Australian Bureau of Statistics

Census

2021 Census health data seminar

30 August 2022

Duncan Young
General Manager, Census Division
Australian Bureau of Statistics

Australian Bureau of Statistics Census

Speakers

Caroline Roga - Director, Department of Health and Aged Care

Caroline Deans - Director, Australian Bureau of Statistics

Robert Long – Director, Australian Bureau of Statistics

Gerard Duck – Director, NSW Ministry of Health

Today's session

Australian Bureau of Statistics Census

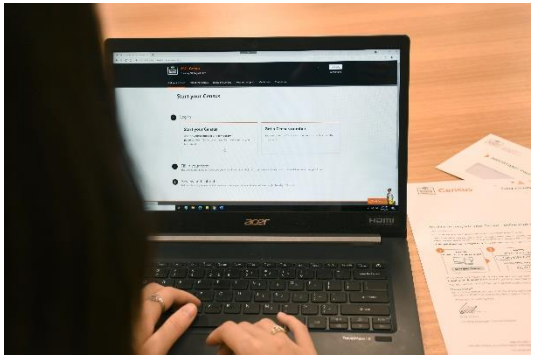
- About the 2021 Census
- Topic consultation
- Caroline Roga

  Monitoring population vaccination coverage through integrated data
- Key data insights
- Other health data sources
- Gerard Duck

  ABS data use in service planning for NSW Health
- Questions

Census Quality

Australian Bureau of Statistics Census



96.1% Response rate

0.7% Net undercount

78.9% Online response rate

Topic Consultation

Australian Bureau of Statistics Census

Australian Government
Department of Health

Australian Government
Department of the Prime Minister and Cabinet

Australian Government
NHMRC National Institute for Dementia Research

Australian Government
Australian Institute of Health and Welfare

City of Belmont
CITY OF OPPORTUNITY

GOVERNMENT OF WESTERN AUSTRALIA
Department of Local Government, Sport and Cultural Industries
Office of Multicultural Interests

NSW GOVERNMENT
Health
Central Coast Local Health District

CAMPBELLTOWN CITY COUNCIL

Government of South Australia
Wellbeing SA

PHIDU
TORRENS UNIVERSITY AUSTRALIA

THE UNIVERSITY OF MELBOURNE

.id

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Census

Caroline Roga

Director

Department of Health and Aged Care

Monitoring population vaccination coverage through integrated data

Australian Immunisation Register (AIR) data is linked weekly to MADIP with a 95% match rate

AIR Data

- COVID-19 vaccination episodes
- COVID-19 vaccine provider
- Vaccine exemptions
- Full immunisation history in AIR

The AIR is the central source for immunisation records in Australia.

Data linkage

Australian Bureau of Statistics

MADIP Linked Data

Includes:

- **ABS 2021 Census**
- ATO (Personal Income Tax and Payroll)
- Centrelink
- MBS and PBS
- National Disability Insurance Scheme
- Cause of mortality (monthly from end of March 2022)

MADIP is a rich data source of diversity, family relationships, health and employment information.

Operational reporting

Regular reporting of COVID-19 coverage estimates for priority and vulnerable cohorts

Longer-term research

Collaborate with peak bodies and researchers to understand COVID-19 impacts

Evaluation

Opportunities to evaluate outcomes from the COVID-19 vaccination rollout

Individuals with Culturally and Linguistically Diverse (CALD) backgrounds data

Data as at:
7 Aug 2022
Updated weekly

Australia's COVID-19 Vaccine Roadmap

People over the age of 16

CALD population *	Total number of individuals in cohort	% People with at least one dose	% People who received two doses	% of eligible people who received three or more doses
General population	20,619,959	>95.0%	>95.0%	71.4%
People born overseas	4,454,014	94.5%	93.9%	72.5%
Speaks a language other than English at home	4,110,252	94.1%	93.4%	68.4%

	General population			Born Overseas			Speaks a language other than English at home		
	% with at least one dose	% who received two doses	% of eligible people who received three or more doses	% with at least one dose	% who received two doses	% of eligible people who received three or more doses	% with at least one dose	% who received two doses	% of eligible people who received three or more doses
ACT	>95.0%	>95.0%	79.9%	>95.0%	>95.0%	78.3%	>95.0%	>95.0%	75.7%
NSW	>95.0%	>95.0%	69.2%	94.8%	94.3%	69.8%	94.1%	93.4%	65.1%
NT	91.2%	88.8%	78.6%	>95.0%	94.9%	87.7%	94.3%	93.8%	86.5%
Qld	94.5%	92.9%	64.5%	92.1%	91.4%	66.8%	92.4%	91.6%	63.4%
SA	>95.0%	94.0%	75.2%	92.7%	91.7%	74.5%	91.7%	90.6%	70.9%
Tas	>95.0%	>95.0%	74.0%	93.8%	93.2%	75.6%	93.9%	93.2%	71.7%
Vic	>95.0%	94.5%	73.6%	>95.0%	94.7%	72.8%	94.7%	94.1%	69.0%
WA	>95.0%	>95.0%	83.0%	>95.0%	94.5%	85.2%	>95.0%	94.6%	83.3%

*Individuals with Culturally and Linguistically Diverse (CALD) backgrounds are as reported in the 2021 Census, excluding those who have since departed Australia; those born in the UK, Ireland or NZ; and Aboriginal and/or Torres Strait Islander peoples. There is overlap across CALD cohorts where individuals may have reported they had more than one CALD characteristic in the 2021 Census.

Small negative changes may appear when compared with the previous report due to perturbation, in particular for small population groups.

Source: Australian Immunisation Register linked to the Multi-Agency Data Integration Project (Census 2021 characteristics)

Australian Bureau of Statistics

Census

Caroline Deans

Director, 2021 Census Dissemination

Australian Bureau of Statistics

Long-term health conditions

Australian Bureau of Statistics Census

Has Person 1 been told by a doctor or nurse that they have any of these long-term health conditions?

Include health conditions that have lasted or are expected to last for six months or more.

Include health conditions that:

- may recur from time to time, or
- are controlled by medication, or
- are in remission.

Select all that apply.

- [ ] Arthritis
- [ ] Asthma
- [ ] Cancer (including remission)
- [ ] Dementia (including Alzheimer's)
- [ ] Diabetes (excluding gestational diabetes)
- [ ] Heart disease (including heart attack or angina)
- [ ] Kidney disease
- [ ] Lung condition (including COPD or emphysema)
- [ ] Mental health condition (including depression or anxiety)
- [ ] Stroke
- [ ] Any other long-term health condition(s)

- [ ] **No long-term health condition**

Census health variables

Australian Bureau of Statistics Census

Person variables:

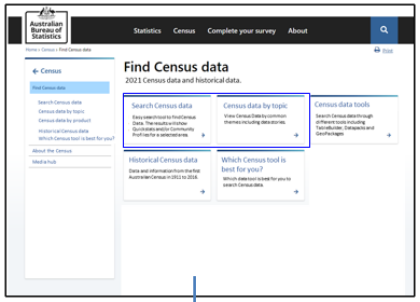
- Count of each condition
- Number of conditions reported (none, 1, 2, 3+)
- Whether has each of the 10 health conditions or other LTHC
- Whether has 12 defined co-morbidities

Household variables:

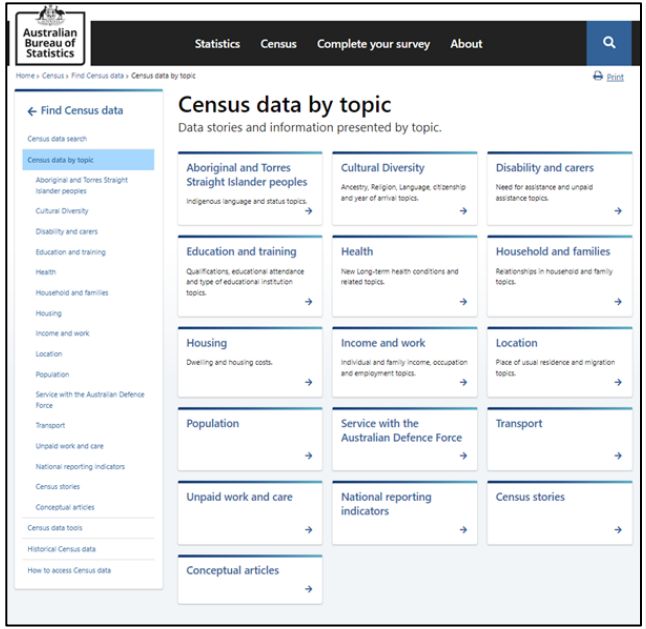
- Count of persons in household with LTHC
- Count of adults in household with LTHC
- Count of children in household with LTHC

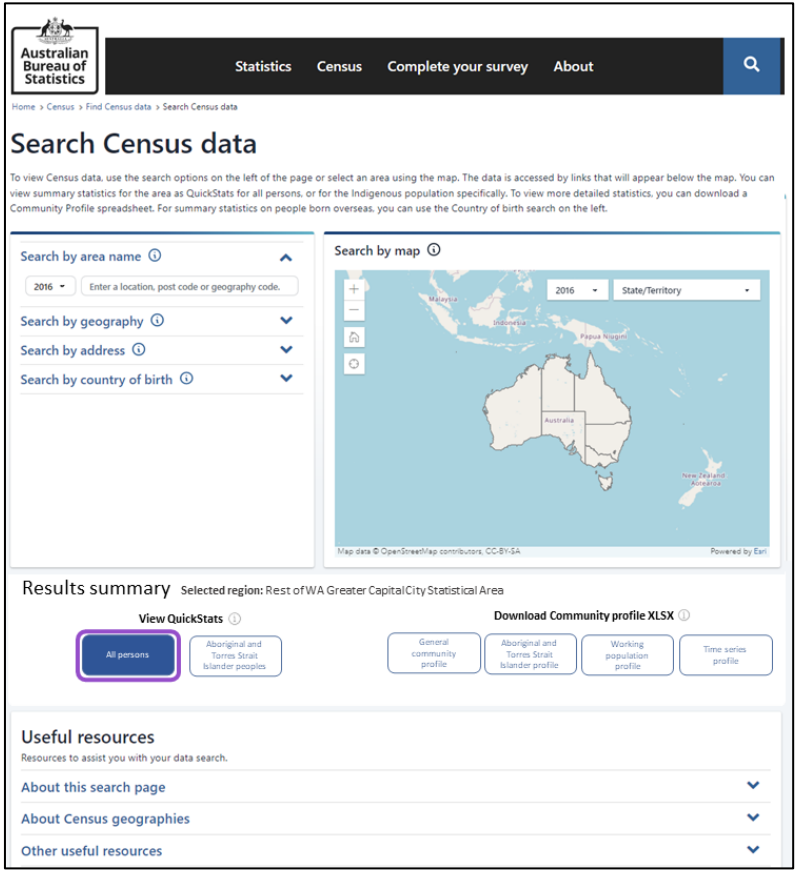
Census data tools

Australian Bureau of Statistics Census



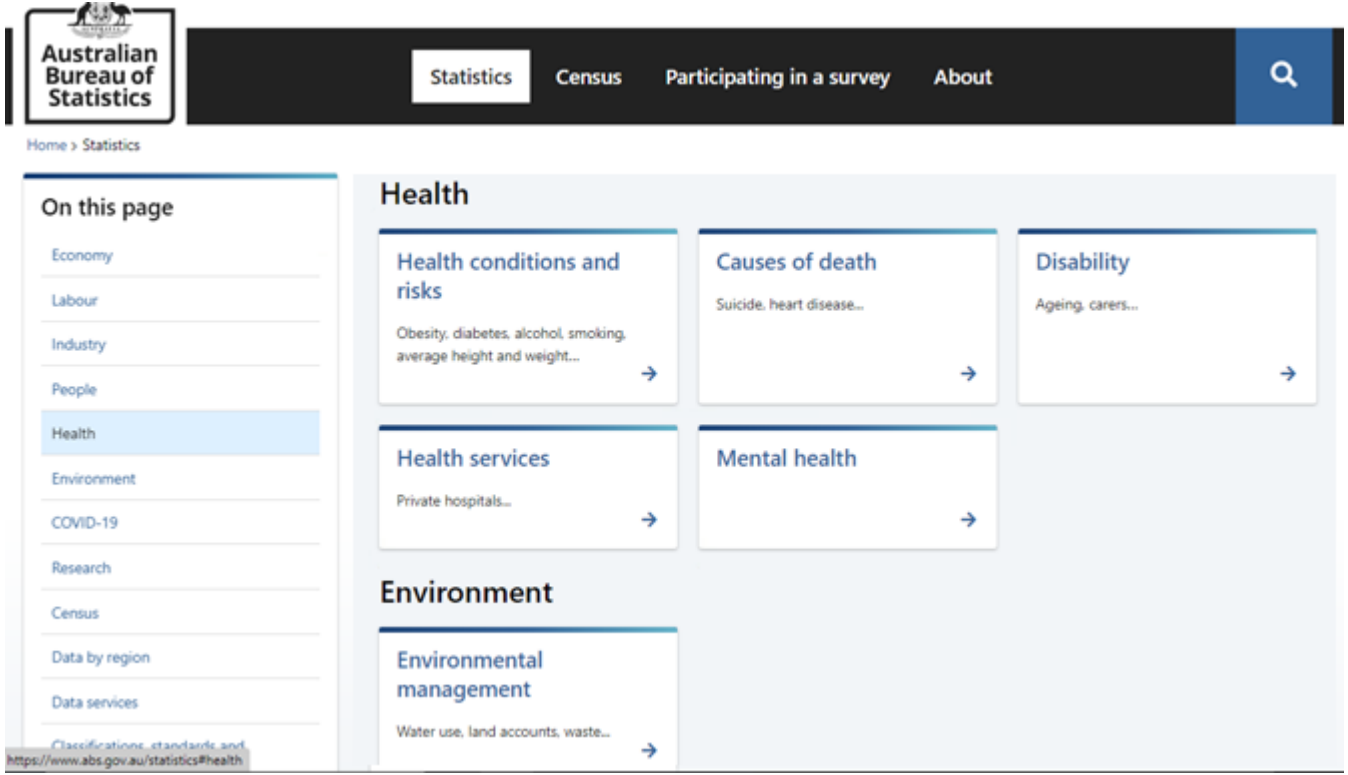
Find Census data by area or topic





ABS health data

Australian Bureau of Statistics Census



Long-term health conditions

Australian Bureau of Statistics Census

31.7%

Australians reported having a long-term health condition

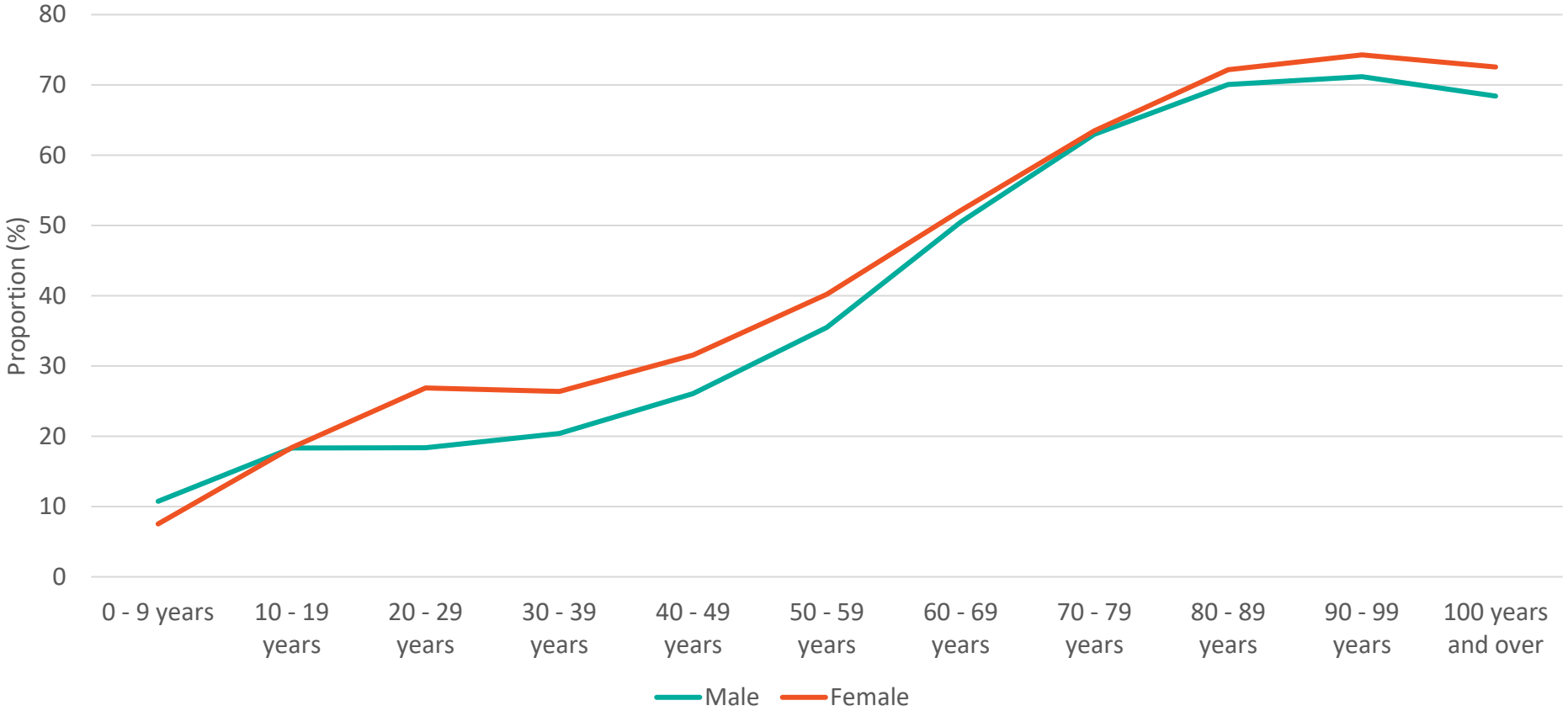
4.8m One of the selected health conditions

1.5m Two of the selected health conditions

0.8m Three or more of the selected health conditions

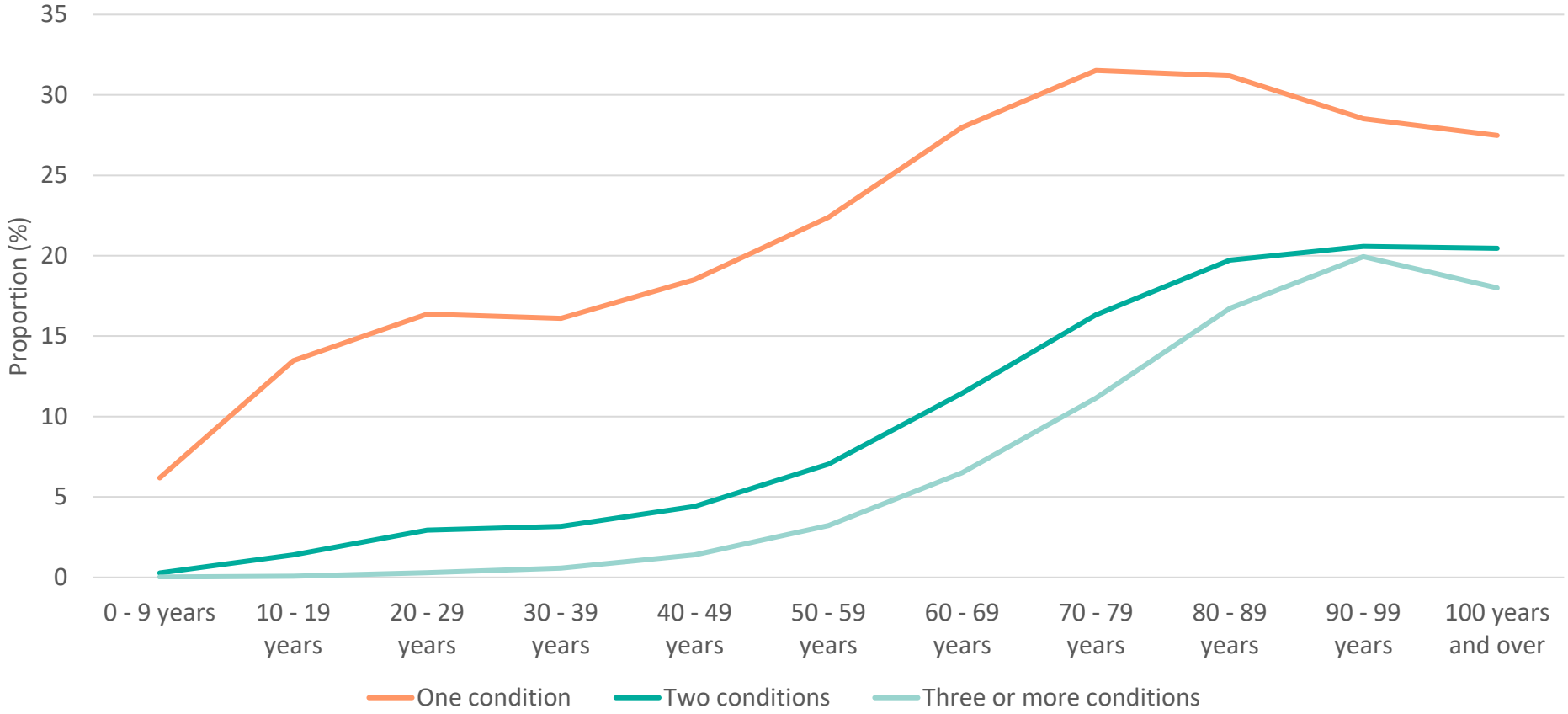
Long-term health condition by age and sex

Australian Bureau of Statistics Census

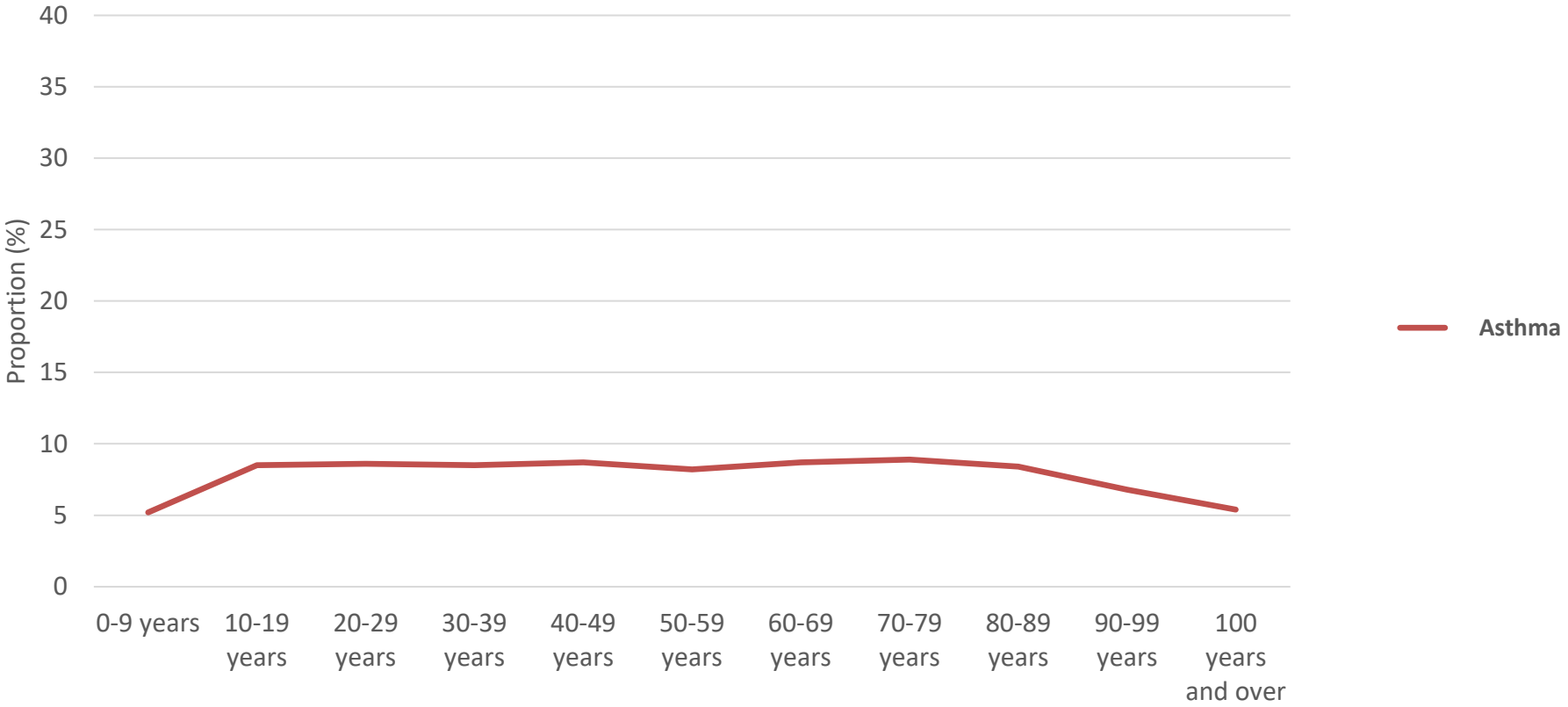


Number of conditions by age

Australian Bureau of Statistics Census

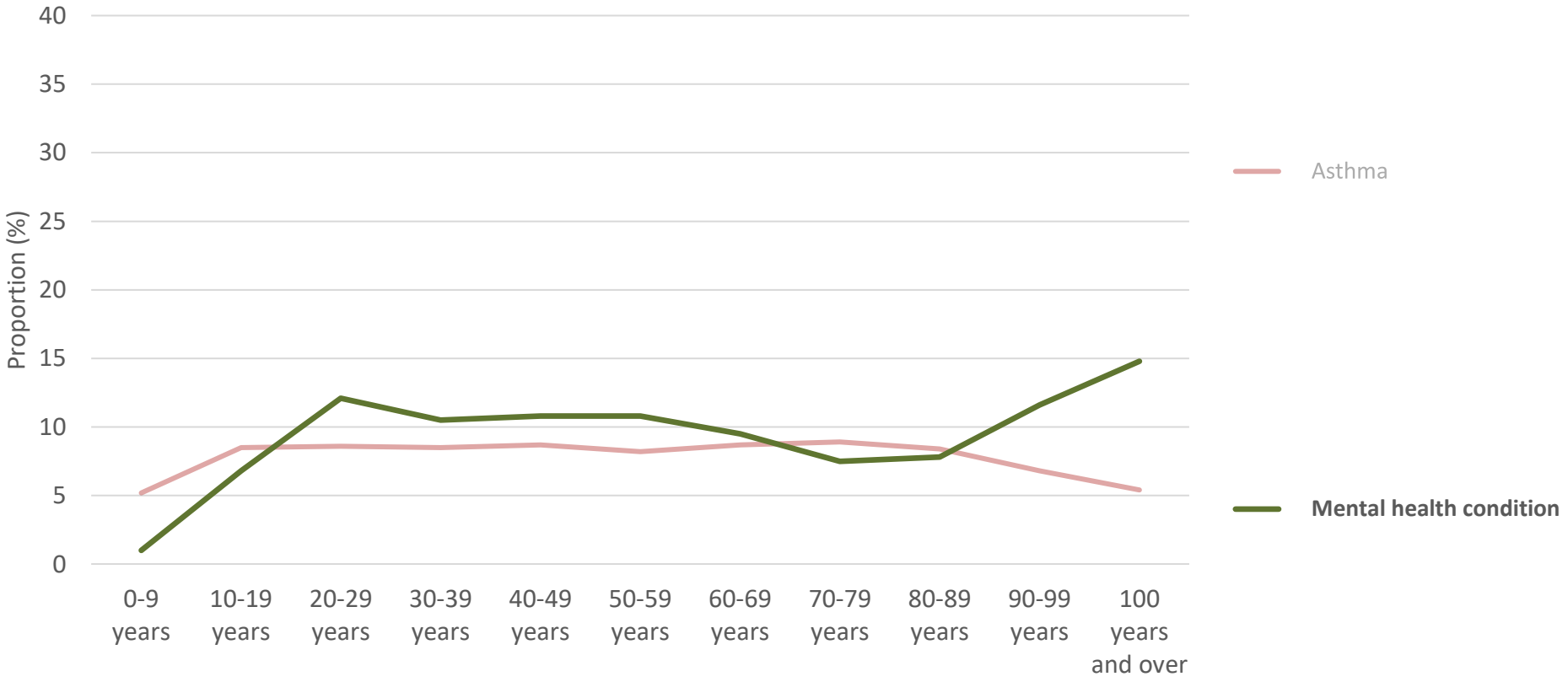


Asthma


40
35
30
25
20
15
10
5
0
Proportion (%)
0-9 years
10-19 years
20-29 years
30-39 years
40-49 years
50-59 years
60-69 years
70-79 years
80-89 years
90-99 years
100 years and over
Asthma

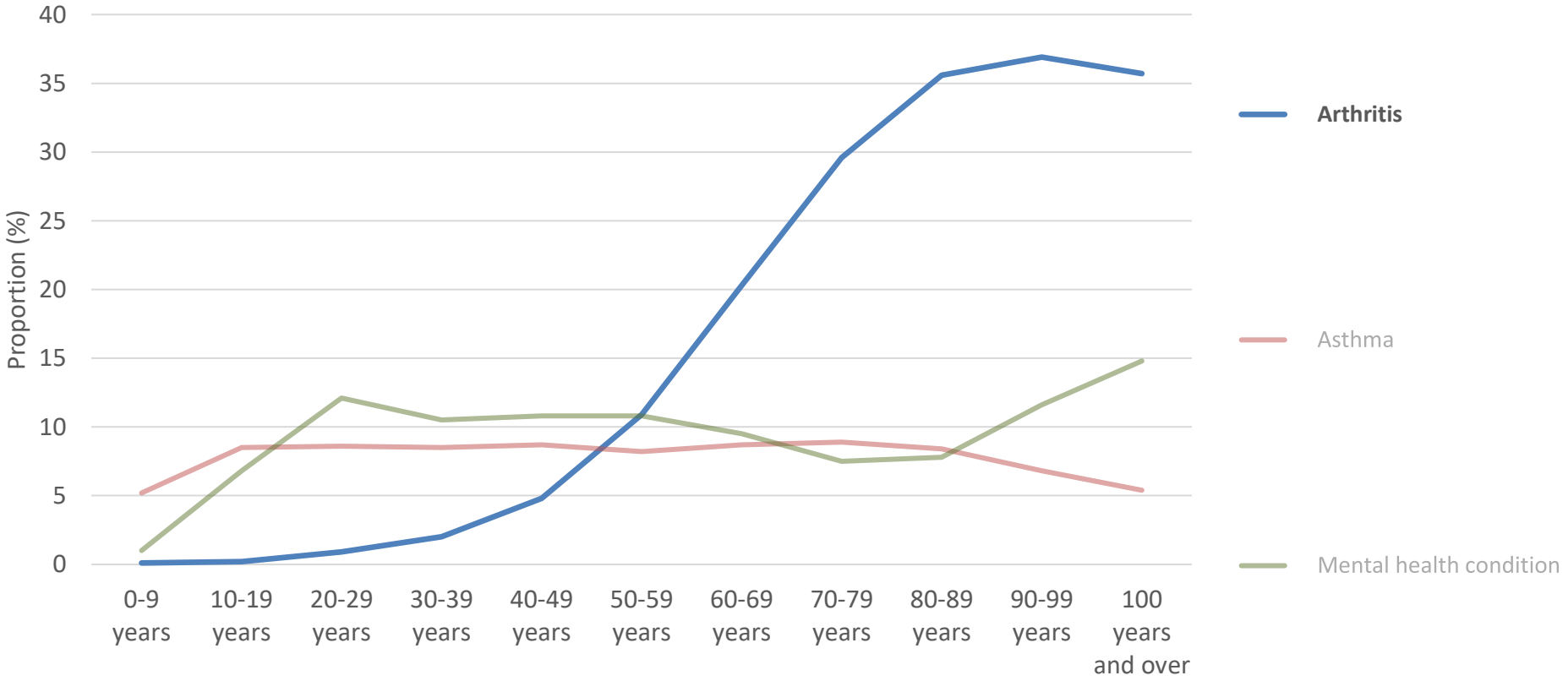
Mental health condition

Census



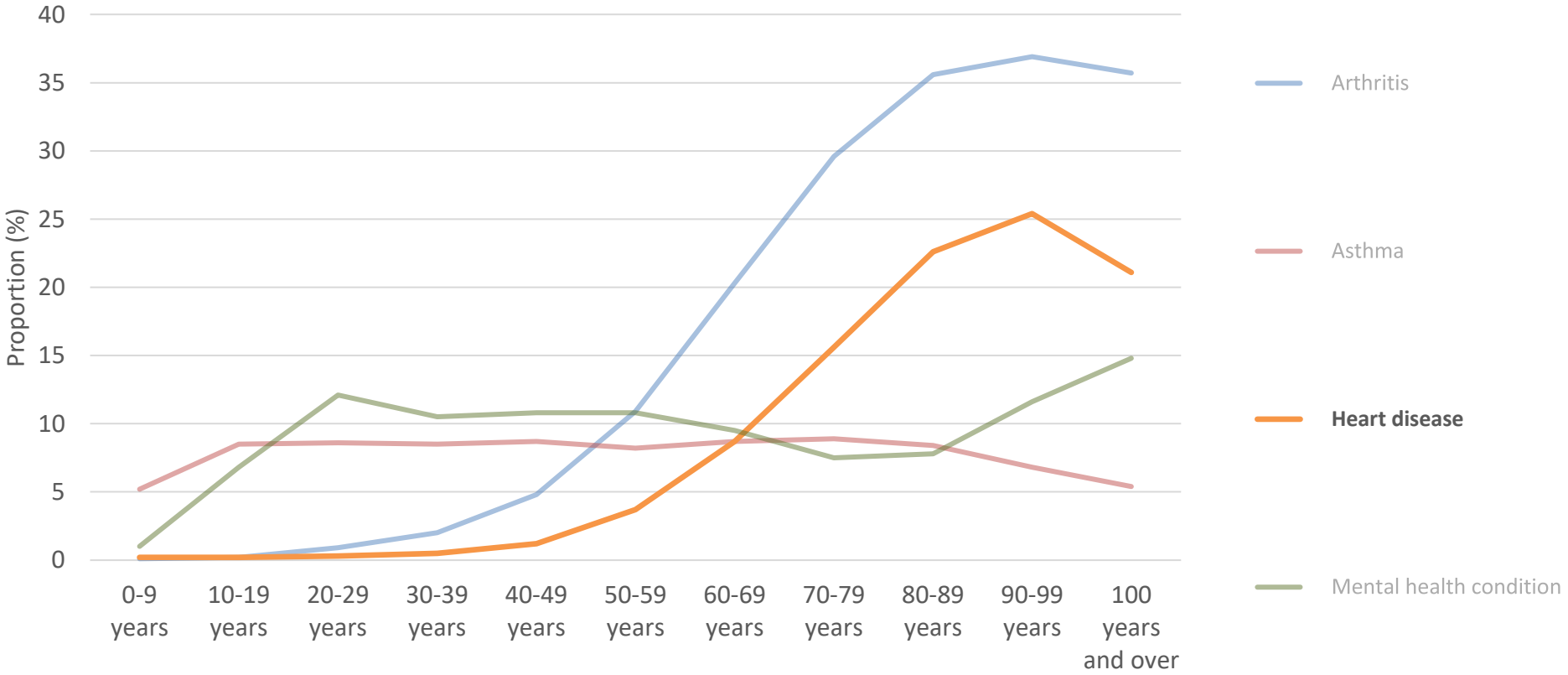
Arthritis

Australian Bureau of Statistics Census

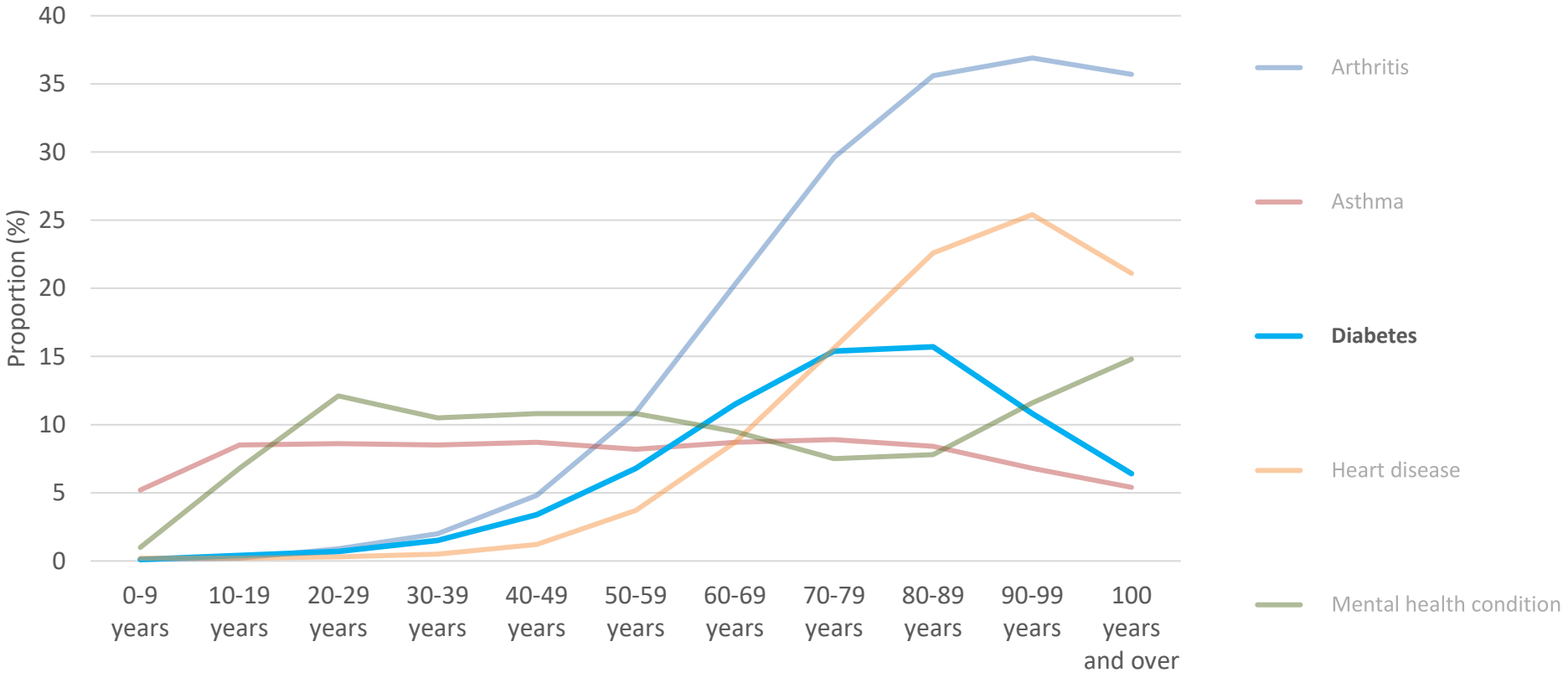


Heart disease

Australian Bureau of Statistics Census



Diabetes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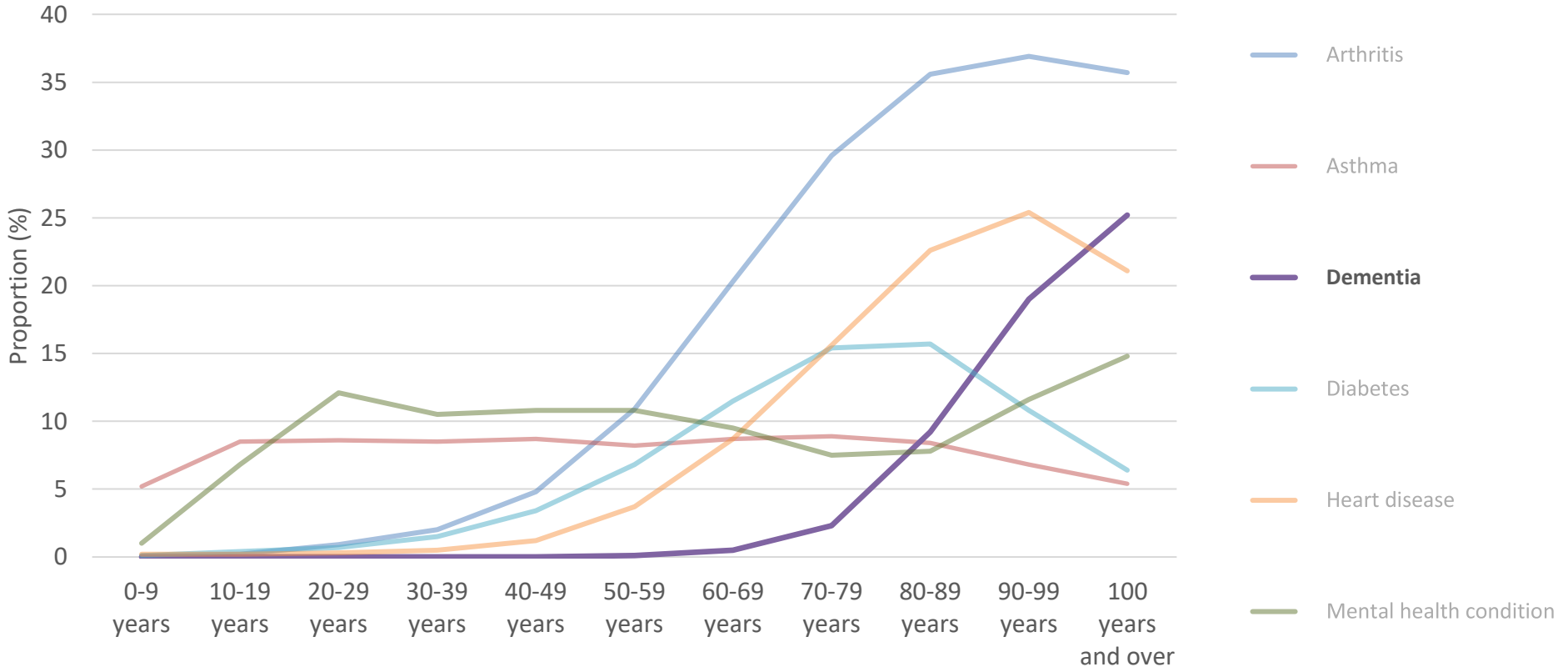
100 years and over
Arthritis
Asthma
Diabetes
Heart disease
Mental health condition

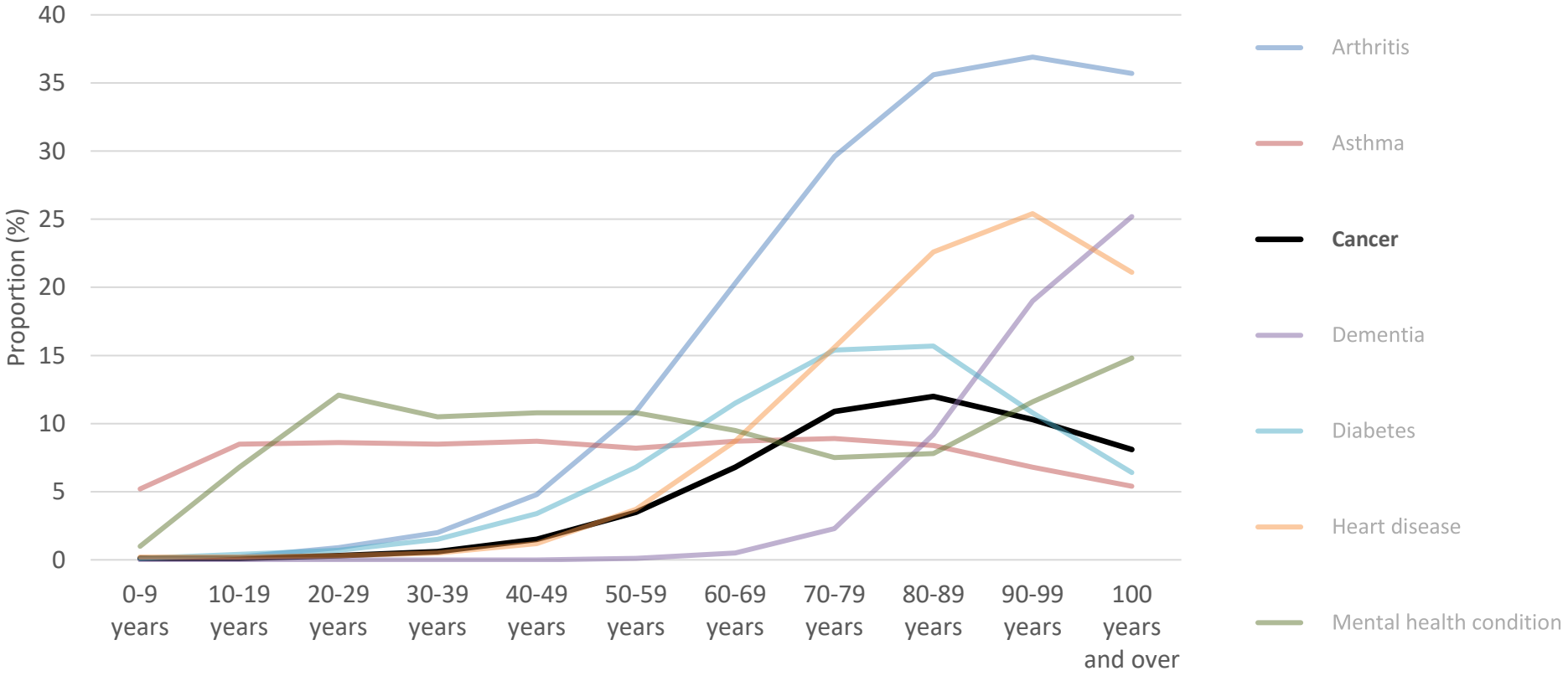
Dementia

Australian Bureau of Statistics Census

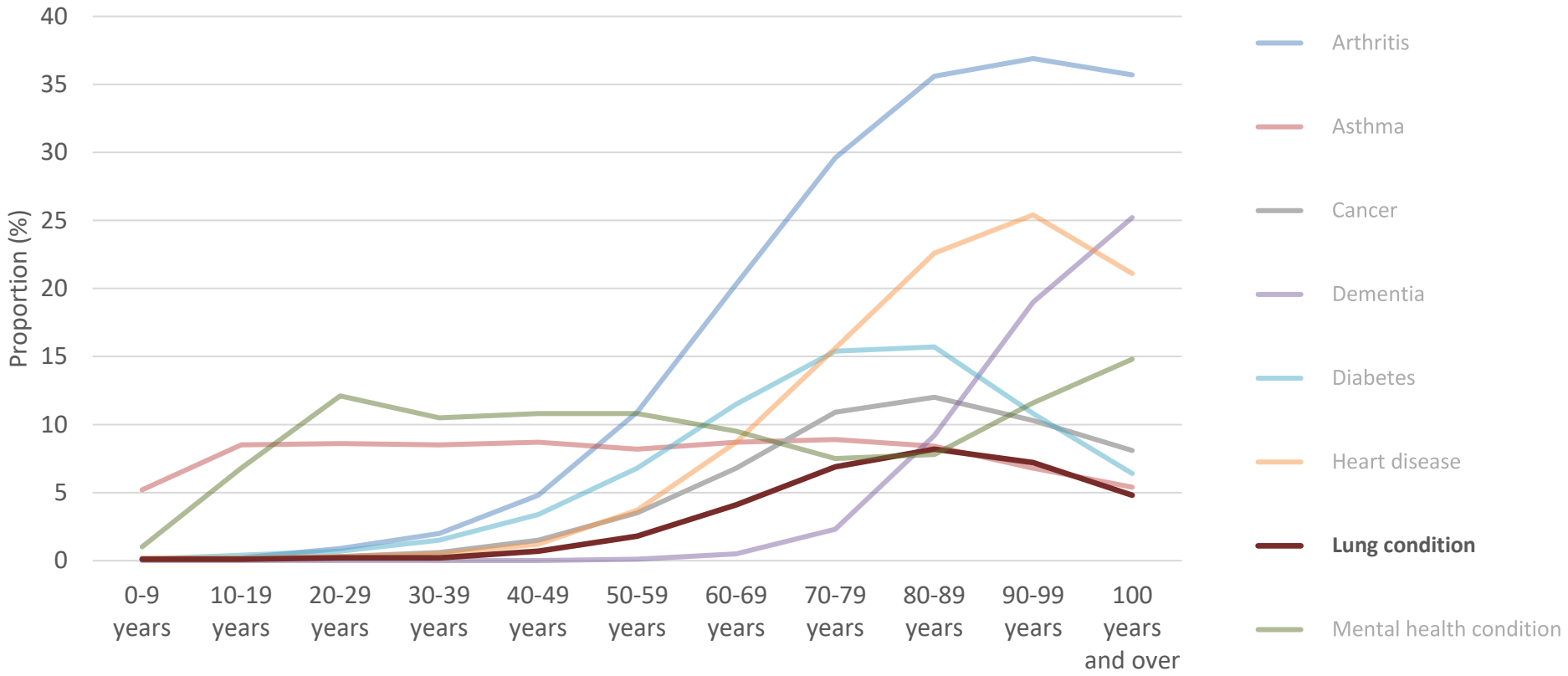


Cancer

Australian Bureau of Statistics Census

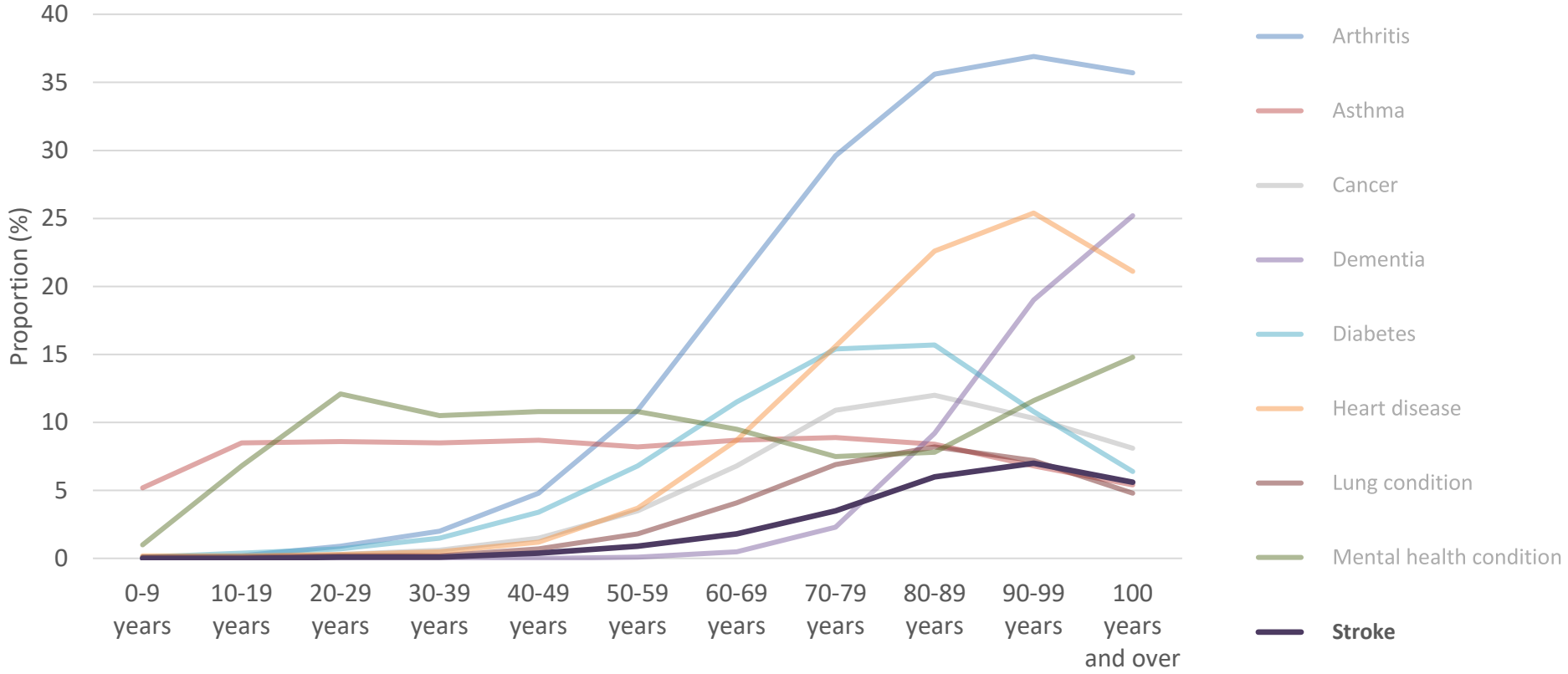


Lung condition

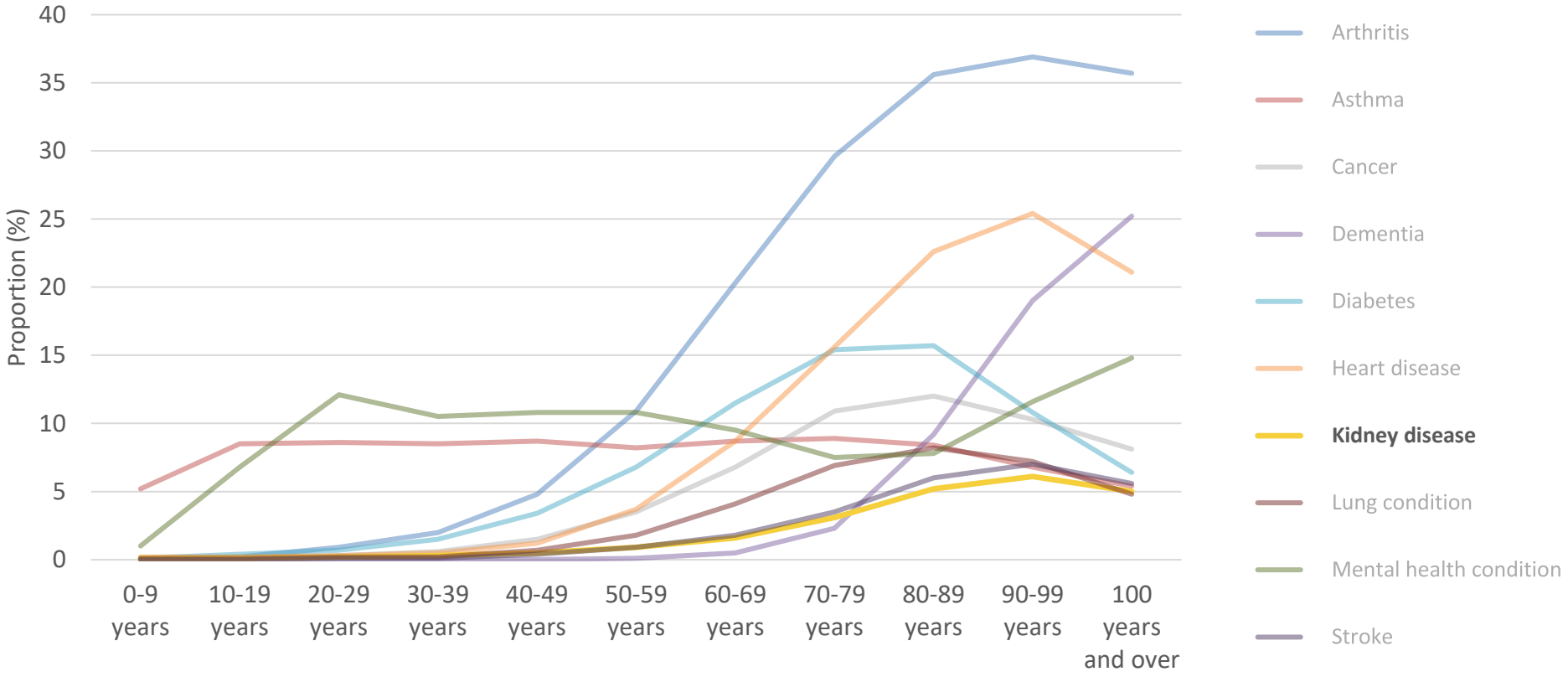


Stroke

Australian Bureau of Statistics Census

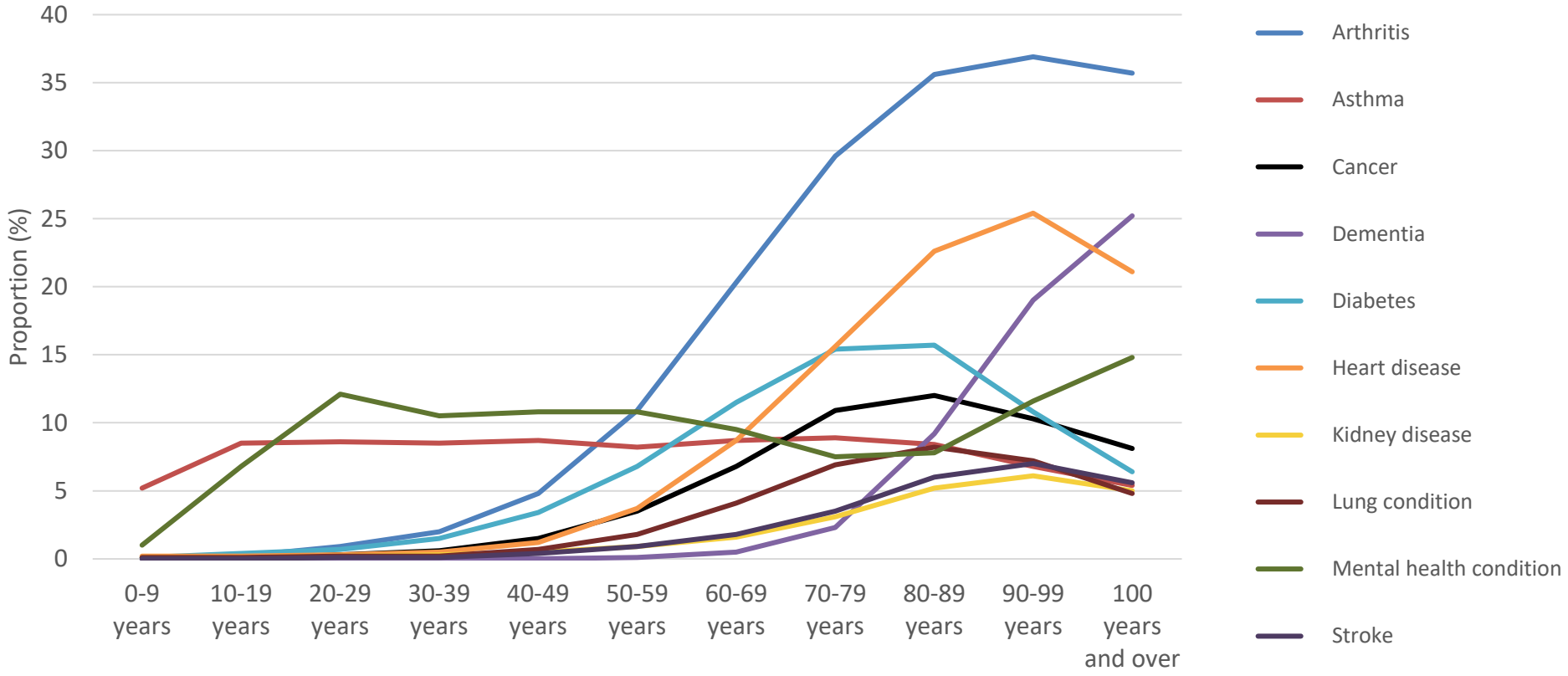


Kidney disease



Age profile for each health condition

Australian Bureau of Statistics Census



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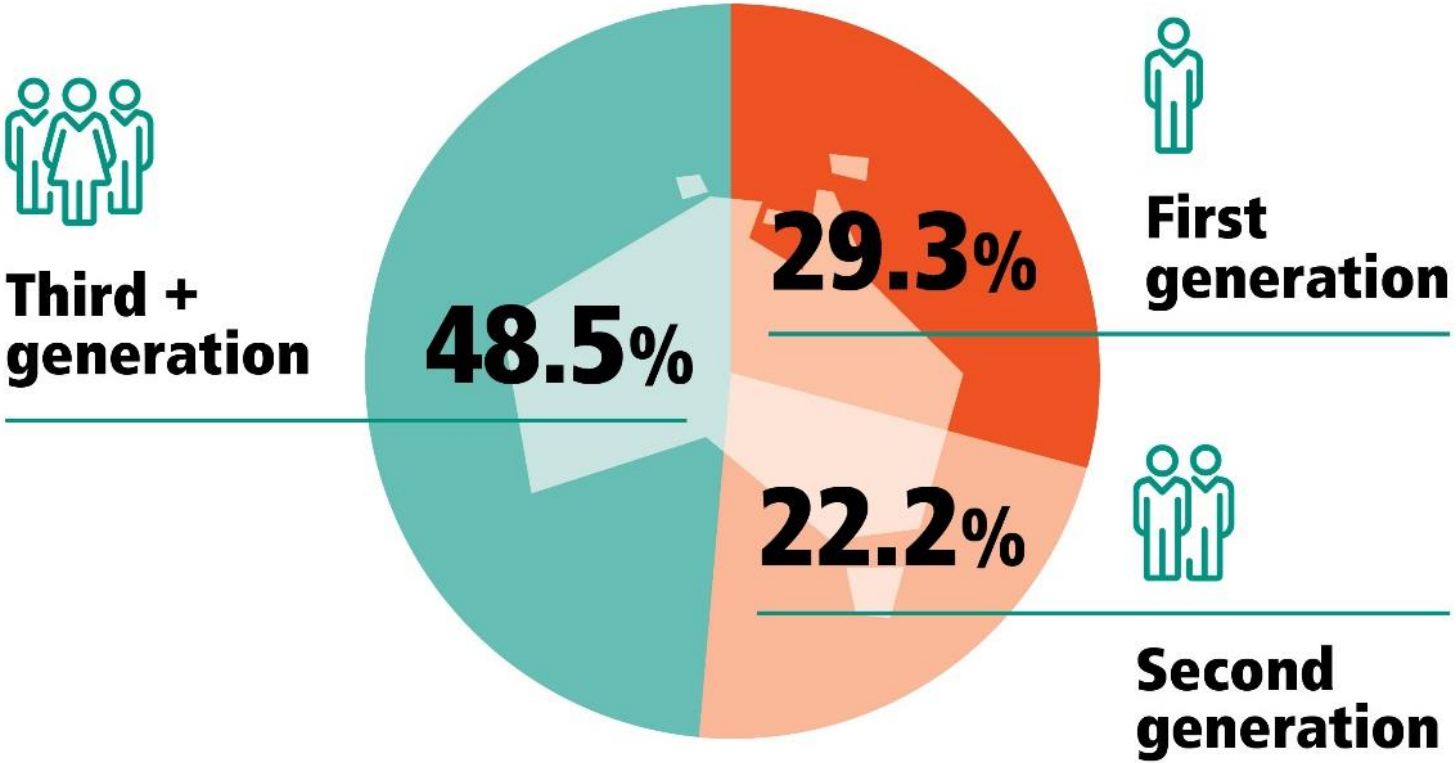
Cultural diversity

A diverse Australia

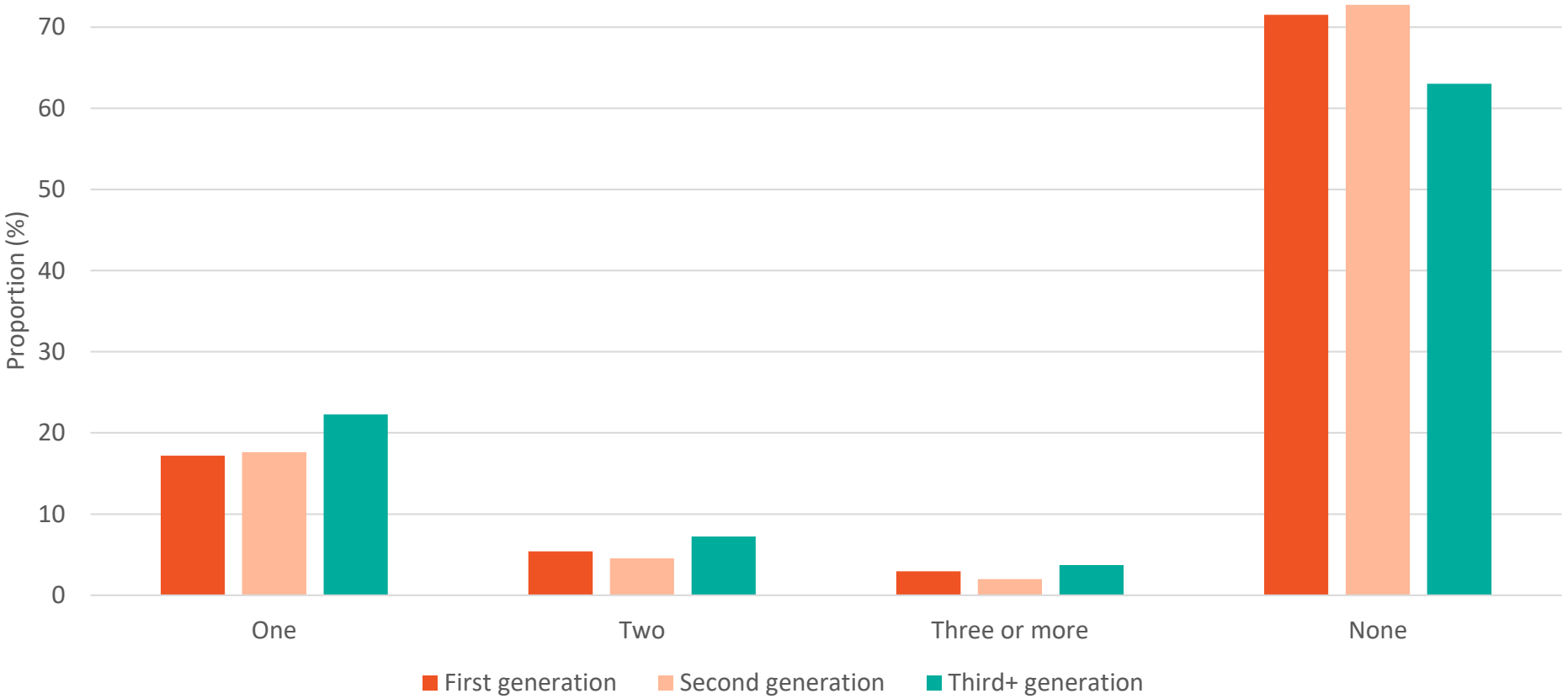
Australian Bureau of Statistics Census



Note: Excludes overseas visitors and responses not stated.

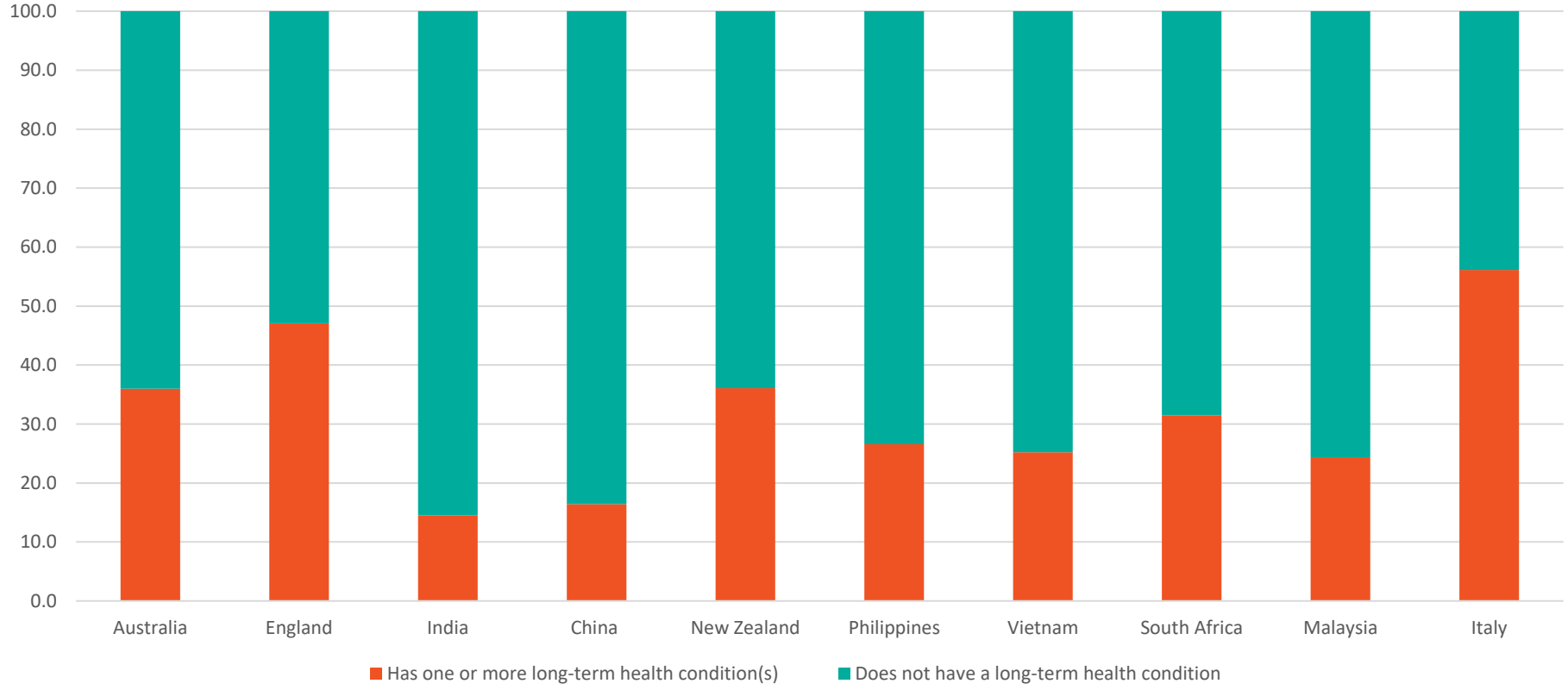
Number of health conditions

Australian Bureau of Statistics Census



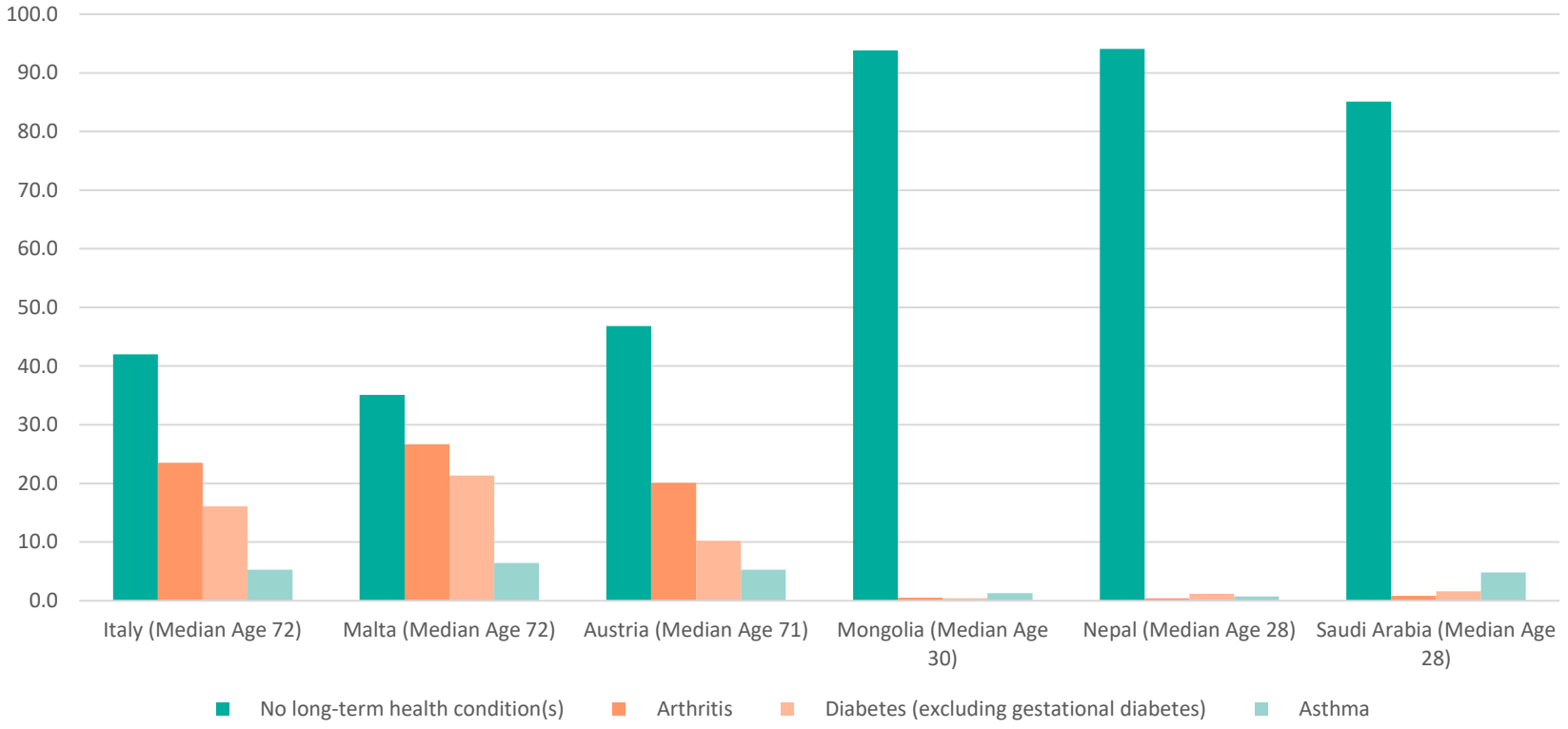
Long-term health condition by country of birth

Census



Excludes 'Not stated'. Australia includes external territories, China excludes SARs and Taiwan.

Health conditions for older vs younger migrant groups



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Census

Robert Long

Director, Health Statistics

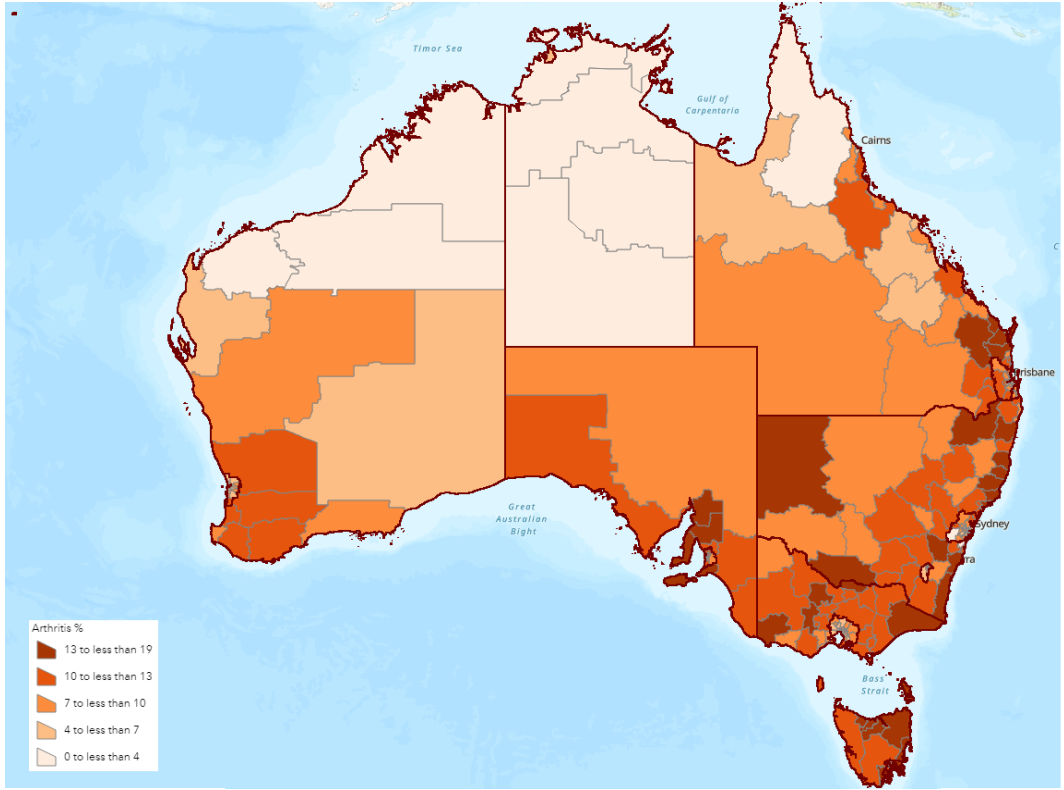
Australian Bureau of Statistics

Number of conditions by state and territory

Australian Bureau of Statistics Census

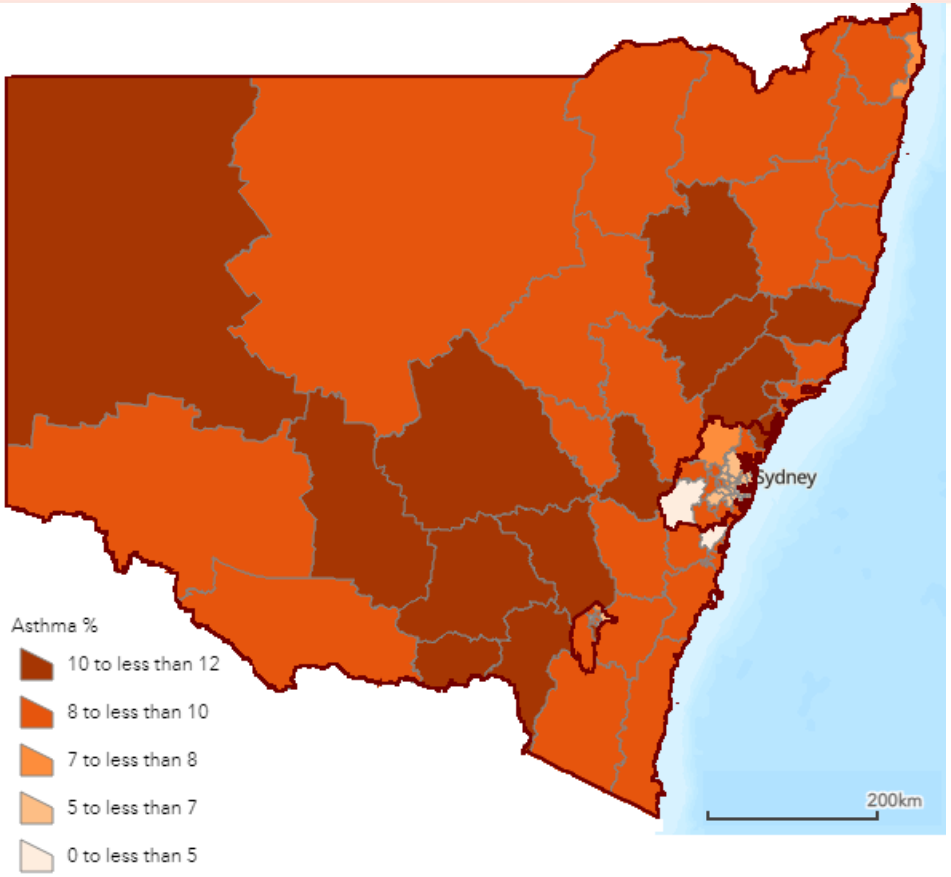
Arthritis - Australia

Australian Bureau of Statistics Census



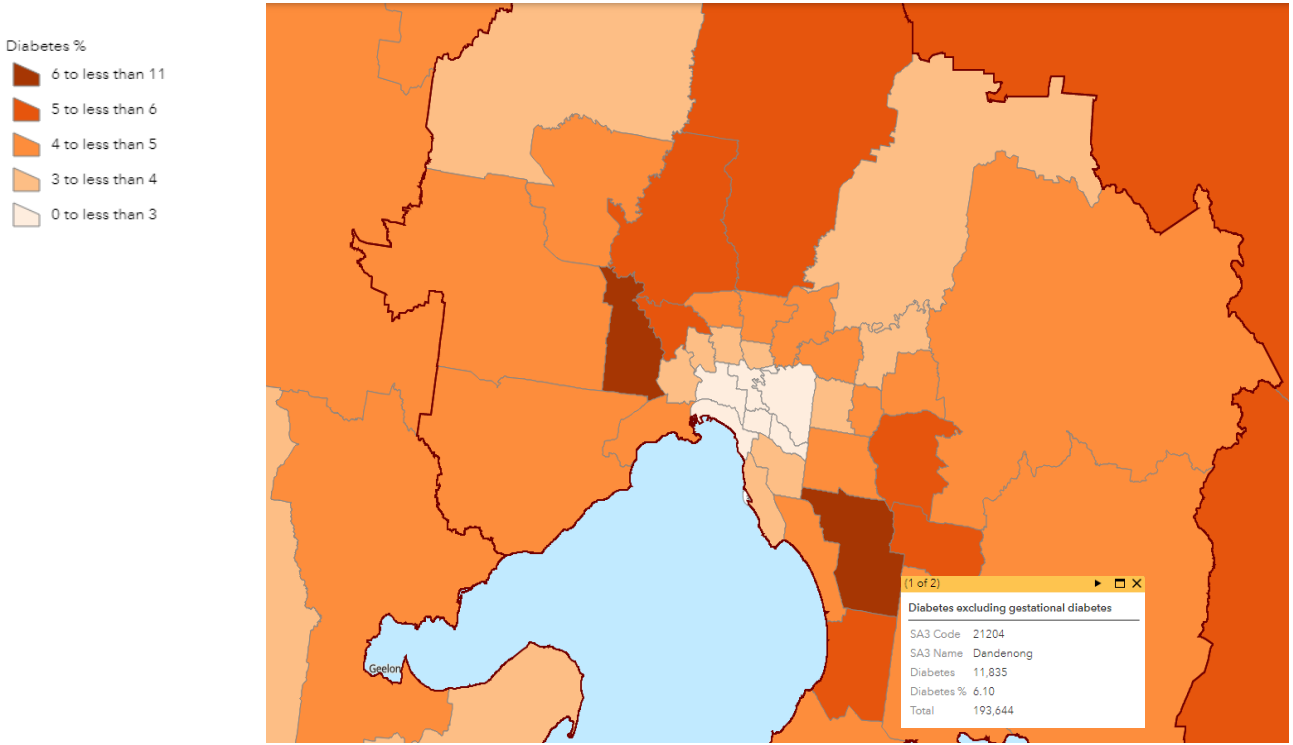
Asthma - NSW

Australian Bureau of Statistics Census



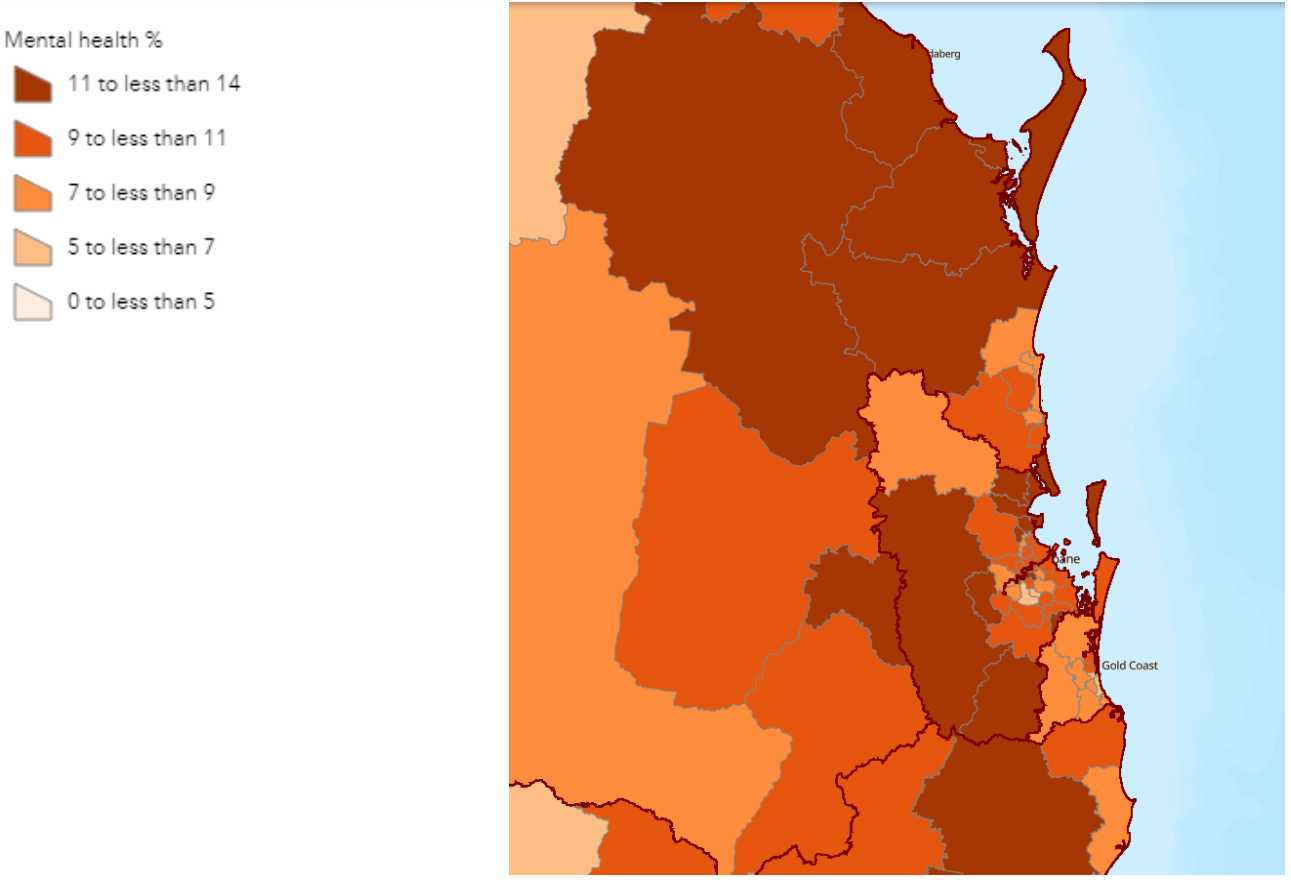
Diabetes - Melbourne

Australian Bureau of Statistics Census



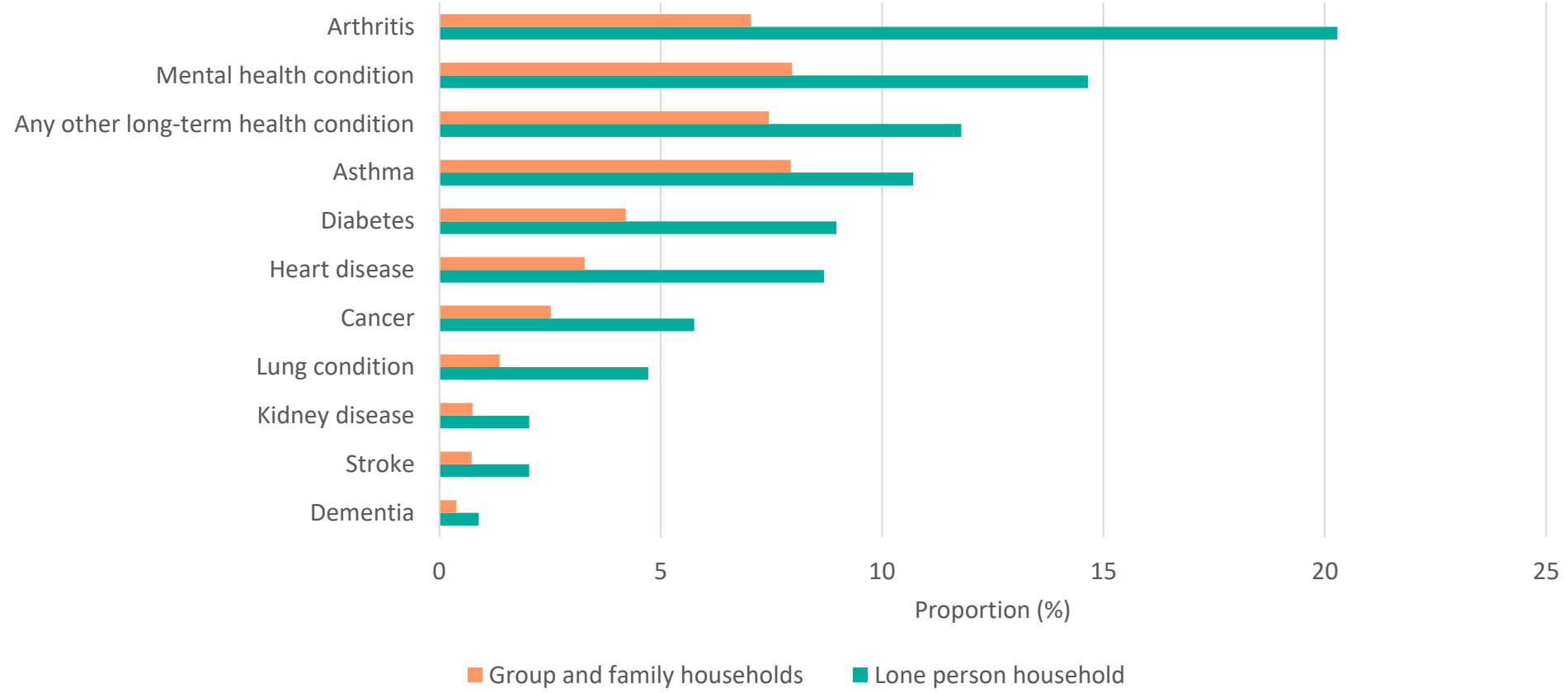
Mental health conditions – SE Qld

Australian Bureau of Statistics Census



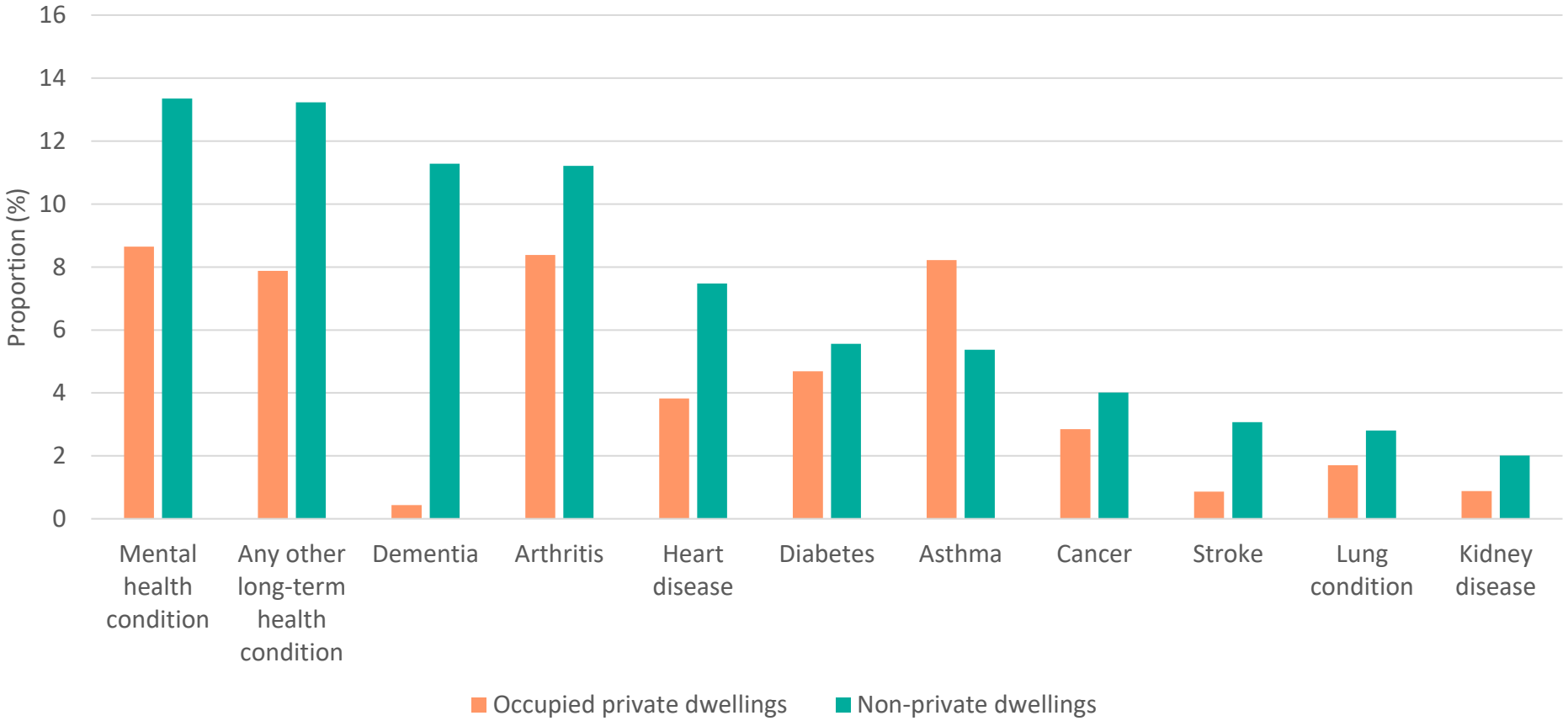
Long-term health condition by household type

Australian Bureau of Statistics Census



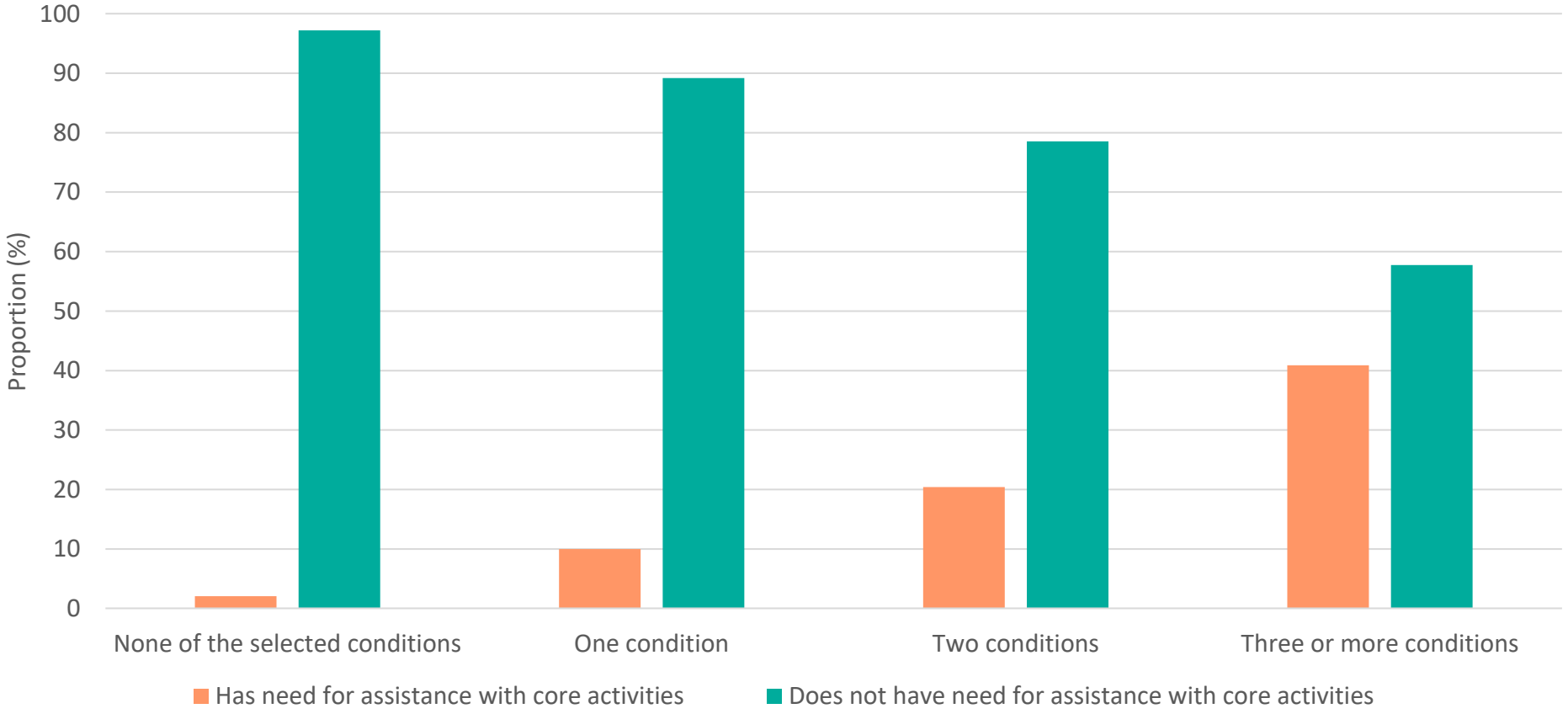
Long-term health condition by dwelling type

Australian Bureau of Statistics Census



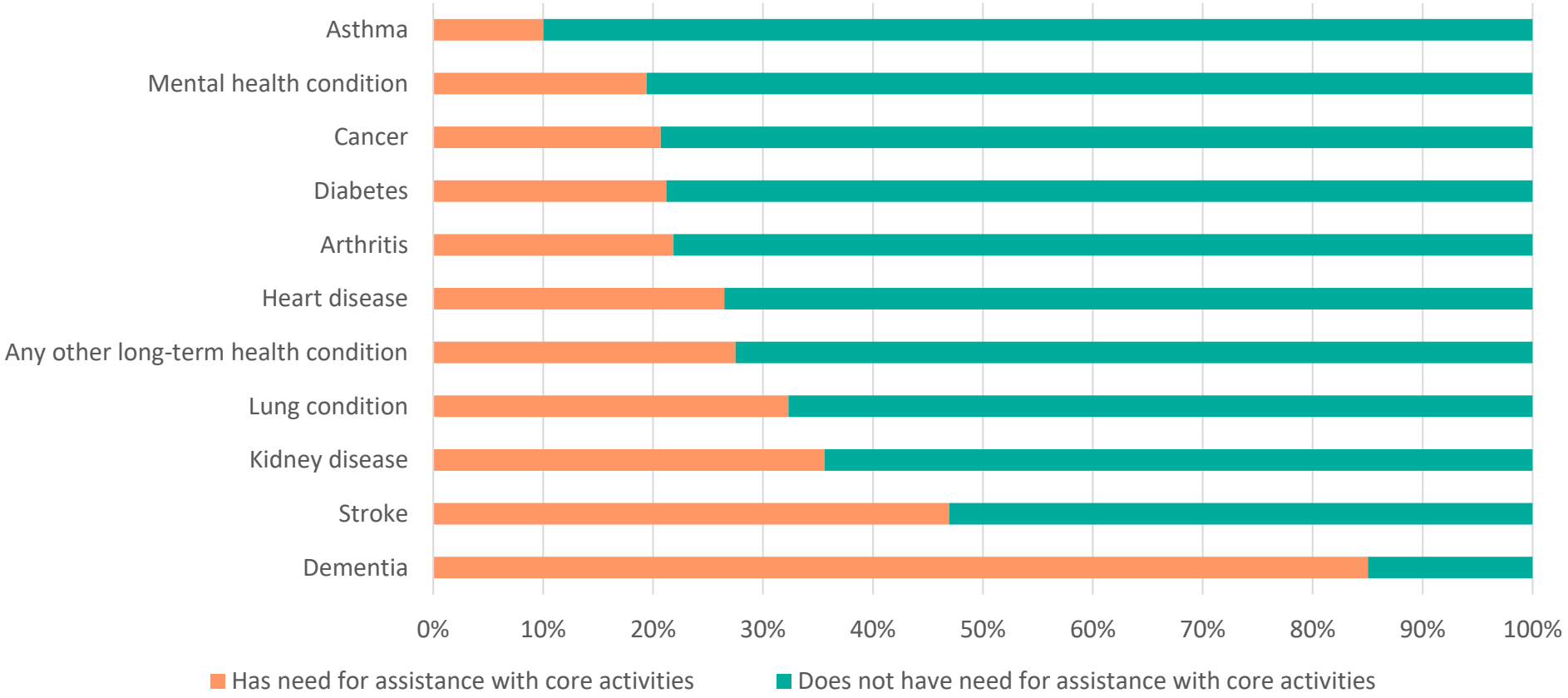
Long-term health conditions by need for assistance with core activities

Australian Bureau of Statistics Census



Long-term health condition by need for assistance

Australian Bureau of Statistics Census



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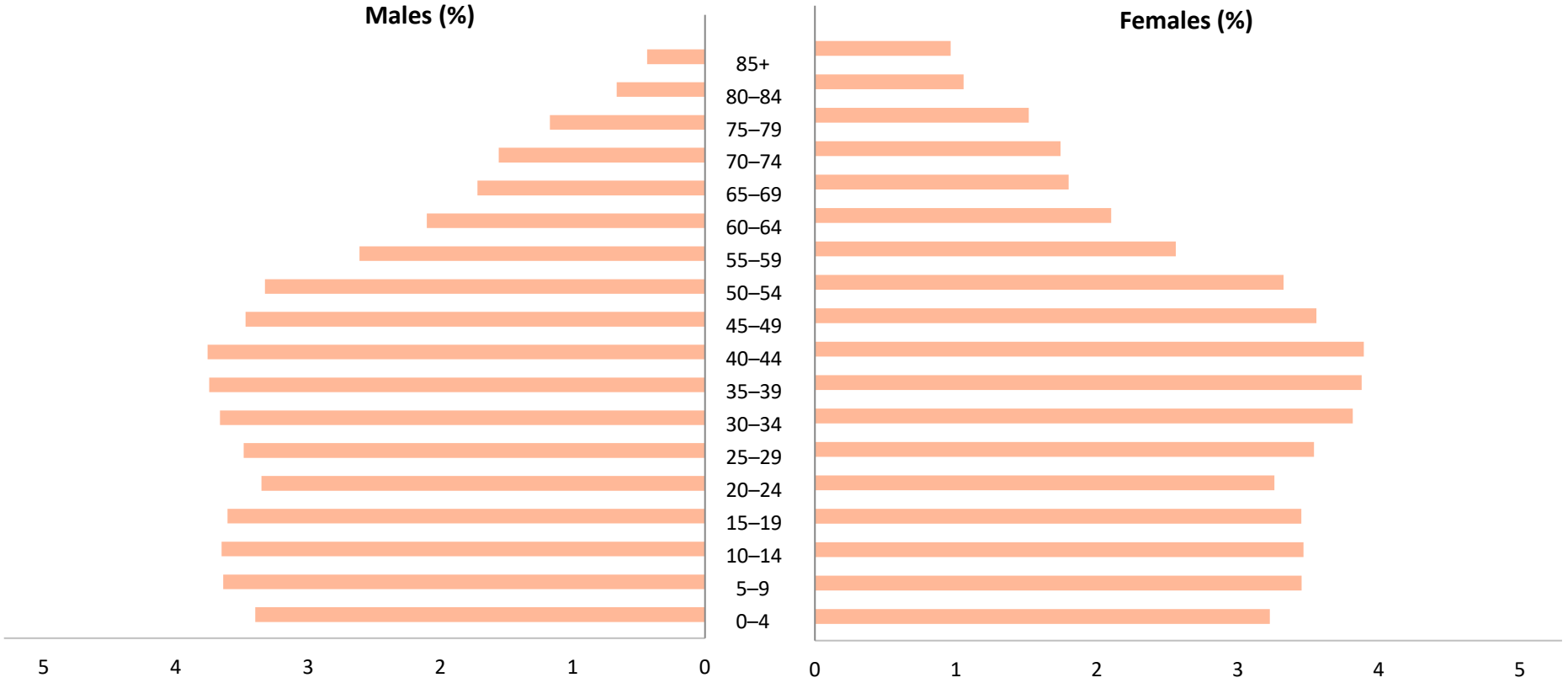
Australia's ageing population

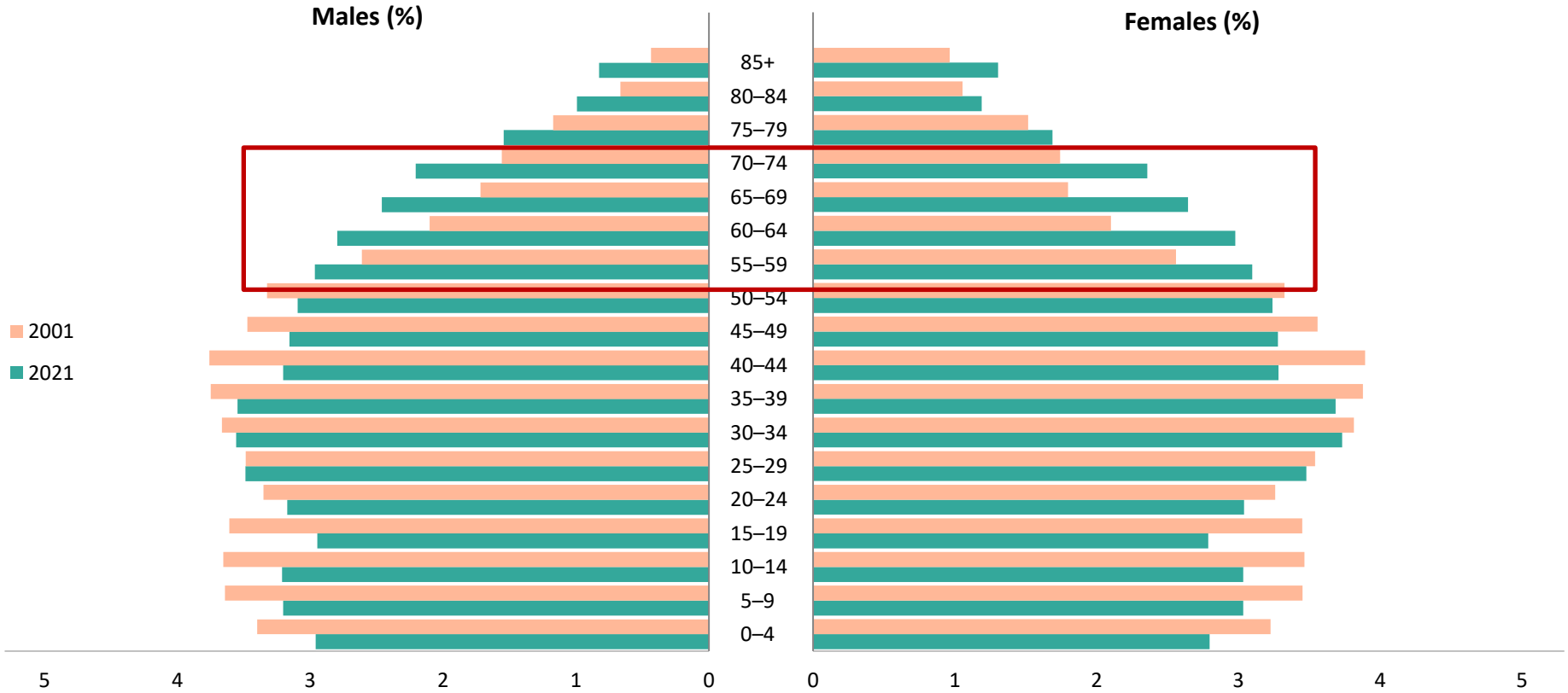
Age distribution - 2001

Australian Bureau of Statistics Census



Age distribution - 2001 vs 2021

Australian Bureau of Statistics Census



Top 5 countries of birth

Australian Bureau of Statistics Census

	55 – 64 years	65 – 74 years	75 – 84 years	85 years and over
1	England	England	England	England
2	New Zealand	New Zealand	Italy	Italy
3	China	China	Greece	Greece
4	Vietnam	Italy	New Zealand	China
5	Philippines	Vietnam	Germany	Germany

Proficiency in English - Wyndham

Australian Bureau of Statistics Census

	55 – 64 years	65 – 74 years	75 – 84 years	85 years and over
English only	61.0	60.5	66.1	63.3
English very well or well	27.1	23.9	20.2	18.0
English poor or not at all	11.9	15.6	13.7	18.7
Top 5 languages Uses another language at home and speaks English poor or not at all	Mandarin Punjabi Vietnamese Cantonese Karen	Mandarin Punjabi Hindi Cantonese Vietnamese	Italian Mandarin Spanish Karen Greek	Italian Mandarin Greek Karen Macedonian

Housing situation

Australian Bureau of Statistics Census

Ageing by Location - % of 55-64 year olds

Australian Bureau of Statistics Census

Top 5 SA3s	No.	%
South East Coast, TAS	1,538	20.3%
Loddon – Elmore, Vic	2,160	17.7%
South Coast, NSW	13,323	17.4%
Yorke Peninsula, SA	4,581	17.2%
Noosa Hinterland, QLD	4,147	17.1%

Bottom 5 SA3s	No.	%
Blacktown – North, NSW	10,885	7.6%
Wyndham, Vic	22,475	7.6%
Gungahlin, ACT	6,503	7.4%
Melbourne City, Vic	9,233	6.2%
Molonglo, ACT	587	5.1%

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Other health condition sources

National Study of Mental Health and Wellbeing

Australian Bureau of Statistics Census

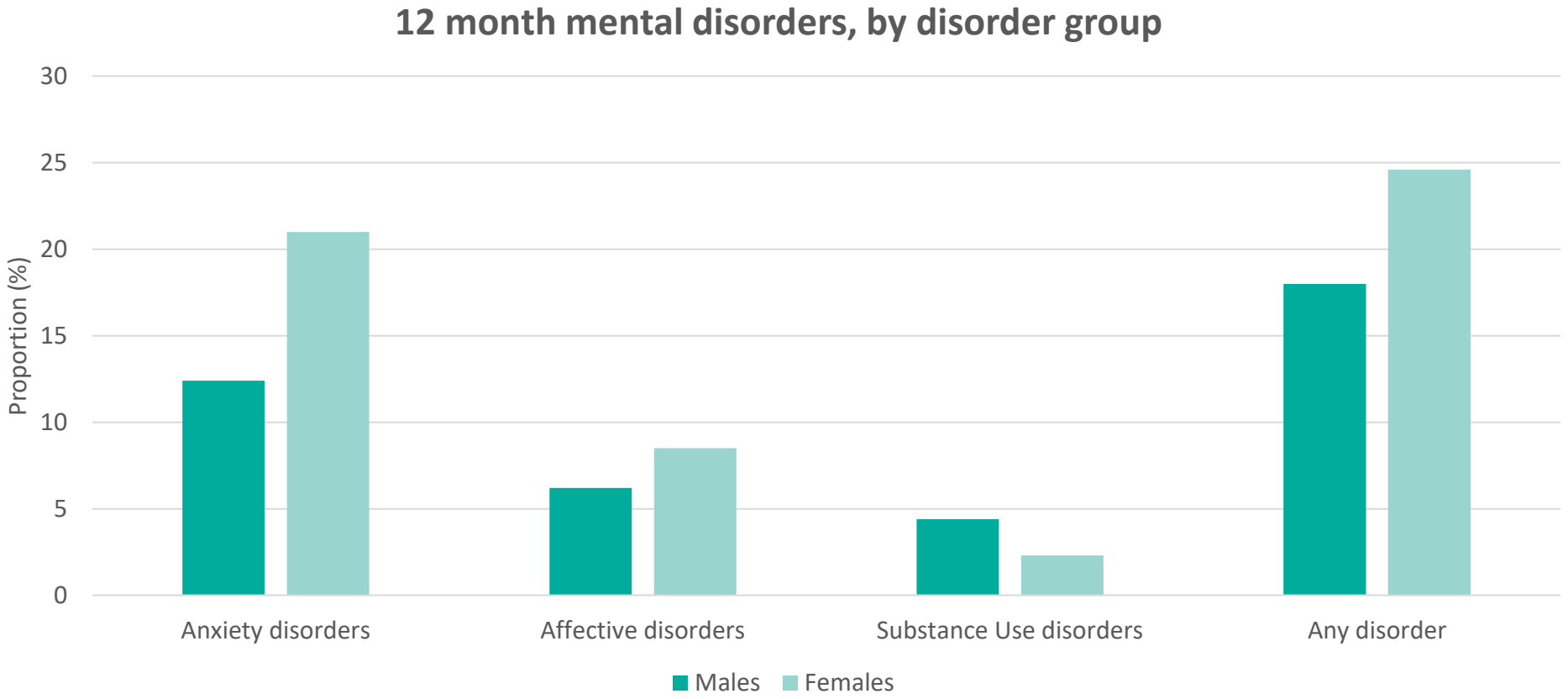
Measures prevalence of mental disorders using diagnostic questions

- WHO Composite International Diagnostic Interview
- Anxiety, affective (e.g. depression) and substance use disorders

One in five (21.4%) people aged 16-85 years had a mental disorder in 2020-21 (4.2 million people)

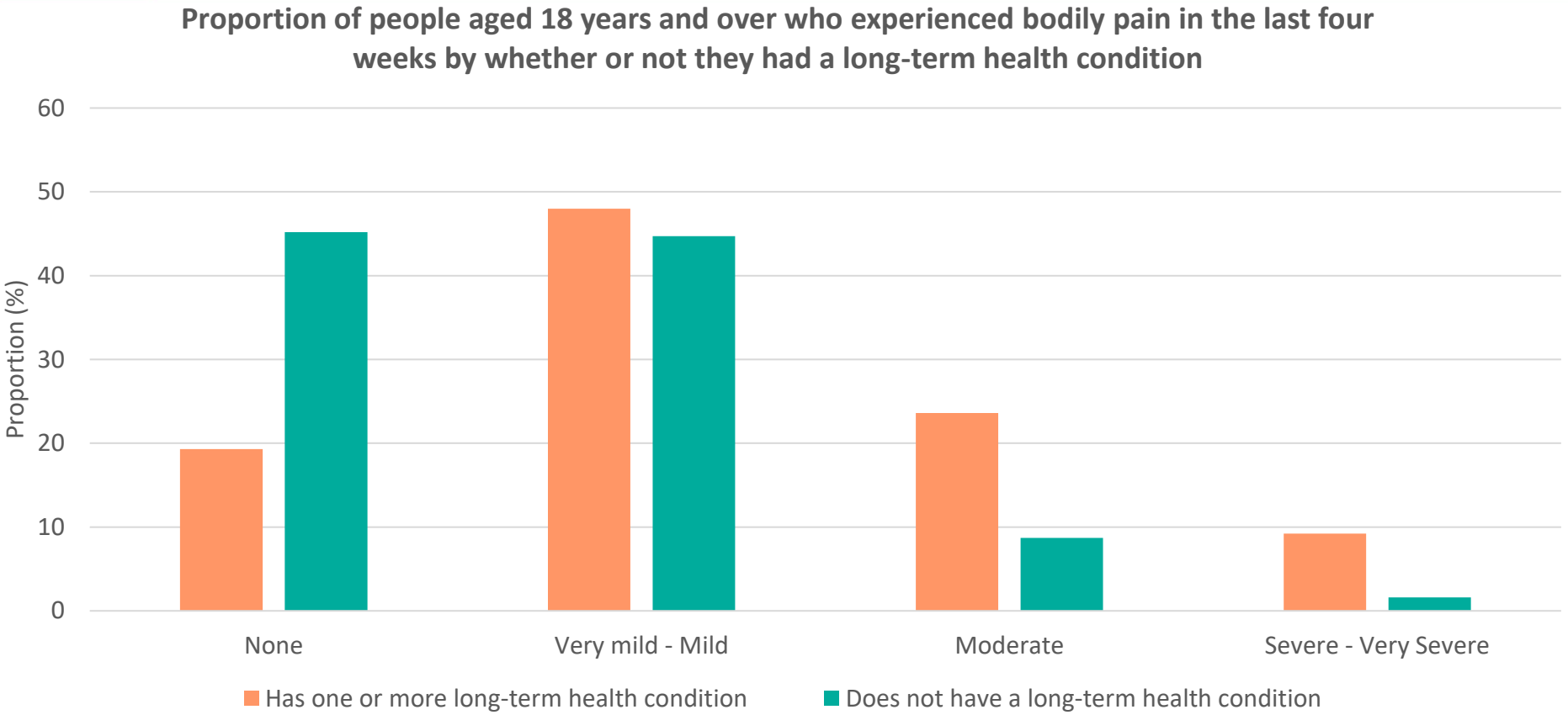
National Study of Mental Health and Wellbeing

Australian Bureau of Statistics Census



National Health Survey, 2020-21

Australian Bureau of Statistics Census



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Gerard Duck

Director, Strategic Analysis & Investment
NSW Ministry of Health

ABS data use in service planning for NSW Health

30 August 2022

NSW GOVERNMENT

2020-21 Annual Report

The NSW public health system is the largest public health system in Australia, providing world-class healthcare to the citizens of NSW.

8,155,600 million residents on **809,444 sq km**

228 public hospitals

351,309 surgeries performed

$30.2 billion in funding for **healthcare services** in 2021-22*

17 local health districts & specialty health networks

1,900,719 inpatient episodes

127,156 full-time equivalent staff

3,068,887 emergency department attendances

1,265,142 ambulance emergency responses

Understanding the community is service planning 101

healthstats.nsw.gov.au

Asthma

Asthma topic overview
Read about Asthma data and browse indicators in an A -Z list

- Alcohol attributable hospitalisations
- Asthma deaths
- Asthma hospitalisations
- Asthma like illness emergency department presentations (annual)
- Asthma like illness emergency department presentations (monthly)
- Asthma prevalence in adults
- Asthma prevalence in children
- Influenza and pneumonia deaths
- Respiratory disease deaths by disease type
- Respiratory disease hospitalisations

NSW GOVERNMENT

Australian Bureau of Statistics Census

Questions

For questions that we don’t get to today, please contact client.services@abs.gov.au