
Drug and alcohol poisonings: new trends challenge emergency departments

INVITERT KOMMENTAR

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Alcohol remains the leading cause of substance-related poisonings; however, the rising incidence of cocaine and ketamine poisonings among young adults and women is impacting on emergency preparedness and public health.

A recent study of Oslo Accident and Emergency Outpatient Clinic provides an updated overview of drug and alcohol poisonings in Norway's capital city in the period 2019–2023 [\(1\)](#). During this five-year period, 18,402 cases were treated, of which almost half were due to the consumption of pure ethanol. The findings confirm that alcohol remains the predominant single cause, while also revealing marked shifts in substance use patterns. Cocaine poisonings doubled, ketamine poisonings increased more than tenfold, and a growing number of women were treated for drug and alcohol poisoning.

The median patient age was 35 years, and approximately two-thirds were men.

However, the proportion of female patients increased throughout the study period, both for alcohol and other substances. This trend is consistent with European data indicating a rising prevalence of severe substance-related problems among women [\(2\)](#). The study also shows that use of cocaine, MDMA and ketamine is highest among young adults, and that poisonings involving these substances represent a growing challenge for emergency departments and clinics.

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These developments are clinically significant for emergency medicine. Cocaine can trigger myocardial infarction, arrhythmias and stroke, including in young adults with no risk factors (3). Chest pain following cocaine use should, therefore, always be considered potentially coronary in origin. Ketamine poisoning frequently manifests as agitation, hallucinations and dissociation, while chronic use can lead to ulcerative cystitis, causing severe pain and urinary dysfunction (4). The progression from isolated cases to several dozen poisonings annually indicates that ketamine use must now be regarded as a major clinical concern.

This trend poses not only medical but also organisational challenges for emergency departments and clinics. Caring for agitated and unpredictable patients requires enhanced safety protocols and additional resources. Emergency psychiatry expertise, interdisciplinary collaboration and access to appropriate facilities are essential for the safe management of such situations.

Benzodiazepine poisonings also increased during the study period, particularly among young adults, which may be a reflection of prescription practices and illegal distribution. Meanwhile, the incidence of heroin and opioid poisonings remained high, consistent with national overdose statistics (5). Collectively, these findings indicate an increasingly complex pattern of substance use, highlighting the need for up-to-date knowledge and preparedness throughout the emergency care chain.

The study also illustrates the influence of social factors on substance use patterns. When the hospitality sector was shut down during the COVID-19 pandemic, a marked decline was observed in the number of poisonings, particularly due to alcohol consumption, demonstrating the strong link between substance use, social environments and accessibility.

«Drug and alcohol poisoning should be regarded as a challenge for emergency medicine and an indicator of high-risk substance use and increased mortality»

Data from Oslo Accident and Emergency Outpatient Clinic provide valuable insight into substance use trends in Norway. The study draws on a large, systematically collected dataset spanning several years, which is a major strength of the study. Consistency with police seizure figures, wastewater analyses and survey data (6, 7) further supports the validity of the findings. However, the study does not capture the most severe cases, which are often transported directly to hospital. Consequently, it provides a comprehensive overview of acute poisonings but does not reflect the complete range of clinical severity.

Drug and alcohol poisoning should be regarded as a challenge for emergency medicine and an indicator of high-risk substance use and increased mortality (8). The findings highlight the need for targeted preventive measures for high-risk groups, such as young adults and women, alongside improved harm-reduction strategies and accessible healthcare services. For the health service, this requires combining clinical

preparedness with preventive strategies, including up-to-date knowledge of toxidromes, prompt access to antidotes such as naloxone, and standardised protocols for managing agitated patients.

REFERENCES

1. Larsen KS, Brekke M, Vallersnes OM. Rusrelaterte forgiftninger ved Legevakten i Oslo 2019–23. *Tidsskr Nor Legeforen* 2025; 145. doi: 10.4045/tidsskr.25.0128. [CrossRef]
2. European Union Drug Agency. European Drug Report 2025: Trends and Developments. Luxembourg: Publications Office of the European Union, 2025. https://www.euda.europa.eu/publications/european-drug-report/2025_en Accessed 14.10.2025.
3. Zimmerman JL. Cocaine intoxication. *Crit Care Clin* 2012; 28: 517–26. [PubMed] [CrossRef]
4. Schep LJ, Slaughter RJ, Watts M et al. The clinical toxicology of ketamine. *Clin Toxicol (Phila)* 2023; 61: 415–28. [PubMed][CrossRef]
5. Folkehelseinstituttet. Dødsårsaker i Norge 2023. Oslo: FHI, 2024. <https://www.fhi.no/publ/2024/dodsarsaker-i-norge-2023/> Accessed 14.10.2025.
6. Kripas. Narkotika- og dopingstatistikk 2023. Oslo: Kripas, 2024. <https://www.politiet.no/globalassets/tall-og-fakta/narkotika/narkotikastatistikk-2023.pdf> Accessed 14.10.2025.
7. Bretteville-Jensen AL, Amundsen EJ, Mounteney J. Key Interpretation Challenges for Wastewater-Based Epidemiology of Illicit Drugs: A Norwegian Three-City Case Study. *Eur Addict Res* 2022; 28: 436–45. [PubMed][CrossRef]
8. Lund C, Bjornaas MA, Sandvik L et al. Five-year mortality after acute poisoning treated in ambulances, an emergency outpatient clinic and hospitals in Oslo. *Scand J Trauma Resusc Emerg Med* 2013; 21: 65. [PubMed][CrossRef]

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