms
 - use the arm with the higher reading for all subsequent BP measurements
 - where postural hypotension (low BP due to standing, sitting or lying) is suspected, measure BP both while sitting and after the child has been standing for 2 minutes
 - Repeat the measurement
- Consult MO/NP to determine which pathology to take to identify:
 - pre-diabetes
 - diabetes mellitus
 - dyslipidaemia
 - non-alcoholic fatty liver disease (NAFLD)
 - polycystic ovary syndrome (PCOS)
- Phlebotomy (taking venous blood) should be undertaken by a suitably qualified clinician according to local policies and guidelines. See Resource 2.
- Assess for obstructive sleep apnoea (OSA)
- Perform a psychosocial assessment and refer to a Psychologist. See [Social-emotional](#)

well-being (child), page 132

- Provide brief intervention and resources if required
- Determine if the child requires a referral according to the results and place on a follow-up and recall register

2. Results

- See Table 1. for BP and pathology values

Table 1. Venous blood results^{2,3,4,5,6,7,8,9,10,11,12}

Assessment	Diagnostic targets				
	Age	Boys		Girls	
		Systolic	Diastolic	Systolic	Diastolic
Blood pressure	9	≥ 107	≥ 70	≥ 108	≥ 71
	10	≥ 108	≥ 72	≥ 109	≥ 72
	11	≥ 110	≥ 74	≥ 111	≥ 74
	12	≥ 113	≥ 75	≥ 114	≥ 75
	≥ 13	≥ 120	≥ 80	≥ 120	≥ 80
	<ul style="list-style-type: none"> • Values below these represent adequate blood pressure ranges • Any values greater than these must be assessed by an MO/NP 				
Pre-diabetes	<ul style="list-style-type: none"> • HbA1c 5.7% to < 6.5% (39 to < 48 mmol/mol) • Fasting plasma glucose of ≥ 5.6 to < 7.0 mmol/L • Oral Glucose Tolerant Test (OGTT): Two-hour plasma glucose of ≥ 7.8 to < 11.1 mmol/L 				
Diabetes	<ul style="list-style-type: none"> • HbA1c ≥ 6.5% (≥ 48 mmol/mol) • Fasting plasma glucose of ≥ 126 mg/dL (7.0 mmol/L) • Oral Glucose Tolerant Test (OGTT): 2 hour plasma glucose of ≥ 11.1 mmol/L • In a child with classic symptoms of hyperglycemia, a random plasma glucose of ≥ 11.1 mmol/L 				
Dyslipidaemia	Fasting lipids for children aged 10 to < 19 years (mmol/L)				
Total cholesterol	Acceptable < 4.4 Borderline high 4.4–5.15 High ≥ 5.15				
Triglyceride	Acceptable < 1.02 Borderline high 1.02–1.46 High ≥ 1.46				
LDL	Acceptable < 2.85 Borderline high 2.85–3.34 High ≥ 3.34				
HDL	Acceptable > 1.17 Borderline low 1.04–1.17 Low ≤ 1.04				
NAFLD	ALT > 25 U/L (boys)		ALT > 22 U/L (girls)		

2.1 Polycystic Ovary Syndrome (PCOS)^{2,9,10,11}

- The diagnosis of PCOS in an adolescent girl is made based on:
 - > 35 days between menstruating on a regular basis (oligomenorrhea) **and**
 - the presence of clinical evidence of hyperandrogenism:
 - excessive terminal hair that appears in a male pattern
 - acne or

- male pattern baldness or hair thinning (androgenic alopecia) **and/or**
- biochemical evidence of hyperandrogenism. Consult MO/NP

2.2 Obstructive Sleep Apnoea (OSA)

- Ask parents and document whether the child snores or stops breathing while sleeping
- Measure a child's daytime sleepiness by doing the Epworth Sleepiness Scale. See Resource 3.
- If they score highly refer to the MO/NP to exclude obstructive sleep apnoea

2.3 Social-emotional well-being

- Assess the child's social-emotional well-being with an open discussion. See [Social-emotional well-being \(child\)](#), page 132

3. Brief intervention^{2,6}

- Any brief intervention for abnormal BP, glucose level or lipid profile aims to improve lifestyle behaviours to:
 - increase intake of nutritious food and reduce intake of junk foods. See [Diet and nutrition](#), page 16
 - reduce body weight. See [Overweight and obesity \(children\)](#), page 441
 - increase the amount of time being active and reduce sedentary behaviours. See [Physical activity](#), page 26
- Engaging children as well as parents is essential. See [Engaging our patients](#), page 2

3.1 Hypertension

- BP is a measurement of the pressure of the blood against the walls of the blood vessels
- BP indicates how hard the heart is working and the health of the blood vessels
- Hypertension in children is attributed to many conditions including acute post streptococcal glomerular nephritis (APSGN)
- See Table 1. for child BP values requiring referral
- See [Hypertension](#), page 401

3.2 Prediabetes

- Measured to identify diabetes, a chronic metabolic condition characterised by high blood glucose levels (BGL) and disturbance of carbohydrate, fat and protein metabolism
- Diabetes destroys small blood vessels, and reduces the ability of nerves to function (diabetic neuropathy) leading to many problems including blindness and limb amputations
- See [Diabetes](#), page 357

3.3 Dyslipidaemia intervention^{2,6}

- Performed to measure circulating blood lipids (fats)
- Fatty deposits in the walls of blood vessels causes narrowing and blockages leading to heart disease and stroke
- Pharmacological treatment should be considered for children > 10 years of age, who are

overweight or obese with an LDL concentration of:

- 4.9 mmol/L **OR**
 - 4.1 mmol/L with a family history of early heart disease or 2 additional risk factors present **OR**
 - 3.4 mmol/L if diabetes mellitus is present
- See [Dyslipidaemia, page 372](#)

3.4 Non-alcoholic Fatty Liver Disease (NAFLD)^{2,7,8}

- NAFLD affects 25 to 45% of people and is strongly associated with impaired glucose tolerance, insulin resistance, central obesity, dyslipidaemia and elevated BP, which are all risk factors for cardiovascular disease
- NAFLD can be associated with liver inflammation and fibrosis, cirrhosis and cancer
- The prevalence of NAFLD increases with body mass index (BMI)

3.5 Polycystic Ovary Syndrome (PCOS)^{2,9,10,11}

- PCOS is a hormonal condition where many partially formed follicles occur on the ovaries
- PCOS is associated with:
 - menstrual irregularity
 - high levels of male hormone (hyperandrogenism)
 - obesity and insulin resistance with a tendency to develop type 2 diabetes
 - low fertility

3.6 Obstructive Sleep Apnoea (OSA)

- OSA is higher among obese children and is associated with upper and lower airway inflammation, anxiety, depression and many other chronic conditions

3.7 Social-emotional well-being

- Through relationships, young children develop social and emotional wellness, which includes the ability to form satisfying relationships with others, play, communicate, learn, face challenges and experience emotions
- Adverse developmental experiences during childhood and as a young person can become risk factors for later social-emotional development including:
 - altered mood such as depression
 - over eating
 - awkward or disinterest in social skills
 - solitary sedentary activities
- See [Social-emotional well-being \(child\), page 132](#)

4. Referral

- Refer all abnormal results to the MO/NP for further investigations and an action plan
- All referrals will depend on intensive lifestyle modification interventions

5. Follow-up

- Place the child and parent on a recall register if required
- Ensure all referrals are actioned
- Provide the parent with details of the next scheduled follow-up appointment

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7. Resources

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3. The Epworth Sleepiness Scale available from: <https://www.sleepservices.com.au/sleepiness-online-test/>