

Tracking the highs and lows: Methamphetamine and heroin price and purity shifts in Melbourne, Victoria (2009-2020)

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Introduction: Previous work has shown dramatic declines in purity-adjusted prices of methamphetamine in Melbourne. Our study builds on this work by examining trends in purity and prices of methamphetamine and heroin from 2009 to 2020 in Melbourne, Victoria.

Method: Purity data for methamphetamine and heroin were derived from illicit drug seizures conducted by Victoria Police. Data on methamphetamine and heroin purchases were collected from the Melbourne Injecting Drug User cohort study (SuperMIX) and from 'VMAX,' a cohort of people who use methamphetamine in Victoria. These datasets were combined to generate purity-adjusted price per gram (PPG). The significance of changes in purity, price, and purity-adjusted PPG was assessed using F-tests for each year of the study period.

Key Findings: An increase in the average purity of methamphetamine was observed from 2009, with median purity plateauing at over 80% from 2012 onwards. In contrast, the average purity of heroin remained consistently low until 2018, with a notable increase in 2019. The average unadjusted PPG for methamphetamine increased until 2012, followed by a decline. For heroin, minimal fluctuations in PPG were observed until 2018. The increase in unadjusted methamphetamine PPG observed in the early stages of the study was offset by increases in purity such that the purity-adjusted PPG declined from AUD1,300 in 2009 to AUD450 in 2015, after which it stabilized. In contrast, the purity-adjusted PPG for heroin was stable between 2009 and 2014 around AUD1,300, after which it declined to AUD650 by 2020.

Conclusions: The overall declines in both methamphetamine and heroin purity-adjusted prices suggest that people who use these drugs now receive more drug for a given purchase. These changes closely match trends seen in key harms, such as opioid overdose. The relationship between these market parameters and harms needs to be further understood.

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