

# PERSPECTIVES

# The Evolving Illicit Drug Market During the Covid-19 Pandemic

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#### Introduction

The COVID-19 pandemic has introduced profound changes to life around the world, and unprecedented measures have been imposed to protect public health. This crisis has also affected the illicit drug market, including production, trafficking, distribution, use, treatment, monitoring, and prevention. Lockdown measures have disrupted drug access and availability and changes in drug use patterns and new harms have emerged during the pandemic. Organized crime groups involved in the drug market responded quickly to the new situation in order to ensure that the availability of drugs would not been disrupted. As the world's drug problem continued to rapidly evolve, all the above have resulted in new challenges to both public health and security. As a result, responses and measures to combat drug trafficking also need to evolve in order to mitigate the new risks arising from the distribution of drugs.

This study provides a first glimpse into new trends and developments in the use, trafficking, and prevention of illicit drugs that emerged during the pandemic. These new trends could last well into the post COVID-19 period. With the easing of confinement measures and the gradual emergence of a new situation, many uncertainties exist and a wide range of questions remain to be answered.

# Changes recorded in the drug market during the pandemic

Studies reported an overall disruption in the illicit drug market in most parts of the world during the first three months of the pandemic, mainly due to the confinement measures.<sup>4,5</sup> However, drug trafficking and use recovered rapidly as social distancing measures were eased.<sup>6</sup> The drug market was proven resilient, demonstrating its ability to adapt quickly to the

<sup>&</sup>lt;sup>6</sup> EMCDA, European drug report, 2021, 10.



<sup>&</sup>lt;sup>1</sup> EMCDA, *European drug report, 2021: Trends and developments* (Luxembourg: Publications Office of the European Union, 2021): 4,

https://www.emcdda.europa.eu/system/files/publications/13838/TDAT21001ENN.pdf.

<sup>&</sup>lt;sup>2</sup> EMCDA, EMCDDA trendspotter briefing. Impact of COVID-19 on patterns of drug use and drug-related harms in Europe (Luxembourg: Publications Office of the European Union, 2020): 2, https://www.emcdda.europa.eu/system/files/publications/13130/EMCDDA-Trendspotter-Covid-19-Wave-2 1.pdf.

<sup>&</sup>lt;sup>3</sup> EMCDA, European drug report, 2021, 4.

<sup>&</sup>lt;sup>4</sup> UNODC, "World Drug Report 2021," Booklet 1, 30.

<sup>&</sup>lt;sup>5</sup> EMCDA, *Impact of COVID-19 on drug markets, use, harms and drug services in the community and prisons. Results from an EMCDA trendspotter study* (Luxembourg: Publications Office of the European Union, 2021): 2, https://www.emcdda.europa.eu/system/files/publications/13745/TD0321143ENN 002.pdf.

evolving environment. As a result, by mid-2021, drug cultivation, production, supply, and consumption rebounded to pre-COVID levels or possibly even higher. 8

Nevertheless, during the pandemic some changes as well as preexisting trafficking dynamics have been triggered and escalated. Substance-specific disruptions to the drug supply chain, increases in the frequency of drug use, as well as changes in consumption patterns have been observed, although reports varied by substance and country. For instance, in most countries an increase in the use of cannabis has been reported during the pandemic. One survey concluded that in seventy-seven countries, there was an increase in the consumption of cannabis by forty-two percent. Purthermore, public health alerts have been recently released, stating that suppliers have adulterated natural cannabis products with synthetic cannabinoids due to shortages in natural cannabis. Such a development has only made the situation worse, due to the difficulty of identifying adulterated products sold on the market and the high potency of these synthetic cannabinoids. They pose serious health risks, as was revealed by the more than twenty deaths related to these substances in 2020. In general during the pandemic, drugs have been widely adulterated with other substances, resulting in reduced quality, a trend that has been exposing consumers to greater risk and overdose incidences. In 15,16

Another drug pattern has also raised concerns during the pandemic. An increase of sixty-four percent misuse of sedatives such as benzodiazepines has been reported. These sedatives are being either diverted from therapeutic use or sold as new psychoactive substances (NPS). <sup>17,18</sup> This trend among recreational drug users, high-risk drug users, and prisoners is growing, most likely due to the high availability and low cost of these substances. The increased mental health issues triggered by the pandemic have also accelerated the use of such sedatives. <sup>19</sup> They can be especially harmful due to synergistic effects when used in combination with opioids or alcohol, increasing the risk of overdose. <sup>20</sup> For this reason, there has been an increase in emergency cases related to benzodiazepines in 2020 compared to 2019. <sup>21</sup>

<sup>&</sup>lt;sup>21</sup> EMCDA, European drug report, 2021,11.



<sup>&</sup>lt;sup>7</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 30.

<sup>&</sup>lt;sup>8</sup> European Commission, "Proposal for a regulation of the European Parliament and of the Council on the European Union Drugs Agency," (Brussels, 2022) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0018.

<sup>&</sup>lt;sup>9</sup> UNODC, "World Drug Report 2021," Booklet 1, 30.

<sup>&</sup>lt;sup>10</sup> EMCDA, Impact of COVID-19, 3.

<sup>&</sup>lt;sup>11</sup> Farihah Ali et al., "Changes in substance supply and use characteristics among people who use drugs (PWUD) during the COVID-19 global pandemic: A national qualitative assessment in Canada," *International Journal of Drug Policy*, no 93, 103237 (2021): 6, https://doi.org/10.1016/j.drugpo.2021.103237.

<sup>&</sup>lt;sup>12</sup> UNODC, "World Drug Report 2021," Booklet 1, 32.

<sup>&</sup>lt;sup>13</sup> EMCDA, European drug report, 2021, 8.

<sup>&</sup>lt;sup>14</sup> EMCDA, European drug report, 2021,11.

<sup>&</sup>lt;sup>15</sup> Farihah Ali et al., "Changes in substance supply," 7.

<sup>&</sup>lt;sup>16</sup> David Otiashvili et al., "The impact of the COVID-19 pandemic on illicit drug supply, drug-related behavior of people who use drugs and provision of drug related services in Georgia: results of a mixed methods prospective cohort study," *Harm Reduction Journal*, no. 19:25, (2022): 11, https://doi.org/10.1186/s12954-022-00601-z.

<sup>&</sup>lt;sup>17</sup> UNODC, "World Drug Report 2021," Booklet 1, 32.

<sup>&</sup>lt;sup>18</sup> EMCDA, European drug report, 2021, 11.

<sup>&</sup>lt;sup>19</sup> EMCDA, European drug report, 2021,11.

<sup>&</sup>lt;sup>20</sup> EMCDA, European drug report, 2021,11.

Changes in patterns of use of other substances were less clear, but the consumption of certain drugs, like cocaine, heroin, and MDMA (ecstasy) decreased in the initial months of the pandemic. <sup>22,23,24,25</sup> Moreover, there has been reported a greater experimentation with psychedelics, such as LSD and 2-CB, and dissociative drugs such as ketamine; and some countries have seen an increase in crack cocaine availability and use.<sup>26</sup> In general, there has been a decrease of interest towards drugs usually associated with recreational events and social gatherings (like MDMA), and an increase in the sale of drugs and substances more suitable for home consumption.<sup>27</sup>

North America has seen an acceleration in opioid overdose deaths since the beginning of the pandemic. In Canada, the number of deaths related to opioids increased and was found to be fifty-eight percent higher during April–June 2020 as compared with the same period in 2019. 28,29 In the United States, the Centers for Disease Control and Prevention (CDC) also reported an acceleration in drug overdose deaths during the pandemic.<sup>30</sup> For the same period, increases in emergency department visits for opioid overdose have also been recorded. 31 It can be concluded that the opioid crises has been substantially worsened by the pandemic.<sup>32</sup>

The pandemic has also caused a shift in drug preferences, in habits, and in patterns of use among people who do drugs.<sup>33</sup> For instance, people previously reported to have been occasional drug users may have reduced or even ceased their use during the pandemic, while regular consumers may have increased or changed their drug use.<sup>34</sup> In general, people who use drugs have been exposed to greater risks, including overdoses and a decreased ability to mitigate risk behaviors. 35,36 Moreover, it has been observed that social and psychological issues associated with self-isolation and social distancing measures have increased the risk of

<sup>&</sup>lt;sup>36</sup> Otiashvili et al., "The impact of the COVID-19 pandemic," 13.



<sup>&</sup>lt;sup>22</sup> EMCDA, European drug report, 2021,10.

<sup>&</sup>lt;sup>23</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 32. <sup>24</sup> Ali et al., "Changes in substance supply," 2.

<sup>&</sup>lt;sup>25</sup> Olivia Price et al., "Changes in illicit drug use and markets with the COVID-19 pandemic and associated restrictions: findings from the Ecstasy and Related Drugs Reporting System, 2016-20," Addiction, no. 117, (2021): 2, https://doi:10.1111/add.15620.

<sup>&</sup>lt;sup>26</sup> EMCDA, European drug report, 2021, 10.

<sup>&</sup>lt;sup>27</sup> EMCDA, European drug report, 10.

<sup>&</sup>lt;sup>28</sup>Ali et al., "Changes in substance supply," 2.

<sup>&</sup>lt;sup>29</sup> UNODC, "World Drug Report 2021," Booklet 1, 32.

<sup>&</sup>lt;sup>30</sup> Centers for Disease Control and Prevention (CDC), Increase in Fatal Drug Overdoses Across the United States Driven by Synthetic Opioids Before and During the COVID-19 Pandemic (Atlanta, GA: CDC Health Alert Network, 2020), https://emergency.cdc.gov/han/2020/han00438.asp.

<sup>&</sup>lt;sup>31</sup> Kristin M. Holland et al, "Trends in US emergency department visits for mental health, overdose, and violence outcomes before and during the COVID-19 pandemic," JAMA Psychiatry, no. 78 (2021), doi:10.1001/jamapsychiatry.2020.4402.

<sup>&</sup>lt;sup>32</sup> Valeria Piersanti, Francesca Consalvo, and Enrico Marinelli, "Substance use disorders during the COVID-19 pandemic: looking for new innovative approaches," Acta Biomedica no. 93, e2022081, (2022): 2, https://DOI: 10.23750/abm.v93i1.12612.

<sup>&</sup>lt;sup>33</sup> Ali et al., "Changes in substance supply," 6.

<sup>&</sup>lt;sup>34</sup> EMCDA, European drug report, 2021, 10.

<sup>&</sup>lt;sup>35</sup> Ali et al., "Changes in substance supply," 6.

relapse and drug consumption. <sup>37,38,39</sup> The pandemic has been pushing more people into drug use and addiction, affecting especially the already vulnerable populations, thus further exacerbating the broader socioeconomic picture. 40

Drug production and trafficking appears to have adapted rapidly to pandemic-related restrictions. Drug producers, traffickers, dealers, and consumers showed remarkable flexibility in adjusting to altered drug market landscape and market conditions. 41 Reports indicate that cannabis cultivation and synthetic drug production within the European Union continued at pre-pandemic levels during 2020, while a trend towards home cultivation of cannabis, partially driven by lockdown measures, also appeared. 42 Social distancing measures may have affected retail drug dealing, but this appears to have led to a greater adoption of new technologies to facilitate drug distribution. 43 The use of the dark web increased and the broad use of encrypted messaging services, social media, and popular e-commerce platforms for sales and communication resulted in a more accessible drug market. 44,45 Drug traffickers have adapted to travel restrictions and border closures with changes in routes and methods, with more reliance on smuggling via intermodal containers and commercial supply chains, and less reliance on the use of human couriers. 46 Consequently, there was a reported increase in the recruitment of truck drivers in smuggling operations.<sup>47</sup> Some trafficking patterns have been accelerated, such as larger shipment size, increased use of private aircraft, air cargo, and postal parcels, increased use of waterway routes, and contactless methods to deliver drugs to end-consumers. 48,49

In some countries the COVID-19 pandemic had an impact on the working practices of law enforcement authorities.<sup>50</sup> More resources were devoted to public order policing, resulting in a temporary reduction in the availability of personnel for investigative duties and/or intelligence work. With fewer personnel, anti-drug units may have faced challenges to cover all the areas of serious organized crime. However, some of the restrictive measures also allowed law enforcement to dedicate more time to specific tasks such as border checks, in some cases resulting in an increase in the detection of illicit goods including drugs. Despite the obstacles, it was reported that law enforcement continued to initiate and participate in national and international drug investigations during the pandemic period. 51,52

<sup>&</sup>lt;sup>52</sup> EMCDDA, EMCDDA trendspotter briefing. June 2021,11.



<sup>&</sup>lt;sup>37</sup> Ali et al., "Changes in substance supply," 2.

<sup>&</sup>lt;sup>38</sup> Price et al., "Changes in illicit drug use," 2.

<sup>&</sup>lt;sup>39</sup> Piersanti, Consalvo, and Marinelli, "Substance use disorders," 1.

<sup>&</sup>lt;sup>40</sup> Piersanti, Consalvo, and Marinelli, "Substance use disorders," 4.

<sup>&</sup>lt;sup>41</sup> Otiashvili et al, "The impact of the COVID-19 pandemic," 12.

<sup>&</sup>lt;sup>42</sup> EMCDA, European drug report, 2021, 11.

<sup>&</sup>lt;sup>43</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 34. <sup>44</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 24.

<sup>&</sup>lt;sup>45</sup> EMCDA, European drug report, 2021, 10.

<sup>&</sup>lt;sup>46</sup> EMCDA, European drug report, 2021, 10.

<sup>&</sup>lt;sup>47</sup> EMCDDA, EMCDDA trendspotter briefing. June 2021, 7.

<sup>&</sup>lt;sup>48</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 30.

<sup>&</sup>lt;sup>49</sup> EMCDA, European drug report, 2021: Trends and developments, 10.

<sup>&</sup>lt;sup>50</sup> EMCDDA and Europol, EU Drug Markets Impact of COVID-19 (Luxembourg: Publications Office of the European Union, 2020): 25, https://www.emcdda.europa.eu/system/files/publications/13097/EU-Drug-Markets Covid19-impact final.pdf.

<sup>&</sup>lt;sup>51</sup> EMCDDA and Europol, EU Drug Markets Impact of COVID-19,25.

Drug prevention and treatment services were also disrupted during the initial lockdown period of the COVID-19 pandemic. In many instances, the closure of non-essential health services and movement restrictions brought about the sudden discontinuation of services for drug users. The number of overall services used and needles distributed fell, suggesting that fewer people accessed harm reduction services, putting them at greater risk of overdosing, discontinuing treatment such as methadone maintenance therapy, and reusing or sharing injecting equipment.<sup>53</sup> When harm reduction measures are reduced, drug-related harm increases and consequently drug-related deaths rise. 54 For that reason, the care sector adapted rather quickly, and service providers were able to introduce innovative working practices to mitigate the impact of the current crisis on drug users.<sup>55</sup> Harm reduction centers were able to continue operating and offering services by adjusting operating hours. Many tasks were carried out using internet-based technology and telephones (telemedicine), the postal system was used for distributing sterile needles and syringes, and mobile vans and vending machines dispensed opioid agonist medication. 56,57,58 In addition, prescribing requirements were simplified and patients were given more flexibility with opioid agonist medication and some people suffering from drug use disorders were allowed to take home methadone doses.<sup>59</sup>

## Considerations for the future and recommendations

Inequality, poverty, and mental health conditions as consequences of the pandemic are on the rise across the world, and are known factors that can contribute to increased illicit drug use and drug use disorders. <sup>60</sup> As a result, drug health consequences, including the risk of overdose and poisoning, are expected to increase in the future, exacerbated by the compromised drug quality trend observed during the pandemic. <sup>61</sup> Furthermore, rising drug sales over the internet and rapid technological innovations in the retail distribution of drugs, with street dealing becoming less and less prevalent, could further digitally enlarge the drug market. 62,63 All of the above have transformed the patterns of drug distribution and use, and may result in a more globalized market where drugs become easily accessible in every part of the world, with dire consequences for public health.<sup>64</sup>

The post COVID-19 economic crisis is expected to have the greatest impact on drug markets regarding the expansion of drug cultivation, production, and trafficking. 65 The rising unemployment and poverty caused by the pandemic are likely to make illicit drug cultivation and production more appealing in opium, poppy, and coca leaf harvesting areas, while drug traffickers may also find recruitment easier. 66 Furthermore, the economic crisis may lead to

<sup>66</sup> UNODC, "World Drug Report 2021," Booklet 1, 34.



<sup>&</sup>lt;sup>53</sup> Camila A. Picchio et al., "The impact of the COVID-19 pandemic on harm reduction services in Spain," Harm Reduction Journal no. 17:87 (2020): 9, https://doi.org/10.1186/s12954-020-00432-w.

<sup>&</sup>lt;sup>54</sup> Claudia Mariottini, Ilkka Ojanperä, and Pirkko Kriikku, "Increase in drugs-of-abuse findings in post-mortem toxicology due to COVID-19 restrictions—First observations in Finland," Drug Testing and Analysis no. 13 (2021): 869, DOI: 10.1002/dta.2982.

<sup>&</sup>lt;sup>55</sup> EMCDA, European drug report, 2021, 4.

<sup>&</sup>lt;sup>56</sup> EMCDA, European drug report, 8.

<sup>&</sup>lt;sup>57</sup> UNODC, "World Drug Report 2021," Booklet 1, 28.

<sup>&</sup>lt;sup>58</sup> Otiashvili et al., "The impact of the COVID-19 pandemic," 12.

<sup>UNODC, "World Drug Report 2021," Booklet 1, 28.
UNODC, "World Drug Report 2021," Booklet 1, 34.</sup> 

<sup>&</sup>lt;sup>61</sup> Ali et al., "Changes in substance supply," 2.

<sup>&</sup>lt;sup>62</sup> UNODC, "World Drug Report 2021," Booklet 1, 34.

<sup>&</sup>lt;sup>63</sup> EMCDA, European drug report, 2021,10.

<sup>&</sup>lt;sup>64</sup> UNODC, "World Drug Report 2021," Booklet 1, 24.

<sup>65</sup> UNODC, "World Drug Report 2021," Booklet 1, 34.

reduced budgets for anti-drug measures and responses, and the expansion of drug production and trafficking may result in greater profits for terrorist organizations.<sup>67</sup>

In the future there will be a need for closer monitoring of changes in patterns of illicit drug use and risk behaviors among the wider population. A higher degree of awareness and understanding of the evolving illicit drug market and related harms must be achieved in order to form adequate drug and health policies. For this reason, more investment is needed for developing forensic and toxicological resources, as research and scientifically valid data play a key role in the adequate evaluation of the evolving drug market. <sup>68,69</sup>

The drug market requires surveillance, especially in regard to innovations in production and distribution. Drug producers, traffickers, and distributors adapted quickly to the pandemic, by using new routes or moving business online. Law enforcement authorities must also react quickly in order to face the new challenges. They should adapt to the new reality with innovative solutions in monitoring and research methods. The capacity of law enforcement agencies should be increased, and international cooperation of all involved actors to address drug trafficking must be prioritized. Furthermore, public-private partnerships should be enhanced, as they have been proven crucial in addressing drug trafficking on the Internet. Surveillance of maritime, land, rail, and air cargo must also be improved substantially, with shared intelligence between national authorities and the private sector (shipping companies and commercial airlines).

National post-COVID-19 strategies for treatment responses and drug use prevention should be sufficiently funded in order to avoid an acceleration in the use of certain drugs. <sup>74</sup> Adaptations made as a result of COVID-19 to the delivery of services for drug use prevention and treatment must remain in place. <sup>75</sup> Critical mental health and support services should remain operating at full capacity, with protocols that include telemedicine, flexible dosing of medication, mobile van-based outreach, and vending machines for dispensing sterile injection equipment. <sup>76,77</sup> Moreover, drug-testing kits should be widely used (e.g. fentanyl test strips) as alternative interventions which can help consumers test their substances before use, leading to safer consumption practices. <sup>78</sup> Furthermore, the special needs of vulnerable populations and traditionally marginalized classes have to be addressed with targeted and easily accessible measures. <sup>79,80</sup> Post-pandemic investment and recovery plans need to focus on the development of life skills in children, young people, and parents, shelters for people suffering

<sup>80</sup> Piersanti, Consalvo, and Marinelli, "Substance use disorders," 4.



<sup>&</sup>lt;sup>67</sup> UNODC, Research brief. COVID-19 and the drug supply chain: from production and trafficking to use (Vienna, 2020): 7, https://www.unodc.org/documents/data-and-analysis/covid/Covid-19-and-drug-supply-chain-Mai2020.pdf.

<sup>&</sup>lt;sup>68</sup> EMCDA, European drug report, 20218.

<sup>&</sup>lt;sup>69</sup> Mariottini, Ojanperä, and Kriikku, "Increase in drugs-of-abuse findings," 869.

<sup>&</sup>lt;sup>70</sup> EMCDDA and Europol, EU Drug Markets Impact of COVID-19, 25.

<sup>&</sup>lt;sup>71</sup> EMCDA, *Impact of COVID-19 on drug markets*, 31.

<sup>&</sup>lt;sup>72</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 24.

<sup>&</sup>lt;sup>73</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 30.

<sup>&</sup>lt;sup>74</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 32.

<sup>&</sup>lt;sup>75</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 28.

<sup>&</sup>lt;sup>76</sup> Ali et al., "Changes in substance supply," 6.

<sup>&</sup>lt;sup>77</sup> Otiashvili et al., "The impact of the COVID-19 pandemic," 13.

<sup>&</sup>lt;sup>78</sup> Ali et al., "Changes in substance supply," 7.

<sup>&</sup>lt;sup>79</sup> UNODC, "World Drug Report 2021," *Booklet 1*, 34.

domestic abuse, as well as mental health services.<sup>81</sup> It is also crucial to raise public awareness, so that more informed decisions can be made regarding drug use and drug prevention.<sup>82</sup> Finally, a holistic support system is needed to tackle the world's drug challenges. Stakeholders playing a role in its implementation should include the international community, government bodies, health care professionals, law enforcement agencies, and society as a whole.<sup>83</sup>

#### **Conclusions**

The psychological and socioeconomic impact of the COVID-19 pandemic has had a profound effect on illicit drug use patterns and trends. A number of new developments in the distribution and trafficking of drugs and related harms have emerged. Furthermore, the expansion of e-commerce for drug supply and online services for prevention and treatment will undoubtedly persist beyond the pandemic. All of the above have formed an evolving situation, which demands a higher degree of awareness and understanding in order to provide policymakers with the tools they need for developing sufficient drug and health policies.

### About the Author

Dr. Kalliroi Ziavrou is a forensic toxicologist who has been working for the Hellenic Police (Lt Colonel) in Northern Greece Forensic Science Subdivision since 2006. She holds a Ph.D. in Forensic Toxicology, a Master's degree in Chemical Technology, and a Bachelor of Science in Chemistry. In 2013, she participated in the George C. Marshall Center's seminar on Combating Weapons of Mass Destruction/Terrorism (CBRN) and in 2018 graduated from the Countering Transnational Organized Crime Course (CTOC). Dr. Ziavrou has previously been published by the Marshall Center and has had several scientific publications published in international journals.

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<sup>83</sup> Piersanti, Consalvo, and Marinelli, "Substance use disorders," 4.



<sup>81</sup> UNODC, "World Drug Report 2021," Booklet 1, 34.

<sup>82</sup> UNODC, "World Drug Report 2021," Booklet 1, 58.