Guideline summary

The Australasian Society for Infectious Diseases and Refugee Health Network of Australia recommendations for health assessment for people from refugee-like backgrounds: an abridged outline

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There are currently more than 65 million people who have been forcibly displaced worldwide, including 21.3 million people with formal refugee status, over half of whom are aged under 18 years.1 More than 15 000 refugees have resettled in Australia in the 2015–16 financial year, which includes a proportion of the 12 000 refugees from Syria and Iraq recently added to Australia’s humanitarian intake.2 In addition, around 30 000 asylum seekers who arrived by plane or boat are currently in Australia awaiting visa outcomes.3

People from refugee-like backgrounds are likely to have experienced disruption of basic services, poverty, food insecurity, poor living conditions and prolonged uncertainty; they may have experienced significant human rights violations, trauma or torture. These circumstances place them at increased risk of complex physical and mental health conditions. They face numerous barriers to accessing health care after arrival in Australia, such as language, financial stress, competing priorities in the settlement period, and difficulties understanding and navigating the health care system.4-6 Most people require the assistance of an interpreter for clinical consultations.7 Offering a full health assessment to newly arrived refugees and asylum seekers is a positive step towards healthy settlement, and helps manage health inequity through the provision of catch-up immunisation and the identification and management of infectious and other health conditions.

These guidelines update the Australasian Society of Infectious Diseases (ASID) guidelines for the diagnosis, management and prevention of infectious diseases in recently arrived refugees published in 2009 and previously summarised in the MJA.8 When these recommendations were first published, more than 60% of humanitarian entrants arriving in Australia were from sub-Saharan Africa9 and had a high prevalence of malaria, schistosomiasis and hepatitis B virus (HBV) infection.10-13 The initial guidelines were primarily intended to help specialists and general practitioners to diagnose, manage and prevent infectious diseases. Since then, there have been changes in refugee-source countries — with more arrivals from the Middle East and Asia and fewer from sub-Saharan Africa14 — and an increased number of asylum seekers arriving by boat15 alongside complex and changing asylum seeker policies and changes in health service provision for these populations. In this context, we reviewed the 2009 recommendations to ensure relevance for a broad range of health professionals and to include advice on equitable access to health care, regardless of Medicare or visa status. The revised guidelines are intended for health care providers caring for people from refugee-like backgrounds, including GPs, refugee health nurses, refugee health specialists, infectious diseases physicians and other medical specialists.

This article summarises the full guidelines, which contain detailed literature reviews, recommendations on diagnosis and management along with explanations, supporting evidence and links to other resources. The full version is available at http://www.asid.net.au/documents/item/1225.
Methods

The guideline development process is summarised in Box 1. The two key organisations developing these guidelines are ASID and the Refugee Health Network of Australia. ASID is Australia’s peak body representing infectious diseases physicians, medical microbiologists and other experts in the fields of the prevention, diagnosis and treatment of human and animal infections. The Refugee Health Network is a multidisciplinary network of health professionals across Australia with expertise in refugee health.26

We defined clinical questions using the PIPOH framework (population, intervention, professionals, outcomes and health care setting).15 The chapter authors and the Expert Advisory Group developed recommendations based on reviews of available evidence, using systematic reviews where possible. Australian prevalence data also informed screening recommendations; for example, the low reported prevalence of chlamydia (0.8–2.0%) infections and absence of gonorrhoea infections in refugee cohorts in Australia13,22,23 (and in other developed countries24–27) informed the new recommendation for risk-based sexually transmitted infection (STI) screening.

Despite the intention to assign levels of evidence to each recommendation, there was limited published high level evidence in most areas, and virtually all recommendations are based on expert consensus. Consensus was not reached regarding the recommendations relating to human immunodeficiency virus (HIV) and STIs.

The term “refugee-like” is used to describe people who are refugees under the United Nations Refugee Convention,28 those who hold a humanitarian visa, people from refugee-like backgrounds who have entered under other migration streams, and people seeking asylum in Australia. “Refugee-like” acknowledges that people may have had refugee experience in their countries of origin or transit, but do not have formal refugee status.

Current pre-departure screening

All permanent migrants to Australia have a pre-migration immigration medical examination 3–12 months before departure,29 which includes a full medical history and examination. Investigations depend on age, risk factors and visa type,30 and include:

- a chest x-ray for current or previous tuberculosis (TB); age ≥ 11 years;
- screening for latent TB infection with an interferon-γ release assay or tuberculin skin test (for children aged 2–10 years, if they hold humanitarian visas, come from high prevalence countries or have had prior household contact);
- HIV serology (age ≥ 15 years, unaccompanied minors);
- hepatitis B surface antigen (HBsAg) testing (pregnant women, unaccompanied minors, onshore protection visas, health care workers);
- hepatitis C virus (HCV) antibody testing (onshore protection visas, health care workers); and
- syphilis serology (age ≥ 15 years, humanitarian visas, onshore protection visas).

Humanitarian entrants are also offered a voluntary pre-departure health check depending on departure location and visa subtype.31 The pre-departure health check includes a rapid diagnostic test and treatment for malaria in endemic areas; empirical treatment for helminth infections with a single dose of albendazole; measles, mumps and rubella vaccination; and yellow fever and polio vaccination where relevant. The current cohort of refugees arriving from Syria will have extended screening incorporating the immigration medical examination and pre-departure health check, with additional mental health review and immunisations.

People seeking asylum who arrived by boat have generally had a health assessment on arrival in immigration detention — although clinical experience suggests that investigations and detention health care varies, especially for children. However, asylum seekers who arrived by plane will not have had a pre-departure immigration medical examination.

General recommendations

Our overarching recommendation is to offer all people from refugee-like backgrounds, including children, a comprehensive health assessment and management plan, ideally within 1 month of arrival in Australia. This assessment can be offered at any time after arrival if the initial contact with a GP or clinic is delayed, and should also be offered to asylum seekers after release from detention. Humanitarian entrants who have been in Australia for less than 12 months are eligible for a GP Medicare-rebatable health
assessment. Such assessments may take place in a primary care setting or in a multidisciplinary refugee health clinic. Documented overseas screening and immunisations, and clinical assessment should also guide diagnostic testing.

Health care providers should adhere to the principles of person-centred care when completing post-arrival assessments. These include: respect for the patient’s values, preferences and needs; coordination and integration of care with the patient’s family and other health care providers; optimising communication and education, provision of interpreters where required (the Doctors Priority Line for the federal government-funded Translating and Interpreting Service is 1300 131 450) and use of visual and written aids and teach-back techniques to support health literacy. It is important to explain that a health assessment is voluntary and results will not affect visa status or asylum claims.

Specific recommendations

Recommendations are divided into two sections: infectious and non-infectious conditions. Box 2 provides a checklist of all recommended tests, and Box 3 sets out details of country-specific recommendations. A brief overview is provided below. For more detailed recommendations regarding management, follow-up and considerations for children and in pregnancy, see the full guidelines.

2 Short checklist of recommendations for post-arrival health assessment of people from refugee-like backgrounds

<table>
<thead>
<tr>
<th>Offer test to</th>
<th>Test</th>
<th>Comments and target condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Full blood examination</td>
<td>Anaemia, iron deficiency, eosinophilia</td>
</tr>
<tr>
<td></td>
<td>Hepatitis B serology (HBsAg, HBsAb, HBeAb)</td>
<td>HBsAg testing introduced overseas in 2016 for Syrian and Iraqi refugee cohort and may have been completed in other countries</td>
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<tr>
<td></td>
<td>Strongyloides stercoralis serology</td>
<td>Strongyloidiasis</td>
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<tr>
<td></td>
<td>HIV serology*</td>
<td>≥ 15 years or unaccompanied or separated minor</td>
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<tr>
<td></td>
<td>TST or IGRA</td>
<td>Also part of IME for age ≥ 15 years</td>
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<tr>
<td></td>
<td>Varicella serology</td>
<td>Offer test if intention to treat. All &lt; 35 years; if ≥ 35 years, depends on risk factors and local jurisdiction. TST preferred for children &lt; 5 years</td>
</tr>
<tr>
<td></td>
<td>Visual acuity</td>
<td>TST or IGRA testing introduced in 2016 as part of IME for children 2–10 years (humanitarian entrants, high prevalence countries, prior household contact)</td>
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<tr>
<td></td>
<td>Glaucoma assessment</td>
<td>LTBI</td>
</tr>
<tr>
<td></td>
<td>Dental review</td>
<td>≥ 14 years if no known history of disease</td>
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<tr>
<td></td>
<td>Hearing review</td>
<td>Determine immunisation status</td>
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<tr>
<td></td>
<td>Social and emotional wellbeing and mental health</td>
<td>Vision status, other eye disease</td>
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<tr>
<td></td>
<td>Developmental delay or learning concerns</td>
<td>Africans &gt; 40 years and others &gt; 50 years</td>
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<tr>
<td></td>
<td>Preventive health as per RACGP35</td>
<td>Caries, periodontal disease, other oral health issues</td>
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<tr>
<td></td>
<td>Catch-up vaccinations</td>
<td>Hearing impairment</td>
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<tr>
<td>Risk-based</td>
<td>Rubella IgG</td>
<td>Mental illness, trauma exposure, protective factors</td>
</tr>
<tr>
<td></td>
<td>Ferritin</td>
<td>Children and adolescents</td>
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<tr>
<td></td>
<td>Vitamin D, also check calcium, phosphate, and alkaline phosphatase in children</td>
<td>Developmental issues, disability, trauma exposure</td>
</tr>
<tr>
<td></td>
<td>Vitamin B12</td>
<td>Non-communicable diseases, consider screening earlier than usual age</td>
</tr>
<tr>
<td></td>
<td>First pass urine or self-obtained vaginal swabs for gonorrhoea and chlamydia PCR</td>
<td>Vaccine preventable diseases, including hepatitis B</td>
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<tr>
<td></td>
<td>Syphilis serology</td>
<td>Women of childbearing age</td>
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<tr>
<td></td>
<td><em>Helicobacter pylori</em> stool antigen or breath test</td>
<td>Determines immunisation status</td>
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<tr>
<td></td>
<td>Stool microscopy (ova, cysts and parasites)</td>
<td>Men who have risk factors, women and children</td>
</tr>
<tr>
<td>Country-based (Box 3)</td>
<td>Schistosoma serology</td>
<td>Iron deficiency anaemia</td>
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<tr>
<td></td>
<td>Malaria thick and thin films and rapid diagnostic test</td>
<td>Risk factors if dark skin or lack of sun exposure</td>
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<td></td>
<td>HCV Ab, and HCV RNA if HCV Ab positive</td>
<td>Low vitamin D, rickets</td>
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<tr>
<td></td>
<td>First pass urine or self-obtained vaginal swabs for gonorrhoea and chlamydia PCR</td>
<td>Arrival &lt; 6 months, food insecurity, vegan diet or from Bhutan, Afghanistan, Iran or Horn of Africa</td>
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<tr>
<td></td>
<td>Syphilis serology</td>
<td>Nutritional deficiency, risk for developmental disability in infants</td>
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<td></td>
<td><em>Helicobacter pylori</em> stool antigen or breath test</td>
<td>Risk factors for STI or on request*</td>
</tr>
<tr>
<td></td>
<td>Stool microscopy (ova, cysts and parasites)</td>
<td>Risk factors for STIs, unaccompanied or separated minors. Part of IME in humanitarian entrants aged ≥ 15 years</td>
</tr>
<tr>
<td></td>
<td>Schistosoma serology</td>
<td>Gastritis, peptic ulcer disease, family history of gastric cancer, dyspepsia</td>
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<tr>
<td></td>
<td>Malaria thick and thin films and rapid diagnostic test</td>
<td>If no documented pre-departure albendazole or persisting eosinophilia despite albendazole</td>
</tr>
<tr>
<td></td>
<td>HCV Ab, and HCV RNA if HCV Ab positive</td>
<td>Intestinal parasites</td>
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</tbody>
</table>

HBeAb = hepatitis B core antibody, HBsAb = hepatitis B surface antibody, HBsAg = hepatitis B surface antigen, HCV = hepatitis C virus. HCV Ab = hepatitis C antibody. HIV = human immunodeficiency virus. IGRA = interferon-g release assay. IME = immigration medical examination. LTBI = latent tuberculosis infection. PCR = polymerase chain reaction. TST = tuberculin skin test. * The panel did not reach consensus on these recommendations. See full guideline at http://www.asid.net.au/documents/item/1225 for details.
Refer any individuals with suspected active TB to specialist services, regardless of screening test results.

Refer patients with positive tuberculin skin test or interferon-γ release assay results to specialist tuberculosis services for assessment and exclusion of active TB and consideration of treatment for latent TB infection.

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- Refer pregnant women or children <15 kg for specialist management.

Intestinal parasites:
- Check full blood examination for eosinophilia.
- If pre-departure albendazole therapy is documented:
  ▶ if there are no eosinophilia and no symptoms, no investigation or treatment is required; and
  ▶ if there is eosinophilia, perform stool microscopy for ova, cysts and parasites, followed by directed treatment.
- If no documented pre-departure albendazole therapy, depending on local resources and practices, there are two acceptable options:
  ▶ empirical single dose albendazole therapy (age > 6 months, weight < 10 kg, dose 200 mg; weight ≥ 10 kg, dose 400 mg; avoid in pregnancy, class D drug); or
  ▶ perform stool microscopy for ova, cysts and parasites, followed by directed treatment.

*Helicobacter pylori*:
- Routine screening for *H. pylori* infection is not recommended.
- Screen with either stool antigen or breath test in adults from high risk groups (family history of gastric cancer, symptoms and signs of peptic ulcer disease, or dyspepsia).
- Children with chronic abdominal pain or anorexia should have other common causes of their symptoms considered in addition to *H. pylori* infection.
- Treat all those with a positive test (see the full guidelines for details, tables 1.5 and 9.1).

STIs:
- Offer an STI screen to people with a risk factor for acquiring an STI or on request. Universal post-arrival screening for STIs for people from refugee-like backgrounds is not supported by current evidence.
- A complete STI screen includes a self-collected vaginal swab or first pass urine nucleic acid amplification test and consideration of throat and rectal swabs for chlamydia and gonorrhoea, and serology for syphilis, HIV and HBV.
- Syphilis serology should be offered to unaccompanied and separated children < 15 years.

Skin conditions:
- The skin should be examined as part of the initial physical examination.
- Differential diagnoses will depend on the area of origin (see table 11.1 in full guidelines for details).

Immunisation:
- Provide catch-up immunisation so that people of refugee background are immunised equivalent to an Australian-born person of the same age.
- In the absence of written immunisation documentation, full catch-up immunisation is recommended.
- Varicella serology is recommended for people aged ≥ 14 years if there is no history of natural infection.
- Rubella serology should be completed in women of childbearing age.

Non-infectious conditions

Anaemia and other nutritional problems:
- Offer full blood examination screening for anaemia and other blood conditions to all.
- Offer screening for iron deficiency with serum ferritin to children, women of childbearing age, and men who have risk factors.
- Check vitamin D status as part of initial health screening in people with one or more risk factors for low vitamin D.
- People with low vitamin D should be treated to restore their levels to the normal range with either daily dosing or high dose therapy, paired with advice about sun exposure.
- Consider screening for vitamin B12 deficiency in people with history of restricted food access, especially those from Bhutan, Afghanistan, Iran and the Horn of Africa.

Chronic non-communicable diseases in adults:
- Offer screening for non-communicable diseases in line with the Royal Australian College of General Practitioners Red Book recommendations, including assessment for:
  ▶ smoking, nutrition, alcohol and physical activity;
  ▶ obesity, diabetes, hypertension, cardiovascular disease, chronic obstructive pulmonary disease and lipid disorders; and
  ▶ breast, bowel and cervical cancer.
- Assess diabetes and cardiovascular disease risk earlier for those from regions with a higher prevalence of non-communicable diseases, or those with an increased body mass index or waist circumference.

Mental health:
- A trauma informed assessment of emotional wellbeing and mental health is part of post-arrival screening. Being aware of the potential for past trauma and impact on wellbeing is essential, although it is generally not advisable to ask specifically about details in the first visits.
- Consider functional impairment, behavioural difficulties and developmental progress as well as mental health symptoms when assessing children.

Hearing, vision and oral health:
- A clinical assessment of hearing, visual acuity and dental health should be part of primary care health screening.

Women’s health:
- Offer women standard preventive screening, taking into account individual risk factors for chronic diseases and bowel, breast and cervical cancer.
- Consider pregnancy and breastfeeding and offer appropriate life stage advice and education, such as contraceptive advice where needed, to all women, including adolescents.
- Practitioners should be aware of clinical problems, terminology and legislation related to female genital mutilation or cutting and forced marriage.

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