



Potentially preventable hospitalisations among people from culturally and linguistically diverse backgrounds, Western Australia, 2007 - 2016

Summary

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

- Rates of potentially preventable hospitalisations (PPHs) due to chronic conditions were 20% to 22% lower among those born overseas compared to the Australian-born population.
 - However, males born in Other Oceania and Antarctica and females born in North Africa experienced significantly higher rates of chronic PPHs compared to their respective Australian-born counterparts.
- Rates of PPHs due to acute conditions were 25% to 38% lower among those born overseas than that experienced in the Australian-born population.
 - However, males born in Other Oceania and Antarctica experienced significantly higher rates of acute PPHs compared to their Australian-born counterparts.
- Rates of PPHs due to vaccine-preventable conditions were around 29% higher among those born in non-English-speaking countries compared to the Australian-born population. Conversely, those born in main English-speaking countries experienced around 36% lower rates than that experienced in the Australian-born population.
 - In particular, males born in five overseas regions – North Africa, Other Oceania and Antarctica, North-East Asia, South-East Asia and Middle East – experienced significantly higher rates of vaccine-preventable PPHs compared to their Australian-born counterparts.
 - Similarly, females born in the same five regions as well as Sub-Saharan Africa experienced significantly higher rates of vaccine-preventable PPHs compared to their Australian-born counterparts.

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). Past research has shown that people from culturally and linguistically diverse (CALD) backgrounds generally had lower rates of potentially preventable hospitalisations (PPHs) compared to those born in Australia, consistent with the 'healthy migrant effect', although there were higher rates among selected country of birth (COB) regions (Bright et al 2011, Correa-Velez et al 2007).

Aims

This paper aims to describe the patterns of PPH rates among people from CALD backgrounds in WA, and whether they differed by the three broad categories of PPH (chronic, acute and vaccine-preventable), broad COB groups, COB regions, gender and year. Details on the definitions of PPHs, 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).

Potentially preventable hospitalisations by broad PPH category and broad COB group

There were similar patterns of rates of PPHs due to chronic conditions and PPHs due to acute conditions across the three broad COB groups (Figure 1). Compared with Australian-born people, those born in main English-speaking countries and those born in non-English-speaking countries had 19.8% and 21.5% lower rates, respectively, for chronic PPHs. Compared with Australian-born people, those born in main English-speaking countries and those born in non-English-speaking countries had 24.6% and 37.8% lower rates, respectively, for acute PPHs.

However, for PPHs due to vaccine-preventable conditions, those born in non-English-speaking countries had 29.1% higher rates compared to those born in Australia. Further analysis of the data found that this difference is largely because those born in non-English-speaking countries had three times the rates for hepatitis B compared to the Australian-born population. This is in keeping with known prevalence rates of hepatitis B infection globally and reflects infection in early childhood in the country of origin (MacLachlan & Cowie 2018). In particular, individuals born in Vietnam, China, Myanmar and Malaysia experienced the highest rates of hepatitis B (Department of Social Services 2019). Compared with Australian-born people, those born in main English-speaking countries had 35.8% lower rates for vaccine-preventable PPHs.

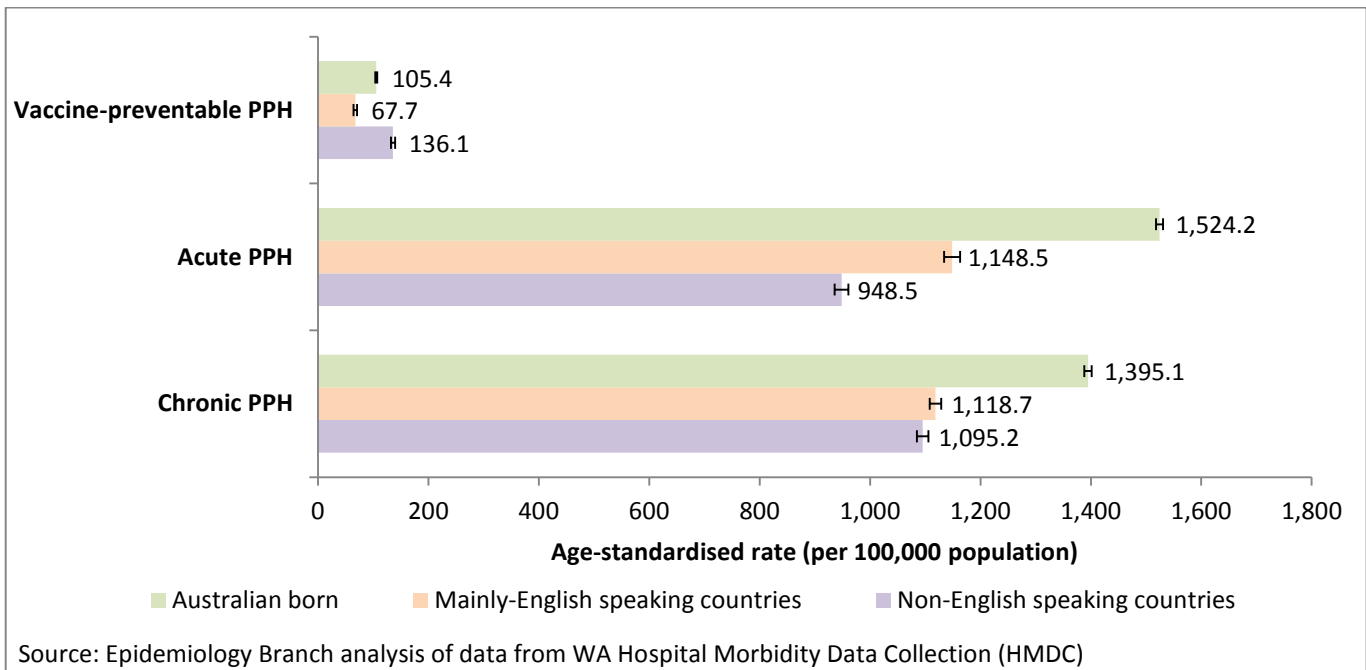


Figure 1. Rates and 95% confidence intervals of PPHs by broad PPH category and broad COB group, WA, 2007-2016

Potentially preventable hospitalisations by broad PPH category, broad COB group and year

In the decade between 2007 and 2016, chronic PPH rates showed an overall decrease whereas acute PPH rates increased slightly across the three broad COB groups (Figure 2). However, for vaccine-preventable PPHs, there appeared to be a spike in rates for those born in non-English-speaking countries in the four years between 2013 and 2016. This is likely due to more migrants from Vietnam, China and Myanmar in this period (Department of Social Services 2019).

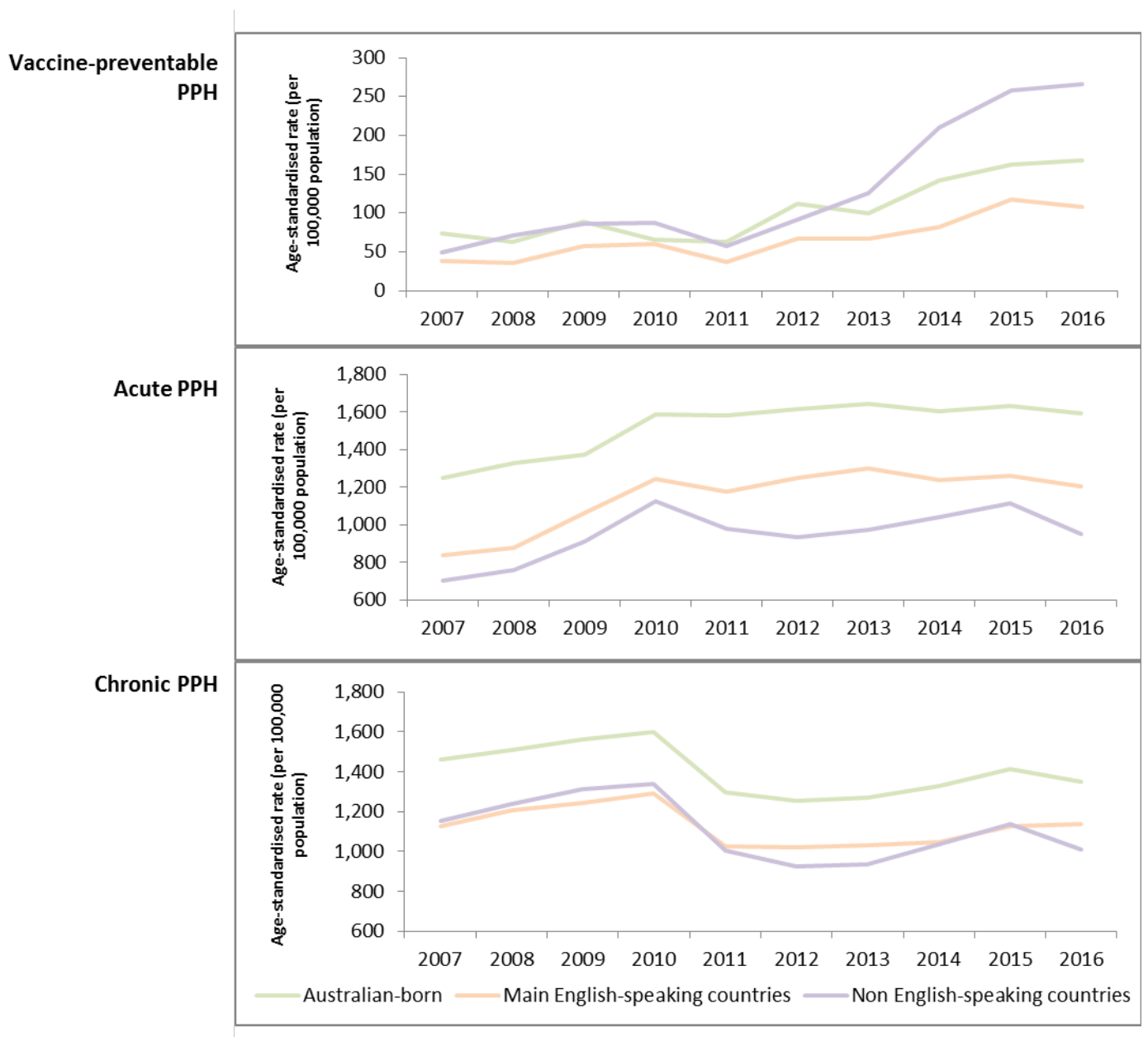


Figure 2. Rates of PPHs by broad PPH category, broad COB group and year, WA, 2007-2016

Chronic potentially preventable hospitalisations by COB region and gender

Compared with their Australian-born counterparts, males born in Other Oceania and Antarctica experienced significantly higher rates of chronic PPHs whereas males born in other regions had similar or lower rates. Compared with their Australian-born counterparts, females born in North Africa had significantly higher rates of chronic PPHs whereas females born in other regions had similar or lower rates (Figure 3).

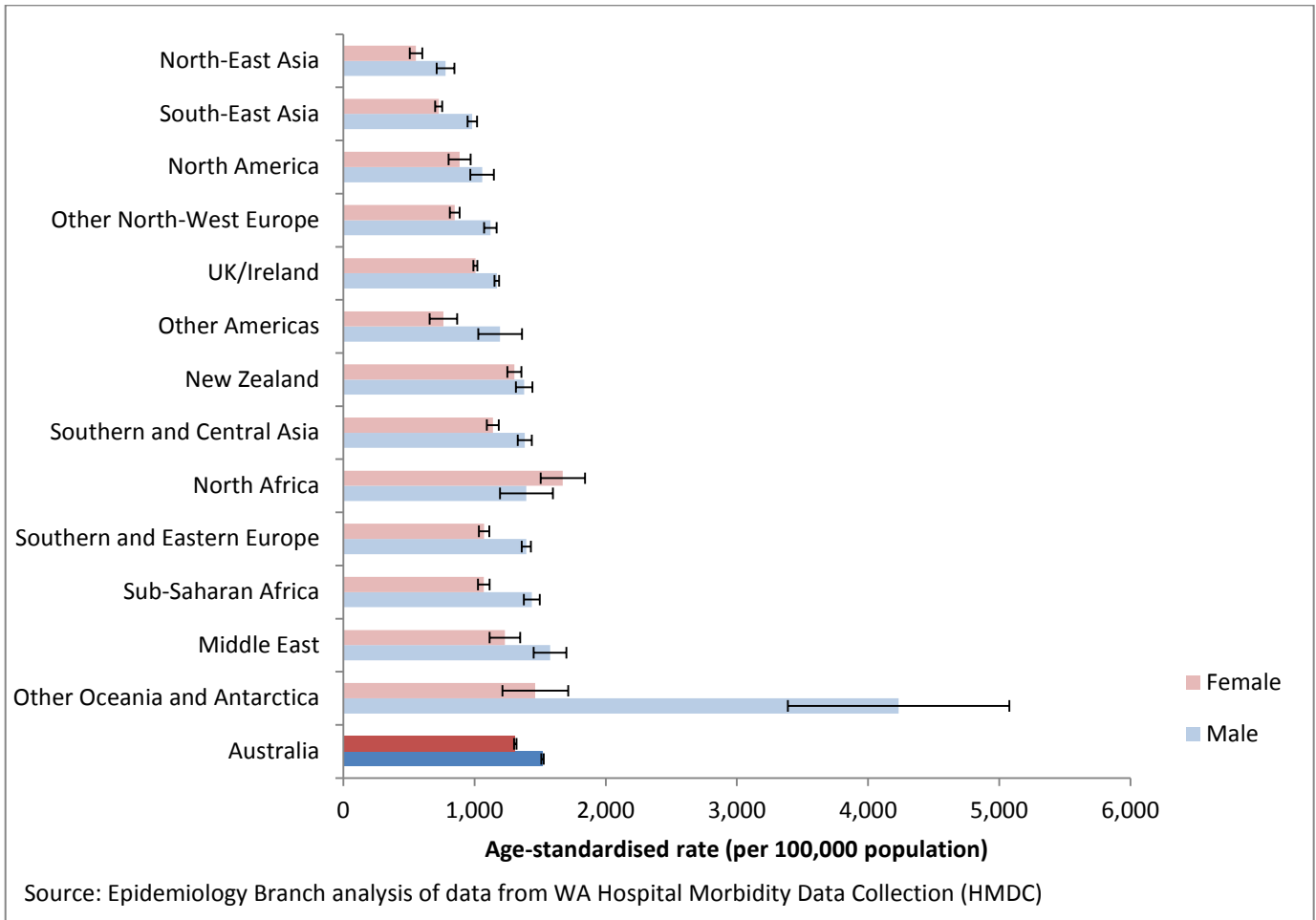


Figure 3. Rates and 95% confidence intervals of PPHs due to chronic conditions by COB region and gender, WA, 2007-2016

Acute potentially preventable hospitalisations by COB region and gender

Compared with their Australian-born counterparts, males born in Other Oceania and Antarctica had significantly higher rates of acute PPHs whereas males born in other regions had similar or lower rates of acute PPHs. Among females, compared with their Australian-born counterparts, those born in other regions had similar or lower rates of acute PPHs (Figure 4).

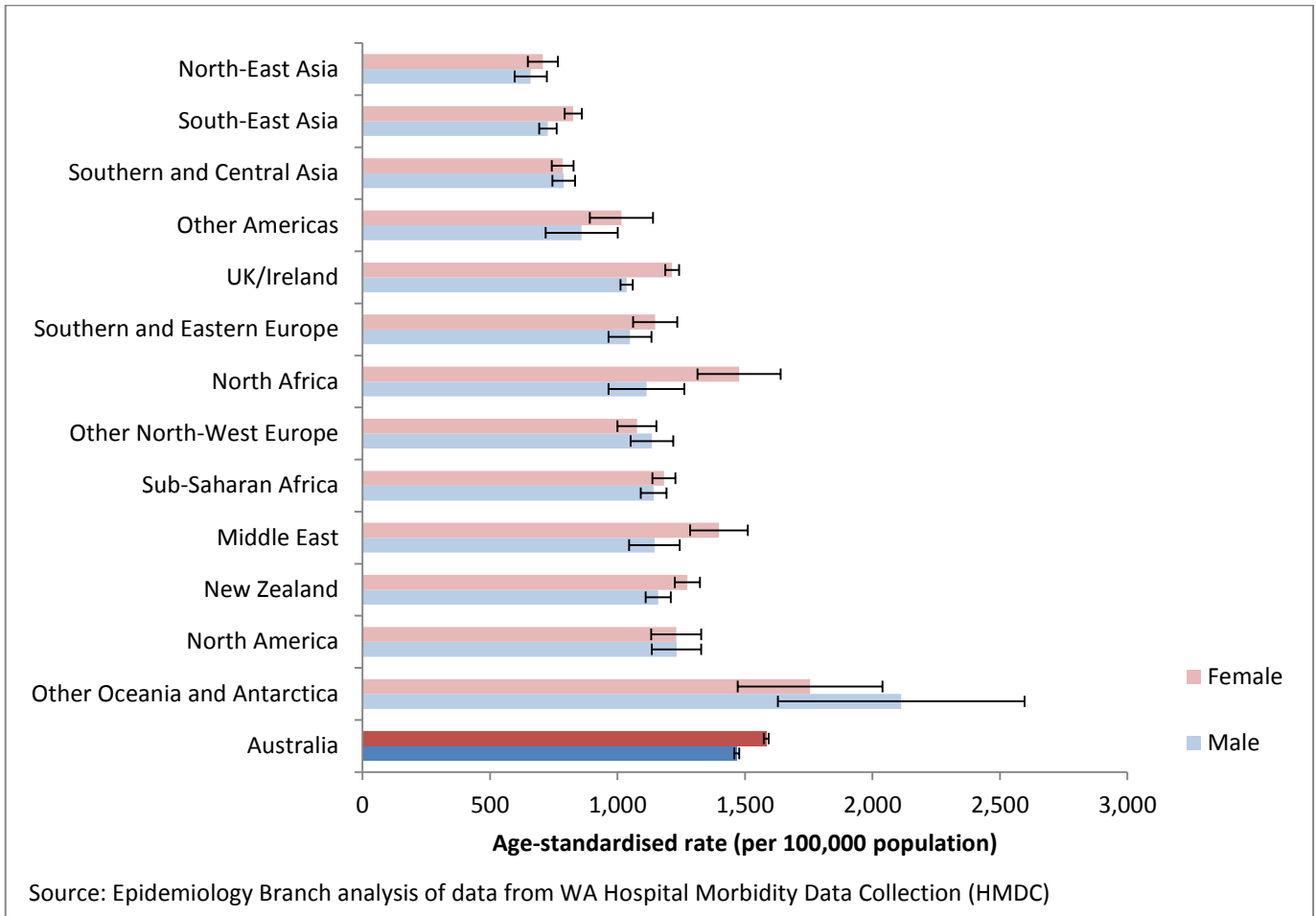


Figure 4. Rates and 95% confidence intervals of PPHs due to acute conditions by COB region and gender, WA, 2007-2016

Vaccine-preventable potentially preventable hospitalisations by COB region and gender

Referring to Figure 5, compared with their Australian-born counterparts, males born in five overseas regions – North Africa, Other Oceania and Antarctica, North-East Asia, South-East Asia and Middle East – experienced significantly higher rates of vaccine-preventable PPHs. Males born in the remaining regions experienced similar or lower rates of vaccine-preventable PPHs. Similarly, among females, compared with their Australian-born counterparts, those born in the same five regions as well as Sub-Saharan Africa experienced significantly higher rates of vaccine-preventable PPHs. Females born in the remaining regions experienced similar or lower rates of vaccine-preventable PPHs.

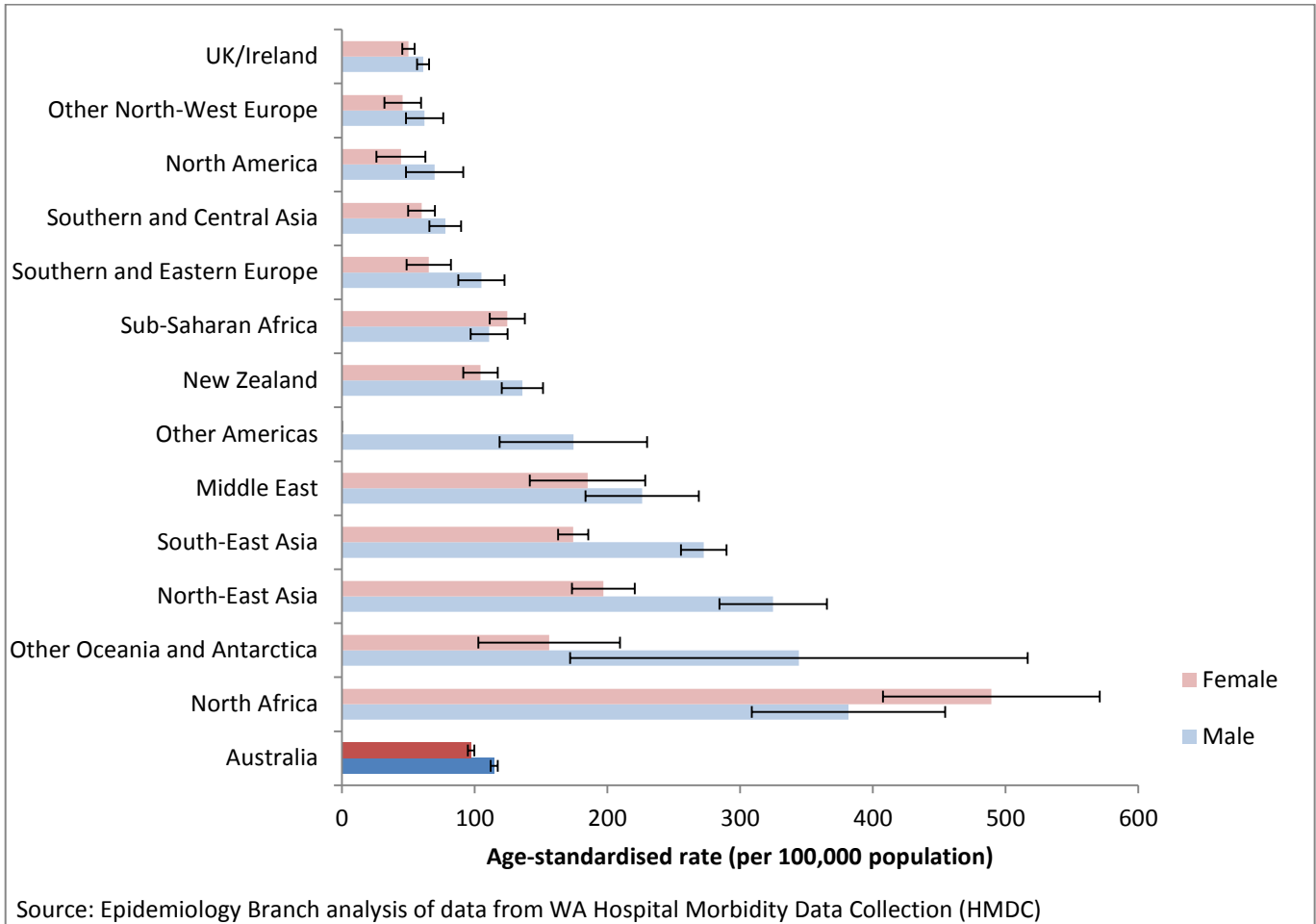


Figure 5. Rates and 95% confidence intervals of PPHs due to vaccine-preventable conditions by COB region and gender, WA, 2007-2016

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For more information

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