

OVERVIEW

- Estimated alcohol-related ED presentations were higher among males than females across all jurisdictions for all ages (15+ years), young adults (20-29 years) and teenagers (15-19 years).
- Nationally trends in presentations appeared to increase slightly for every age group (15+, 20-29, 15-19 years). This was partly influenced by the upward trends in Qld.
- In most jurisdictions male and female trends tended to track in similar directions in every age group.
- In most jurisdictions trends in all ages (15+ years) presentations were largely stable over time, except in Qld where the trend increased.
- In all jurisdictions rates of presentations for teenagers were about twice that for all ages. This is likely to be indicative of higher prevalence of alcohol-related night time weekend ED presentations for teenagers. This is in keeping with previous findings on age and alcohol-related harm, e.g. [1-3].

Introduction

This bulletin shows trends in estimated alcohol-related injuries using emergency department (ED) data from seven Australian jurisdictions (Tasmania was not included due to data access issues) between 2005-06 and 2011-12.

ED data tend to capture less serious but more frequent alcohol-related injuries (e.g. minor fractures from falls and assaults) than hospital admission data. The high frequency of ED presentations (i.e. compared to death and hospital admissions) gives the data particular strength as an indicator of alcohol-related harm^{4,5}.

Methods

Australian ED data routinely record primary diagnosis (e.g. fracture, laceration), time of day and day of week of presentations, but generally do not consistently record external causes of injuries (e.g. assault, road crash, fall)⁶. A temporal surrogate measure using primary diagnosis, time of day and day of week was applied to identify alcohol-related ED injuries^{7,8}. This surrogate identifies ED presentations for which alcohol is highly likely to have been a major contributor, based on time of day and day of week of the presentation. Surrogate measures are recommended as a reliable approach to examining trends over time⁹. It should be noted however, that while surrogate measures may be used for assessing trends over time, they are not recommended for use as a measure of incidence, as under-estimation is likely. The rates presented here are only a partial representation of the magnitude of alcohol-related injury in the population.

Data were restricted to presentations with an 'injury' related primary diagnosis ICD-10 code, based on research by Evans et al. 2011⁶ (see website for a detailed list of codes). Alcohol-related presentations were defined as those occurring during any one of the following times: 'Friday night' (Fridays, 22:00 to 23:59; Saturdays, 0:00 to 3:59); 'Saturday night' (Saturdays, 22:00 to 23:59; Sundays, 0:00 to 3:59); and 'Sunday night' (Sundays, 18:00 to 23:59). The rates shown are crude rates of ED presentations per 1,000 residents (state and age specific), based on ABS population estimates data¹⁰.

The project attempted to obtain a minimum dataset from all jurisdictions; however, in some cases data limitations produced disparities which should be taken into account. The data presented for WA include presentations at Perth metropolitan EDs only. NSW was unable to provide ICD-10 codes and instead

provided a free-text field identifying the 'presenting problem'. ED presentations with "assault" or "injury" in the presenting problem description were selected for analysis. While still comparable over time, data are likely to be an underestimate of alcohol-related ED presentations in these two states.

Trends in all ages (15+ years) alcohol-related injury presentations to EDs

Figure 1 shows stable or slightly increasing trends in estimated rates of male and female alcohol-related ED presentations across most jurisdictions. Alcohol-related ED presentations increased relatively quickly in Qld for both males and females between 2005-06 and 2008-09; after 2008-09 the trends appeared to stabilise. Annual rates in the NT appeared least stable.

Trends in young adult (20-29 years) alcohol-related injury presentations to EDs

As shown in Figure 2, Vic, SA and WA indicate relatively stable trends. To varying degrees, increases were apparent for NSW, Qld and the NT. In the ACT, estimated rates of alcohol-related ED presentations declined between 2008-09 and 2010-11.

Trends in teenage (15-19 years) alcohol-related injury presentations to EDs

Overall, at jurisdictional level, trends in estimated alcohol-related ED presentations over time were least stable for teenagers. Figure 3 shows that nationally slight increases over time were apparent for both males and females. At state level, the most notable increases occurred in Qld.

Website

<http://ndri.curtin.edu.au/research/naip.cfm>

References

1-10 see website

Citation

Lensvelt, E., Gilmore, W., Gordon, E., Hobday, M., Liang, W. and Chikritzhs, T. (2015). *Trends in estimated alcohol-related emergency department presentations in Australia, 2005-06 to 2011-12*. National Alcohol Indicators Project, Bulletin 14. Perth: National Drug Research Institute, Curtin University.

Acknowledgements

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Trends in all ages (15+ years) alcohol-related injury presentations to EDs

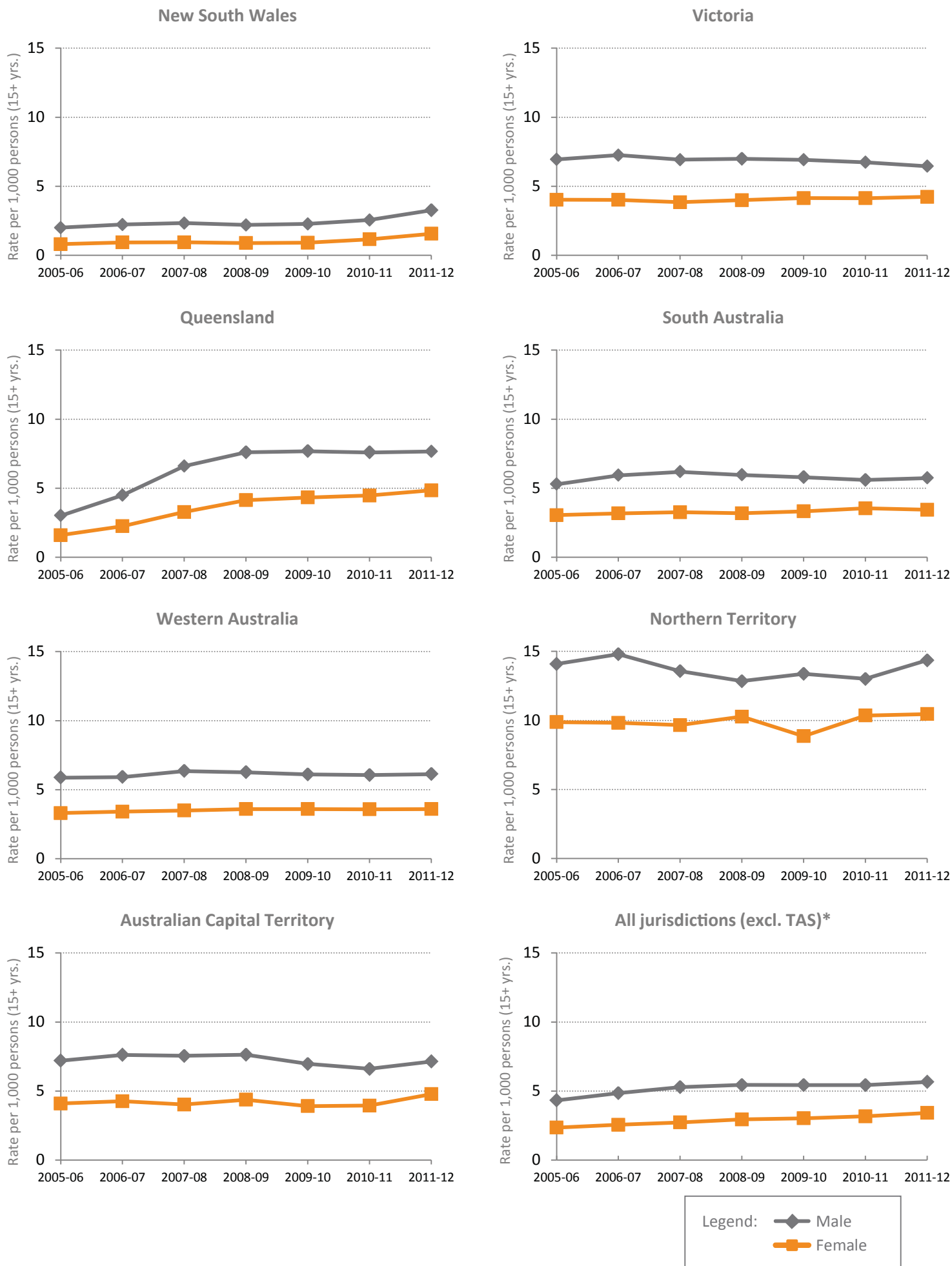


Figure 1: Alcohol-related Emergency Department presentations per 1,000 persons, aged 15 years and older, by gender, 2005-06 – 2011-12

* Note: WA data includes ED presentations in Perth metropolitan area only, NSW data includes ED presentations coded 'assault' or 'injury' in free-text field only.

Trends in young adult (20-29 years) alcohol-related injury presentations to EDs

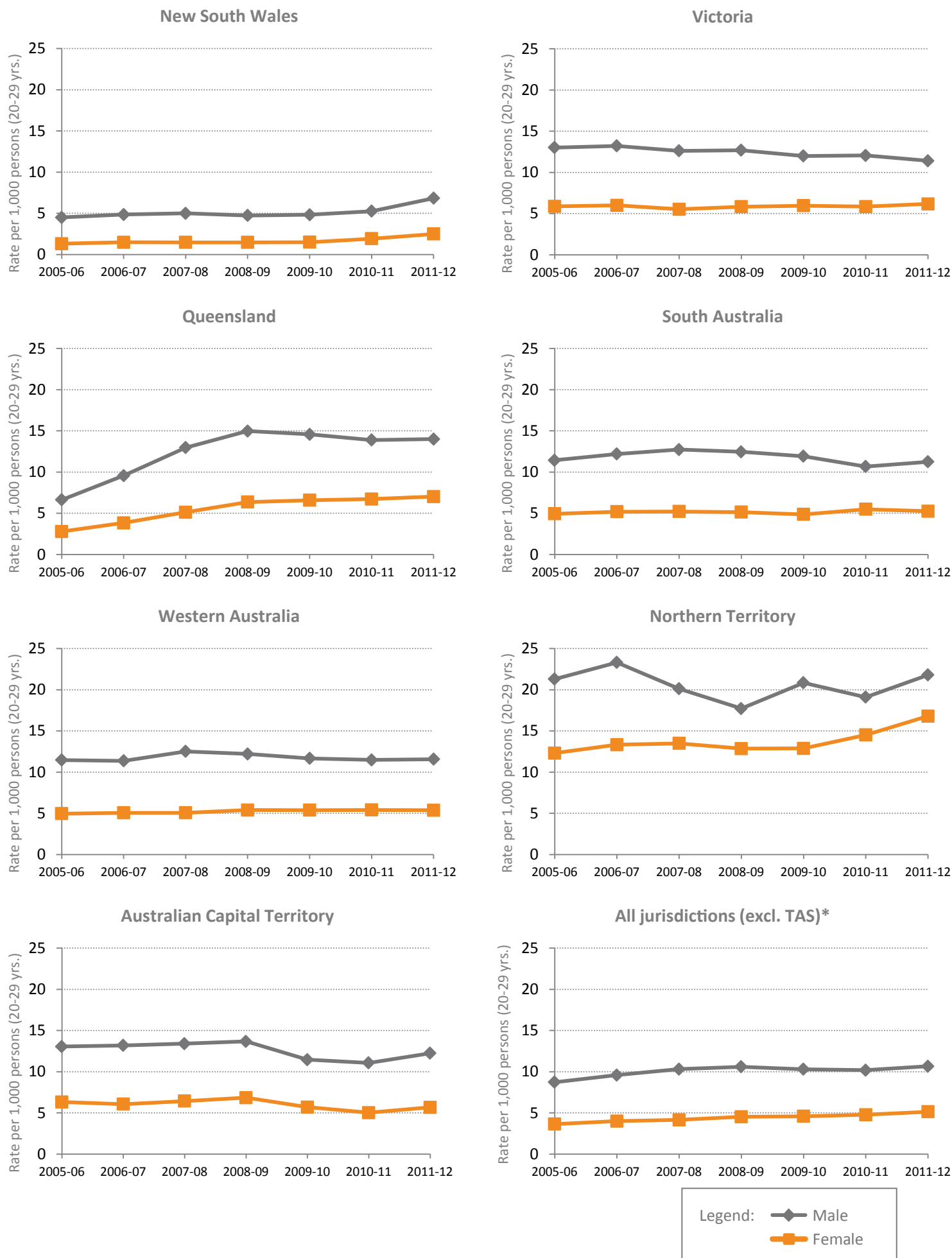


Figure 2: Alcohol-related Emergency Department presentations per 1,000 persons, aged 20-29 years, by gender, 2005-06 – 2011-12

* Note: WA data includes ED presentations in Perth metropolitan area only, NSW data includes ED presentations coded 'assault' or 'injury' in free-text field only.

Trends in teenage (15-19 years) alcohol-related injury presentations to EDs

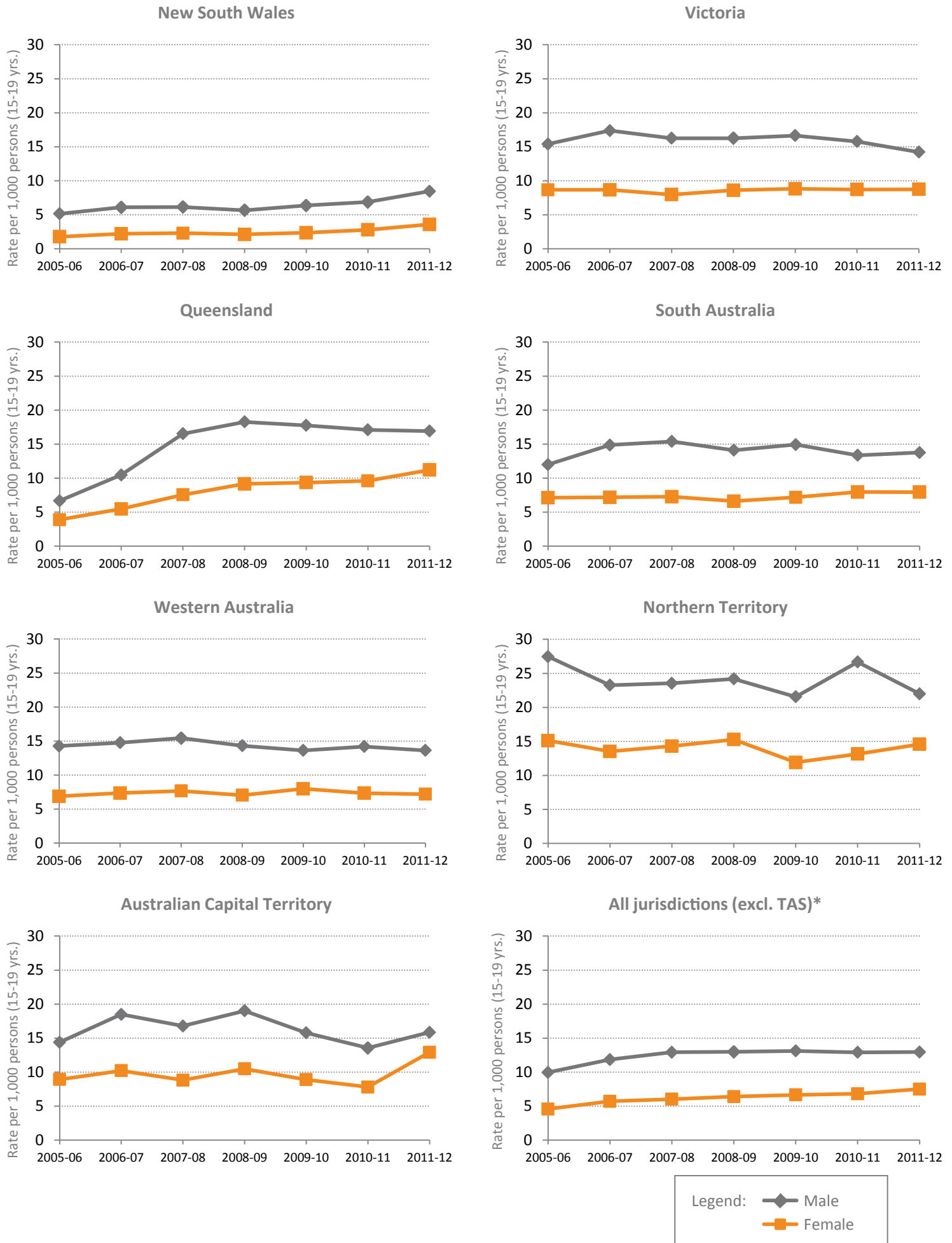


Figure 3: Alcohol-related Emergency Department presentations per 1,000 persons, aged 15-19 years, by gender, 2005-06 – 2011-12

* Note: WA data includes ED presentations in Perth metropolitan area only, NSW data includes ED presentations coded 'assault' or 'injury' in free-text field only.