



Cohort Profile

Cohort Profile: Building a New Life in Australia (BNLA): the longitudinal study of humanitarian migrants

Ben Edwards,^{1*} Diana Smart,² John De Maio,² Michelle Silbert² and Rebecca Jenkinson^{2,3,4}

¹ANU Centre for Social Research and Methods, Australian National University, Canberra, Australia, ²Australian Institute of Family Studies, Melbourne, VIC, Australia, ³Centre for Population Health, Burnet Institute, Melbourne, VIC, Australia and ⁴School of Public Health and Preventive Medicine, Monash University, Melbourne, VIC, Australia

*Corresponding author. Centre for Social Research & Methods, Australian National University, Level 2, Beryl Rawson Building (#13), Ellery Crescent, Canberra, ACT 2601, Australia. E-mail: ben.edwards@anu.edu.au

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Why was the cohort set up?

Humanitarian migrants are fleeing trauma and persecution. Many have spent periods of time in refugee camps or detention centres, pending resolution of their status. The journey that people make from refugee to citizen is one where they will encounter many hurdles, but also support from people who took the journey before them, from the community and from different levels of government. Worldwide, there were more than 21 million refugees at the end of 2015, with the most frequent countries of origin being Syria (4.9 million), Afghanistan (2.7 million) and Somalia (1.1 million).¹ This is the largest number of displaced persons historically, and larger than the number following World War II.

Migrant communities have made considerable contributions to the economic and social well-being of many OECD countries.^{2–4} Understanding how humanitarian migrants settle and their health needs is paramount to ensuring effective policy and programme responses; however, detailed research in this area has been lacking. The Building a New Life in Australia (BNLA) study was commissioned by the Australian Government to provide information on the settlement outcomes of recently arrived

humanitarian migrants to Australia. In Australia, the profile of the humanitarian migrant intake has changed in recent years, both in terms of its cultural and national backgrounds and the higher rate of boat arrivals to Australia. There is a need for information on how the current cohort of humanitarian migrants are faring, and on the factors that promote or hinder settlement, which can inform policy development and service provision.

Building a New Life in Australia traces the settlement journey of participants for at least 5 years, from their early months in Australia to their eligibility for citizenship. The following key research questions guide the study and were determined through community consultation and endorsed by the BNLA Advisory Committee.

- What are humanitarian migrants' settlement outcomes, in particular their English language proficiency, housing situation, labour force participation, use of qualifications, income, health, community engagement, citizenship and level of satisfaction with life in Australia?
- Which factors facilitate or hinder successful settlement?
- What role does access to and use of government and non-government services and their effectiveness play in migrants' successful settlement?

- Do the settlement experiences and outcomes of humanitarian migrants vary according to the differing migration pathways taken

To our knowledge, the BNLA study is the largest survey of humanitarian migrants in Australia,^{5–9} and one of the largest studies of its type in the world. The Survey of New Refugees in the UK (conducted between 2005 and 2009) recruited around 5600 refugees in Wave 1.¹⁰ Statistics Canada¹¹ also undertook a longitudinal survey of over 9000 refugees, beginning in 2005, to examine how immigrants (including refugees and non-refugees) adjust to life in their new countries.

Who is in the cohort?

The study population comprises individuals or families who were granted permanent protection visas through Australia's humanitarian programmes during May and December 2013. Australia's Refugee and Humanitarian programme comprises three main types of permanent protection visas: (i) those granted to refugees who are primarily identified through the United Nations High Commission for Refugees; (ii) those related to the Special Humanitarian Program (SHP) for Women at-risk which is for female applicants and their dependants, who are living outside their home country without protection of a male relative and are in danger of victimization, harassment or serious abuse because of their gender; and (iii) also onshore protection visas which are granted for those who have sought protection following their arrival in Australia.¹² There are two types of onshore protection visas granted, for individual or families who have arrived by boat [referred to as illegal maritime arrivals (IMAs) by the Department of Immigration and Border Protection] and for those who originally came to Australia on another type of visa (e.g. tourist or student) and then sought and were granted a permanent humanitarian visa.

Recruitment into the study was based on the 'migrating unit' named on the visa application, which could consist of a single individual or a group/family. Contact was initially made with the Principal Applicant named on the visa application, who was required to consent before other members of the migrating unit (referred to hereafter as Secondary Applicants) could be invited to participate. Secondary Applicants were required to be aged 15 years or older and residing with the Principal Applicant at the time of the Wave 1 data collection. To be eligible for the study, participants had to have arrived in Australia in the 3 to 6 months preceding the start of Wave 1 fieldwork and already be holding a permanent protection visa (the 'offshore' group), or to have been granted a permanent protection visa in the previous 3 to 6 months after their arrival in Australia either by boat or on another visa type such as a tourist or student visa (the 'onshore' group). Ethics approval was obtained from the Australian Institute of Family Studies Human Research Ethics Committee, for all aspects of the study.

A total of 1509 Principal Applicants, 755 adult Secondary Applicants and 135 adolescent Secondary Applicants (aged 15 to 17 years) were recruited to Wave 1, yielding 2399 participants in all. Participants were residing in all states of Australia and in capital cities and regional centres. A total of 1177 (78%) of migrating units had followed an 'offshore' pathway, and the remaining 332 (22%) had followed an 'onshore' pathway. Of wave 1, 2009 (84%) were interviewed in Wave 2 and 1894 (79%) in Wave 3 (Table 1).

How often have they been followed up?

At least five annual data collections are planned, with Waves 1, 2 and 3 already completed. Participants have home visits for Waves 1, 3 and 5 and telephone interviews in Waves 2 and 4. In Waves 1, 3 and 5, the survey was

Table 1. Summary of the BNLA study design

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5
	BNLA Main Wave data collection				
Data collection period	October 2013 – February 2014	October 2014 – February 2015	October 2015 – February 2016	October 2016 – February 2017	October 2017 – February 2018
Data collection method	Face-to-face interview (home visit)	Telephone interview	Face-to-face interview (home visit)	Telephone interview	Face-to-face interview (home visit)
Number of interviews	2 399	2 009	1 894	–	–
MU size ^a	1 509	1 273	1 165	–	–
Anticipated length of interviews	70 mins for PAs, 30 mins for SAs	20 mins for PAs, 10 mins for SAs	60 mins for PAs, 30 mins for SAs	20 mins for PAs, 10 mins for SAs	60 mins for PAs, 30 mins for SAs

^aA Migrating Unit (MU) could consist of a single individual or several related individuals. Principal Applicants (PAs) are the persons upon whom the permanent protection visa was granted; Secondary Applicants (SAs) are other persons named on the grant application.

administered using a computer-assisted self-interview (CASI) on a small portable computer tablet. The CASI has audio functions available so that participants can listen to the questions being read out, a feature particularly useful for participants with low literacy levels. For those who preferred an interview, a computer-assisted personal interview (CAPI) was offered. The survey and participant material were translated into 14 languages including Amhari, Arabic, Burmese/Myanmar, Chin Haka, Dari, Hazaragi, Nepali, Oromo, Pashto, Persian, Somali, Swahili, Tamil and Tigrinya. All translations had multiple stages of independent checking to ensure a quality translation; however, for languages beyond the translated 14 languages, we used trained interpreters who, where possible, attend the home visit. For particularly rare languages, the small pool of accredited interpreters in Australia meant participants were interviewed over the telephone. In Wave 1, 19 languages were used across the Wave 1 sample. The most common languages used included 1014 interviews in Arabic (42%), 562 in Persian (23%), 230 in English (10%) and 200 in Dari (8%) (Table 2). In Wave 1, 1692 (71%) participants completed a computerized self-interview, 658 (27%) a computerized personal interview I and 49 (2%) a computerized self-interview with an interpreter.

Each main wave of data collection is to be preceded by a pilot phase to test the survey methodology and content.

Strategies employed to retain participants include: collecting detailed address, telephone and other contact information at baseline and follow-up interviews (for participants and secondary contacts where possible); employing multilingual interviewers from national and cultural backgrounds similar to those of the participants; employing respected members of local communities to act as 'Community Engagement Officers' in Wave 1 to advocate for the study, broker introductions and assist interviewers with participant recruitment; providing participants with links to a BNLA participant website and other relevant external resources and services; and disseminating participant newsletters (translated into 14 languages for Wave 1) highlighting key findings from each wave of data collection. Table 1 provides a summary of the data collection time periods, data collection methods and anticipated sample sizes.

What has been measured?

The study aims to investigate both the degree to which successful settlement outcomes are achieved (e.g. health, economic well-being, social participation) and the factors that may influence outcomes (e.g. personal characteristics, migration experiences, community support, services provided). Thus, it contains a wide range of content areas that are

Table 2. Language of survey completion, by interview mode, Wave 1

Language of interview	Survey mode			Total (%)
	CASI ^a (%)	CAPI ^b with interviewer (%)	CAPI ^b with interpreter (%)	
Amharic	0.35	0.15	0	0.29
Arabic	43.85	40.73	8.16	42.27
Burmese/Myanmar	3.31	2.28	4.08	3.04
Chin Haka	1.83	2.13	0	1.88
Dari	6.38	12.31	22.45	8.34
English	9.63	10.18	0	9.59
Hazaragi	3.25	3.65	0	3.29
Karen	0	0	2.04	0.04
Nepali	5.56	0.15	10.2	4.17
Oromo	0.24	0	0	0.17
Pashto	0.47	0.3	0	0.42
Persian	22.64	26.29	12.24	23.43
Somali	0.24	0.15	2.04	0.25
Swahili	0.71	0.76	24.49	1.21
Tamil	1.3	0.46	0	1.04
Tigrinya	0.24	0.46	0	0.29
Other	0	0	14.29	0.29
Total (%)	100.00	100.00	100.00	100.00
Number of interviews	1 692	658	49	2 399

^aCASI - Computer Assisted Self Interview.

^bCAPI - Computer Assisted Personal Interview.

summarized in Table 3. All domains will be assessed at each data collection wave with the exceptions of pre-migration experiences and some demographic characteristics that do not change (e.g. sex), which are collected only in Wave 1.

The survey contains standard scales measuring aspects such as health, employment and income as well as individual items assessing particular characteristics that have been adapted from previous national surveys to enhance comparability with the general population. We highlight a number of the major standardized scales; further details about all survey items can be found on the study website. There are two major measures of mental health. Psychological distress was measured by the Kessler-6¹³ or K6, which contains six questions assessing depressive and anxiety symptoms in the past 4 weeks. The K6 is a widely used measure and has been used in over 30 countries. We capture post-traumatic stress disorder symptoms using the PTSD-8,¹⁴ an eight-item screening questionnaire derived from the Harvard Trauma Questionnaire¹⁵ which has intrusion, avoidance and hypervigilance subscales that correspond to the DSM-IV criteria. In BNLA, the PTSD-8 can be used to give an indication that an individual is at risk of PTSD¹⁶ and, in Wave 1, has a Cronbach's alpha of 0.92. In terms of physical health, the survey uses four items from

four subscales of the SF-36,¹⁷ specifically General health ('Overall, how would you rate your health during the past 4 weeks?'); Physical function ['During the past 4 weeks, how much did physical health problems limit your usual physical activities (such as walking or climbing stairs)?']; Role-physical ('During the past 4 weeks, how much difficulty did you have doing your daily work, at home and away from home, because of your physical health?'); and Bodily pain ('How much bodily pain have you had during the past 4 weeks?'). There are two shortened versions of standardized scales of personal resources—self esteem and self-efficacy. Self-esteem is measured through three items from the Rosenberg self-esteem scale¹⁸ and had a Cronbach's alpha of 0.87 in Wave 1. Self-efficacy is measured through three items from the General Self Efficacy Scale,¹⁹ and for Wave 1 has high levels of internal consistency (Cronbach's alpha = 0.87).

There is also linked geospatial data for Waves 1 and 2, including several measures of area-based socioeconomic advantage and disadvantage developed by the Australian Bureau of Statistics,²⁰ and an indicator of whether participants are living in major cities or inner or outer regional areas of Australia. Whereas most data are quantitative in nature, there are some qualitative questions such as

Table 3. Domains covered in the BNLA study

Broad area	Specific issues
Demographics and family composition	Demographic information relating to the individual or family, such as age, gender, country of birth, marital status
Health	Information on health status prior to arrival in Australia; self-rated health, pain, long term health condition, injury or disability, Post Traumatic Stress Disorder screener and Kessler-6; life stressors and coping
Housing and neighbourhood	Number of times moved home; assistance in finding housing; current tenure type; quality of housing, e.g. number of bedrooms, facilities; neighbourhood characteristics
English language proficiency	Languages spoken at home; English language proficiency; whether attending English language classes; use and helpfulness of interpreting services
Education and training	Highest level of education achieved; current education and training undertaken; educational aspirations; previous qualifications gained prior to arrival in Australia and whether they have been recognised
Employment and income	Current employment status, employment characteristics; prior occupation and work experience before coming to Australia; experience of unemployment in Australia; income and government benefits received; financial strain
Immigration experience	Countries lived in prior to arrival; experience of deprivation or trauma; time spent and amenities or services available in refugee camps, Australian detention centres or community detention; reasons for migrating to Australia; social networks available upon arrival
Self-sufficiency	Ability to perform daily life tasks (e.g. use banking services); ability to access services and transport; barriers to service use
Community support	Levels of support from national, religious and other community groups; involvement in community activities; ease of making friends; sense of belonging in Australia
Personal resources and life satisfaction	Satisfaction with current life and situation; self-concept; self-efficacy; levels of trust in differing community groups and organisations; experience of discrimination
Life in Australia	Expectations of life in Australia before arrival; factors promoting or hindering settlement; ease of settling in Australia

participants' perceptions of the factors that have helped or hindered their settlement, and barriers to service use.

What has it found? Key findings and publications

At the time of writing, Wave 2 data were not yet publicly available. The following section reports findings from Wave 1 in the areas of sample characteristics, pre-migration experiences of trauma, and participants' physical and mental health status.

Participants' backgrounds

The BNLA cohort was extremely diverse, comprising participants born in 35 different countries. Most commonly participants were born in Iraq (944; 39%), Afghanistan (611; 25%), Iran (286; 12%) and Myanmar (135; 6%). The age of adult respondents ranged from 18 to over 80 years of age, with the average age of the Principal Applicants being 37 years and 32 years for Secondary Applicants. Recruitment was skewed toward males at the

Principal Applicant level and females at the Secondary Applicant level, but in all there were 1307 males (54%) and 1092 females (46%) in the cohort. Approximately two-thirds (69%, $n = 1036$) of Principal Applicants and 229 (30%) Secondary Applicant adults had worked at some time before coming to Australia, but 380 (15%) reported having never attended school and 909 (37%) had nine years or less of schooling. On arrival, 64% or 1548 participants reported that they understood spoken English 'not well' or 'not at all', and a slightly higher percentage had very limited or no skills in speaking, reading or writing in English. Table 4 provides a summary of the key demographic features of the sample recruited to the BNLA study.

Pre-migration experiences of trauma

Previous research has shown how experiences of trauma are an important predictor of post-traumatic stress and heighten the risk of mental illness.²¹ Participants were asked whether they or other members of their family had experienced or witnessed a range of traumatic events before coming to Australia. A total of 2161 (95%) reported that they or their

Table 4. Key characteristics of recruited sample at Wave 1, by respondent type

	%			
	PA ^d (n=1 509)	SA ^e Adult (n=755)	SA ^e Adolescent (n=135)	Total (n=2 399)
Visa status				
Refugee	62.4	79.6	63.0	67.9
Special Humanitarian Program (Women at-risk) ^a	12.1	10.3	23.0	12.2
Onshore protection –IMA ^b	22.1	5.7	2.2	15.8
Onshore protection –other ^c	3.3	4.4	11.85	4.1
Gender				
Male	70.3	24.9	43.0	54.5
Female	29.7	75.1	57.0	45.5
Location				
Metropolitan	90.3	91.3	85.2	90.3
Non-metropolitan	9.7	8.7	14.8	9.7
Prior education				
Never attended school	17.6	13.8	7.4	15.8
Up to 7 years	20.0	18.9	20.7	19.7
7–9 years	15.2	18.8	48.2	18.2
10–11 years	9.0	13.3	17.0	10.8
12+ years	18.4	21.2	4.4	18.5
Trade or technical qualification	7.0	4.6	1.5	6.0
University degree	11.9	8.5	0	10.1

^aThe Special Humanitarian Program for Women at-risk is for female applicants and their dependents who are living outside of their home country without protection of a male relative and are in danger of victimisation, harassment, or serious abuse because of their gender.

^bOnshore protection visas are granted for those who have sought protection following arrival in Australia. For individual or families who have arrived by boat they are referred to as illegal maritime arrivals or IMAs, by the Department of Immigration and Border Protection.

^cOnshore protection visas other are for individuals or families that have sought asylum in Australia but originally came to Australia on another type of visa (e.g. tourist or student).

^dPrincipal Applicants (PAs) are the persons upon whom the permanent protection visa was granted.

^eSecondary Applicants (SAs) are other persons named on the grant application.

immediate family had experienced at least one type of traumatic event, with 751 (33%) reporting experience of three or more different types of events (Table 5). These events were most commonly war or conflict, reported by 1324 (55%), political or religious persecution, by 1189 (47%), extreme living conditions, by 854 (36%), violence, by 418 (17%), and imprisonment or kidnapping, by 362 (15%).

Mental health

Figure 1 shows that more females (521, 45%) than males (461, 35%) were experiencing moderate or high levels of psychological distress in their early stages of settlement in

Table 5. Number of traumatic events experienced or witnessed by migrating unit

Traumatic pre-migration event ^a	%	N
Any of the seven traumatic events asked in the survey	94.9	2161
No event	9.4	214
1 event	32.4	738
2 events	25.2	574
3 or more events	33.0	751
Total	100	2277

^a122 respondents had missing data on this variable, 56 refused, 45 didn't know or said it did not apply.

Source: BNLA Wave 1.

Australia ($\chi^2(2) = 35.06, P = 0.000$). Participants were classified as showing 'high'¹³ and 'moderate' psychological distress,²¹ using clinical cut-offs. Between one in five to one in eight participants were in the high range. These trends were compared with Australian national data from the Australian Bureau of Statistics' National Mental Health and Wellbeing Survey,²³ which found that rates of psychological distress were higher for humanitarian migrants when compared with the wider Australian population where 7% of adult males and 11% of adult females in the general population reported moderate or high psychological distress. At Wave 1, greater numbers of traumatic events and financial hardships, loneliness and family conflict were found to be risk factors for high psychological distress after adjusting for age, sex, country of origin, education and marital status.²⁴

Overall health

The General Health item from the SF-36¹⁷ suggests that overall, 349 (15%) reported that their health had been 'very poor' or 'poor', with similar rates of poor health reported among Principal Applicants (236, 16%) and Secondary Applicant adults (108, 14%), but lower among Secondary Applicant adolescents (5, 4%). Further analysis of the BNLA data revealed gender differences in rates of poor overall health, with a higher proportion of females

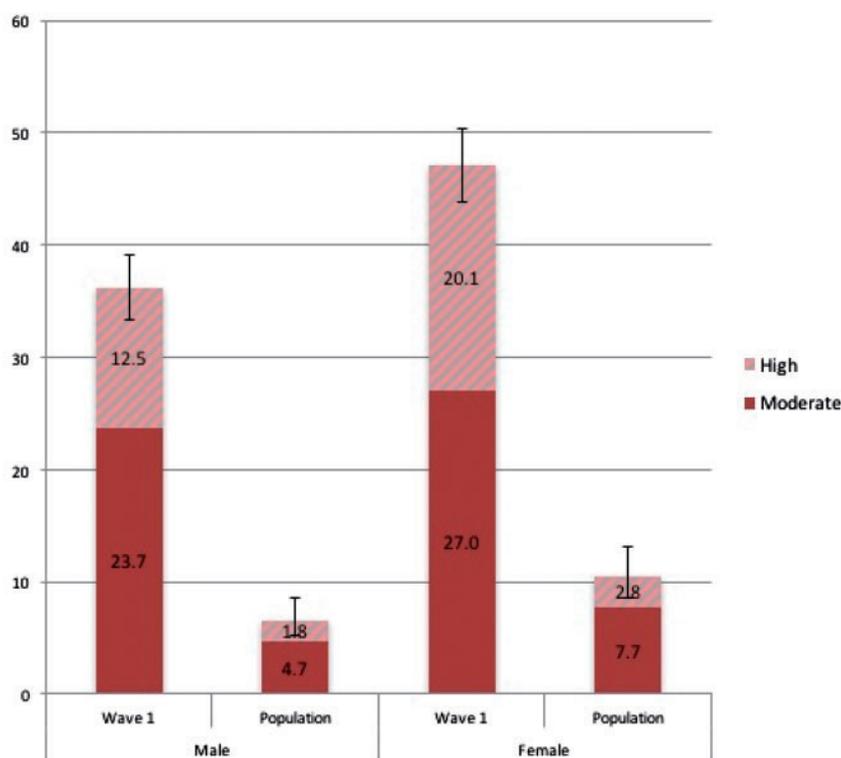


Figure 1. Levels of moderate and high psychological distress (K6; past four weeks) among BNLA participants and the general Australian population (National Mental Health and Wellbeing Survey), further analysed by gender.

[0.179, 95% confidence interval (CI) 0.156 - 0.201] reporting poor health than males (0.117, 95% CI 0.100 - 0.135, $P = 0.000$). Further, the proportion of BNLA participants reporting poor or very poor health is higher than the general Australian population studies (3%).²³ At Wave 1, poor or very poor self-rated health was associated with a greater number of financial hardships and not feeling welcomed in Australia, after adjusting for age, sex, marital status, education, country of origin, visa subclass, time in Australia and experience of traumatic events.²⁵

Participants were asked whether they had a disability, injury or health condition that had lasted or was likely to last 12 months or more. In all, 421 (27.9%) Principal Applicants, 158 (20.9%) Secondary Applicant Adults and nine (6.7%) Secondary Applicant Adolescents had a disability, injury or health condition that had lasted or was likely to last 12 months or more.

Dissemination activities

The BNLA project team and collaborators have presented early findings from the study at a range of national and international conferences, via data highlight papers and factsheets, submissions to government inquiries and importantly, via annual newsletters to study participants. Wave 1 and 2 data were released to approved data users in September 2015, with increasing numbers of publications likely as awareness of the study increases. Copies of technical papers, a fact sheet that outlines early findings of the experiences of recently arrived humanitarian migrants, the findings from the Wave 1 and other publications¹² including data documentation and a description of the survey weighting, can be accessed at: [www.aifs.gov.au/bnla/].

What are the study's main strengths and weaknesses?

There are many strengths to the study. For instance, whereas other Australian studies of humanitarian migrants have typically been cross-sectional in nature or involved short durations of follow-up, the BNLA cohort will be followed annually for a minimum of 5 years. Further, we recruited a very large sample, the largest survey of humanitarian migrants to date in Australia, with 33% of the humanitarian migrants arriving in Australia during the sampling period being recruited into the study and completing a survey in the first wave of data collection. The retention rate was 84% at 12 months' follow-up. Although attrition at Wave 2 was associated with lower levels of pre-migration education, living in regional Australia and participants living in a couple family with no children, those lost to follow-up were otherwise similar to participants retained in the study, thus limiting the impact of attrition bias

on our findings. A set of 'longitudinal' weights that adjusts for attrition between the first and second waves of BNLA data were also calculated and will be made available on the Wave 2 BNLA dataset. Finally, in addition to the long duration of follow-up and high rates of retention (to date), a key strength of this study is the inclusion of key measures of mental health and health along with a broad range of issues and domains covered, providing a rich, valuable dataset. This will enable a better understanding of the settlement experiences of humanitarian migrants in Australia, to inform targeted policy decisions aimed at maximizing settlement success for humanitarian migrants.

There are some limitations to the survey. Most questions relate to the participants' recent arrival experiences, and behaviours reported across shorter retrospective time frames have been found to be more consistent and accurate.²⁶ Participants were also asked about their life before coming to Australia, and findings may be subject to some recall bias. The sample is extremely diverse, responding to the survey in 19 languages in Wave 1, and an extensive translation process was undertaken with multiple stages of independent checking of survey questions; however, some bias may still be present in the data. Unfortunately direct assessments of physical health were not possible with this population given the resources available, but testing for differential item functioning of key constructs is planned, and derived latent variables that remove biases in cultural responding will be made available to data users.

Can I get hold of the data? Where can I find out more?

Building a New Life in Australia will help to shed light on the health outcomes for humanitarian migrants in Australia. The analyses reported here highlight the complex lives of recently arrived humanitarian migrants and the diversity of their pre-migration and early arrival experiences.

The two waves of confidentialized BNLA data are available to approved international and Australian researchers from government, academic institutions and non-profit organizations. As BNLA was always intended to be publicly accessible, ethical approval was obtained for public release of a confidentialized dataset and no further ethical approvals are required to be a licensed user. There is no fee for data access. Further supporting documentation are available for data users at [http://www3.aifs.gov.au/bnla/index.html#about] and there is no requirement that researchers have links to the authors. Further waves will be available in due course. Details on how to apply for the BNLA data are available on the Department of Social Services website: [https://www.dss.gov.au/our-responsibilities/families-and-children/programmes-services/access-to-dss-longitudinal-datasets].

Profile in a nutshell

- Building a New Life in Australia (BNLA) aims to better understand the factors that aid or hinder the successful settlement of humanitarian migrants, and to provide an evidence base to inform policy and programme development.
- This is one of the largest studies of humanitarian migrants to date; 2399 individuals and families who had been granted a permanent humanitarian visa to live in Australia participated in Wave 1.
- Participants reported diverse backgrounds and experiences, coming from 35 different countries and speaking close to 50 different languages.
- Participants will be followed annually for at least 5 years; the retention rate at 24 months' follow-up was 79%.
- Wave 1 findings highlight the complex lives of recently arrived humanitarian migrants and the disadvantage and vulnerability experienced by many. Large proportions reported having witnessed or experienced traumatic events before arrival in Australia, and current rates of poor mental and overall health were much higher among BNLA participants than in the general Australian population.

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Conflict of interest: None declared.

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