



## Death and hospitalisation rates by country of birth in Queensland #4: potentially preventable hospitalisations

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### Key Findings

In Queensland over the five year period 2003/2004 to 2007/2008:

- Total potentially preventable hospitalisations (PPH) rates were:
  - about 30% lower among overseas born MESB and NESB populations than rates in the Australian born population;
  - lower in all country of birth regions than the Australian born population, except for Oceania and Antarctica region with rates about 4-15% higher.
- Chronic and acute PPH rates were between 20% and 40% lower in the overseas born groups (NESB and MESB) compared to the Australian born population. The rate of vaccine preventable PPHs were 20% higher in NESB populations than Australian born, although 30% lower in the MESB population.
- Regional differences were evident for chronic and vaccine preventable PPHs. For example rates of vaccine preventable PPHs were three times higher than the rate in the Australian born population for people born in North Africa. Acute PPH rates for those born in all regions other than Australia were similar to or lower than the Australian born rate.

This is the fourth in a series of reports analysing hospitalisation rates in Queensland by country of birth and compares rates of potentially preventable hospitalisations (PPHs). Total PPHs are analysed in addition to the three sub-categories of PPHs: chronic, acute and vaccine-preventable conditions. Data sources, definitions and analytical methods were described in the first report in this series.<sup>1</sup>

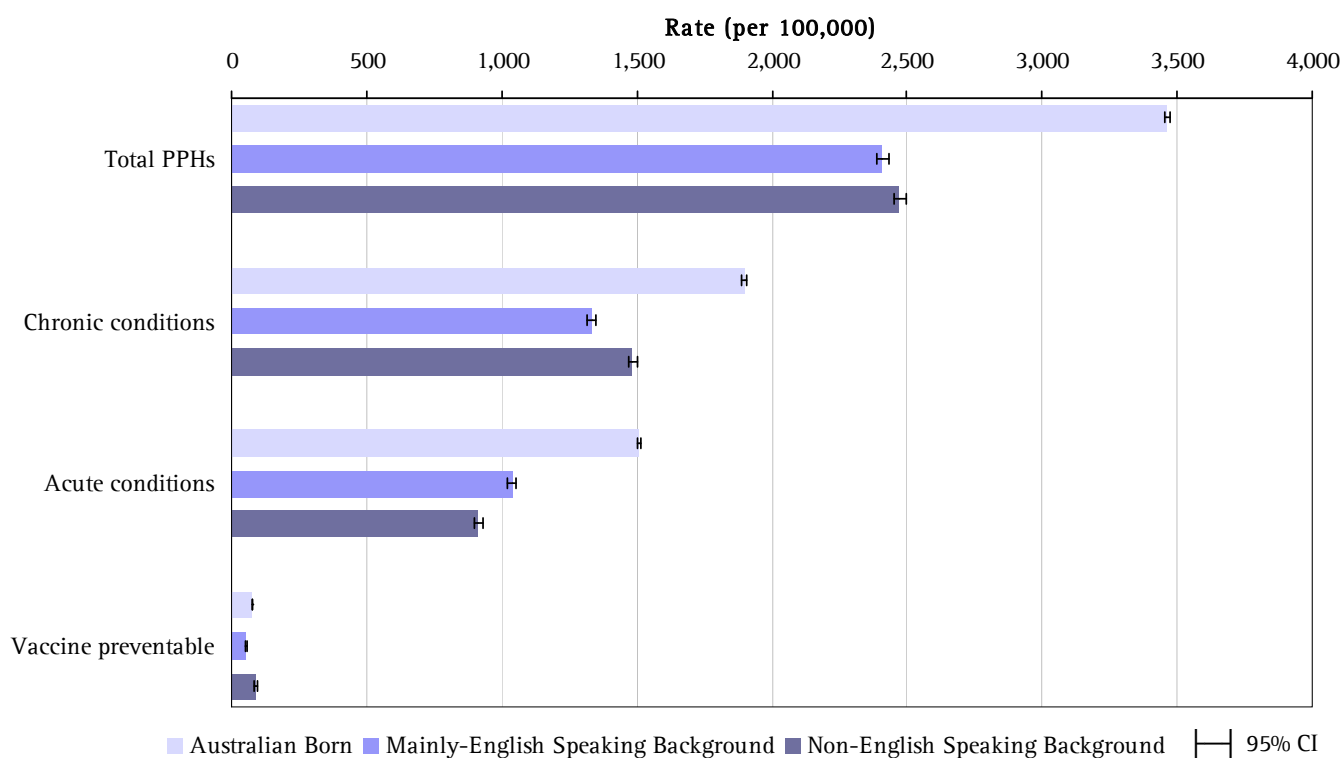
### Potentially preventable hospitalisations

PPHs are defined by the Australian Institute of Health and Welfare as those conditions where hospitalisation is thought to have been avoidable with the provision of timely and adequate non-hospital care,<sup>2</sup> and are described in other Queensland Health reports.<sup>3,4,5</sup> PPHs can be used to measure the quality or effectiveness of non-hospital care across different regions or cultures, although higher rates of PPHs may also reflect higher prevalence of conditions and disease. The rate of PPHs is a performance indicator in the National Health Agreement.<sup>6</sup>

#### *Total PPHs*

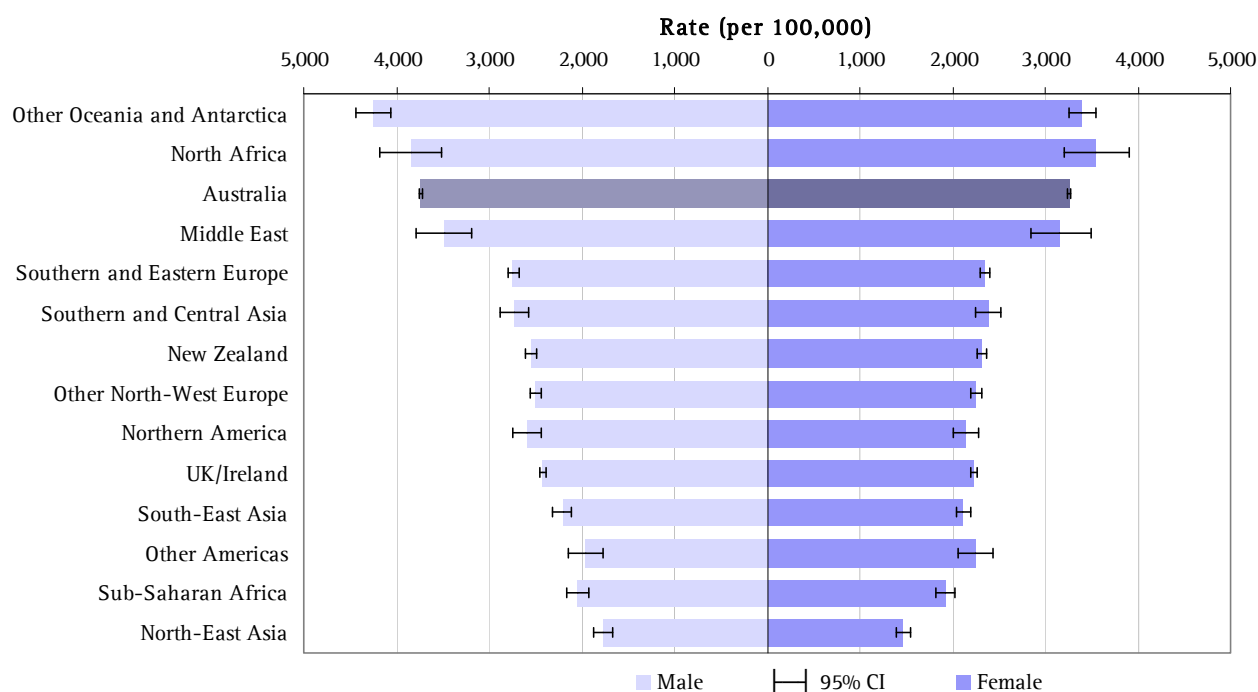
Over the five year period (2003/2004 to 2007/2008) the rate of PPHs among both NESB and MESB populations was 30% lower than the rate in Australian born Queenslanders (Figure 1). This pattern was evident for both males and females. Considering region of birth, the rate of PPHs for males born in the Other Oceania and Antarctica region (excluding Australia and external territories, and New Zealand) was 13% higher than the Australian born rate and 4% higher for females born in this region (Figure 2). Rates in all other regions were either similar to or lower than the Australian born rate.

**Figure 1. Age-standardised rates of PPHs by broad country of birth category, Queensland, 2003/2004-2007/2008**



Source: Queensland Hospital Admitted Patient Data Collection, Queensland Health

**Figure 2. Age-standardised rates of total PPHs by region of birth and sex, Queensland, 2003/2004-2007/2008**



Source: Queensland Hospital Admitted Patient Data Collection, Queensland Health

**PPHs – Chronic conditions**

Over the five year period 2003/2004 to 2007/2008 the rate of PPHs due to chronic conditions among the MESB population was about 30% lower than the rate in the Australian born population, and the NESB rate was 20% lower than the Australian born rate (Figure 1). This pattern was evident for both males and females. Based on region of birth, people born in Other Oceania and Antarctica had higher rates of chronic PPHs than the Australian born population (about 30% higher) as did those born in the Middle East (about 20% higher). North Africa had similar a rate of chronic PPHs and all other regions were lower compared to the Australian born population (Figure 3a).

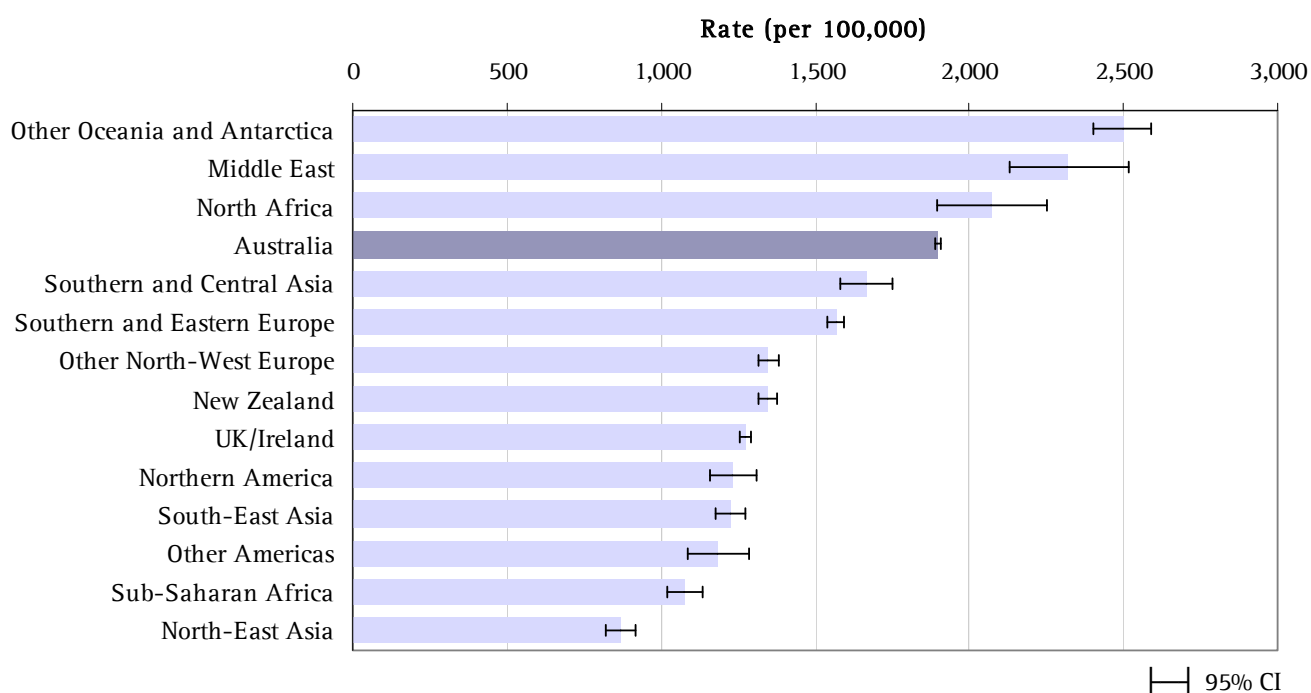
**PPHs – Acute conditions**

Over the five year period 2003/2004 to 2007/2008 the rate of PPHs due to acute conditions among the MESB population was about 30% lower than the rate in the Australian born population, and the NESB rate was 40% lower than the Australian born rate (Figure 1). This pattern was evident for both males and females. The rate of acute PPHs was similar to the Australian born rate for those born in North Africa and lower than the Australian born rate for all other country of birth regions (Figure 3b).

**PPHs – Vaccine-preventable conditions**

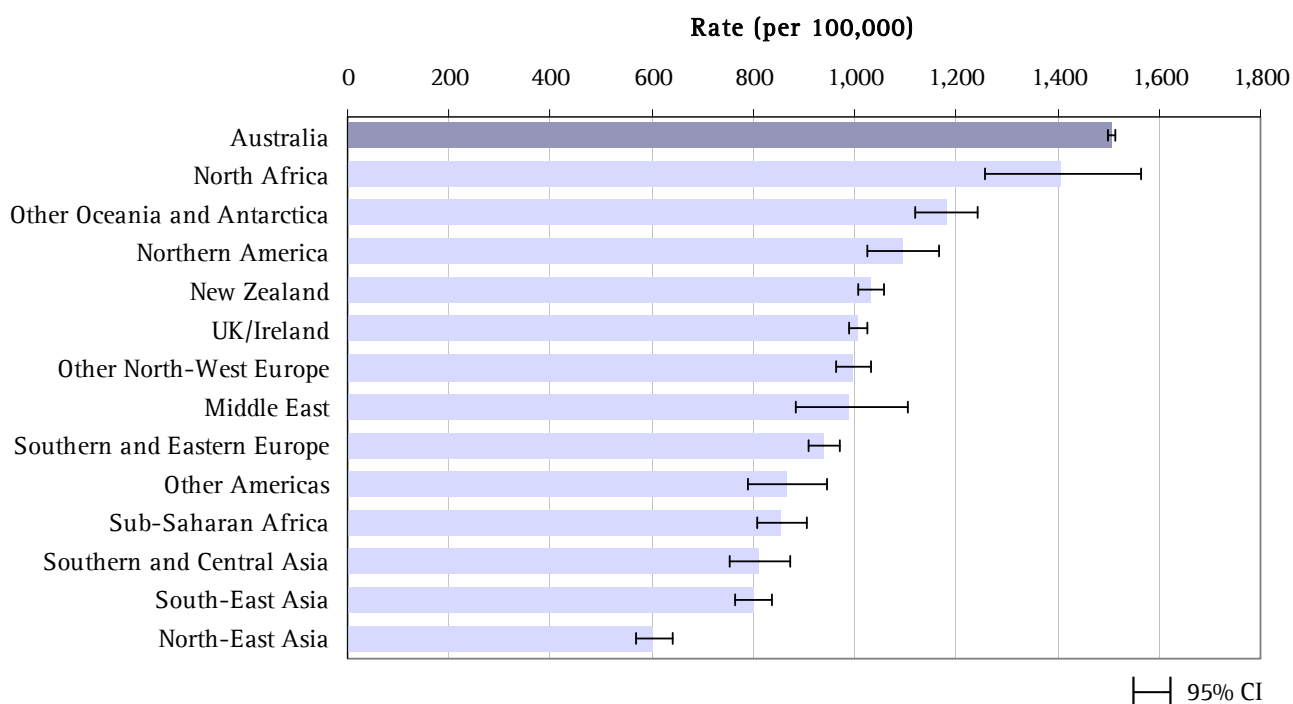
Over the five year period 2003/2004 to 2007/2008 the rate of PPHs due to vaccine preventable conditions among the MESB population was about 30% lower than the rate in the Australian born population, however the rate in the NESB population was 20% higher than the Australian born rate (Figure 1). Although this pattern was evident for both males and females for vaccine preventable PPHs among MESB populations, for the NESB population male and female rates differed – the male NESB vaccine preventable PPH rate was 25% higher than the Australian male rate while the female NESB rate was 11% higher than the Australian female rate. Based on region of birth, people born in North Africa, Other Oceania and Antarctica, South-East Asia and North-East Asia all had higher rates of vaccine preventable PPHs than the Australian born population (Figure 3c). Rates among the North African born population were triple the Australian born rates, while for the other three regions they were about nearly double the Australian born rate.

**Figure 3. Age-standardised rates of PPHs by region of birth and preventability, Queensland, 2003/2004-2007/2008**

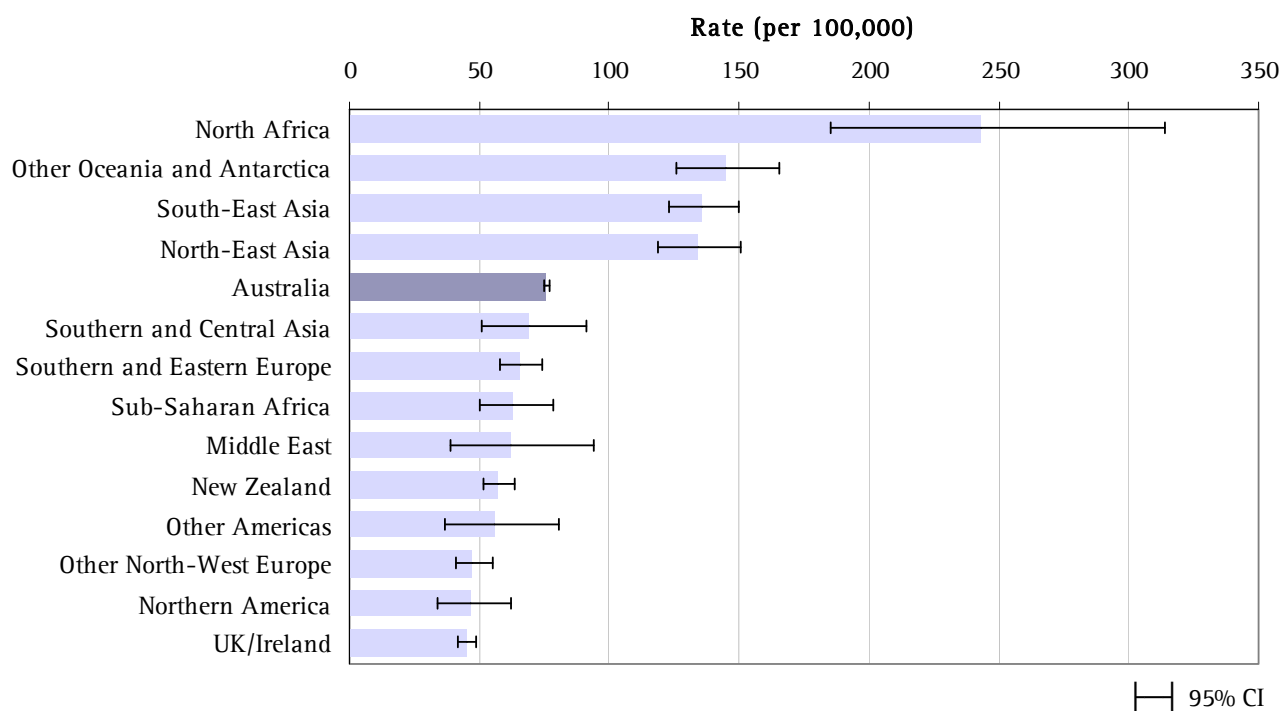
**3a. Chronic conditions**

Source: Queensland Hospital Admitted Patient Data Collection, Queensland Health

3b. Acute conditions



3c. Vaccine preventable conditions



Source: Queensland Hospital Admitted Patient Data Collection, Queensland Health

## References

1. Endo T, Jardine A, Watson, M, Bright M, Macleod S. Death and hospitalisation rates by country of birth in Queensland #1: overview, data sources and definitions. (*In print*): Queensland Health, June 2011
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