

All-cause hospitalisations and hospitalisations due to selected conditions among people from culturally and linguistically diverse backgrounds, Western Australia, 2007 - 2016

Summary

In Western Australia, in the decade between 2007 and 2016,

- Rates of all-cause hospitalisations were 24% to 31% lower among those born overseas compared to the Australian-born population.
- Rates of hospitalisations due to four selected conditions (diabetes, coronary heart disease (CHD), chronic obstructive pulmonary disease (COPD) and stroke) were lower among those born overseas compared to the Australian-born population.
- However, analysis by country of birth (COB) region found that selected regions experienced higher rates
 of all-cause hospitalisations and hospitalisations due to selected conditions. Specifically, compared with
 their Australian-born counterparts,
 - Both males and females born in Other Oceania and Antarctica and North Africa experienced significantly higher rates of all-cause hospitalisations.
 - Males born in six regions Other Oceania and Antarctica, North Africa, Middle East, Other Americas, Southern and Eastern Europe and Southern and Central Asia – experienced significantly higher rates of diabetes-related hospitalisations.
 - Females born in Other Oceania and Antarctica and North Africa regions had significantly higher rates of diabetes-related hospitalisations.
 - Males born in five regions Other Oceania and Antarctica, North Africa, Middle East, Southern and Central Asia and Sub-Saharan Africa had significantly higher rates of CHD-related hospitalisations.
 - Females born in four regions Other Oceania and Antarctica, North Africa, Middle East and Southern and Central Asia had significantly higher rates of CHD-related hospitalisations.
 - Both males and females born in New Zealand experienced significantly higher rates of COPDrelated hospitalisations.
 - Males born in Other Oceania and Antarctica and New Zealand experienced significantly higher rates of stroke-related hospitalisations.
 - Females born in Other Oceania and Antarctica, New Zealand, Sub-Saharan Africa and South-East Asia had significantly higher rates of stroke -related hospitalisations.

Background

Western Australia is culturally diverse with nearly one third (32.2%) of residents born overseas and with around 18% of residents speaking a language other than English at home (OMI 2017). Generally, people from culturally and linguistically diverse (CALD) backgrounds experienced lower rates of all-cause hospitalisations compared to those born in Australia although there were higher rates among selected COB regions (ABS 2017; Endo et al 2011). Despite this 'healthy migrant effect', past research in Australia has found poorer health outcomes for selected diseases and conditions among selected CALD population groups. For example, in New South Wales, hospitalisation rates for diabetes were higher in people born in Lebanon and the Philippines and hospitalisation rates for coronary heart disease were higher in people born in Lebanon, Fiji, Sri Lanka and Iraq (NSW Department of Health 2008 and 2010).

Aims

This paper aims to describe the rates of all-cause hospitalisations and hospitalisations due to four selected conditions identified as priorities from the literature (diabetes, coronary heart disease, chronic obstructive pulmonary disease and stroke) among people from CALD backgrounds in Western Australia (WA) and whether the rates differed by broad COB groups, COB regions, gender and year. Details on the definitions of hospitalisations due to all causes and the four selected conditions, CALD, broad COB groups and COB regions are provided in the overview, aims and methods paper for this series of CALD information papers (Koh et al. 2019).

All-cause hospitalisations and hospitalisations due to selected conditions by broad COB group

Compared with Australian-born people, those born in main English-speaking countries and those born in non-English-speaking countries had 24.4% and 30.9% lower rates, respectively, for all-cause hospitalisations (Figure 1). Within the Australian-born population and those born in main English-speaking countries, female rates were significantly higher than male rates. Among those born in non-English-speaking speaking countries, female and male rates were similar.

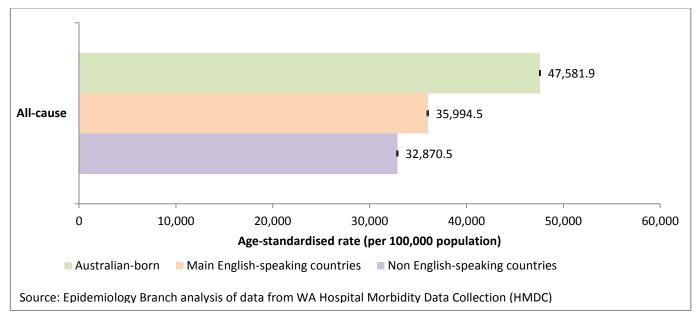


Figure 1. Rates and 95% confidence intervals of all-cause hospitalisations by broad COB group, WA, 2007-2016

Compared with Australian-born people, those born in main English-speaking countries and those born in non-English-speaking countries experienced similar or lower rates of hospitalisations due to selected conditions, including diabetes, coronary heart disease, COPD and stroke (Figure 2).

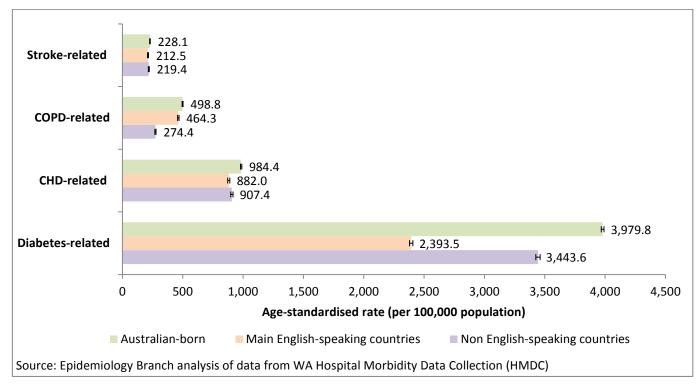
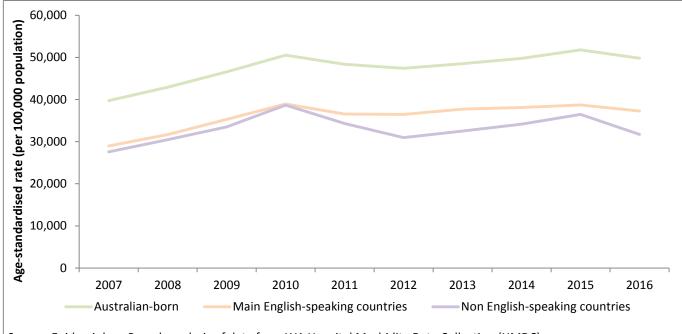


Figure 2. Rates and 95% confidence intervals of hospitalisations due to selected conditions by broad COB group, WA, 2007-2016

All-cause hospitalisations by broad COB group and year

Among those born in Australia and those born in English-speaking countries, rates of all-cause hospitalisations increased between 2007 and 2010 and stayed relatively stable in the years between the 2010 and 2016. Among those born in non-English-speaking countries, rates of all-cause hospitalisations increased between 2007 and 2010 and fluctuated in the years between the 2010 and 2016 (Figure 3).



Source: Epidemiology Branch analysis of data from WA Hospital Morbidity Data Collection (HMDC)

Figure 3. Rates of all-cause hospitalisations by broad COB group and year, WA, 2007-2016

All-cause hospitalisations by COB region and gender

Compared with their Australian-born counterparts, both males and females born in Other Oceania and Antarctica and North Africa regions experienced significantly higher rates of all-cause hospitalisations whereas those born in other regions had similar or lower rates (Figure 4).

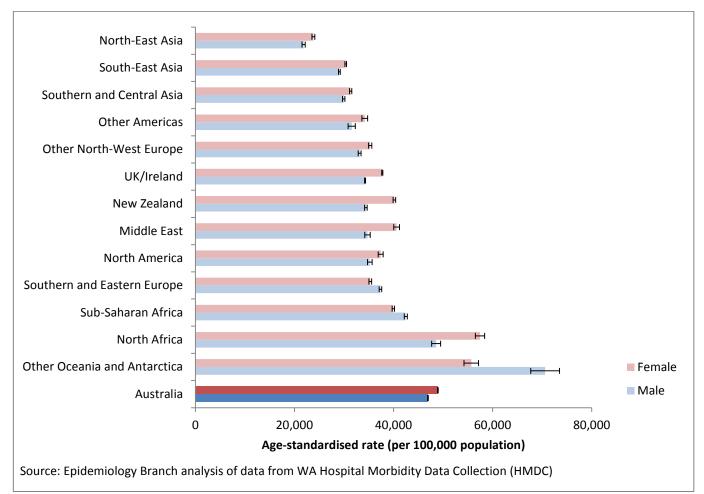


Figure 4. Rates and 95% confidence intervals of all-cause hospitalisations by COB region and gender, WA, 2007-2016

Hospitalisations due to diabetes by COB region and gender

Compared with their Australian-born counterparts, males born in Other Oceania and Antarctica, North Africa, Middle East, Other Americas, Southern and Eastern Europe and Southern and Central Asia experienced significantly higher rates of diabetes-related hospitalisations whereas males born in the other regions had similar or lower rates. Among females, compared with their Australian-born counterparts, those born in Other Oceania and Antarctica and North Africa regions had significantly higher rates of diabetes-related hospitalisations whereas those born in other regions had similar or lower rates.

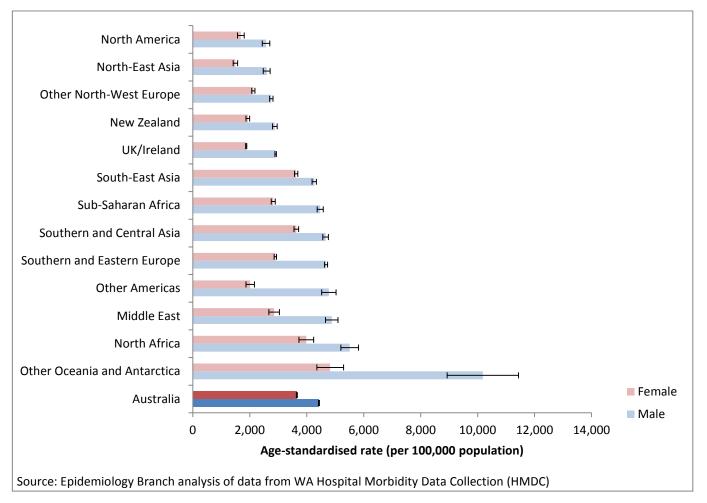


Figure 5. Rates and 95% confidence intervals of hospitalisations due to diabetes by COB region and gender, WA, 2007-2016

Hospitalisations due to coronary heart disease (CHD) by COB region and gender

Compared with their Australian-born counterparts, males born in Other Oceania and Antarctica, North Africa, Middle East, Southern and Central Asia and Sub-Saharan Africa had significantly higher rates of CHD-related hospitalisations whereas males born in other regions had similar or lower rates. Among females, compared with their Australian-born counterparts, those born in Other Oceania and Antarctica, North Africa, Middle East and Southern and Central Asia had significantly higher rates of CHD-related hospitalisations whereas those born in other regions had similar or lower rates of CHD-related hospitalisations whereas those born in other regions had similar or lower rates of CHD-related hospitalisations whereas those born in other regions had similar or lower rates (Figure 6).

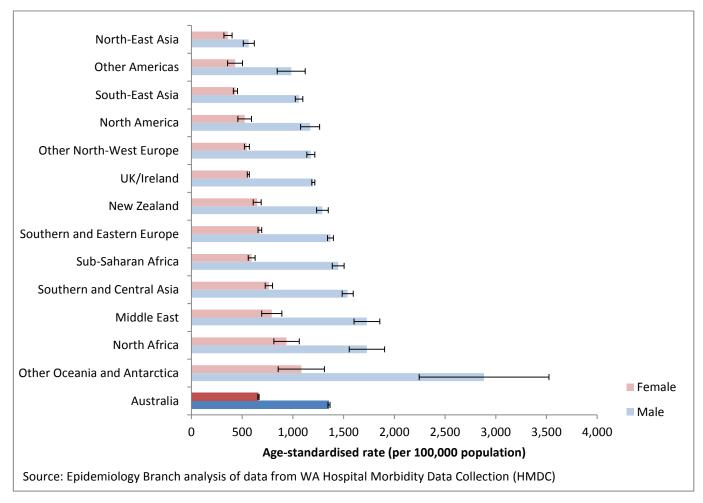


Figure 6. Rates and 95% confidence intervals of hospitalisations due to coronary heart disease by COB region and gender, WA, 2007-2016

Hospitalisations due to chronic obstructive pulmonary disease (COPD) by COB region and gender

Both males and females born in New Zealand experienced significantly higher rates of COPD-related hospitalisations than their Australian-born counterparts, whereas those born in other regions had similar or lower rates (Figure 7).

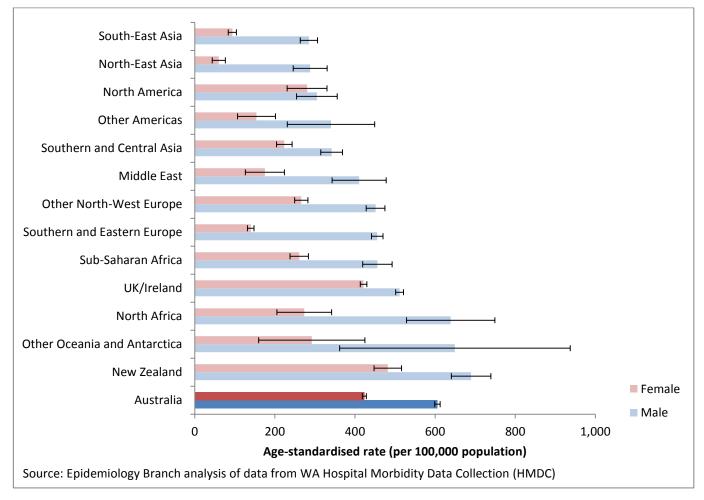


Figure 7. Rates and 95% Confidence intervals of hospitalisations due to COPD by COB region and gender, WA, 2007-2016

Hospitalisations due to stroke by COB region and gender

Compared with their Australian-born counterparts, males born in Other Oceania and Antarctica and New Zealand had significantly higher rates of stroke-related hospitalisations whereas males born in other regions had similar or lower rates. Among females, compared with their Australian-born counterparts, those born in Other Oceania and Antarctica, New Zealand, Sub-Saharan Africa and South-East Asia regions had significantly higher rates of stroke-related hospitalisations whereas those born in other regions had significantly higher rates of stroke-related hospitalisations whereas those born in other regions had significantly higher rates of stroke-related hospitalisations whereas those born in other regions had similar or lower rates (Figure 8).

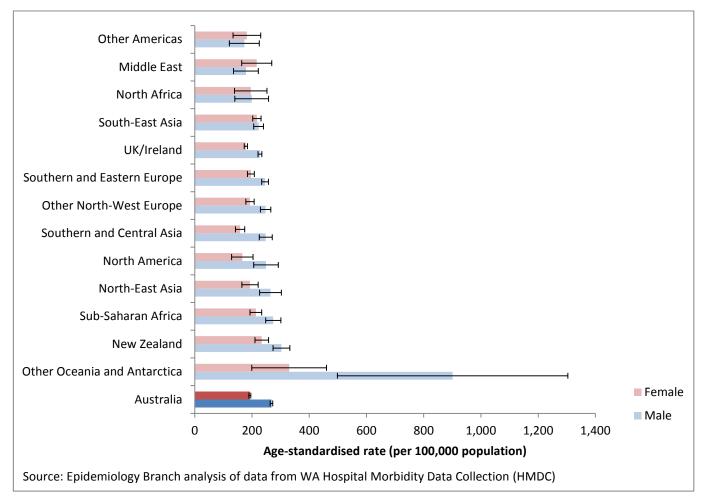


Figure 8. Rates and 95% confidence intervals of hospitalisations due to stroke by COB region and gender, WA, 2007-2016

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For more information

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