



# Substances implicated in Non-fatal overdose admissions in Edinburgh

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## Introduction

Rates of Drug-related deaths (DRDs) have increased exponentially over the last decades. Illicit benzodiazepines are now much more frequently implicated in such overdoses. Non-fatal overdoses (NFOs) are a reliable predictor for subsequent DRDs deaths. However, few studies have examined patient characteristics and substances implicated in such overdoses. We identified substances commonly misused in NFOs in patients admitted to the Royal Infirmary of Edinburgh.

## Methods

We conducted face-to-face surveys on 21 patients admitted in September 2020 to the Acute Medical unit. We selected all patients suspected of substance misuse. Participants reported substances misused in their latest overdose. We compared their medical records with previous overdose history from 2017 to 03/2020, defined as the "Pre-COVID-19" period. The "During COVID-19" period was defined as NFOs occurring following April 1<sup>st</sup>, 2020. 42 NFOs presented in "Pre-COVID-19" and 43 NFOs "During COVID-19".

## Results

### Patient Demographics

	Males (%)	Age(years)
NFOs	71	38
DRDs	69	42

### NFOs vs DRDs

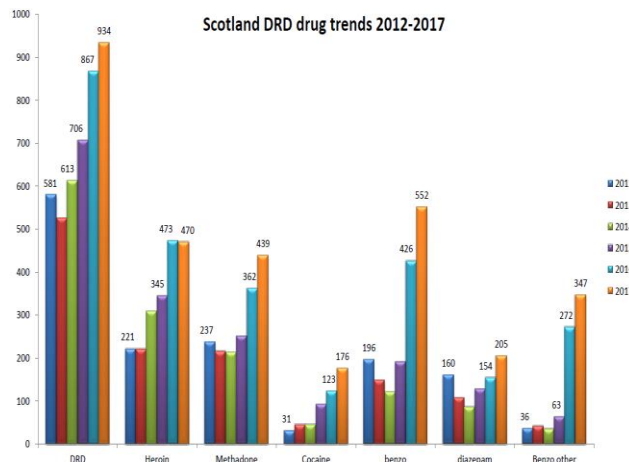
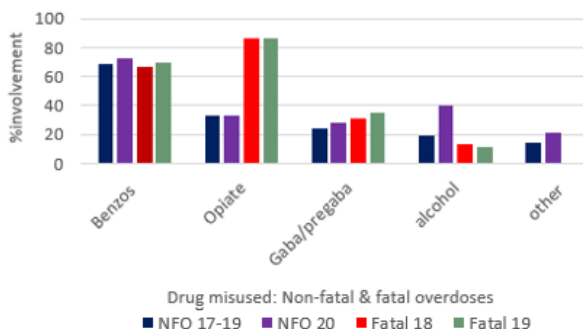


Fig.1 Illustrates the trend in increasing DRDs in Scotland from 2012-2017.

The participants' average age was 42 and 71% were male (n=15) at the point of contact in 2020. Benzodiazepines (any type) were implicated in 69%, 72%; opiates 33%, 33%; gabapentin/pregabalin 24%, 19%; alcohol 19%, 40%; other substances 14%, 21%; and polysubstance use 48% and 70% comparing the Pre- and During COVID-19 timeframe, respectively.

Table 1. Illustrates patient demographics in NFOs Figure 2. Compares substances involved in NFOs pre-COVID-19(NFO 17-19) and during COVID-19(NFO 20) to Scottish DRDs report 2018(Fatal 2018) & 2019(Fatal 2019).

## Conclusions

This study demonstrates NFOs and DRDs are comparable in both patient demographics and substances misused. We observed benzodiazepines were the most frequently misused substance in NFOs. Opiates, and alcohol were also frequently implicated in such overdoses and participants were likely to concomitantly misuse several substances. NFOs can act as a predictor of future DRD characteristics. Regulatory bodies and health providers should act at the point of contact when patients present with NFOs.