## 'ICE' IN THE ED: EMERGENCY DEPARTMENT PRESENTATIONS IN THE MELBOURNE INJECTING DRUG USER COHORT STUDY

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Methamphetamine, in particular crystal methamphetamine or 'ice', has drawn considerable interest from the media, police and health services in Australia and elsewhere due to increasing frequencies of methamphetamine-related ambulance attendances and police arrests. There are reports of similar increases in emergency department (ED) presentations, but these are mostly anecdotal or based on routinely collected data sources. We sought to examine the relationship between methamphetamine use and ED utilisation in a cohort of people who inject drugs (PWID).

Self-report data, including drug use, sociodemographics and use of health services, collected through annual interviews with PWID recruited between 2008 and 2010 in Melbourne, was linked to a statewide administrative ED database. Multivariate regression analyses were used to determine predictors of cumulative and frequent ED use (defined as three or more annual presentations).

Among 651 participants observed over a median of 3 years, 42% only used heroin in the past month, over a quarter (27%) used heroin and methamphetamine and 14% only used methamphetamine. Less than a third (31%) of the cohort had at least one ED presentation and there were 70 sets of frequent ED presentations among 59 participants. Primary methamphetamine use, defined as reporting methamphetamine as the main drug of choice or injecting methamphetamine most frequently in the past month, was the only factor predicting both cumulative (incidence rate ratio 1.8, 95% confidence interval (CI) 1.2–2.6) and frequent ED use (adjusted odds ratio 8.7, 95%CI 3.4–22.0).

Among 202 PWID presenting to an ED, methamphetamine use was associated with increased cumulative ED presentations and clustered high-frequency presentations. These data may reflect the impact of increased methamphetamine purity and concomitant reductions in purity-adjusted price noted in Melbourne across the period of data collection. Our findings support the targeting of methamphetamine harm reduction initiatives to current drug users.

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