

EUROPEAN DRUG TRENDS MONITOR



About this report

This is the third issue of the Global Initiative Against Transnational Organized Crime's European Drug Trends Monitor, an output of our Observatory of Organized Crime in Europe. This series of bulletins tracks developments in European drug markets to provide an analysis of trends in availability, pricing and criminal dynamics across 12 major cities.

European drug markets are undergoing considerable changes, triggered by the confluence of several major trends in supply and demand. These include an oversupply of cocaine, a growing crack epidemic, significant shifts in the production of heroin in Afghanistan, the gradual emergence of synthetic opioids, the partial legalization of cannabis in some countries and the rise of synthetic stimulants such as synthetic cathinones, especially against the backdrop of Russia's war against Ukraine. At the same time, we seek to document the growing illicit market of diverted or falsified prescription drugs, such as painkillers, tranquillizers and anaesthetics.

As drug markets rapidly transform, with consequences for public health, criminal dynamics and related violence, the European Drug Trends Monitor seeks to provide up-to-date analysis to inform public debate and supplement data from governments and international organizations. Trends are being monitored in Antwerp, Barcelona, Bucharest, Eindhoven, Hamburg, Istanbul, Kyiv, London, Marseille, Milan, Prague and Stockholm. In each city, information is gathered on drug availability, retail and wholesale prices, and criminal dynamics in trafficking activities. The monitor relies on field research, analysis of data provided by authorities, information gained through interviews, and tracking of media reports and incidents such as drug seizures. It also draws on the monitoring and analysis of hundreds of social media channels and encrypted messaging apps such as Telegram and Signal, as well as dozens of dark web marketplaces where illicit drugs – alongside diverted, falsified and counterfeit prescription drugs – are being commercialized.¹ Additionally, discussions on dark web forums, where users, producers and sellers openly exchange information and tips, provide valuable insights on emerging trends, supply chains and distribution methods. The field research findings are referred to in the text but are not referenced throughout. The European Drug Trends Monitor finalized its third round of data gathering and field research in March 2025. This issue summarizes key findings for two sets of substances whose markets are undergoing significant changes: cannabis and cocaine. There are methodological limitations and caveats on how to interpretate the findings: no toxicological analysis of the surveyed substances can be conducted, therefore caution needs to be applied in analyzing the data; the analysis lacks comparisons due to the absence of previous data; and the research focuses only on the supply of illicit drugs, not the potential demand for them, limiting explanations of the size of drug markets.

KEY TREND 1: A liberal cannabis belt has emerged in western Europe, with Germany at its centre.

Cannabis legislation has shifted significantly in some European countries in the past years. A key objective behind the legalization and decriminalization of cannabis has been to curb organized crime and its involvement in cannabis supply chains. While the full effects are yet to take root, early indicators point to mixed and almost entirely unintended results.

Hundreds of cannabis users gathered on the night of 31 March 2024 at the Brandenburg Gate in Berlin.² As midnight passed, they celebrated the new cannabis legislation coming into effect on 1 April, legalizing the private possession of up to 50 grams of cannabis and the carrying of up to 25 grams. Home growing and the establishment of cannabis clubs for collective production were also legalized.

In 2021, Malta was the first EU state to legalize cannabis possession, production and use within legal thresholds, and Switzerland³ allowed scientific pilot projects to supply recreational cannabis. The Netherlands⁴ launched a controlled cannabis supply chain experiment in 10 municipalities, and the first 'coffee shops' selling its products of licit supply opened in 2023. Luxembourg allowed home growing and consumption of cannabis in 2023. On 3 July 2025, the Czech Republic's senate approved a bill that allows for the possession of up to 100 grams of cannabis for adults (21 years or older) at home, 25 grams outside and the growing of up to three plants.⁵ Several other countries, including Portugal and Spain, have decriminalized cannabis possession. Barcelona was home to more than 200 of Catalonia's approximately 450 cannabis clubs, which had operated in a legal grey zone until the end of 2023.⁶ However, this tolerance began to unravel in 2024 as authorities ordered the closure of 30 clubs and reiterated plans to shut down the rest.7



FIGURE 1 Countries in Europe with a regulatory or experimental approach to recreational cannabis.

While a liberal cannabis policy belt has emerged in the middle of Europe, connecting Germany, Luxembourg, the Netherlands, Switzerland and the Czech Republic, neighbouring states such as France⁸ and Poland⁹ have maintained comparatively strict

enforcement regimes for offences linked to recreational cannabis, and they have criticized liberalization elsewhere. While initial fears of emerging drug tourism to Germany from neighbouring countries do not appear to have come to fruition,¹⁰ the cannabis legislation landscape has become uneven and there is concern that organized crime will exploit the situation.

According to Europol estimates, cannabis has a 38% share of European illicit drug markets.¹¹ Before legalization in Germany, cannabis-related offences accounted for about 60% of drug trafficking cases.¹² Cannabis is the most widely consumed drug across Europe¹³ and its potency has gradually increased.¹⁴ All EU states that have legalized or decriminalized the drug have done so within European law, even while pushing its boundaries. This implies that a licit retailing system has not been found to be in line with European and international law. Germany, Luxembourg and Malta have therefore not followed the example of Canada and some US states by establishing legal supply chains. Home growing and community-based approaches such as cannabis social clubs are therefore the only licit sources of cannabis. This is the main reason for justified concerns that the new cannabis paradigm in some countries may provide an economic stimulus for organized crime.

A government-commissioned evaluation of Germany's new cannabis legislation was scheduled for 2028¹⁵ but the new governing coalition has agreed to evaluate the law by autumn 2025.¹⁶ Although it says there are no preconceived conclusions, there is widespread concern that the legislation has failed to curb the illegal market, and by extension organized crime. Cannabis-related offences decreased by 30%–60% between 2023 and 2024 due to the new legal framework, and in theory this should have been welcomed by law enforcement and criminal justice officials.¹⁷ However, unions and associations of police¹⁸ and judges¹⁹ have criticized the legislation on the grounds that high thresholds of possession are believed to be enabling drug trafficking and organized crime. The significant administrative burden of implementing the legislation²⁰ has been described as a 'bureaucratic monster'.²¹

Concerns about the boom effect of cannabis legalization for organized crime in Europe's most populated country may be exaggerated due to an unintended and unexpected side effect of the new legislation. Already in 2017, Germany had legalized cannabis for treatment of a narrow set of medical conditions and introduced strict rules for how it could be prescribed. With the removal of recreational cannabis from the narcotics law, these rules were relaxed as well.²²

In theory, a doctor should still examine a patient, make a diagnosis and prescribe medical cannabis procured through a pharmacy. But Germany has seen a boom in heavily marketed online prescription platforms, despite a ban on advertising prescription drugs. These platforms allow quick access to a cannabis prescription based on a simple multiple-choice questionnaire with suggestive questions hinting directly at cannabis-oriented treatment. All platforms charge a fee for a prescription, ranging between \in 4.99 and \in 14.99. Even before the questionnaire can be accessed, the strain of cannabis and its THC and CBD potency need to be selected, as well as the desired amount up to a maximum of 100 grams, twice the quantity allowed for recreational cannabis. Prices of \in 6– \in 12 per gram are similar or even cheaper than in illicit markets, and patients can choose between dozens of strains and brands.

On one of the most popular platforms, filling out the questionnaire takes only a few minutes. Potential reasons for needing cannabis include chronic pain, sleep disturbances, cancer, neurological conditions and palliative care. No documentation is needed. Further questions ask about previous episodes of psychosis or anxiety and whether the patient is pregnant. Once the questionnaire is submitted, a prescription is issued within hours by a doctor who has had no direct contact with the patient. Consultations occur only if the customer asks for one or ticks one of the precondition boxes. Once the prescription is issued, it can be submitted directly to a specialized pharmacy that offers home delivery. Payment for the prescription and the cannabis can be managed online. Given the ease of this process, field research has shown little demand for fake cannabis prescriptions on the dark web or on social media marketplaces.

It appears that this highly accessible and easy-to-manage medical cannabis market is substituting for a non-existent licit retail market. With constraints on community or individual cannabis growing, the deregulated medical cannabis market has become a primary entry point for acquiring pharmaceutical quality cannabis. It competes with the illicit market while offering higher quality and transparency about the drugs' composition. Medical cannabis imports to Germany almost quadrupled in 2024, and domestic production also increased.²³ A cannabis entrepreneur says his leading platform receives 'thousands of orders' daily.²⁴



A questionnaire on a popular platform in Germany offering medical cannabis prescriptions asks about preconditions and symptoms.

According to official data, in 2024 Germany imported 72.85 tonnes of cannabis for medicinal and scientific purposes, with a rapidly increasing trend. In the first quarter, before the deregulation of medical cannabis, imports reached roughly 8 tonnes, compared with 37 tonnes in the same period of 2025.²⁵

While it is not possible to calculate the size of Germany's illicit market or distinguish recreational users from legitimate medical cannabis patients, it is clear that deregulated medical suppliers have taken a notable share of the recreational market from organized crime. One of the few studies on the matter estimated annual demand for recreational cannabis of 400 tonnes.²⁶ If the trend of rapid growth in the medical cannabis market persists, a considerable contraction of the illicit market could be plausible. Similar unexpected consequences of cannabis legalization have occurred elsewhere. In the state of New York, recreational cannabis was legalized in 2021 but the government was slow to set up licensed dispensaries. Hundreds of unlicensed shops duly opened to meet the massive demand.²⁷ In Thailand, cannabis was de facto legalized before the development of a regulatory framework, enabling an unregulated surge in the supply of cannabis.²⁸

While this booming and deregulated prescription cannabis market is widely criticized by health practitioners,²⁹ it has provided an unexpected way to undermine the illicit market and organized crime's control over supply chains – the original aim of the legalization effort.³⁰ In the meantime, despite liberalized legislation, tight constraints and burdensome bureaucratic rules have limited the emergence of cannabis clubs. By April 2025, of roughly 450 clubs applying for a licence, only about 80 had received one.³¹ Some state governments have blocked licensing with excessive bureaucracy, awarding no licences at all.³²

A key aim of legalization has been to shrink Europe's cannabis market, but Germany's rescheduling and the size of its market in a population of more than 83 million have changed the dynamic (other European countries moving towards a legally regulated approach have relatively small populations). Furthermore, none of the European countries at stake has regulated the cannabis supply chain beyond limited experiments. While some German users have circumvented the lack of licit supply through online medical prescription services, organized crime-controlled supply chains remain dominant across Europe. This is partly due to the size of the cannabis user population, with latest data pointing to about 23 million adult users.³³ In addition, the market has experienced recent growth in some countries.³⁴

KEY TREND 2: Illicit cannabis markets remain resilient but face growing challenges.

Despite legislative shifts in some European countries, illicit cannabis markets still thrive due to the size of the user population and the absence of licit supply chains for recreational cannabis. Nonetheless, the market is in a state of flux amid increasing competition from licit suppliers.

Cannabis prevalence rates do not significantly differ between countries where the drug has been legalized or decriminalized and those where it remains prohibited. In western Europe, where prohibition, decriminalization and legalization regimes coexist in a limited geographic area with open borders, cannabis prevalence is uniformly high. Among 15 to 34-year-olds, for example, the 2022 or latest available last-year prevalence of cannabis in countries such as Germany, France, Spain, the Netherlands and Italy is between 17% and 21%.³⁵

At the same time, the most recent data from the European Drug Trends Monitor shows that wholesale prices do not differ between settings where cannabis continues to be prohibited and those where cannabis is either legalized or legalized supply chain experiments are in place, as Figures 2 and 3 show. Furthermore, it is also notable that retail prices in Hamburg and in Eindhoven are considerably higher than in cities closer to the main illicit supply chains from North Africa and Spain, such as Marseille and Barcelona, despite the legal character of cannabis in Germany and the Netherlands (see Figure 5 further below). Proximity to supply hubs appears to beat the legal status in terms of pricing.

A corresponding trend can be identified in terms of prevalence: France has one of the highest cannabis use prevalences in Europe – considerably higher than Germany, Luxembourg or the Netherlands – despite its prohibitionist approach.³⁶ In Germany, prevalence rates were steadily increasing already before legalization,³⁷ so the impact on the market will be harder to determine.

German authorities report that cannabis trafficking patterns have not changed since legalization. As before, the illicit market is widely assumed to be predominantly supplied from Spain,³⁸ the drug being transported to Germany by truck.³⁹ In Luxembourg, cannabis is the most frequently seized drug.⁴⁰ Overall results of Switzerland's cannabis supply experiment are not clear but in Lausanne it is estimated that 10% of the illicit market has been displaced.⁴¹

Beyond Spain as a key country of origin and transit within the EU, there have been signs of adaptation and shifts in the wholesale market for cannabis, again partly linked to legalization. Seizures of cannabis shipments from Canada to western Europe have increased. These mainly involve commercial flights, though EU



FIGURE 2 Wholesale prices of cannabis herb. SOURCE: GI-TOC field research findings, December 2024 to March 2025

states also report maritime shipments from Canada.⁴² Most of the cannabis seized in 2024 at Dutch ports also originated in Canada,⁴³ and in 2023 German authorities reported an increase in cannabis trafficking in parcels and containers from North America.⁴⁴

In some countries, such as the Netherlands, scientific supply experiments compete with street market retailing and traditionally tolerated 'coffee shop' retailing supplied by organized crime. In Hamburg, the traditional illicit street market for cannabis is dominated by West African, Albanian, Turkish and Kurdish



FIGURE 3 Wholesale prices of cannabis resin. SOURCE: GI-TOC field research findings, December 2024 to March 2025

traffickers. At national level, as official pre-legalization data shows, the cannabis market has been dominated by Germans (about 60%), followed by Polish, Turkish and Syrian nationals.⁴⁵ Across the European cities surveyed, Albanian and North African nationals are the most dominant criminal groups in the cannabis economy. Post-legalization, however, organized crime groups compete increasingly with cannabis cultivated legally and procured through easy-access online-issued prescriptions. Therefore, a complex landscape of supply chains and actors has emerged and the effects are still unclear for the overall balance between licit and illicit sources of supply.

KEY TREND 3: Cannabis resin markets remain mostly unaffected by legalization and decriminalization efforts.

In several European cities monitored for this study, cannabis resin – a compressed solid made from the resinous parts of the plant – remains a central pillar of illicit drug markets. Though often overshadowed in media coverage by substances such as cocaine, heroin or synthetic drugs, and in policy debates by herbal cannabis, the composition and structure of resin supply continues to change.

In contrast to herbal cannabis, which is increasingly (and partly legally) home grown, diverted from medical sources or illegally produced in Europe – often in controlled indoor facilities operated by eastern European or Balkan groups – cannabis resin remains a predominantly transnational commodity. Its trafficking depends on maritime and land smuggling, transcontinental coordination and alliances that straddle North Africa and the EU. The European cannabis resin trade is underpinned by a diverse and highly organized set of criminal actors from EU states and elsewhere, notably Morocco.⁴⁶ Resin of Moroccan

origin dominates European markets, and Moroccan criminal networks – often deeply embedded in communities in Spain, France, Belgium and the Netherlands – are central players in this illicit economy.⁴⁷ These networks often control the entire supply chain, from sourcing resin in the Rif region of Morocco to wholesale distribution in European user markets. They operate with a high degree of internal coordination and external collaboration, building multiethnic and transnational alliances to facilitate logistics and territorial control.⁴⁸

The cannabis resin supply chain is distinguished by its professionalization and the use of criminal 'service providers'.⁴⁹ These are groups or individuals who do not necessarily own the product but offer critical support functions, such as transportation across the Strait of Gibraltar using high-powered rigid inflatable boats, rental of stash houses and provision of false documentation.⁵⁰ In southern Spain, police have uncovered logistical networks dedicated to building and outfitting vessels for resin trafficking, often

overlapping with cocaine smuggling infrastructure. For example, in April 2025 the Spanish National Police intercepted a convoy near Huesca transporting 400 kilograms of Moroccan resin destined for France. The operation targeted a transnational criminal network employing the 'go fast' method – rapid convoys using high-speed vehicles to evade law enforcement.⁵¹ The convoy comprised a cargo van carrying the resin and two vehicles scouting ahead for police, all driven by French nationals. Upon interception, the van driver rammed police vehicles and fled on foot, abandoning 10 burlap-wrapped bundles of resin. Three occupants of the escort vehicles were arrested at the scene. Subsequently, two more suspects were detained in Marbella after a search of a rented property.⁵²

Spain remains the principal entry point for Moroccan resin destined for European consumers, due to its proximity and the wellestablished smuggling routes across the western Mediterranean.⁵³ While most trafficking occurs by maritime routes, in early 2025 Spanish authorities discovered a 50-metre drug-smuggling tunnel connecting Morocco to the autonomous Spanish enclave of Ceuta, highlighting the sophisticated methods employed to transport cannabis resin into Europe.⁵⁴ Moreover, the nature of the resin trade has fuelled heightened violence and contestation. In key transit and storage hubs in southern Spain and the port of Barcelona – from where about 70% of resin seized in Catalonia enters the country⁵⁵ – territorial disputes between rival criminal networks have escalated into shootings, arson and kidnappings.⁵⁶ Market analyses by Europol and the EU Drugs Agency say violence associated with resin trafficking has become increasingly pronounced, often tied to unpaid debts, thefts of large consignments or attempts to monopolize distribution zones.⁵⁷

Multi-ethnic groups in Spain work closely with local and other international criminal organizations – including Moroccan, Albanian-speaking, Dutch, French and Italian networks – to distribute cannabis resin further into the continent. Its wholesale value rises in proportion to the distance from its point of entry in southern Spain. These partnerships enable greater efficiency and resilience, with different actors specializing in storage, inland transportation, and operations at ports and borders.



FIGURE 4 Land and maritime routes of cannabis resin trafficking from Morocco to Europe. SOURCES: GI-TOC field research findings, December 2024 to March 2025; EUDA, EUROPOL

In northern Europe, Antwerp illustrates how even marginal cannabis markets can reflect broader vulnerabilities. Better known as a major hub for cocaine, the port city also facilitates the transit of cannabis products.⁵⁸ The arrest of a key figure in the so-called '*favela* gang' allegedly disrupted local supply chains, suggesting that interventions in specific nodes of urban trafficking ecosystems can have disproportionate influence.⁵⁹

In the Netherlands, the longstanding policy of tolerance towards cannabis has produced a paradoxical market structure: while retail sales through licensed coffee shops in Eindhoven and other cities are officially tolerated under strict municipal conditions, cultivation, wholesale distribution and transport remain illegal.⁶⁰ This regulatory asymmetry has created a structurally unstable supply chain, forcing 'coffee shops' to rely on illicit sources despite their quasi-legal status.⁶¹ This has long been exploited by local and North African trafficking networks, which have established robust smuggling corridors across the western Mediterranean, channelling resin – with an average THC level of 28.4% in 2023⁶² – through Spain and into the Netherlands.⁶³ Domestically produced *nederhasj* is slightly more potent, averaging 30.4% THC, but less prevalent in the market.⁶⁴

Within the Netherlands, groups such as those summarized under the contested term of 'Mocro Maffia', consisting mainly of criminal networks of Dutch nationals of Moroccan descent, play a prominent role in resin distribution.⁶⁵ Eindhoven's location near major logistics corridors and the port of Rotterdam makes it a key distribution node in this supply chain. The interplay between domestic regulatory frameworks and international trafficking has created a complex landscape: while Dutch policy seeks to contain and regulate cannabis sales, persistent demand for imported resin and the adaptability of foreign criminal networks continue to test the limits of enforcement.

Further south, Italy is a destination and a redistribution hub. In February 2025, Italian police arrested two Moroccan nationals transporting 240 kilograms of resin in a truck travelling from France and bound for Milan and surrounding towns.⁶⁶ While land routes remain predominant, a parallel maritime corridor has emerged. Private yachts, often disguised as regatta participants to avoid stringent inspections, are used to smuggle resin into smaller ports such as Civitavecchia. Larger ports such as Genoa are used less frequently due to tighter controls.⁶⁷ This infrastructure is leveraged not only by North African groups but sometimes by Italian criminal organizations. The 'Ndrangheta, in particular, has exploited this maritime loophole to import resin into Milan, where it has strategically increased its presence in the market. The motivations for this are economic and legal. Cannabis resin is a high-demand commodity with increasing street value. Moreover, penalties for trafficking cannabis in Italy are often two-thirds less severe than for trafficking harder drugs such as cocaine.⁶⁸ This legal asymmetry incentivizes market entry and diversification by established criminal groups.

At street level, distribution is marked by functional and often ethnic specialization. North African networks typically handle direct retail sales, maintaining control over open-air and lowlevel markets. Italian actors are more commonly associated with encrypted delivery services catering to discreet mid- and highlevel clientele. These services – used for cannabis and cocaine – offer customized packages of 4–50 grams, targeting users who often combine substances and prefer anonymity and reliability over street-level dealings.⁶⁹

KEY TREND 4: The cannabis resin landscape is shifting.

Cannabis resin has developed into a potent, high-value product, driving criminal innovation and complicating regulation. The rise of concentrates and digital sales challenges public health and law enforcement.

Across Europe, cannabis resin was once seen as a cheap, low-THC byproduct of broader cannabis use. Today, it has developed into a high-potency, commercially attractive commodity. Its dual identity, simultaneously normalized and criminalized, complicates law enforcement and public health efforts. Far from being a static or residual product, resin has become increasingly central to maturing cannabis markets, especially in southern and south-western Europe.

Consumption trends suggest that resin is widely used, particularly by those who value its higher potency and perceivably more predictable dosing compared to herbal cannabis.⁷⁰ Illicit online sales data from the dark web and social media platforms in countries such as the Netherlands, Germany, Belgium, the UK and Sweden show a consistent pattern: resin's price per gram decreases with larger purchases. This volume-based pricing reflects the logic of illicit e-commerce, where sellers incentivize bulk transactions to maximize profits and minimize the logistical risks of numerous small-scale deals.

Compounding this shift is the growing presence of highly concentrated products such as 'rosin' and butane hash oil, with some samples testing at over 90% THC.⁷¹ These products are not only more potent but also deviate significantly from traditional consumption methods, complicating harm-reduction messaging and regulatory oversight.⁷² The intersection of potency, pricing and purchasing patterns indicates that resin is no longer a marginal street drug but part of a more sophisticated and competitive cannabis economy.





December 2024 to March 2025

Spain has become one of Europe's leading production zones for high-THC cannabis. The permissiveness around personal cultivation, juxtaposed with the prohibition on commercial trafficking, provides fertile ground for criminal innovation.⁷³ Criminal networks, some linked to foreign groups including Italian mafias operating in Barcelona's metropolitan area, have built industrial-scale operations using Catalonia as a logistics hub.⁷⁴ A high-profile case in March 2024 revealed the extent of this growth: Spanish police, supported by Europol, dismantled a violent clan trafficking cannabis resin across Europe from Barcelona and laundering profits through property and cryptocurrency. The operation led to 18 arrests in five countries and the seizure of hundreds of kilograms of Moroccan resin and six cannabis plantations.⁷⁵

Similar patterns emerge elsewhere on the continent, albeit shaped by local context. In Milan, a rise in resin potency from 17% THC to over 25% reflects consumer demand and improved processing techniques.⁷⁶ In Marseille, resin remains the dominant form of cannabis, distributed through well-established North

African supply networks.⁷⁷ Much of it enters the city by road from Morocco, transiting through Spain.⁷⁸ According to local harm-reduction experts, newer concentrates such as 'dry sift' began appearing in late 2024, expanding the range of available products.⁷⁹ In contrast to most European cities where the resin price rivals or exceeds the price of herbal cannabis, in Marseille and Eindhoven resin is cheaper, probably due to market saturation (see Figure 5). Prices in Hamburg are also an exception, but high average prices of herbal cannabis are probably attributable to the availability of potent strains.

In the UK, resin occupies a less prominent place in the cannabis economy, but it is nonetheless illustrative of broader trends in segmentation and branding. Sales favour units of a gram over traditional fractions of an ounce, and resin is often bundled with cocaine or other substances. Law enforcement data, social media analysis and user interviews confirm that delivery is typically arranged on digital platforms, with tiered pricing and targeted marketing strategies.⁸⁰

KEY TREND 5: In the evolving cocaine trade, procaine has emerged as a hidden but strategic adulterant.

Though nearly invisible in dark web listings, procaine's growing use in wholesale 'proca bricks' reveals a quiet innovation in trafficking tactics driven by middle-market economics.

Procaine is a local anaesthetic mainly used in dental procedures.⁸¹ It is not a widely abused substance yet it plays a growing role in the illicit drug market as a cutting agent, particularly for cocaine. In 2024, cocaine purity decreased in some European countries for the first time in 10 years.⁸² Law enforcement sources confirm a growing tendency to use procaine as a dominant cutting agent in less pure cocaine. However, it has been unclear if this trend is related to increasing cocaine seizures and therefore decreasing availability; or if it corresponds to a profit-maximizing strategy of purposeful supply chain delays, a common tactic of organized crime groups in Europe.



Telegram marketplace post from the Netherlands advertising 'mixed proca bricks' – pre-manufactured cocaine adulterated with procaine.

One potential interpretation of the trend is that procaine is used to increase profit, since its appearance and numbing effect resemble cocaine. According to this understanding, procaine cutting would allow traffickers to increase volume while maintaining the perceived quality of purer cocaine, especially at first glance when the drug is orally tested. In online drug markets, particularly those that use encrypted messaging platforms and the dark web, our research has found references to procaine under names such as 'mixed proca bricks', 'coca-proca' and 'mixed systems'. These terms indicate a combination of procaine and cocaine, with procaine acting as a bulking agent to maximize profits for traffickers, while undermining quality.

Unlike branded Novocain/e, which appears to be largely absent from illicit markets, procaine is traded in ways that obscure its presence in the final product. In exploring the online cocaine ecosystem, a search using variations of 'procaine', 'procain', 'proca-coca' and chemically related substances such as benzocaine, lidocaine and tetracaine revealed a pattern. Advertisements for coca bricks mixed with procaine appeared exclusively in wholesale and bulk sale groups, targeting resellers rather than end-users. Apart from one case in which a dealer complained that his customers preferred less pure cocaine, this is unsurprising; users tend to prize purity while dealers can maximize earnings by diluting their product.⁸³

Procaine adulteration is therefore happening at the wholesale level rather than in retailing environments. This trend of adulterated cocaine bricks, usually dominant in wholesale transactions, is confirmed by European law enforcement.⁸⁴ In contrast, law enforcement authorities from the Americas say they have not yet identified procaine-adulterated cocaine at wholesale level.⁸⁵ This suggests wholesale shipments of cocaine bricks are adulterated with procaine in Europe rather than in the source country. Unpacking, adulteration and rebricking at wholesale level is considered a highly unusual procedure, but still appears to occur frequently in the case of procaine cutting.⁸⁶

This trend is generally not perceived to be positive by users. In numerous discussions about adulterants on dark web forums, procaine was mostly referenced negatively. Vendors often emphasized their cocaine's purity by explicitly stating that it does not contain procaine. In some cases, purity was substantiated by alleged 'lab results'. Some dissatisfied buyers posted complaints about receiving 'cut' cocaine instead of the high-quality product they had expected and paid for.

Nonetheless, in wholesale trafficking settings, procaine is identified as an income booster. Encrypted messaging platforms provide more explicit insights into the European procaine-cocaine trade. The ability to mix the drugs at the middle-wholesale level is recognized as a lucrative opportunity. At least four cases indicate that procaine-cocaine bricks are being produced in Europe rather than imported in pre-cut form.

Several identified operations were traced to the Brabant region of the Netherlands. This could reflect a research bias but may also suggest that Brabant, on either side of the Netherlands–Belgium

Commented on: Any kole vendor on AT? (M/deleted] - 3 years ago in (d/austria - 1 points I have read that drogenAut has the best Coke Repository. (Will post test result of coke in /d/Austria, when it's delivered) You can choose between uncut, 20%cut and 50%cut. (Cut-Versions are cheaper) I would not buy coke again from amaguetesiegel. <u>He has perfect MDMA but his/her/their coke is cut with Levamisole and Procain.</u> Commented on: SWX free sample review 3.5 grams fishscale (M/dccud11 - 4 years ago in /d/DarkNetMarkets - 1 points Marquis Reagent - started pink to orange. (4-FMA, 6-APDB, METH, MPA, MDAI) MECKE - turned slightly vellow (Lidocaine present) Lieberman-yellow (Cocain) Errlich - slightly faint very light yellow (procain/beracain) but close to clear which is what we need no reaction. Socts - checked out from pink to blue/pink mix cocain present. Wish I could upload vs typing it out but wit.

User discussion on the dark web forum Dread showing frustration over cocaine adulterated with procaine, pointing to rising distrust in product quality among forum users. border, functions as a central hub for this activity. In September 2024, police said they had dismantled a laboratory in Anderlecht and confiscated 100 kilograms of procaine – the first seizure in Belgium.⁸⁷

One Netherlands-based online vendor advertises pure cocaine and 'Procain bricks > Systems/Mix we can make', sharing promotional videos and images to attract potential buyers. Another supplier, with the alias 'Ferrari', has marketed their ability to produce cocaine bricks mixed with procaine, positioning themselves as a major cocaine distributor in the Netherlands. A third case involves an individual in a drug-selling group chat who was seeking partners to import cocaine and procaine, prepare mixed bricks in the Netherlands and sell them regionally. This individual claimed that a few hours of work could generate earnings of $\leq 1500- \leq 2000$, though it was unclear whether this was revenue or profit. Notably, they referenced the use of Dutch 'cooks' with 'know-how from overseas', which could imply Latin American trafficking connections.

While cocaine's origins in Latin America are well documented, the supply chain for procaine is more opaque. Unlike benzocaine and lidocaine, procaine was not found for sale as a standalone substance within encrypted groups. It appeared only in listings where it was already mixed with cocaine, reinforcing the idea that its use is purely pragmatic – as an invisible bulking agent for traffickers rather than an independent commodity. Notably, procaine is barely mentioned on dark web drug marketplaces. Lidocaine and benzocaine appear far more frequently, often stated to be sourced from India and shipped to destinations in Europe, including the UK and Poland.

Dark web forums provide an additional layer of analysis, particularly in discussions about drug purity and subjective user

experiences. Messages on encrypted apps create the impression that procaine-cut cocaine is produced in Europe, but some dark web forum users speculate that it is often added earlier in the supply chain, possibly before the cocaine reaches Europe. A post on the forum Dread suggested that 'it's often cut in Mexico already', though no corroboration was provided and the claim contradicts information from law enforcement in the Americas. Many other forum discussions revolved around consumer frustration. Users frequently complained that they had bought pure cocaine, only to find it had been adulterated with procaine. Our research indicates that for at least the past five years, dark web drug users and vendors conducting laboratory analyses have reported the presence of procaine in cocaine, even though toxicologists say procaine-adulterated cocaine has appeared in some European countries only recently.

The role of procaine in Europe's illicit drug trade is an underexplored but revealing example of how traffickers adapt to shifting market dynamics. While largely absent from dark web marketplaces and rarely acknowledged in direct transactions, its presence in wholesale supply chains suggests a quiet but effective method of stretching product volumes. The emergence of the Netherlands, and to a lesser extent Belgium, as potential hubs for this practice raises important questions about whether procaine might follow the path of benzocaine and lidocaine and become a widely accepted cutting agent. This development must be viewed within the broader context of decreasing purity and stable retail prices, which may reflect a strategic response to consumer expectations and a deeper recalibration of profit margins across the supply chain. Although it is too early to draw conclusions, these patterns merit closer scrutiny to assess whether this is a temporary adaptation or an emerging structural trend in the European cocaine market.

Notes

- The monitoring included major dark web platforms such as Abacus, Nexus, TorZon, MGM Grand, Silky Road, DrugHub, Dark Matter, Dread and ASAP.
- 2 Hunderte feiern Cannabis-Freigabe in Berlin, ZDF, 1 April 2024, https://www.zdf.de/nachrichten/panorama/cannabis-legalisierung-feier-brandenburger-tor-100.html.
- 3 Serena Tinari, Swiss cities test controlled cannabis distribution, Swiss Info, 23 July 2023, https://www.swissinfo.ch/eng/business/ swiss-cities-test-controlled-cannabis-distribution/48673280.
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