

# Maternal and Child Health Conference

Healthy, growing, learning, thriving for over 100 years

An orange rounded rectangle containing the word "Agenda" in white sans-serif font.

Agenda



Proudly supported by the Victorian Government

## Refugee health

## Considering our smallest new arrivals in MCH care

A/Prof Georgia Paxton OAM  
Immigrant health service  
Royal Children's Hospital



# Outline

- Scale and context
- Some sense of complexity
- Services
- Specific considerations
  - Vitamin D, vitamin B12, immunisation,
- Strengths

Disclosures: Advisory roles DIBP/DHA

Minister's Council for Asylum Seekers and Detention (2015-2018)

IHAP and HAIMAP (2014 – ongoing)

Health Subcommittee of the Joint Advisory Committee for Nauru Regional Processing (2013-2016)

## Maternal and Child Health Service guidelines



### Maternal and Child Health Service guidelines

OFFICIAL

### Interim guidelines: How to work with interpreters and translators

A guide to effectively using language services



## 8.1 Children and families from culturally and linguistically diverse communities, encompassing people seeking asylum and refugee communities

MCH Service providers are culturally aware and responsive to children and families who hold a particular cultural or linguistic connection attributable to their place of birth, ancestry, ethnic origin and religion. Children and families seeking asylum or from refugee communities have specific health and wellbeing needs, and a partnership approach with MCH Service providers and other specialised services is best practice.

MCH Service providers collect information on the cultural identity of clients, including country of birth, preferred language and if an interpreter is required. This practice facilitates interpreter bookings and promotes the identification of resources required to provide a culturally responsive service at a local and state level.

### Delivering for diversity: cultural diversity plan 2016–2019

The department has developed the **Delivering**

**diversity plan.** These communities include those with a long-established presence in Victoria, as well as recently arrived migrants, refugees and people seeking asylum.

Find in Document

## Language services

refugee

3/6

The department allocates funding for interpreters for departmental programs and funded services. **Language Loop** (formerly VITS) provides on-site, telephone and video remote interpreting service for the MCH Service.

The department's **Language services policy** supports and responds to the needs of linguistically diverse people, including migrants, refugees and people seeking asylum and those who use sign language. It identifies when language services should be offered to clients based on policy requirements and best-practice service delivery. MCH Service providers are encouraged to develop their own language services policies and procedures consistent with the **Language services policy**. The department's **How to work with interpreting and translating services** is a practical guide to using language services effectively, and it outlines diversity responsiveness within service provision.

Language Loop provides a comprehensive online booking facility. Bookings for onsite interpreters can be made via the Language



# Wishlist

- Universal
- Free
- Medicare blind
- Child development
- Parenting, families
- Local and accessible
- Really good interpreting access



# Definitions

## Refugee

- Someone who 'owing to a **well founded fear of being persecuted** for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is **outside the country of his nationality**, and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country, or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is **unable** or, owing to such fear, is unwilling **to return** to it'

UNHCR 1951 'Convention Relating to the Status of Refugees' and 1967 'Protocol relating to the status of refugees'

## Asylum seeker

- A person who has left their country of origin, **applied for recognition as a refugee in another country, and is awaiting a decision on their application**. They are not given the rights, protection, assistance associated with UNHCR refugee status

Not every asylum seeker is found to be a refugee

But all refugees were initially asylum seekers

**Refugee applicant**

**Offshore program**



**Humanitarian entrant**



**PR on arrival**

**Onshore arrival**



**Asylum seeker**



**Air arrivals\***

**Unauthorised/Irregular/  
Unauthorised/ 'Illegal'  
/Unauthorised/  
Irregular Maritime Arrivals**

# Australian context

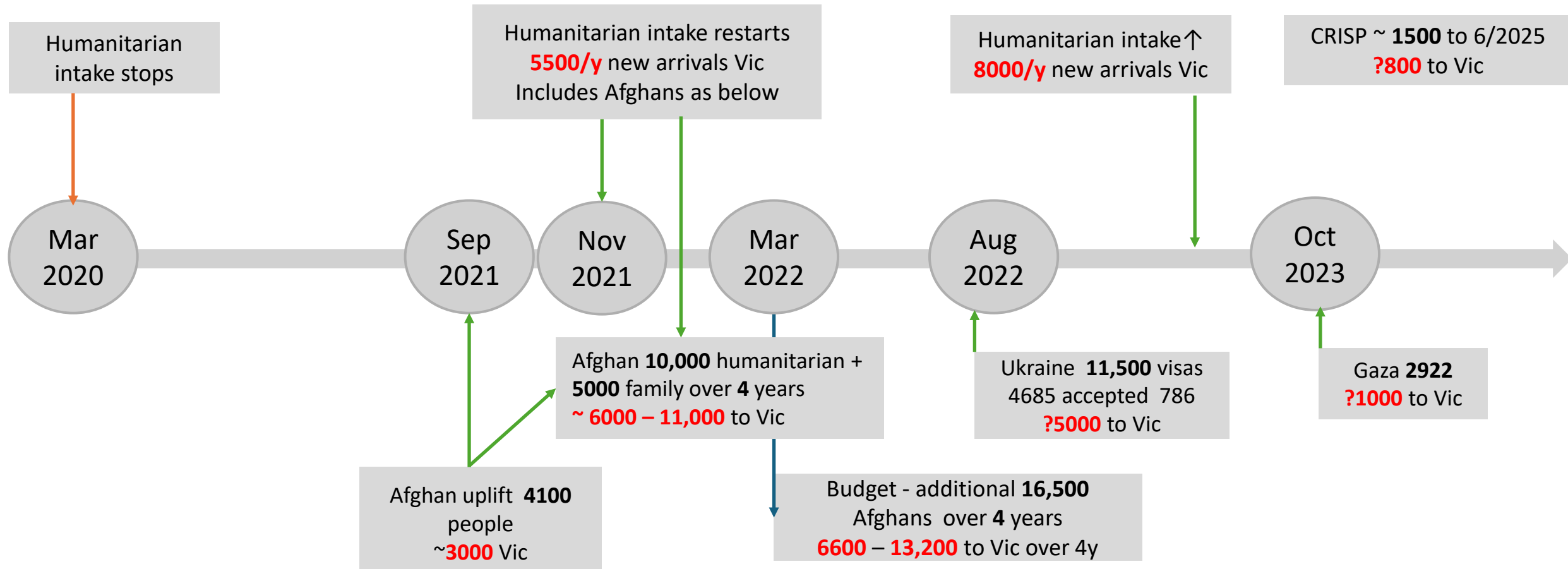
Asylum seekers -82,625 nationally

~18,000-24,000 annually

?40,000 Victoria

Annual humanitarian intake: 20,000 at 8/23 (↑27,000) | 40% aged <18 y on arrival | 40% Victoria

Anticipated (min) 47,400 refugee arrivals to Victoria over next 4 years





Aged 0-4y on arrival

7% metro intake  
9% in regional

5.8% Victoria overall

Ames – personal communication

<https://profile.id.com.au/australia/five-year-age-groups?WebID=110>

## My Health, Learning and Development book (green book)

### Ten key ages and stages visits

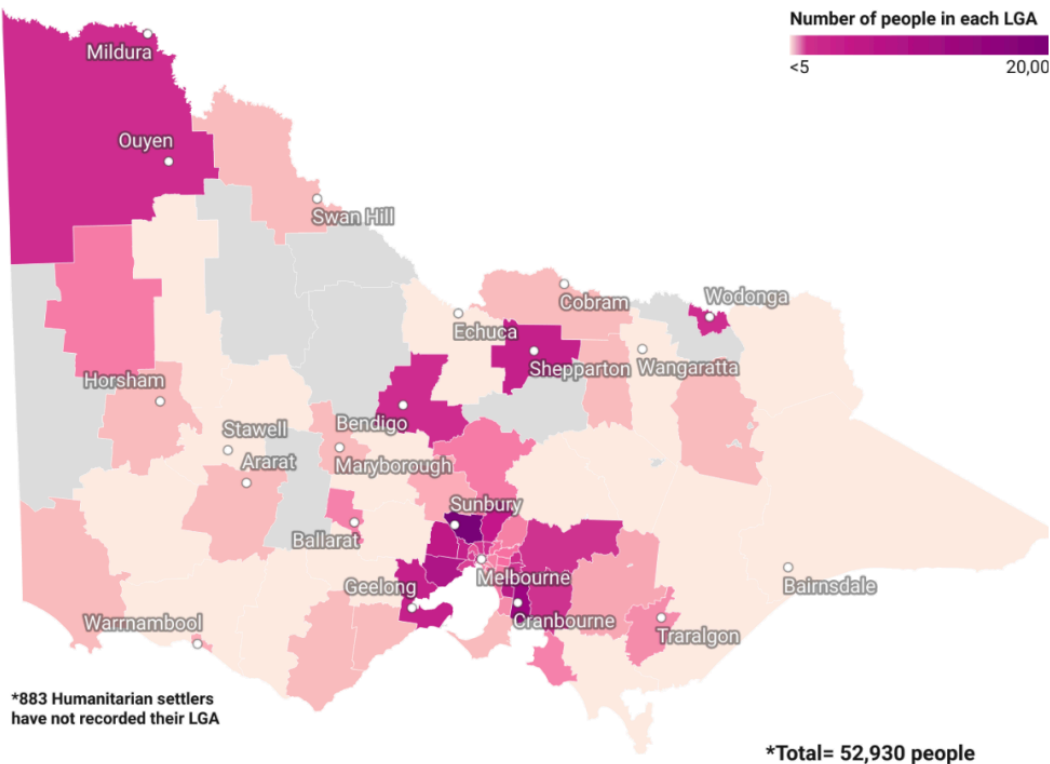
Information will be added to your child's 'green book' at each of these 10 key ages and stages maternal and child health service visits:

- [at birth](#) – this first visit is at your home, but the following visits are at a maternal and child health centre
- [two weeks](#)
- [four weeks](#)
- [eight weeks](#)
- [four months](#)
- [eight months](#)
- [one year](#)
- [18 months](#)
- [two years](#)
- [three and a half years](#)

As of 4th July 2024, there are approximately 52,930 people who were granted a permanent protection visa (i.e.,200 series, visa subclass 866 and 851) in the past 10 years and are now recorded as residing in Victoria.

Humanitarian settlers in Victorian Local Government Areas over the last 10 years.

Humanitarian settlers (200 visa series and 866) with a Date of Arrival between 01/07/2014 and 30/06/2024 and are currently recorded as residing in Victoria as at 04/07/2024. Humanitarian settlers (851 visa) with a Date of Arrival between 01/01/2012 and 30/06/2024 and are currently recorded as residing in Victoria as at 04/07/2024 are also included.



\* These figures are approximations as any cells that have been suppressed were changed to a numerical value to present data in this map.  
Map: Victorian Refugee Health Network • Source: Australian Government- Settlement Database • Map data: ABS • Created with Datawrapper

Table 7: Top 10 Local Government Areas where people are recorded to live who have arrived in the past 10 years

Local Government Area	Visa number						
	200	201	202	203	204	866	851
Hume	3,714	38	7,949	13	301	351	346
Casey	2,208	606	2,509	0	484	399	767
Wyndham	1,605	60	2,169	144	343	561	262
Greater Dandenong	1,141	487	1,281	18	373	407	966
Melton	1,075	21	1,519	6	104	159	190
Whittlesea	808	71	1,049	0	82	284	627
Brimbank	718	20	1,120	15	132	222	290
Greater Geelong	664	3	501	0	219	30	288
Maroondah	331	6	842	7	26	91	47
Greater Shepparton	675	0	142	0	106	90	89
Grand Total of all LGA's	15,785	1,530	23,112	219	2,779	4,438	5,067
52, 930 people							

Main Language Spoken for those who arrived in the past 10 years: Top 30

People on Visa subclass (200 series, 866) who arrived in Australia between 01/07/2014 and 30/06/2024 and Visa subclass (851) who arrived in Australia between 01/01/2012 and 30/06/2024

[Home](#)

#### DATA AND STATISTICS

## Global Trends

The latest Global Trends report, published in June 2024, provides key statistical trends on forced displacement. It includes the latest official statistics on refugees, asylum-seekers, internally displaced and stateless people, as well as the number of refugees who have returned home.

[View the Global Trends report](#)
[Access the data](#)

At the end of 2023, an estimated 117.3 million people worldwide were forcibly displaced due to persecution, conflict, violence, human rights violations and events seriously disturbing the public order. Based on operational data, UNHCR estimates that forced displacement has continued to increase in the first four months of 2024 and **by the end of April 2024 is likely to have exceeded 120 million.**

The increase to 117.3 million at the end of 2023 constitutes a rise of 8 per cent or 8.8 million people compared to the end of 2022 and continues a series of year-on-year increases over the last 12 years.

One in every 69 people, or 1.5 per cent of the entire world's population, is now forcibly displaced. This is nearly double the 1 in 125 people who were displaced a decade ago.

### 117.3 million

Over 117.3 million people were forcibly displaced at the end of 2023.

### 1 in 69

This equates to more than 1 in every 69 people on Earth.

### 12 years

The number of displaced people has increased every year for 12 years.

# Global context

- **Lebanon** – 2000 deaths, 10,000 injured, 1.2M IDP, 400,000 crossed to Syria
- **Gaza** – 42,010 deaths, 97,720 injured, 1.9M IDP, famine
- **Ukraine** – estimated 1M deaths, 6.8M refugees globally, now 3<sup>rd</sup> year
- **Syria** – 306,000+ civilian deaths, 5.0M refugees, now 14<sup>th</sup> year
- **Afghanistan** – 5.8M refugees, earthquakes 10/2023, Pakistan repatriation 1.7M, now Iran
- **Yemen** – 21.6M need aid, 4.5M IDP, now 10<sup>th</sup> year
- **Myanmar** – 3.4M IDP, 1.3M refugees, increasing instability
  - **Rohingyan** displacement – 1.0M in Bangladesh
- **Venezuela** – 7.0M need humanitarian assistance (1 in 4), elections 7/24
- **Sudan** – 11.3M displaced, inc 8.1M IDP, 2.9M refugees, evolving famine
- **DRC** – 6.9M IDP, 1.1M refugees
- **Australia** – sending boat arrivals to Nauru



# Australia's population officially passes 27 million

Media Release

Released 19/09/2024

**Source:** [National, state and territory population, March 2024](#)

Australia's population grew by 2.3 per cent to 27.1 million people in March 2024, according to the latest figures released today by the Australian Bureau of Statistics (ABS).

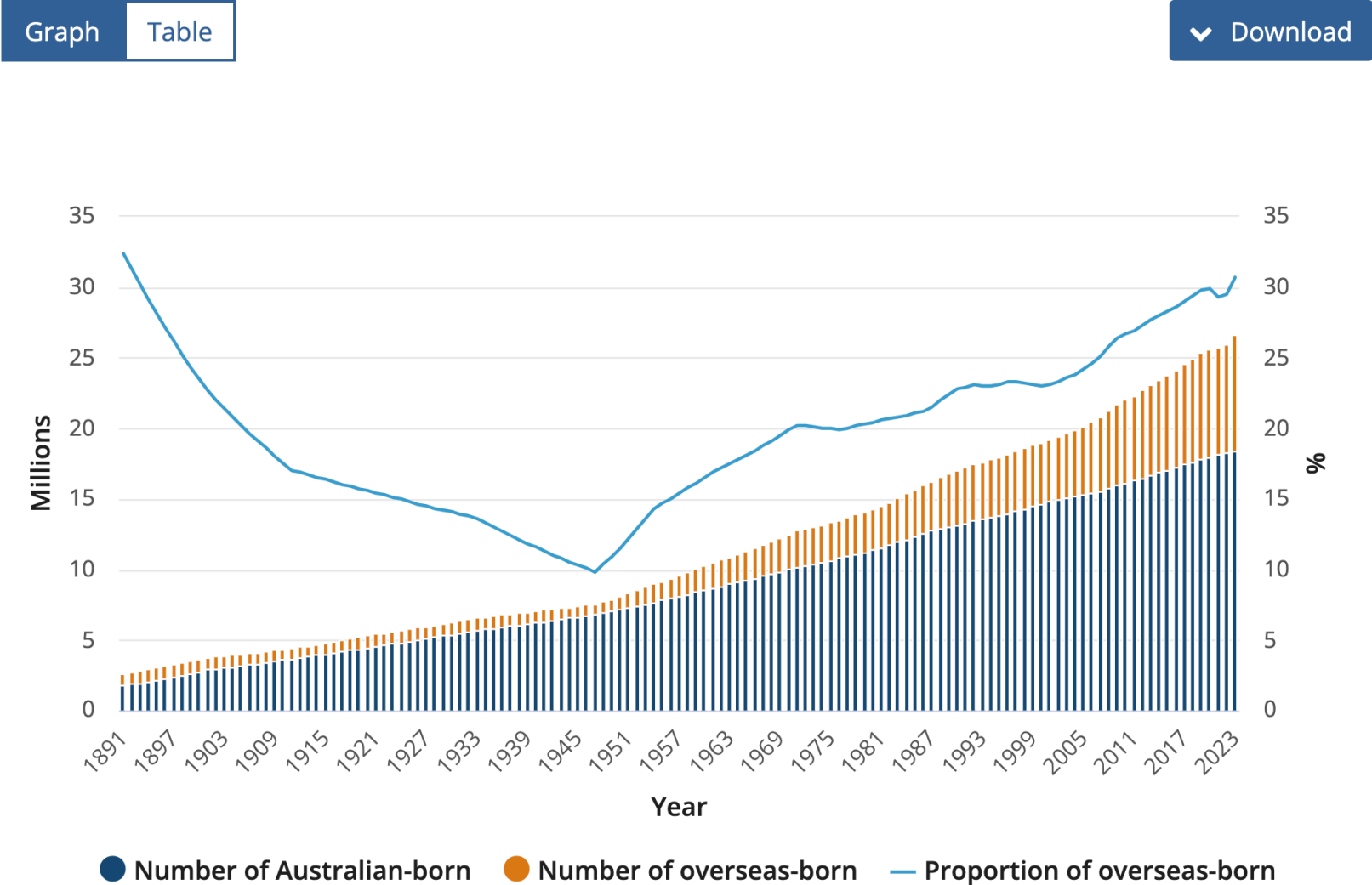
Beidar Cho, ABS head of demography, said: "Our population at 31 March 2024 was 27.1 million people, having grown by 615,300 people over the previous year. Net overseas migration drove 83 per cent of this population growth, while births and deaths, known as natural increase, made up the other 17 per cent."

Annual net overseas migration in the year to March 2024 was 509,800 people, down from a peak of 559,900 in September 2023.

Natural increase was 105,500 people in the year ending March 2024, made up of 289,700 births and 184,200 deaths registered in Australia.

Western Australia had the fastest growing population, up 3.1 per cent in the 12 months ending March 2024. This was followed by Victoria,

Graph 1.1 – Estimated resident population – proportion born overseas(a)  
(b)





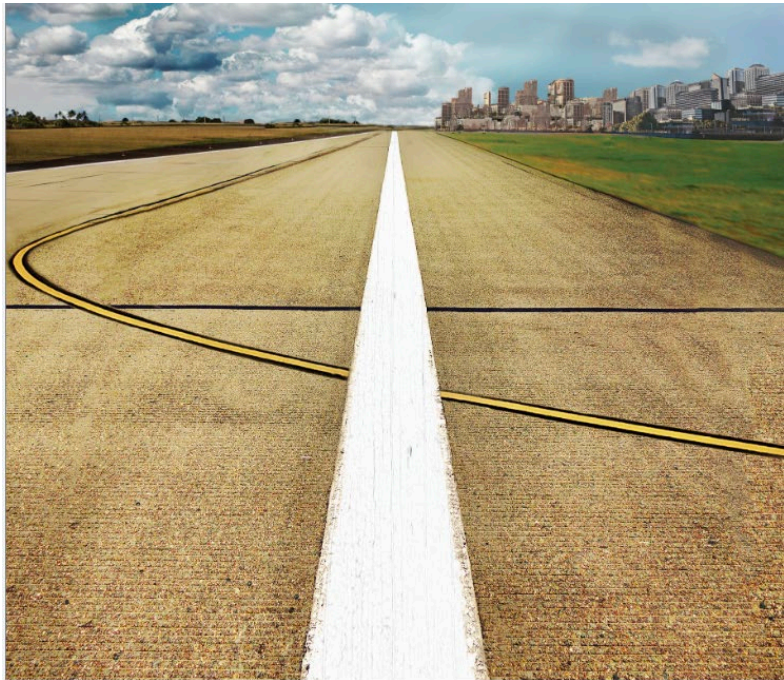
## Temporary entrants visa holders pivot table

at 31 August 2024 - comparison with previous quarterly snapshots

© Commonwealth of Australia

Applicant Type (All) ▼  
Citizenship Country (All) ▼  
Visa Subclass (All) ▼  
Visa Type (All) ▼

Sum of Visa Holders	Snapshot Date						
Visa Category ▼		30/9/2019	30/9/2020	30/9/2021	30/9/2022	30/9/2023	31/8/2024
Bridging		203,886	307,463	330,808	369,182	191,235	323,583
Crew and Transit		11,832	8,337	9,026	14,200	13,724	13,425
Special Category		685,172	657,186	657,823	680,047	717,718	717,639
Student		633,816	476,383	317,915	419,325	664,178	679,293
Visitor		337,563	86,748	38,728	271,301	339,919	300,433
Working Holiday Maker		135,124	65,066	29,821	71,704	144,685	171,178
Other Temporary		5,228	5,155	3,761	3,993	5,216	6,229
Temporary Resident (Other Employment)		42,068	32,189	46,470	71,866	214,585	121,096
Temporary Resident (Skilled Employment)		139,267	117,316	95,035	105,891	139,736	178,416
Temporary Protection		15,936	17,786	18,608	23,440	15,589	5,126
Temporary Graduate		94,657	107,865	95,042	115,029	193,277	223,961
Grand Total		2,304,549	1,881,494	1,643,037	2,145,978	2,639,862	2,740,379

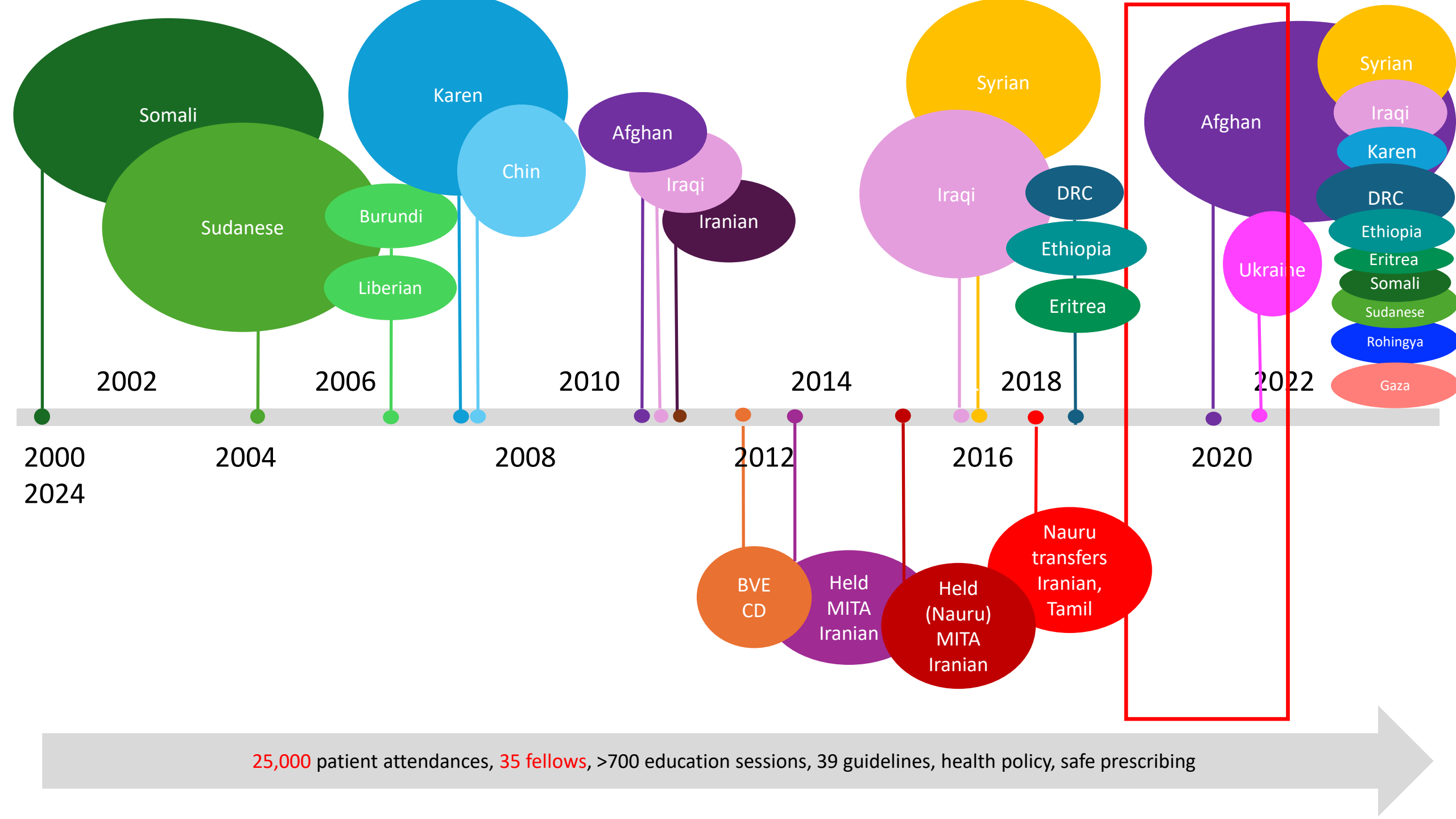


## NOT QUITE AUSTRALIAN

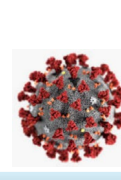
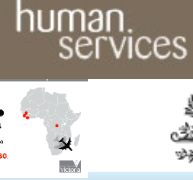
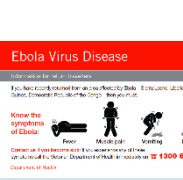
How Temporary Migration Is Changing the Nation

Peter Mares  
Author of the award-winning Borderline









Other:

FGM

Age Ax

Arsenic

Men's health

Ebola

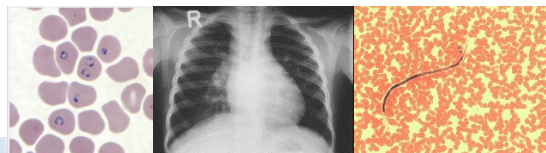
Child Protection

IRCSA

IS-CTVE

Destitution

Vaccine hesitant, War injury



Hepatitis B, TB, parasites

Low vitamin D/rickets

Primary screening



Trauma, mental health, behaviour, attachment, Nauru transfers, FV settlement

NZ



Development, learning issues, disability



NDIS

Rare neurology/genetics/metabolic, epilepsy Deaf

Primary screening

Low B12

Hep A

Malnutrition

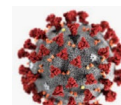
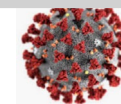
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

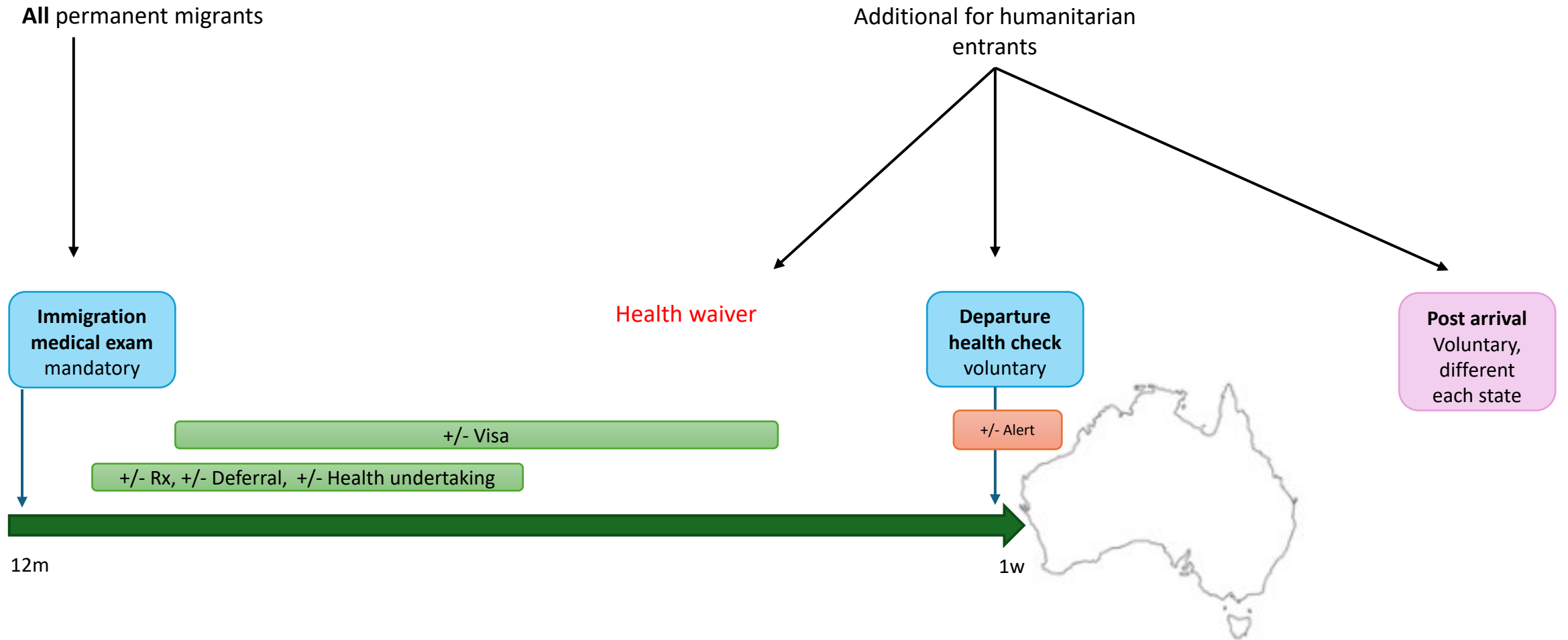
Catch-up immunisation

Oral health

Adolescent health

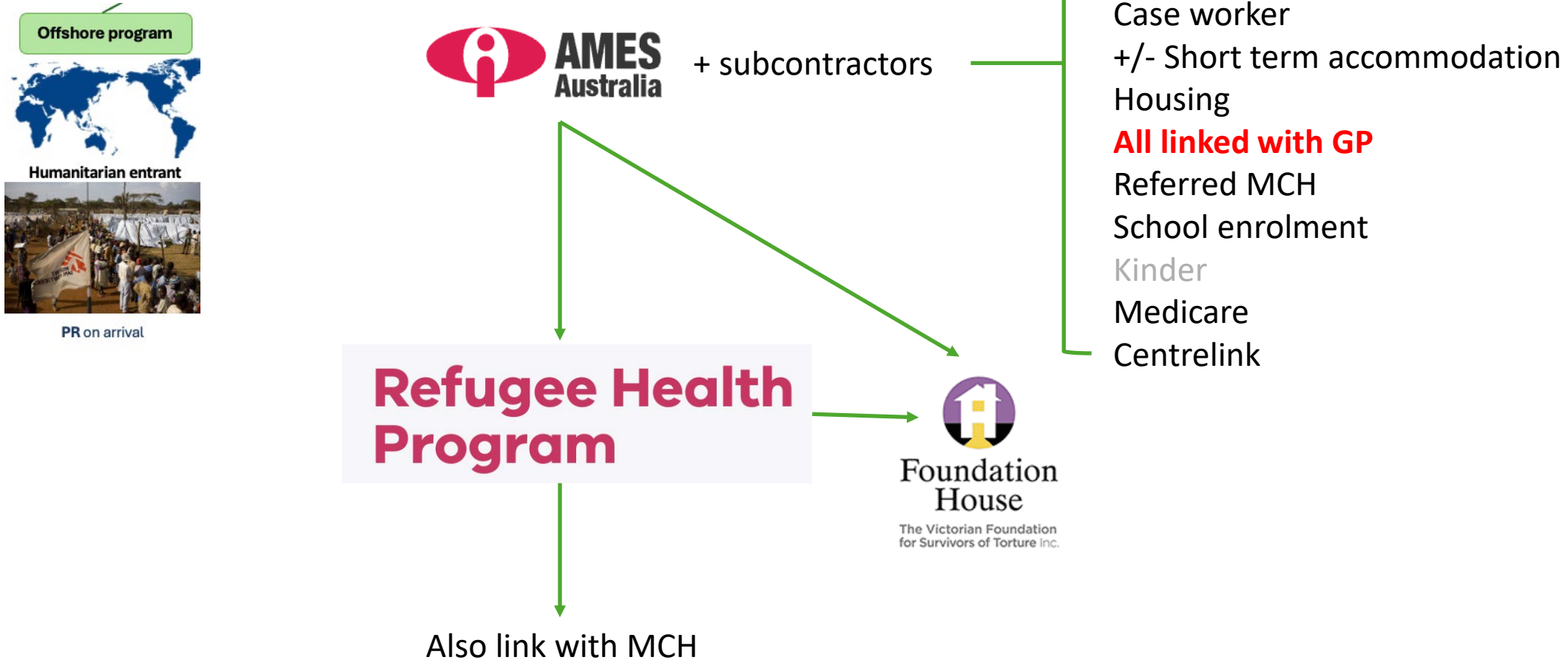
Racism – experience and systemic





Untreated/undertreated medical, developmental and disability presentations

# Post arrival – settlement and supports



# Post arrival – settlement and supports

## Early Start Kindergarten

Early Start Kindergarten gives eligible children 15 hours of free or low-cost kindergarten a week for 2 years before starting school.

- And a quick note on school

### On this page

[Early Start Kindergarten and Three-Year-Old Kindergarten](#)

[How to apply](#)

[When to apply](#)

[Why Early Start Kindergarten is important](#)

[Quality is important](#)

[Koorie Kids Shine](#)

[Resources](#)

To be eligible, your child must be 3 by 30 April in the year they start kindergarten, and:

- from a refugee or asylum seeker background, or
- identify as Aboriginal or Torres Strait Islander, or
- your family has had contact with child protection.

Children can also access free or low cost Four-Year-Old Kindergarten through the Early Start Kindergarten Extension Grant.

Watch the [Early Start Kindergarten video on Vimeo](#).

### Department of Education

#### Education – information for parents home

#### Child care

#### Kindergarten

Kindergarten

Kindergarten programs and initiatives

↳ Types of kindergarten programs

↳ [Early Start Kindergarten](#)

↳ Three-Year-Old Kindergarten

↳ Kindergarten for Aboriginal children: Koorie Kids Shine

↳ Kindergarten for culturally and linguistically diverse children

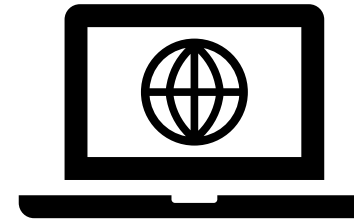
↳ Kinder Tick

- Aim for a 6y old start
  - Common in Victoria
  - Avoid refugee background being youngest in class
  - Allow kinder
  - Allow time for assessments and ECEI if development delays/disability



## Vaccine records

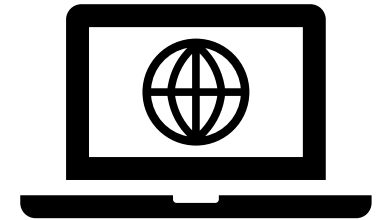
Full report	
Record results	
Was the client's identity confirmed?	Yes
Vaccination requirements complete	Yes
Does the Client have a COVID vaccination certificate?	No
Examiner Declaration	
Examiner Declaration	Yes
Examiner Name	Dr Titus Kiprono RUTO
Declaration date	21 Nov 2022
Pentavac or equivalent (using DTP)	
Disease	Diphtheria, Tetanus, Pertussis, Hib, Hepatitis B
Vaccine	Pentavac or equivalent (using DTP)
History date 1	07-May-2021
History date 2	30-Jun-2021
History date 3	04-Aug-2021
MMR	
Disease	Measles, Mumps, Rubella
Vaccine	MMR
Panel date 1	10-Nov-2022
Batch 1	0161N017
Batch Expiry date 1	28-Feb-2024
Measles-Rubella	
Disease	Measles, Rubella



HAPlite system

+/- Health/RHP

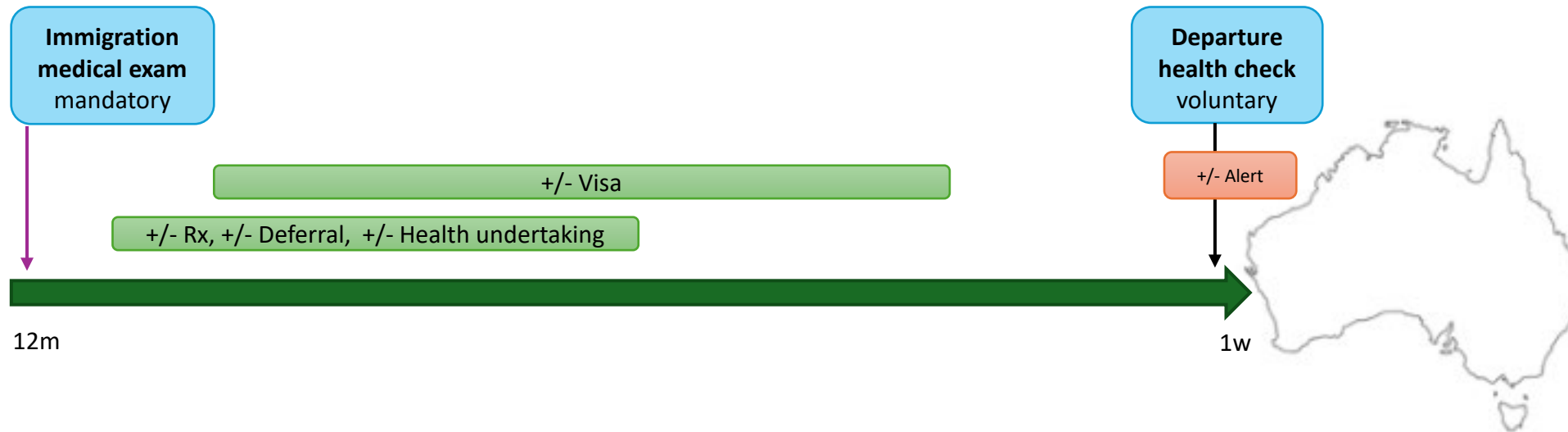
+/- Alert



HSP system



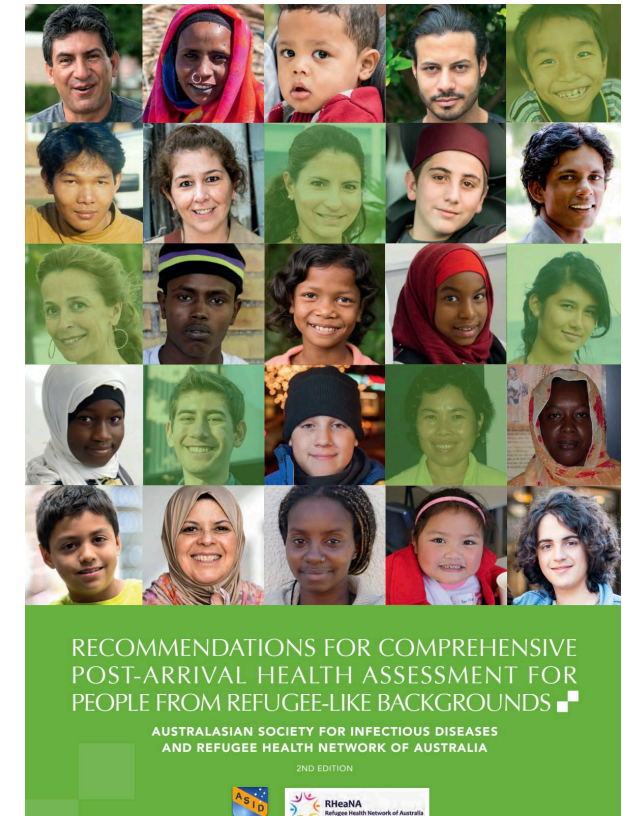
+/- PMI/CMI



# Post arrival screening

Post arrival  
Voluntary,  
different  
each state

- Recommended all
- Increasingly complex
- Cohort divergence
- Key aspects
  - All
  - Risk based
  - Country based
  - Catch-up vaccination
- Young children
  - Vit D status, B12, TB screening differences, catch-up



Immigrant Health Service

RCH > Division of Medicine > General Medicine > About the Immigrant Health Service

In this section

About us

COVID-19 Immigrant health

Clinical

Other

Research

Translated

Talks

Contact us

## About the Immigrant Health Service

The immigrant health service includes weekly outpatient clinics (main clinic Monday afternoons at A5, fellow clinic Tuesday afternoon at desk A5), consultations, and work in education/policy/guideline development. The service is supported by the Victorian Department of Health (DH), including support for the refugee health fellows program.

All children within a family can be seen at the same visit, and every attempt is made to combine appointments for other services (such as eye review and audiology) with clinic times. We use telehealth/phone appointments flexibly, to minimise transport, and where this is family preference. A detailed summary is provided for the referring doctor with an ongoing plan for management; families receive a copy of this letter. **We provide a comprehensive approach to physical and mental health for children and young people who arrived as refugees or seeking asylum, and the service is free of charge.**

- Combined medical and mental health care, multidisciplinary assessment service** - we can provide medical and education/developmental assessment/care, mental health/psychiatry assessment/care, oral health assessment and health promotion, catch-up vaccinations, Mantoux testing and administration of Vitamin D as needed. Post-arrival health screening and age assessment can be provided where required.
- Staff** - include 4 consultant paediatricians, 2 fellows, a psychiatrist, senior child mental health clinician, a clinic coordinator, social worker and a dental therapist. Male and female clinicians are available, our clinician coordinator speaks Arabic and Syriac Aramaic. Staff have experience in refugee health, general paediatrics, child development, autism assessment, forensic medicine, child and adolescent psychiatry and mental healthcare.
- Other services** - Pathology, radiology, immunisation and pharmacy are available onsite, alongside all other hospital services. We have regular secondary mental health consultations.
- Linked care** - we have close links to primary health care providers, the [Refugee Health Program](#), the Royal Dental Hospital and settlement/community organisations working in refugee health.
- Affiliated services** are available in Footscray (CoHealth), Sunshine, Hoppers Crossing, Craigieburn, Darebin (Your Community Health) and Ringwood (EACH) - please see [contact details](#) for other paediatric refugee services.

### Refugee fellows and clinic coordinator

In 2024, our refugee health fellows are Dr Elliot Lyon (Mon/Tues/Thurs/Fri) and Dr Amy Williamson (Mon), Amy also works at coHealth on Thursdays. The fellows can be contacted on [refugee.fellow@rch.org.au](mailto:refugee.fellow@rch.org.au) or 9345 5522, [page 7142](#). Our clinic coordinator is Natale Massa - (Mon/Tues/Thurs/Fri), email [natale.massa@rch.org.au](mailto:natale.massa@rch.org.au) and work phone 0481457012.

Thank you for your referrals and work in refugee health. We are seeing variation in testing, and hope to ensure screening is consistent with [2016 Refugee Guidelines](#). The following tests are recommended for **children** arriving in Australia as refugees/seeking asylum:

All	Risk- or country-based
<b>FBE/film</b> <b>Ferritin</b> <b>Hepatitis B serology</b> - HBsAg, HBsAb, HBcAb <b>Tuberculosis screening</b> TST or IGRA. TST preferred <5y, and should be used <2y	<b>Active B12/folate</b> - risk factors, all Afghan and Gazan arrivals. Also check homocysteine & urine methylmalonic acid if risk low B12 <u>and</u> disability or neurological symptoms <b>Vitamin D, Ca, PO4, ALP</b> - risk factors, all Afghan and Gazan arrivals <b>Consider MMR and varicella serology</b> in <a href="#">adolescents</a> to determine vaccination
<b>Strongyloides serology*</b> <b>Faecal specimen</b> - cysts, ova, parasites* <b>*not required for Ukraine</b>	<b>Schistosoma serology</b> - endemic: Africa, Burma, Iraq, Syria; <b>not Middle East/Afghanistan/Ukraine/other Asian countries</b> <b>Malaria RDT and thick/thin films</b> - arrival <3m endemic area (<12m if fever): Africa ( <i>except Egypt</i> ), Burma, Bhutan, India, Pakistan, Afghanistan; <b>not Middle East/Egypt/Sri Lanka/Ukraine</b> <b>Hepatitis C serology</b> HCVAb - endemic: Congo, Egypt, Iraq, Pakistan, consider Syria, Ukraine; <b>not other African/Middle East/Afghanistan/Asian countries</b> <b>Hepatitis A serology</b> – all Gazan arrivals until more information available
	<b>HIV serology</b> - 15y and older, all UHM, clinical concerns any age <b>STI screening</b> (HIV, syphilis, urine NAAT chlamydia/gonorrhoea, consider rectal/throat swabs) - if risk factors <b>Syphilis serology</b> - all UHM, where parent has syphilis, if risk factors <b>Extended nutrition screen</b> - low weight for age, poor food access. All new Gazan arrivals should have vitamin A and zinc levels (+/- other) <b>TFT/blood lead</b> - if developmental issues <b>Helicobacter pylori faecal antigen</b> if upper gastrointestinal symptoms <b>Others</b> - based on clinical findings as needed

UHM = unaccompanied humanitarian minor – term also used for any unaccompanied/separated child

These guidelines are summarised on our website (see [Initial assessment](#), and specific guidelines for [Afghan](#), [Ukrainian](#) and [Palestinian](#) refugees). We would be grateful for any suggestions/feedback. We look forward to working together, and are happy to answer questions, provide catch-up vaccination plans, or meet remotely or directly (if useful). Our team can be contacted on 9345 5522 page 7142 or email: [refugee.fellow@rch.org.au](mailto:refugee.fellow@rch.org.au).



ORIGINAL ARTICLE

**‘I think we’ve had a health screen’: New offshore screening, new refugee health guidelines, new Syrian and Iraqi cohorts: Recommendations, reality, results and review**

Rachel C Heenan<sup>1</sup>, Thomas Volkman<sup>1,2,3</sup>, Simon Stokes<sup>1</sup>, Shidan Tosif<sup>1,2,3</sup>, Hamish Graham<sup>1,2,3</sup>, Andrea Smith<sup>1</sup>, David Tran<sup>1,4</sup> and Georgia Paxton<sup>1,3</sup>

<sup>1</sup>Immigrant Health Service, Department of General Medicine, Royal Children's Hospital, <sup>2</sup>Department of Paediatrics, University of Melbourne, <sup>3</sup>Infection and Immunity, Murdoch Childrens Research Institute and <sup>4</sup>Department of Paediatrics, Northern Hospital, Melbourne, Victoria, Australia

**Aim:** To examine refugee health assessments in Syrian and Iraqi children in the context of changes to offshore immigration screening, updated Australian refugee health guidelines and the primary care refugee health model in Victoria.

**Methods:** This is a retrospective audit of Syrian and Iraqi children aged 0–17 years attending a specialist immigrant health service from January 2015 to September 2017.

**Results:** We saw 128 children (7 months–16 years, 64.8% male). Prior to arrival, 58.9% of children had experienced trauma, and 67.9% had missed at least 1 year of school. Almost all children (93.3%) were linked with a regular general practitioner in Australia, and 23.6% children were

PLOS ONE

RESEARCH ARTICLE

Health of children who experienced  
Australian immigration detention

Shidan Tosif<sup>1,2,3\*</sup>, Hamish Graham<sup>1,2,3</sup>, Karen Kiang<sup>1</sup>, Ingrid Laemmle-Ruff<sup>2</sup>, Rachel Heenan<sup>1</sup>, Andrea Smith<sup>1</sup>, Thomas Volkman<sup>1,3</sup>, Tom Connell<sup>1,3</sup>, Georgia Paxton<sup>1,2,3</sup>

<sup>1</sup> Department of General Medicine, Royal Children's Hospital Melbourne, Parkville, Victoria, Australia,

<sup>2</sup> Infection and Immunity, Murdoch Children's Research Institute, Melbourne, Victoria, Australia,

<sup>3</sup> Department of Paediatrics, The University of Melbourne, Melbourne, Victoria, Australia

Afghan cohort → data being analysed

Difficulties tracking information  
93% (113/121) linked with regular GP  
23.6% (21/89) linked with refugee nurses  
**2%** (2/113) had appropriate health screening

Total cohort 277, 239 HD  
**1%** (3/213) overseas born had had appropriate health screening

Total cohort 218, 78 emergency uplift  
65.1% (142/218) linked with regular GP  
30.7% (67/218) linked with refugee nurses  
**9.2%** (20/218) had appropriate health screening

ANNOTATION

No jab, no record: Catch-up vaccination of children in immigration detention

Karen M Kiang,<sup>1</sup> Sonja Elia<sup>2</sup> and Georgia A Paxton<sup>1</sup>



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**Abstract:** International Health and Medical Services (IHMS) are contracted to provide health services, including catch-up vaccination, for individuals in immigration detention. Our audit of catch-up vaccination in asylum seeker children who spent time in held detention demonstrates inadequate and suboptimal vaccine delivery in this setting, and no evidence that IHMS recorded vaccines on the Australian Childhood Immunisation Register at the time. We also found substantial shortfalls in vaccination for these children after they were released from detention. Immunisation in this cohort falls well below Australian community standards, does not demonstrate assurance in IHMS provision of care, and has implications for similar asylum seeker cohorts nationally as well as people in held detention.

**Key words:** asylum seeker; child; immigration detention; immunisation; vaccine.

ORIGINAL ARTICLE

'I think we've had a health screen': New offshore screening, new refugee health guidelines, new Syrian and Iraqi cohorts: Recommendations, reality, results and review

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**Aim:** To examine refugee health assessments in Syrian and Iraqi children in the context of changes to offshore immigration screening, updated Australian refugee health guidelines and the primary care refugee health model in Victoria.

**Methods:** This is a retrospective audit of Syrian and Iraqi children aged 0–17 years attending a specialist immigrant health service from January 2015 to September 2017.

**Results:** We saw 128 children (7 months–16 years, 64.8% male). Prior to arrival, 58.9% of children had experienced trauma, and 67.9% had missed at least 1 year of school. Almost all children (93.3%) were linked with a regular general practitioner in Australia, and 23.6% children were

→ 16% (24/149) had appropriate vaccination in detention, adjusted for duration/age  
None entered onto AIR while in detention

Community at the time of first visit  
34.6% (38/110) up to date/appropriately vaccinated, adjusted for time/age

→ Difficulties tracking information  
93% (113/121) linked with regular GP  
55% (43/78) had had appropriate catch-up adjusted for time/age



Guidelines  
Vitamin D and health in pregnancy, infants, children and adolescents in Australia and New Zealand: a position statement

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low vitamin D levels are a major public health concern across the lifespan. This position statement of the Australian and New Zealand Bone and Mineral Society and Osteoporosis Australia accompanies a position statement on vitamin D and health in adults<sup>1</sup> and updates a 2006 position statement.<sup>2</sup> It is intended for primary care providers and specialists involved in the care of children and pregnant women, and is endorsed by the Australasian Paediatric Endocrine Group, Royal Australasian College of Physicians and Royal Australian and New Zealand College of Obstetricians and Gynaecologists. The consensus process is described in Box 1.

**Summary**

- The recommended level for serum 25-hydroxyvitamin D (25(OH)D) in infants, children, adolescents and during pregnancy and lactation is >50 nmol/L. This level may need to be 10–20 nmol/L higher at the end of summer to maintain levels > 50 nmol/L over winter and spring.
- Sunlight is the most important source of vitamin D. The US recommended dietary allowance for vitamin D is 600 IU daily in children aged over 12 months and during pregnancy and lactation, assuming minimal sun exposure.
- Risk factors for low vitamin D are: lack of skin exposure to sunlight, dark skin, southerly latitude, conditions affecting vitamin D metabolism and storage (including obesity) and, for infants, being born to a mother with low vitamin D and exclusive breastfeeding combined with at least one other risk factor.
- Targeted measurement of 25(OH)D levels is recommended for infants, children and adolescents with at least one risk factor for low vitamin D and/or for pregnant women with at least one risk factor for low vitamin D at the first antenatal visit.
- Vitamin D deficiency can be treated with daily low-dose vitamin D supplements, although barriers to adherence have been identified. High-dose intermittent vitamin D can be used in children and adolescents. Treatment should be paired with health education and advice about sensible sun exposure. Infants at risk of low vitamin D should be supplemented with 400 IU vitamin D, daily for at least the first year of life.
- There is increasing evidence of an association between low vitamin D and a range of non-bone health outcomes, however there is a lack of data from robust randomised controlled trials of vitamin D supplementation.

**Physiology**

A summary of vitamin D physiology is provided in the adult vitamin D position statement.<sup>1</sup> During pregnancy, alterations to vitamin D and calcium homeostasis allow calcium transfer to the developing fetus.<sup>3</sup> Maternal intestinal calcium absorption is doubled, serum 1,25-dihydroxyvitamin D (1,25(OH)<sub>2</sub>D) levels increase and parathyroid hormone (PTH) levels decrease to the lower end of the normal range in women with adequate calcium and vitamin D status. Maternal calcium absorption and fetal calcium accretion are maximal during the third trimester. Fetal vitamin D is derived from transplacental passage of maternal 25-hydroxyvitamin D (25(OH)D), with neonatal vitamin D status directly related to maternal vitamin D status. Cord blood 25(OH)D levels are about 65% of maternal levels,<sup>4</sup> hence neonates born to vitamin D deficient mothers will also be vitamin D deficient.<sup>1</sup> Further, premature infants have low vitamin D stores solely due to prematurity.<sup>5</sup>

Sources of vitamin D

# Vitamin D

- RF – skin exposure to sun, skin colour, medical conditions affecting metabolism, BF bubs – maternal deficiency + at least 1 other RF
- Breastfed infants with at least one other RF
  - 400 IU daily until 12m
- Targeted screening RF (or self management)
  - Treatment guidelines
- Watch for rickets
  - Check in GM delay in child with dark skin
- Beware of pharmaceutical marketing!



Health Professionals	Patients and Families	Departments and Services	Research	Q
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Clinical Practice Guidelines

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Vitamin D deficiency

This guideline has been endorsed by the Paediatric Improvement Collaborative



See also

- [Immigrant Health Guideline – Low Vitamin D](#)
- [Sun Protection](#)
- [Vitamin D supplements photoboard](#)

Key points

- Vitamin D is essential for bone and muscle health. Low vitamin D and low calcium and/or phosphate can cause nutritional rickets
- Sunlight is the most important source of vitamin D at all ages
- Vitamin D deficiency is common in risk groups and should be self-managed wherever possible - through education, behaviour change and supplementation as required
- In Australia, nutritional rickets is generally only seen in infants and children with dark skin

Background

- Sunlight (UVB) is the most important source of vitamin D (>90%) through skin synthesis of D3. This varies with
  - Skin colour: people with dark skin ( Fitzpatrick types V and VI) require greater UVB exposure compared to people with light skin
  - Skin exposure: covering clothing may result in low vitamin D levels
  - Season/UVB availability: during winter there may not be enough UVB to maintain adequate vitamin D levels in southerly latitudes. Sunscreens do not result in low vitamin D with normal use
- Only small amounts of vitamin D are available from diet:
  - the main natural food source is fish
  - breastmilk, despite its other benefits, contains almost no vitamin D
  - infant formula is fortified with vitamin D

# Vitamin D supplements photoboard

## Vitamin D photo board LIQUID FORMULATIONS

### Vitamin D only drops

					
	5mcg(200IU*)/0.5mL	10mcg(400IU)/0.03mL	10mcg(400IU)/0.08mL	25mcg(1000*IU)/0.2mL	25mcg(1000*IU)/0.5mL
<b>Product specifications</b> (number of doses as per manufacturer)	20mL, 40* doses	2.4mL, 80 doses	15mL, 187 doses	50mL, 250* doses	50mL, 100* doses
<b>Cost range#</b>	\$6.99-9.99	\$10.00-18.29	\$8.99-9.89	\$16.95-19.99	\$12.99- 17.45
<b>Cost per dose</b>	17-25c per 200IU 35-50c per 400IU	13-23c per 400IU	5c per 400IU	3c per 400IU 7-8c per 1000IU	5-7c per 400IU 13-18c per 1000IU

			
	5mcg(200IU*)/0.5mL	5mcg(200IU*)/0.5mL	10mcg(400IU)/0.1mL
<b>Product specifications</b> (as per manufacturer)	20mL, 40* doses	30mL, 60* doses	10mL, 100 doses
<b>Cost range#</b>	\$6.99	\$10.99	\$20.40-\$28.94 p/h
<b>Cost per dose</b>	17c per 200IU 35c per 400IU	18c per 200IU 37c per 400IU	20-29c per 400IU

# Price estimates based on prices documented by four pharmacy brands: Chemist Warehouse, My Chemist, Priceline and Amcal. Current- 19<sup>th</sup> Aug 2020

p/h refers to online pricing inclusive of postage and handling

### Combination Vitamin D liquids

## Vitamin B12

### Background

- **Vitamin B12 (cobalamin) is synthesised by microorganisms and found in animal products** (meat, organ meat, fish, seafood, dairy and eggs). Some packaged cereals and soy milk are also fortified with B12
- **B12 is important in haematopoiesis and the central nervous system** and is an enzyme cofactor
- **Recommended daily requirements** range from 0.4 mcg (infants) to 2.4 mcg (>14 years age)
- Most diets containing animal products contain a much higher intake than this. B12 is safe in doses up to 1000 times the RDI. See [B12 content of common foods](#).

### Causes of low vitamin B12

- **Exclusively breastfed infants of mothers with B12 deficiency** may develop deficiency and typically present from 4-6 months of age
- **Malabsorption** - causes include: ileal resection, inflammatory bowel disease, medication (e.g. proton pump inhibitors), parasites (including *Giardia intestinalis*), bacterial overgrowth, tropical sprue, possibly *H. pylori*
- **Vegan/vegetarian diet** - due to low intake
- **Pernicious anaemia** - autoimmune atrophic gastritis causes loss of intrinsic factor (IF)
- **Rare metabolic disorders** - including [transcobalamin II \(TCII\) deficiency](#), [cobalamin C/D defects](#)

### Causes by age

- **Birth - 6 months** - severe maternal deficiency, consider metabolic causes, especially if severe metabolic disturbance (acidosis/vomiting) and neurological features
- **6 months - mid-childhood** - dietary deficiency, maternal deficiency (causing deficiency in breast fed infants), malabsorption
- **Mid-childhood onwards** - juvenile pernicious anaemia, gastritis, malabsorption, medication

**In refugee populations the most common cause is low intake** - typically a diet low in animal products, due to chronic food insecurity in the country of origin.

# Vitamin B12

- Increasing issue
  - Common in refugee populations
    - Afghan, Gazan, Iran, Iraq, Bhutan
    - Also consider food access, vegan
  - Can cause irreversible disability infants
  - **Low B12 in an infant is a medical emergency**
  - Screen + treat if low
- Refugee background infants with delay
  - Consider **both** maternal and infant status
  - Refer to GP for screening

# Immunisation

- Everyone will need catch-up
- Impact of legislation
  - No Jab No Pay; No Jab No Play
  - Childcare/kinder
  - Centrelink → housing, money for daily life
- More offshore vaccine records
  - HAP system **and** Patient held
  - Can be entered into AIR
- Sites → Primary care and LGA
- Complex process, amplified in big families

## Full report

### Record results

Was the client's identity confirmed?	Yes
Vaccination requirements complete	Yes
Does the Client have a COVID vaccination certificate?	No

### Examiner Declaration

Examiner Declaration	Yes
Examiner Name	Dr Titus Kiprono RUTO
Declaration date	21 Nov 2022

### Pentavac or equivalent (using DTP)

Disease	Diphtheria, Tetanus, Pertussis, Hib, Hepatitis B
Vaccine	Pentavac or equivalent (using DTP)
History date 1	07-May-2021
History date 2	30-Jun-2021
History date 3	04-Aug-2021

### MMR

Disease	Measles, Mumps, Rubella
Vaccine	MMR
Panel date 1	10-Nov-2022
Batch 1	0161N017
Batch Expiry date 1	28-Feb-2024

### Measles-Rubella

Disease	Measles, Rubella
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## PRIME: Program for Refugee Immunisation Monitoring and Education

### Evaluation

PRIME – Ongoing (2017-2022)

PRIME – Abridged catch-up pilot (2022)

PRIME – Covid (2022)

2017-2022

Authors: A/Prof Georgia Paxton OAM, Reham Elzeiny, Rachael James

On behalf of the PRIME teams: City of Whittlesea, City of Greater Dandenong, Asylum Seekers  
Resource Centre and Cabrini Asylum Seeker and Refugee Health Hub

**7 years**

**4 sites**

2 LGA

Whittlesea – working with Hume  
CGD – NPELS and expanded

2 asylum seeker healthcare agencies

ASRC

Cabrini

**Amazing teams**

Include bilingual, bicultural members

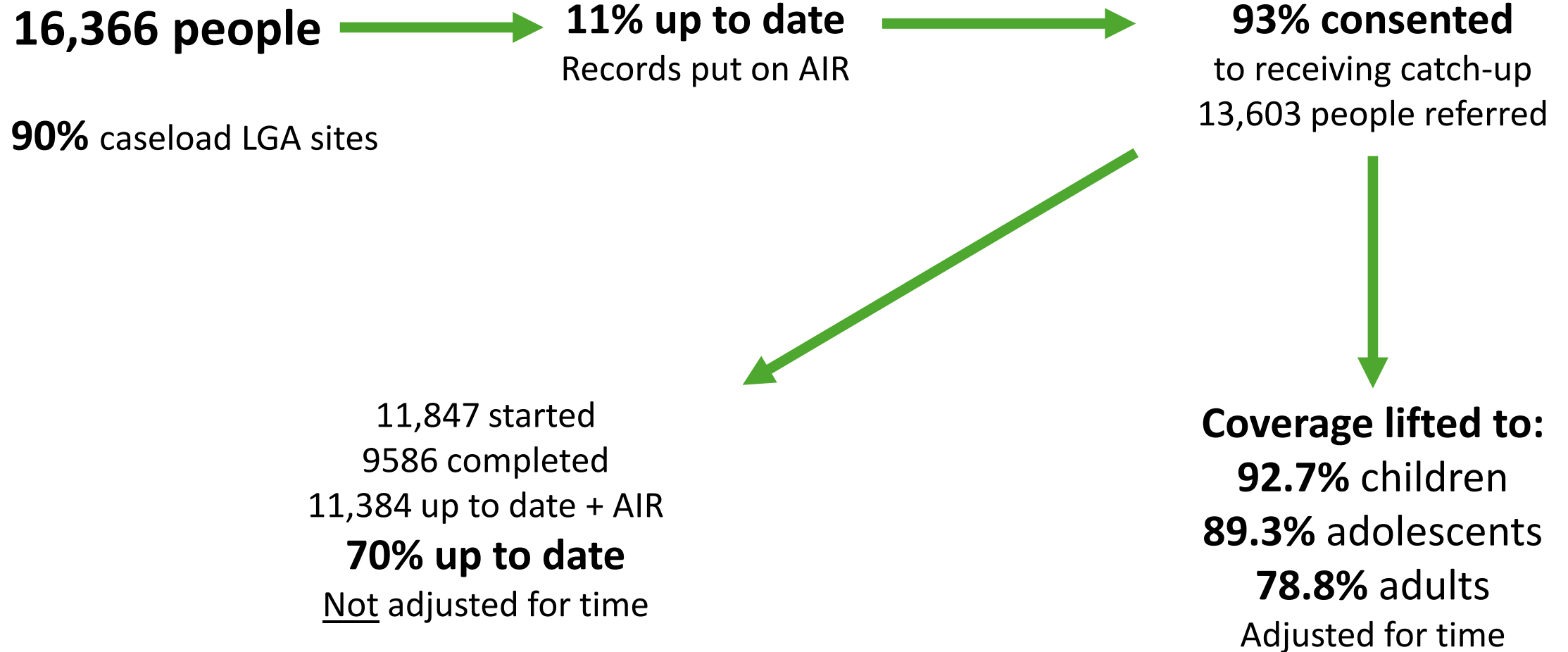
Embedded in local communities,

Local solutions, local networks, inc PHN

**Primary care support + LGA lifespan**



# PRIME – all sites



**Table 5: Catch-up completion after 12 months: comparison baseline and PRIME**

Site, age group	Cohort resident 12m+ at entry	Up to date at entry	Up to date at entry (%)	In PRIME 12m or longer	Up to date at entry	Complete after referral	Total up to date	Total up to date (%)
<b>H-W* Total</b>	<b>2348</b>	<b>697</b>	<b>29.7%</b>	<b>5977</b>	<b>1126</b>	<b>3955</b>	<b>5081</b>	<b>85.0%</b>
0-10 years	580	396	68.3%	1318	687	559	1246	94.5%
11-19 years	421	229	54.4%	999	314	592	906	90.7%
20 years & older	1347	72	5.4%	3660	125	2804	2929	80.0%
<b>CGD* Total</b>	<b>699</b>	<b>41</b>	<b>5.9%</b>	<b>2746</b>	<b>81</b>	<b>2230</b>	<b>2311</b>	<b>84.2%</b>
0-10 years	211	25	11.9%	868	41	739	780	89.9%
11-19 years	161	8	5.0%	1056	9	920	929	88.0%
20 years & older	327	8	2.5%	822	31	571	602	73.2%
<i>All children</i>	<i>791</i>	<i>421</i>	<i>53.2%</i>	<i>2186</i>	<i>728</i>	<i>1298</i>	<i>2026</i>	<i>92.7%</i>
<i>All adolescents</i>	<i>582</i>	<i>237</i>	<i>40.7%</i>	<i>2055</i>	<i>323</i>	<i>1512</i>	<i>1835</i>	<i>89.3%</i>
<i>All adults</i>	<i>1674</i>	<i>80</i>	<i>4.8%</i>	<i>4482</i>	<i>156</i>	<i>3375</i>	<i>3531</i>	<i>78.8%</i>
<b>Totals</b>	<b>3047</b>	<b>738</b>	<b>24.2%</b>	<b>8723</b>	<b>1207</b>	<b>6185</b>	<b>7392</b>	<b>84.7%</b>

\* Data extracted from PAIVnG 29 December 2022 for the entire program reporting period.

# Background development

- Keep it simple:
  - Parent concern
  - Age talked **sentences 3 years**
  - Eye contact, compensation strategies
  - Understandable outside family/choked on food
  - Age walked **~ 1 year**
  - Imaginative play (fear of monsters/ghosts)
  - Adaptive milestones
  - Vision and hearing
  - Lost skills
  - **Different from siblings/other kids**
  - **(Brigance testing)/pencils/paper/books/zippers/buttons /teaset/dolls/cars all culturally bound**
- In the context of migration and language transitions

# Migration history (in the refugee health context)

- Country of birth
- Country of origin → where is your family from (+ global context)
- Language(s)
- Interpreter requirement
- Year of arrival and status on arrival (refugee, seeking asylum)
  
- Family constellation → who is in your family in Australia
- Connections in Australia
- Occupation overseas/Australia → what work did you do overseas
- Current living situation
- Services and supports

# Other things to know and consider

- Refugee **background** – all humanitarian entrants have **PR**
  - Entitled for NDIS
- All asylum seekers are entitled to free hospital + community health care in Victoria
  - Eligible for ECIS-Cos
- All these cohorts have experienced forced displacement



# Levelling the field

This person has survived events I am not sure I would be able to  
They speak more languages than I do



<https://www.politico.com/news/2024/06/15/sudan-displacement-crisis-unhcr-00163595>



<https://www.nytimes.com/2024/10/22/world/middleeast/israel-strike-beirut-hospital.html>

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