

ORAL PRESENTATIONS

[ID-O#083] Prescription, Recreational and Illicit Substance Evaluation (PRISE) Program (2018-2024): Emerging drug surveillance and response program in New South Wales, Australia

Thanjira Jiranantakan^a, Daniel Madeddu^a, Darren Roberts^b, Andrew Dawson^c, Nicole Wright^b, Santiago Vazquez^d, Vanessa Shaw^d, Catherine McDonald^d and Jared Brown^e

^aCentre for Alcohol and Other Drugs, NSW Ministry of Health, NSW, Australia; ^bNSW Poisons Information Centre, Sydney Children's Hospitals Network, NSW, Australia; ^cDrug Health Services, Royal Prince Alfred Hospital, NSW, Australia; ^dNSW Health Pathology, Forensic & Analytical Science Service, Forensic Toxicology Laboratory, NSW, Australia; ^eCentre for Alcohol and Other Drugs, NSW Ministry of Health, NSW, Australia

Background: The Prescription, Recreational and Illicit Substance Evaluation (PRISE) Program provides timely toxicology confirmation for patients experiencing severe and unusual toxicities in NSW. Established in response to drug-related harms at music festivals, using the Poisons Information Centre (PIC) and pilot hospitals' referrals, it evolved into a statewide emerging drug surveillance and response program. This study demonstrates the program's operations and outputs.

Method: The PRISE Program databases were reviewed for notifications, clinical outcomes, toxicological results, and responses from July 2018 (inception) to June 2024.

Results: During the six years, the PRISE Program received 1192 notifications from hospital-based toxicology services (454, 38.1%), surveillance of emergency department triage text (236, 19.8%), and PIC (232, 19.5%), with 748 cases proceeded testing (62.8%), and 124 deaths (10.4%). There were 179 distinct detections, including 25 novel psychoactive substances. Key detections include methamphetamine, 3,4-methylenedioxymethamphetamine (MDMA), delta-9-tetrahydrocannabinol, cocaine, heroin, 1,4-butanediol, nitazenes (isotonitazene, etodesnitazene, metonitazene, protonitazene, protonitazepyrone), illicit benzodiazepines (etizolam, bromazolam, flualprazolam, clonazepam, flubromazolam, bromonordiazepam), fentanyl analogues (acetylfentanyl, carfentanyl), 4-fluoroamphetamine and 25C-NBOMe. Fentanyl and ketamine detections were indistinguishable from medically administered. MDMA was confirmed in 103 music festival cases (81.1% of 127 cases), with a median blood MDMA concentration of 0.9 mg/L (IQR 0.4-1.4 mg/L). Preliminary results were reported within two business days in 225 cases (58.1% of 387 cases since 2022). Concerning results were discussed with the NSW Standing Panel on Acute Toxicity Risk. Toxicology results were shared with clinicians, prompted risk communications (21 public warnings, 15 clinical alerts, 10 media releases) and product recalls, guided harm reduction strategies, influenced policies and facilitated cluster investigations and emerging drug surveillance by information sharing nationally and internationally. Multi-agency collaboration is essential for success and improvement.

Conclusion: The PRISE Program enables the timely detection of drugs causing severe harm in NSW and contributes significantly to clinical management and public health interventions.