



Potentially avoidable GP-type presentations to emergency departments among people from culturally and linguistically diverse backgrounds, Western Australia, 2007 - 2016

Summary

In Western Australia (WA), in the decade between 2007 and 2016,

- Potentially avoidable General Practitioner (GP)-type presentations made up around 52% of all emergency department (ED) presentations. Rates of such all-cause GP-type presentations were 27% to 48% lower among those born overseas compared to the Australian-born population, and remained relatively stable over time.
- Rates of GP-type presentations due to four of the five selected common conditions (minor single-site injury, musculoskeletal or connective system illness, illness of the skin, subcutaneous tissue or breast, and digestive system illness) were lower among those born overseas compared to the Australian-born population. However, rates of ED presentations due to major single-site injury, which was the second-most common presenting condition, were higher in those born in main English-speaking countries than in those who were Australian-born or born in non-English-speaking countries.
- Analysis by country of birth (COB) region found that selected regions experienced higher rates of GP-type presentations, for all causes and selected causes. Specifically, compared with their Australian-born counterparts,
 - Both males and females born in the European regions and New Zealand experienced significantly higher rates of GP-type presentations due to major single-site injuries.
 - Males born in Other Oceania and Antarctica experienced significantly higher rates of GP-type presentations due to illnesses of the musculoskeletal or connective tissue system.

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). Research into ED usage among Australian culturally and linguistically diverse (CALD) populations as a whole has been scarce, but international evidence suggests that overall, migrants present to EDs at higher rates than local-born people, and are more likely to present to EDs instead of primary and community care (Credé et al. 2018, Mahmoud & Hou 2012). In developed countries where emergency services charge no fees at the point of care, the ED may be seen as easier to access than a GP (Mahmoud & Hou 2012), which can result in individuals presenting to ED for non-acute and non-urgent conditions which could be treated by a GP.

Between 2007 and 2016, ED attendance rates among the WA overseas-born population were significantly lower than for the Australian-born population, opposite to the pattern described in the international literature (Koh et al. 2019b). The profile of migrants to Australia differs significantly from that of other developed countries in North America, Northern Europe and Western Europe where most studies so far have been conducted. This could be due to differences in the circumstances, age and cultural profiles of migration between Australia and other developed countries, the proportion of immigrants who are undocumented (i.e. illegal immigrants) and to differences in the health systems, such as the use and coverage of private health insurance (Mahmoud & Hou 2012).

There has been some evidence that vulnerable populations in South Australia, including the elderly and migrants from refugee and asylum-seeker source countries, had higher rates of ED use for conditions which may be better suited to primary and community healthcare (Banham et al. 2019).

Aims

This paper aims to describe the patterns of potentially avoidable, GP-type presentation rates among people from WA, and whether they differed by selected common conditions, broad COB groups, COB regions, gender and year. Details on the definitions of CALD, broad COB groups and COB regions, and potentially avoidable ED presentations are provided in the overview, aims and methods paper for this series of CALD information papers (Koh et al. 2019a).

All-cause GP-type presentations and presentations due to selected conditions by broad COB group

Potentially avoidable GP-type presentations made up 51.6% of all presentations to EDs from 2007 to 2016. Compared with Australian-born people, those born in main English-speaking countries and those born in non-English-speaking countries had rates that were 26.9% and 48.3% lower, respectively, for all-cause GP-type presentations (Figure 1).

Male rates were significantly higher than female rates in the Australian-born population (4.7% higher) and those born in main English-speaking countries (6.2% higher), whereas for those born in non-English-speaking countries, male and female rates were similar.

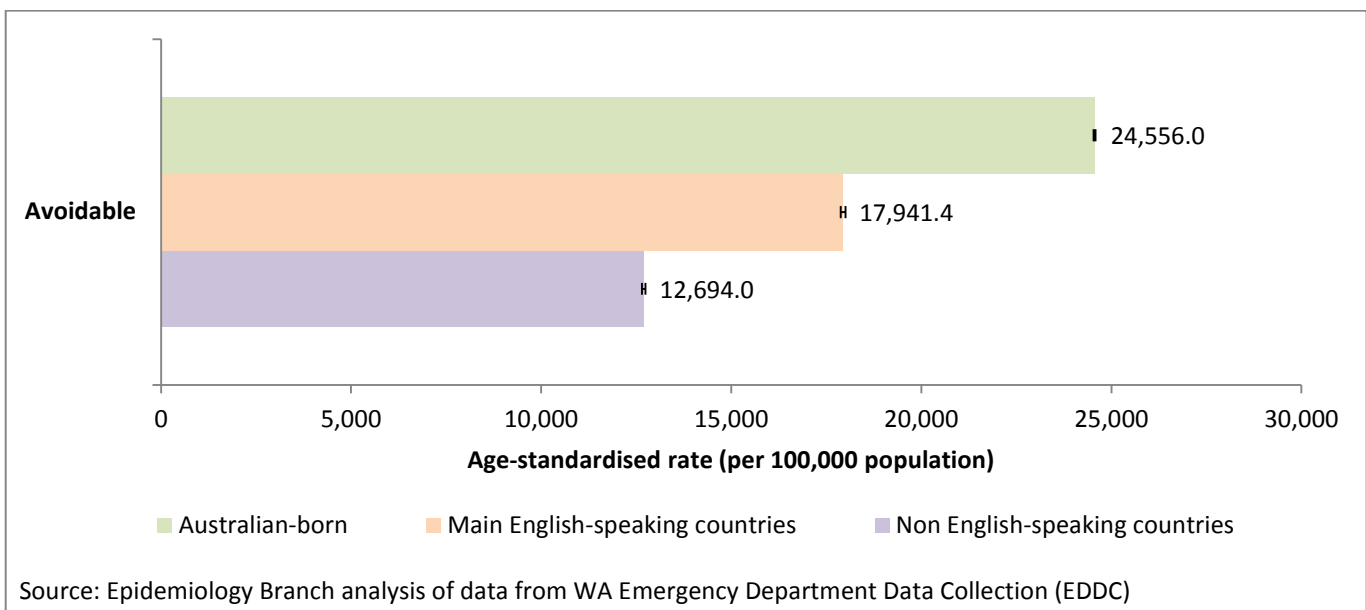


Figure 1. Rates and 95% confidence intervals of all-cause GP-type presentations by broad COB group, WA, 2007-2016

The five selected presenting conditions below made up 52% of all GP-type presentations, and represent the five most common reasons for such presentations among the overseas-born population. Compared with Australian-born people, WA residents born overseas experienced lower rates of GP-type presentations due to these conditions, with the exception of major single-site injuries, for which those born in main English-speaking countries had the highest rates (Figure 2).

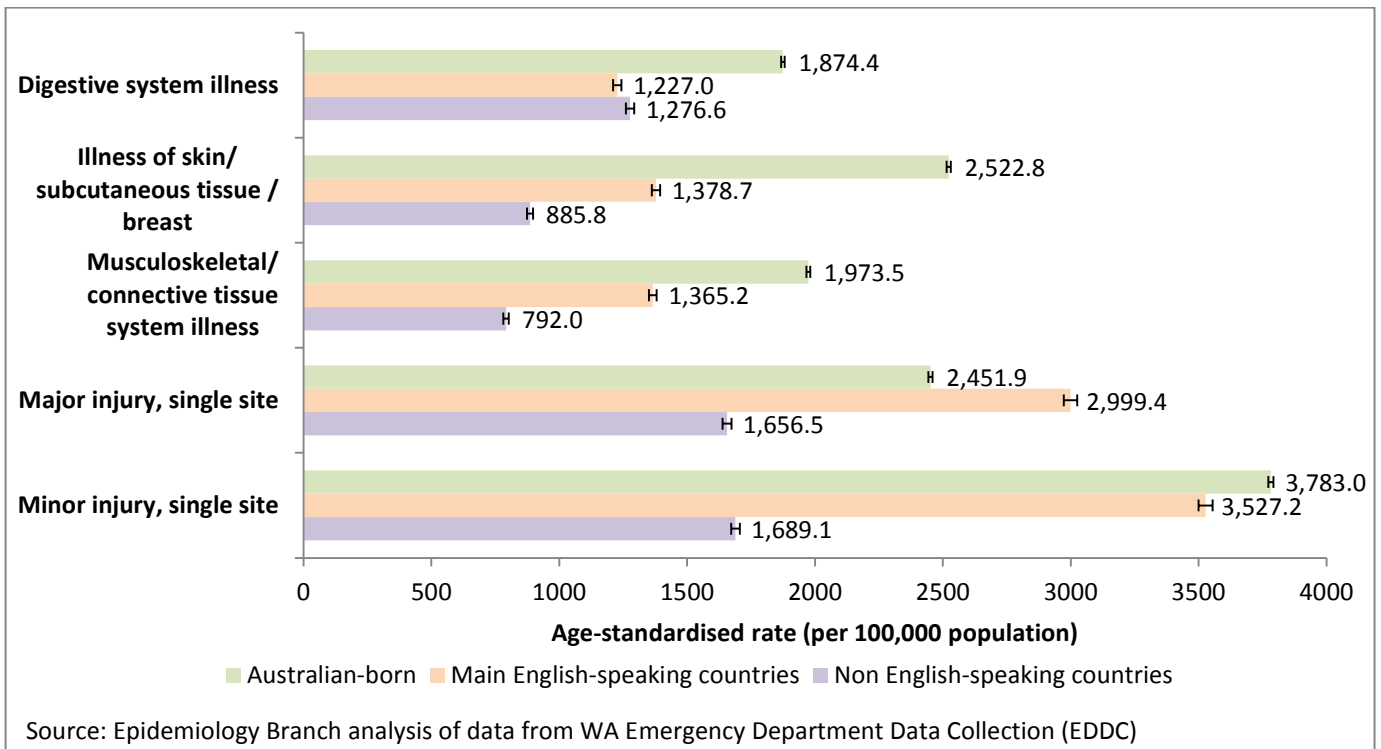


Figure 2. Rates and 95% confidence intervals of GP-type presentations due to selected conditions by broad COB group, WA, 2007-2016

All-cause GP-type presentations by broad COB group and year

Among those born in Australia, rates of all-cause GP-type presentations stayed relatively stable in the years between 2007 and 2016. Among those born overseas, rates of all-cause GP-type presentations increased between 2007 and 2010 and fluctuated in the years between 2010 and 2016 (Figure 3).

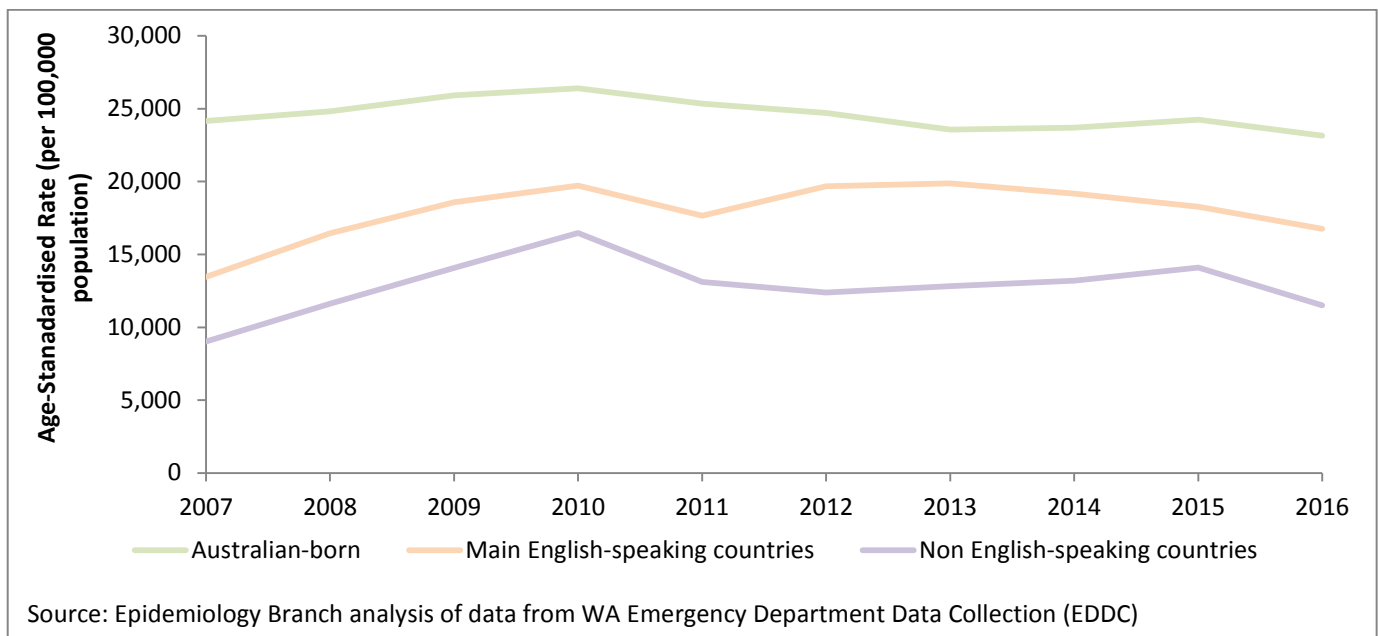


Figure 3. Rates of GP-type presentations by broad COB group and year, WA, 2007-2016

All-cause GP-type presentations by COB region and gender

Compared with their Australian-born counterparts, only males born in Other Oceania and Antarctica experienced significantly higher rates of all-cause GP-type presentations; whereas both males and females born in other regions experienced lower rates (Figure 4).

Presentation rates for females were significantly higher than those of males for those born in the Asian regions; while in all other COB regions, male rates were similar to or higher than female rates.

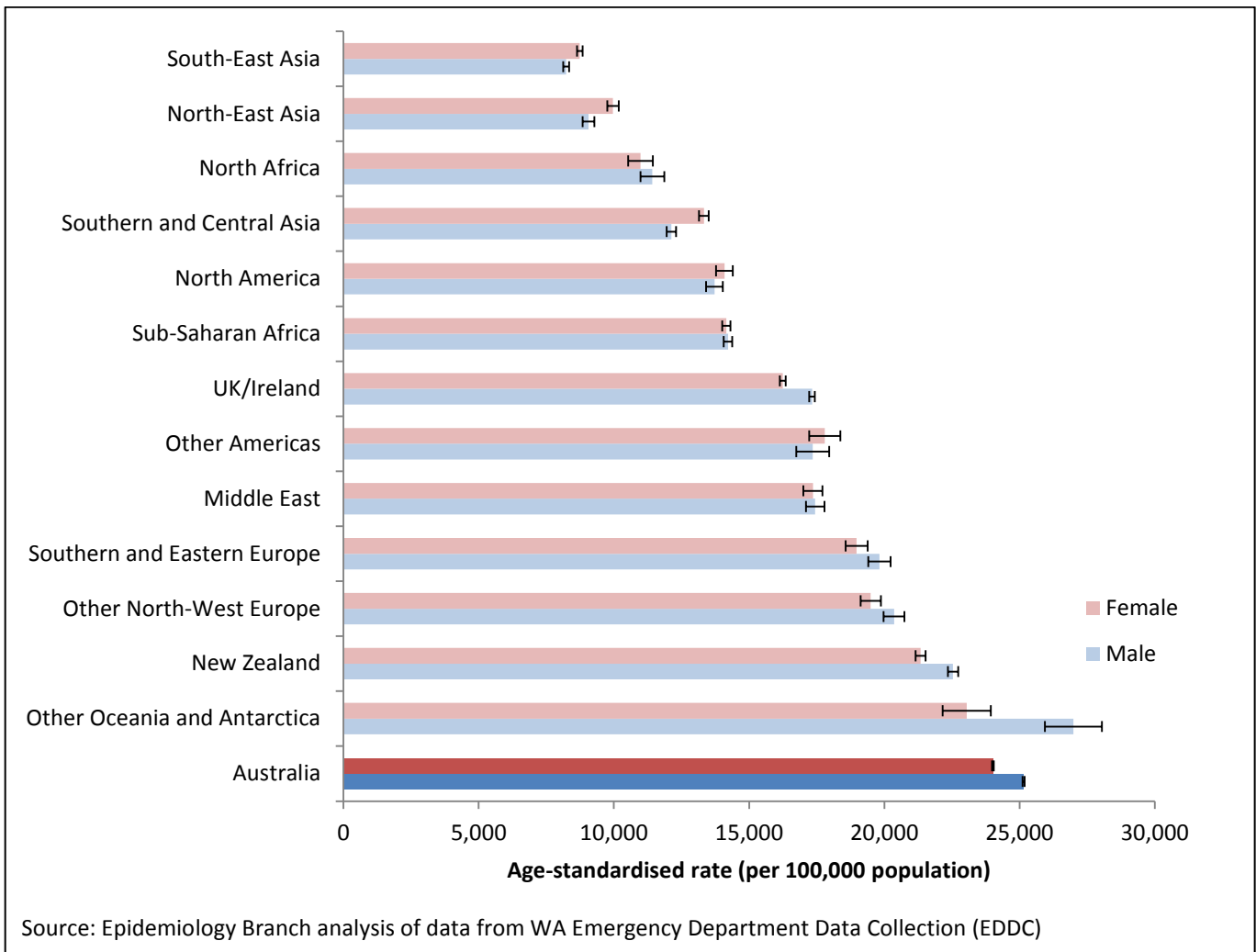


Figure 4. Rates and 95% confidence intervals of all-cause GP-type presentations by COB region and gender, WA, 2007-2016

GP-type presentations due to minor single-site injury by COB region and gender

Compared with their Australian-born counterparts, both males and females born overseas experienced significantly lower rates of GP-type presentations due to minor single-site injuries, while only males from New Zealand and Other Oceania and Antarctica had rates that were similar to Australian-born males (Figure 5). Males had significantly higher rates than females in all COB regions.

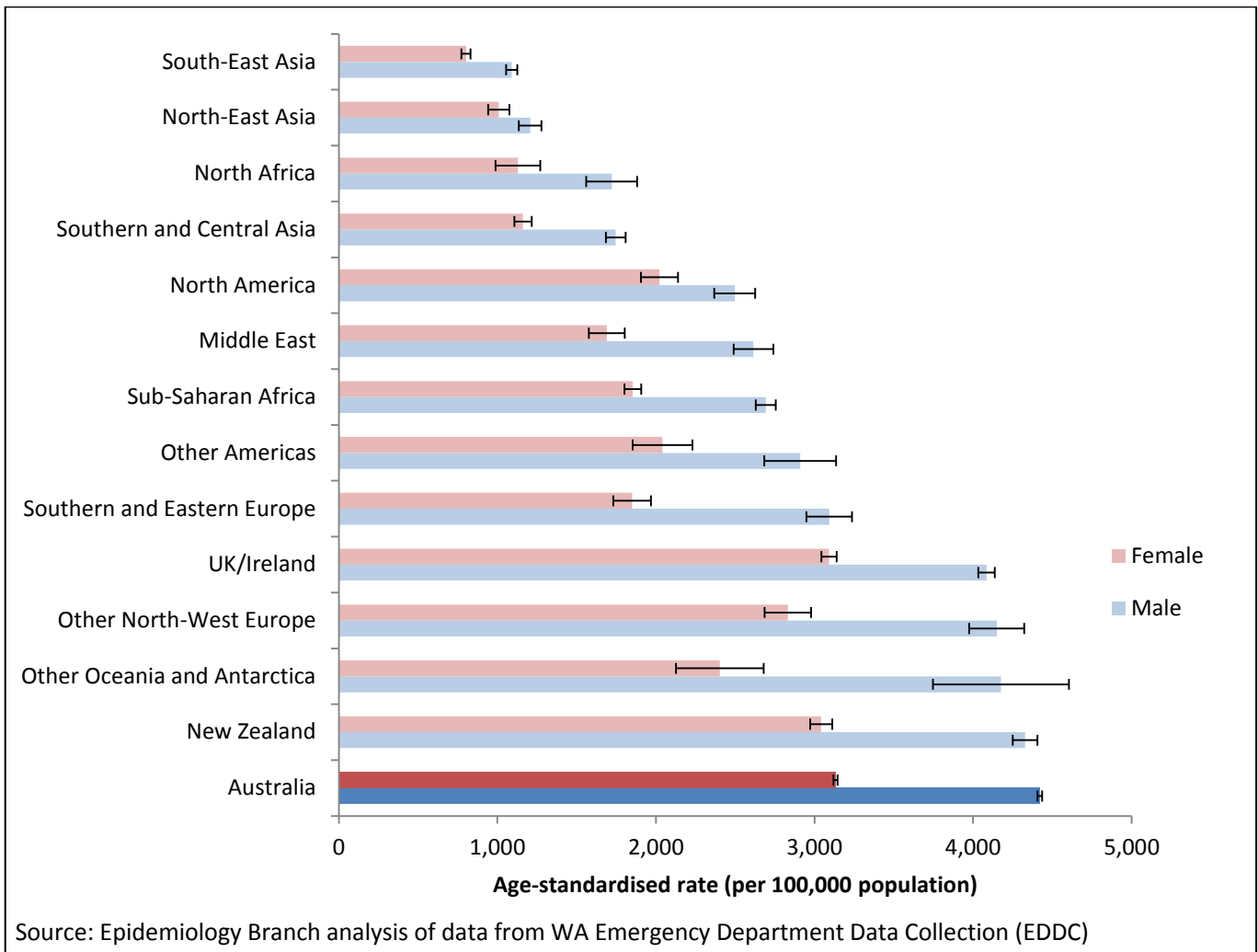


Figure 5. Rates and 95% confidence intervals of GP-type presentations due to minor single-site injury by COB region and gender, WA, 2007-2016

GP-type presentations due to major single-site injury by COB region and gender

Compared to their Australian-born counterparts, both males and females born in the European regions and New Zealand experienced significantly higher rates of GP-type presentations due to major single-site injuries, whereas males and females born in all other regions experienced rates that were similar to or lower (Figure 6).

Males had significantly higher rates than females in all COB regions. This pattern is similar to that of GP-type presentations for minor single-site injuries.

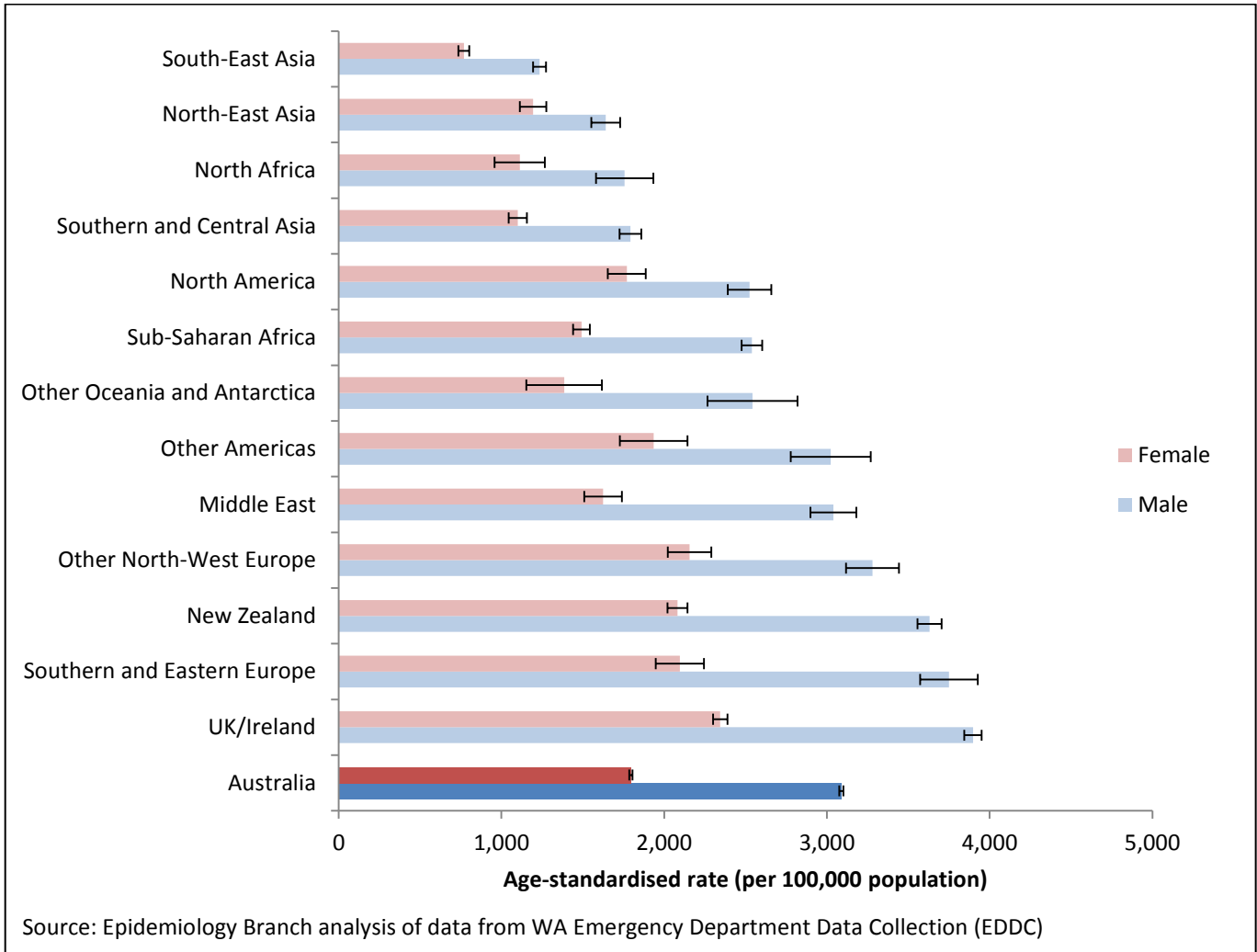


Figure 6. Rates and 95% confidence intervals of GP-type presentations due to major single-site injury by COB region and gender, WA, 2007-2016

GP-type presentations due to musculoskeletal/connective tissue system illness by COB region and gender

Compared with their Australian-born counterparts, males born in Other Oceania and Antarctica experienced significantly higher rates of GP-type presentations due to conditions of the musculoskeletal or connective tissue system (Figure 7). Presentation rates for all other COB region and gender groups were similar to or lower than the Australian-born rates.

Presentation rates for males were significantly higher than females in most COB regions, with the exception of males born in North Africa, North-East Asia and the Other Americas who had similar rates to their female counterparts.

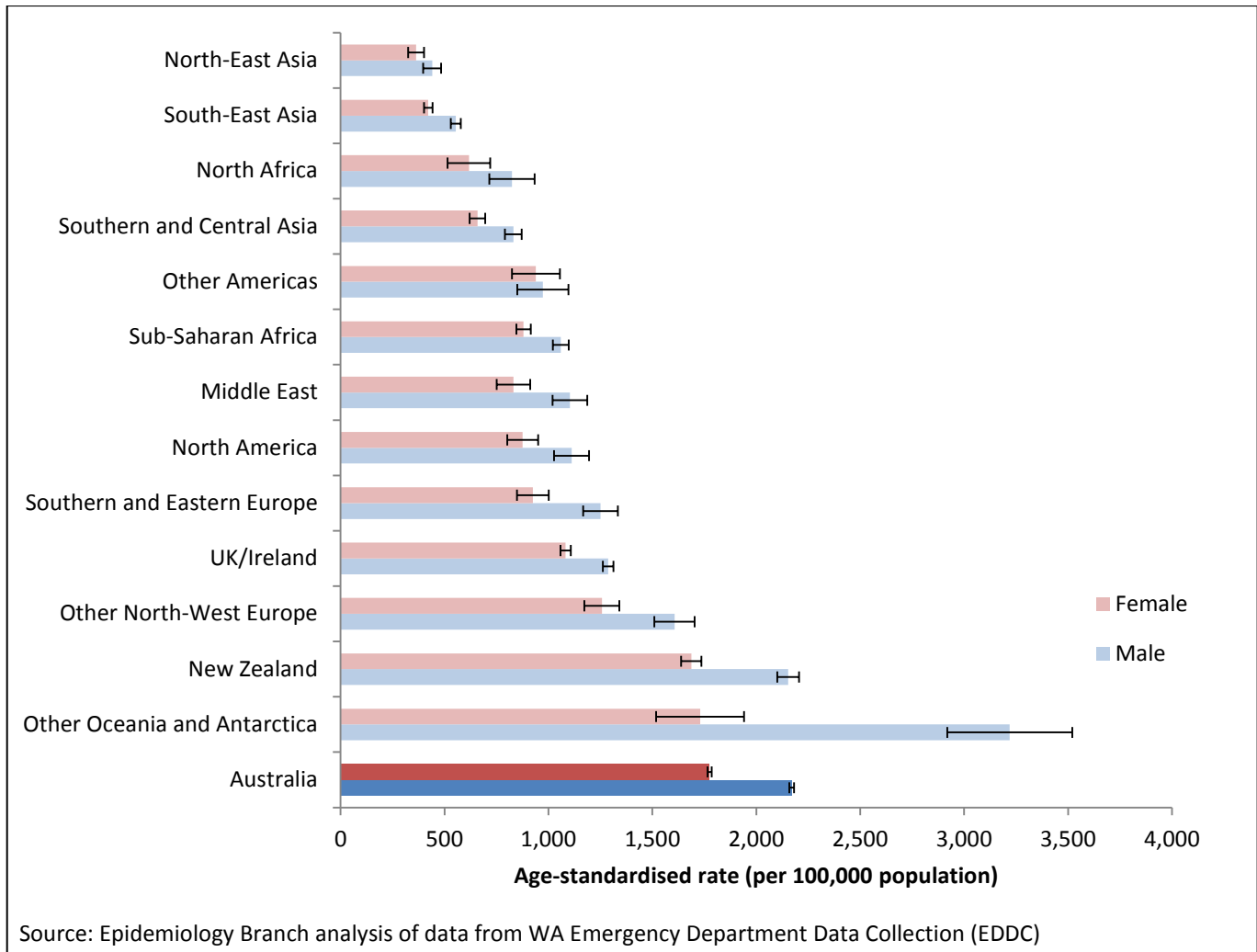


Figure 7. Rates and 95% confidence intervals of GP-type presentations due to musculoskeletal/connective tissue system illness by COB region and gender, WA, 2007-2016

GP-type presentations due to illness of the skin/subcutaneous tissue/breast by COB region and gender

Compared with their Australian-born counterparts, only males born in Other Oceania and Antarctica experienced similar rates of GP-type presentations due to illness of the skin, subcutaneous tissue or breast; whereas all other COB region and gender groups had significantly lower rates (Figure 8).

Presentation rates for males were significantly higher than females for those born in Australia, Other Oceania and Antarctica, New Zealand, UK/Ireland, Other North-West Europe and Sub-Saharan Africa. In all other COB regions, there was no significant difference in rates between the genders.

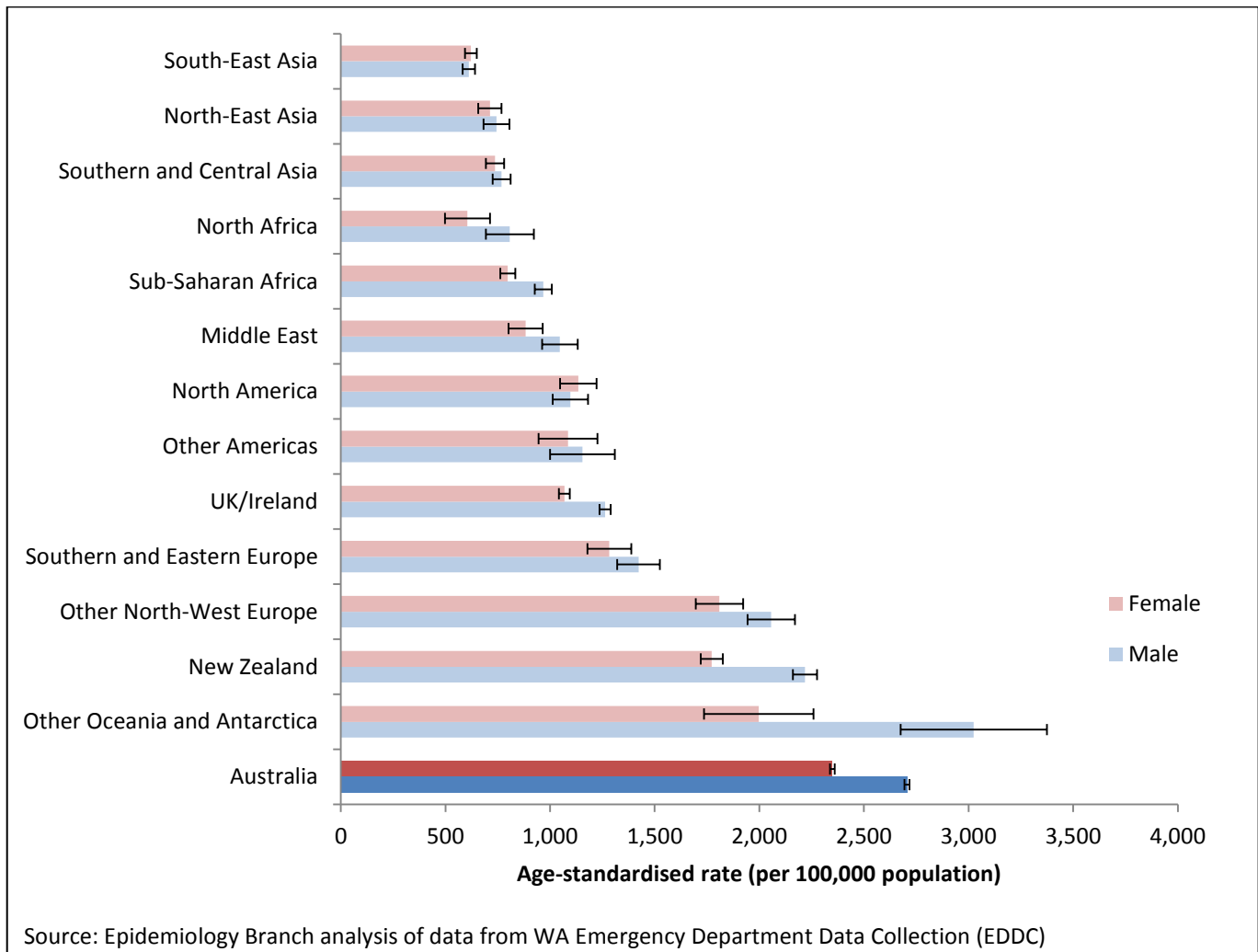


Figure 8. Rates and 95% confidence intervals of GP-type presentations due to illness of the skin/subcutaneous tissue/breast by COB region and gender, WA, 2007-2016

GP-type presentations due to digestive system illness by COB region and gender

Both males and females born in Other Oceania and Antarctica, Southern and Eastern Europe, and Other Americas, as well as males born in the Middle East, experienced rates of GP-type presentations due to digestive system illness that were similar to the Australian-born rates (Figure 9). All other gender and COB region groups experienced significantly lower presentation rates compared with their Australian-born counterparts.

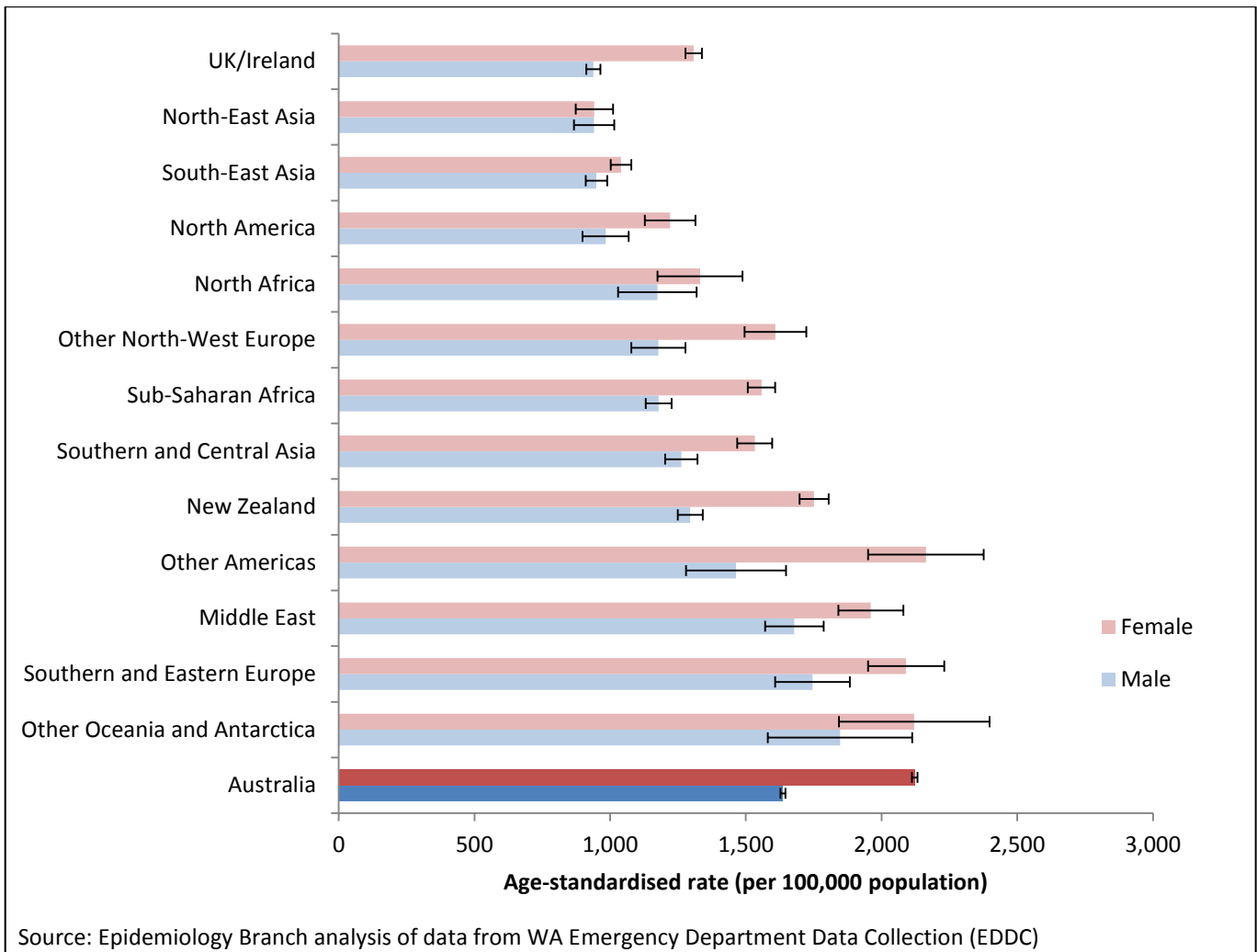


Figure 9. Rates and 95% confidence intervals of GP-type presentations due to digestive system illness by COB region and gender, WA, 2007-2016

References

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For more information

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