



## Appendix

**This appendix was part of the submitted manuscript and has been peer reviewed.  
It is posted as supplied by the authors.**

Appendix to: Degenhardt L, Larney S, Chan G, et al. Estimating the number of regular and dependent methamphetamine users in Australia, 2002–2014. *Med J Aust* 2016; 204: 153. doi: 10.5694/mja15.00671.

## **Online appendix for “Estimating the number of regular and dependent methamphetamine users in Australia, 2002-2014”**

### **Data sources considered for use as benchmark data but which were not considered suitable for use**

**Emergency department (ED) data** identified methamphetamine-related cases under the ICD-9 diagnoses of '*Drug dependence – amphetamine and other psychostimulant*' and '*Poisoning by psychotropic agents – psychostimulants*'. However, the data did not identify methamphetamine psychosis presentations because the ICD-9 diagnostic system subsumed methamphetamine psychosis under a broader general category of drug-induced psychosis that could include psychoses induced by alcohol and cannabis use. We did not use ED data as a benchmark in the current study because they would miss a large proportion of stimulant-related admissions and therefore underestimate the number of ED admissions for this reason, and hence the number of users.

**Ambulance attendance data** were not used for a similar reason, namely, that they did not routinely collect information that would enable researchers to accurately identify ambulance attendances that dealt specifically with methamphetamine-related presentations.

**National data on arrests** were not used because they included arrests for all amphetamine-type stimulants, including those for ecstasy. This is because some jurisdictions did not distinguish between ecstasy-related arrests and arrests related to amphetamine or methamphetamine. This was consistent with the approach of McKetin et al(9).

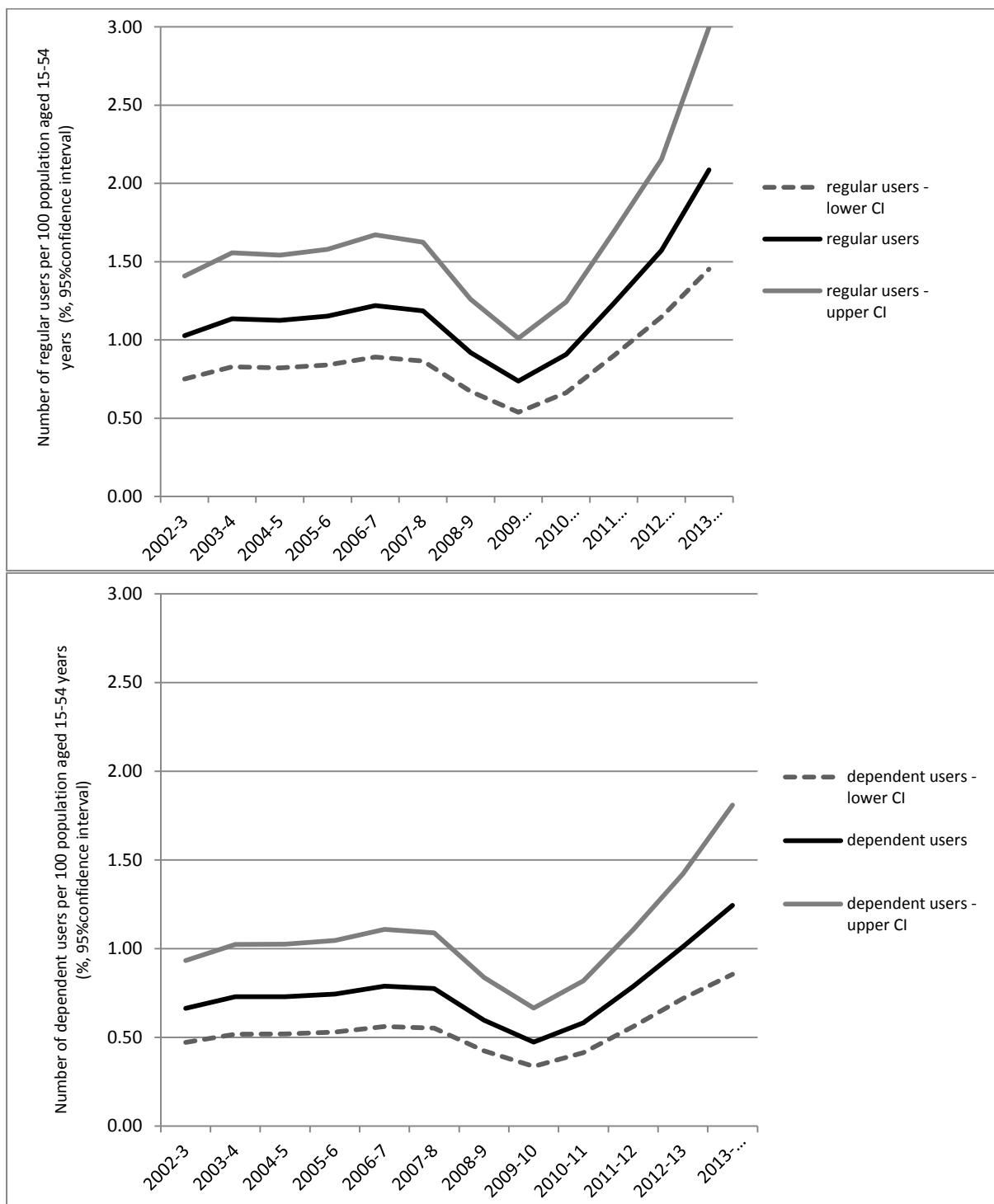
### **Data sources considered for multipliers but which could not be used for this study**

We attempted to obtain multipliers on an annual basis, however due to major limitations in each of the data sources identified for the purposes of this study, we could not use them. These included:

1. Data from the Australian NSP survey (11);
2. Data from interviews with people who inject drugs regularly from the Illicit Drug Reporting System (IDRS) and people who use ecstasy (MDMA) regularly from the Ecstasy and Related Drugs Reporting System (EDRS) (12, 13);
3. Data from McKetin et al.'s Methamphetamine Treatment Evaluation Study (MATES) cohort (14-19);
4. A cohort of methamphetamine users in Melbourne in 2010 (20).

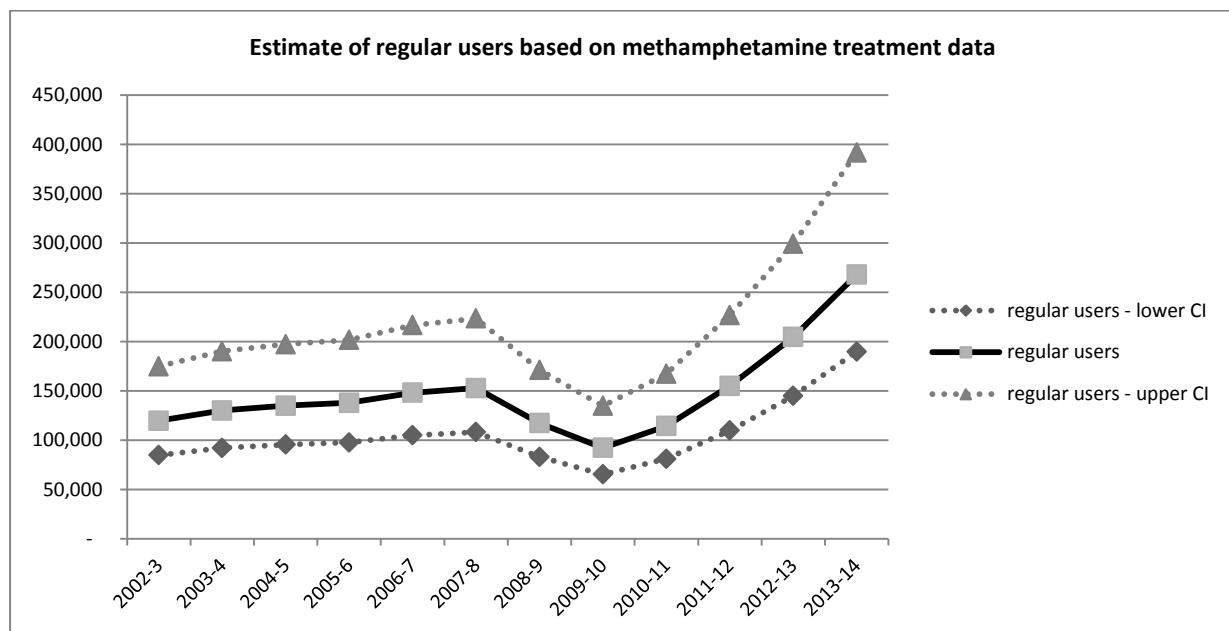
Unfortunately, each of these sources had major limitations for our specific purposes, which precluded their use for estimation. These surveys did not ask specific questions about these events; did not ask about the frequency of methamphetamine use or dependence; used timeframes that were not consistent with our benchmark data; or contained too few frequent or dependent methamphetamine users to generate multipliers.

**Figure A1: Pooled estimated number of regular and dependent methamphetamine users per 100 population aged 15-54 years (with 95% confidence intervals) in Australia, 2002-2014**



Note: 2013-2014 estimates based only upon indirect estimates generated from treatment data.

**Figure A2: Estimated number of dependent methamphetamine users age 15-54 years in Australia, based on methamphetamine treatment data**



**Figure A3: Estimated number of dependent methamphetamine users age 15-54 years in Australia, based on primary methamphetamine hospital separations data**

