

Drug and Alcohol Services South Australia

# The Social Costs of Alcohol, Tobacco, Opioids, Methamphetamine and Cannabis in Australia

November 2020



# The Social Costs of Alcohol, Tobacco, Opioids, Methamphetamine and Cannabis in Australia

This paper summarises recent research conducted by the National Drug Research Institute (NDRI) and the Australian Institute of Criminology (AIC), which estimated tangible and intangible social costs relating to the use of alcohol, tobacco, opioids, methamphetamine and cannabis in Australia.

## Summary

Tobacco and alcohol have the highest tangible social costs (\$19.2 and \$14.4 billion, respectively), with the largest cost attributed to premature mortality/health care (45% of costs for tobacco and 50% of costs for alcohol). Tobacco also has \$118 billion of intangible social costs.

The highest tangible social costs after tobacco and alcohol were for opioids (\$5.6 billion), where 44% were attributed to premature mortality. Tangible social costs for methamphetamine and cannabis were calculated at \$5.1 and \$4.4 billion, respectively, with 64% of methamphetamine costs and 55% of cannabis costs incurred in the criminal justice system.

## Introduction

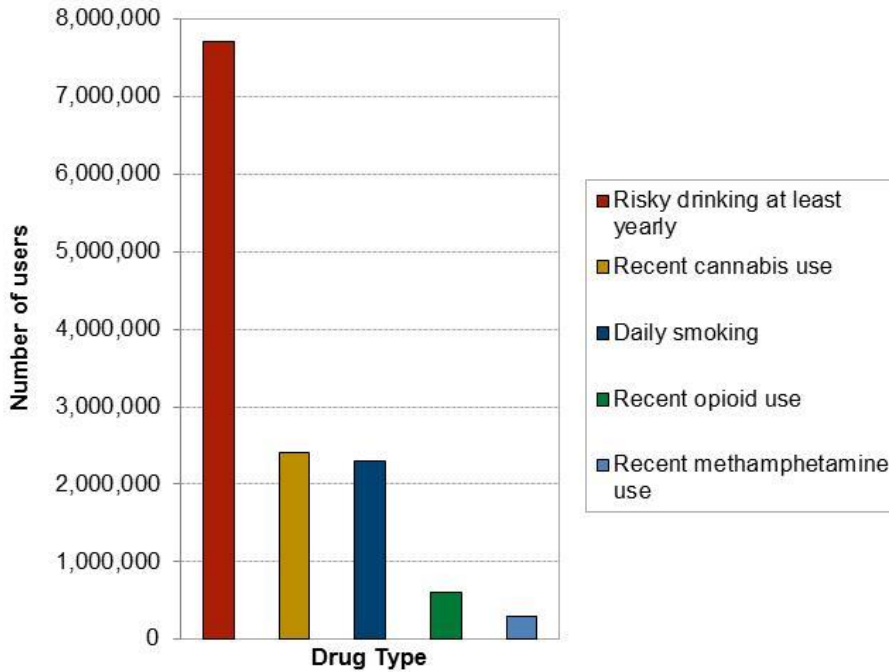
The social costs of selected drugs have recently been identified by NDRI<sup>1 2 3 4</sup>. Cost analyses for tobacco, opioids (non-medical use) and cannabis were based on data collected in 2015-16, while 2013-14 data were used for methamphetamine. The most recent data on social costs associated with alcohol use in Australia were analysed by the AIC in 2010<sup>5 6</sup>. Costs are divided into 'tangible' and 'intangible'<sup>7</sup>.

## Drug Use in Australia

Figure 1 shows the most recent prevalence estimates from 2019<sup>8</sup>. Alcohol is the most commonly used drug in Australia with more than 2 in 5 adults (an estimated eight million people) drinking at levels that increased their risk of injury from a single occasion (consuming more than four standard drinks). There were 1,366 deaths directly attributable to alcohol recorded in 2017, with 4,186 deaths where alcohol was mentioned as being a contributing factor to mortality<sup>9</sup>. Daily smoking is reported by 11% of Australians (an estimated 2.3 million people), and tobacco use results in 20,000 deaths per year<sup>10</sup>.

Cannabis is the most commonly used illicit drug, with 11.6% in 2019 (an estimated 2.4 million people) reporting use at least once in the last 12 months. It has been estimated that approximately 150,000 people are classed as dependent<sup>11</sup>. In contrast, opioids (either illegal opioids or pharmaceutical opioids used for non-medical purposes) and methamphetamine are used by a much smaller number of Australians. In 2019, 2.8% of Australians (an estimated 600,000 people) reported use of opioids at least once in the last 12 months, with 1.3% reporting use of methamphetamine (an estimated 300,000 people). It has been estimated that approximately 104,000 people are classed as dependent on opioids<sup>12</sup>, with 160,000 dependent on methamphetamine<sup>13</sup>. Opioids resulted in 1,123 deaths in 2018 (mostly unintentional overdoses), with pharmaceutical opioids making up 70% of these<sup>14</sup>.

**Figure 1: Estimates of drug use in Australia, 2019**



Data source: National Drug Strategy Household Survey, 2019.

## Tangible Costs

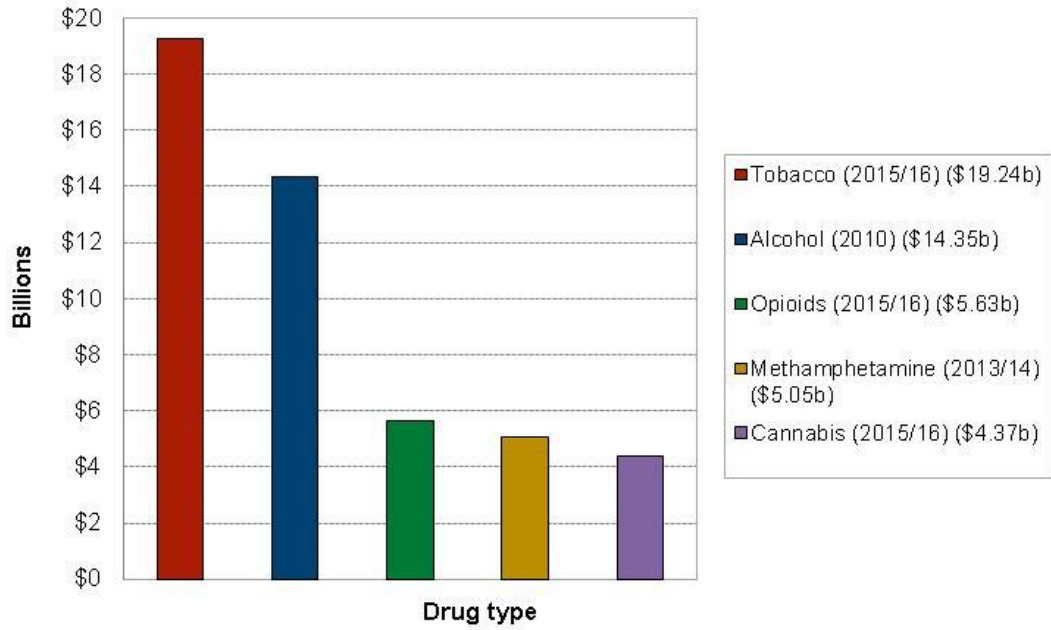
The main tangible social costs include premature mortality, health care costs (hospital and community), workplace costs (accidents and absenteeism) and road accidents, and for all but tobacco, criminal justice costs. Figure 2 presents the overall total cost for each drug, with Figure 3 breaking down the various categories.

Tobacco and alcohol have the highest tangible social costs (close to \$34 billion combined) with the largest cost attributed to premature mortality/health care (\$8.6 billion; 45% of costs for tobacco and \$7.1 billion; 50% of costs for alcohol). Individually, these drugs cost the Australian community 3-4 times that of opioids (\$5.63 billion), methamphetamine (\$5.05 billion) and cannabis (\$4.37 billion). Premature mortality was less than 1% of costs for cannabis, but 44% of costs for opioids and 16% of costs for methamphetamine.

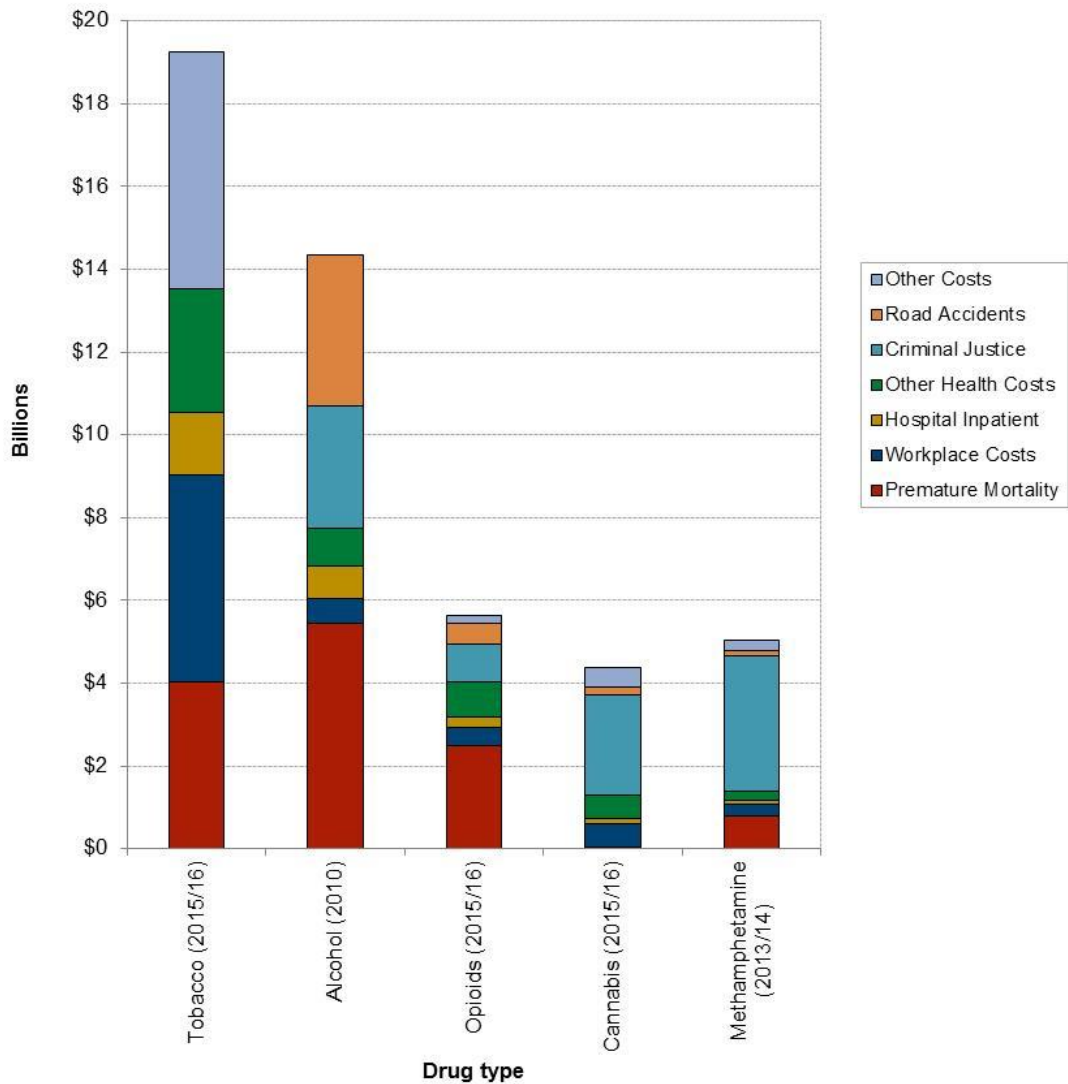
After premature mortality/health care, the biggest costs for tobacco included tobacco purchases, and fires and litter as a result of cigarettes (30%), and for alcohol, road crashes (26%) and criminal justice (21%).

Criminal justice made up the largest proportion of costs for methamphetamine (64%; \$3.25 billion) and cannabis (55%; \$2.4 billion). For cannabis, this was followed by other health care costs (13%) and workplace costs (13%); and for methamphetamine by premature mortality (16%) and workplace accidents/productivity (6%). After premature mortality (44%), the biggest contributor to costs for opioids was criminal justice (17%) and other health care (15%).

**Figure 2: Tangible Social Costs of Drug Use in Australia**



**Figure 3: Distribution of social costs of drug use in Australia**

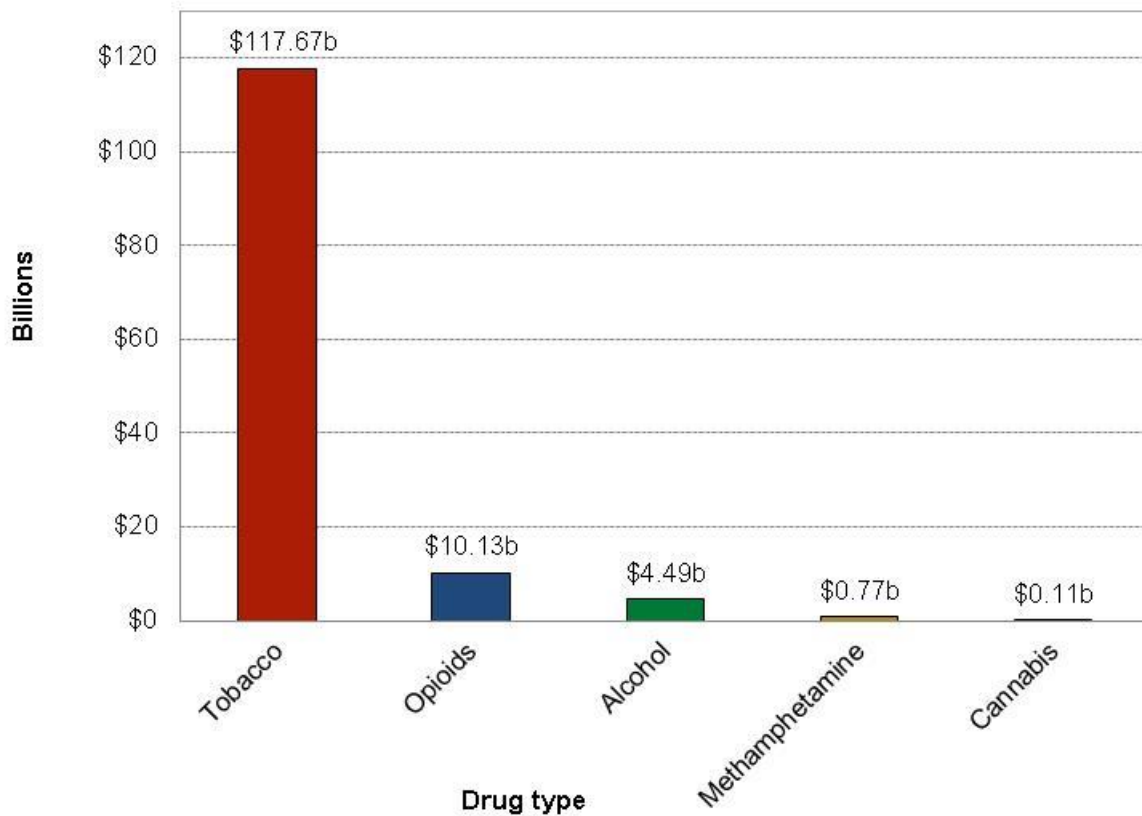


## Intangible Costs

Intangible costs were also calculated, which included: harms to others, value of disability adjusted life years (DALY), costs of purchasing the drug and the intangible costs of premature mortality<sup>15</sup>. Intangible costs for alcohol were not reported in 2010, although research using data from 2004/05 estimated intangible costs of \$4.5 billion, which included loss of life through violence, litter costs, and vehicle and administrative costs associated with road crashes<sup>16</sup>.

The highest intangible costs were for tobacco (\$118 billion) and included premature mortality (value of life lost) and the lost quality of life of those experiencing smoking attributable ill-health. After tobacco, the highest intangible costs were for opioids (\$10 billion), followed by alcohol (\$4.5 billion; using 2004-05 data). Methamphetamine (\$0.77 billion) and cannabis (\$0.11 billion) had the lowest intangible costs, which were attributed to premature mortality (value of life lost).

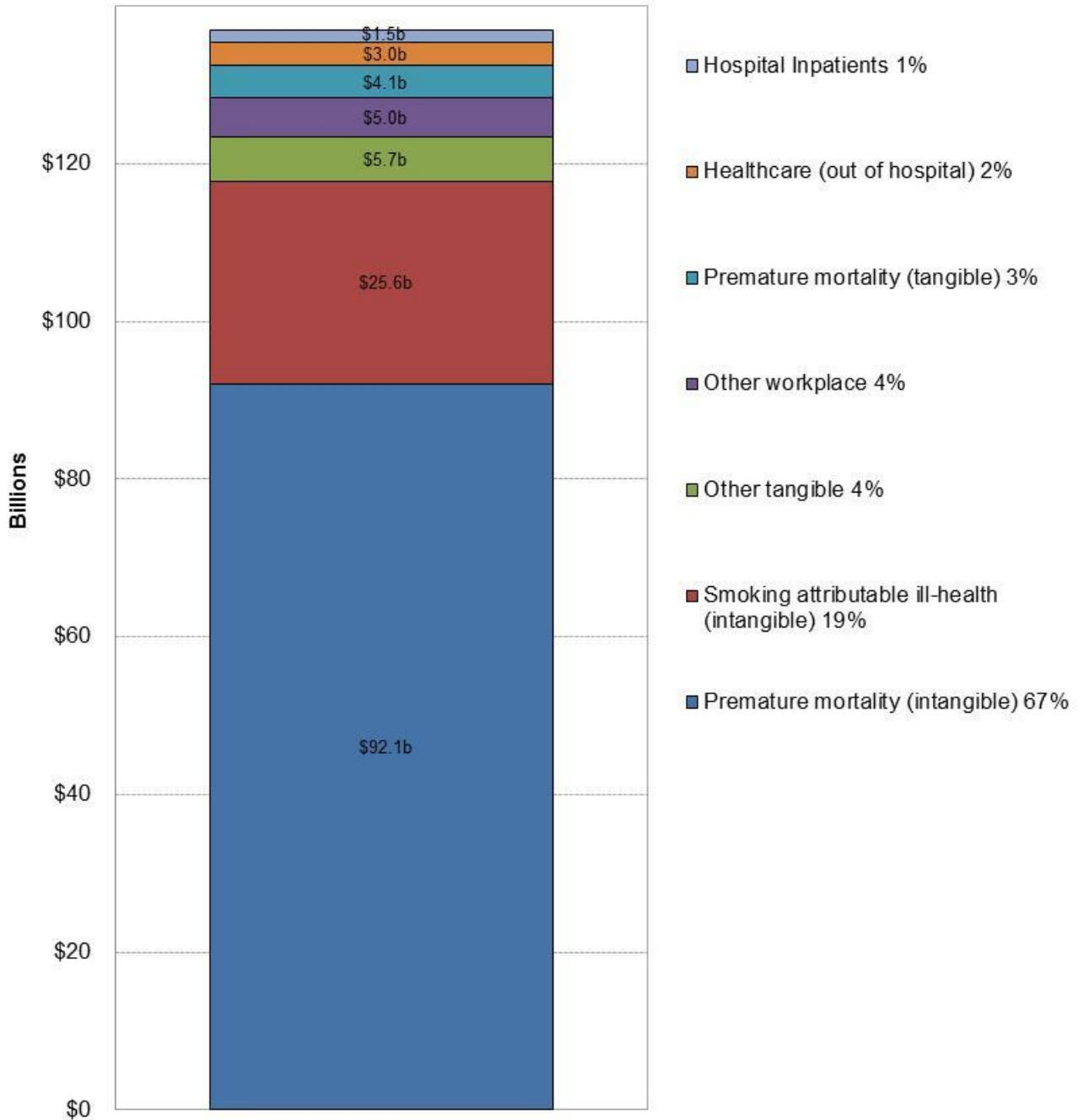
**Figure 4: Intangible Social Costs of Drug Use in Australia**



# APPENDIX A: Costs associated with individual drugs

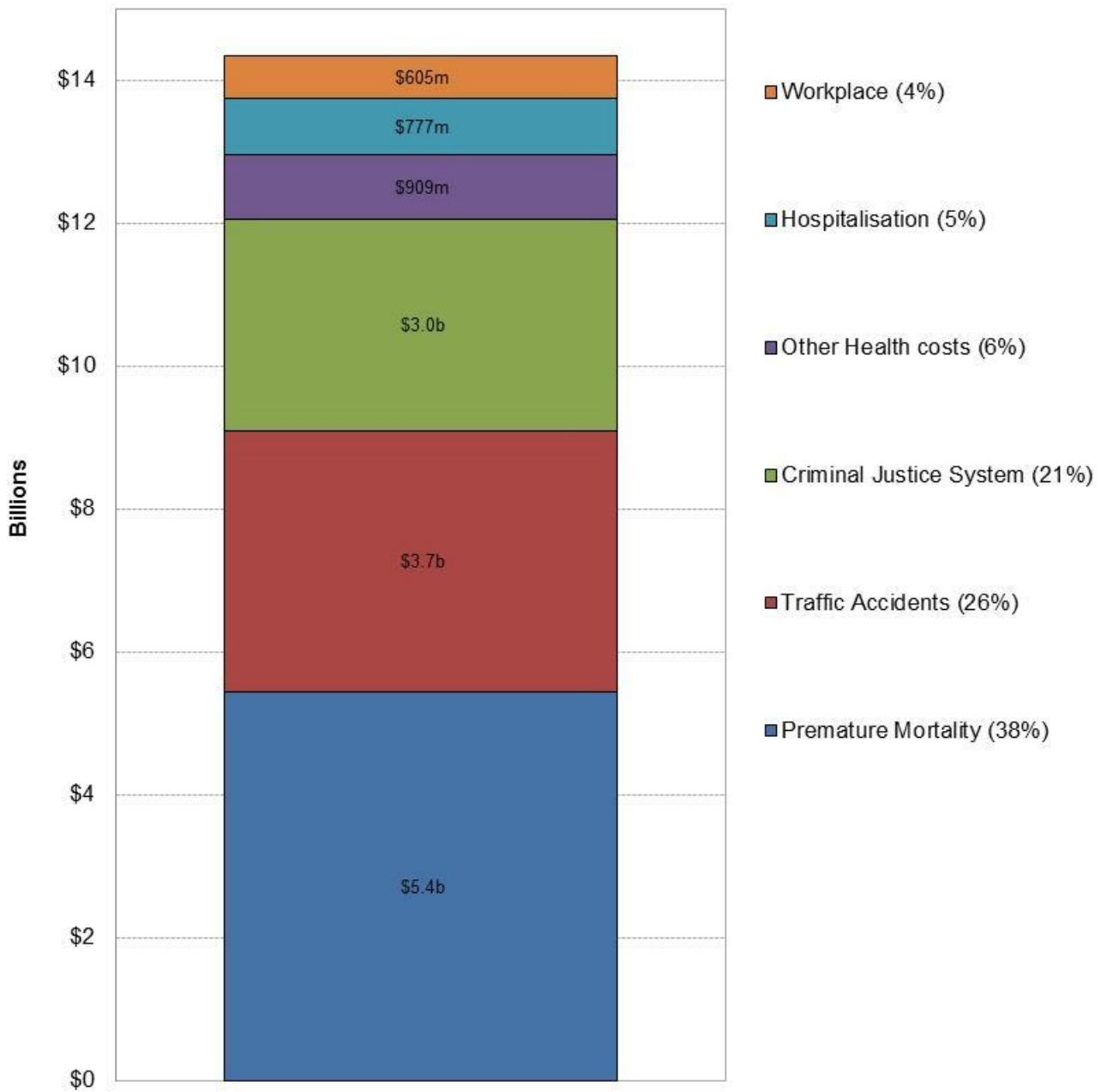
## Tobacco

Distribution of intangible and tangible costs of tobacco in Australia (2015/16)



# Alcohol

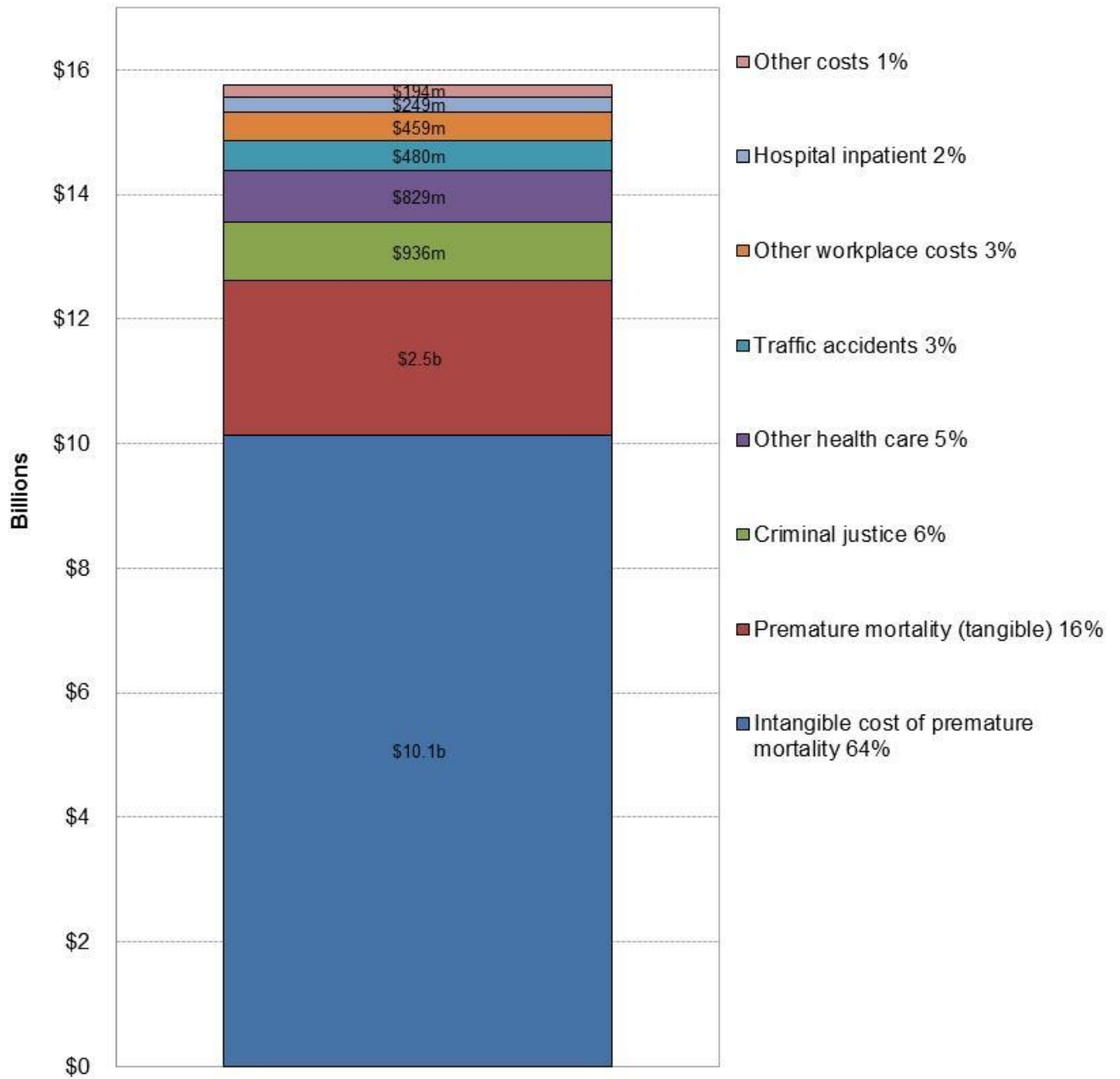
## Distribution of tangible costs\* of alcohol use in Australia (2010)



\* Intangible costs were not reported in 2010

# Opioids

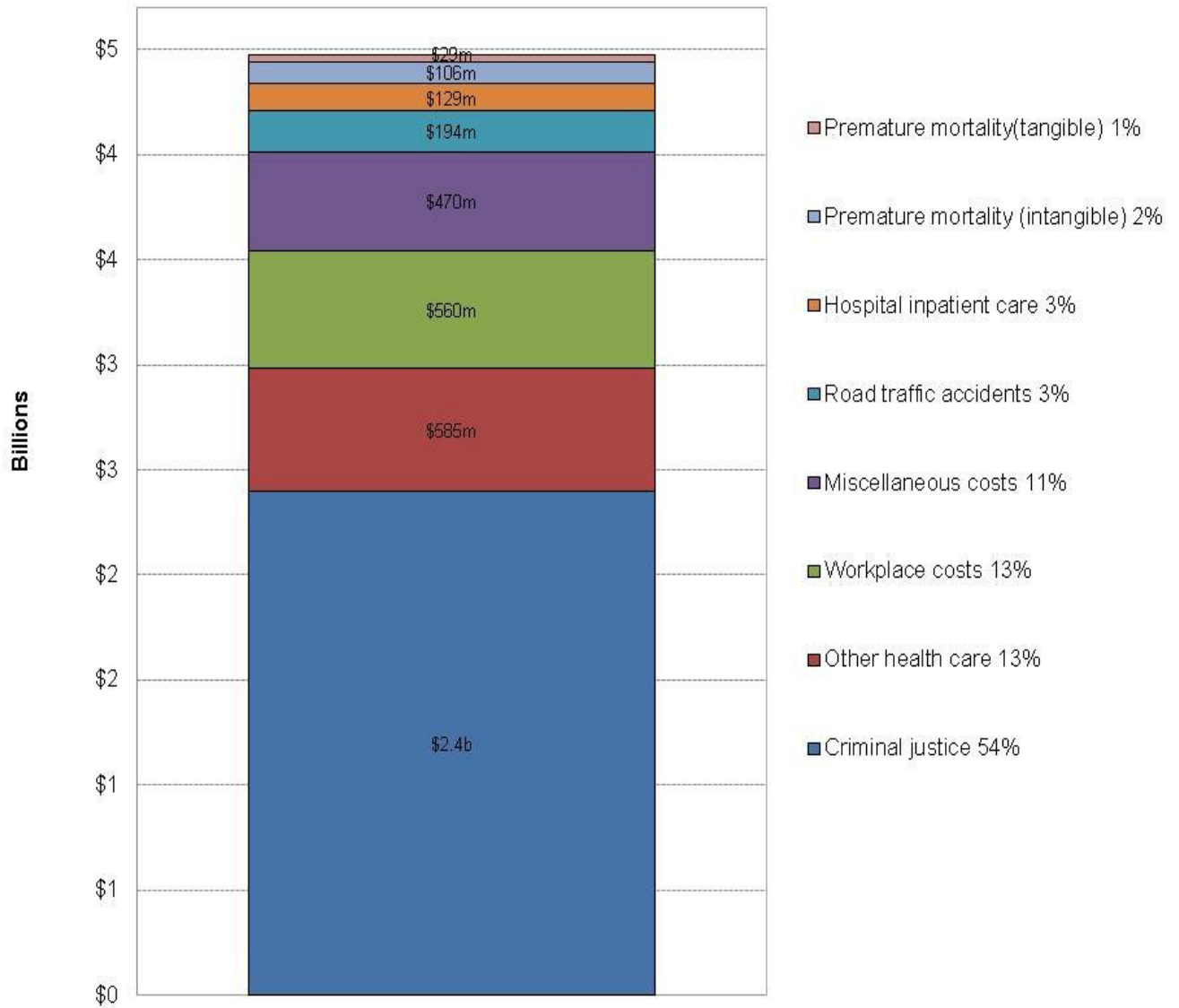
**Distribution of intangible and tangible costs of non-medical opioid use in Australia (2015/16)**





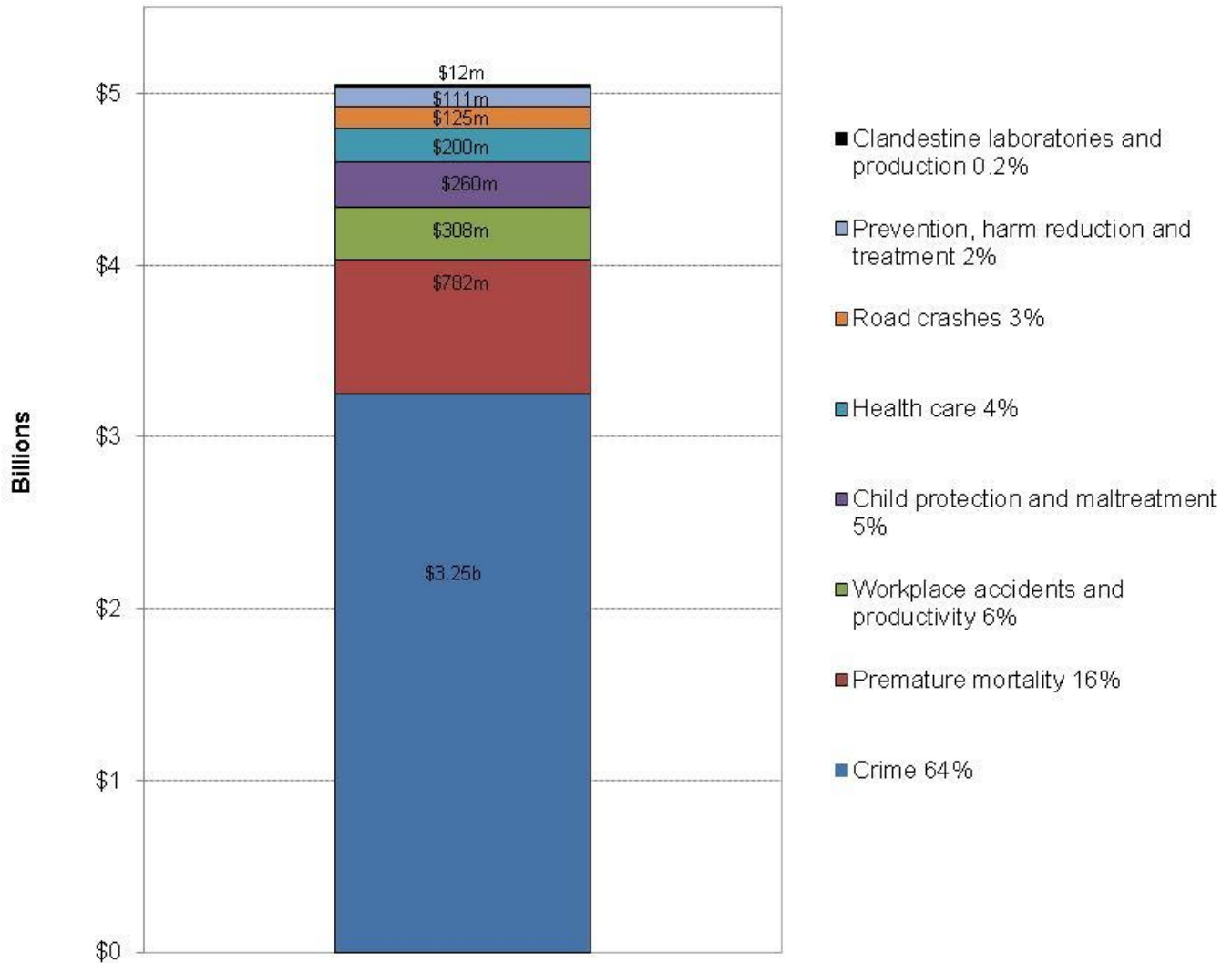
# Cannabis

**Distribution of intangible and tangible costs of cannabis use in Australia (2015/16)**



# Methamphetamine

**Distribution of social costs of methamphetamine use in Australia (2013/14)**



## For more information

This report was produced by Marie Longo, Richard Cooke and Lisa Weir, Planning and Performance Unit, Drug and Alcohol Services South Australia.

For more information, please contact:

Planning and Performance Unit  
 Telephone: 08 7425 5101  
 Email: [richard.cooke@sa.gov.au](mailto:richard.cooke@sa.gov.au)

1 National Drug Research Institute (2019). Identifying the social costs of tobacco use to Australia in 2015/16. Curtin University, Perth, Western Australia.  
 2 National Drug Research Institute (2020). Quantifying the social costs of pharmaceutical opioid misuse and illicit opioid use to Australia in 2015/16. Curtin University, Perth, Western Australia.  
 3 National Drug Research Institute (2016). The Social Costs of Methamphetamine in Australia 2013/14. Curtin University, Perth, Western Australia.  
 4 National Drug Research Institute (2020). Quantifying the Social Costs of cannabis used to Australian in 2015/16. Curtin University, Perth, Western Australia.  
 5 Manning M, Smith C & Mazerolle P 2013. The societal costs of alcohol misuse in Australia. Trends & issues in crime and criminal justice no. 454. Canberra: Australian Institute of Criminology.

---

6 While the total costs of alcohol have been included in the comparison, different methodologies have excluded alcohol from other comparison graphs. Differences in timeframe and methodology should be considered when making comparisons between the different drugs.

7 Note that for tobacco, tangible costs include the purchase of tobacco by dependent smokers (\$5.5b); this is not included in the tangible costs for any of the other drugs. This makes it the largest single contributor to tangible costs for tobacco, followed by healthcare at \$4.5b and premature mortality at \$4.1b. Although excluded from the final costs, they were estimated for the other drugs as \$1.3m for methamphetamine, \$312.4m for cannabis and \$1.4b for opioids (not mentioned for alcohol).

8 Australian Institute of Health and Welfare 2020. National Drug Strategy Household Survey 2019. Drug Statistics series no. 32. PHE 270. Canberra AIHW.

9 ABS (Australian Bureau of Statistics) 2018. Causes of Death, Australia, 2017. ABS cat. no. 3303.0. Canberra: ABS.

10 National Drug Research Institute (2019). Identifying the social costs of tobacco use to Australia in 2015/16. Curtin University, Perth, Western Australia.

11 Global Burden of Disease Collaborative Network, 2018. Global Burden of Disease Study 2017 (GBD 2017) Results, Institute for Health Metrics and Evaluation, Seattle. Available from <http://ghdx.healthdata.org/gbd-results-tool>.

12 Global Burden of Disease Collaborative Network, 2018. Global Burden of Disease Study 2017 (GBD 2017) Results, Institute for Health Metrics and Evaluation, Seattle. Available from <http://ghdx.healthdata.org/gbd-results-tool>.

13 Degenhardt, L., Larney, S., Chan, G., Dobbins, T., Weler, M., Roxburgh, A., Hall, W.D., McKetin, R., 2016a. Estimating the number of regular and dependent methamphetamine users in Australia, 2002–2014. Medical Journal of Australia 204, e1.

14 ABS (Australian Bureau of Statistics) 2019. Causes of Death, Australia, 2018. ABS cat. no. 3303.0. Canberra: ABS.

15 The cost for methamphetamine is based on an estimate that is consistent with other estimates used in the analysis.

16 Collins DJ & Lapsley HM 2008. The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05. National Drug Strategy Monograph Series No. 64.