## The emergence of novel synthetic opioids in Australian drug markets: what does this mean for harm reduction responses?

Amanda Roxburgh,<sup>1,2,3</sup> Emmanuel Mammoliti<sup>1,2</sup>, and Suzanne Nielsen <sup>1,3</sup>

1. Harm Reduction Program, Burnet Institute, Melbourne, Australia

2. National Drug Research Institute, Curtin University, Perth, Australia

3. Monash Addiction Research Centre, Monash University, Melbourne, Australia

Presenter's email: amanda.roxburgh@burnet.edu.au

**Introduction:** Overdose deaths from illicitly manufactured fentanyl and analogues in North America, and the emergence of nitazenes in the US and UK has driven concern about expansion of novel synthetic opioids (NSOs) into Australian drug markets. This presentation discusses what we know about NSOs in Australia.

Methods: Scoping review of the literature/indicators available on NSOs in Australia.

**Results:** Publications on monitoring systems (including wastewater, syringe residue/urine samples, cryptomarkets and emergency department – ED - presentations) have identified various NSOs (including  $\beta$ -U10, nitazene compounds) for the first time. Detections of nitazene compounds have emerged in ED (n=8) presentations from 2021, two involved intentional nitazene consumption. NSOs have also been identified for sale on cryptomarkets. Mortality studies have identified fentanyl-contaminated heroin deaths (N=9, 2015), fentanyl analogue (furanylfentanyl, acetylfentanyl) (N=22, 2013-2021) deaths, and illicitly manufactured fentanyl (including fentanyl-contaminated cocaine and MDMA) (N=15, 2013-2021) and other synthetic opioid (mostly U-447700; (N=12, 2016-2021) deaths. Victorian Coroner's reported at least 16 nitazene deaths (VIC, 2021-onwards). A sizeable (11kg) seizure of illicit fentanyl from the US was detected in 2021, and 22 detections of nitazenes from the UK in 2023. 46 public drug warnings have been released across Australia since 2019, 14 involved NSOs, and 5 involved opioid-contaminated (fentanyl/nitazenes) stimulants.

**Discussions and Conclusions:** Australia has strong monitoring capacity for NSOs postconsumption, particularly in the ED setting. Pre-consumption monitoring (i.e. drug checking) would be more beneficial in reducing harms, particularly for people who are opioid-naïve and may be unknowingly consuming NSOs. Expanding drug checking services across the country would be an important addition to monitoring capability. Expanding take-homenaloxone availability, particularly in settings such as night clubs/dance parties, is also warranted given increasing NSO-contamination of stimulants in Australian markets. The demand for NSOs in Australia is not yet clear. This is a rapidly evolving situation and ongoing monitoring is crucial.

**Disclosure of Interest Statement:** AR was supported by a National Health and Medical Research Council (NHMRC) Project Grant (APP1173505).