



PENINGTON
INSTITUTE

Global Overdose Snapshot 2022

A Penington Institute Report

August 2022



For more information, contact:

Penington Institute
95 Drummond Street
Carlton Vic 3053

T: 61 3 9650 0699
F: 61 3 9650 1600
www.penington.org.au

Copyright © Penington Institute

Every effort has been made to present all information accurately. Penington Institute accepts no liability for and does not indemnify against any loss or damage that may result from any actions taken based on the information contained in this report.

Suggested citation:

Penington Institute (2022). *Global Overdose Snapshot 2022*. Melbourne: Penington Institute.

ISSN: 2653-6021

About us

Like it or not, drugs are a part of every society.

It would be naive to think otherwise. And cruel to ignore it. And, while we don't encourage drug use, there are other things that we will always encourage.

Understanding. Openness. Empathy. Communication.

The reasons people use drugs, including alcohol and pharmaceuticals, are countless. Risky behaviours are part of being human. We need to understand that, not condemn it.

At Penington Institute, we believe in approaching drug use in a safe, considerate and practical way.

We seek solutions, not scapegoats. We strive for positive outcomes, not negative stereotypes.

We follow evidence and data, but we temper it with compassion and empathy to create change for the better.

Our default as a society has been to pour scorn on those who use drugs and judge them harshly by seeing their problems as self-inflicted.

But human beings are complex, and so is this issue.

Judging is easy. Helping is more of a challenge.

How do we rise to that challenge?

Our focus is on making individuals and families safer and healthier.

Our goal is simple: to help communities and frontline services reduce harm and to make public policy work for the people, not against them.

We won't ever give up on that goal, or the people it exists to serve.

Penington Institute is the convenor of International Overdose Awareness Day. Through this global campaign, we aim to bring about positive change in people, health and law enforcement systems, the economy, and society.

CONTENTS

1. INTRODUCTION	6
2. DRUG USE IS INCREASING	7
3. DRUG TYPES ARE INCREASING AND SPREADING THROUGHOUT THE WORLD	7
<hr/>	
3.1. Opioids (including synthetic opioids)	8
3.2. Stimulants	12
3.2.1. Amphetamine-type stimulants	12
3.2.2. Cocaine	15
3.3. New psychoactive substances (NPS)	15
4. CHALLENGES	17
<hr/>	
4.1. A lack of reliable overdose data	17
APPENDIX – OVERDOSE DEATHS IN SELECTED COUNTRIES	21
<hr/>	
5.1. Australia	21
5.2. Canada	21
5.3. England and Wales	21
5.4. European Union	22
5.5. New Zealand	25
5.6. Northern Ireland	25
5.7. Scotland	26
5.8. Serbia	26
5.9. Ukraine	26
5.10. United States	27

FIGURES

FIGURE 1. GLOBAL NUMBER OF OPIOID USERS, 2010 AND 2020	8
FIGURE 2. NUMBER OF OPIOID USERS AND PROPORTION OF OPIATE USERS IN REGIONS AND SELECTED SUBREGIONS, 2020	9
FIGURE 3. OPIOIDS MOST USED FOR NON-MEDICAL PURPOSES, BY COUNTRY, 2020	10
FIGURE 4. COUNTRIES IN EAST AND SOUTHEAST ASIA REPORTING METHAMPHETAMINE AS THEIR PRIMARY DRUG OF CONCERN, 2010 AND 2011	13
FIGURE 5. NUMBER OF REPORTED NPS DETECTED BY UNODC EARLY WARNING ADVISORY, BY COUNTRY	16

1. Introduction

There is an international crisis of drug overdose. Over the last twenty years drug overdose deaths have increased significantly in many parts of the world. Each year a record number of deaths are reported, predominantly driven by the misuse of opioids, often in combination with other drugs including benzodiazepines, stimulants and alcohol.

Overdose often happens accidentally, with many overdose deaths caused by multiple contributing drugs rather than a single substance. It is often a complicated and messy story involving the diversion of legally prescribed controlled substances, overprescribing, the infiltration of highly potent illicitly manufactured substances into drug markets, and a lack of trust and investment in proven methods of prevention and treatment, such as Needle and Syringe Programs,¹ Opioid Substitution Therapy² and easy access to naloxone.

Drug overdoses, both fatal and non-fatal, will continue to expand beyond what is considered the epicentre in North America, deeply affecting individuals, families, and communities. Without question, the opioid epidemic – evolving with ever-more potent synthetic opioids and stimulants, often taken together – is reshaping life in North America and has the potential to do the same in other countries.

As illustrated clearly by the data contained in the United Nations Office of Drugs and Crime's (UNODC) *World Drug Report 2022*, the size of and attention given to the North American opioid epidemic has hidden the extent and severity of both fatal and non-fatal drug overdose throughout the rest of the world. The rise in overdose is due not only to the use of opioids but to a rise in drug use and the increased use of stimulants, most notably cocaine and methamphetamine, and synthetic drug types – most markedly synthetic opioids such as fentanyl and tramadol.

Effective responses, needed now more than ever, are not being implemented to meet this growing challenge. For this to happen there needs to be greater recognition of both fatal and non-fatal overdoses in all countries. The impact of this global drug overdose crisis will continue to grow unless effective, proven responses are implemented.

¹ Needle and Syringe Programs provide sterile injecting equipment, health information and education and voluntary referral to health and welfare services for people who use drugs. The service is unique as a preventative and early intervention measure, located between supply reduction (such as policing) and demand reduction (such as abstinence campaigns and encouragement into treatment).

² Opioid Substitution Therapy is an evidence-based, cost-effective public health strategy for managing opioid dependence. Methadone and buprenorphine have been declared by the World Health Organization as essential medicines that can significantly improve and save lives and classified as medicines to which people, many who are marginalised, should have access at all times and in sufficient amounts. See <https://lifesavers.global/> for more detail.

2. Drug use is increasing

In 2020, an estimated 284 million people – one in every 18 people aged 15-64 – had used a drug in the past 12 months, a 26 per cent increase from 2010.^{3,4} It is projected that the number of people using drugs by 2030 will rise by 11 per cent globally, and by as much as 40 per cent in Africa.^{5,6}

Across most regions and for most drug types, young people are using more drugs than any previous generation. In Africa and the Americas, most people being treated for drug use disorders are under 35 years of age.⁷

By 2020, not only had the range of available drugs expanded considerably, but many were cheaper to produce and easier to transport, lowering consumer prices and making them accessible to more people than ever before. New markets have opened and continue to expand, particularly for cocaine and amphetamine-type stimulants (ATS), but also for other drug types including synthetic opioids.

Some of the new drugs available today – most notably synthetic opioids and amphetamine-type stimulants – are more dangerous than their counterparts were 20 or even 10 years ago. Not only are these drugs considerably more dangerous than other drug types, but they are often consumed in more risky ways, thereby increasing both the acute and chronic risks associated with drug use. The intentional and unintentional practice of taking more than one drug, either at the same time or sequentially (often referred to as poly-drug use) has continued to increase. Poly-drug use increases risks, most notably of toxicity produced by drug interactions which can result in fatal and non-fatal overdose.

3. Drug types are increasing and spreading throughout the world

Unlike ever before, people are using, misusing, and abusing pharmaceutical drugs, heroin and other drugs including amphetamine-type stimulants, and new psychoactive substances (NPS) such as

³ UNODC (2022). *World Drug Report 2022*, [booklet 1](#), p. 60.

⁴ In 2019 new data on drug use from India and Nigeria became available, increasing the number of people estimated to have a drug use disorder by 15 percent from 30.5 million to 35.3 million, and resulting in the global number of opioid users being 50 per cent higher than previously thought.

⁵ UNODC (2021). *World Drug Report 2021*, [booklet 1](#), p. 11.

⁶ IDPC (2022), *The World Drug Report 2021: A critical assessment of projected increases in African drug use*. IDPC's response to the 2021 World Drug Report highlights the limitation to how data is collected and the lack of a robust baseline to project the 11 percent and 40 percent increase. Demographic factors contributing to this rise are not detailed but presumed to be due to increased urbanisation and growing number of young people in African countries.

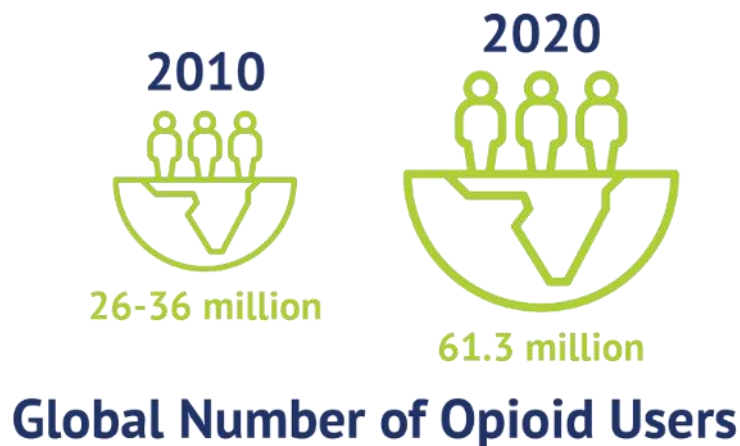
⁷ UNODC (2022). *World Drug Report 2022*, [booklet 1](#), p. 30.

synthetic cannabinoids and fentanyl analogues. For example, the number of different types of opioid NPS found worldwide has increased from just one in 2009 to 86 in 2020.⁸

3.1. Opioids (including synthetic opioids)

Opioids account for two-thirds (69 per cent) of deaths related directly to drug overdose.⁹ Globally, opioid use has doubled from 2010 to 2020 (Figure 1).

Figure 1. Global number of opioid users, 2010 and 2020¹⁰



Today, half of the 61 million people who use opioids live in South Asia and South-West Asia. Prescription opioids used in non-prescribed ways dominate consumption in North America and Oceania, whereas illicitly manufactured drugs (mainly heroin) are the main concern in Eastern and South-Eastern Europe. As shown in Figure 2, the number of opioid users is highest in North America and South Asia but is also high in West and Central Africa and the Near and Middle East/South-West Asia.

⁸ UNODC (2022). *World Drug Report 2022*, [booklet 1](#), p. 67.

⁹ UNODC (2022). *World Drug Report 2022*, [booklet 1](#), p. 28.

¹⁰ UNODC (2022). *World Drug Report 2022*, [booklet 3](#), p. 71.

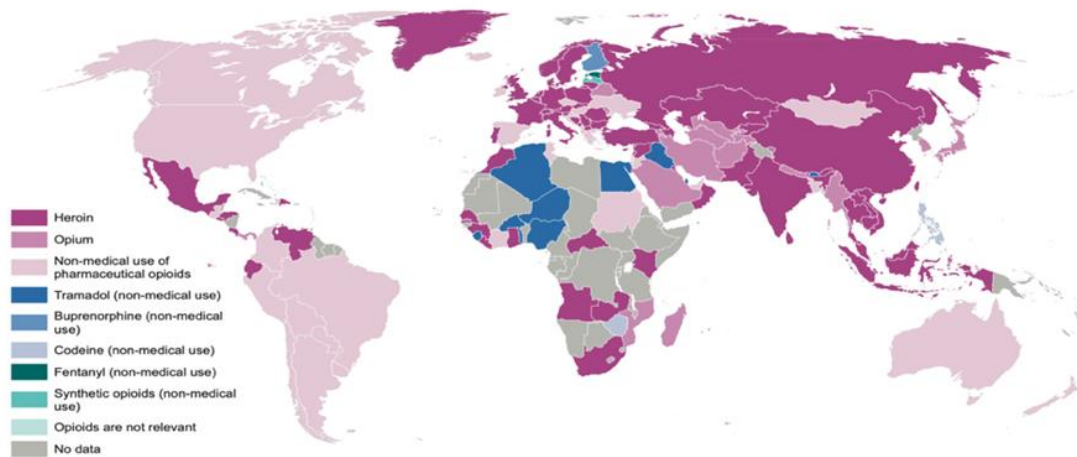
Figure 2. Number of opioid users and proportion of opiate users in regions and selected subregions, 2020¹¹



Figure 3 shows opioid use by opioid-type by country. The dominance of non-medical use of tramadol in Africa and the Middle East is notable.

¹¹ UNODC (2022). *World Drug Report 2022*, [booklet 3](#), p. 82

Figure 3. Opioids most used for non-medical purposes, by country, 2020¹²



Source: UNODC, responses to the annual report questionnaire.

Note: The information is based primarily on the ranking of prevalence of non-medical opioid use confirmed by reported prevalence of non-medical opioid use and, when that was not available, on the ranking or data on treatment of non-medical opioid use reported in the annual report questionnaire. Estimating prevalence on the basis of drug treatment data has its limits, particularly with regard to the non-medical use of drugs such as pharmaceutical opioids, which does not carry the same level of social stigma as that of other drugs and for which users may be less likely to seek treatment.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dashed lines represent undetermined boundaries. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

With respect to opioid overdoses, there are multiple ongoing epidemics in the world; one is driven by the increased presence of the synthetic opioid fentanyl in the United States and Canada, while another in North Africa, West Africa, the Near and Middle East and South-West Asia is due to the non-medical use of the synthetic opioid tramadol.

Synthetic opioids are known to be highly potent and dangerous – and serve as a dramatic illustration of the ways the global drug prohibition regime stimulates innovation in illicit markets. They are easy and cheap to produce, and given their high potency, enter the market in smaller volumes, making them less detectable during transport.

Since 2014, synthetic opioids have been responsible for the rising number of overdose deaths in the United States; in April 2021, the total number of drug overdose deaths surpassed 100,000 for the preceding 12-month period.¹³ Two-thirds of these deaths involved synthetic opioids, primarily

¹² UNODC (2022). *World Drug Report 2022*, [booklet 3](#), p. 84

¹³ Commission on Combating Synthetic Opioid Trafficking (2022). *Final Report*, p. iii.

The Commission on Combating Synthetic Opioid Trafficking, established under Section 7221 of the National Defence Authorization Act for Fiscal Year 2020, was charged with examining aspects of the synthetic opioid threat to the United States—specifically, with developing a consensus on a strategic approach to combating the illegal flow of synthetic opioids into the United States—with an overarching goal of reducing the number of overdose deaths from these drugs. This final report includes action items directed to appropriate executive branch agencies and congressional committees and leadership.

fentanyl. Drug seizure data also support this trend, showing that in some parts of the United States, fentanyl has replaced heroin.¹⁴ The scale of death has prompted not only traditional supply-side anti-drug strategies, but also a new willingness to acknowledge the importance of harm reduction techniques such as treatment, access to opioid substitution programs, and distribution of naloxone.¹⁵

In Canada, overdose mortality has also increased, with the number of opioid-related deaths per quarter consistently about 50 per cent higher than pre-pandemic figures. In 2021, fentanyl was responsible for 87 per cent of opioid-overdose deaths in Canada.¹⁶ Of all accidental opioid-related deaths in 2021, 81 per cent involved only non-pharmaceutical opioids.

Tramadol, another synthetic opioid, is commonly used for non-medical purposes. It is generally cheap and usually sourced from diverted medicines and from counterfeit medicines using tramadol as the psychoactive agent.¹⁷ Depending on dosage, it has either a sedating or a stimulating effect. While it is less potent than the opioids driving the overdose epidemic in North America, it has become a growing concern in African countries.¹⁸

The World Health Organisation reports that use, abuse, dependence, and overdose attributed to tramadol have in recent years emerged as serious public health concerns in countries across several regions, but most notably in Africa and Middle Eastern countries. This is despite past epidemiological studies reporting a lower tendency for tramadol misuse compared to other opioids.¹⁹

In countries where tramadol misuse has been reported as problematic, overdose from tramadol is disproportionately higher than overdose from other substances. Tramadol has become one of the most reported drugs in acute drug toxicity emergency department presentations in the Islamic Republic of Iran.²⁰ Egypt placed tramadol under strict national control due to wide-scale abuse.²¹

Increased harms from tramadol have also been recorded in the United Kingdom and the European Union, but the greatest use and harms from tramadol are unfolding in Africa and West Asia. The

¹⁴ Special Advisory Committee on the Epidemic of Opioid Overdoses (2022). [Apparent Opioid and Stimulant Toxicity Deaths: Surveillance of Opioid and Stimulant-Related Harms in Canada](#). Public Health Agency of Canada, p. 8.

¹⁵ The White House, Executive Office of the President, Office of National Drug Control Policy (2022). [National Drug Control Strategy](#), p. 10.

¹⁶ Special Advisory Committee on the Epidemic of Opioid Overdoses (2022). [Apparent Opioid and Stimulant Toxicity Deaths: Opioid- and Stimulant-related Harms in Canada](#), Public Health Agency of Canada, p. 8.

¹⁷ WHO Expert Committee on Drug Dependence (2018). [Forty-first meeting of the Expert Committee on Drug Dependence report 12-16 November 2018](#), p. 32.

¹⁸ https://www.unodc.org/documents/scientific/Regional_Overview_Africa.pdf

¹⁹ WHO Expert Committee on Drug Dependence (2018). [Forty-first meeting of the Expert Committee on Drug Dependence report 12-16 November 2018](#), p. 31.

²⁰ UNODC (2021). *At the Crossroads of Licit and Illicit: Tramadol and other pharmaceutical opioids trafficking in West Africa*, p. 9.

²¹ Salm-Reifferscheidt L (2018). 'Tramadol: Africa's opioid crisis'. *The Lancet*. 391, pp. 1982-1983.

harm associated with tramadol is increasingly referred to as the other opioid epidemic, but in contrast to the opioid epidemic in North America continues to receive little attention.

3.2. Stimulants

While opioids continue to account for the greatest share of harms and overdose globally, the rise in use of stimulants, most notably cocaine and methamphetamine, has significantly increased risk and contributed to the global drug overdose trend. The UNODC estimates that in 2020, 34 million people used amphetamines (0.7 percent of the world population) and 21.5 million people used cocaine (0.4 percent).²²

3.2.1. Amphetamine-type stimulants

In Europe, stimulants are the second most reported category of drug consumed.²³ Based on the UNODC annual report questionnaire, 11 per cent of countries reported stimulant drugs (ATS or cocaine-type substances) as the drug group causing the greatest number of drug-related deaths.²⁴

The production and use of methamphetamine continues to increase and expand beyond the more traditional markets of East and South-East Asia and North America, notably in South-West Asia, Western Europe and Latin America.²⁵

Recent wastewater analyses found comparable levels of estimated total consumption in some cities in Western, South-Eastern, and Central Europe and Southern Africa. Other data also suggest growing methamphetamine use in other regions. For example, the number of people in treatment for methamphetamine use disorders in Bangladesh more than doubled between 2016 and 2019,³² and there have been accounts of a recent emergence of methamphetamine use in Nigeria.³³ With the increased production of methamphetamine in Afghanistan there is also growing use of the drug there.^{26, 27} In 2020, 1.3 per cent of Afghan students reported use of methamphetamine over the past year.²⁸

²² UNODC (2022). *World Drug Report 2021*, [booklet 1](#), p. 66.

²³ EMCDDA (2022). *European Drug Report Trends and Development 2022*, p. 8.

²⁴ Based on UNODC annual report questionnaire referenced in UNODC (2022). *World Drug Report 2022*, [booklet 2](#), p. 36.

²⁵ UNODC (2022). *World Drug Report 2022*, [booklet 1](#), p. 27.

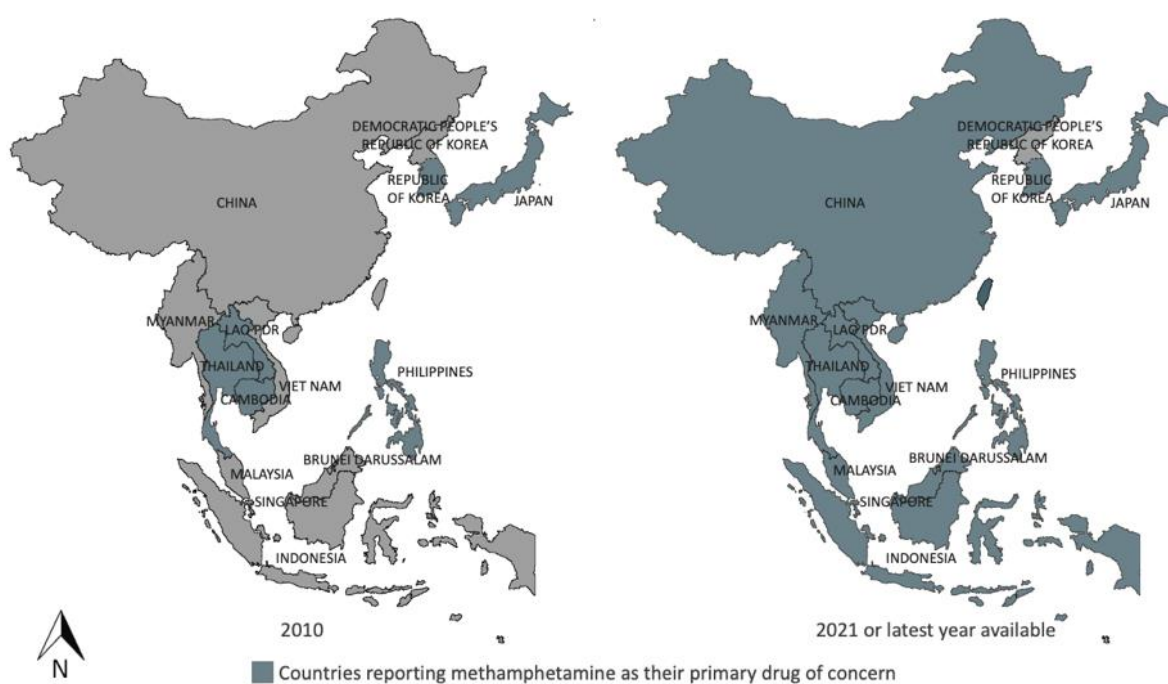
²⁶ UNODC (2022). *World Drug Report 2022*, [booklet 1](#), p. 29.

²⁷ Ahmed I. Al-Asmari, (2021). 'Methamphetamine-Related Postmortem Cases in Jeddah, Saudi Arabia'. *Forensic Science International*. 321.

²⁸ UNODC, UNICEF and Government of Afghanistan, Youth study on substance use and health (unpublished report, 2020). Referenced by UNODC (2022). '[Afghanistan's 'tablet K' – a forensic insight into an emerging synthetic drug market](#)', *Global SMART Update*, p. 4.

As shown in the map below, methamphetamine has been identified as the primary drug of concern in all reporting countries in East and Southeast Asia.²⁹ The only country in the region not reporting methamphetamine as the primary drug of concern is the Democratic People’s Republic of Korea. However, there are reports that use of methamphetamine in North Korea is common enough to justify characterising the situation as a methamphetamine epidemic.³⁰ Figure 4 below shows how the extent of methamphetamine has spread throughout East and Southeast Asia over the past decade.

Figure 4. Countries in East and Southeast Asia reporting methamphetamine as their primary drug of concern, 2010 and 2011³¹



Source: DAINAP.
Note: * Or latest year available.

Increases in deaths involving methamphetamine have been recorded in the Middle East. For example, a recent paper which reviewed drug-related deaths between 2016 and 2018 in Jeddah, Saudi Arabia, found that overdose deaths attributed to methamphetamine had increased by 500 per cent. Most of these deaths involved another drug such as heroin.

Similarly, recent research found that of the 344 methamphetamine-related overdose deaths in Kuwait during the period 2014-2018, morphine was present in 80 per cent of the cases, followed by benzodiazepines (43 per cent), amphetamine (23 per cent) and methamphetamine (23 per cent). As

²⁹ UNODC (2022). [Synthetic Drugs in East and Southeast Asia: Latest developments and challenges, 2022](#), p. 14.

³⁰ Yongjin Yi (2020). 'Methamphetamine Epidemic in North Korea'. *Borgen Magazine*.

³¹ UNODC (2022). [Synthetic Drugs in East and Southeast Asia: Latest developments and challenges](#), p. 28

a trend, overdose deaths where methamphetamine was found increased from 4.8 per cent of drug overdose deaths in 2014 to 36.8 per cent of deaths in 2018.³²

Of the accidental stimulant toxicity deaths in Canada in 2021, 62 percent involved cocaine, while 55 percent involved methamphetamines.³³ Increasing overdose deaths have been seen in Europe as well. Analysis of post-mortem data conducted by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) found the number of deaths involving amphetamines increased in Norway (74 deaths), Finland (67), Austria (28), Czechia (18), Slovakia (17), and Estonia (17) in 2020, compared with the previous year.³⁴ Amphetamine, MDMA, and methamphetamine were all among the 11 most common substances reported in acute drug toxicity presentations at European hospitals.³⁵

Multiple countries in Latin America have reported increases in various types of stimulants.³⁶ Amid a general increase in drug-related deaths, Mexico reports that amphetamines have become the most frequently detected drug in the deceased.³⁷ The dominance of methamphetamine use, as compared with the use of other amphetamines, is illustrated by the 29,680 methamphetamine users in drug treatment in 2020, compared with only 727 amphetamine users in treatment.³⁸ This number represented a 218 per cent increase in the number of clients in drug treatment with amphetamine-type stimulant as their primary drug compared to 2013.³⁹

Consumption in Australia and New Zealand has also increased in recent years. Stimulants – including methamphetamine – are the third most common drug type present in drug-induced deaths in Australia, contributing to more than one quarter (27.8 per cent) of all overdose deaths in 2020. Overdose deaths involving stimulants have increased ten-fold during the previous two decades in Australia.⁴⁰

³² Al-Waheeb, S, et al. (2021). 'Patterns of drug overdose deaths in Kuwait from 2014 to 2018'. *Public Health in Practice*. 2.

³³ Special Advisory Committee on the Epidemic of Opioid Overdoses (2022). [Apparent Opioid and Stimulant Toxicity Deaths: Surveillance of Opioid and Stimulant-Related Harms in Canada](#). Public Health Agency of Canada, p. 6

³⁴ EMCDDA notes that caution must be used with these number due to the small size. EMCDDA (2022). [European Drug Report Trends and Development 2022](#), p. 34.

³⁵ Detail about the sentinel system is detailed in the most recent 2020 report European Monitoring Centre for Drugs and Drug Addiction, [Technical Report: Drug-related hospital emergency presentations in Europe: update from the Euro-DEN Plus expert network](#), Publications Office of the European Union (2020), p. 14 .

³⁶ Shuldiner, H (2022). '[Chile Receiving Synthetic Drugs Galore from Netherlands, Belgium](#)', *InSight Crime*.

³⁷ UNODC (2022). *World Drug Report 2022*, [booklet 2](#), p. 37.

³⁸ UNODC (2022). *World Drug Report 2022*, [booklet 4](#), p. 58.

³⁹ *Ibid*, p. 59.

⁴⁰ Penington Institute (2022). *Australia's Annual Overdose Report 2022*. Melbourne: Penington Institute.

3.2.2. Cocaine

An estimated 80 per cent of the people who use cocaine live in the Americas and Europe.⁴¹ South and Central America and the Caribbean have the highest proportion of people worldwide who are in drug treatment due to the use of cocaine, which is often consumed in smokable forms that are cheap and frequently toxic.⁴²

The manufacture of cocaine is at record level in South America,⁴³ and the global market for cocaine is continuing to expand beyond the traditional markets of North America and Western Europe into Africa and Asia.⁴⁴ While demand in Africa and Asia has risen over the past two decades, the UNODC acknowledges that lack of data prevents a clear understanding of the level of use. Despite these data deficiencies, the growth of cocaine use across West and Southern Africa is illustrated by the increasing number of people seeking treatment.⁴⁵

In 2020, more than 19,000 people in the United States died from an overdose involving cocaine.⁴⁶ Deaths due to cocaine in England and Wales reached 777 in 2020, marking the ninth consecutive year of increases and a nearly 10 per cent rise from the 708 deaths registered in 2019. The number of deaths has increased by five times since 2010 (when 144 deaths were recorded).⁴⁷ Drug-induced deaths involving cocaine are also increasing in Australia, with 98 such deaths recorded in 2020, compared with 17 in 2010 – an increase of more than 475 per cent.⁴⁸

3.3. New psychoactive substances (NPS)

New psychoactive substances – often called ‘legal highs’ – are a diverse group of substances that are either analogues of existing controlled drugs or newly synthesized chemicals that are created to mimic the effects of medicines or controlled substances.⁴⁹

Opioid NPS, which include fentanyl analogues, continue to emerge and grow; from one substance registered by the UNODC in 2009 to 56 in 2019 to 87 in 2020. They are regarded as the fastest-growing and most harmful group of NPS.⁵⁰ Benzodiazepine-type NPS have also increased in number.

⁴¹ UNODC (2021). *World Drug Report 2021*, booklet 4, p. 35.

⁴² Transnational Institute (2019). *Smokable cocaine markets in Latin America and the Caribbean: A call for a sustainable policy response*, p. 4.

⁴³ UNODC (2022). *World Drug Report 2022*, booklet 1, p. 30.

⁴⁴ Ibid. p. 28.

⁴⁵ Ibid. p. 30.

⁴⁶ National Institute on Drug Abuse (2022). [National Institute on Drug Abuse overdose data 1999-2020](#).

⁴⁷ Office of National Statistics (2021). [Deaths related to drug poisoning in England and Wales: 2020 registrations](#).

⁴⁸ Penington Institute (2022). *Australia's Annual Overdose Report 2022*. Melbourne: Penington Institute.

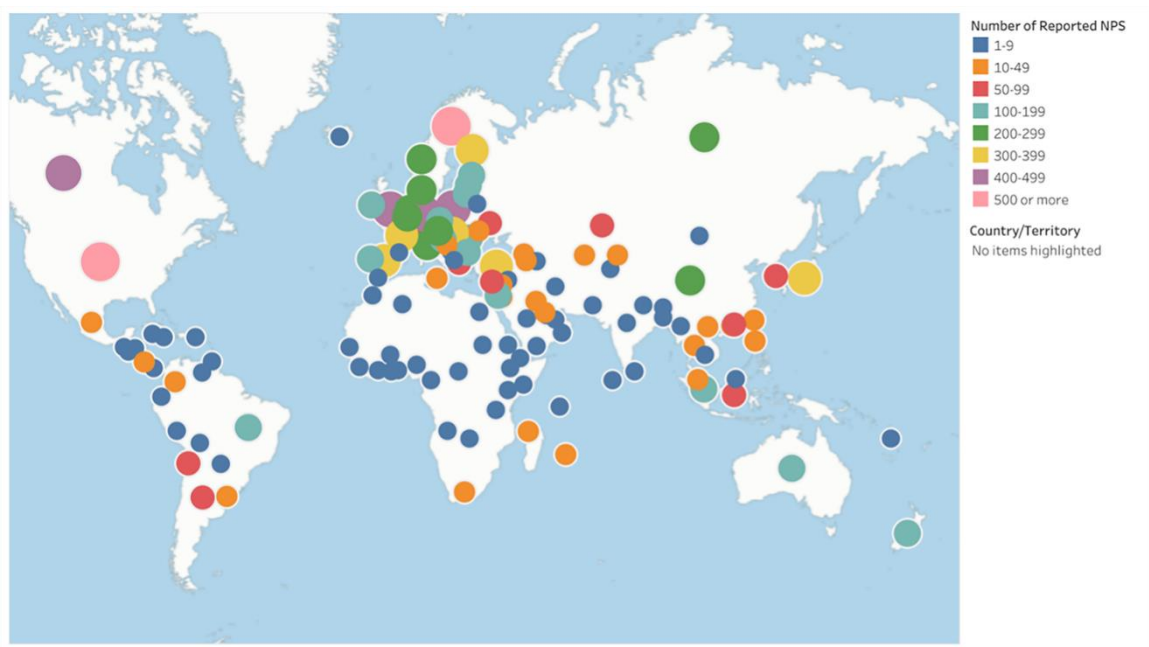
⁴⁹ Abu Shafi et al. (2020). ‘New Psychoactive Substances: A Review and Updates’, *Therapeutic Advances in Psychopharmacology*, 10.

NPS have become a major drug problem in Eastern Europe and Central Asia with 260 NPS substances reported in the region in 2012. On a global level, there were 1,127 NPS substances reported in 134 countries and territories between 2009 and 2021.⁵¹

The number of NPS has also risen sharply in countries in South America,⁵² with reports of NPS – sometimes containing fentanyl and other potential overdose-inducing compounds – circulating in party and street markets in Colombia,⁵³ Argentina, Uruguay,⁵⁴ and Chile.⁵⁵

Figure 5 shows the location of the number of reported NPS and the concentration of reports of NPS drugs in Europe recorded from the UNODC Early Warning Advisory, as of May 2022.⁵⁶

Figure 5. Number of reported NPS detected by UNODC Early Warning Advisory, by country⁵⁷



⁵⁰ UNODC (2022). *World Drug Report 2022*, [booklet 1](#), p. 29.

⁵¹ UNODC (2022). *World Drug Report 2022*, [booklet 4](#), p. 86.

⁵² Inter-American Observatory on Drugs (2019). [Report on Drug Use in the Americas 2019](#), p. xi.

⁵³ Gago, C, (2021). [‘Fentanyl and 2CB, Worrying New Cocktail on Colombia’s Party Circuit’](#), *InSight Crime*; Ford, A, (2022). [‘Tusi: The Pink Drug Cocktail That Tricked Latin America’](#), *InSight Crime*.

⁵⁴ Asmann, P, (2019). [‘Synthetic Pink Cocaine Crossing from Argentina Into Uruguay’](#), *InSight Crime*.

⁵⁵ Hermosilla, I, (2022). [‘What is Tusi and what are the dangers of this synthetic drug’](#). *BioBio Chile*.

⁵⁶ UNODC (2021). [Data from UNODC early warning advisory on new psychoactive substances](#).

⁵⁷ UNODC (2021). [Data from UNODC early warning advisory on new psychoactive substances](#).

4. Challenges

4.1. A lack of reliable overdose data

Changes in the *World Drug Report's* focus over the past two decades show how drug use patterns have shifted over time. During the past two decades the UNODC has played an important role documenting changing trends in global drug markets through reporting on the production, trafficking and consumption of drugs. Early publications of the *World Drug Report* focused primarily on documenting the advances authorities made in disrupting supply, and thereby allegedly reducing demand. The 2000 edition assured a brighter future of reduced demand for drugs, and the eradication of coca and opium poppy production. The limited attention to drug-related deaths in these reports during the early 2000s was assigned to 'problem drug users' and primarily linked to heroin use.⁵⁸

By 2010, the *World Drug Report* highlighted that opioids were causing severe problems worldwide and were responsible for most of the rising number of drug-related deaths. Unlike a decade earlier, by 2010 heroin was overshadowed by the misuse of prescription opioids – a trend particularly noted in the United States. In addition to the growing problem of opioids, new markets were opening for a growing range of drugs including methadone, other opioids, cocaine and synthetic drugs.

The *World Drug Report 2022* documents a world very different from two decades earlier with the growth in production, expanded markets and increased use of amphetamine-type stimulants and synthetic drugs, along with the noticeable impact of drug production on the environment and the role of the dark web and apps helping consumers to acquire drugs.

In addition, more recent editions of the *World Drug Report* have provided data on the harms of drug use, with some insight into drug-related deaths. The 2021 report⁵⁹ estimates there were approximately 128,000 deaths globally in 2019 attributed to drug use disorders consisting mainly of overdose.⁶⁰ A closer look, noting the limitations, reluctance, and challenges to recording drug overdose fatalities, even in high-resource settings, reveals the gross limitations underpinning this global estimate.

Beyond a few countries and regions, most notably North America, the European Union, United Kingdom, Australia and New Zealand, reliable data on fatal and non-fatal overdose do not exist or

⁵⁸ United Nations Office for Drug Control and Crime Prevention (ODCCP) (2000). [World Drug Report 2000](#), pp. 1-4.

⁵⁹ UNODC (2021). *World Drug Report 2021*, [booklet 2](#), p. 34.

⁶⁰ Estimate is based on work conducted by Institute for Health Metrics and Evaluation, "Global Burden of Disease Study 2019 Data Resources: GBD Results Tools". The Global Burden of Disease study quantifies health loss from diseases, injuries, and risk factors. UNODC claims the Global Burden of Disease Study, to be the most comprehensive and timely data on global deaths attributed to drug use.

are at best questionable. Much of the analysis for the *World Drug Report* is based on the Annual Report Questionnaire (ARQ) submitted by only some member states.⁶¹ The *World Drug Report 2022* reported that 36 of only 46 countries responding to the ARQ about data monitoring reported having a system in place to monitor drug-related deaths. In addition, for another ARQ question only 22 countries (from the 42 responding countries) stated that their country monitors non-fatal drug overdoses. Standard operating procedures on the administration of and/or access to agonists to prevent drug-related deaths, in particular naloxone, existed in only about half of the countries responding to the questionnaire.⁶²

In many low-resource countries, deaths caused by overdose are not reliably recorded, instead being classified as heart attacks or respiratory failure. This occurs for many reasons; among the important contributors are widespread stigma about drug use, fear of police harassment, political pressure, and inconsistent or inadequate coronial systems.

Many countries are estimated to have large populations of people who inject drugs (PWID), yet there is little data available on drug-related deaths. For example, the UNODC estimates that Asia accounts for most the world's drug-induced deaths, but due to unreliable reporting the official rate of deaths caused by drugs is lower than in any other region.⁶³ Additional examples of important data gaps abound:

- In South America, drug use is seen as a significant and growing problem, yet there is little reliable information available to determine the extent of harms caused from drug use.⁶⁴ In Colombia, for instance, different government agencies have reported widely varying and contradictory numbers of fatal opioid overdoses.⁶⁵
- In 2019, the Indian government reported only 704 drug overdoses within a population of 1.4 billion people.⁶⁶ The low official count is in tension with reports that drug use is widespread in India, with the wealthy northern state of Punjab emerging as an epicentre of drug-related harms. The Punjabi government estimates that close to 900,000 men aged 15-35 are using drugs. Local media have reported high rates of overdose (both accidental and suicidal), drug arrests and people who use drugs dying in custody. Due to inaccurate

⁶¹ The Methodological Annex for the 2022 World Drug Report was not available online at the time of writing this report.

⁶² UNODC (2022). *World Drug Report 2022*, [booklet 2](#), p. 41.

⁶³ UNODC (2022). *World Drug Report 2017*, [booklet 2](#), p. 27.

⁶⁴ Pacurucu-Castillo, S.F, Ordóñez-Mancheno J. M et al. (2019). 'World Opioid and Substance Use Epidemic: A Latin American Perspective'. *Psych Res Clin Pract*, 1, pp. 2–38.

⁶⁵ ATS Corporation (2021). '[How many deaths are there from opioid overdose in Colombia? We do not know](#)'. *ATS Corporation*.

⁶⁶ National Crime Records Bureau, Ministry of Home Affairs (2020). [Accidental Deaths & Suicides in India 2020](#), p. 13.

reporting on overdose, some small villages have recorded dozens of healthy young men dying of heart attacks.⁶⁷

The scale of inadequate data is underscored by reporting issues in the four countries that, according to the UNODC, accounted for more than half of the worldwide population of people who inject drugs: Russia, China, Pakistan and the United States. For all but the United States, fatal overdose is either underreported or misreported.

- In 2014, Russia's Federal Drug Control Service (FSKN) estimated that 100,000 fatal overdoses occurred every year; however, the service was dissolved in 2016.⁶⁸ Functions were transferred to the Main Drugs Control Directorate of the Ministry of Internal Affairs – and no new statistics have since been made available. More recent data from the Russian Federal Statistics Service (Rosstat) diverge significantly, indicating that more than 10,000 Russians died in 2021 from drug use, double the 2019 number of deaths.⁶⁹ What we do know is that in Russia, opioid substitution therapy is banned, naloxone remains difficult to access and attempts to repeal the criminal penalties for non-medical drug use in the case of overdose have been unsuccessful.
- In 2014, the UNODC estimated that there were 49,000 drug-related deaths in China. However, Chinese media reports estimate the number of drug users at 14 million, suggesting the rate of drug-related mortality could be much higher than reported.⁷⁰ A 2020 document from the Office of China National Narcotics Control Commission dismisses the issue, claiming that the situation of drug abuse continues to improve and that drug abuse in China has been curbed.⁷¹
- Pakistan shares a large border with Afghanistan, the world's largest producer of opium, and possession of opium or derivatives like heroin is legal. In 2015, the Pakistani government estimated an alarming 700 drug-induced deaths occur every day – implying an annual total of more than 250,000.⁷² While this is likely overstated, reliable data show the country consumes 44 tonnes of heroin annually.⁷³

Lack of data leaves policy makers relying on drug consumption, drug seizures, changing and growing market trends and treatment data to understand the impact of rising drug use and drug-related harms. The lack of data, and subsequent caution that must be applied when analysing the limited data that are available, cannot be blamed solely on resource limitations and inadequate data

⁶⁷ Singh, I.P., Rana, Y, (2020). '[Number of drug-linked deaths could be double](#)'. *The Times of India*.

⁶⁸ RT, (2014). '[100,000 lives annually: Drug death toll triples in Russia](#)'. *RT*.

⁶⁹ Meduza (2022). '[If only we had the political will: Why Russia's rise in drug overdose deaths is unlikely to end soon](#)', *Meduza*.

⁷⁰ Sui-Lee Wee, '[Drug abuse cost China \\$80 billion last year as it clocked 49,000 drug related deaths](#)', *Insider* June 24, 2015.

⁷¹ Office of China National Narcotics Control Commission (2020). *Drug Situation in China (2019)*, p. 3.

⁷² Foa, M (2015). '[Pakistan's Drug Crisis in Numbers](#)', *Foreign Policy*.

⁷³ Aljazeera (2014). '[Dugged up Pakistan](#)', *Aljazeera*.

monitoring systems. The illegal nature of drugs and profound stigma associated with drug use leaves an overwhelming reluctance in many parts of the world to acknowledge let alone report on drug-related deaths.

5. Appendix – Overdose deaths in selected countries

5.1. Australia

In 2020, there were 2,220 drug-induced deaths in Australia, a rate of 8.5 deaths per 100,000 people. This equates to 69,741 years of life lost to drug-induced deaths, with an average of 33 years of life lost per drug-induced death. The number of all drug-induced deaths surpassed the road toll in 2008 and has continued to rise in the years since. For Australians aged 30-39, drug-induced deaths were the second-leading cause of death behind suicide in 2020.

Number of drug-related deaths in Australia

	2020	2015	2010	2005	2001
Drug-related deaths	2,220	2,178	1,756	1,278	1,313

5.2. Canada

A total of 7,560 opioid toxicity deaths occurred in 2021.

Total opioid-related deaths⁷⁴

	2021	2020	2016	2010	2005	2000
Opioid-related deaths	7,560	6,638	2,829	1160	730	495

5.3. England and Wales

In 2020, 4,561 deaths related to drug poisoning⁷⁵ were registered in England and Wales (equivalent to a rate of 79.5 deaths per million people). This is the highest number since records began in 1993

⁷⁴ Note: Existing assessments of the time trends of opioid-related mortality, hospitalisation and emergency department visits in Canada have relied mainly on provincial databases, while national assessments generally do not provide information before 2016; Alsabbagh MW, Chang F, Cooke M, Elliott SJ, Chen M. (2021).

'National trends in population rates of opioid-related mortality, hospitalization and emergency department visits in Canada between 2000 and 2017. A population-based study'. *Addiction*. 116. pp. 3482-3493; Special Advisory Committee on the Epidemic of Opioid Overdoses (2022). [Opioid- and Stimulant-related Harms in Canada](#). Ottawa: Public Health Agency of Canada.

⁷⁵ Deaths classified as a drug poisoning must have an applicable International Classification of Diseases (ICD) code assigned as the underlying cause of death; this is determined by international coding rules from the condition or conditions reported by the certifier, as recorded on the certificate. The figures include accidents and suicides involving drug poisonings, as well as deaths from drug abuse and drug dependence; they do not include other adverse effects of drugs (for example, anaphylactic shock), or other types of accidents (for

and is 3.8 per cent higher than the number of deaths registered in 2019 (4,393 deaths; 76.7 deaths per million).⁷⁶

Number of drug-related deaths: England and Wales

	2020	2015	2010	2005	2000	1995
Drug-related deaths	4,561	3,674	2,747	2,762	2,932	2,540

In 2020 deaths due to cocaine in England and Wales recorded increased for the ninth consecutive year. There were 777 deaths involving cocaine registered in 2020, which was 9.7 per cent higher than the previous year (708 deaths). The number of deaths has increased by five times since 2010 (144 deaths).⁷⁷

The Office for National Statistics (ONS) reported that there were 137 deaths registered in England and Wales in 2020 where NPS were mentioned on the death certificate. The table below shows the number of drug-related deaths from selected NPS registered in England and Wales from 1995 to 2020.

Number of drug-related poisonings where new psychoactive substances were mentioned on the death certificate, England and Wales, deaths registered 1995 - 2020⁷⁸

	2020	2015	2010	2005	2000	1995
Drug-related poisonings	137	114	23	5	3	1

5.4. European Union

A European project monitoring cases involving medical treatment for non-fatal overdoses found 6.2 per cent of cases to be related to NPS in the period 2014–2017. While deaths related directly to the use of NPS do occur, they were rare in the countries that were able to provide relevant data.⁷⁹

Deaths involving synthetic cannabinoids were reported by three countries in 2020: Germany (9), Hungary (34) and Turkey (49). In 2020, 3-MMC was involved in 38 acute drug toxicity presentations in 5 Euro-DEN Plus hospitals.⁸⁰

example, a car crash) where the driver was under the influence of drugs. For further explanation see [‘Deaths related to drug poisoning in England and Wales QMI](#).

⁷⁶ Statistics are based on the year of death registration – because of death registration delays, around half of these deaths will have occurred in the previous year (2019).

⁷⁷ Office of National Statistics (2021). [Deaths related to drug poisoning in England and Wales: 2020 registrations](#), p. 2.

⁷⁸ Office for National Statistics (2022). [Deaths related to drug poisoning by selected substances, England and Wales](#),

⁷⁹ UNODC (2022). *World Drug Report 2022*, [booklet 4](#), p. 100.

⁸⁰ EMCDDA (2022). [European Drug Report Trends and Development 2022](#), p. 39.

Number of overdose deaths, rate per 100,000 population, by country and year

Country	OD 2020 # ⁸¹	2020 rate (per 100,000)	2020 Pop (000)	OD 2015 #	2015 rate (per 100,000)	2015 Pop (000)	OD 2010 #	2010 rate (per 100,000)	2010 Pop (000)	OD 2005 #	2005 rate (per 100,000)	2005 Pop (000)	OD 2000 #	2000 rate (per 100,000)	2000 Pop (000)
Austria	191	2.12	9,006.4	153	1.76	8,678.7	187	2.22	8,409.9	191	2.31	8,253.7	167	2.07	8,069.3
Belgium	-	-	11,589.6	123	1.09	11,287.9	135	1.23	10,938.7	-		10,546.9	-	-	10,282.0
Bulgaria	24	0.35	6,948.4	17	0.24	7,199.7	41	0.55	7,425.0	40	0.52	7,686.9	41	0.51	7,998.0
Croatia	99	2.41	4,105.3	54	1.28	4,232.9	73	1.69	4,328.2	84	1.92	4,378.1	51	1.15	4,428.1
Cyprus	6	0.50	1,207.4	9	0.78	1,161.0	9	0.81	1,112.6	9	0.88	1,027.7	-	-	943.3
Czechia	58	0.54	10,709.0	44	0.42	10,601.4	55	0.52	10,536.5	62	0.60	10,258.2	80	0.78	10,289.4
Denmark	202 (2019)	3.49	5,792.2	198	3.49	5,668.7	248	4.46	5,554.8	207	3.82	5,421.7	247	4.62	5,341/2
Estonia	33	2.49	1,326.5	88	6.69	1,315.3	101	7.58	1,332.1	57	4.20	1,355.6	31	2.22	1,399.1
Finland	258	4.66	5,540.7	166	3.03	5,481.1	156	2.91	5,365.8	126	2.40	5,258.9	134	2.58	5,187.9
France	-	-	65,273.5	373	0.58	64,453.2	392	0.62	62,879.5	301	0.48	62,120.1	247	0.42	59,015.1
Germany	1,581	1.89	83,783.9	1,226	1.50	81,787.4	1,237	1.53	80,827.0	1,326	1.62	81,602.7	2,030	2.49	81,400.8
Greece	274 (2018)	2.63	10,423.1	284	2.66	10,659.8	267	2.45	10,887.6	-		11,224.8	-	-	11,082.1
Hungary	48	0.50	9,660.4	25	0.26	9,777.9	17	0.17	9,927.4	28	0.28	10,085.9	38	0.37	10,220.5
Ireland	235 (2017)	4.76	4,937.8	236	5.07	4,652.4	174	3.82	4,554.3	164	3.96	4,141.2	113	2.99	3,783.1
Italy	308	0.51	60,461.8	308	0.51	60,578.5	374	0.63	59,325.2	653	1.12	58,281.2	1016	1.79	56,692.2

⁸¹ Overdose data for each year is from [EMCDDA](#).

Country	OD 2020 # ⁸²	2020 rate (per 100,000)	2020 Pop (000)	OD 2015 #	2015 rate (per 100,000)	2015 Pop (000)	OD 2010 #	2010 rate (per 100,000)	2010 Pop (000)	OD 2005 #	2005 rate (per 100,000)	2005 Pop (000)	OD 2000 #	2000 rate (per 100,000)	2000 Pop (000)
Latvia	21	1.11	1,886.2	18	0.90	1,997.7	7	0.33	2,118.9	14	0.62	2,252.0	42	1.76	2,384.2
Lithuania	47	1.73	2,722.3	115	3.92	2,931.9	51	1.63	3,123.8	32	0.96	3,344.3	45	1.29	3,501.8
Luxembourg	6	0.96	626.0	12	2.12	566.7	12	2.36	507.9	8	1.75	457.8	26	5.96	436.1
Malta	3 (2018)	0.68	441.5	8	1.85	433.6	5	1.21	414.3	8	1.98	404.7	6	1.52	393.6
Netherlands	295	1.72	17,134.9	197	1.16	16,938.5	94	0.56	16,682.9	122	0.75	16,367.2	131	0.82	15,926.2
Norway	324	5.98	5,421.2	289	5.56	5,199.8	248	5.08	4,885.9	234	5.05	4,632.4	360	8.00	4,499.4
Poland	212 (2019)	0.56	37,846.6	255	0.67	38,034.1	261	0.68	38,329.8	290	0.76	38,368.9	310	0.80	38,556.7
Portugal	72 (2019)	0.71	10,196.7	54	0.52	10,368.4	26	0.25	10,596.1	9	0.09	10,508.5	52	0.50	10,297.1
Romania	33	0.17	19,237.7	21	0.11	19,925.2	34	0.17	20,471.9	6	0.03	21,417.3	0	0.00	22,137.4
Slovakia	37	0.68	5,459.6	27	0.50	5,435.6	20	0.37	5,405.3	17	0.31	5,399.0	-	-	5,399.2
Slovenia	70	3.37	2,078.9	32	1.54	2,071.2	25	1.22	2,043.3	36	1.80	1,995.0	19	0.96	1,987.7
Spain	546 (2019)	1.17	46,754.8	390	0.84	46,672.0	393	0.84	46,931.0	665	1.51	44,019.1	705	1.73	40,824.8
Sweden	524	5.19	10,099.3	675	6.91	9,765.0	371	3.95	9,390.2	245	2.71	9,038.6	194	2.18	8,881.6
Turkey	314	0.37	84,339.0	590	0.75	78,529.4	126	0.17	72,327.0	26	0.04	67,903.5	-	-	63,240.2

⁸² Overdose data for each year is from [EMCDDA](https://www.emcdda.europa.eu/).

5.5. New Zealand

In 2019, there were 307 drug related deaths in New Zealand.⁸³ Cases are considered drug-related where the death was due to external causes, and where drugs made a contribution to death. The national rate of drug-related deaths was 6.4 deaths per 100,000 population. In 2019, 84.7 per cent of opioid-related deaths involved the opioid as a primary contributor to death.⁸⁴ Roughly 46 accidental opioid overdoses are recorded each year by the New Zealand Ministry of Health (five-year average from 2014-2018).⁸⁵

5.6. Northern Ireland

Northern Ireland recorded 218 drug related deaths in 2020. There has been a general upward trend in the number of drug related deaths in Northern Ireland, with deaths increasing from 92 in 2010 to 191 in 2019 and 218 deaths in 2020.⁸⁶ The number of drug-misuse deaths have increased from 64 to 182 between 2010 and 2020.⁸⁷

Number of drug related deaths in Northern Ireland due to drug misuse

	2020	2015	2010	2005	2001
Drug-related deaths	218	144	92	84	35

⁸³ NCIS Fact Sheet (2022). [Drug-related deaths in New Zealand in 2019](#).

⁸⁴ Ibid.

⁸⁵ New Zealand Drug Foundation (2022). [State of the Nation 2022: A stocktake of how New Zealand is dealing with drug use and drug harm](#), p. 23.

⁸⁶ Northern Ireland Statistics and Research Agency (2020). [Drug-related and drug-misuse deaths in Northern Ireland](#), p. 5.

⁸⁷ Drug related deaths and drug misuse deaths explanation from Drug Related Deaths, Northern Ireland: Information Paper, March 2022. "A death is drug-related when the underlying cause of death recorded on the death certificate is drug poisoning, drug abuse or drug dependence. – Deaths classified as drug misuse must be a drug poisoning and meet either one (or both) of the following conditions: · the underlying cause is drug abuse or drug dependence, defined by ICD-10 as mental and behavioural disorders due to use of: opioids (F11), cannabinoids (F12), sedatives or hypnotics (F13), cocaine (F14), other stimulants, including caffeine (F15), hallucinogens (F16) and multiple drug use and use of other psychoactive substances (F19); or · any of the substances controlled under the Misuse of Drugs Act 1971 are involved, this include class A, B and C drugs."

5.7. Scotland

1,339 people lost their lives to a drug-related death in Scotland in 2020.⁸⁸ In 2019 there were 1,280 drug-related deaths in Scotland a rate of 234 drug-related deaths per million. This is a 5 per cent increase from 2019 and represents the highest number of drug-related deaths ever recorded in Scotland, for the seventh consecutive year. Scotland has the highest per capita rate of drug deaths in Europe at 25.2 deaths per 100,000 people, which is more than three and a half times higher than the rest of the United Kingdom.⁸⁹

Number of drug-related deaths in Scotland due to drug misuse

	2020	2013	1996
Drug related deaths	1,339	527	244

In 2020, there were 872 deaths where NPS were implicated in the cause of death. Benzodiazepines were present in almost all cases.⁹⁰

5.8. Serbia

In 2019 there were 57 drug-induced deaths in Serbia which equates to 8.21 deaths per million people. In 2018 there were 47 drug-induced deaths.⁹¹ Drug Policy Network South-East Europe emphasised controversies and questions regarding the reliability of the data.⁹²

5.9. Ukraine

In 2019 there were 421 deaths caused by psychoactive substances, an increase from 2018 when 335 deaths were recorded. 319 deaths were classified as accidental overdose. Opioid-related overdoses totalled 209 deaths, synthetic opioids accounted for 18 cases, and five cases involved psychostimulants.⁹³

⁸⁸ National Records of Scotland (2021). [Drug Related Deaths in Scotland 2020](#), p. 2.

⁸⁹ Ibid. p. 5.

⁹⁰ Ibid. p.18.

⁹¹ Republic of Serbia, Office for Combating Drugs, Presentation of the analysis, Drug-induced deaths in Serbia 2008-2019, March 2021, Presentation to Drug Policy Network South-East Europe. Drug Policy Network South-East Europe (DPNSEE) has prepared the analysis using statistic about the drug-induced deaths managed by the Statistical Office of the Republic of Serbia. Presentation '[Drug induced deaths in Serbia](#)'.

⁹² Drug-induced deaths are not always reported. Instead, they are classified as stroke, heart attack, heat stroke or suffocation by vomiting.

⁹³ [Report on the drug and alcoholic situation in Ukraine for 2020 \(according to 2019 data\)](#), Kyiv 2020, p. 17.

5.10. United States

In 2021, provisional data from the CDC yielded an estimate of 107,622 drug overdose deaths in the United States, an increase of 15 per cent from 2020.⁹⁴

The United States reported an age-adjusted mortality of 216 per 1 million people for the 15–64-year age bracket for 2019.⁹⁵

Total overdose deaths 1999-2020⁹⁶

	2020	2015	2010	2005	2000	1999
Overdose deaths	91,799	52,404	38,329	29,813	17,415	16,849

⁹⁴ [National Centre for Health Statistics](#), May 11, 2022.

⁹⁵ UNODC (2022). *World Drug Report 2022*, [booklet 2](#), p. 36.

⁹⁶ [National Institute on Drug Abuse Overdose Data 1999-2020](#).