ABOUT THE AUSTRALIAN REFUGEE HEALTH PRACTICE GUIDE

The Australian Refugee Health Practice Guide aims to support doctors, nurses and other primary care providers to deliver comprehensive on arrival and ongoing care for people from refugee backgrounds, including people seeking asylum. The Australian Refugee Health Practice Guide comprises the following resources:

- Desktop guide
- Booklets on key topics
- Website: refugeehealthguide.org.au

The Australian Refugee Health Practice Guide is an updated version of Promoting Refugee Health: A guide for doctors and other healthcare providers caring for people from refugee backgrounds (2012) and Caring for patients in general practice: a desktop guide (2012) and their previous editions.

The 2018 update of the Guide was conducted by the Victorian Foundation for Survivors of Torture Inc. (Foundation House) in collaboration with general practitioners, refugee health nurses, practice nurses, specialists and Primary Health Network staff. The project was informed by a national project advisory group. For a complete list of contributors: refugeehealthguide.org.au/contributors

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INTRODUCTION

Definitions of children, adolescents, youth and young people vary, and the terms ‘adolescent’ and ‘young people’ are often used interchangeably. The World Health Organization (WHO) defines children as 0–17 years, adolescents as 10–19 years, youth as 15–24 years and young people as 10–24 years. This booklet is focused on children/adolescents aged less than 18 years, although it may also be relevant for young people, especially those who are still in secondary education.

Humanitarian populations include a high proportion of children and adolescents. In 2016, over half the total Australian humanitarian intake (51%) was aged less than 25 years, and 28% were less than 12 years. Families are often large, and there may be many children/adolescents within a family group. Some refugee children/adolescents arrive as unaccompanied/separated humanitarian minors; others from refugee backgrounds arrive under alternative visas (e.g. orphan relative family stream visas) or as asylum seekers.

Health and settlement services need to consider the high proportion of children and adolescents in refugee background populations and be aware of issues affecting this group. These children/adolescents will have similar health problems to their Australian-born counterparts (e.g. viral illnesses and injuries), but they may also have health issues specific to their countries of origin and migration experience.

SPECIFIC CONSIDERATIONS IN CHILDREN AND ADOLESCENTS

• Health care for children/adolescents needs to factor in their developmental stage and ability to express themselves; working with parents/carers; and different types/presentations of medical conditions.

• Immigration medical screening is limited for children less than 11 years compared to adolescents and adults.

• Paediatric pathology specimen collection should be used to reduce the amount of blood drawn for screening tests and aim to complete testing in a single blood draw.

• Medication dosing varies with age, and medications may not be licensed for use in children.

• Catch-up vaccination schedules and vaccine licensing vary with age.

• Children/adolescents may have an incorrect date of birth recorded on their migration paperwork.

• Prior schooling may have been limited or interrupted, with implications for education placement in Australia.

• The impact of trauma and mental health problems may present differently in children and adolescents. Consider functional impairment, developmental progress, attachment, behavioural and learning concerns, sleep issues and difficulties with attention/concentration, as well as mental health symptoms. Parent mental illness affects child and adolescent wellbeing, and addressing both parent and child mental health is important.

• Link infants and children with the universal service system early in settlement (e.g. maternal and child health services, playgroups, kindergarten). This also provides a safety net for developmental, health and parenting issues.

• Seek early paediatric review for complex physical health issues, developmental/behavioural concerns, disability, and age assessment. Paediatric review may be helpful to facilitate mental health services if needed.

• Family structures and parenting roles may change with migration, affecting settlement and child and adolescent development. Exploring these aspects offers an opportunity to assess risk and resilience factors for children, adolescents and families.
PRE-ARRIVAL HEALTH SCREENING

Pre-arrival immigration medical examinations (IME) and screening for onshore protection visa applicants are outlined in the Australasian Society for Infectious Diseases (ASID) and Refugee Health Network of Australia (RHeaNA) 2016 Recommendations for comprehensive post-arrival health assessment for people from refugee-like backgrounds (ASID & RHeaNA Recommendations 2016)³ and Department of Home Affairs (DHA) information.⁴ The IME for Humanitarian entrants includes urinalysis (5 years and older), interferon gamma release assay (IGRA) or tuberculin skin test (TST) (2–10 years), chest X-ray (11 years and older, or if clinically indicated), human immunodeficiency virus (HIV) screening (15 years and older, or if risk factors are identified) and syphilis screening (15 years and older).⁴ Unaccompanied minors (all ages) also have screening for HIV and hepatitis B surface antigen (HBsAg). Refugee entrants may undergo an additional departure health check (DHC),⁵ and extended screening and vaccinations have been introduced for the recent Syrian/Iraqi cohorts. In practice, children have more limited screening compared to adolescents and adults due to these age cut points.

It is important for clinicians to be aware of the pre-arrival health screening process, as this process has implications for post-arrival health care:

• Check available offshore paperwork.
• Offshore vaccinations should be entered onto the Australian Immunisation Register (AIR).
• Children 2–10 years may have had additional tuberculosis screening (commenced from late 2015).⁷
• TST (screening for tuberculosis (TB) exposure) should not be performed within 1 month of a live viral vaccine (e.g. mumps-measles-rubella (MMR) vaccine given pre-arrival).
• Albendazole (given as part of the DHC) may result in false negative serology for Strongyloides infection.
• People from the same source country may have different patterns of offshore health screening depending on their migration pathway and visa type.
POST-ARRIVAL HEALTH ASSESSMENT

All refugee and asylum seeker arrivals should be offered a comprehensive health assessment ideally within 1 month of arrival, or within days if there is any clinical indication or health alert. This assessment can be offered at any time after arrival if initial contact with health care is delayed. Families (and adolescents individually) need to understand the importance and implications of health screening and give informed consent. This means explaining all tests, the conditions being screened, the meaning of a positive test, and the next step in management.

Assessment of newly arrived refugee children and adolescents should focus on:

- Parent (or self-identified) concerns
- Excluding acute illness
- Immunisation status and catch-up vaccination
- Tuberculosis screening
- Other infections, including parasites, malaria and hepatitis
- Nutritional status and growth
- Oral health
- Concerns about development, vision and hearing
- Mental health, trauma and violence exposure
- Previous severe or chronic childhood illness or physical trauma
- Confirming the reported birth date
- Education history
- Issues arising during resettlement in Australia.

INITIAL SCREENING INVESTIGATIONS

Suggested initial screening investigations are:

All children and adolescents

- Full blood examination (FBE) and film
- Ferritin
- Hepatitis B serology – surface antigen (HBsAg), surface antibody (HBsAb) and core antibody (HBcAb)
- *Strongyloides* serology
- TB screening – TST or IGRA. TST is preferred in children less than 5 years
- Faecal specimen – ova, cysts and parasites (OCP)

Age/risk-based screening

- Vitamin D, calcium, phosphate, alkaline phosphatase (ALP) – if risk factors for low vitamin D (lack of skin exposure to sunlight, dark skin, conditions affecting vitamin D metabolism, and exclusively breastfed infants where there is maternal deficiency and at least one other risk factor).
- Serum active vitamin B12 – if arrival less than 6 months, and any of: food insecurity; vegan; from Bhutan, Afghanistan, Iran, or Horn of Africa.
- Varicella serology – age 14 years and older if no history of clinical varicella infection and no documented varicella vaccination.
- Rubella serology – females of childbearing age. Consider in late adolescence, although not needed if catch-up vaccination in place.
- Sexually transmitted infection (STI) screen – *Neisseria gonorrhoea* and *Chlamydia trachomatis* urine nucleic acid detection, syphilis serology (note: also HIV, hepatitis B) in sexually active adolescents, or if there is a history of sexual violence/abuse.
- Syphilis screening should be completed in all unaccompanied/separated children, and children should also be screened for syphilis if their mother has positive serology.
- HIV testing – age 15 years and older, less than 15 years if unaccompanied/separated minor, or clinical risk factors (sexually active, history of sexual violence/abuse, where parents are deceased/missing/known to be HIV positive, other STIs, history of blood transfusions, or where there are clinical symptoms/signs).
- *Helicobacter pylori* screening (faecal antigen test on fresh specimen) in children with family history of gastric cancer, or symptoms/signs of dyspepsia/ulcer disease.

Country-based screening

- Malaria – rapid diagnostic test (RDT) and thick and thin film, if travel from/through endemic malaria area within 3 months of arrival if asymptomatic, or within 12 months if symptoms of fever http://refugeehealthguide.org.au/malaria-schistosomiasis-and-hep-c-screening.

• **Urgent specialist assessment/advice** is required in children and adolescents with the following presentations:
  - Unwell/febrile (this requires urgent exclusion of malaria and other severe infection)
  - Symptoms suggesting active TB disease (fevers, weight loss/poor weight gain, prolonged cough, other localising symptoms)
  - Malnutrition
  - Clinical rickets or hypocalcaemia
  - Low B12 levels in infants/young children (also maternal deficiency during exclusive breastfeeding)
  - Developmental issues or disability
  - Severe mental health concerns

**KEY POINTS IN CLINICAL ASSESSMENT**

Understanding the family history and migration pathway, together with language transitions, is important in appreciating the child and family refugee/asylum experience and the effects on health and development.

It is important to take a medical history, considering additional background relevant to forced migration. Access to antenatal/perinatal care and child health screening (neonatal, vision, hearing screening) may have been limited or non-existent; and prior access to health care, dental care and education varies widely. Useful tips include asking specifically about chronic diarrhoea, malnutrition in infancy, hospital admissions overseas, and episodes of malaria, coma and physical trauma, as these issues may not be revealed initially. Trauma, mental health concerns and child protection issues (including female circumcision/cutting) also may not be disclosed, however it is important to be aware of these areas, and history may emerge with time, as trust and rapport develop.

Although it is standard of care to see adolescent patients alone for at least part of a consultation, this may not be feasible in the first consultations. Sexual history and counselling around some screening tests may need to be deferred until later visits. Serum can usually be taken with initial blood tests and held for testing at a later date.
<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>COMMON CAUSES</th>
<th>ADDITIONAL CONSIDERATIONS IN REFUGEE CHILDREN</th>
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<tr>
<td>Fever</td>
<td>Common viral infections</td>
<td>Malaria (endemic areas)*</td>
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<td></td>
<td>Common bacterial infections (check for localising features)</td>
<td>Hepatitis</td>
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<tr>
<td></td>
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<td>TB any site, especially if prolonged</td>
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<td></td>
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<td>Dengue and other arboviral infections*</td>
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<td>Typhoid*</td>
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<td></td>
<td>Dysentery*</td>
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<td>Respiratory symptoms</td>
<td>Consider usual causes of respiratory symptoms for age, e.g. viral respiratory tract infection (RTI), asthma, bronchiolitis, croup, pneumonia</td>
<td>Whooping cough (pertussis) vaccination may not have been available in country of origin.</td>
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<td>TB – consider in children with contact history, or cough &gt;2 weeks.</td>
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<td>Sickle cell disease may (rarely) present with acute chest syndrome.</td>
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<td>Parasite infections may (very rarely) cause wheeze/respiratory symptoms.</td>
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<tr>
<td>Abdominal pain</td>
<td>Acute infection</td>
<td>Parasite infection</td>
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<td></td>
<td>Constipation</td>
<td><em>Heliocobacter pylori</em> gastritis – epigastric pain, early satiety, anorexia, nausea/vomiting, family history</td>
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<td></td>
<td>Surgical causes</td>
<td>hepatitis</td>
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<td></td>
<td>Gynaecological causes</td>
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<tr>
<td>Diarrhoea</td>
<td>Viral gastroenteritis</td>
<td>Parasite infections are common</td>
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<tr>
<td></td>
<td>Bacterial gastroenteritis</td>
<td>Lactose intolerance may be more common in some racial groups; more common in older children/adults.</td>
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<td></td>
<td>Malabsorption</td>
<td>Bacillary* and amoebic dysentery</td>
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<td>Rashes</td>
<td>Infective</td>
<td>Strongyloides infection may cause an intermittent urticarial rash lasting a few days (larva currens) – this may be located anywhere but is most typically on the buttocks/perianal region.</td>
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<tr>
<td></td>
<td>Eczema</td>
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<td></td>
<td>Dermatophyte (tinea) infections</td>
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<tr>
<td>Continence issues</td>
<td>Nocturnal or diurnal enuresis urinary tract infection (UTI)</td>
<td>Chronic UTI may not have been detected/treated.</td>
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<td></td>
<td>Irritable bladder</td>
<td>Consider mental health issues as a cause of secondary enuresis.</td>
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<td>Consider female circumcision/cutting as an additional possibility in girls (seek advice on how to raise this issue).</td>
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<tr>
<td>Symptoms of low calcium – tetany, muscle cramps, stridor, seizures</td>
<td>Vitamin D deficiency (note: low calcium more likely in infants &lt;12 months)</td>
<td>Look for features of rickets (bossing, swelling of wrists and ankles, bony deformity – which may be in any direction).</td>
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<tr>
<td></td>
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<td>Children with rickets or symptoms of low calcium need prompt specialist advice.</td>
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</tbody>
</table>

*More likely shortly after arrival
<table>
<thead>
<tr>
<th><strong>Musculoskeletal pain</strong></th>
<th>Injury</th>
<th>Low vitamin D is an extremely common cause in refugee children and adolescents with risk factors.</th>
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<tbody>
<tr>
<td></td>
<td>Growing pains</td>
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<td>Joint pathology/inflammation</td>
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<tr>
<td><strong>Fussy/restrictive eating</strong></td>
<td>Behavioural issues</td>
<td>Food insecurity (not being able to afford/access adequate food)</td>
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<td></td>
<td>Excess milk intake</td>
<td>Iron deficiency is common in refugee children</td>
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<td></td>
<td>Enlarged tonsils</td>
<td><em>Helicobacter pylori</em> gastritis</td>
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<td>Other gastrointestinal infections</td>
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<td>Dental disease – pain with chewing may restrict food intake.</td>
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<tr>
<td><strong>Poor growth (failure to thrive, or malnutrition)</strong></td>
<td>Poor intake</td>
<td>Review food insecurity overseas and in Australia.</td>
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<td></td>
<td>Increased losses (gut, urine)</td>
<td>Rickets may restrict linear growth.</td>
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<td></td>
<td>Increased requirements</td>
<td>Seek urgent advice for severe malnutrition – may need admission.</td>
</tr>
<tr>
<td><strong>Developmental or learning concerns, disability</strong></td>
<td>Genetic</td>
<td>May be multifactorial combination of antenatal, peri- and post-natal contributors. Be wary of attributing to English as an additional language – needs specialist review. Check age in older children and consider interrupted schooling, trauma and mental health.</td>
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<tr>
<td></td>
<td>Environmental</td>
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<td></td>
<td>Trauma – injury</td>
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<tr>
<td><strong>Mental health/parent concern</strong></td>
<td>Behaviour concerns</td>
<td>Clarify family background, separations and migration history, parent mental health, and detention experience for people arriving as asylum seekers. A paediatric assessment can be a useful first step to provide comprehensive assessment and facilitate mental health referral.</td>
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<tr>
<td></td>
<td>Sleep issues</td>
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<td></td>
<td>Anxiety/separation issues</td>
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</table>

*More likely shortly after arrival*

**CONDITIONS IDENTIFIED ON POST-ARRIVAL SCREENING**

Refer to the relevant sections of the ASID & RHeNA Recommendations (2016) for further investigation and management of issues identified on screening. These can be accessed on the Australian Refugee Health Practice Guide website.

IMMUNISATION

Vaccine preventable diseases may be endemic and/or epidemic in countries of origin, and disruptions to health care may affect vaccine quality and access to immunisation. Most refugees do not have written documentation of immunisation, although, if present, written records are considered reliable evidence of vaccination status. Check for the presence of a Bacillus Calmette Guerin (BCG) scar (deltoid, forearm, scapula, both sides, and may be in other locations) and a natural history of varicella (chickenpox).

Immunity to rubella should be checked in women of childbearing age and varicella serology should be checked in those 14 years and older if there is no history of clinical varicella infection and no documented vaccination. Hepatitis B serology is part of post-arrival screening. Otherwise, routine serologic testing for immunity to vaccine preventable diseases is not recommended; there is no significant cost benefit; it requires additional blood sampling, and combination vaccines mean the same vaccine will be required if there is inadequate immunity to any of the vaccine components. Specific information on catch-up vaccination is available:

- ASID & RHeNA Recommendations (2016)
- Catch-up immunisation in refugees (2017)

Vaccines for refugees and humanitarian entrants are now funded through government initiatives, and the Australian Immunisation Register (AIR) has been extended to all ages. The No Jab No Pay (federal) legislation has changed immunisation requirements for access to family assistance payments, and in Queensland and Victoria state-based legislation has changed immunisation requirements for access to early childhood services.

Key components of addressing catch-up vaccination are to:

- Assess any existing immunisation records (overseas, pre-departure, post-arrival).
- Consider relevant clinical information (vaccine intervals, chickenpox, hepatitis B infection/immunity, additional risk factors, contraindications to vaccination).
- Develop a catch-up vaccination plan – aim for minimum visits and minimum dosing schedules, using combination vaccines where possible. Catch-up can generally be completed in three visits over 4 months (four visits over 10 months for children less than 10 years).
- Document vaccinations that have been given (in Australia and overseas) on the AIR.
- Ensure catch-up vaccination is completed.

Above all, be opportunistic – do not assume other providers are completing catch-up vaccination – immunisation is the responsibility of all health providers.
NUTRITIONAL ISSUES

Nutritional issues are common. Fussy eating and concerns about weight gain (too little or too much) may be a family priority. These are common paediatric concerns, and are not specific to refugee background families. Specific issues include low weight or height for age, vitamin D deficiency, other vitamin deficiencies, iron deficiency and anaemia. Increasingly, clinicians are noting overweight/obesity as a health issue in the years after settlement, and malnutrition in newly arrived children/adolescents with disability appears to be an emerging issue.

Several studies suggest the prevalence of overweight/obesity is low in recently arrived refugee children/adolescents. However, immigrant cohorts are observed to have increased prevalence of overweight/obesity in the years after settlement and subsequent generations. The early settlement period represents a window for health promotion around nutrition, and dietitian referral may be appropriate.

ASSESSMENT OF NUTRITIONAL STATUS AND GROWTH

- Take a thorough dietary (and general) history and ascertain access to and quantity/quality of food overseas and after settlement. Food insecurity after resettlement is well reported in refugee communities, including in Australia.
- Fussy eating (+/- growth issues) is often due to high caloric intake in the form of drinks/juices at the expense of solid food intake and regular meals. It may also be due to a mismatch between food the child is used to, and food available at childcare/school.
- An early severe/prolonged nutritional insult or chronic disease during infancy will affect long-term growth and may affect final height (‘stunting’). This history is usually easily elicited.
- Consider organic disease early in refugee background children/adolescents with poor growth or reduced appetite; including gastrointestinal infections (Helicobacter pylori gastritis, Giardia intestinalis, other parasites), other infections (including TB), low vitamin D/rickets and dental disease (leading to difficulty chewing). Iron deficiency may affect appetite and compound poor intake. Mental health issues may also be a cause of poor intake/growth.
- Consider family patterns of growth/puberty, remembering parents may have also been malnourished.
- Clarify the correct age/birth date, chart growth parameters on percentile charts (weight/height/body mass index – BMI) and check pubertal status. Measure parent height where possible.

Children with poor nutrition

- Assess for macronutrient deficiency (fat/protein/carbohydrate) by checking growth (as above), oedema, muscle bulk, subcutaneous fat stores and mid upper arm circumference.
- Assess for micronutrient deficiency (vitamin/trace element/mineral) by checking pallor, dry eyes (xerophthalmia), cheilitis, glossitis, gum disease, goitre, rash, rickets, neuropathy, hair and nail changes.
- Assess for organic medical contributors.

Children who are overweight (uncommon on post-arrival screening)

- Assess for complications/associations – girth, striae, hypertension, signs of hyperlipidaemia, acanthosis, early puberty, joint problems, obstructive sleep symptoms, pulmonary hypertension, syndromal features.

Post-natal growth is most rapid during early infancy; then slows by the primary school years, picking up again at puberty. Linear growth is similar in children aged less than 5 years worldwide, although growth must be considered in the context of parent height, ethnicity (Australian growth charts are based on American data) and pubertal status. Children and adolescents may have different growth parameters compared to their Australian-born peers and still have normal growth. It is important to remember that around 25% of Australian children and adolescents are overweight or obese.

Most common causes of poor growth in children and adolescents from refugee backgrounds are elicited with a careful history and initial refugee health screening investigations. Once the initial screen has been completed and treatment initiated as necessary, a period of monitoring growth is often appropriate.

The principles of healthy eating are universal and should be discussed with families, and breastfeeding should be promoted. Encourage introduction of solids at 4–6 months of age, introduction of meat before 12 months, and an appropriate diet containing vegetables, legumes, fruit, cereals, meat and dairy. Milk should be limited to less than 600 ml daily after 12 months; in children with lactose intolerance, regular yoghurt and cheese are appropriate sources of calcium. Adequate calcium intake is essential for all children but has additional implications in groups at risk for low vitamin D. Home-cooked food and maintaining families’ cultural food preferences is usually healthier and more economical.

Consider referral to a dietitian or extra help from the Maternal and Child Health Service. Children who are severely malnourished need urgent assessment and may need hospital admission.
HAEMATOLOGY ISSUES

Australian data suggest the prevalence of anaemia is 10–30% in refugee children, with similar prevalence in children from Africa, the Middle East or Asia. Iron deficiency affects a similar proportion, and is associated with tiredness, irritability and adverse effects on behaviour and cognitive development.

ANAEMIA

Anaemia is usually multifactorial in refugee children and adolescents. Contributors include iron deficiency, malaria and parasite infection/infestation. Iron deficiency is usually nutritional, but may be due to gastrointestinal loss or associated with Helicobacter pylori infection.

Low B12

Low B12 has been reported in 16.5% of refugee arrivals in Australia, with high rates in people from Afghanistan, Bhutan, Iran, and countries in the Horn of Africa. Low B12 should be considered in anyone with restricted food access pre-arrival; lack of dietary animal products is associated with B12 deficiency; whereas a lack of fresh food is associated with folate deficiency. In a national study of low B12 in refugee arrivals, macrocytosis was uncommon. Exclusive breastfeeding in the setting of maternal B12 deficiency places infants at high risk of deficiency. Low B12 may be associated with developmental delay/regression, motor delay, seizures, or failure to thrive. However, even without these features, low B12 is a medical emergency in infants, and requires urgent specialist advice and assessment.

Haemoglobinopathies

Haemoglobinopathies are more common in African, Asian and Middle Eastern populations. This means many children will be carriers, with microcytosis, and sometimes with mild anaemia (actual disease is uncommon). Screening for carrier status is not routine for children. Sickle cell disease/thalassaemia major/significant other haemoglobinopathy should be apparent based on clinical examination and FBE.

Lead exposure

Elevated blood lead levels (>10 mcg/dL) are associated with cognitive impairment (>10 mcg/dL), anaemia (>25 mcg/dL) and central nervous system/gastrointestinal symptoms (>60 mcg/dL). Lead levels for children exposed in infancy peak around the age of 2 years, then decrease. In the 1980s and 1990s, elevated blood lead levels were reported in 7–13% of African and South Asian refugee children. More recently, elevated blood lead levels have been noted in Burmese Karen and children. Elevated lead is more common in children less than 6 years, although rarely to a level requiring chelation therapy (>45 mcg/dL). Testing for blood lead levels is recommended in recently arrived refugee children (aged 6 months – 16 years) in the United States, and should be considered as second-line screening in children with microcytic anaemia, and initially in children with pica, developmental issues or a history of exposure, including through traditional medicines. Both iron deficiency and inadequate calcium intake may increase lead absorption.

NEUTROPENIA

People from Africa commonly have a neutrophil count below Australian reference ranges (‘benign ethnic neutropenia’). In clinically well children and adolescents (excluding fevers, gingivitis, or skin infections) this is usually a normal variant.

APPROACH TO HAEMATOLOGY ISSUES

Screening

• Routine screening tests are FBE, film and ferritin (an iron storage protein). Ferritin provides a reasonably accurate estimate of iron stores in the absence of inflammatory disease.
• Low iron stores may result in false negative results (lack of elevated HbA2) in haemoglobin electrophoresis in beta-thalassaemia carrier state (although screening for haemoglobinopathies is not routine in refugee children/adolescents).
• Measure serum active B12 (holotranscobalamin) and red cell folate if clinically indicated. Serum active B12 measures the biologically available form of B12 and is a more accurate indicator of B12 status than total B12.
• Measure serum lead in children with pica, microcytosis not explained by iron status/haemoglobinopathy carrier state, and where there are development issues or a history suggesting exposure, including through traditional medicines.

Management

• Iron deficiency should be treated using oral iron supplementation, giving a dose of elemental iron of 2–6 mg/kg/day for around 3 months. Discuss side effects (gastric upset, constipation, dark stools) and safety/storage. Iron is extremely toxic in overdose. For children with severe iron deficiency, consider concurrent folate supplementation.
• Low B12 needs urgent specialist consultation/review and is a medical emergency in infants. The child will typically require further investigations to clarify dietary or metabolic causes of low B12 (urine methylmalonic acid/serum homocysteine – expect both to be elevated in deficiency) then treatment with intramuscular B12, usually in the hospital setting.
• Low folate should not be treated until low B12 has been excluded (and treated if present) to avoid precipitating sub-acute combined degeneration of the spinal cord.
DEVELOPMENT AND LEARNING

Development may be affected by any combination of biological, environmental, social and emotional factors. Considerations in children from refugee backgrounds include:

- **Biological:** pre-, peri- and post-natal complications; malnutrition, chronic disease, severe infection (including meningitis and cerebral malaria); hearing impairment, visual impairment; family history, genetic/inherited conditions.

- **Environmental:** living conditions, access to schooling/education, healthcare access, food security; exposure to communicable diseases, toxins, environmental hazards; injuries.

- **Social:** migration and language transitions (and the age/developmental stage at which they occurred); parenting roles; family disruption/separation; parent/family mental health; parent/family education, occupation and circumstances; roles and responsibilities; detention experience; human rights violations; settlement experience in Australia.

- **Emotional:** temperament, stress, trauma experiences, loss, displacement, uncertainty around future, mental health problems.

Parent concern about a child’s development is highly predictive of developmental delay/disability, although absence of concern is not necessarily reassuring. Families with multiple children usually readily identify if one child’s development is different to their siblings, and it is useful to ask whether child development is comparable to their extended family and children within the same community.

Completing a thorough developmental and educational assessment in children/adolescents from refugee backgrounds present challenges. As with any other child, a developmental, medical, social and family history is essential, along with assessment of sleep, screen use, behaviour, and temperament. However, it is important to recognise that antenatal, perinatal, and post-natal screening/supports will have been affected by forced migration, and to consider migration, education and language transitions in relation to developmental milestones. There are additional factors to consider in the aetiology of development/learning problems in refugee children, and basic screening for contributors, such as treatable medical concerns (iron deficiency, vitamin B12 deficiency, hypothyroidism), visual/hearing impairment and mental health problems is frequently missed.

Immigrants learning a new language usually achieve conversational proficiency after 2–3 years but take much longer to achieve academic success, especially when schooling occurs in the new language. Large international studies (in advantaged children with age-appropriate schooling) show children aged 8–12 years at migration achieve academic language more quickly than other age groups, although they take 5–7 years to reach the standard of native-born speakers when tested at group level. Students from refugee backgrounds are likely to have additional risk factors for educational disadvantage, including interrupted or inadequate schooling, financial hardship, mental health issues, cultural transitions and family stressors. However, a recent systematic review found young people from refugee backgrounds have similar school outcomes to their local-born peers, and low teacher expectations are among the risk factors for learning problems. Resource factors are high academic/life ambition, motivational narratives, parent involvement in education, a supportive home environment, accurate grade placement, teacher understanding of linguistic/cultural heritage, culturally appropriate school transition, supportive peers and successful acculturation. Many of these resilience factors are modifiable with long-term paediatric care.

ASSESSMENT OF DEVELOPMENT AND LEARNING

Developmental and educational assessments should include a comprehensive refugee health assessment, and an educational assessment should include a developmental assessment. Students from refugee backgrounds may be referred for assessment of developmental/learning issues several years after arrival.

Assessment should include:

- Migration history
- Languages spoken; preferred language; and timing of acquisition of language(s)
- Parents’ prior education and occupation
- Confirmation of reported birth date
- Early medical history (including pregnancy/delivery, early childhood, nutrition, communicable diseases, injuries/accidents, seizures, hospital admissions, sensory impairment)
- Early developmental history – gross motor milestones and major language milestones (e.g. speaking in sentences) appear to be remarkably constant across languages and cultures
• Family history, including family developmental history and consanguinity
• Trauma/mental health history, including detention history where relevant
• Schooling history overseas (including access, type, language of teaching)
• Current behavioural, emotional, developmental and educational concerns, and level of function
• Families’ settlement or asylum experience
• Home and family environment – considering current function, risk and resilience factors
• Sleep, screen use and dietary history
• A full physical examination

DEVELOPMENTAL SCREENING INSTRUMENTS

There is a lack of validated developmental screening tools for this group, and in practice clinicians typically rely on the history, with additional information from allied health and educators wherever possible. Possible screening tools include:

• Strengths and Difficulties Questionnaire (SDQ), which is translated into multiple languages (2–17 years) http://www.sdqinfo.com
• Ages and Stages Questionnaire (ASQ) (age 0–5 years) http://agesandstages.com
• Child Behaviour Checklists (1.5–18 years) www.aseba.org

There are a number of screening tools available that have been designed for use in the primary healthcare setting, their validity with different cultural groups varies. A recent review of the SDQ found the instrument has some validity as a clinical screening tool in cross-cultural settings but is not trauma sensitive.45

Formal tests of cognition and language are culturally bound, and these tests are generally not validated for use in non-English-speaking children, or for use with an interpreter.46 However, this testing often provides useful information in the context of a comprehensive assessment, and is usually required to gain additional support in the school setting.

MANAGEMENT OF DEVELOPMENTAL AND LEARNING ISSUES

• Early audiology and formal visual assessment.
• Early thyroid function testing and iron studies (also consider serum active B12 and blood lead levels).
• Other tests (microarray, Fragile X screening, metabolic screening) can usually be performed later, and rarely change initial management.
• Encourage a healthy diet, adequate sleep and appropriately limited screen use and content.
• Encourage first language use and provide education on additional language acquisition.
• Facilitate opportunities for play, relaxation and exercise, and opportunities for success – sporting activities can offer connections and success for many children/adolescents.
• Apply for financial supports where eligible – e.g. carer’s allowance (offshore Humanitarian Programme entrants are eligible from arrival; children on temporary protection visas are eligible, asylum seekers are not eligible).
• Long-term care – often details emerge as trust and rapport develop.
• Cognitive and language testing – in children with a developmental history suggesting substantial concerns/intellectual disability, findings should not be attributed to learning English, and formal assessment/access to support services should not be delayed.
• Enlist additional supports early (see Table 2), including complex case management for new arrivals.
Table 2: Additional supports for children/adolescents with developmental/learning concerns

<table>
<thead>
<tr>
<th>PRE-SCHOOL-AGED CHILDREN</th>
<th>SCHOOL-AGED CHILDREN/ADOLESCENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Maternal and Child Health Nurses</td>
<td>• Liaise with the school for formal assessment and supports as available.</td>
</tr>
<tr>
<td>• Playgroups and Early Start Kindergarten</td>
<td>• National Disability Insurance Scheme (NDIS – early intervention 0–6 years, or disability services 7–65 years – note: asylum seekers and people on temporary protection visas are not eligible) or other allied health</td>
</tr>
<tr>
<td>• Childcare</td>
<td>• Mental health services if needed</td>
</tr>
<tr>
<td>• Kindergarten</td>
<td>• Carer allowance where eligible</td>
</tr>
<tr>
<td>• Early intervention (National Disability Insurance Scheme – NDIS) or local allied health</td>
<td>• Complex case management (new arrivals)</td>
</tr>
<tr>
<td>• Mental health services if needed</td>
<td>• Mentoring/casework supports, including youth-specific</td>
</tr>
<tr>
<td>• Carer allowance where eligible</td>
<td>• Homework support programs</td>
</tr>
<tr>
<td>• Complex case management (new arrivals)</td>
<td></td>
</tr>
</tbody>
</table>
ADOLESCENT HEALTH AND DEVELOPMENT

WHO defines adolescent as 10–19 years, youth as 15–24 years and young people as 10–24 years. Humanitarian populations include a high proportion of adolescents and young people. In 2016, 23% of the Australian Humanitarian Programme intake were young people aged 12–24 years. Adolescent developmental issues include physical and cognitive transitions, emergent autonomy and independence, personal identity and body image, peer relationships and recreational goals, educational and vocational goals, and sexuality. Adolescence can be divided into three general stages of psychosocial development.

Table 3: Stages of adolescent development

<table>
<thead>
<tr>
<th>EARLY ADOLESCENCE (10–14 YEARS)</th>
<th>LATE ADOLESCENCE (15–19 YEARS)</th>
<th>YOUNG ADULTHOOD (19–24 YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Rapid growth and physical change; secondary sexual characteristics develop</td>
<td>• Pubertal maturation</td>
<td>• Peak physical fitness and bone density</td>
</tr>
<tr>
<td>• Gender roles consolidate</td>
<td>• Growth rate decreases</td>
<td>• Further development of reasoning and self-regulation</td>
</tr>
<tr>
<td>• Low resistance to peer influences</td>
<td>• Progression of intimate relationships</td>
<td>• Education and vocational goals important</td>
</tr>
<tr>
<td>• Low future orientation</td>
<td>• Development of executive and self-regulation skills</td>
<td>• Adoption of adult roles and responsibilities</td>
</tr>
<tr>
<td>• Poor self-regulation and increases in risk-taking behaviour</td>
<td>• Greater future orientation and ability to assess consequences</td>
<td></td>
</tr>
<tr>
<td>• Identity formation and new interests, including sexual relationships</td>
<td>• Increasing autonomy and independence from family</td>
<td></td>
</tr>
</tbody>
</table>

ACROSS ADOLESCENCE

• Establishing the social, cultural, emotional, educational and economic resources to maintain health and wellbeing across the life course

• Rapid adoption and use of technology

• Risks of injuries/transport injuries, communicable diseases, non-communicable diseases, mental health disorders, substance use and maternal disorders; with variation between countries in risks and burden of disease
Adolescents from refugee backgrounds face all these transitions in addition to the transitions of resettlement. They are faced with balancing the values/expectations of their parents/cultural background with those of their new peers, while developing their own identity and learning a new language in a new schooling system. Adolescents may make new meaning from past trauma, and present with mental health concerns in relation to trauma in early childhood.

**APPROACH TO ADOLESCENT CARE**

During adolescence, healthcare visits may be limited, and adolescents may seek care from a variety of providers. The goal of post-arrival assessment for adolescents should be to complete a thorough physical and psychosocial evaluation with an emphasis on preventative care. The initial assessment provides a starting point to introduce longer-term, developmentally appropriate care in the areas of physical, mental and sexual health. Adolescents may have an incorrect date of birth recorded. This can have significant implications for assessing learning or school/vocational placement, and may need early assessment.

When consulting with adolescents, helpful strategies include:

- Seeing the adolescent alone at some point during (or soon after) the initial screening assessment. This may be more acceptable to parents and adolescents if the health provider sees the family initially, and they are aware this will occur in the future.
- Establishing confidentiality for the medical consultation (and also for the interpreter)
- Taking a direct history from the adolescent about their health concerns
- Using clear language and open-ended questions, with a non-judgmental approach
- Allowing enough time

The **HEADSSS screen** can be used to assess adolescent psychosocial health:

- **H** – home
- **E** – education/employment (and eating)
- **A** – activities
- **D** – drug and alcohol use
- **S** – sexual activity
- **S** – suicide, depression, self-harm
- **S** – safety from injury and violence

**Sexual health**

Sexual health is an important area of adolescent health care that is often neglected. Australian research suggests many refugee young people have a poor understanding of sexual health and STI, and limited opportunities to learn about sexual health before and after their arrival in Australia.\(^{49-51}\) Young people from refugee backgrounds view school-based sexuality programs and health providers, including general practitioners (GPs), as useful and appropriate sources of information,\(^{49}\) and express a preference for clear factual information and gender-matched educators. Teenage pregnancy is also identified as an issue in refugee background young people after settlement.\(^{52}\)

Consider sexual health, STIs (including hepatitis B), sexual violence and female circumcision. A sensitive history is required, allowing adequate time. Do not assume prior sexual health knowledge, and offer opportunities for questions/discussion. Written resources for young people, and general sexual health resources are available, although many of these are not translated. Translated information on sexual health, safe sex and specific STIs is also available. See Health Translations Directory [http://healthtranslations.vic.gov.au](http://healthtranslations.vic.gov.au)
Disability affects people across the life span, and includes physical, mental and intellectual impairments that interact with the physical and social environment to cause different forms of activity limitations. Australian service systems have developed to respond to varying impairments, disabilities, needs and age cohorts, and are currently in transition with the implementation of the National Disability Insurance Scheme (NDIS).

Following changes to the visa health requirement for Humanitarian Programme entrants in 2012, the number of refugee arrivals with disabilities appears to have increased, with increased complexity in clinical practice. Clinical assessment, NDIS planning and service access can be challenging for recent arrivals with disability, especially for older children, adolescents and adults.

There is limited research and information about disability in people from refugee backgrounds and people seeking asylum in Australia. Emergent issues include:

- Lack of recorded data and information on new entrants with disability, transfer of offshore information
- Lack of on-arrival support – people living with disabilities from refugee backgrounds often arrive in Australia without aids or equipment. Initial housing arrangements may not be suitable for their needs.
- Access to appropriate diagnosis and cognitive disability screening
- Access to medical specialists and equipment
- Access to appropriate education
- Access to appropriate housing

The NDIS is currently being introduced across Australia, to be completed by late 2019. NDIS will assume the function of Early Childhood Intervention Services, Commonwealth funding for autism and other forms of disability (Better Start), and other services for children (and adolescents/adults). Support is goal-oriented, with a focus on community participation and accessing mainstream supports. Culturally and linguistically diverse (CALD) community participation and access to NDIS during the pilot phases has been low. This is likely to be due to language barriers, difficulty navigating services, and different concepts and understanding of service systems, although there is limited research in this area.
MENTAL HEALTH, EMOTIONAL AND BEHAVIOURAL ISSUES

Children and adolescents from refugee backgrounds are likely to have experienced significant adversity before and after arrival in Australia. They will have experienced significant upheaval and transitions; many have been exposed to conflict, violence or life-threatening situations. They may have experienced family separation or loss of family members, physical or sexual violence, or other significant human rights violations. Other experiences include being separated from community, disruption to schooling/routines, and prolonged periods of dislocation with uncertainty around the future. A history of these profoundly traumatic events is often not disclosed during the initial assessment, but may emerge once a therapeutic relationship has developed.

Children may have additive risks for mental health and developmental concerns through parent mental illness, disrupted family functioning, and interrupted schooling. Children and adolescents who are seeking asylum may present with concerns specific to their asylum/detention experience, and/or the ongoing impact of uncertainty due to current immigration policy. Consider the timing of migration and trauma exposure(s) in relation to developmental milestones.

• Children and adolescents experience similar psychological reactions to trauma as adults, however, the clinical presentation reflects their age and development.

• Presentations may include behavioural problems, sleep concerns, attention difficulties, low self-esteem, friendship difficulties, enuresis, and developmental/education concerns, as well as symptoms of anxiety, depression and post-traumatic stress disorder (PTSD).

• Unaccompanied and separated minors have specific vulnerabilities and increased risk of experiencing violence (including sexual violence).66-68 Orphan relative visa holders are a high-risk group, with the majority from refugee-like backgrounds; however, they do not receive the supports available to Humanitarian Programme entrants.

• Long-term (adult) mental illness may present in adolescence. Adolescents may also make new meaning from past trauma, and present with mental health concerns arising from early childhood trauma.

• Parent distress and mental illness influence child/adolescent mental health, and parents with mental health issues often have reduced coping and parenting skills.

• Asylum seeker children and adolescents who have experienced immigration detention are at high risk of mental health problems. Australian immigration detention has a negative impact on child mental health, parenting and family functioning.61-66 Infants born in detention may have severe attachment issues associated with parent depression.62,65

• While pre-arrival trauma is well recognised in refugee populations, settlement is also associated with multiple stressors.

• Consider cultural aspects to the presentation, and the child/adolescent and family’s perspectives.

• People from refugee backgrounds face significant barriers to accessing mental health services in Australia.67-69 There are difficulties with diagnosis and measurement of mental health issues across cultures.70 Studies of refugee children and adolescents report widely varying prevalence figures for mental health problems in different groups, and different rating scales are used.71 There is more information available on the prevalence of PTSD, depression, and anxiety than other diagnoses, however, it is important to note that prevalence is specific to cohorts, conflicts and countries of settlement.
**MANAGEMENT OF MENTAL HEALTH CONCERNS**

- Seek specialist paediatric mental health advice early.

- Where relevant, consider and screen for treatable conditions that may cause and/or exacerbate mental health or behavioural problems, including hypothyroidism, vitamin B12 deficiency and iron deficiency.

General principles for managing children/adolescents experiencing trauma reactions and/or mental health concerns include:

- Making sure children and adolescents are informed about their own situation – using developmentally appropriate language and offering them the opportunity to ask questions

- Addressing mental health issues in the whole family

- Supporting primary attachments

- Ensuring predictability – through maintaining routine, including school attendance, and preparing for changes; reassuring children about the future

- Addressing sleep issues – maintaining a healthy age-appropriate sleep routine and limiting screen time (and addressing screen content/safety)

- Encouraging play in younger children, enjoyable activities or sports in older children/adolescents, and peer connections and experiences of success at all ages

- Encouraging expression of emotions and asking what children/young people are thinking/feeling

- Setting realistic goals for behaviour and avoiding overreacting to difficult behaviour during transition periods

- Promoting engagement with school and community, and maintenance of first language alongside English language learning

*Many of these strategies can be implemented while waiting for specialist mental health input.*

Although people from refugee backgrounds may have experienced significant trauma, there is good evidence that they often have great resilience and positive social adjustment. Experience of trauma does not always predict worse mental health outcomes, and mental health symptoms may not result in functional impairment. The majority of children from refugee backgrounds grow up to be well-adjusted adults and make significant contributions to their countries of resettlement.
CHILD PROTECTION

Like any other group of children/adolescents in Australia, child protection issues may be identified for children/adolescents from refugee backgrounds. Child maltreatment is broadly defined as any non-accidental behaviour by parents, caregivers, other adults or older adolescents that is outside the norms of conduct and entails a substantial risk of causing physical or emotional harm to a child (less than 18 years of age). Maltreatment may occur through acts of omission (such as neglect of care) or commission (such as inflicted harm). Subgroups of protective concerns include:

- **Physical abuse** – non-accidental use of physical force against a child that results in harm to the child
- **Emotional maltreatment** – inappropriate verbal or symbolic acts towards a child and/or a pattern of failure over time to provide a child with adequate non-physical nurture and emotional availability
- **Neglect** – failure by a parent or caregiver to provide a child (where they are in a position to do so) with the conditions that are culturally accepted as being essential for their physical and emotional development and wellbeing
- **Sexual abuse** – the use of a child for sexual gratification by an adult or significantly older child/adolescent
- **Witnessing family violence** – child being present (hearing or seeing) while a parent or sibling is subjected to physical abuse, sexual abuse or psychological maltreatment, or is visually exposed to the damage caused to persons or property by a family member’s violent behaviour

The National Framework for Protecting Australia’s Children 2009–2020 emphasises that protecting children is everyone’s business. Priorities include early recognition and action, support for carers, responding to sexual abuse, and ‘joining up’ service delivery. Reporting requirements (mandated reporting – including categories of reporting – and failure to disclose offences) vary with jurisdiction, and it is important to be aware of responsibilities and requirements (and seek advice if needed). Forced underage marriage and procurement of female circumcision/cutting are both urgent child protection matters, with mandated reporting requirements. For families seeking asylum, current immigration policy and prolonged uncertainty can be substantial drivers for mental illness and parenting issues, and may also act as a disincentive for disclosure of family violence and/or child protection matters. These situations are complex, and require a high index of concern and a supportive response with specialist input.
INCORRECT BIRTH DATE

Children/adolescents from refugee backgrounds may have an incorrect birth date on their visa paperwork, which becomes the basis for all the official documentation in the country of settlement. This issue is not uncommon, especially for adolescents, and may have significant effects on school placement, developmental assessment (including formal assessments such as cognitive testing) and access to welfare, services and case management support.

The reasons for an incorrect birth date are often complex. Their birth date may be unknown, recorded incorrectly due to error or calendar discrepancies, or changed to due to family circumstances/conditions in country of origin. Any child with a birth date of 01/01/(year) is almost certainly younger than their paperwork age. Families may be reluctant to raise this as an issue, and may be worried about the implications for their migration claim/visa/citizenship. Often incorrect birth date emerges as an issue some years after settlement.

Correcting a birth date requires an assessment of the family narrative (including contextual migration events, birth order/ages of siblings matched to any known local events or transitions in the migration pathways), reviewing and documenting any existing paperwork or known milestones, and an assessment of the child’s growth, dental eruption, pubertal stage and development, with information from schools wherever possible (on peers, learning, maturity/function in the classroom). Undisclosed trauma frequently becomes apparent during age assessment, and it is essential to allow enough time and be prepared to work through this process at a pace that is acceptable to the child and family.

A bone age X-ray or orthopantogram (OPG) are sometimes used as additional information in the specialist setting, but neither bone age nor OPG imaging defines the child’s or adolescent’s age. Bone age X-rays provide an estimate of bone age compared to chronological age. The Greulich and Pyle (GP) method is used most commonly (evaluating a single frontal X-ray of the left wrist), however, it is essential to note:

- The GP method is intended to assess skeletal age knowing the chronological age (not the reverse).
- The GP method is based on data from white American children from the 1930s; and there is considerable racial variation.
- The GP method is not precise – the margin of error is typically a 3–4 year range throughout childhood/adolescence.
- Skeletal maturity is affected by additional factors such as constitutional delay in maturation.

Bone age X-rays are most useful in a child who is clearly many years older or younger than their paperwork birth date. Similar principles apply to the use of the OPG.

### SERVICE SYSTEMS

Table 4 highlights key national service systems for children, adolescents and young people. State and territory information can be found under Referrals on the Australian Refugee Health Practice Guide website: [http://refugeehealthguide.org.au/referrals](http://refugeehealthguide.org.au/referrals).

**Table 4: National service systems for children and adolescents**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>AGE RANGE</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision checks</td>
<td>All</td>
<td>Commercial optometry providers often offer Medicare billed optometry assessment, although spectacles may be expensive. University optometry services/refugee-affiliated services such as the Australian College of Optometry, Northern Territory Primary Health Network or Brien Holden Vision Institute may be cheaper.</td>
</tr>
<tr>
<td>Audiology services</td>
<td>All</td>
<td>Australian Hearing provides screening and ongoing assistance to young people (0–25 years) with permanent and long-term hearing loss. For local service providers visit Australian Hearing: <a href="http://www.hearing.com.au">www.hearing.com.au</a>.</td>
</tr>
<tr>
<td>Allied health – e.g. speech pathology, occupational therapy and physiotherapy</td>
<td>Early childhood – 0–6 years or 0–school entry; school aged</td>
<td>Available from local community health services in some states and territories, from public hospitals in others, and through some school-based programs. Contact state or territory Department of Health for further information. Also see Speech Pathology Australia <a href="https://www.speechpathologyaustralia.org.au">https://www.speechpathologyaustralia.org.au</a> (See ‘Find a Speech Pathologist’ language directory available). For children with disability, services are based within the NDIS.</td>
</tr>
<tr>
<td>Community dietitians and diabetes educators</td>
<td>All</td>
<td>Variable availability. To find a diettian in your state or territory see your state/territory Department of Health website, or the Dietitians Association of Australia website: <a href="https://daa.asn.au/find-an-apd">https://daa.asn.au/find-an-apd</a>.</td>
</tr>
<tr>
<td>Family and reproductive rights education program (FARREP) workers (female circumcision/cutting)</td>
<td>All women and girls</td>
<td>FARREP workers provide community education on female circumcision/cutting and individual support to people affected by it. The program is based in Victoria, but provides national advice and coverage: <a href="http://www.thewomens.org.au/health-professionals/health-professionals-gynaecology/family-reproductive-rights-education-program-farrep">www.thewomens.org.au/health-professionals/health-professionals-gynaecology/family-reproductive-rights-education-program-farrep</a>. FARREP workers are available who speak Amharic, Arabic, Somali and Tigrinya.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| Disability and National Disability Insurance Scheme (NDIS) | All | Funding support for people with disability and their families and carers: [www.ndis.gov.au](http://www.ndis.gov.au)  
NDIS translated information  
Better Start for children with disability initiative – diagnostic/assessment – MBS item 137 (specialist) and MBS item 139 (GP) supports additional Medicare rebateable allied health sessions, [http://www.betterstart.net.au](http://www.betterstart.net.au)  
Action on Disability within Ethnic Communities (ADEC) – empowering people with disabilities from ethnic backgrounds, including translated information on ADEC services, respite, NDIS, and group activities. [http://www.adec.org.au](http://www.adec.org.au)  
Refugee children are a target group in the current strategy.  
Immunisation requirements affect eligibility for childcare benefit/rebate, and access in some states. |
For maps of local services see: [http://raisingchildren.net.au](http://raisingchildren.net.au) (my neighbourhood – by postcode) |
<table>
<thead>
<tr>
<th><strong>Outside school hours care (OSHC)</strong></th>
<th><strong>School-aged</strong></th>
<th>OSHC is available at many schools. Immunisation requirements affect eligibility for childcare benefit/rebate for OSHC.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Homework clubs</strong></td>
<td><strong>School-aged</strong></td>
<td>Homework clubs are available for students in many areas, and may be a significant source of support/community connections. Check with the child’s school, local community health centre, local council or local migrant resource centre for details.</td>
</tr>
<tr>
<td><strong>Libraries and toy libraries</strong></td>
<td><strong>All</strong></td>
<td>For local libraries and toy libraries see: <a href="http://raisingchildren.net.au">http://raisingchildren.net.au</a> (my neighbourhood – by postcode)</td>
</tr>
<tr>
<td><strong>Child and Adolescent Mental Health Services</strong></td>
<td><strong>0–15 or 0–18 years, varies, moving towards 0–25 years</strong></td>
<td>Child and adolescent mental health services operate across the different jurisdictions. See State and territory referrals, Australian Refugee Health Practice Guide <a href="http://www.refugeehealthguide.org.au/referrals">http://www.refugeehealthguide.org.au/referrals</a></td>
</tr>
<tr>
<td><strong>Headspace</strong></td>
<td><strong>12–25 years</strong></td>
<td>Headspace is the national youth mental health foundation, with a network of drop-in centres and web-based resources: <a href="http://www.headspace.org.au">www.headspace.org.au</a>. Check language service availability.</td>
</tr>
<tr>
<td><strong>Torture and trauma</strong></td>
<td><strong>All</strong></td>
<td>Forum of Australian Services for Survivors of Torture and Trauma (FASSTT) agencies in each state and territory offer direct services to survivors of torture and trauma, their families and communities. These include psychological assessments, individual psycho-therapeutic interventions, group and family therapy, youth activities, natural therapies and community development. For services in your state or territory see: <a href="http://www.fasstt.org.au">www.fasstt.org.au</a></td>
</tr>
<tr>
<td><strong>Youth workers (includes youth counselling service)</strong></td>
<td><strong>14–25 years</strong></td>
<td>Local community health service or state/territory Department of Health</td>
</tr>
</tbody>
</table>

**RESOURCES**

- Royal Children’s Hospital (RCH) Centre for Community Child Health [www.rch.org.au/ccch/publications-resources/Family_information_sheets](http://www.rch.org.au/ccch/publications-resources/Family_information_sheets)
- Raising Children Network (focus is 0–15 years) [http://raisingchildren.net.au](http://raisingchildren.net.au)
- Headspace [https://headspace.org.au](https://headspace.org.au)
REFERENCES


58. Thomas S, Nafees B, Bhugra D. 'I was running away from death': the pre-flight experiences of unaccompanied asylum seeking children in the UK. Child Care Health Dev. 2004; 30(2):113-122.


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