



**GLOBAL
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ORGANIZED CRIME

AN ALTERED STATE

EVOLVING DRUG TRENDS
IN WARTIME UKRAINE

Ruggero Scaturro

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ABOUT THE AUTHOR

Ruggero Scaturro is a senior analyst at the GI-TOC and a PhD candidate on criminal justice and security in Slovenia. He conducts research on Eastern and South Eastern Europe, and on Italian mafia-related issues. His main areas of interest and expertise are drug trafficking and consumption habits in Europe, as well as the history of the Cosa Nostra and its ties with other criminal networks across the Mediterranean.

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Please direct inquiries to:
The Global Initiative Against Transnational Organized Crime
Avenue de France 23
Geneva, CH-1202
Switzerland
www.globalinitiative.net

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FROM VISION TO ACTION: A DECADE OF ANALYSIS, DISRUPTION AND RESILIENCE

The Global Initiative Against Transnational Organized Crime was founded in 2013. Its vision was to mobilize a global strategic approach to tackling organized crime by strengthening political commitment to address the challenge, building the analytical evidence base on organized crime, disrupting criminal economies and developing networks of resilience in affected communities. Ten years on, the threat of organized crime is greater than ever before and it is critical that we continue to take action by building a coordinated global response to meet the challenge.



EXECUTIVE SUMMARY

The Russian invasion of Ukraine in February 2022 disrupted drug trafficking routes through the country, forcing traffickers to adopt alternatives. The ongoing war has also created a new demand for certain drugs, particularly synthetics, which can help users alleviate the stress and trauma of living in a conflict zone. This report assesses this dual phenomenon of changes in supply and demand by tracking emerging trends. In doing so, it spotlights Khimprom, a major transnational criminal organization that appears to be exploiting the changing dynamics of the illicit drug market to establish a monopoly on the sale of synthetic drugs in Ukraine.

The report identifies the major trends in demand and supply before outlining the wider implications of these shifts.

Trends in demand:

- Civilians and soldiers alike on the front line are reported to use cannabis, often combined with synthetic stimulants. Access to drugs is sometimes facilitated by medical facilities. In addition, a black market for synthetic opioids, including methadone and Subutex (buprenorphine), has emerged. In this context, heroin – the price of which became particularly high in 2023 – has largely been replaced by methadone and other synthetic opioids.
- The use of synthetic cathinones, such as alpha-PVP (α -pyrrolidinopentiophenone, also known as ‘flakka’) and mephedrone (4-methylmethcathinone, 4MMC), is also on the rise, especially among young people seeking relief from the stress and trauma of the war.¹ Hospital admissions for psychotic states and renal complications from the abuse of designer drugs known as ‘salts’ have increased significantly.
- The legalization of medical cannabis in Ukraine, approved in December 2023, will significantly contribute to the country’s efforts to address the mental health challenges arising from the war.² However, questions remain about the market’s regulation, potential overproduction, and the prevalence of illegal supply channels for strains that are high in tetrahydrocannabinol (THC), the main psychoactive component of cannabis.

Trends in supply:

- Before the Russian invasion, Ukraine, and Odesa in particular, served as a key transit hub for Eastern European cocaine trafficking. However, the closure of the port of Odesa due to military action has disrupted cocaine imports specifically, resulting in a temporary decrease in the availability and an increase in retail price. However, since May 2023, prices have started to fall again, suggesting increased supply due to diversion of trafficking flows through western Ukraine.

- Synthetic stimulants, particularly alpha-PVP and mephedrone, are increasingly available in Ukraine. Prices have remained relatively low, making these substances attractive to users. In addition, synthetic drug production and trafficking have become more sophisticated, with evidence of organized groups and skilled 'cooks' involved in the process.
- According to several experts, Khimprom, a transnational organization operating in Russia, Belarus, Ukraine and Kazakhstan, has reportedly expanded its influence in Ukraine since the start of the war. The syndicate's influence is said to extend to high-ranking officials and Ukrainian law enforcement actors, who provide protection and the supply of drugs all over the country, including to the front line.



Police in Kyiv uncovered a laboratory for the production of methadone in July 2023. The drug has proliferated on Ukraine's black market since the Russian invasion. *Photo: National Police of Ukraine*

Seen in terms of these changes in supply and demand, the evolving illicit drug landscape in wartime Ukraine has significant policy implications for governmental and private stakeholders, including law enforcement agencies and health professionals. The emergence of new trafficking routes requires a strategic review of customs and border police operations, and highlights the need to foster international collaboration to improve the detection of various substances. Of particular concern is the discernible growth of the synthetic drug market.³ Harm reduction initiatives will need to adapt to address this increase, in part by emphasizing training that is inclusive of all stakeholders, including people with experience of drug use. At the same time, dedicated research initiatives will need to be prioritized to address the substantial gap in understanding of the chemical composition and long-term effects of substances such as alpha-PVP and mephedrone, including by improving law enforcement capacity to accurately identify and differentiate substances, addressing challenges such as the detection of salts disguised as amphetamines. The increased frequency of precursor seizures underscores the importance of investigating the potential transition from small-scale to large-scale production of synthetic stimulants, particularly in collaboration with international partners, in order to effectively disrupt the operations of organizations such as Khimprom.

Methodology

The analysis presented in this report is based on a mixed-methods research approach consisting of three phases. First, desk research was conducted, which involved the collection and review of official documents released by Ukrainian law enforcement agencies, as well as Ukrainian and English-language media reports on police operations.

Second, quantitative database queries were conducted on drug wholesale and retail prices and on seizures. This data was provided by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and the United Nations Office on Drugs and Crime (UNODC), and covers the period 2017–2022. This data was used to provide a context and track changes in the first year of the war. To fill gaps in quantitative databases, the GI-TOC collected data on drug prices at the retail level by accessing Telegram channels and through interviews with street dealers and people who use drugs.⁴

Third, to corroborate the information obtained in the previous phases, and given the limited coverage of drug trends in most of the sources consulted, semi-structured interviews were conducted with experts from different organizations and professional backgrounds in Ukraine. These interviews took place between February and July 2023 and included representatives from intelligence services, customs agencies, national anti-drug police units, local police departments, the media, healthcare providers, non-governmental organizations (NGOs) and people who use drugs.

To ensure consistency throughout the information-gathering process, field researchers were provided with a guiding questionnaire containing key questions and topics.



A NEW MARKET EMERGING FROM THE WAR

Before Russia's invasion of Ukraine in February 2022, Ukraine was home to a diverse and well-established illicit drug market, acting both as a major transit hub for flows to Western Europe and as a significant drug consumer destination, particularly for heroin trafficked from Russia.⁵ The port of Odesa was a main entry point for cocaine trafficked from Latin America and precursors from China, which contributed to the emergence of domestic synthetic drug production.⁶ State efforts to control the market had limited success, with traffickers using innovative methods of concealment and corrupt officials reportedly turning a blind eye to much of the activity.⁷

All this meant that while the Russian invasion dealt a severe blow to the structure and functioning of Ukraine's drug economy, the disruption was short-lived. The Ukrainian market for illicit drugs was large and traffickers were well established, enabling them to quickly find workarounds to logistical challenges, the most significant of which were the closure of the port of Odesa (due to the Russian blockade) and the highly violent and dynamic front line in the east of the country, which proved to be a severe constraint on heroin flows from Russia.

By mid-2023, signs of the new shape of Ukraine's drug market were beginning to emerge. In part, the changing logistics map has dictated certain shifts: with heroin no longer available, for example, synthetics have become more prominent in its place, while the overland route from Romania into western Ukraine has taken over as the channel for cocaine.

But this is only part of the picture. The war has brought unimaginable suffering to the people of Ukraine, raising levels of stress and trauma to extraordinary levels. Russia's missile and drone attacks on Ukrainian cities have left millions of civilians in constant fear and hardship, while soldiers on the front line are engaged in one of the most intense and bloody mechanized conflicts since World War II. With so much uncertainty, young people in the cities have seen their plans for the future put in jeopardy, and may be desperate for a few hours of distraction in nightclubs and bars.

These factors have led people to seek respite in several different types of drugs, all with different effects and harms. While these drugs may provide a temporary respite and escape from the daily horrors of war for the user, they also pose an immense risk to the individual user and the country as a whole. From Afghanistan to Vietnam, there is plenty of evidence from history of how conflict fuels drug use that can continue for decades after the fighting has stopped, increasing addiction, violence and instability, and empowering drug traffickers.⁸



Russia's invasion of Ukraine caused short-term disruptions to Ukraine's illicit drug market, but traffickers quickly found new ways to sustain the drug economy. © Sergei Supinsky/AFP via Getty Images

As this report shows, many of these early signs are evident in Ukraine today, making it vital that action and energy are devoted to tackling the region's illicit drug trade. If action is not taken, the consequences of this transformative period in Ukraine's illicit drug economy – particularly in the rise of new psychoactive substances – will be felt for decades, and risk undermining the country's efforts to reinvent and rebuild itself in the post-conflict period when it eventually emerges.

The first section of the report examines how the war has led to new patterns of drug use, as individuals seek solace from the harsh realities of the conflict. Cannabis, salts, street methadone, synthetic opioids and legal drugs are all being widely used in this context, posing serious and multifaceted health risks. The pending legalization of medical cannabis, particularly targeted at the treatment of post-traumatic stress disorder (PTSD), points to a more nuanced, if potentially problematic, role for drugs in the country's future.

Having established this background, the report turns to examine the supply dynamics of the drug market in Ukraine, covering cocaine, cannabis, synthetic stimulants and opioids. It considers the impact of disrupted supply routes, the emergence of new trafficking patterns, and the adaptation of production methods in response to adversity, using drug-related offences and changes in price as a means of tracking availability.

It then explores the complex web of synthetic drug production and trafficking orchestrated by the criminal organization Khimprom across Eastern Europe and Central Asia, raising concerns about the group's influence, its ties to officials and the wider security implications.

The report concludes with observations aimed at helping those working in security and harm reduction in Ukraine to better understand the intricate relationship between drug trafficking and drug use, stress and trauma in Ukraine. It does so by formulating recommendations specifically for improved border controls, but also for the broader landscape of substance use as a response to the psychological toll of war.



WHAT PEOPLE WANT: TRENDS IN DEMAND

Before 2022, the illicit drug market in Ukraine was well established and diverse, with cannabis, amphetamine-type stimulants (ATS) and new psychoactive substances (NPS) being the three most commonly used recreational drugs, particularly for stress reduction and, in the case of cannabis, relaxation.⁹

However, the Russian aggression appears to be having a strong impact not only on patterns of drug supply but also on the motivations behind drug use. Russia's war on Ukraine has not only resulted in thousands of deaths and injuries and the destruction of infrastructure, but has also inflicted less visible wounds on the Ukrainian population. Soldiers and civilians have shared in the intense stress and trauma of war, from the harrowing experience of the front line to the fear of missile attacks in the middle of night.

Traffickers have not been slow to serve this market, and drugs are widely available, even on the front line. In a military hospital in the Donetsk region, for instance, soldiers apparently have access to 'any drug' delivered to drop-off points within the hospital's boundaries.¹⁰ As a soldier stationed at the hospital noted to a journalist, 'Just tell me, I can get anything you want.'¹¹ According to a local security expert, if there is a drug supply network at the front line, it exists through medical facilities, where drugs are accessible and where they can be distributed.¹² In contrast to the 2014 crisis, there is little evidence of opioid use on the front line, where most soldiers seek both relaxing substances (e.g. cannabis products) and stimulants, particularly salts.¹³



Although few studies and surveys have been conducted on drug use since the start of the 2022 invasion, small surveys conducted by local NGOs, analysis of public debates, and fieldwork conducted by the Global Initiative Against Transnational Organized Crime (GI-TOC) in 2023 have shed light on several emerging trends in the kinds of drugs people are turning to in wartime Ukraine.

In September 2022, Ukraine's State Bureau of Investigation uncovered a laboratory in the Chernivtsi region involved in industrial-scale amphetamine production. *Photo: State Bureau of Investigation*

The rise of 'salts'

According to the 2023 Global Organized Crime Index, the synthetic drug market in Ukraine has experienced the most significant expansion among all drug markets. The market registered a growth of 4.50 points between the 2021 and 2023 Indexes, primarily attributable to the impact of the ongoing war.¹⁴ Within this trend, the surge in the use of NPS has been particularly alarming. These synthetic stimulants, also known as salts, and in particular drugs of the synthetic cathinone class (such as alpha-PVP and 4MMC), are reported to be increasingly used, particularly by young users aged 14–16, not only for recreational purposes but increasingly to reduce stress and cope with the trauma of the ongoing war.¹⁵ The consumption of salts is also reportedly high among Ukrainian and Russian military personnel, often in combination with alcohol. Military and public health specialists who spoke to the GI-TOC expressed concern about this trend.¹⁶ At the time of mobilization, soldiers were hardly screened for drug dependence, and while some may have brought their condition to the front line, others have picked up the habit during their deployment.¹⁷

Salts can be either injected or smoked. Young users tend to smoke them, while long-term opiate dependants mainly inject them.¹⁸ According to user reports, alpha-PVP is largely consumed to 'escape from reality' and is usually preferred to other synthetic stimulants such as amphetamine, methamphetamine and MDMA (ecstasy) because of its perceived more intense effects and comparatively low quality-weighted price.¹⁹ Within the realm of injecting drug use, salts are recognized for their strong immediate effects, often referred to as a 'rush', which unlike injecting methamphetamine, quickly turns into psychological discomfort, including heightened paranoia and intense craving for further doses. Many adult drug users turn to salts as a substitute for ATS, driven by 'nostalgia' for a form of homemade methamphetamine known as 'pervintine'.²⁰

According to harm reduction experts in Ukraine, war-related stress and trauma are driving young users to smoke up to 5 grams a day and long-term drug dependants to inject salts every hour until they run out.²¹ As soon as this happens, according to one expert interviewed, they immediately start looking for a new supply, and if they cannot afford to buy more of the drug, they go 'gulling', which involves finding drop-off points and stealing supplies from other users.²²

The effects of salts are more toxic than those of ATS. Immediate health risks include an increased incidence of abscesses associated exclusively with the use of salts, as well as progressive weight loss and exhaustion. Salts also have a severe adverse effect on mental cognition, with studies suggesting a discernable negative impact on the social functioning of users.²³ The use of salts is also associated with psychological distress and other health-related consequences, and renal complications are also a major cause of hospital admissions among users.²⁴

At the same time as the use of salts has increased, treatment availability has decreased, with more than 60 private clinics in and around Kyiv having closed down immediately after the invasion. An interviewee working in a state-run substitution therapy facility in Ukraine revealed that by July 2023, the facility was treating twice as many patients for drug dependency as before the invasion.²⁵ Overcrowded public facilities leave voluntary organizations and costly private rehabilitation centres to shoulder most of the responsibility. Furthermore, a recent wave of suicides involving people jumping off buildings in the Ukrainian capital, linked to the use of salts, suggests that the Ukrainian government is not doing enough to prevent and tackle the problem.²⁶

Cannabis legalization: a possible solution for PTSD?

Cannabis use has increased since the start of the war, particularly among soldiers. Potent strains are reported to be widely smoked by soldiers on the front line and, according to sources who have spent the night in the trenches, soldiers often combine cannabis use with the use of synthetic stimulants.²⁷ But unlike salts, cannabis use is increasingly accepted by the public and officials, with many citing its therapeutic effects in combating PTSD, which promises to be a major challenge for healthcare professionals in Ukraine in the near future. At the end of 2022, the Ukrainian health ministry reported that 57% of the population was at risk of developing long-term war-related psychological conditions,²⁸ while a study conducted in April 2023 shows that thousands of Ukrainian soldiers and civilians are currently suffering from PTSD.²⁹ According to scientific studies, PTSD sufferers who use cannabis are 2.5 times more likely to recover.³⁰

With medical cannabis becoming a trending topic in Ukraine and globally, there seems to be a developing consensus in the Ukrainian parliament that it can be beneficial in the treatment of PTSD and other war-related mental health conditions.³¹ In December 2023, the Ukrainian parliament approved the draft law on legalizing medical cannabis in its second reading.³² Supported by 248 members of parliament, the bill still needs to be signed by President Zelensky to become law.³³

Nevertheless, this represents a significant shift in official attitudes towards cannabis in little more than two years. As early as 2020, various polls conducted by independent research centres showed that the vast majority of the Ukrainian public supported the legalization of cannabis for medical use, but when the bill was introduced in 2021, it was supported by only 80 members of parliament and ultimately failed to be approved.³⁴ Then, in 2023, the government decided to endorse the original bill.³⁵



Protesters demand reform of Ukraine's drug policy during the so-called March of Freedom outside the Presidential Office in Kyiv in 2020. © Pavlo Gonchar/SOPA Images/LightRocket via Getty Images

The draft law distinguishes between the cultivation and distribution of medical cannabis and industrial hemp. It also raises the permissible THC potency limit from 0.08% to 0.3% of dry weight for medical cannabis, which can only be cultivated using officially approved seeds under strict state oversight. The bill also aims to safeguard local producers by proposing to restrict the import of legal cannabis into Ukraine, with the exception of horticultural or scientific purposes and cannabis-derived medicines, until at least 2028.³⁶ Croatia, the Czech Republic and Poland have already adopted similar regulations, with the only difference being that most of the cannabis has to be imported from abroad.³⁷ Instead, the Ukrainian government sees cannabis legalization as a way to protect local producers by using the law to limit imports as much as possible.³⁸ However, it may take several years for domestic cannabis cultivation to take off in Ukraine following the approval of the new law, and this could create import–export opportunities for both local and international businesses seeking to match supply and demand, particularly in the early years of the Ukrainian market.³⁹ Furthermore, the impact of legalization on cultivation is difficult to assess, but the risks of overproduction and the use of licensed farms to produce cannabis for both foreign and local illicit markets are real, as the case of North Macedonia suggests.⁴⁰

The legalization of cannabis for medical use will certainly alter a relatively stable equilibrium in Ukraine, consisting of fluctuating local supply and increasing demand among both civilians and military personnel.⁴¹ At the same time, however, it is unlikely that legal cannabis will replace illegal cannabis supplies, mainly because the legal potency limit of THC is relatively low, and may not be sufficient to meet the needs of recreational cannabis users in Ukraine. This is evidenced by price data collected by the GI-TOC in May and June 2023, which suggests that there is demand for cannabis with THC levels much higher than those regulated in the new bill. The table below lists four of the most common cannabis strains identified by the GI-TOC at street level. All are very high in THC (22% or more) and have not only relaxing effects, ideal for treating PTSD, but also energizing and stimulant effects. This is particularly true of Super Lemon Haze (70% sativa) and Amnesia Mac Ganja (80% sativa).⁴²

Name of strain	Price per gram	Strain	Yield (g/m ²) indoor	Cultivation period (weeks)	THC level	Main effects
Super Lemon Haze	€12	70% sativa 30% indica	600–800	10–12	25%	Elevating and motivating (indicated for medical use, especially for stress, depression and fatigue)
Runtz Punch	€7	70% indica 30% sativa	500–600	7–8	27%–29%	Relaxing, ideal for treating anxiety
Amnesia Mac Ganja	€8	80% sativa 20% indica	450–500	10–11	22%	Euphoria (indicated for medical use, especially for stress, depression and anxiety)
Auto Gagarin Feminized	€12	75% indica 25% sativa	500	10	31%	Classified medical strain prescribed for insomnia, stress, panic attacks, certain types of pain and inflammation

FIGURE 1 Cannabis strains available on the black market in Ukraine as of July 2023.

In other words, with a new law that will allow for local production of medical cannabis with THC levels of only up to 0.3%, it is unclear whether Ukraine will be able to regulate the market and promote legal cannabis as a way to cope with PTSD. This is particularly the case as a large proportion of users are likely to rely on illegal supply channels to meet the need for potent strains, particularly of cannabis sativa, for recreational and therapeutic purposes. Experience from other countries where cannabis legalization has been in place for years suggests that there are risks associated with legalization. In Canada, for example, despite legalization, illicit drug dealers continue to control a significant proportion of the country's cannabis market.⁴³ Thus, if the challenges of fully transitioning the market from illegal to legal channels persist in a context such as Canada, a country with arguably a much stronger policy base and a much longer policy-setting period than Ukraine, legalization efforts in Ukraine will require even more attention in order to be effective.

Cheap synthetic opioids

Despite their widespread use, cannabis and salts are not the only substances sought to cope with stress and trauma. Opioids remain popular, with the exception of heroin, the availability (and use) of which is reported to have declined since the end of 2021.⁴⁴

Surveys from before February 2022 show that various synthetic opioids have replaced heroin in Ukraine,⁴⁵ a trend that finds validation in another drug use survey conducted at the end of 2022 in the regions of Sumy, Dnipro, Kryvyi Rih and Kyiv. According to both surveys, the use of street methadone is widespread, as is the use of other synthetic opioids such as Subutex (buprenorphine) and nalbuphine, and other legally available drugs such as Lyrica (pregabalin), Dimedrol (diphenhydramine) and benzodiazepines.⁴⁶ These are anticonvulsant, analgesic and anxiolytic drugs that are on average found in 10% of methadone users.⁴⁷ They can be obtained without a prescription in Ukraine, but are categorized as class C drugs in the UK, meaning that their manufacture, possession or sale is punishable by up to 14 years in prison.⁴⁸

These substances are being widely misused in Ukraine. According to a senior health official in Odesa, pregabalin users in Ukraine are taking as much as 20 times the recommended daily dose.⁴⁹ This concerning pattern could have significant health implications for the individual, including central nervous system depression and, when combined with alcohol or other opioids, potentially fatal intoxication.⁵⁰

Civilian users mostly obtain drugs with legal medical use from clients of substitution therapy centres, who resell them at drop-offs points agreed on Telegram. This is reportedly because many users are afraid to visit treatment centres due to the threat of harassment by the police and security services, and the social stigma attached to drug use.⁵¹

Price is likely to play a part in the growing demand for synthetic opioids. The price of heroin has allegedly risen up to €90–€100 per gram due to massive supply shortages. Substitutes, by contrast, are relatively cheap and also easier to obtain, making them more convenient, especially given the high doses used for injection or smoking (6–8 milligrams of buprenorphine and 25–100 milligrams of methadone per dose).⁵²



WHAT PEOPLE CAN GET: TRENDS IN SUPPLY

The previous section has shown that the effects of the Russian aggression on Ukraine's drug consumption habits have been many and varied. The war has exacerbated changes in drug demand that date back to before the invasion, as in the case of opioids and ATS. But the mature phase of the war has also created a new reality of drug use, with suppliers now adapting their trafficking methods to meet new demand characteristics, as in the case of heroin substitutes, while at the same time driving new ones, as in the case of salts.

Heroin: the great absentee

In 2020, an estimated 350 000 adults in Ukraine, or 1.7% of the adult population, were estimated to be injecting drug users, most of whom were likely to be using heroin.⁵³ But by August 2023, based on interviews conducted with people who use drugs and law enforcement authorities in Ukraine, street methadone and other synthetic opioids seem to have replaced heroin, which is perceived to be more expensive.⁵⁴

Supply constraints may be the main reason for this shift in demand. Heroin and opium produced in Afghanistan have traditionally reached markets in Ukraine and north-eastern Europe through two main trafficking routes: the so-called 'northern route' through Central Asia and then Russia, or else through Iran, Turkey and the South Caucasus, and then the Western Balkans westwards.

Initially, the UNODC speculated that the Russian invasion could potentially weaken Ukrainian law enforcement capacities, leading to an upsurge in trafficking activity.⁵⁵ However, there is currently no evidence of an escalation in trafficking along the Central Asia–Russia route, which involves drugs being transported overland from Russia into eastern Ukraine. Conversely, it is plausible that military hostilities have made trafficking too risky for those involved. This may have led traffickers to reroute heroin flows that had previously passed through Ukraine to alternative pathways, particularly through the Western Balkans.

Based on data from the 2023 Global Organized Crime Index, this is the most likely scenario, as the heroin trade appears to be a stable, if not increasingly pervasive, criminal market throughout the Balkan region.⁵⁶ Declining heroin supply has consequences for local availability. According to interviews with people who use drugs and street-level dealers, the little that remains of the heroin supply enters Ukraine from the north-east, but only in crystal form. It is then processed by local 'cooks'.⁵⁷

Interviews and price data collected by the GI-TOC between late 2022 and August 2023 suggest that in less than two years heroin has become noticeably absent from Ukrainian drug markets, and while it remains available, the price has risen from around €25 per gram to as much as €90–€100. Instead, the supply of its substitutes is a growing concern for the Ukrainian police; with the use of street methadone becoming particularly prominent due to its lower price (€13 per dose).⁵⁸ In this context, if heroin use was already declining in 2021,⁵⁹ the Russian invasion may have had a reinforcing effect on drug use patterns, as people who used to use heroin are no longer able to source it or afford it.



Bottles of methadone are destroyed during a police operation in Crimea. The black market for methadone has increased since the Russian invasion, eclipsing heroin. © Yuriy Lashov/AFP via Getty Images

The war has also shaped the way in which such alternatives are provided. The case of methadone is particularly illustrative, highlighting a shift towards illicit production. Legally obtained methadone, which made up the bulk of the supply before the invasion, is finding its way to the black market directly from clients of opioid substitution therapy centres, who then sell it to other users. In July 2023, for example, police in Kyiv exposed and stopped the activities of two groups of methadone dealers with a turnover of millions. During searches of members' homes, police seized methadone prepared for sale, electronic scales, mobile phones, SIM cards and cash, pointing to the group's sophistication.⁶⁰

Buprenorphine, an opioid used for substitution therapy and sold under the brand name Subutex, has also recently begun to appear on the black market in Kyiv. According to the State Bureau of Investigation (SBI), until recently, the main areas of sale were in the western regions of Chernivtsi, Ivano-Frankivsk and Transcarpathia, where buprenorphine was trafficked from substitution therapy centres in Western Europe.⁶¹ As of August 2023, a dose (consisting of one tablet and eye drops for diluting the substance for injecting) was sold on the streets for €20, delivered at drop-off points pre-arranged on Telegram.⁶² According to underworld sources, buprenorphine supply enters the country from Romania at the Siret-Terebleche border crossing in the Chernivtsi region.⁶³

However, most of the supply of opioid substitutes is provided by drug trafficking networks that manufacture methadone in clandestine laboratories in Ukraine. In May 2023, Ukrainian authorities dismantled a methadone trafficking organization active in the Odesa-Vinnitsia-Kyiv axis in central Ukraine, thanks to a year-long investigation carried out by the Dnipro prosecutor's office in collaboration with Kyiv police and the Security Service of Ukraine (SBU).⁶⁴ Pre-trial investigations revealed that the criminal group included relatives and close associates, each with an established role in the organization. The members acted according to a joint and coordinated plan, periodically changing their operational centres. Their methadone sales took place through pre-arranged drop-offs points, with drugs hidden in bushes near a petrol station on the highway connecting Kyiv and Odesa. Two pills of diphenhydramine were included as a 'gift' with each dose of methadone purchased.⁶⁵

A few months later, in July 2023, police dismantled a large-scale methadone laboratory in Kyiv. During searches, law enforcement officers seized 142 kilograms of ready-to-sell methadone and about 150 kilograms of precursors; they also discovered specially equipped rooms with refrigerators for storing ready-made products, bins for precursors, plastic containers with liquid reagents, scales and packaging materials.⁶⁶



Methadone and precursors worth US\$1.4 million were confiscated by Ukrainian police during a search of a clandestine laboratory in Kyiv, July 2023. Photos: Kyiv Police Telegram channel

Cocaine and cannabis: supply recovers as trafficking adapts

Recent studies by the GI-TOC have shown that the Russian invasion has had a disruptive effect on cannabis production and cocaine trafficking along affected routes, with traffickers having to adopt alternative pathways to bring drugs into the region.⁶⁷

Before the invasion, Ukraine was a major transit hub for Eastern European cocaine trafficking, particularly through the port of Odesa. In the 2010s, the port had evolved into a significant pivot point for the movement of cocaine, mainly from Latin America, with traffickers leveraging its strategic location on the north-western shoreline of the Black Sea. From a logistical point of view, the port of Odesa is an ideal hub, with connections to mainland Ukraine and the land networks of Central and South Eastern Europe. Before the invasion, shipments of cocaine routinely reached the port, before being

conveyed by road through Romania and Poland to consumer markets across Eastern, Central and Western Europe.⁶⁸ In three distinct operations carried out between 2019 and 2020, for example, Ukrainian authorities discovered a total of 429 kilograms of the cocaine in containers carrying bananas from Latin American ports.⁶⁹

Despite its widespread availability, cocaine has always been considered an elite drug in Ukraine, with an average retail price of €120 per gram in 2021, slightly higher than in the larger markets of Western Europe.⁷⁰ Prices have only risen since the invasion, as the Ukrainian authorities suspended operations at the port of Odesa in response to military action by Russian forces, rendering the container terminal non-operational. The shortage of direct imports from Latin America has led to an escalation in the retail price of cocaine,⁷¹ with data collected between November 2022 and July 2023 revealing that the cost of a gram averaged between €140 and €150 (an increase of 16%–25%) in central and north-western Ukraine during this period, reaching as much as €170 in Odesa (an increase of 41%).⁷²

However, according to high-ranking officials in the Ukrainian police anti-narcotics department and the SBU, the availability of cocaine seems have increased again in June and July 2023 after an initial period of decline. The sharp rise in police operations targeting cocaine trafficking after a long break since the Russian invasion also supports the Ukrainian law enforcement argument that cocaine is 'back on the market'.⁷³ In July 2023, for example, Kyiv police arrested six members of a criminal group particularly active in the sale of cocaine to 'hundreds of customers per month' in various districts of the capital, through both drop-off points pre-arranged on Telegram and delivery using taxi services.⁷⁴

However, while the detection of cocaine between May and August 2023 may suggest that the drug is once again widely available in Ukraine, frequent seizures may instead be an indicator of improvements in policing. In other words, there is not yet sufficient information to conclude that the absence of seizures in the period between the closure of the port of Odesa in February 2022 and May 2023 indicates the absence of cocaine in the Ukrainian market.

Price data collected by the GI-TOC nevertheless seems to support the argument that 'cocaine is back' in Ukraine. In August 2023, the average price per gram had fallen to €130, pointing to an increase in supply and availability nearly comparable to pre-naval blockade times.⁷⁵ Figure 2 (below) shows the price fluctuation between 2017 and August 2023.

In addition to typical information on seizures and drug-related arrests, details from police operations often provide an understanding of how traffickers have adapted to new scenarios by changing routes and modus operandi, including concealment methods.



According to multiple sources, cocaine now enters Ukraine at the western and south-western borders of the Chernivtsi, Transcarpathia and Lviv regions and then reaches the capital, Kyiv, where most seizures of small quantities take place.⁷⁶ In July 2023, for example, Ukrainian police dismantled an international drug trafficking organization, consisting of Ukrainian police and customs officers, which was

In August 2023, Ukrainian police seized cocaine worth US\$500 000, after it was trafficked into the country through the Czech Republic. Photo: National Police of Ukraine

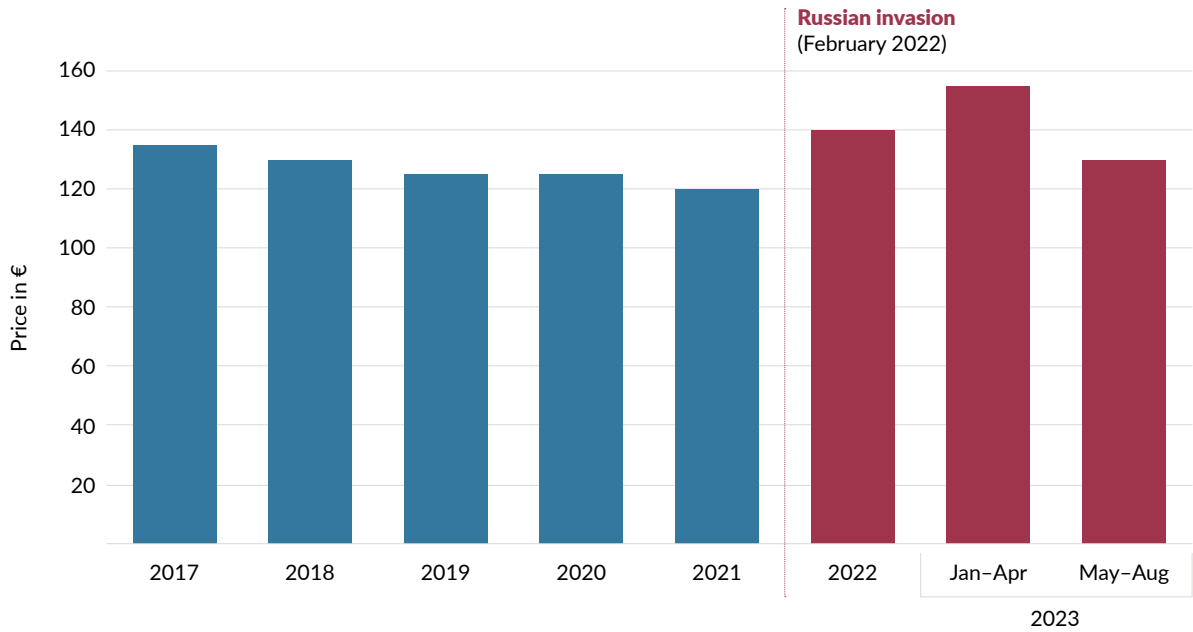


FIGURE 2 Average retail price (in €) of cocaine in Ukraine, 2017 to August 2023.

active in importing Ecuadorian cocaine from Western Europe and distributing it to local dealers throughout Ukraine at a price of US\$45 000 per kilogram. Investigations have also revealed that, before the war, the group was involved in importing large quantities of cocaine through the port of Odesa and that, since the closure of the port, the group has moved its area of operation to the border with Poland.⁷⁷



FIGURE 3 Cocaine trafficking routes in Ukraine, as of August 2023.

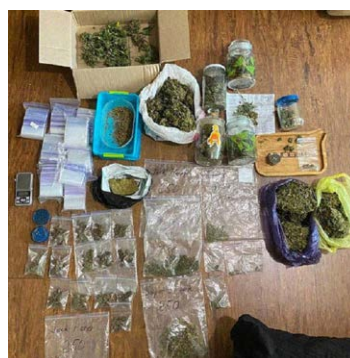
However, based on information on current cocaine wholesale prices in Europe, the purchase price of US\$45 000 for a kilogram suggest that, in this specific example, Ukrainian traffickers were acting as local distributors rather than brokers controlling the international supply chain. Recent research on cocaine trafficking suggests that the cost of a kilogram purchased directly from producers in Latin America by European-based traffickers and brokers ranges from US\$10 000 to US\$15 000. The price increases as the cocaine is distributed throughout the region.⁷⁸

A similar trafficking scheme was identified in August 2023, when Ukrainian police dismantled a trafficking network responsible for importing cocaine into Ukraine from the Czech Republic by car, through Slovakia and Poland, for a value of up to US\$450 000 a month.⁷⁹ Figure 3 shows cocaine trafficking routes in Ukraine as of August 2023.

Cannabis cultivation and trafficking patterns were also initially disrupted before adapting to wartime conditions. Before the invasion, Ukraine had a widespread cannabis cultivation system aimed at meeting consumption demands within the country and in neighbouring countries.⁸⁰ This cultivation involved both outdoor and indoor methods. In 2019, authorities in Ukraine took action to eradicate around 1.8 million plants as part of control measures against outdoor cultivation.⁸¹ Meanwhile, indoor cultivation continued in well-equipped greenhouses, using drip irrigation, lighting and heating systems, allowing for up to three harvests annually.⁸²

However, severe winter temperatures, power outages and fertilizer shortages have all adversely affected the cannabis harvest in Ukraine. These adversities have led to a reduction in the overall supply of cannabis, resulting in a significant increase in prices.⁸³ This is in contrast to the previously low prices observed. In 2020 and 2021, the cost of a gram of domestically grown outdoor cannabis in Ukraine ranged from €2 to €4. However, since the Russian invasion and up to April 2023, fieldwork carried out in Lviv, Odesa and Kyiv has revealed a notable escalation in price, with costs now ranging between €4.50 and €6.50 per gram.⁸⁴ Cannabis cultivation in Ukraine has gradually shifted from outdoor to indoor methods, with short flowering periods and high yields, probably due to an increased demand for cannabis strains with high levels of THC.

Evidence from two recent police operations provides an understanding of the scale of cannabis trafficking in Ukraine. For example, in May 2023, after monitoring unusual movements to and from a residential building in Kyiv, police found a greenhouse with cannabis plants in an apartment. During the search, investigators seized 50 packages of cannabis herb, a quantity significantly higher than the average number of packages usually seized during routine police operations, as well as smoking devices, seeds and fertilizer.⁸⁵ A month later, Kyiv police arrested two men for the sale of cannabis they had cultivated en masse in an apartment in the capital. During the raid, police confiscated several kilograms of cannabis herb, as well as fertilizer and indoor cultivation equipment.⁸⁶



In operations in mid-2023, police seized substantial amounts of cannabis herb from residential buildings in Kyiv. Photos: National Police of Ukraine (Kyiv)

Prices of cannabis per gram have also risen, averaging €10 in May–August 2023.⁸⁷ But unlike the increase that characterized the first year of the war, which resulted from supply shortages,⁸⁸ this surge can be attributed to higher costs of imported seeds and indoor cultivation.

Evidence from police operations suggests that many street-level dealers in Ukraine do not specialize in any particular drug and instead sell cannabis alongside stimulants to meet users' demand for both relaxation and energy.⁸⁹ In April 2023, for example, police in Kyiv arrested a man who was in possession of eight different types of drugs, including cannabis herb, methadone, cocaine, amphetamine and alpha-PVP.⁹⁰ A few months later, in July 2023, police in Kyiv arrested a street-level dealer who was in possession of half a kilogram of cannabis herb as well as cannabis resin, amphetamines and hallucinogenic mushrooms. Investigations later revealed that the dealer had used various taxi services to deliver the drug to drop-off points pre-arranged with customers on Telegram.⁹¹

However, while drug dealers peddling a range of different drugs is not a new aspect of supply dynamics, a police operation conducted in June 2023 revealed how drug dealers in Ukraine have been able to opportunistically exploit the kinds of commodities that the war has made available on the market by turning also to trafficking ammunition. On the 30 June, police in Kyiv arrested two individuals active in the sale of cannabis and ammunition. The raid led to the confiscation of 101 kilograms of cannabis herb, as well as a grenade and some 3 000 cartridges of various calibres, an amount more consistent with possession for trafficking than for self-defence. One of the two arrested people was already

known to law enforcement, having been convicted of arms trafficking in the past.⁹² While small arms for self-defence and business protection are frequently seized in drug interdiction operations, the seizure of large quantities of ammunition for automatic rifles indicates the involvement of drug traffickers in multiple criminal markets.



Gun cartridges and cannabis seized by police in Kyiv in June 2023. Photo: National Police of Ukraine (Kyiv)

Alternative concealment methods

In part as a response to increasing law enforcement capacity and to adapt to new scenarios created by the war, Ukrainian drug traffickers have developed new methods of concealment to supply the domestic market.

For example, until recently, cocaine was mainly brought into Ukraine directly from Latin America by sea, hidden in consignments of tropical fruit – particularly bananas. However, in March 2023, Kyiv police arrested a cocaine dealer who had a stock of apples sealed in hermetic polyethylene film. When the police cut open the apples, they found that the cores had been replaced with small bags of cocaine.⁹³



A drug dealer in Kyiv was found to be hiding cocaine in apples. Photos: Kyiv City Prosecutor's Office Telegram channel

Other types of drugs, particularly cannabis products and synthetics, are often disguised as food products and imported into Ukraine, typically from Western Europe and North America. In July 2023, police in Kyiv intercepted a parcel from the US that contained packets of sweets filled with cannabis herb and resin.⁹⁴

In other detected cases, concealment methods have involved a diverse set of techniques and vectors, ranging from humanitarian aid convoys to car compartments and computer parts, as in the case of 2 kilograms of cannabis found inside a computer system unit belonging to a man in Kyiv who was distributing drugs through the postal service.⁹⁵

Ukrainian police discovered 2 kilograms of cannabis hidden inside a computer in Kyiv in March 2023.
Photo: National Police of Ukraine (Kyiv)

However, the September 2023 arrest in the Sumy region of drug mules hired to deliver cocaine directly from Latin America within Ukraine suggests that 'traditional' trafficking methods also persist.⁹⁶ ■



Adaptations in the supply of synthetic stimulants

Before the Russian invasion, data from police operations suggested signs of increasing synthetic drug production capacity in Ukraine, with the number of laboratories dismantled by Ukrainian authorities rising from five in 2019 to 67 in 2020. Although this increase could simply be the result of improved police capacity, the 2020 record was still the highest number of amphetamine laboratories reported dismantled in any country in that year, indicating a level of production likely to meet local demand for ATS.⁹⁷

As the invasion of eastern Ukraine began, laboratories, particularly those located in Kharkiv and the Donbas, experienced a temporary halt in production.⁹⁸ This coincided with an increase in detections in the central and western parts of the country, including the Prykarpattia region on the borders with Slovakia, Hungary and Romania.⁹⁹

'The Twenties' gang

In an interview in July 2023, high-ranking officials from the anti-narcotics department of the Ukrainian police and the SBI discussed a recent successful operation aimed at dismantling a well-known organized criminal group operating in Kryvyi Rih and the Dnipropetrovsk region.¹⁰⁰

The operation targeted a new generation of recruits to a long-established gang known as 'The Twenties', which takes

its name from the 20th quarter of Kryvyi Rih where it was formed in the 1990s. The Twenties began as an extortion ring, but as the gang consolidated its influence, it began to engage in drug trafficking as well. Eventually, the gang opted to diversify into quasi-legal enterprises, leading the group's heads to establish a company named Triad. This company specialized in metal trading – a typical choice when trying to establish a legitimate business in an industrial city.¹⁰¹

While the group still exists, and remains in control of potent ATS production for markets in Dnipropetrovsk and Kyiv, its influence has waned and police are now trying to deal it one last lethal blow.¹⁰² According to law enforcement sources, the operation against The Twenties is also connected to the latest SBU-led clean-up of the local police department in Dnipro, where about a dozen officers were fired for allegedly selling drugs in collaboration with the gang.¹⁰³

However, according to senior police representatives, this new generation of The Twenties had a more indirect relationship with the original gang and were much less influential than the old members.¹⁰⁴ At the time of the police operation, the gang was reorganizing its ranks, recruiting warehouse workers and drug couriers to move the sale of

drugs and precursors, particularly 1-Phenyl-2-nitropropene (P2NP), from the Dnipropetrovsk and Zaporizhzhia regions to areas closer to the front line.¹⁰⁵

In January 2024, police in Dnipro arrested 38 suspected members of The Twenties and confiscated drug laboratories set up to produce as much as 40 kilograms of ATS per month. Investigations also revealed information about the gang's modus operandi and rules. The substances were distributed in plastic cocktail tubes sealed with hot glue of different colours, depending on the area assigned to a specific street dealer. Dealers operating outside their designated area would be severely punished by other members of the group.¹⁰⁶ ■

Following an initial period of disruption at the start of the war, the illicit manufacturing and distribution of synthetic drugs has re-emerged in central areas of Ukraine, such as the Kyiv region, facilitated by online platforms and the postal system. This resurgence is suggested by various law enforcement actions.¹⁰⁷ For example, in July 2023, metropolitan police disrupted the activities of a group of traffickers with a turnover of several million US dollars. A 39-year-old resident of Kyiv organized production and set up a sales scheme through one of the city's entertainment establishments. The suspects also created and administered a special channel on Telegram with the aim of expanding ATS sales to the entire Kyiv region.¹⁰⁸

Online drug sales are widespread in Ukraine, but 'traditional' in-person sales have also persisted, or rather have reappeared after an initial hiatus caused by the heavy presence of law enforcement on the streets of major cities in the early days of the war.¹⁰⁹ In May 2023, for example, police arrested a salesperson at an electronic retail store in Kyiv who had ordered synthetic drugs from Telegram and was covertly selling them in the shop where he worked.¹¹⁰



In May 2023, police in Kyiv arrested a salesperson of an electronic retail store who was selling synthetic drugs under the counter. Photo: National Police of Ukraine (Kyiv)

ATS production goes industrial

Most police operations targeting synthetic drugs in Ukraine have involved the dismantling of a large number of clandestine laboratories and the seizure of precursors such as ephedrine and pseudo-ephedrine. This indicates that ATS production in the country is taking place in typical 'kitchen-type' laboratories using processes that are reportedly difficult to scale up.¹¹¹

However, towards the end of 2022 and in the first half of 2023, authorities began to detect and seize not only pre-precursors used for large-scale ATS production, but also laboratory equipment and reagents needed for semi-industrial synthesis of ATS. In December 2022, for example, detectives from

the national police exposed a group active in the sale of precursors throughout Ukraine. According to the police report, the products offered by the group included a variety of laboratory equipment and all types of precursors and reagents necessary for large-scale ATS synthesis. For regular customers, the traffickers prepared special 'packages' in advance with a set of required ingredients, which they offered on their own websites.¹¹² The following year, in March, two distinct operations aimed at dismantling laboratories in Kyiv's Shevchenkivsky and Desnyansky districts, led to the seizure of more than 200 grams of P2NP, a chemical compound employed in the industrial manufacture of ATS, among other reagents.¹¹³

Evidence emerging from operations such as these raises a number of questions about whether ATS production in Ukraine has already shifted from small-scale to large-scale, and whether large quantities of non-ephedra-related precursors and pre-precursors are being used in the domestic and close regional synthesis of ATS using large-scale production methods.

Prices of ATS have also remained relatively stable between the start of the invasion and January 2023, suggesting that local production may be continuing. For instance, the cost of a gram of amphetamine ranged from €8 to €12 between 2021 and 2022 and remained stable until early 2023. However, data gathered from Telegram shows that throughout 2023, amphetamine prices increased to an average of €16 per gram in several major cities, with the exception of Kharkiv, where the cost remained €8 (see Figure 4).¹¹⁴

City	Price per gram (€)	
	2022	2023
Kyiv	11.50	16
Odesa	12	16.70
Lviv	11	16
Kryvyi Rih	12	16
Poltava	12	16
Sumy	12	16
Kharkiv	8	8

FIGURE 4 Retail price of amphetamine in selected Ukrainian cities, 2022 and 2023.

In the absence of information on the purity of amphetamine available on the market, and with data from police operations suggesting an ongoing and undisturbed local manufacturing process, the increase in retail prices (by 30%) may be attributable to unknown economic factors. Moreover, in terms of the impact of demand on the price surge, any potential reduction in the number of civilian users due to population displacement appears to have been offset, if not outweighed, by an increase in the number of people turning to drug use as a coping mechanism within the context of the ongoing war.¹¹⁵ According to evidence from several police operations and interviews conducted with the SBI, Ukraine is its own source of ATS, with the substances being sold to all regions of the country – including the front line in the east.¹¹⁶

New kid on the block: 'salts' taking over the role of ATS

Since the February invasion, the Ukrainian authorities have progressively detected significant quantities of synthetic stimulants, with a high availability of NPS, mainly limited to alpha-PVP and mephedrone.¹¹⁷

In contrast to the pre-war period, when most synthetic stimulants were imported from China, the EU (particularly the Netherlands) and Turkey,¹¹⁸ evidence from fieldwork and police operations suggests that the supply of synthetics in Ukraine is being sustained by local production. Between December 2022 and August 2023, for instance, police conducted dozens of operations leading to the seizure of several kilograms of alpha-PVP and mephedrone, together with hundreds of litres of precursors, from clandestine laboratories located mainly in Kyiv and in the Kharkiv region.¹¹⁹ However, alpha-PVP and other salts are being detected and seized at a steady pace from west to east across Ukraine, including in rural areas. For example, in February 2023, police in Truskavets, Lviv region, arrested a dealer who had been making about 10 000 deliveries of alpha-PVP and the hallucinogenic LSD (lysergic acid diethylamide) per month for the previous year, at specific locations pre-arranged on Telegram.¹²⁰

Evidence from police operations suggests that the sophistication of precursor trafficking and salt synthesis, particularly of alpha-PVP and mephedrone, has already reached a high level, with several arrests and seizures indicating the presence of numerous clandestine laboratories and well-established trafficking schemes. Precursors and cough suppressants,¹²¹ the sale of which is limited in Ukraine, are trafficked into the country in large quantities from neighbouring Poland, but also from Turkey and especially Egypt. According to law enforcement officers, 5 000 blister packs are believed to be sufficient to produce around a kilogram of salts.¹²²

Experienced 'cooks' are central to the manufacturing process, as it is almost impossible to produce high-quality salts without trained ones.¹²³ They are particularly valued by drug trafficking organizations, as they are the only ones who can guarantee the ongoing expansion of supply by passing on their knowledge and training new cooks, as confirmed by interviews with chemists from law enforcement authorities.¹²⁴ Reportedly, after the invasion, salts were the only substance whose purity was maintained at a high level, while the purity of seized ATS dropped, with their relative market characterized by an almost total absence of pure substances.

Price data sheds light on the vastly increased supply and attractive market position of salts since the invasion. In June/July 2023, the average price of a gram of alpha-PVP in its crystal form was UAH500 (€12) for both blue and white crystals, the latter being perceived as higher quality by users.¹²⁵ As an example, Figure 5 shows retail prices collected by the GI-TOC on Telegram for drop-offs in the Odesa region. Interestingly, the price per unit decreases significantly when multiples of grams of salts are purchased. This not only suggests a high level of availability, but may also be an incentive for traffickers, who benefit from favourable wholesale prices compared to retail prices, to start stocking the substances, and users, who see an opportunity to buy more for less, thus fuelling dependency.



In January 2024, a woman was caught crossing into Ukraine from Poland with over 1 000 pills containing pseudoephedrine in packages with Arabic writing. Photo: Western Regional Directorate of the State Border Service of Ukraine Facebook page

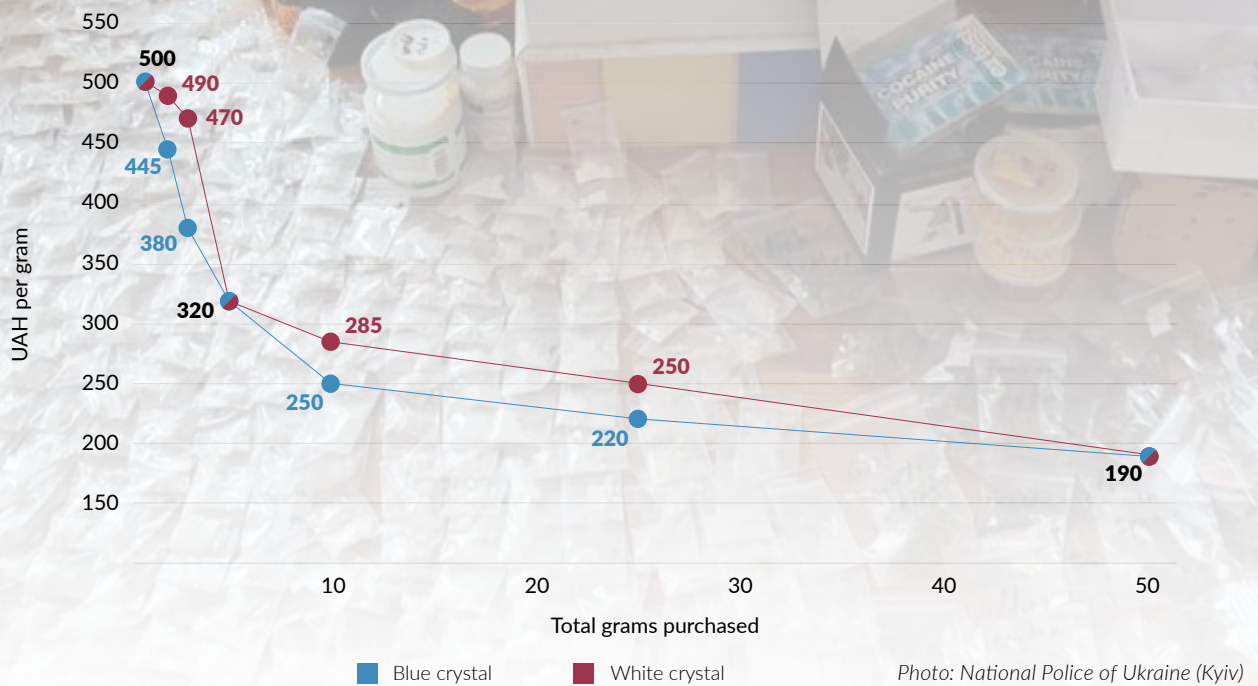


FIGURE 5 Cost of alpha-PVP in the Odesa region, June and July 2023.

NOTE: Figure shows retail prices seen on Telegram, with cost per gram decreasing as amount purchased increases. UAH1=€0.024 converted using OANDA Currency Converter as of 1 July 2023.

Between January and August 2023, a gram of amphetamine could be bought through Telegram in Ukraine from a minimum of UAH300 (€7.50, at the time of price collection) in Kharkiv to a maximum of UAH800 (€20) in Odesa. Meanwhile, a gram of MDMA, also available through Telegram, could be purchased for a minimum of UAH500 (€12) in Kryvyi Rih and a maximum of UAH1 650 (€41) in Odesa, depending on the purity.¹²⁶ Instead, until June 2023, the price of a gram of methamphetamine ranged between UAH805 (€21) in Kyiv and UAH1 550 (€39.60) in Odesa, also depending on the quality.¹²⁷ On the other hand, cocaine and related substances, such as 2C-B (aka 'tucibi', or pink cocaine), remain elite stimulants, and are reportedly too expensive for the average person. According to fieldwork conducted by the GI-TOC between January and April 2023, the price of a gram of cocaine powder ranged from €150 in Kyiv to €190 in Odesa.¹²⁸

As shown in Figure 6, the price of alpha-PVP per gram appears to have remained relatively low, making its cost-effectiveness a major selling point. In Kyiv and Odesa, alpha-PVP prices per gram have been stable – if not slightly decreased – from a maximum of UAH650 (€16.60) to about UAH630 (€15.70). In early August 2023, a gram of alpha-PVP could be bought in Odesa for as little as UAH380 (€9.30).

City	Price per gram (UAH)
Odesa	380
Kyiv	610
Sumy	635
Kharkiv	500
Kryvyi Rih	635
Poltava	635
Lviv	635

FIGURE 6 Retail prices of alpha-PVP in Ukraine in the first half of 2023.

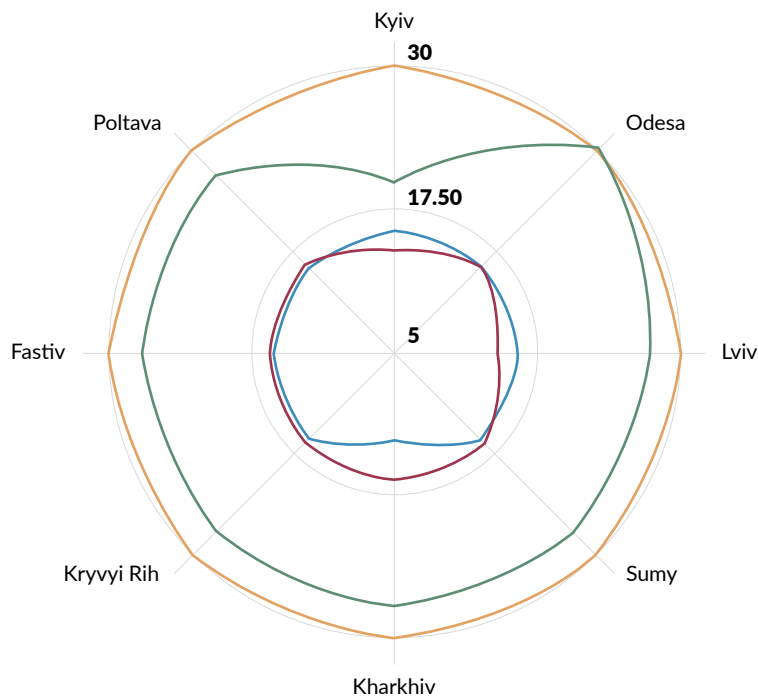


FIGURE 7 Retail prices of alpha-PVP, amphetamine, methamphetamine and MDMA (price per gram in €) in Ukraine in 2023.

While the comparatively lower cost of salts makes them attractive to users, much remains unknown about the risks associated with the use of these substances. There is, for example, very little known about the chemical composition and the full effects of salts. In most cases, substances are synthesized in improvised laboratories set up in garages or apartments. Equipment is rarely sterilized and residues from previous synthesis processes often contaminate the production of substances that are then sold as alpha-PVP or other end products. Although some cooks may produce higher quality drugs, others may be less precise, meaning that the dosage of salts may vary depending on the chemical composition resulting from each synthesis, and the level of toxic compounds may differ.

This means that the use of salts poses significant health risks, sometimes leading to death. In June 2023, for example, police broke into an apartment in Kyiv and found the dead bodies of two minors, allegedly deceased due to complications related to the abuse of alpha-PVP. Investigators later discovered that the apartment belonged to a dealer, from whom the minors had bought the salts.¹²⁹

The continuation of production during the war, the increased detection of laboratories and equipment for large-scale synthesis, and the wide availability of cooks with knowledge of production processes throughout the country point to a well-organized pattern of salt trafficking in Ukraine.



Police in Kyiv seized 3.5 kilograms of alpha-PVP and 400 litres of precursors in May 2023. Photos: National Police of Ukraine (Kyiv)



A MONOPOLY OVER SYNTHETICS? THE RISE OF KHIPROM

The level of sophistication seen in the market for salts in Ukraine could hardly have been achieved without a stable and structured network behind it. The market has this in Khimprom, a Russian-Ukrainian outfit that also plays a major role in the trafficking of synthetic drugs and precursors to the front line.¹³⁰

In May 2023, Ukrainian law enforcement authorities raised concerns about specific methods developed by Khimprom to traffic substances from Russian-occupied territories into Ukraine. These activities strategically utilized routes near the war zone, involving substantial quantities of the substances in question.¹³¹

According to law enforcement, Khimprom consists of several cells operating in Russia, Belarus, Ukraine and Kazakhstan. Since about 2014, the network has specialized in trafficking synthetic drugs and their precursors using the dark web. Khimprom is reported to have initially established its operations in Russia before relocating to Ukraine.¹³²

Facing heightened scrutiny by law enforcement in both Russia and Ukraine, Egor Burkin (who also goes by the name of Levchenko¹³³), and who is often cited in media reporting as the head of Khimprom,¹³⁴ is thought to have evaded authorities by fleeing to Mexico.¹³⁵ However, law enforcement officials in Kazakhstan and Ukraine believe that Burkin remains actively involved in overseeing Khimprom's activities from abroad.¹³⁶ Criminal proceedings have been brought against the group, and Ukraine's national security and defence council recently imposed sanctions on a number of individuals said to be linked to Khimprom, including Burkin.¹³⁷ According to law enforcement officials interviewed, the syndicate appears to be continuing to establish new networks of synthetic stimulant laboratories in Ukraine and Kazakhstan, guaranteeing a steady supply of laboratory equipment and precursors from China, and reagents from Russia into both countries.¹³⁸

One of the stimulants in question is alpha-PVP, of which the Ukrainian authorities have reported a systematic increase in production and distribution by traffickers throughout Ukraine. The manner in which production has increased over the course of the first half of 2023 has raised suspicions among senior law enforcement officials about the potential control that the syndicate may be exerting over supply through a series of direct and indirect actions. Indeed, experts believe that Khimprom could

ultimately be behind both lawful (i.e. pressuring local police departments to target and dismantle independent drug laboratories) and unlawful actions aimed at eliminating competitors that could threaten its monopoly.¹³⁹ In June 2023, for example, Ivan Klymovich (aka 'Khram'), a well-known leader of an organized criminal group controlling the drug market in Ivano-Frankivsk in western Ukraine, was severely injured by a sniper who shot him while he was at the gym.¹⁴⁰ Allegedly, Khram's gang operates independently and does not align its criminal interests with those of Khimprom, thus posing a threat to Khimprom's expansion plans.¹⁴¹

In fact, Khimprom's takeover of the drug supply in Ukraine has already begun, thanks in part to a PR campaign using billboards and videos offering financial incentives to drug traffickers to avoid useless competition and join the Khimprom-controlled web marketplace RuTor,¹⁴² the successor to the Russian dark web portal Hydra.¹⁴³ The use of RuTor is so widespread in Ukraine that in many cases where drugs are sold through this portal, traffickers have no idea that they are actively working for Khimprom when selling their products.¹⁴⁴

Synthetic stimulant production is systematic in Ukraine, and Khimprom's monopoly may also explain the low levels of violence associated with the market. It may also account for why, according to the police, trafficking in alpha-PVP and other salts is not a major security concern.¹⁴⁵ Khimprom is believed to benefit from stable connections with high-ranking Ukrainian officials, from whom it receives protection and also a practical way to supply salts and stimulants to the front line to meet the demand for potent stimulants among military personnel.¹⁴⁶ For example, in September 2023, an SBI operation led to the dismantling of two synthetic drug laboratories and the arrest of a law enforcement officer allegedly overseeing the production and trafficking of end products to the front line.¹⁴⁷

According to dark web sources, the network of individuals involved in Khimprom includes high-ranking officials and heads of various departments of the State Border Guard Service of Ukraine from the eastern to the western border, as well as long-standing members of Ukraine's criminal landscape. According to dark web sources, a former border guard in the Luhansk region is believed to be in charge of the movement of illicit goods across the front line, mainly tobacco into Ukraine and synthetic drugs (alpha-PVP) and precursors to and from Russia.¹⁴⁸

However, evidence suggests that Khimprom's plan to capture the synthetic drug market extends beyond Ukraine, with similar production dynamics and precursor trafficking patterns identified in the wider region of Eastern Europe and Central Asia, particularly in Kazakhstan.¹⁴⁹ In the first quarter of 2023, Kazakh law enforcement authorities reported the dismantling of eight large-scale clandestine laboratories, highlighting the expansion of manufacturing operations to various provinces across the country.¹⁵⁰ In the first half of 2023, the Kazakh interior ministry successfully confiscated approximately 73 tonnes of precursor substances and laboratory equipment intended for the establishment of sizeable synthetic drug production facilities. Mephedrone was



Similar production dynamics observed in drug laboratories dismantled by the Kazakh police point to Khimprom's possible expansion into Central Asia.

Photo: Government of Kazakhstan

also among the substances seized during this operation.¹⁵¹ The apprehended members of the criminal group are said to be of Armenian, Belarusian, Kazakh and Russian nationality.¹⁵² In March 2023, law enforcement authorities seized 200 kilograms of alpha-PVP and 15 tonnes of precursors during an operation to dismantle a clandestine laboratory set up by a Russian national in Kazakhstan's southern province of Turkistan.¹⁵³

According to a Kazakh law enforcement official, synthetic drugs produced in the country are frequently distributed within the Russian diaspora by Russian drug trafficking organizations based in Kazakhstan. The precursor chemicals for these substances are usually sourced from Russia, effectively creating a closed system of production and distribution. Nonetheless, the source indicated that the agency does not rule out the possibility that recently arrived Russian traffickers may eventually expand their sales to the local Kazakh population.¹⁵⁴

In explaining regional trafficking dynamics, one law enforcement officer described how synthetic drugs manufactured in Kazakhstan are often distributed by Russian drug trafficking organizations based in Kazakhstan – a pattern that has recently been identified in other countries in the wider region, such as Georgia. Here, too, precursor chemicals are also typically shipped from Russia, creating a closed system of production and distribution.

Khimprom in Georgia

In December 2019, Georgian police dismantled a drug trafficking group specializing in the production and distribution of NPS in the capital Tbilisi and the cities of Kutaisi and Batumi. The group consisted of six people from Georgia and four from Russia, Ukraine, Kyrgyzstan and Kazakhstan. During the operation, police confiscated 21 kilograms of powdered alpha-PVP and 10 litres of liquid alpha-PVP, as well as laboratory equipment and various chemical products in Tbilisi and Batumi.

Subsequent investigations revealed that the group was in fact a cell of an 'undefined international network' of drug traffickers active in the production, storage and sale of drugs in Armenia, Kyrgyzstan, Uzbekistan, Tajikistan and Georgia, using Telegram channels.¹⁵⁵ The modus operandi and the regional context suggest that the cell might have worked as a local unit of Khimprom. The Ukrainian national

was the regional 'coordinator' of the organization, responsible for leading the group and hiring trustworthy personnel to act as foot soldiers in Georgia.¹⁵⁶ Under the Ukrainian, nationals from Kyrgyzstan and Georgia were employed as cooks, mixing chemicals and precursors in established laboratories to produce and then store alpha-PVP. The Russian citizen was in charge of bringing precursors as legitimate imports from China to a fake company registered in Russia (another detail that aligns with Khimprom's modus operandi) and then smuggling them into Georgia. The other members of the group worked as couriers to deliver the final drug to drop-offs points. To communicate, the group used an application called Vipol, through which they had contact with their direct supervisors and the Ukrainian manager in Georgia. ■



CONCLUSION AND RECOMMENDATIONS

The emergence of new patterns of drug use in the context of the Russian invasion of Ukraine indicates new trends in the consumption of cannabis, street methadone and salts, both for recreational use and as a means of coping with the stress and trauma of the ongoing war, particularly among military personnel. The challenges posed by the pending legalization of medical cannabis, combined with the emergence of more potent drug therapies for treating PTSD, suggest a nuanced but potentially problematic role for drugs in Ukraine's future.

The findings point to shifting supply dynamics in the drug economy, disruptions and adaptations in production methods, and new trafficking patterns since the start of the war. Of particular relevance is the intricate network of synthetic drug production and trafficking orchestrated by the criminal network Khimprom across Eastern Europe and Central Asia, raising concerns about the group's growing influence, its connections to officials and the broader security implications.

Based on these findings, a number of observations and recommendations can be made:

- Substantiated data indicates that new trends in drug consumption have emerged in Ukraine since the Russian invasion. In contrast to the 2014 crisis in Ukraine, when opioids were the predominant substances of abuse, it has become imperative for harm reduction initiatives to include measures to tackle the discernible use and misuse of synthetic drugs, in particular alpha-PVP and mephedrone. At present, the services provided by the National Health Service of Ukraine are inadequately configured to meet the specific needs of individual consumers. It is therefore incumbent upon international harm reduction stakeholders to facilitate a better understanding of this evolving landscape. To this end, it is recommended that a series of comprehensive training sessions and seminars be organized, bringing together representatives from various sectors, including law enforcement agencies, health professionals and civil society. Furthermore, the active involvement of people with lived experiences of drug use is crucial in order to identify emerging patterns in drug consumption behaviour.
- The Ukrainian parliament has approved a law to legalize the medical use of cannabis, reflecting a growing consensus that the substance can be a beneficial tool in the treatment of PTSD and other mental health conditions exacerbated by the ongoing war.¹⁵⁷ If the bill is signed by President Zelensky and becomes law, medical cannabis could be instrumental in aiding the recovery of those suffering from PTSD. However, the Ukrainian government is not only seeking to legalize cannabis for medical purposes but also to protect local producers by restricting imports of herb and seeds as much as possible. While the implications of legalization on cultivation remain uncertain at this stage, and

determining these is likely to require follow-up surveys on consumption, the government will certainly need to address lingering concerns about potential overproduction and the diversion of legal cannabis produced in licensed farms to illicit markets.

- Although alpha-PVP and mephedrone are frequently seized in Ukraine, there remains a substantial gap in our understanding of their chemical composition and potential long-term effects. These substances are often synthesized in makeshift laboratories, typically set up in garages or residential apartments. Equipment sterilization is often lacking in these environments, leading to contamination of subsequent substance production with residues from previous synthesis processes. These contaminated substances are then sold as alpha-PVP or other end products. Moreover, there is considerable concern about cases in which law enforcement agencies initially believe they have seized ATS, only to discover upon laboratory testing that the substances are in fact salts. This not only raises concerns about police capabilities, but also poses a significant risk to inexperienced users, as the dosage of salts can differ substantially from those of amphetamines and similar compounds. It is then imperative to prioritize and fund research initiatives aimed at comprehensively understanding the chemical composition and potential long-term effects of substances such as alpha-PVP and mephedrone. Research should focus on the effects of these contaminants and the potential health risks to users. Additionally, efforts should be directed towards enhancing law enforcement capabilities to accurately identify and differentiate between substances, in particular addressing the challenge of detecting salts, which are often disguised as amphetamines. Such research is crucial for the development of informed public health policies, tailored interventions and harm reduction strategies to protect both law enforcement personnel and users from the risks associated with these substances.
- The emergence of several new trafficking routes necessitates a review of the operational focus of customs and border police. A pertinent example relates to cocaine trafficking, particularly the increased frequency of seizures in the western regions of Chernivtsi, Transcarpathia, Volyn and Lviv. Importantly, these incidents involve individuals who were previously engaged in trafficking cocaine through the port of Odesa, reflecting the adaptability of traffickers in response to the changed circumstances brought about by the conflict. This transition underscores a pivotal shift from the port-centric model that prevailed in pre-war Ukraine. The identification of trafficking operations in regions that previously received less attention from law enforcement suggests that drug flows do not necessarily follow predetermined routes but are constantly shifting and fragmenting into sub-flows. In light of this, and extrapolating from the cocaine experience, there is an opportunity for Ukrainian law enforcement agencies to collaborate strategically with their international counterparts to improve the detection of flows of other substances, including salts and precursors, in regions that may have appeared uncharacteristic until recently.
- The increased frequency of seizures of precursors essential for large-scale production of ATS and salts has led to investigations into the potential transition from small-scale to large-scale synthetic stimulant manufacturing in Ukraine, Kazakhstan and Georgia. Law enforcement operations have revealed the existence of a robust production system, characterized by the transport of precursors from China and the import of reagents from Russia into these three countries, even across conflict lines. Operating relatively discreetly in the background is Khimprom, an international drug trafficking organization of Russian and Ukrainian origin. Khimprom has the capacity to establish Ukraine as a key hub for the supply of synthetic drugs to local and global markets. Given the inability to cooperate with Russian counterparts, it is imperative for Ukrainian law enforcement agencies and military intelligence to fully determine the extent of Khimprom's infiltration of Ukraine's illicit drug production landscape. Timely disruption of production and trafficking operations is essential to avert the potential consequences of delayed action.



NOTES

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