

# nsCr

## A Dutch Perspective on the Fentanyl Crisis

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## **Abstract**

In this field report, I will provide a Dutch perspective on the fentanyl crisis currently ravaging the United States. I do this by giving a brief introduction to the current state of the opioid crisis as it has developed in the United States. Here, I detail the four waves of the opioid crisis and the various interventions that have been introduced in the United States to mitigate the devastating consequences of fentanyl. In the Netherlands, the issues with fentanyl are, on the other hand, almost completely absent. I explore four protective factors that both the literature and experts in the field argue have served as deterrents against the (widespread) introduction of fentanyl on the Dutch market. These factors are a saturated market, long-standing preventive interventions, accessible healthcare, and cautious prescription practices. While there, thus, currently are few indications of a fentanyl crisis in the Netherlands, it is important to be vigilant about maintaining this status quo since the widespread introduction of fentanyl changes a drug market in ways that are hard, if not impossible, to reverse. In order to do do this, I identify four areas that it is important to keep an eye on, to ensure that the fentanyl situation in the Netherlands remains under control. These are: Market changes, Production vs consumption, developments in prescription practices, and Specialized information.

## **Introduction**

The following document is the result of a stay at the Dutch Embassy in Washington D.C. ultimo '23. As a NWO Embassy Science Fellow, I travelled to Washington D.C. to learn more about the fentanyl crisis that is ravaging the United States. The aim with my visit was to get a better understanding of what is going on in the United States and what this means from a Dutch perspective. To learn more about this, I consulted both literature on the topic and experts in the field from both the United States and the Netherlands. This field report is the compilation of my notes and insights from this knowledge-gathering trip.

Fentanyl is the substance that takes center stage in this report. It is a synthetic opioid, which means that it is an analgesic, just like heroin and morphine. Fentanyl is, however, much stronger than these traditional opioids. It is often described as being roughly 50 times stronger than heroin and up to 100 times stronger than morphine (DEA, n.d.; Pardo & Reuter, 2018) and as little as 2 mg of fentanyl can be a lethal dose for humans (EMCDDA, n.d.). Fentanyl has been used for medical purposes since it was first synthesized in 1959 in Belgium. In this context,

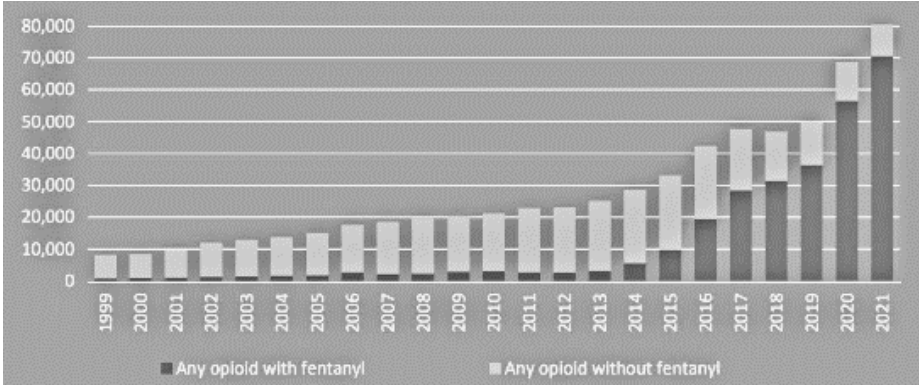
it has been used as a painkiller for patients with very intense pain and for people who have built a tolerance for other opioids. Fentanyl is described as synthetic because it is not made from organic matter, like how e.g. heroin is made from processing the sap from poppy flowers. Rather, fentanyl is made through a chemical process, just like other synthetic drugs such as methamphetamine and MDMA.

In order to give a Dutch perspective on the fentanyl crisis, this field report falls in three parts. The first part briefly details the development of the opioid crisis in the United States with a focus on the role of fentanyl. The second part outlines four reasons why fentanyl remains a relatively small problem in the Netherlands. Lastly, the third part puts forward four aspects it is essential to pay attention to, in order to ensure that fentanyl continues to play a minor role in illegal drug market in the Netherlands. The ambition of this field report is thus to serve both as a brief introduction to this societal issue and to serve as a starting point for a discussion about how to ensure that fentanyl remains a minor player in the Dutch illegal drug market.

# Fentanyl in the United States

The rise of fentanyl in North America has received widespread public attention over the last decade. The reason that fentanyl has received so much attention is that it has been found to be present in an increasing number of lethal drug overdoses. As the drug has expanded across the country, the number of lethal overdoses involving fentanyl has sky-rocketed while lethal overdoses without fentanyl present are becoming increasingly less frequent. Figure 1, from UNODC, illustrates this development (UNODC, 2023). This figure shows an explosive increase in the number of opioid-related overdoses in the last 22 years with an increase from below 10,000 lethal overdoses in 1999 to approximately 80,000 in 2021.

**Figure 1** Number of overdose deaths involving opioids, United States, 1999-2021  
(source: UNODC)



Source Figure: UNODC, 2023

The first 15 years of the graph (1999-2013) show a low presence of fentanyl, but a steady increase of fatal overdoses involving opioids from below 10,000 to approximately 25,000. This period corresponds to the what is often called the first two waves of the opioid crisis. This first wave was fueled by over-prescription of opioid painkillers like oxycontin and began in the late 1990s. The second wave began in 2010 and lasted until 2013. This was a period where most of the lethal overdoses were attributed to illicit heroin (Ciccarone, 2021).

The third wave of opioid mortality started in 2013 as the number of fatal overdoses involving synthetic opioids started to increase explosively. The most prominent among these synthetic opioids was illicitly-manufactured fentanyl (CDC, 2023). This change is seen in figure 1, where the number of lethal overdoses with fentanyl detected increased explosively after 2013, while the number of victims of fatal overdoses without fentanyl present diminished. The number of opioid-related lethal overdoses almost doubled between 2013 and 2017 and reached 80,000 in 2021. In 2021, only about 12 % of the opioid-related overdoses did not involve

fentanyl. Some researchers argue that we have now entered the fourth wave of the crisis, which comprises of a sharp rise in poly-drug overdoses. Here, not one but multiple illegal substances are increasingly frequently detected in the body of victims of lethal overdoses. These substances are typically fentanyl in combination with some kind of stimulant (typically cocaine or methamphetamine) (Ciccarone, 2021).

Recent reports indicate that the number of lethal overdoses in the United States has started plateauing, but it is still too early to draw conclusions. There is thus still a very high number of lethal overdoses, but there are indications that the explosive year-on-year growth that has been seen over the last couple of decades might be stagnating (Ahmad et al., 2023).

### *Why is fentanyl so prominent?*

What is the reason for this high number of overdoses and the widespread presence of fentanyl in the bodies of the victims? Fentanyl is a cheap and very potent drug. This means that for sellers there is a strong incentive to push fentanyl over other traditional drugs that might leave a smaller profit. According to the DEA: *“One kilogram of fentanyl illegally purchased in China for \$3,000-\$5,000 can generate upwards of \$1.5 million in revenue on the illicit market.”* (Tackling the Opioid Crisis: A Whole-of-Government Approach, 2019). When the profit margins are this big, there is a big incentive for dealers to sell fentanyl. The introduction of fentanyl was thus originally motivated by the benefit for the sellers rather than by the interest of the buyers. For the sellers it was an option to make extra money while it for the buyers was an unfamiliar, unpredictable, and potentially lethal substance. While new drugs typically attract new users, fentanyl seems to have driven up the number of deaths rather than users (Pardo et al., 2019).

Now that fentanyl has been around for a number of years, some users have gotten accustomed to its potency and actively seek it out. These are typically people with long-lasting issues with drug use and not the recreative users (Trimbos instituut, 2021). This, however, does not mean that the impact of fentanyl is only felt across all groups of users. Since fentanyl is much cheaper than most other illegal drugs, users who are purchasing other illicit drugs often buy fentanyl without knowing it. Many drugs are now, often unbeknownst to the user, adulterated with fentanyl. This is exemplified by a recent study from New York City among people who inject drugs. This study found that while only 18 % of the respondents had chosen to use fentanyl, it was detected in the blood of 80 % (McKnight et al., 2023).

Another reason fentanyl has become so pervasive is that the illicit production of fentanyl has become more tenable. While fentanyl has been part of the illicit opioid market in the United States since the end of the 1970s, its availability was first restrained by the fact that only few chemists knew how to synthesize the drug and restricted access to both the necessary chemicals and equipment for production. These barriers have since eroded (UNODC, 2023). The necessary chemicals and equipment are now both readily available through the internet and the knowledge of how to synthesize the drug is more widespread than ever. This has allowed fentanyl to go from being a niche drug to being a drug that is omnipresent in the United States.

### *Interventions against Fentanyl*

Since fentanyl started wreaking havoc across the United States, a number of interventions have been implemented in order to curb the devastating impact it has had. These efforts have so far demonstrated how complicated it is to deal with a public health crisis on the scale of the fentanyl crisis. In the most general terms, the experience from the United States (and other places heavily affected by fentanyl) seems to be that it is necessary to approach the issue from more angles at once. Equal attention must thus be given to *supply*, *demand*, and *harm reduction* in order to curb the harms of fentanyl and other synthetic opioids (Moazen & Stöver, 2023). This makes managing this kind of crisis a complicated balancing act involving collaboration between parties from law enforcement, healthcare, international trade regulations, and many others.

To curb *supply* has proved to be a complicated task in the United States because there are many different suppliers and the supply networks are both influential and advanced. Fentanyl is made through the processing of precursor chemicals. These chemicals are typically produced in Asia and then synthesized to fentanyl in North America. In the public debate in the US, the source of the fentanyl is typically attributed to Chinese chemical industry as producer of the chemicals and Mexico as the producer and distributor. This is, indeed also one of the main paths of creation, though other countries, like e.g. India and Canada, have also been found to be used for the illicit production (DEA, 2020).

The international production chain of fentanyl and the need for international cooperation with law enforcement agencies in multiple other countries make curbing the supply complicated. This need for international cooperation appears to be a very high priority in the United States and has led to a number of coalitions and collaborations both between the United States and their North American neighbors and China. While the pressing situation has thus led to new political alliances and initiatives to limit the supply of fentanyl, these interventions have

so far proven insufficient to stop the flow of fentanyl into the United States. This has recently led lawmakers to introduce new laws that allocate more funds and jurisdiction to border patrol agents in order to curb the amount of fentanyl entering the United States. These laws also target the laundering of the money earned through the sales of fentanyl (and other illicit drugs) in order to make it harder for organized crime to operate in the United States (United States Senate Committee on Banking, Housing, & Urban Affairs, n.d.).

In order to limit the *demand* of fentanyl, there has been various interventions in the United States. While there are too many specific interventions to describe them all here (for a systematic review of a number of interventions see Kiisk et al., 2023; Lee et al., 2021), it is worth mentioning that there are two overall categories of programs that target the demand: there are preventive programs that target potential future users and treatment programs that target current users. An example of a preventive program is an educational program developed by researchers by Stanford that focus on informing and educating children and teens about the risks of using illegal substances. There is some evidence of the preventive effect of these types of programs (e.g. Fischer, 2022). Another central tool to curb demand are the addiction treatment options that target current users. One of the most prominent of these treatment options is Opioid Substitution Therapy (OST). This intervention has been used to treat people addicted to heroin and other opioids and is also used to treat fentanyl addiction. Here, users are given slow-releasing opioids such as buprenorphine or methadone in order limit their withdrawal symptoms and/or to treat their addiction long-term.

One of the big challenges in the reduction of demand in the United States has been making treatment available to the people who need it. The organization of the healthcare system in the United States means that a number of treatment options are financially out of reach for many users. A large number of the users are not able to find a slot to start treatment or do not have health insurance, which drastically limits the treatment options available due to the high costs of most treatments like rehab, OST, detoxification, and therapy (Moazen & Stöver, 2023). A recent survey shows that only 24 % of the people who needed treatment for substance use received it within the last year (Substance Abuse and Mental Health Services Administration, 2023). This means that three quarters of the people in need of help did not get it. A central ambition by the White House has thus been to remove obstacles so that addiction treatment becomes wider available for those who need it (Office of National Drug Control Policy, 2022).

*Harm reduction measures* are another class of interventions that has been used to limit the impact of the fentanyl crisis. These interventions aim to make it less dangerous, strenuous,

and stigmatizing to be addicted to fentanyl. Harm-reduction interventions thus aim to reduce the negative consequences of using rather than limiting the use itself (at least in the first instance). The harm reduction interventions are diverse and specific to the needs of the users. They include things like overdose prevention sites, drug checking, street-based interventions (like e.g. wound care), needle exchanges, and making naloxone available (Moazen & Stöver, 2023). These programs have real impact on the devastating consequences on the widespread use and addiction of fentanyl. A tangible harm-reduction intervention worth mentioning is the wider availability of naloxone. Naloxone is an opioid antagonist that can reverse fentanyl overdoses, which is now available without a prescription in the United States. The wide availability of this drug has already been used to reverse tens of thousands of overdoses (CDC, 2015).

While there are many supporters of harm-reduction interventions, these are not without controversy in the United States. Opponents argue that harm-reduction interventions might encourage drug use or at least remove some of the barriers to experimenting with (hard) drugs by reducing the negative effects of drug use and addiction. The wide availability of naloxone, for example, has been argued to provide users with a (false) sense of safety that might drive them further into their use of fentanyl (Doleac & Mukherjee, 2018). The evidence of the effect of naloxone availability on fatal overdoses is mixed, where some studies do find increased overdose deaths as naloxone availability increases, but most research tends towards a beneficial influence (Smart et al., 2021). While there thus is a need for further research in this area, it seems that the beneficial effects of naloxone outweigh any potential side effects.

### *Early warning system*

One last aspect that is consistently described as essential in the response to the fentanyl crisis in the United States is a specialized (early) warning system. One of the biggest challenges to dealing with the fentanyl crisis has been how to get information about the scale and nature of the issue. Since the vast majority of the fentanyl in question is sold illicitly, there is no readily available information about how much fentanyl is sold or used in a specific location. Furthermore, while drug markets are intricately connected there are also big regional differences. This means that the interventions suitable in one place might not make sense in another. It is therefore essential to have a system to gather information about the status quo about different illicit drugs markets. This is not only important in terms of knowing which places are most affected but also to see early signs of increases or decreases in severity.



An early warning system that uses a number of sources to detect developments in the drug market is therefore essential because without these systems it will only be possible to act based on slower and more crude indicators such as counts of overdoses and toxicology reports of lethal overdoses, which arrive after the drugs have already entered the market. This delay is a disadvantage in the struggle against the detrimental effects of fentanyl, because intervening early is essential to limit the damage it will cause.

### **Why is fentanyl not a problem in the Netherlands?**

While fentanyl (and other synthetic opioids) are on the top of the agenda in the United States, this topic receives much less attention in the Netherlands. And there is a pretty good reason for that. While fentanyl-related lethal overdoses do happen in the Netherlands, the scale is completely different compared to the United States. While there is only limited information about fentanyl-related lethal overdoses in the Netherlands, every indicator shows that fentanyl has a much smaller presence there than in the United States.

While there is no data available of the number of people who die from an overdose of fentanyl in the Netherlands, there are smaller investigations made on specific subareas. The health services of the Netherlands, the GGD, made an overview that 7 people who died of an overdose in Amsterdam between 2013 and 2017 had fentanyl (and fentanyl analogues) detected in their blood (De Nationale Drug Monitor, 2021). In 2021 there were an estimated 137 deaths related to fentanyl in Europe at large. This is only a fraction of the number of recorded fentanyl-related deaths recorded in the United States. In 2021 synthetic opioids (primarily fentanyl) were detected in the blood of just above 71.000 victims of a fatal overdose in the United States (CDC, 2022).

Even if we use the number of lethal overdoses from opioids in general from the Netherlands instead of just the synthetic opioids, there remains much fewer lethal overdoses per capita in the Netherlands than in the United States. In the Netherlands there were 298 fatal overdoses in 2021 and in 50 % of these, opioids were present (EMCDDA, 2023). With a population of around 17.5 million in 2021 (Statistics Netherlands, n.d.), this amounts to 0.85 overdoses related to opioids per 100.000 individuals. In comparison, the number of people dying from an overdose with synthetic opioids detected (primarily fentanyl) in the United States

in 2021 was 21.45 per 100.000 inhabitants<sup>1</sup>. The number of overdoses with synthetic opioids present in the United States is thus multitudes higher than the lethal overdoses of all opioids in the Netherlands.

The low mortality and the general absence of fentanyl, has led researchers to conclude that fentanyl is not a big problem in the Netherlands (or Europe at large). Quite contrary to the big increase in opioid use in the United States over the last years, if anything the data indicate that “(...) *levels of opioid use over the last decade have been relatively stable; at best they may arguably be indicative of a slight decline.*” (Seyler et al., 2021, p. 1078) The general picture is therefore that synthetic opioids remain a smaller issue in Europe, and more specifically in the Netherlands, than in the United States.

But how can that be? The same motivating factors that has tempted dealers in the United States to sell fentanyl surely apply in the Netherlands. Fentanyl could also allow dealers in the Netherlands to make more money, so how come this drug is not more of a problem in the Netherlands? The Netherlands is (in)famous for its permissible attitude towards drugs and is also one of the biggest producers of synthetic drugs in Europe, so why is fentanyl not more prevalent?

This relative absence of fentanyl probably is the consequence of a host of different factors, but I will describe four potential reasons why fentanyl remains such a relatively rare substance on the Dutch illicit drug market. These are the explanations I have encountered in the literature on the topic and in the conversations that I have had with experts in the field from both the Netherlands and the United States. The four protective factors I encountered among experts and in the research literature on the topic are: a saturated market, preventive interventions, accessible healthcare, and cautious prescription practices.

The first explanation has to do with the Dutch drug market. As argued above, the introduction of fentanyl in the American market was motivated by financial gains. In the Netherlands, a lot of money is also made from selling illicit drugs. While fentanyl in theory might be a more lucrative drug, as long as there is fast money to be made and there is a supply of illegal drugs that can cover the need of the users, it appears that the Dutch market is saturated. People interested in selling drugs make a lot of money with the existing drugs and people that

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<sup>1</sup> 71.000 lethal overdoses with synthetic opioids (mainly fentanyl) and a total population of around 331 million (United States Census Bureau, n.d.)

buy drugs get what they know and want. The Dutch market thus appears to be somewhat resilient to change because of the satisfaction from both the sellers' and the buyers' perspective.

Some researchers hypothesize that this saturation of the Dutch market has to do with the protection provided by the heroin from Afghanistan. Approximately 95 % of the heroin in Europe comes from Afghanistan and this has in recent years been both plentiful and high quality (EMCDDA, 2023). There are therefore relatively cheap and high-quality opioids available on the European market. While fentanyl might be cheaper and stronger than this heroin, this trend in the heroin production could potentially have mitigated or delayed a widespread entrance of fentanyl on the Dutch market.

The second explanation has to do with the long-standing preventive interventions that are implemented in the Netherlands. The Netherlands has a long history of harm reduction around drug use. The widespread use of heroin in the 1980s led to a number of innovative interventions being developed in order to reduce the harm that the use of hard drugs and especially heroin might have on the lives of the users. These harm-reduction strategies originally developed to curb heroin addiction are in many cases similar to the harm reduction techniques recommended for fentanyl prevention and harm reduction (Moazen & Stöver, 2023). These interventions are (among others) needle-exchanges, drug testing services to users, safe drug use sites, and opioid replacement therapy.

The third reason has to do with the availability of healthcare for people who struggle with addiction or healthcare complaints as a consequence of opioid use. In the Netherlands a relatively high number of the people who regularly use opioids are in contact with the healthcare system. It is estimated that around 50-80 % of opioid addicted people are in regular contact the specialized healthcare dealing with addiction (Laghaei et al., 2013). This contact is essential to ensure that marginalized users are not left alone but rather receive help when they want and need it. The organization of the healthcare system in the Netherlands also means that there is a comparatively low threshold for people to get help from a healthcare professional. Healthcare is available for all citizens meaning that marginalized people have an easier time getting the help they might need for any health problems whether they have to do with their addiction or not.

A potential fourth reason that fentanyl is not more widespread has to do with the prescription practices of the Dutch doctors. The prescription of legal opioids by doctors is intimately tied to the addiction and use of illicit opioids: over-prescription increases the number

of people who risk getting addicted to opioids but under-prescription might force people who need pain medication to seek out illegal alternatives to manage their pain. The widespread over-prescription in the United States during the 90s has received a lot of attention and has shaped the way that opioids are prescribed in the Netherlands today. This has meant that there is a focus on not over-prescribing opioids and making sure that opioids are only prescribed over longer periods of time when it is necessary. A recent large-scale research project has received funding from the European Union, and is focusing on the prescription guidelines and trends in prescriptions (*Taptoe Consortium*, n.d.).

### **Why is it still important to pay attention to fentanyl?**

Fentanyl has run rampant in North America over the last decade. This has cost hundreds of thousands of lives and continues to be one of the most pressing challenges affecting both the healthcare system, law enforcement, and the political system. While this continues to be one of the biggest challenges in North America, the Netherlands has, so far, remained mostly unscathed. Keeping fentanyl out of the Dutch market is, however, a continuous effort. New challenges might erupt that require additional measures to limit the role of fentanyl. One reason it is so important to keep track of fentanyl is that the general consensus seems to be that once fentanyl has entered a drug market, it changes the market in irreversible ways. The recommendation thus in general seems to be that the right time to start tackling fentanyl is before it becomes a widespread issue, not after. This means that while there are no signs that the Netherlands is facing conditions similar to those currently devastating the United States, it will require a vigilance to keep it like that. While the status quo thus looks good, this does not mean that it is not important to pay attention to fentanyl and be alert to new developments (Oja et al., 2021; Viskari & Tammi, 2021).

In the following, I will detail four areas it is essential to pay attention to, in order to ensure that fentanyl remains under control in the Netherlands. These four aspects are: market changes, production vs consumption, developments in prescription practices, and specialized information.

#### ***Market changes***

A number of experts argue that because of the profitability of fentanyl compared to other drugs, it is only a question of time before fentanyl enters the Dutch illegal market. While the European illicit drug market might be slower moving compared to the American market, it is a question

of *when* fentanyl enters the European market, rather than *if* it happens (Moazen & Stöver, 2023). This expected development is also ascribed to geopolitical developments. Since the United States left Afghanistan, there has been an unprecedented decrease in the production of poppy, and thus heroin, because of the reinstated ban on this crop by the Taliban. Since 95 % of the heroin in Europe comes from Afghanistan, this ban could lead to a shortage of opioids in Europe if the decreased production is not picked up somewhere else. This could mean that the cheap and potent heroin that has protected Europe from the synthetic opioids so far, might be vanishing soon (EMCDDA, 2023).

The last time there was such a drop in the heroin production in Afghanistan was in the 2000s. This previous drop led to the introduction of fentanyl to the European market in the Baltic countries. In Estonia, the purity of heroin dropped from 58 % in 2000, to 21 % in 2001, and all the way down to 7 % in 2002 (Oja et al., 2021). This decrease in purity meant that the heroin users were left without access to the drug they had been used to and thus in search of a replacement. As argued by previous research, the shortage of an old drug thus makes people susceptible to the introduction of new drugs, such as fentanyl (Pardo et al., 2019; Uusküla et al., 2020). Shortly after the drop in heroin purity, fentanyl started becoming widespread filling the vacuum. This led to a sharp increase in fatal overdoses in Estonia, which continues to plague the country. In 2017 Estonia had a drug-induced mortality rate of 130 deaths per million inhabitants (age 15-64), which is magnitudes larger than the European average of 22 deaths per million (EMCDDA, 2019).

The illicit drug markets have also changed profoundly in recent years because of the internet. This both influences the way illicit drugs are produced and the way they make their way to consumers. The producers can now buy precursor chemicals online, and have them delivered to their address on the other side of the planet. This allows e.g. the Mexican cartels to purchase chemicals or machinery that are catalogued and tight controlled in North America, from countries where these are more readily available. The internet furthermore allows illicit drugs to be sold to consumers over long distances through dark web marketplaces or even social media sites. The new synthetic opioids, like fentanyl, are so potent that even a small package can contain enough fentanyl for a large-scale seller (UNODC, 2023). This means that however well prepared the Netherlands is as a country, any individual nation state is bound to come up short when dealing with an international issue such as fentanyl in the era of the internet.

### *Production vs consumption*

Even if the Netherlands does not experience a public health crisis because of fentanyl, that does not mean that the country will not play a role in the production and distribution of this illegal drug. The Netherlands continues to be one of the biggest producers of synthetic stimulants such as methamphetamines and MDMA (EMCDDA, 2022; Van Amsterdam et al., 2021). The Netherlands has become a hotspot for this kind of activity for a number of reasons but it might, at least in part, be explained by the central location of the Netherlands in Europe, the big harbors of the country, and the liberal attitude towards (soft) drugs (Chatwin, 2018). Some researchers even argue, that it makes more sense for clandestine productions of fentanyl to take place in countries that are not struggling with a health crisis because of it, since this might lead to less focus on the operation (Wang et al., 2022).

In recent years, a number of warning signs have been found that the illicit drug production in the Netherlands is part of a larger global drug market with chemists being flown in from America to work in clandestine laboratories in the Netherlands to produce illegal drugs to be exported to profitable markets within and outside Europe (EMCDDA, 2022). Precursor chemicals used for the production of fentanyl and 1 kg of pills containing fentanyl have also been confiscated in the Netherlands (De Rechtspraak, 2023). While there are thus only few signs of widespread use within the Netherlands, there is fentanyl and precursors for the production of fentanyl travelling through the country (The Dutch Police, 2022). While the instances so far are few and far between, it is important to pay attention to whether this becomes an issue in the future.

While the production of fentanyl and other synthetic opioids in the Netherlands might not necessarily lead to a national health crisis, this would still be a challenge for law enforcement and foreign relations. The production of fentanyl in the Netherlands would be a challenge for the law enforcement of the Netherlands because of the level of organization that comes with this kind of crime. The influence of internationally organized crime has proven to be not only very resilient but also slowly seeping into other parts of society in order to protect and advance its interests. This kind of organized crime can thus have an undermining effect over time through e.g. “drug waste dumping, money laundering, intimidation of public servants and penetration of criminal interests in the public domain” (Van Amsterdam et al., 2021, p. 107). While the clandestine production of fentanyl within the Netherlands might not necessarily lead to a health crisis on the scale of what is seen in the United States, the presence of these criminal networks can still impact the society at large and be a big issue for law enforcement.

The presence of this kind of organized crime can also become a big political issue for the foreign relations of the Netherlands. The relationship between the Netherlands and the United States has been historically complicated because of issues with the production of illegal drugs in the Netherlands. This was especially poignant in the late 90s and early 2000s where Barry R. McCaffrey, the White House drug policy director at the time, called Dutch drug policy an “Unmitigated disaster” (Reinarman, 2000). If the Netherlands should become a big producer of synthetic opioids, in addition to the large production of other synthetic drugs that is already taking place, this could thus negatively influence the international relationships of the Netherlands.

### *Developments in prescription practices*

While there is a focus on prescription practices in the Netherlands, researchers have pointed towards an increase in prescriptions of opioids in the Netherlands as a potential risk (Viskari & Tammi, 2021). It is important to investigate why this increase is happening and whether opioids are the right choice, despite the relatively large dangers that they pose. There are approximately one million Dutch people who used opioids in 2022, this is an increase of 5 % from the preceding year. Out these, 600.000 use the strong and fast-working opioids, that pose a risk for addiction (Stichting Farmaceutische Kengetallen, 2023). It is worth noting that while the number of users of opioids thus has increased, the number of chronic users has remained more or less constant.

It is also important to note, that while a dramatic increase in the prescription of opioids is cause for concern, a quick reduction should also sound the alarm bells. While the prescription of an opioid painkiller might create a physical dependency, the curtailment of the same prescription does not solve this potential addiction. Not prescribing or continuing to prescribe opioids to people who need or have grown accustomed to the drug will lead some users to seek out illicit alternatives. Any dramatic change in prescription practices should thus be a cause of concern and call for further investigation. There is therefore good reason to follow the development in prescription practices closely.

It is worth noting that over-prescription of opioids is not the only way that fentanyl has become a threat to public health. In both British Columbia in Canada and Estonia opioids have become a threat to public health, but have followed very different trajectories from that of the United States (Moazen & Stöver, 2023; Uusküla et al., 2020). In neither of these places did the lethal overdoses originate with the over-prescription of opioids. It, therefore, seems that while

the heavy-handed prescription of opioids in the United States often is described as one of the factors that contributed to the public health crisis faced today, this is only one factor out of many (Madras, 2018) and not a necessity for such a crisis to occur. While it is thus important to keep the prescription practices under close scrutiny, it is not the only path to big issues with synthetic opioids.

### *Specialized information*

While the Netherlands has a great early warning system for previous drug epidemics, it might face certain limitations in regards to the current drug landscape. If the drug market in the Netherlands would start facing some of the same trends that are currently at play in North America, the way that information is gathered might have to be adjusted to accommodate these changes. There are three different reasons why early-warning systems might need to be adjusted to fit this new drug landscape.

The first specifically has to do with fentanyl (and other new synthetic drugs). These drugs often need specific tests to detect their presence in the body of a person. While the standard drug tests typically test for a number of the most prevalent drugs, fentanyl (and other new synthetic psychoactive drugs) requires specialized tests that can detect their presence (Sutter et al., 2017). In Maryland a team of researchers supplied hospital ERs with specialized fentanyl tests and this had a big impact on the detection rate: 83 % of the people seeking treatment for intoxication or withdrawal symptoms tested positive on the dedicated fentanyl screen. Only half of those who tested positive on the designated fentanyl screen, tested positive for opioids on the standard hospital screen (Dezman et al., 2020). This shows how the standard tests used in e.g. hospitals might not be sensitive to some of the new synthetic analogues.

The second reason it would be important to develop a warning system equipped for the current drug market is if the illicit drugs become adulterated with other drugs like what is currently happening in the United States. Because the new synthetic opioids are much cheaper to sell than their organic counterparts, they are, often unbeknownst to the customer, added to or completely replacing other illicit drugs. This means that many of the users are exposed to a number of drugs, which they might not be aware of. This clandestine adulteration of drugs is part of what researchers have called the fourth wave of the opioid crisis: the polydrug wave. This crisis is not just risky for the users because they are unaware of what they are taking, it is also an issue for the ways that many early warning systems so far have gathered information about drug use. A lot of the tools used to monitor drug habits in the Netherlands rely on either



self-reports by users or visual estimation by first responders. Both of these methods may have worked in past drug markets, but it is an inaccurate way of estimating what drugs are actually being used during the polydrug crisis. In many instances, users won't know what they are using and will be exposed to not one but a cocktail of drugs. The only way to really know what is being used is to test the chemical composition of the substance.

There is, third, a lack of record keeping in the Netherlands with regards to the specific cause of death when it comes to lethal overdoses. This means that developments in specific drugs will be difficult to track. This is also the reason that there is only very limited information about the number of lethal overdoses of fentanyl in the Netherlands. With the current information, it is only possible to see broad categories of drug overdoses but the specific number of overdoses due to fentanyl is not readily available (De Nationale Drug Monitor, 2021). There are, however, initiatives to change these recording practices to bring a higher level of granularity. Making this kind of data available is essential to understand the changes in the drug market early. This would allow researchers and health professionals to see if e.g. the number of lethal overdoses where fentanyl is detected increase, even if this is counteracted by a dip in the overdoses from heroin, as was seen in the United States.

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