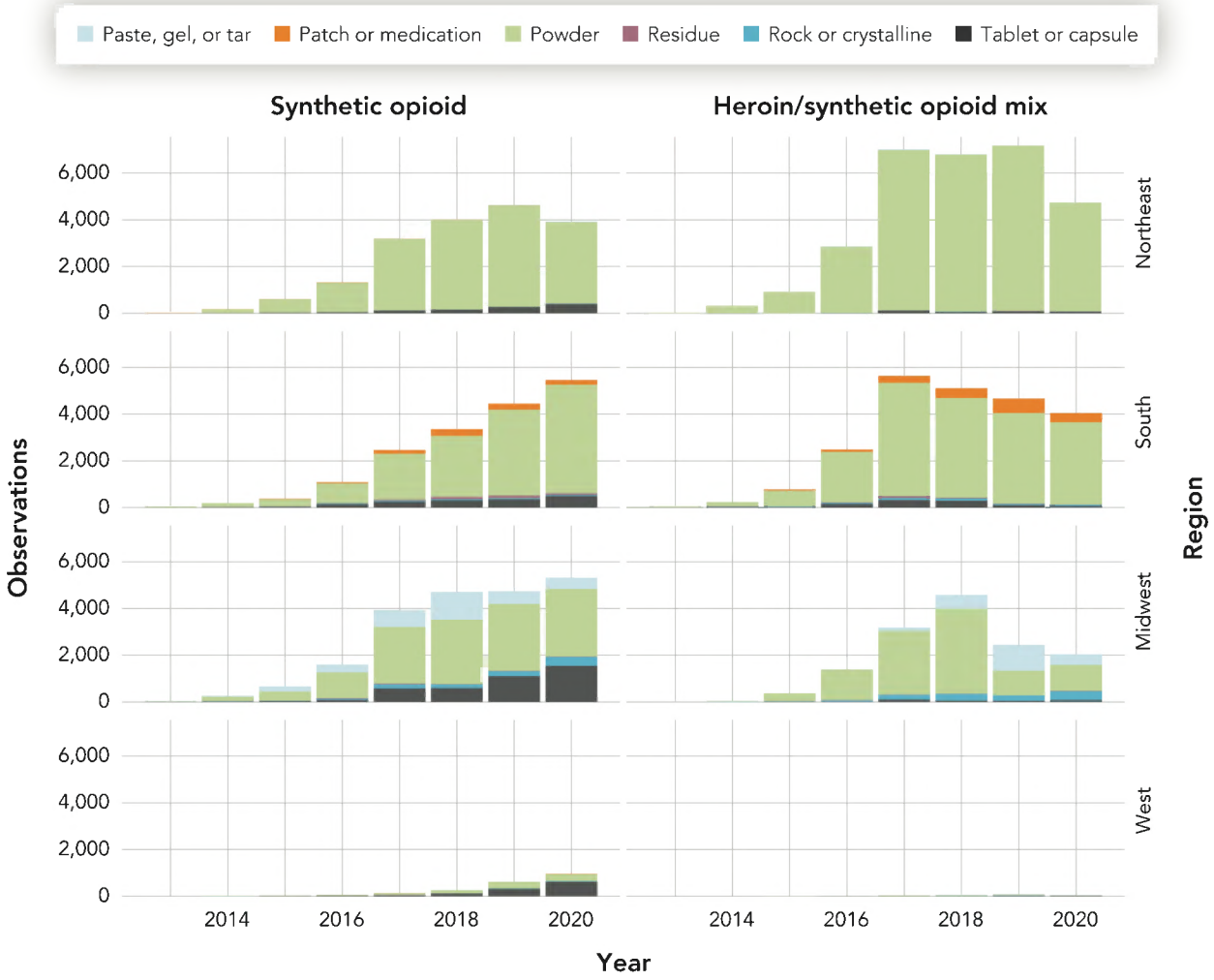
Figure 3.3

Retail-Level Synthetic Opioid and Heroin Seizures per 100,000 People, by U.S. Census Region



SOURCE: Analysis of NFLIS data, 2013–2020 (NFLIS, "NFLIS-Drug," undated).
NOTE: Observations include only seizures of 1 g or less.

In short, geographic patterns of exposure of illegally supplied synthetic opioids, such as fentanyl, are similar to the patterns of overdose deaths involving these drugs. Deaths and drug seizures are most common in the Northeast and Midwest regions. The West has not seen fentanyl penetrate to the same degree as other parts of the country, although the number of overdoses and frequency of drug seizures are rising. The percentage of fatal drug overdoses involving synthetic opioids and other drugs, including heroin (a semisynthetic opioid) and cocaine (a psychostimulant), is rapidly expanding, suggesting greater complexity in the exposure of synthetic opioids in different drug markets. Of similar concern is the rise in the percentage of the number of seizures of synthetic opioids in counterfeit tablet formulations. These are more common in the Midwest region, although the West reports the highest share of fake pills. Monitoring these evolving trends will be an essential part of a U.S. response.

Chapter 4

REDUCING THE ILLEGAL SUPPLY OF SYNTHETIC OPIOIDS: NEW CHALLENGES

The encroachment and entrenchment of illegally manufactured synthetic opioids into domestic drug markets in the United States has important implications for drug policy and public health and safety. Not since the early 20th century, when heroin replaced morphine as the main opioid in illegal drug markets, has the United States seen one major opioid permanently displaced by another. The ongoing shift in illegal drug markets from prescription opioids to heroin to illegally manufactured synthetic opioids is driven largely by factors related to economics and pharmacology and is likely to have long-lasting and far-reaching effects. As a result, the United States needs new approaches that focus on new leverage points and ways to close vulnerability gaps.

The Commission examined how the transition in illegal drug markets might affect illegal supply chains. Illegal suppliers, TCOs and entrepreneurial individuals alike, stand to gain financially from such a transition in the short to medium term; long-term effects are less clear if prices decline because cheaper synthetic drugs proliferate and reduce the total dollar value of the market.

Controlling the supply of illegal drugs is challenging, and the challenges appear to be substantially greater with synthetic opioids. Consolidation of supply chains means that TCOs can cut production costs and reduce risks associated with trafficking because the production and distribution of synthetic drugs involve fewer steps and smaller amounts. Further, the use of legitimate sectors, including mail and parcel systems, international trade, and online social media and other communication platforms, help connect criminal operators across large distances. Collectively, these factors reduce risks to criminals and prices and complicate efforts to reduce supply.

SYNTHETIC OPIOIDS GIVE SUPPLIERS ADVANTAGES

From a supplier standpoint, illegally manufactured synthetic opioids have several advantages over plant-based heroin in terms of production and distribution (see Table 4.1).[1] Operationally, it takes a few days to produce a batch of fentanyl, while poppy takes months to come to harvest. A single lab employing a trained technician can substitute for a field of poppy that employs scores of laborers. Further, poppy is subject to blight, drought, and eradication. A synthetic opioid can be produced in a small lab, sometimes in a single container, that is easier to conceal from authorities than hectares of poppy would be.

Table 4.1

Dimensions of Illegal Supply for Heroin and Synthetic Opioids

Dimension	Heroin	Synthetic Opioids
Production	• Farmers cultivate poppy in remote areas; heroin requires fewer available chemical inputs. • Heroin takes months to produce. • Environmental and social threats to poppy crops have made them subject to risk of supply eradication.	• These do not involve crops. • The precursor chemicals are cheap and easily substitutable. • Little technical proficiency is required. • Production takes a matter of days in a small setting (indoor or outdoor). • Many alternative compounds can be made to circumvent existing controls.
Potency	• Three to five times that of morphine	• Wide range depending on drug, but fentanyl is 50 to 100 times as potent as morphine
Distribution	• Largely involves TCOs trafficking on overland routes • Almost completely relies on traditional retail networks	• Can be shipped by mail in small amounts; can also be smuggled in smaller loads • Modest segment of distribution that uses the internet along with traditional retail networks
Import price (unadjusted for purity)	• $25,000 per kilogram from Mexico	• $3,000–5,000 per kilogram from the PRC[a] • $25,000 per kilogram from Mexico

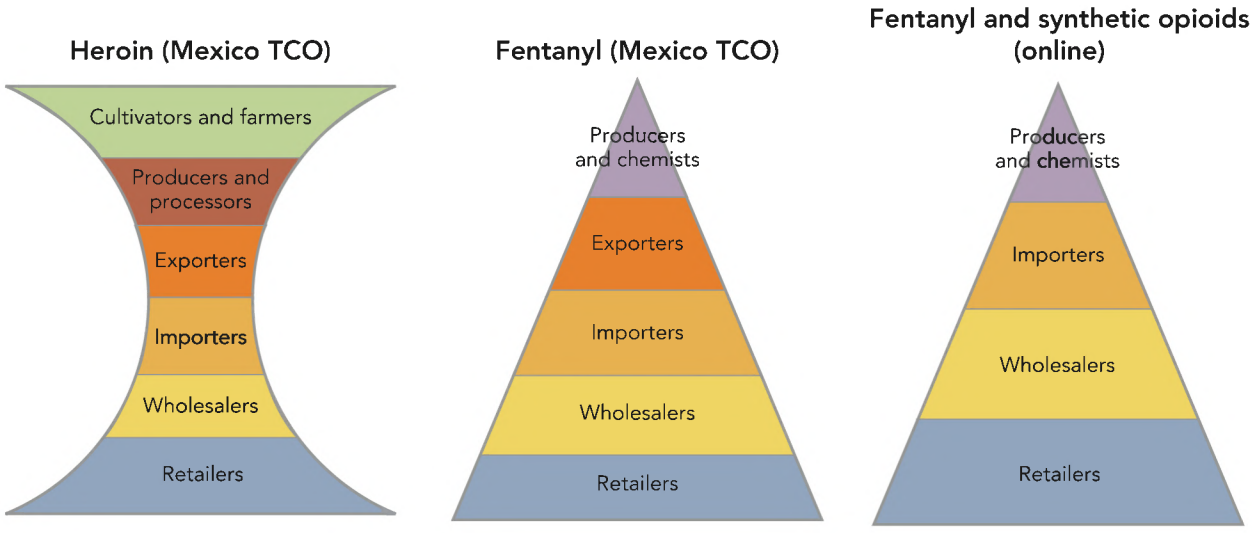
[a] Prices at import from online vendors in the PRC prior to 2019. The PRC no longer appears to be the main source of finished fentanyl sent directly to the United States.

The move from heroin to fentanyl by illegal suppliers eliminates layers in the supply chain, pointing to a radical transformation (see Figure 4.1). Consolidated supply chains and production of cheaper alternatives are likely to reduce prices of drugs sold in retail markets. The price differences between heroin and fentanyl are large, even after accounting for differences in purity and potency. Data that the Commission analyzed put costs of 1 kg of heroin, which is 60-percent pure, at about $25,000 at the point of import from Mexico. Fentanyl was advertised from online vendors in the PRC at prices of up to $5,000 per kilogram at 95-percent purity. Undercover purchases of fentanyl suggest that 1 kg imported from Mexico to the United States could cost as much as $25,000 at purity levels around 10 percent. Differences in purity and price for nearly pure product from the PRC and those for highly impure product from Mexico likely reflect the different supply chain and manufacturing structures.

The supply chain for synthetic opioids differs markedly from that of heroin. The traditional plant-based drug trade has an hourglass shape—with many producers at the top, many retail-level dealers at the bottom, and fewer importers and exporters in the middle (this is illustrated in Figure 4.1). In contrast, the supply chain for illegally produced synthetic opioids is a pyramid that cuts off the large number of producers at the top. Instead, fewer chemists or producers make fentanyl or other synthetic opioids that are shipped via importers and exporters to wholesale and retail distributors. Online distribution and mail-order delivery streamline the process further, by cutting out exporters and sending small amounts of fentanyl directly from producer to users or to importers for further distribution. Consolidating supply chains makes them far more efficient, reduces risks to suppliers, and increases revenues retained by the remaining segments in the chain.

Figure 4.1

Drug Supply Chains for Heroin and Synthetic Opioids



SOURCE: Adapted from Peter Reuter, Bryce Pardo, and Jirka Taylor, "Imagining a Fentanyl Future: Some Consequences of Synthetic Opioids Replacing Heroin," *International Journal on Drug Policy*, Vol. 94, August 24, 2021, Art. 103086.

Prices for illegally supplied fentanyl closer to retail distribution might already be declining. In analyzing data on drug seizures by law enforcement agencies, the Commission found that the purity-adjusted price for fentanyl at the mid-upper levels of the market, which means purchases involving 10 to 100 g of raw powder, fell on the order of 50 percent between 2017 and 2020.* Such a large drop in purity-adjusted prices suggests a substantial increase in the availability of fentanyl in illegal markets. The data do not provide enough information to know whether this is a decline in the retail price or whether this decline applies to both counterfeit tablet and powder formulations. Additional analyses suggest that this price decline for purchases of powder in the range of 10 to 100 g is driven by purchases made in the Northeast region of the United States, where markets are most saturated and closer than other parts of the country to becoming mature fentanyl markets.

In addition to offering these production advantages, synthetic opioids are highly potent and chemically versatile, allowing them to be easily manipulated in various ways that circumvent the law.[2] Further, use of precursors that are common and easily substitutable confound supply-reduction efforts aimed at restricting access to chemicals. Structural manipulation of compounds can challenge detection capabilities because existing technologies might not be effective at detecting newer substances that are not explicitly prohibited in drug control schedules, which allows suppliers to sometimes escape prosecution or require that DOJ use the Federal Analogue Act to prosecute suppliers.[3] Further, synthesis of drugs, such as fentanyl, is increasingly made easier and more accessible to nonchemists.[4]

* The Commission looked at this in multiple ways, such as comparing the mean and median prices per pure gram over time and estimating multivariate regression models. See Appendix B for more information.

Pharmacologically, fentanyl is more potent than heroin. Ranges vary, but fentanyl's potency is up to 50 times that of heroin.* This means that a much smaller amount of pure fentanyl than of pure heroin is needed to meet about the same volume of demand, making fentanyl much easier to smuggle. It can be transported in smaller loads that are easier to conceal from interdiction efforts. Because they are more compact, it is much easier to ship synthetic opioids through the mail or express carrier or smuggle it in other ways.†

Distribution is not only easier because fentanyl is more compact; it is also facilitated through online platforms, including B2B websites; social media websites; encrypted communications; the darknet; payment applications; and the cargo, mail, and parcel systems. The growth of these online communication platforms not only presents new challenges for drug supply reduction. They also create opportunities for chemical manufacturers, most of which appear to be in the PRC and could be operating as legitimate chemical or pharmaceutical companies, and those interested in synthesizing fentanyl, such as Mexico-based TCOs.

Websites that the Commission analyzed show that vendors can find buyers by easily creating listings that use large and unmonitored web platforms. Listings sometimes promise fulfillment of multikilogram orders and guarantee delivery to Mexico. Information on content, price, or contact can easily be embedded in photos or hidden in text, which might not be identified by existing platform moderation protocols. Once they have established contact, buyers and sellers can easily communicate through other encrypted systems out of view of law enforcement. No longer do criminals need to travel to make connections with suppliers of primary inputs. In addition, the abundance of online suppliers that inexpensively sell substantial amounts of precursors creates new challenges for supply reduction.

Crucially, these production and distribution advantages reduce not only operational risks but also costs. Removal of primary layers, such as cultivators or processors, means that criminal groups in Mexico that move from heroin to fentanyl can cut operational costs and lower risks, keeping more revenue in the process. Further, Mexico-based manufacture of counterfeit tablets, which are ready for retail distribution and require no further dilution or processing, removes additional steps that occur in the United States and might allow TCOs greater control over product distribution.

PRODUCTION VOLUMES FOR SYNTHETIC OPIOIDS ARE MINUSCULE

Reliable estimates of the illegal production of synthetic opioids are not available, nor is it possible to precisely estimate total U.S. consumption or imports of illegal fentanyl. Lacking available data, the Commission estimated the scale of illegally produced synthetic opioids that flow from the PRC (or from anywhere, for that matter).‡ A simple calculation suggests that these quantities are likely to be in the single digits of metric tons (MT). The best estimate of U.S. heroin consumption in 2016 (the most recent year for which data are available) is 47 MT.[5] Even when the

* Fentanyl's potency compared with that of morphine, the benchmark opioid, ranges from 50 to 100 times. Heroin is three to five times as potent as morphine. For the purposes of analyses presented in this report, the Commission assumed that fentanyl's potency is 25 times that of heroin by taking the upper bound of fentanyl and the midpoint of heroin (Ruben S. Vardanyan and Victor J. Hruby, "Fentanyl-Related Compounds and Derivatives: Current Status and Future Prospects for Pharmaceutical Applications," *Future Medicinal Chemistry*, Vol. 6, No. 4, March 2014; Claus W. Reichle, Gene M. Smith, Joachim S. Gravenstein, Spyros G. Macris, and Henry K. Beecher, "Comparative Analgesic Potency of Heroin and Morphine in Postoperative Patients," *Journal of Pharmacology and Experimental Therapeutics*, Vol. 136, No. 1, April 1962; DEA, "Fentanyl Facts," webpage, last reviewed November 2, 2021c).

† Neither fentanyl nor heroin is smuggled into the United States as a pure product. A kilogram of heroin seized at the U.S.–Mexico border tends to be about 60-percent pure, whereas a kilogram of fentanyl powder seized at the border tends to be about 10-percent pure. Despite the discrepancy, when both products are converted into their morphine-equivalent doses, the fentanyl seized is much more potent than the same volume of heroin would be.

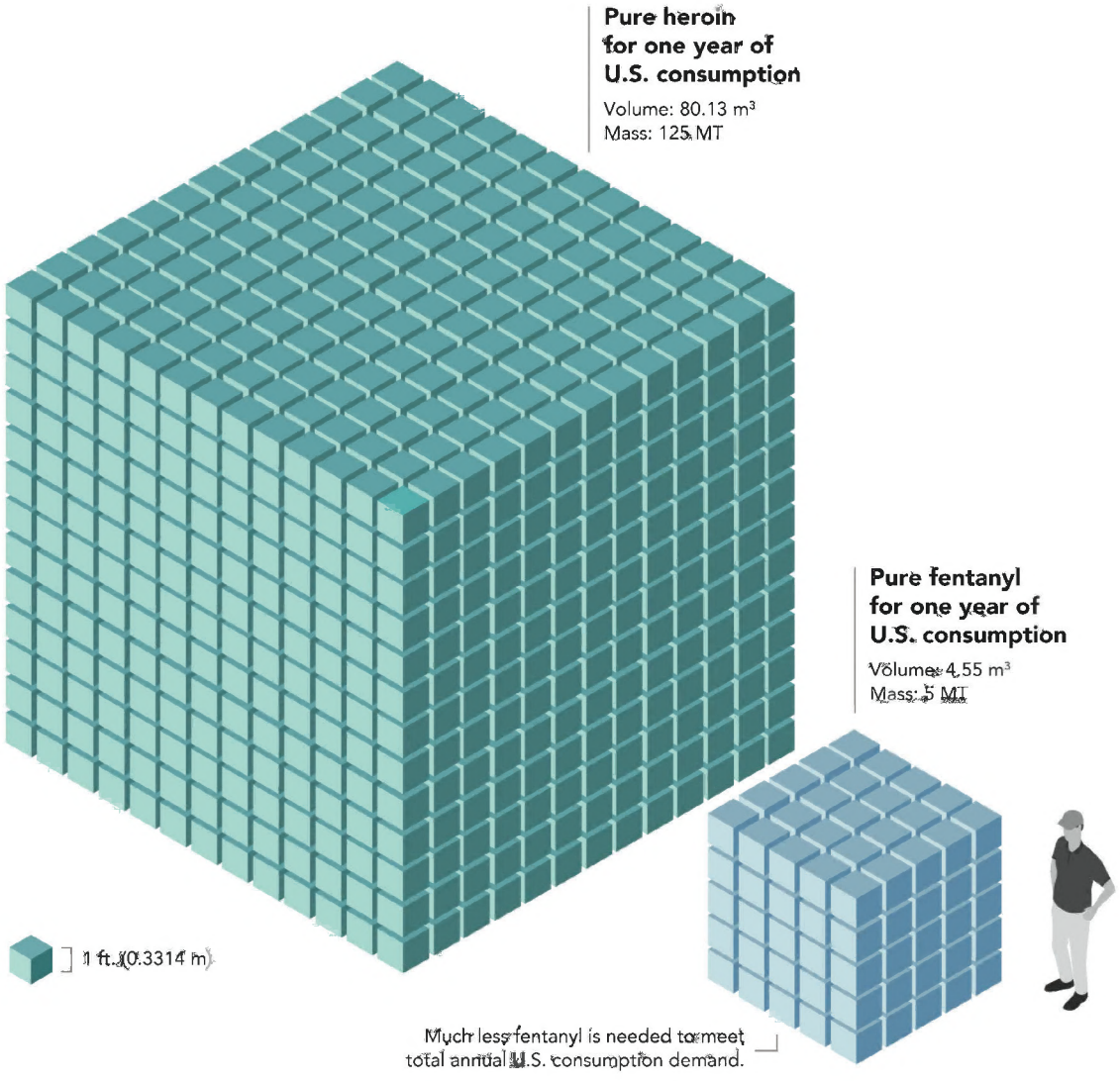
‡ More information is available in Appendix B.

Commission allowed for 50-percent market growth between 2016 and 2021, it determined that the amount of pure fentanyl needed (assuming that fentanyl is 25 times more potent than heroin) was only about 3 MT.

Single-digit metric tonnage of pure fentanyl is not a large amount and could easily fit into a shipping container or a truck trailer, which seriously challenges interdiction. Perhaps as much as 5 MT of pure fentanyl would be needed to satisfy the entire annual U.S. consumption for illegally supplied opioids, assuming that current use of heroin or prescription opioid misuse were converted to fentanyl. This amount is a fraction of the total consumption of heroin or cocaine. In equivalent potency, 5 MT of fentanyl functionally equals perhaps 125 MT of heroin: the relative difference in scale is startling and goes a long way in illustrating the magnitude of the supply-reduction challenge (see Figure 4.2).

Figure 4.2

Estimated Volume Needed to Meet U.S. Consumption for Illegally Sourced Opioid: Fentanyl Versus Heroin



NOTE: To achieve morphine-equivalent doses for all U.S. consumption in a year, 125 MT would be required. However, only 5 MT of fentanyl provides the same morphine-equivalent dosage. The volume of these supplies is illustrated with an average-size American man for scale.

Furthermore, if the total weight of fentanyl consumed is modest, the total amount of precursor chemicals used to produce that fentanyl is also relatively modest. Perhaps no more than 11.5 MT of 4-piperidone, the precursor that appears to be the most common according to DEA chemical analysis of seizures, is needed to produce 5 MT of fentanyl, assuming reasonable yield rates. Thus, the total amount of precursor or finished fentanyl is smaller than needed for traditional drug threats.

However, selling smaller amounts of a cheaper opioid means lower revenues for primary producers. Total revenues from exporting fentanyl from the PRC are likely very modest. If the export price for fentanyl from the PRC was on the order of $5,000 per kilogram, each pure metric ton sold at export would generate $5 million in revenue for illegal producers in the PRC. With producers in the PRC having moved from exporting finished fentanyl to exporting much cheaper precursors, that amount in revenue could be substantially less. Clearly, that is a truly tiny amount compared with the amount in the total pharmaceutical industry in the PRC or its chemical exports.

LIMITATIONS OF TRADITIONAL SUPPLY REDUCTION

Illegally supplied synthetic opioids present novel challenges for supply-reduction efforts. It is important to understand, however, that supply-reduction efforts aimed at more-traditional drugs, such as heroin, have also met with limited success. For example, the prices of both cocaine and heroin are notably lower than they were a few decades ago.*

Supply-reduction efforts at every step in the supply chain run into obstacles. Reducing supply by disrupting in source countries is difficult because local production costs are minuscule compared with final drug prices because of the huge markups along the supply chain. Even if primary production costs were to increase substantially, the effect on retail prices would be much less.[6] To evade interdiction, drug traffickers have an incentive to use elaborate countermeasures. Supply disruptions are often overcome through alternative means of sourcing, transport, and routes.[7] Domestic law enforcement efforts are also limited because drugs and dealers are often easily replaced through diffuse drug distribution networks.[8] That said, supply reduction and interdiction remain critical tools that the United States must use to protect the public. Every fentanyl-laced drug or counterfeit pill taken off the street is a life potentially saved.

This is not to say that supply-reduction efforts cannot produce positive results. For instance, supply-reduction efforts are likely particularly helpful in tackling nascent and emerging drug markets.[9] In recent history, this included successfully shutting down emergent illegal fentanyl laboratories in North America in the 1990s and 2000s.[10] However, the effectiveness of supply reduction in mature and well-established markets with developed distribution networks and easy replacement of removed actors and goods has been more limited since long before the onset of synthetic opioids.[11]

Applying Supply-Reduction Interventions to Synthetic Opioids

Traditional supply-reduction tools aimed at heroin can be adapted, to varying degrees, to the problem of illegally supplied synthetic opioids. That said, across all levels the challenges are greater when it comes to reducing synthetic

* Jonathan P. Caulkins, Peter Reuter, Martin Y. Iguchi, and James Chiesa, *How Goes the "War on Drugs"? An Assessment of U.S. Drug Problems and Policy*, Santa Monica, Calif.: RAND Corporation, OP-121-DPRC, 2005; Midgette et al., 2019. It is unknown how much lower drug prices would have been in the absence of supply-reduction efforts, and it is important to recognize that drug prices are a function of other factors as well.

opioid supply. In this section, the Commission describes a variety of interventions, summarizing them in Table 4.2 at the end of the chapter.

Production and Processing

In terms of the raw inputs, synthetic opioid production requires no cultivators. Instead, supply-reduction efforts would require a focus on policing chemical manufacturers that might not be violating laws in their countries. The precursors needed to produce fentanyl are widely available, with many not controlled internationally, in the United States, or by country-specific laws in the PRC, India, or Mexico.

This means that authorities would need to conduct investigations into improper handling or transferring of chemicals and more-frequent unannounced inspections to examine operations and records rather than eradicate swaths of illegal crops.* Given smaller production quantities, there are also perhaps fewer laboratories to target (alternatively, dismantling major processing operations would likely disrupt supply to a greater degree, assuming that TCOs do not stockpile inventory as insurance against seizures). Greater focus should also be placed on constraining producers' ability to openly transact or advertise chemicals online. Enhanced controls over equipment needed to manufacture counterfeit tablets is another regulatory option, although the low cost of some tableting machines and ingenuity of some criminal suppliers to circumvent regulations could limit that option.

Trafficking

Interdiction remains an available tool, although it has been made more difficult by the fact that trafficking loads of fentanyl can be lighter in weight and the risk can be spread out over more border crossings. Because fentanyl is synthetic, the total elapsed time from deciding to produce and obtaining finished product can be days or weeks, depending on delivery delays for precursors, which is much shorter than a full growing season needed for any plant-based drug. That means that the supply chain for fentanyl can respond faster to interdiction or production disruption successes.

The fact that Mexican TCOs are trafficking in low-purity fentanyl is striking. Traditionally, drugs trafficked over the border were at their highest purity, often 80 percent or more, depending on the drug, because smuggling smaller volumes at greater purity reduces risk.† Yet, fentanyl trafficked from Mexico is often found in purities lower than 10 percent. The increasing numbers of seizures of counterfeit tablets,[12] which are closer to 1 percent in purity,‡ suggests that it is profitable for TCOs to smuggle counterfeit pills that are 99-percent filler.§

Powder formulations of fentanyl from Mexico also do not approach the purity levels seen in the product coming by mail directly from the PRC. Over time, should TCOs be affected by interdiction in ways that reduce their

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* Examples include inspectors reviewing the records of chemicals in and out of facilities, reviewing lists of licensees to determine who, if any, has prior rule violations, and examining logs of employees who have access to labs.

† In the southwestern U.S. border states, heroin seizures larger than 1 kg have an average purity of 60 percent, according to the Commission's analysis of data from DEA's System to Retrieve Information from Drug Evidence (STRIDE). By the time it reaches retail, purity is closer to half that amount.

‡ A standard oxycodone tablet has a gross weight of 135 mg, and DEA's analysis, described in various reports from DEA's Fentanyl Signature Profiling Program (FSPP), of counterfeit pills suggests that they could contain as much as 2 mg of fentanyl, meaning that they have an estimated average purity of about 1 to 2 percent.

§ TCOs could be trafficking in counterfeit tablets containing minute quantities of fentanyl for any of a variety of reasons. One is that their manufacture is easier to conceal in Mexico than in the United States, given insufficient control of drug production and importation of tableting machines. Another is that product quality and consistency can be assured when manufacturing at industrial scale. Finally, new products, such as counterfeit tablets, offer opportunities to enter new markets by attracting people who are reluctant to use heroin.

earnings, they could take steps to complicate interdiction. One option is to smuggle smaller amounts of fentanyl at higher purities. Being able to move smaller amounts might encourage other means of getting fentanyl across the border, including use of unmanned aerial vehicles or reliance on greater use of body packing.*

A focus on maritime container and air cargo shipments departing the PRC or arriving in Mexico would likely concentrate interdiction efforts where loads of precursors are largest, purest, and in conveyances that might present fewer harmful countermeasures. That is, falsely labeling or smuggling shipments of fentanyl precursors is less harmful than concealing pure fentanyl in body cavities to get it across the border. This type of counternarcotics approach necessarily relies on the capacities and efforts of PRC authorities, however, who might be reluctant to comply, and Mexican authorities, who face internal challenges of drug-related violence and TCO influence, might be unable to effectively tighten import screening efforts. More efforts, however, should continue to be attempted.

Wholesale and Retail Distribution

Targeting wholesalers remains an option, but the supply of synthetic opioids that are not included in existing drug control schedules could diminish the possibility of prosecuting these people in some instances because of the challenges and greater costs of prosecuting a case under the Federal Analogue Act.[13] Federal law enforcement has noted a decrease in the number of prosecutions for fentanyl analogues since the control on fentanyl-related substances was implemented in the PRC in 2019.[14] Retail distribution disruption is equally challenging given the expanding use of online platforms and mail-order services.

In fact, mail-order delivery makes it significantly harder for domestic drug enforcement officers to reduce both wholesale and retail levels of supplies used in opioid manufacture. Because buyers and sellers can use the internet to facilitate transactions, law enforcement must adapt its enforcement efforts to meet the current landscape of fentanyl trafficking. Also, improving ways to screen mail and packages within Fourth Amendment protections against unlawful search and seizures could be a critical addition to existing efforts. Efforts aimed at wholesale distribution should, to the extent possible, focus on the most-egregious actors—those who traffic in novel synthetic opioids that are more potent; the most violent; and those who manufacture or distribute counterfeit pills. Retail distribution might require an entirely new focus because an unknown but consequential share of synthetic opioids is not sold in street markets that provide opportunities for law enforcement interventions to disrupt transactions, increase search times, or deter buyers from finding sellers.†

Money Laundering

Focusing on money-laundering services to seize illegal proceeds remains an important priority because it seeks to prevent TCOs from profiting from their illegal actions. The move to synthetic opioids presents some challenges because some share of online transactions use cryptocurrency or wire transfers that are arranged in a way to avoid scrutiny. Nevertheless, efforts to seize suspected proceeds or freeze accounts of foreign shell companies suspected of importing precursors are likely disruptive to criminals, even if they are unlikely to substantially affect any reduction of drug flows.‡

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* A push to circumvent border detection by body packing—smuggling small amounts of pure fentanyl in body cavities—should be given consideration in light of the potentially life-threatening consequences for a low-level drug courier should a concealed drug enter that person's bloodstream.

† Concerns remain, however, about how not to increase severity of punishment for low-level dealers who might not be aware of what they are handling.

‡ See Appendix I for greater detail on the limited impact that anti–money-laundering (AML) efforts have on drug trafficking.

In general, adaptations and additional approaches are needed to increase the effectiveness of supply-reduction efforts. All of these options offer opportunities, but employing them will not be without challenges (see Table 4.2). Synthetic opioids have profoundly changed the landscape, and traditional supply reduction cannot be the only response. As a result, even as illegal supply is addressed, approaches to reduce demand for illegally manufactured synthetic opioids, including by offering medication for OUD, need to be an integral part of responding to the current opioid crisis. The federal response needs new tactics; the United States cannot keep pace with the existing tools.

Table 4.2

Possible Supply-Reduction Options Aimed at Various Market Levels

Market Level	Supply-Reduction Tool	Opportunity	Challenge
Primary production of inputs	Precursor controls; enhanced scheduling of entire drug or chemical substances; strengthening industry oversight and encouraging industry to report on movements of chemicals; targeting vendors that openly transact in chemicals online	Illegal production emanates from the supply of precursors and new drugs, lending to leverage points in supply. To deter online sourcing, authorities could target online vendors that openly advertise online.	Imposing greater chemical controls and extending schedules are difficult. Authorities face difficulties in improving oversight of large industries in Asia. Chemical controls could displace production to new chemicals and substances. Enhancing online surveillance and regulation might require oversight of internet platforms.
Processing	Enhanced controls over equipment needed to manufacture counterfeit tablets	Controls over equipment have been associated with disruptions in illegal manufacture of counterfeit tablets in Canada.	Supply reduction here could be challenging given U.S. reliance on limited enforcement in the PRC and Mexico. Successful supply reduction could encourage greater domestic production.
Trafficking	Enhanced detection capabilities and threat prediction for inbound packages, containers, vehicles, and individuals	POEs could become greater targets.	Traffickers could adapt by moving higher-purity product or shifting to other smuggling means.
Wholesale distribution	Targeting the most egregious of distributors that contribute to the most overdoses by handling potent chemicals, counterfeit tablets, or mixtures containing nonopioids	Efforts here could shift distributor behaviors and practices to reduce risks in market.	Significant human resources would likely be needed for prosecution, as would more analysis and information for investigations.
Retail distribution	Targeting the most egregious of retailers handling potent chemicals, counterfeit tablets, or mixtures containing nonopioids	Supply reduction could increase operational risks for more-dangerous dealers.	Significant human resources would likely be needed for prosecution, as would more analysis and information for investigations.

Chapter 5

CONSIDERATIONS OF DEMAND REDUCTION: THE NEED FOR NEW INTERVENTIONS

In trying to grasp the demand for illegally manufactured synthetic opioids, U.S. drug policy and health authorities are largely flying blind. The United States does not have the data infrastructure to adequately measure the amount of illegally manufactured synthetic opioids consumed in the United States or the number of people who use them. For example, because fentanyl can be mixed in with other powders or counterfeit pills, many people who consume synthetic opioids do not even know what they are consuming. Consequently, user surveys, the mainstay of many estimates of drug use, cannot provide accurate measures.

In addition, there are no reliable estimates of either the number of people with OUD or the number of people knowingly using illegally manufactured opioids.[1] This lack of understanding creates at least three problems:

- First, it makes it hard to quantify the problem and how it is changing.
- Second, it makes it difficult to assess treatment gaps or efficiently target resources to this population.
- Third, it creates challenges in evaluating the effectiveness of interventions intended to reduce synthetic opioid consumption and OUD.

CHALLENGES FOR REDUCING DEMAND VIA TREATMENT

There is strong evidence for interventions that successfully reduce the demand for drugs, especially for heroin and prescription opioids. How well existing treatment modalities will work for the onset of OUD from illegally manufactured synthetic opioids, however, remains a question because of differences in pharmacology and tolerance specific to these drugs.[2] The Food and Drug Administration (FDA) has authorized three medications for treating OUD: methadone, buprenorphine, and naltrexone. Building on decades of evidence from clinical trials, medication therapy is considered the gold standard for treating OUD.

Methadone and buprenorphine are medications that are taken regularly (in some cases, daily) to reduce opioid cravings and opioid withdrawal while blunting or blocking the effects of other opioids.[3] Buprenorphine can be prescribed by any DEA practitioner (save state limitations for midlevel practitioners) for pain. For OUD, authorized narcotic treatment programs and DEA Drug Addiction Treatment Act–waived practitioners can treat

OUD utilizing buprenorphine.* Methadone used to treat OUD is largely distributed through designated opioid treatment programs. Naltrexone, on the other hand, is a long-acting opioid that completely blocks the effects of other opioids.

Methadone and buprenorphine reduce the use of heroin[4] and substantially reduce the risk of mortality from overdose.[5] There is strong evidence suggesting that (1) providing these two medications is more cost-effective than other treatment options[6] and (2) the social benefit of providing these medications exceeds the costs.[7] One recent study noted that such medications, mostly methadone, yield savings of $25,000 to $105,000 per patient over their lifetime.[8] There is less research on the effect of naltrexone for OUD, although extended-release formulations might reduce the use of heroin for some.[9] Different medications affect people differently, but it is important to keep in mind that these treatments are aimed at those with OUD. Someone accidentally overdosing on a counterfeit tablet who did not have OUD will obviously not benefit from such medications.

Unfortunately, a quick look at the numbers suggests that the United States will not be able to treat its way out of the synthetic opioid problem, just as it cannot arrest or interdict its way out of it. Even in western Europe, where treatment is generally better funded, better integrated into the health care system, and more readily available than it is in the United States, the annual non–acquired immunodeficiency syndrome (AIDS) mortality rate of people who inject drugs is already 1.4 deaths per 100 person-years.[10] An important subset of those deaths came from overdose, yet this figure is based on data from before potent synthetic opioids debuted. The risk of death is about 70-percent lower for someone undergoing treatment,[11] but the risk is not zero, and those who inject drugs often cycle in and out of medication treatment. If synthetic opioids continue to penetrate other drug markets, the non-AIDS death rate will markedly increase, which substantially raises the cumulative death risk, even for people who have access to treatment.

In addition, because of fentanyl's potency and what it means for people with limited tolerance or going through withdrawal, standard approaches for treating OUD might have to be augmented. Further, because fentanyl has been found in counterfeit tablets and cocaine, other interventions will be needed for casual (and nonopioid) drug users who are unlikely to have any tolerance to fentanyl and could overdose by unknowingly consuming drugs laced with fentanyl. Some of those people are not seeking drug treatment, nor do they need it, but they are potentially still at serious risk for fatal overdose, pointing to a real limitation of relying on treatment alone to address overdose fatalities.

Emerging Research on Reducing Demand for Fentanyl

The vast majority of research on demand reduction for opioids focuses on heroin and prescription opioids. This research has established medication therapy as the gold standard for treating OUD. Additional research on the unique challenges of synthetic opioids is needed to understand how medication therapy can best be employed for people using these drugs. Some research about the effectiveness of medication treatments for illegally manufactured synthetic opioids has been conducted; however, results of the clinical trial research have not yet been published. Researchers examined roughly 250 adults receiving buprenorphine treatment concluded, "Buprenorphine

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* Per federal law, a practitioner interested in prescribing buprenorphine for OUD must obtain a DEA waiver and is limited in how many patients they can treat. See more at SAMHSA, "Become a Buprenorphine Waivered Practitioner," webpage, last updated January 3, 2022. The Drug Addiction Treatment Act is Public Law 106-310, Children's Health Act of 2000, October 17, 2000, Title 35, § 3502. It also has some other advantages:

> Buprenorphine's opioid effects increase with each dose until at moderate doses they level off, even with further dose increases. This "ceiling effect" lowers the risk of misuse, dependency, and side effects. Also, because of buprenorphine's long-acting agent, many patients may not have to take it every day. (Psychiatric Research Institute, University of Arkansas for Medical Sciences, "What Is Buprenorphine?" webpage, undated)

treatment retention and abstinence among those retained in treatment is not worse between people using fentanyl compared to heroin at treatment initiation."[12] Other researchers found that "buprenorphine was associated with lower odds of fentanyl-positive urine."[13]

With respect to methadone, researchers in a 2020 study focused on about 150 patients, 80 percent of whom tested positive for fentanyl when they were admitted to methadone treatment programs. The findings suggest that methadone maintenance therapy (MMT) "is safe despite repeated exposure to fentanyl while taking methadone. Remission is achievable, and MMT is protective against death among fentanyl-exposed patients while in treatment."[14]

In 2021, a group of physicians in Canada published recommendations for treating those who use fentanyl:

> Methadone and buprenorphine are both first-line [opioid agonist treatment] options. Methadone may be preferable to buprenorphine for patients who are at high risk of treatment drop-out and subsequent fentanyl overdose. Methadone should also be considered as a first option for patients who have done well on methadone in the past; patients who do not want or have not benefited from buprenorphine; and patients for whom buprenorphine induction has not been successful.[15]

CHALLENGES IN REDUCING DEMAND VIA PREVENTION

Prevention programs are broadly esteemed despite limited evaluations of their effectiveness and long-term expected returns.[16] Even the effectiveness of model programs does not approach that of vaccinations for measles or other childhood diseases.[17] Further, the returns to school-based prevention are long term and do not address the harms in today's markets.

Synthetic opioids are spreading, in part, because suppliers are cutting costs, not because users are asking for such drugs as fentanyl—at least, they were not initially. Indeed, many of fentanyl's victims did not want or even know that they were using it. Expanding traditional prevention messaging to deter initiation, a major focus of conventional prevention efforts, would do little to directly reduce today's appalling death toll, especially among those currently using street-sourced opioids, although it could have long-term benefits for future generations.*

However, because many people could be misled into using fentanyl disguised as some other drug, educating the public that counterfeit pills can contain a fatal dose of fentanyl is an important potential goal. These fake prescription pills are designed to appear nearly identical to legitimate prescriptions and have been found in every state in the country. Although someone buying diverted Adderall or Xanax without a prescription might understand that the transaction is illegal, they might have no idea that one of the pills could contain a lethal dose of a synthetic opioid.

Some community-based prevention programs might be able to help, although their effectiveness in preventing the use of synthetic opioids has not been evaluated. Anyone seeking additional information about this or other community-based prevention programs should review SAMHSA's Evidence-Based Practices Resource Center.[18]

* There could well be a role for educating existing users about safer ways to use. Just as Mothers Against Drunk Driving altered norms for alcohol use ("friends don't let friends drive drunk"), one can imagine altering norms for the use of street drugs ("friends don't let friends use opioids alone"). Such efforts, however, are more in the spirit of harm reduction than traditional drug prevention. Some of these messaging campaigns are currently underway in some cities in North America.

DEMAND REDUCTION AND PUBLIC HEALTH INTERVENTIONS FOR THOSE WHO CONSUME SYNTHETIC OPIOIDS

Expanding access to available treatment options, prevention, and researching other innovative treatment modalities and harm reduction are paramount to reducing exposure to synthetic opioids or reversing opioid overdose.[19] The number of overdose deaths would be higher without medication therapies and overdose-reversal interventions. Policymakers should remove unnecessary limitations and barriers* and expand on medication-based treatment (and overdose prevention, for that matter).

More information is needed to optimize treatment availability and deployment, as well as other lifesaving interventions, given fentanyl's potency and unpredictability in illicit markets. According to CDC, in 2020, some four out of five overdose deaths involving fentanyl occurred in residences, and more than one-third occurred within proximity to potential bystanders;† more than half of victims had no pulse when emergency services arrived.[20] As CDC explained, these figures indicate the increased risks posed by highly potent opioids and "underscore the need to enhance harm reduction efforts, including improving naloxone access and distribution for persons who use drugs (and their family members and friends) to ensure timely response" to overdoses.[21]

Demand-reduction interventions are an important part of a comprehensive effort to reduce the supply of illegally manufactured synthetic opioids because existing demand for these substances continues to entice criminals, including Mexican TCOs, to supply fentanyl to illegal markets. Further, reducing demand reduces exposure to fentanyl and thus saves lives. Table 5.1 explores many of these interventions and how they address the challenges that illegally manufactured synthetic opioids pose.

Table 5.1

Demand-Reduction Tools for Heroin and Synthetic Opioids

Demand-Reduction Intervention	Heroin	Potential Application to Synthetic Opioids
School-based prevention	Many school-based prevention programs lack rigorous evaluation. However, some programs have shown promise in reducing drug consumption later in life (either using drugs at all or keeping use at moderate levels).	The focus is long term. It might benefit some as they age into adulthood but does little to reduce harms faced by those using drugs today.

* The Commission did not catalog or categorize all types of limitations and barriers to medications for OUD, but many remain, including waiver requirements for buprenorphine providers; lack of provider education; requirements and restrictions for distribution of methadone, such as through some insurers (e.g., Medicare); prior-authorization requirements; limited coverage; requirements for in-person visits; prohibitions on receiving medications while incarcerated; limited research on treatment modalities for synthetic opioids; and other factors related to addiction and drug use.

† CDC defines *potential bystander* as someone "aged ≥11 years who was physically nearby either during or shortly preceding a drug overdose and potentially had an opportunity to intervene or respond to the overdose" (O'Donnell et al., 2021, p. 1741).

Demand-Reduction Intervention	Heroin	Potential Application to Synthetic Opioids
General-population prevention and media campaigns	Media campaigns lack rigorous evaluation, but messaging can shape drug-use behaviors or encourage people to enter treatment.	Messaging might need to be tailored if the goal is to reduce the number of deaths. Elevated overdose harms from synthetic opioids might require additional harm-reduction messaging rather than campaigns aimed at merely stopping drug use.
Treatment (especially medication therapies)	Medications for OUD, including methadone and buprenorphine, have been shown to reduce consumption of heroin and stabilize patients. Naltrexone is also shown to reduce use of heroin, but some patients might be less likely to stay in treatment than in other medication therapies.[a] Other forms of behavioral treatment can be combined to improve outcomes.	Early evidence shows that these medications work to stabilize patients. Different medications or varying dosing regimens might be needed to treat addiction to fentanyl or other, more-potent synthetic opioids. It might not be suitable for those without OUD exposed to fentanyl in a nonopioid drug.
Harm reduction: overdose reversal	Naloxone can reverse overdose. Evidence on naloxone shows that it reduces the number of overdose deaths.	Naloxone might need to be administered more frequently or in greater amounts for more-potent opioids. Other overdose risks are specific to fentanyl, such as precipitated withdrawal and renarcotization.[b]

NOTES: Fentanyl is a long-acting opioid that can lead to renarcotization (Charles P. France, Gerard P. Ahern, Saadyah Averick, Alex Disney, Heather A. Enright, Babak Esmaeli-Azad, Arianna Federico, Lisa R. Gerak, Stephen M. Husbands, Benedict Kolber, Edmond Y. Lau, Victoria Lao, David R. Maguire, Michael A. Malfatti, Girardo Martinez, Brian P. Mayer, Marco Pravetoni, Niaz Sahibzada, Phil Skolnick, Evan Y. Snyder, Nestor Tomycz, Carlos A. Valdez, and Jim Zapf, "Countermeasures for Preventing and Treating Opioid Overdose," *Clinical Pharmacology and Therapeutics*, Vol. 109, No. 3, March 2021), which is a lethal phenomenon in which an overdose victim revived by naloxone requires additional doses to prevent residual fentanyl in the system from inducing another overdose.

[a] G. K. Hulse and M. R. Basso, "The Association Between Naltrexone Compliance and Daily Supervision," *Drug and Alcohol Review*, Vol. 19, No. 1, 2000; Joshua D. Lee, Edward V. Nunes, Jr., Patricia Novo, Ken Bachrach, Genie L. Bailey, Snehal Bhatt, Sarah Farkas, Marc Fishman, Phoebe Gauthier, Candace C. Hodgkins, Jacquie King, Robert Lindblad, David Liu, Abigail G. Matthews, Jeanine May, K. Michelle Peavy, Stephen Ross, Dagmar Salazar, Paul Schkolnik, Dikla Shmueli-Blumberg, Don Stablein, Geetha Subramaniam, and John Rotrosen, "Comparative Effectiveness of Extended-Release Naltrexone Versus Buprenorphine-Naloxone for Opioid Relapse Prevention (X:BOT): A Multicentre, Open-Label, Randomised Controlled Trial," *The Lancet*, Vol. 391, No. 10118, January 27, 2018; Brantley P. Jarvis, August F. Holtyn, Shrinidhi Subramaniam, D. Andrew Tompkins, Emmanuel A. Oga, George E. Bigelow, and Kenneth Silverman, "Extended-Release Injectable Naltrexone for Opioid Use Disorder: A Systematic Review," *Addiction*, Vol. 113, No. 7, July 2018; Björn Axel Johansson, Mats Berglund, and Anna Lindgren, "Efficacy of Maintenance Treatment with Naltrexone for Opioid Dependence: A Meta-Analytical Review," *Addiction*, Vol. 101, No. 4, April 2006.

[b] Hannah Gill, Eamonn Kelly, and Graeme Henderson, "How the Complex Pharmacology of the Fentanyls Contributes to Their Lethality," *Addiction*, Vol. 114, No. 9, September 2019.

Chapter 6

NEW CHALLENGES CALL FOR A NEW RESPONSE

The nature of the illegal supply of synthetic opioids presents new challenges that will require retooling and refocusing U.S. drug policy to reduce the number of people who become addicted to or overdose on synthetic opioids. Additionally, other parallel goals of minimizing harms, such as violence and corruption that are commonly associated with illegal markets and supply chains, should be considered. The Commission sought to understand this multifaceted problem, documenting the limitations of existing supply-reduction efforts and the gaps and vulnerabilities that remain. The task of developing effective solutions, however, is further complicated by the fact that many legitimate sectors are involved in the illegal supply of synthetic opioids and related chemicals. In addition, a restructuring of existing illegal markets, declining prices, and greater availability of novel synthetic opioids are likely to have far-reaching and difficult-to-predict effects.

Anticipating some of these consequences, the Commission considered how markets are likely to evolve and reviewed existing U.S. capacities, including counternarcotic efforts at home and abroad, efforts to reduce the demand for drugs, the role of the international community, and other ways to improve data collection and market surveillance. Taking all this into account, the Commission identified five pillars for concerted action:

- pillar 1: policy coordination and implementation
- pillar 2: supply reduction
- pillar 3: demand reduction and public health
- pillar 4: international cooperation
- pillar 5: research and monitoring.

Each pillar contains a series of key actions and associated enabling actions. The ordering of these actions does not imply priority or a ranking of importance. To develop individual areas of action, the Commission considered its understanding of the nature of the challenge and reflected on the limitations of policy efforts in the era of synthetic drugs. Some of the actions are motivated by obvious vulnerabilities or gaps. The Commission refined the sets of actions during rounds of internal review and discussion. The resulting list contains actions the United States can take to stem the illegal flow of synthetic opioids or develop ways to mitigate overdose deaths.

Additional funding from Congress and a realignment of department and agency priorities would be required to ensure proper resourcing, staffing, and policy design and implementation. To that end, several of the actions call for additional support. Congress will need to work with departments and agencies to determine the appropriate levels of funding, keeping in mind that the current overdose crisis has cost the U.S. economy approximately $1 trillion annually in just the past few years.[1]

PILLAR 1: POLICY COORDINATION AND IMPLEMENTATION

Drug policy is segmented across the U.S. government. Different agencies are responsible for various domains of the problem (e.g., supply or demand), and all levels of government are involved (federal, state, and local). Efforts at coordination occur but are not strong, and lack of coordination often impedes aims to implement successful drug policy. With the arrival of illegally manufactured synthetic opioids, the problem has only worsened and become more acute. Overall, the legislative and executive branches will need to work together to strengthen the policymaking processes and clearly delineate the roles of competing agencies that are sometimes reluctant to share information with one another. The lack of authority in key leadership roles and responsibilities at agencies hinders a coordinated policy approach both at home and abroad.

1.1. Increase Coordination of U.S. Authorities, Fill Critical Appointments, and Ensure Proper Levels of Staffing

Drug policy should be coordinated across federal agencies but also requires a robust and well-informed bureaucracy. However, limits remain on information-sharing, especially sharing data. These impediments prevent a single executive functioning agency from coordinating federal drug policy across all domains, within the federal government while also engaging state agencies, other countries, and multilateral organizations. Existing agencies retain specific areas of focus related to drug policy, but the sense of urgency of this quickly changing problem makes gaps in coordination more apparent. Well-coordinated domestic and foreign drug policy needs a single authority and appropriate levels of staffing. Unfilled nominations and appointments limit a coordinated response within key departments or foreign countries.

1.1.1. Return the Office of National Drug Control Policy to the Cabinet, and Enhance the Structure of the U.S. Drug Policy Apparatus to Improve Information-Sharing and Coordination

By statute, the director of the Office of National Drug Control Policy (ONDCP) is the President's principal adviser on all drug policy matters affecting the United States. ONDCP must lead and coordinate the formulation, implementation, and assessment of drug control policy among the 18 federal departments and agencies with drug control functions, as well as those that do not receive a share of the federal drug control budget but nonetheless perform critical roles in drug control policy formulation and implementation. The primary means for fulfilling this role is the development of the National Drug Control Strategy and its associated consolidated National Drug Control Budget. ONDCP's ability to shape policy and lead interagency coordination on drug issues can be enhanced with greater access to the data necessary to understand emerging drug trends. Furthermore, emphasizing ONDCP's statutory responsibility to certify drug control agencies' budgets and assess their performance will strengthen the federal government's ability to advance the President's drug control priorities and focus on the most-pressing drug policy issues. The ONDCP director must have a greater role in establishing the President's drug control budget priorities, in addition to holding federal drug control program agencies accountable for their performance. ONDCP should establish itself more firmly as the central authority for policymaking and interagency coordination on all drug control policy matters, and departments and agencies should reinforce that role by more consistently providing ONDCP with detailees and subject-matter experts to coordinate efforts across agencies.

ONDCP's position in the White House gives it some authority, but the 2009 removal of the director from the Cabinet has limited its role. Given the magnitude of this problem, the director should be returned to the Cabinet as the lead authority on coordinating the U.S. drug control policy apparatus and the office be appropriately staffed and adequately funded to better address this problem. Because ONDCP is in a unique position to assess the problem from both domestic and international perspectives, greater emphasis is needed to ensure ONDCP's position as the lead coordinating arm of U.S. drug policy; it holds a singular position to assess the problem not

only from the domestic and international perspectives but also across the entire national security, law enforcement, and public health dimensions of this crisis. The Office of the Director of National Intelligence should work with the director of national drug control policy to ensure adequate intelligence-collection and analysis resources are being applied to support the U.S. government in identifying and sanctioning foreign opioid traffickers and to report the results of their efforts to Congress in accordance with Section 7231 of the Fentanyl Sanctions Act.[2]

1.1.2. Improve Coordination of Tools Across Federal Agencies to Address Trafficking

The United States must improve the sharing of research and information across the U.S. federal drug policy apparatus by authorizing additional monitoring and research functions and authorities to ONDCP (see also pillar 5 on concrete research and monitoring actions). Additionally, addressing this complex issue requires greater operational coordination across the various domains related to drug policy, particularly the intersection of national security, law enforcement, and public health. Building on existing fusion center structures, the federal government must better integrate all the tools available to address the trafficking of synthetic opioids to include targeting illicit financial structures and sanctioning individual traffickers and integrating public health capabilities in a seamless interagency response. Because interagency cooperation at the operational level is most effective when conducted by people working side by side, this integration should include the physical colocation of these capabilities for better integration, information-sharing, and problem-solving.

1.1.3. Ensure That Key Ambassadorships, the Foreign Service, U.S. Law Enforcement Detachments Abroad, and Related Staff Positions Are Fully Staffed and Informed on Matters Relevant to a Coordinated U.S. Strategy on Illegally Supplied Synthetic Opioids

The United States does not have a sitting ambassador to India, which limits diplomatic efforts to elevate this issue to foreign partners and other countries. Several other critical positions across the federal government remain unconfirmed in the Senate, including the head of sanction coordination at the Department of State, or unnominated by the president, including deputy administrator of DEA. Until recently, the position of DEA administrator did not have a confirmed nominee for six years. These vacancies and failure to address staff turnover in a timely manner limit a robust and coordinated federal response both domestically and internationally. Further, key departments and agencies should ensure that staff in positions that touch on various dimensions of drug policy (e.g., nonspecialized foreign service staff posted abroad) are fully trained on counternarcotics, with an emphasis on illegally supplied synthetic opioids.

1.2. Assess and Update U.S. Legislative and Regulatory Drug Control Frameworks

The emergence of whole classes of compounds that are chemically varied means that suppliers can easily circumvent existing legislation by tinkering with a drug's molecular structure. Regulatory authorities should continue to monitor the emergence of new drugs, as well as new precursor chemicals, and some legislative tools will be needed to enhance existing laws.

1.2.1. Consider Extending Appropriate Structural Controls over Whole Classes of Emerging Drugs

The continued extension of temporary restrictions on all fentanyl-related substances in the United States and its permanent adoption in the PRC coincides with a sharp reduction in the number of new fentanyl analogues. The PRC, unprompted by external requests, has recently issued generic controls over synthetic cannabinoid receptor agonists,[3] signaling its intention to extend prohibition of whole families of chemicals. Given the frequency with which new drugs, including new synthetic opioids, are generated, the future of drug control could rely on extensions of controls over whole chemical structures rather than listing compounds individually.

DEA issued its first generic controls over a whole class of drugs when it temporarily scheduled fentanyl-related substances in 2018. However, the existing U.S. statutory scheme is not well-suited to this concept: In the absence of temporary classwide scheduling, every emergent drug sold in street markets is individually controlled by adding it to Schedule I simply because it is believed to pose a clear threat to public safety and has no federally recognized medical application. This process of scheduling drugs takes time, sometimes years, before a drug is permanently scheduled. Some suggest that the elevation of a whole class of chemicals to Schedule I, as is currently done, might not be the best approach, given that it restricts research and increases penalties for the supply of drugs that might not have a psychoactive effect or for which harms might not be known.

The generic control approach, on the other hand, can respond to emerging threats of entirely new synthetic opioids, without authorities having to conduct rigorous assessments only to list an individual compound that producers later modify to circumvent new controls.

Furthermore, the selection of appropriate statutory language must weigh a multitude of factors: suitable exemptions for research; the appropriate penalties for the unlawful possession of these drugs; and the means of determining the appropriate scheduling or descheduling of a compound should more information on its harms or benefits emerge.

1.2.2. Monitor Chemicals That Are Used in the Illegal Manufacture of Synthetic Opioids, and Control Them When Appropriate

Extending controls or rules over precursors that have little or no legitimate use can create the necessary legal requirements for investigating crimes related to unlawful supply or handling of precursors. The United States has controlled several of these precursors, such as 4-AP and norfentanyl, but others remain outside U.S. control because of their common use and will need to be monitored. Assessing the total amount of an uncontrolled chemical needed for legitimate purposes and ensuring the proper export labeling and handling of uncontrolled chemicals used for the production of synthetic opioids can inform future regulatory actions, including control or inclusion in other supplemental industry watch lists, and enhance investigations of suspect shipments. DEA will need to investigate and identify the variety of precursor chemicals that are likely to be used to manufacture synthetic opioids but lack legitimate commercial, medical, or industrial use.

PILLAR 2: SUPPLY REDUCTION

The reduction in supply of illegally manufactured synthetic opioids is part of a larger, comprehensive policy. Supply reduction requires a multidimensional approach that involves interdiction and law enforcement, restricting the distribution of chemicals needed to manufacture synthetic opioids, disrupting online sourcing, and tackling the enabling functions of criminal groups.

Interdiction and Law Enforcement

2.1. Enhance Interdiction Capabilities, Especially in the Mail and Express Consignment Systems That Facilitate Trafficking of Synthetic Opioids

Trafficking of synthetic opioids through the domestic mail and ECC systems remains a concern. Although CBP has identified and closed several gaps with advance electronic data (AED) for international mail, ensuring that more data are complete for inbound items to allow enhanced screening, some vulnerabilities still remain, and the U.S. Postal Inspection Service and others have reported an increase in the weight and number seizures of synthetic opioids in the domestic mail system. Law enforcement agencies need to better understand mail-based shipments of

synthetic opioids within the United States, but the Postal Inspection Service now suspects that Mexican TCOs are mailing fentanyl from warehousing facilities close to the border. Improving Postal Inspection Service screening capabilities and enforcement tools and requiring private carriers to use enhanced detection methods can help close this vulnerability gap by sharing information on positive findings, such as shipping documents and exam photos of packaging and labels with CBP's National Targeting Center. ECCs are not legally required to allow domestic law enforcement to screen parcels, and there are currently no industrywide standards or practices for screening. Requirements that private express carriers improve screening efforts aimed at synthetic opioids are warranted.

2.1.1. Close Specific Loopholes and Address Limitations to the Interim Final Rule on Advance Electronic Data Requirements for Inbound International Mail

CBP's ability to prescreen inbound international mail for potential contraband can help manage high volumes of packages. However, to increase its usefulness to screening efforts, the interim final rule promulgated by CBP establishing the AED receipt–related rules and obligations should address several limitations and loopholes. These limitations are relatively straightforward to address, but if they are not addressed, shippers are likely to be able to bypass the intended protections with little effort. One limitation is that AED are not required for "letter-class mail—documents," but, given that moving low-weight packages of high-purity synthetic opioids can be highly profitable, an assessment by relevant agencies, such as USPS and the Department of State, of whether inbound document-only mail can or does contain synthetic opioids should be conducted to confirm that this is not a significant exclusion.

Another limitation is that countries that have low capacity to transmit AED, that represent low risk, or that send low volumes of items could be excluded from the AED provision requirement. CBP should codify the specific definitions of each of these measures and monitor them over time for excluded countries to keep their excluded status. CBP will need to screen and assess items from excluded countries because they present a transshipment risk—that is, the risk that a synthetic opioid is sent from an originating country to the United States through an excluded country. CBP and Postal Inspection Service staffing and resource needs should be assessed as the volume of inbound items with AED, and presumably customs holds, increase.

2.1.2. Mandate That Private Express Consignment Carriers Cooperate with Domestic Drug Law Enforcement, and Require Couriers to Participate in Building Industry Standards to Improve Screening Algorithms for Packages

The use of private couriers to ship synthetic opioids within the United States is an important component of the current challenge. Collaboration with private couriers represents a major opportunity. A private courier has custody of their parcel during the entirety of the transport and can open a package that they determine to be dangerous. A courier also possesses a wealth of information about the package and is in complete control of its movements. This information should be paired with law enforcement algorithms for identifying suspicious packages.

As of now, cooperation between companies and law enforcement remains underdeveloped. A chief contributor to this situation is the fact that, outside of standard border checks on all incoming goods, there is no legal requirement for ECCs to allow law enforcement access to their parcels or their data. The Congress should address this vulnerability by mandating that ECCs enhance screening, not limited to synthetic opioids, of suspicious domestic consignments by requiring

- the development of industrywide best practices for automated screening algorithms that are informed by law enforcement metrics

- reporting of seized or suspected items to relevant law enforcement agencies, such as DEA
- authorization of the involvement of local law enforcement to assist in screening items at cargo hubs in the United States.

Additionally, carriers should be encouraged to track suspicious activities, including identifying red flags, such as packages shipped to unoccupied or fictitious addresses.

2.1.3. Strengthen Capacities for the U.S. Postal Inspection Service to Identify, Track, and Disrupt Mail-Based Distribution of Illegally Manufactured Synthetic Opioids That Utilize the Domestic Mail System

In response to the increased use of domestic mail for drug-trafficking purposes and faced with personnel limitations, in FY 2020, the Postal Inspection Service introduced a task-force officer program. In the program, local and state law enforcement officers are embedded with postal inspectors to support efforts to interdict drug shipments via mail.[4] By incorporating additional officers, the service has aimed to increase its capacity to conduct interdictions and investigations. The program also offers the Postal Inspection Service the ability to tap into law enforcement intelligence available to local agencies.

The Postal Inspection Service, in collaboration with its partner agencies, should undertake an assessment of the program and the extent to which it meets its goals. Depending on the results, the program should be expanded and refined to increase its effectiveness. Further, additional tools might be needed for the service to combat mail-based distribution of illegally manufactured synthetic opioids. Controlled substances are prohibited in the mail unless the sender is registered with DEA, and prohibitions and regulations apply to a variety of dangerous substances. Other federal agencies, such as DEA and the Federal Bureau of Investigation, can issue subpoenas without judicial oversight when conducting investigations. The Postal Inspection Service cannot issue administrative subpoenas when conducting drug investigations, although it says that it would benefit its investigations and its ability to enforce existing mandates about safety of the mail stream.

In addition, USPS does not receive direct federal funding for operations, including Postal Inspection Service activities. The need for additional financial support to enhance analytic and law enforcement intelligence-based detection, including the need for adequate technological solutions to identify suspicious packages, should be assessed. Further, the use of mail generates many data points, such as information on packages and use of postal money orders, origin and destination locations, and senders' and recipients' contact information, that should be exploited for operational purposes. More-robust analyses of such data inform law enforcement operations against drug traffickers and their stash houses near the southwestern U.S. border, as well as feed into mail-targeting algorithms used to intercept suspicious mail and to undertake controlled deliveries.*

2.1.4. Increase Interdiction Capabilities for Air Cargo Shipments from the People's Republic of China to Mexico That Land in the United States

Air-bound cargo from the PRC to Mexico sometimes stops in the United States for refueling. The appropriate law enforcement agencies should prioritize collecting information to target possible shipments of precursor chemicals en route to TCOs. Additional funding for CBP and screening efforts will be needed.

* One detail mentioned to the Commission was the increasing amount of cannabis that is trafficked domestically across state lines, which complicates interdiction and targeting efforts. Greater consideration might be needed to ensure that law enforcement screening efforts are not overwhelmed by mail-based trafficking of cannabis.

2.1.5. Promote Additional Technological Solutions to Enhance Border Screening

The majority of synthetic opioids entering the United States does so across the southwestern border, although synthetic opioids also enter the United States by passenger boat, cargo ship, train, commercial plane, drone, and mail carrier. CBP should research additional technological solutions aimed at targeting and detecting low-purity fentanyl, especially in counterfeit pressed tablets. Enhanced targeting of counterfeit pills through nonintrusive, noninvasive, and other visual screening technologies, as well as enhanced data-driven targeting, could increase seizure rates. However, challenges to such detection, such as limited throughput or traffickers' countermeasures, could present continued impediments to interdiction. Congress should expand funding to the Defense Advanced Research Projects Agency or the Intelligence Advanced Research Projects Activity to research additional technological detection solutions.

2.2. Bolster Capabilities and Capacity of Domestic Law Enforcement Efforts to Investigate Illegal Distribution of Synthetic Opioids

Illegally sourced synthetic opioids are more difficult than heroin for domestic law enforcement to detect and seize. For one, existing referent libraries* and detection tools might need regular updates and enhancements to capture and counter the proliferation of new chemicals. Federal support and resources could be needed in some cases to aid local law enforcement in this area. Further, online distribution enables a single person, without any connection to organized crime, to import large, wholesale amounts of synthetic opioids. Overall, the small amounts necessary to satisfy consumption present unique challenges for supply-reduction efforts. In response, law enforcement capabilities will need to be enhanced to swiftly respond to any sudden emergence of illegally sourced synthetic opioids. Little is known about local law enforcement's efforts to increase the swiftness of overdose death investigations to discourage harmful dealing in synthetic opioids (transacting in counterfeit tablets or stimulants mixed with synthetic opioids, for example), but these new interventions warrant consideration.

2.2.1. Strengthen Referent Libraries to Facilitate the Detection of Emerging Synthetic Opioids

Current field detection and identification technologies rely on referent libraries that serve as databases of previously encountered and characterized synthetic opioids. A synthetic opioid that has not been encountered or has been recently created by a chemist creates a detection and identification gap in the library. Significant time delays between laboratory characterization and referent library updates can further limit detection capabilities. Additionally, the reliance on a variable array of vendors, instruments, solvents, temperature, and other characteristics of laboratory analysis reduces the utility of existing referent libraries.

Referent libraries should be improved via several pathways. DEA should develop and implement standard operating procedures for routine updating of referent libraries; these updates should occur automatically with minimal human intervention to match similar laboratory-based and -managed databases. Artificial intelligence and machine learning would expedite data analysis and shorten laboratory-based chemical characterization timelines. These techniques and other computational chemistry techniques should be used to supplement referent libraries with the predicted chemical spectra of unencountered synthetic opioids.

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* Most detection equipment uses chemical profiles, known as *referent materials*, to allow the identification of an unknown powder by checking its chemical profile against the properties of known chemicals.

2.2.2. Fund and Evaluate Pilot Efforts for Local Law Enforcement to Investigate Overdose Deaths

Federal grants should be offered to local police departments and prosecutors interested in rapidly investigating overdose deaths to identify and prosecute retail dealers that transact in the most-dangerous combinations or formulations of drugs, such as synthetic opioids pressed into counterfeit tablets, dealers handling highly potent analogues, or those mixing fentanyl into nonopioid drugs, such as cocaine. The underlying premise is that dealers who think that they will attract the attention of law enforcement and risk prosecution are likely to be deterred from dealing synthetic opioids in harmful ways that elevate overdose risk. DOJ should grant funding to local law enforcement and prosecutors to hire and train additional detectives to map overdose patterns to swiftly investigate overdose scenes (e.g., ensure proper evidence collection) and identify and prosecute the dealers engaging in the most-harmful distribution practices. DEA actively partners with many state and local law enforcement agencies across the country on these cases. The Commission recommends that additional resources be allocated to federal law enforcement to expand this work.

Restricting Distribution of Chemical Inputs

2.3. Work with Private-Sector Stakeholders to Implement Systems to Prevent Drug Traffickers from Acquiring Chemicals Used Illegally to Manufacture Synthetic Opioids

Because information on lost or stolen chemical shipments or other concerns that could signal increased diversion of chemicals is so valuable, oversight and reporting need to be enhanced to prevent Mexican TCOs from obtaining alternative precursors from sources in North America. This could help authorities anticipate possible sourcing changes and encourage industry best practices to prevent future diversion.

2.3.1. Enhance Oversight of Reporting of Chemicals Leaving the United States or Produced Abroad by U.S.-Held Companies or Foreign-Based Operations, and Encourage Proactive Company Reporting

The use of U.S.-made chemicals in illegal drug manufacture in Mexico has been documented,[5] although U.S. chemical firms do not appear to be a major source for fentanyl inputs. Still, diversion of chemicals made in the United States or by U.S. companies abroad could become a major risk. Chemical manufacturers are legally required to report the movements of controlled chemicals to authorities; however, no law requires a U.S.-based company to report its overseas subsidiaries' movement of chemicals to DEA. DEA can enhance diversion control efforts by reviewing information on exported chemical transactions and investigate and fine companies for such violations. Congress should require that U.S.-based firms report the production and transportation of controlled chemicals by their overseas operations or subsidiaries in countries where illegal synthetic opioid manufacture is known or suspected to occur.

To prevent a pivot to clandestine domestic fentanyl production with U.S-sourced chemicals or related illegal exportation to Mexico, suspected shipments of chemicals that could be used in the manufacture of fentanyl or other synthetic opioids must be proactively reported. DEA and ONDCP have issued circulars to educate chemical companies,[6] but this step needs to be supported by more-active, continued engagement with companies and industry associations. International Narcotics Control Board (INCB) materials on public–private partnerships can be used to inform these efforts.[7]

2.4. Target Distribution of Synthetic Opioids and Related Chemicals Advertised Online

The Commission established that chemical vendors and other producers of synthetic opioids and precursor chemicals needed to manufacture fentanyl use the internet to advertise to buyers, which include TCOs and U.S.-based distributors. The darknet remains a much smaller source of drug transactions and one that is often aimed at

end users. Local law enforcement can lack the capacity to initiate or undertake investigations online but is uniquely placed to collect evidence that aids federal investigations. Capacity, training, and reporting mechanisms for local law enforcement to feed information to federal authorities need expansion. The use of public online platforms to attract buyers interested in fentanyl precursors will require constant monitoring by federal authorities, such as DHS Homeland Security Investigations or DEA, given how online sellers often work to conceal the nature of listing content to evade automated monitoring tools. Similarly, law enforcement could target those shopping for fentanyl precursors and consider using sting operations, such as posing as an online chemical vendor in the PRC. Even if unsuccessful, an onslaught of law enforcement's fake listings could create confusion in the online environment, eroding trust and disrupting how buyers engage with sellers.

2.4.1. Improve Local Law Enforcement Capabilities to Support Federal Authorities with Information on Darknet Sales

Through grants, federal law enforcement can expand the pool of trained analysts and investigators to support federal efforts against sales of synthetic opioids on the darknet. Local law enforcement is not trained and lacks robust resources to conduct detailed cyber investigations that cross multiple jurisdictions, but electronic data collected on overdose victims and distributors can provide additional inputs to federal law enforcement. Thus, a system for local law enforcement to report leads to Joint Criminal Opioid and Darknet Enforcement could help federal authorities. DOJ should educate and train state, local, territorial, and tribal law enforcement on the tools and resources available to them about online or technology-assisted marketing and sale of synthetic opioids. These training efforts should include consolidated guidance and information-sharing on best practices in cryptocurrency management and other forensic efforts to gather and collect information from cell phones and online materials used in the transaction of synthetic opioids.

2.4.2. Enhance Efforts to Screen Online Advertisements and Use Sting Operations to Target Traffickers Sourcing Precursor Chemicals Online and Other Vendors on the Darknet

Social media data that identify which chemical precursors are being widely advertised can inform regulatory policies to control the flow of these chemicals into and within the United States. DEA and Homeland Security Investigations should enhance efforts to scan online advertisements, including social media, to identify possible criminal networks and determine how vendors are operating and changing their practices. Federal law enforcement should set up sting operations on darknet marketplaces. It should intensify its efforts to set up spoof online advertisements for fentanyl precursors or related chemicals on social media, B2B websites, or other classified-ad platforms to gather information on prospective buyers or sellers of related chemicals. Such a strategy is low cost and high reward because it does not need to be highly successful in gathering information on drug traffickers. Those who submit information or contact law enforcement can be monitored, but, because law enforcement would publicize such efforts, prospective buyers seeking fentanyl precursors online might be deterred. Federal authorities should take steps to improve their efforts to develop postings and put them online where drug traffickers source product. U.S. law enforcement, in partnership with foreign law enforcement, should strengthen its work surveilling and arresting vendors to remove their products from the market.

Disrupting Online Sourcing of Synthetic Opioids

2.5. With the Help of Private Entities, Reduce Online Advertising and Sales

The internet presents unique challenges for drug control in that chemical suppliers in Asia openly advertise synthetic opioids and related chemicals on public platforms, including social media forums and B2B websites. Shoppers from around the world, including Mexican TCOs, can easily link with vendors in Asia without ever

meeting in person, communicating over encrypted chat platforms out of sight of law enforcement. Private companies need to do more to monitor and delete listings for chemical precursors, provide law enforcement relevant information on suspected precursor vendors, and otherwise reduce the ease with which such ads are found using common search engines. Federal authorities should require or encourage private online platforms to take such steps.

2.5.1. Expand Social Media Self-Monitoring to Target and Remove Posts by Unlawful Drug or Precursor Suppliers, and Ask Social Media Platforms to Work with Law Enforcement to Identify Online Vendors of Precursor Chemicals and Finished Synthetic Opioid Products

Social media platforms practice self-monitoring for adult and other potentially troublesome content through their terms of service. U.S.-based companies should enhance self-monitoring mechanisms and automated screening tools to expand removal of posts and ads for chemicals specifically related to fentanyl and other novel substances. Congress can change laws governing online platform accountability for harmful or illegal content. In addition, the targeting of these drug-related posts on social media should include a technology approach, such as custom-developed algorithms for identifying Chemical Abstracts Service (CAS) nomenclature informed by DEA or machine-learning approaches, such as image recognition for images containing CAS number and seller contact information. Any such use of artificial intelligence must include safeguards to protect against algorithmic bias and other harmful automated outcomes. Congress and federal law enforcement can also formally request and publicly signal the need to create partnerships with U.S.-based technology companies to aid in identifying online vendors that post chemicals on social media platforms. They can do so by proactively sharing information about suspected postings and accounts. Creating such a partnership can aid in investigations and, if publicized, could deter future listings.

2.5.2. Encourage Greater Use of Search Engine Indexing to Remove or Deprioritize Ads for Synthetic Opioids and Related Materials

Search engines can identify advertising related to synthetic opioids and precursor chemicals through their search indexing capabilities and either force-rank the relevant pages to the bottom of the search results or remove them from the search index entirely. Federal authorities should provide U.S.-based search companies with information on key terms to encourage voluntary deprioritization of such ads. Additionally, search engines should be encouraged to identify fentanyl and precursor–related ads through those search indexing capabilities and provide a catalog of suspect websites to relevant federal authorities for further investigation.

2.5.3. Collaborate with Foreign Countries from Which Accounts Operate That Violate Terms of Service

Foreign companies developed and own two popular mobile applications used for securing illegal seller communication channels:

- WeChat can be run on Android and Apple mobile devices. Because Tencent owns it and operates in the PRC, the governing structure for monitoring communication is already in place and being cataloged. A co-collaboration should be established between the PRC and the United States to monitor and report specific accounts that are violating terms of service by advertising fentanyl precursors.
- Viber is owned by Rakuten operating in Japan. A similar co-collaboration with Japan on a governing structure for monitoring, cataloging, and reporting specific accounts violating terms of service through attempted sales of fentanyl precursors provides another option for potential mitigation and enforcement. Federal authorities in the executive branch can explore ways to sanction companies that fail to implement collaborative investigatory agreements between the appropriate law enforcement entities in the two countries.

Tackling Other Functions and Other Services Used by Transnational Criminal Organizations

2.6. Intensify Efforts to Counter Transnational Criminal Organizations' Money Laundering

The Commission identified several vulnerabilities related to money laundering, including the use of new means, such as cryptocurrency, to generate and launder illicit proceeds and the expansion of Chinese money-laundering organizations. Neither of these vulnerabilities emanates directly from the problem of illegally supplied synthetic opioids, but online buyers of synthetic opioids can use them, as can TCOs as part of their efforts to launder proceeds. Greater efforts are needed to target illegal drug proceeds. Gaps remain in the PRC's AML framework. Similarly, Mexico's legislative AML framework requires renewed focus as the existing framework faces challenges in prosecuting Mexican drug-trafficking leaders for money-laundering activities. AML efforts in the PRC and Mexico could be improved, and both countries should dedicate more resources and attention to this problem. However, just as AML efforts have been limited in their success in countering other drug threats, they are likely to remain a limited tool to directly counter synthetic opioid trafficking.

2.6.1. Encourage the People's Republic of China to Fully Implement Its Anti–Money-Laundering Framework and Address Other Anti–Money-Laundering Deficiencies

Interviewees involved in AML efforts identified Chinese money-laundering organizations and trade-based money laundering as being of increasing concern. The Department of State and Department of the Treasury should directly engage with their PRC counterparts to encourage the PRC to fully implement AML frameworks. Areas for improvement include improving the PRC's financial intelligence unit's (FIU's) access to all data they have collected, expanding the focus of money-laundering investigations beyond individuals involved in predicate crimes, and updating the regulatory framework and guidance for less traditional actors, such as online lenders and designated nonfinancial businesses and professions.

2.6.2. Provide Support to Enhance the Effectiveness of Mexican Anti–Money-Laundering Efforts

The responsibility for prosecuting money-laundering activities in Mexico rests with the country's attorney general, with support from its FIU.[8] The FIU has administrative authority to block assets of investigated individuals. However, the use of this tool, which has grown substantially in recent years, has come under fire over due-process concerns.[9] Legislation is currently pending to address these concerns and would fortify its authority to freeze assets of illicit financial actors and entities. In addition, the rise in the use of Chinese money-laundering organizations and trade-based money laundering presents new challenges for Mexican authorities, including the need to uncover increasingly complex relationships and language barriers in dealing with PRC counterparts. The United States should offer technical assistance and other training to financial regulatory authorities in Mexico to overcome such challenges. Notwithstanding the prominence of drug-trafficking and associated organized crime groups as a major target for law enforcement, very few money-laundering cases are brought against drug traffickers who export synthetic opioids to the United States. The money flows specifically associated with synthetic opioids are likely to involve the same traffickers engaged in supply of other drugs that generate high-volume money needing to be laundered.

2.6.3. Enhance U.S. Laws, Regulations, and Resources Pertaining to Financial Tools Aimed at Drug Trafficking and Other Crimes, and Determine What Regulatory and Policy Gaps Remain for the Cryptocurrency and Payment Processing Industries

Existing AML frameworks in the United States prioritize combating drug trafficking. That framework should continue to respond to evolving strategies that TCOs embrace for money laundering. In late 2021, the White House issued a new sanction authority against the global illicit drug trade. Executive Order 14059 provides new sanction powers for the U.S. government and new flexibility to sever criminals' finances, safeguard the U.S. financial system, and ensure warranted, strategic, and judicious use of sanctions.[10] The U.S. Department of the Treasury should use this authority to prioritize sanctions targeting foreigners who engage in synthetic opioid and chemical trafficking. The department should also continue to monitor illicit activity facilitated by evolving blockchain technologies to determine whether additional solutions are needed to enhance regulatory controls over financial activity involving cryptocurrency used in money laundering with respect to drug trafficking–related proceeds. Closing other limitations in resources for DEA includes increasing the number of agents with Chinese-language (Mandarin and Cantonese) skills and cultural awareness and increase resources to investigate and prosecute money laundering. DEA should hire additional agents with the necessary skills (language and culture) to engage with Chinese money and banking institutions. Other additional prosecutorial and investigatory resources will be needed to prioritize money-laundering cases, including cases that involve false businesses and real estate purchases. Last, Treasury should intensify its efforts to encourage other countries to adopt regulations of virtual assets.

PILLAR 3: DEMAND REDUCTION AND PUBLIC HEALTH

The Commission recognized the need for a coordinated and well-articulated policy that encompasses not only supply reduction but also the demand for opioids and the related harms stemming from their use. HHS has released a drug overdose–prevention strategy that incorporates many key demand-reduction and public health policies, including primary prevention, harm reduction, evidence-based treatment, and recovery support.[11] Further action is needed in each of these four areas.

Prevention

3.1. Support Evidence-Informed Efforts to Reduce Substance Misuse and Progression to Substance-Use Disorder

Many discussions about drug prevention focus on school-based efforts or media campaigns, which is a very narrow perspective. People use drugs and progress to substance-use disorder (SUD) for a variety of reasons, and some of these can be addressed by improving mental health services, increasing educational opportunities, and providing other services that are not traditionally defined as *drug prevention*. Indeed, some of the best school-based prevention programs are those that teach students life skills and decisionmaking; drug use is addressed in these efforts but is not their main thrust.

Multiple programs have tried to reduce the number of opioid prescriptions and the amounts prescribed in recent years, and the number of prescriptions per capita has dropped to almost half of its peak in circa 2012; in 2020, 43 opioid prescriptions were dispensed per 100 people, down from more than 80 per 100 in 2012.[12] Efforts aimed at drug take-backs or disposals have also increased, yet many patients are still not aware of these options.[13]

Although the per capita number of overdose deaths involving prescription opioids has not decreased at a similar rate, the numbers from 2017 to 2019 suggest a decline, from 5.2 deaths per 100,000 to 4.2 per 100,000.[14] However, comprehensive assessments will need to address the longer-term consequences (e.g., did these efforts

reduce initiation that would have led to future OUD and possibly an overdose?). These efforts might also make it harder for people with chronic pain to get relief as prescribers refuse medications to some patients or patients are forced to taper off their medications in an effort to end their prescriptions.[15]

The Commission recognizes the delicate balance between reducing unnecessary prescribing of opioids with the need to effectively manage and treat pain. For some patients, opioids are a legitimate means of managing chronic, non–cancer-related pain. CDC should encourage health care providers to review guidelines on prescribing opioids for chronic pain to ensure that patients currently receiving opioids do not face abrupt disruptions that could encourage them to source diverted medications from illegal markets.[16] The extent to which people are moving to nonopioid treatment or to illegally obtained opioids remains to be seen. Indeed, some research has shown that limiting access to prescribed opioids leads some people to source the drugs from illegal markets.[17] Others with OUD might move to illegal alternatives, such as heroin and fentanyl, because they are cheaper and sometimes easier to obtain.

3.1.1. Fund Evidence-Based Prevention, and Provide Resources to Evaluate New Approaches Aimed at Different Populations

SAMHSA's National Mental Health and Substance Use Policy Laboratory collaborates with the Center for Behavioral Health Statistics and Quality to collect information from grantees in federal programs in order to evaluate and disseminate information on evidence-based practices, including culturally and linguistically appropriate services, as appropriate, and service delivery models.[18] SAMHSA has also created an evidence-based resource guide series, which is a comprehensive set of modules with resources to improve health outcomes for people at risk for, experiencing, or recovering from mental disorders or SUD. It is designed for practitioners, administrators, community leaders, and others considering interventions for their organizations or communities.[19] That means supporting efforts with public funds that have a strong evidence base and withholding funding from those using programs that are not evidence based. However, an independent entity, such as GAO, should evaluate these criteria and publish the results to ensure that programs are rigorously assessed for the quality of their evidence. Initially, new programs will be based on theory and will not be evidence based. Innovation should be encouraged, especially with respect to developing culturally and linguistically appropriate services, as well as those for remote learning, but will also need to be rigorously evaluated. Federal support for new efforts and evaluations by disinterested (independent) third parties will be needed (program developers commonly also serve as the primary evaluators, which raises concerns about conflict of interest).

3.1.2. Expand and Target Health and Social Services to Help Reduce Substance Use and Progression to Substance-Use Disorder

Increasing social supports for individuals, families, and communities can help prevent substance use and the progression to SUD. Given the strong link between adverse childhood events and substance use, identifying opportunities at the individual and community levels to intervene is paramount. Increasing access to evidence-based mental health care, which, among other benefits, can reduce the need for illegally manufactured substances, especially for those who are self-medicating. Multiple programs and efforts fall under ONDCP's Drug-Free Communities Support Program. Having GAO or another independent evaluator determine whether these efforts are evidence based and how they can be improved can help ONDCP make sure this program is focused on the most cost-effective efforts. Special attention should be paid to efforts to enhance culturally competent prevention programming in diverse and underserved communities. Nonprofit organizations should be provided resources to implement evidence-based activities targeting the communities they serve.

3.1.3. Encourage Medical Officials and Regulatory Agencies to Reduce Opioid Misuse While Avoiding Unnecessary Barriers to Medical Use

Helping physicians, nurses, and other medical officials identify people who are experiencing SUD—and those who are at risk—remains an important opportunity for intervention. Developing and promoting best practices for screening for OUD are critical. These efforts should help practitioners distinguish between those who are *dependent* on opioids (i.e., they experience tolerance and could have withdrawal symptoms after abrupt stoppage) and those who are *addicted* (i.e., they compulsively use despite harmful consequences). Most people who are addicted to opioids are also dependent on them, but not everyone who is dependent is addicted.

Although physicians have started to reduce the prescription of opioids, some prescribers might not be aware of the risks or best information relevant to treating chronic pain. CDC, with support from HHS, should publicize and encourage health care providers to review updated guidelines for the prescribing of opioids for chronic.[20] Following screening, medical practitioners might adjust treatments: They might switch to nonopioid pain management (see action 3.1.4) or prescribe buprenorphine to treat OUD (or refer patients to other types of treatment). Ironically, federal entities require that medical officials undergo special training to prescribe buprenorphine for OUD but not to prescribe oxycodone or other prescription painkillers. The Commission calls on FDA and other federal entities to reconsider this barrier to evidence-based treatment for OUD. Relatedly, Congress should provide funding or other statutory requirements, perhaps through continuing medical education requirements, to educate prescribers about best practices for opioid prescribing, screening, brief intervention, and referral to treatment. Similarly, there is important variation in how prescription drug monitoring programs are implemented across states, including the access that law enforcement and other authorities have to this medical information. Input from HHS and DOJ will be critical for creating standards and improving how systems share information across states.

The availability of unused prescription opioids is an important contributing factor for the initiation of opioid misuse. FDA and ONDCP should devote necessary resources to educate patients and the public about the appropriate ways to dispose of unwanted and unused medications. Congress should request that FDA develop options, including at-home disposal or sealable take-back bags that can be collected at certain government buildings to reduce the availability of unused and unwanted medications.

Pharmaceutical companies' marketing to patients and prescribers has contributed greatly to social problems with opioids. FDA should explore reducing the direct-to-provider marketing pharmaceutical companies can conduct for opioid pain-management therapies. The United States and New Zealand are the only countries in the world that allow direct marketing of prescription drugs to consumers. Efforts should be made to curtail this practice in the United States, although this could run into legal issues related to U.S. commercial free-speech doctrine. Additionally, HHS should mandate enhanced labeling or require that prescribers or dispensers be trained to deliver written warnings for the prescription or dispensation of medications that can cause SUD.

3.1.4. Increase the Availability of Alternatives to Opioid Pain Relievers

Although important efforts have been made to increase access to nonopioid treatment for pain, much more is needed. Increasing NIH funding for research on nonopioid analgesics and nonpharmacological strategies for relief of acute and chronic pain should offer additional options for pain-management therapy. Increasing provider reimbursement for prescribing opioid alternatives and provider education on prescribing practices and available options should help reduce reliance on prescription opioids. Additional efforts will be needed to expand access to available OUD treatments, as described in the discussion of action 3.2, to ensure that prescribers do not abandon patients with chronic pain who are experiencing OUD or dependence on opioids.

3.1.5. Promote Overdose-Prevention Messaging, Especially That Aimed at the Risks of Counterfeit Tablets

A small percentage of those dying from illegally manufactured fentanyl did so after unintentionally consuming a small amount of fentanyl concealed in a counterfeit tablet. Congress should direct funds to ONDCP and HHS to elevate a messaging campaign about this risk. DEA has started to draw attention to this problem through its One Pill Can Kill campaign, but other efforts are needed to reach those most at risk of consuming fake tablets. Additional messaging efforts can be included to encourage those using drugs to not use alone or use with naloxone present.

Treatment

3.2. Expand Access to Evidence-Based Treatment

The fact that access to evidence-based treatment, including medications used to treat OUD, is limited impedes successful national demand-reduction efforts. Although access to treatment for OUD has grown in recent years, many gaps remain. Most people with OUD receive no treatment, and only a small share of those in treatment receive medication treatment, which is the option with the strongest evidence base,[21] while some treatment programs are based on no evidence at all.[22] Gaps in health care availability and quality coverage across states and other federal rules for dispensing medications to treat OUD create unnecessary barriers. An effective long-term strategy to reduce trafficking must incorporate demand-side efforts to treat OUD such that people leave illegal markets or do not find themselves with little alternative but to source opioids from illegal markets to manage opioid withdrawal. In some cases, available treatment does not treat other, co-occurring disorders.

3.2.1. Extend the Opioid Public Health Emergency Declaration

Access to evidence-based treatment for OUD is impeded by a host of barriers, including insufficient capacity, cost of treatment, and regulatory obstacles (both state and federal), such as rules on who can provide treatment and under what circumstances. The executive branch should extend the public health emergency declaration of the overdose crisis* to continue to bring attention to the problem and avoid signaling that the issue has been satisfactorily resolved.

3.2.2. Identify Actions That Can Expand Access to Care by Evaluating Barriers, Regulatory and Otherwise, to Accessing Mental Health and Substance-Use Disorder Treatment

In collaboration with HHS and DEA, Congress should review existing laws and regulations pertaining to OUD treatment—and, in particular, medications for OUD—to identify changes in the regulatory framework that could facilitate access to treatment and encourage greater uptake of treatment services, including low-barrier treatment services. HHS should also convene a working group of health care insurers and employers to review the implementation of the Mental Health Parity and Addiction Equity Act[23] and progress made since the work of the 2016 Mental Health and Substance Use Disorder Parity Task Force to identify steps to promote its full

* The first such declaration was Eric D. Hargan, Acting Secretary of Health and Human Services, "Determination That a Public Health Emergency Exists," Washington, D.C.: HHS, October 26, 2017. It has been renewed 17 times and remains in effect (Xavier Becerra, Secretary of Health and Human Services, "Renewal of Determination That a Public Health Emergency Exists," Washington, D.C.: HHS, January 3, 2022).

implementation. The act was passed in 2008 to increase insurance coverage for mental health and SUD services. However, despite the law's existence, lack of parity is still a barrier.*

In further regulatory changes, to increase the number of providers who can prescribe medications, Congress should remove unnecessary barriers to prescribing buprenorphine, including through elimination of the cap on the number of patients a waivered provider can treat and potential elimination of the requirement that a prescriber obtain an X waiver.† Additionally, reducing barriers to access can include reducing law enforcement focus on diversion of medications used to treat OUD. Research shows that people use diverted buprenorphine and methadone to manage withdrawal and to abstain from use of heroin.[24] Use of diverted-medication therapies to manage withdrawal or abstinence signals the need to expand their access. All things being equal, use of diverted medications by people with OUD is less risky than use of illegally sourced opioids. DEA should review internal policies to shift enforcement efforts away from diversion of medications used to treat OUD and toward supplies of illegally manufactured synthetic opioids.

3.2.3. Expand Funding and Add Interventions to Increase Availability of and Access to Opioid-Use Disorder Treatment

In addition to evaluating existing rules and identifying steps to improve access to mental health and SUD treatment more broadly, Congress and HHS should take concerted action to increase the availability and access to medications for OUD. HHS has included efforts to reduce some of these barriers and has requested that Congress appropriate more than $11 billion in federal funding to expand access to SUD prevention, treatment, harm-reduction, and recovery support services. The appropriate government agencies and other key stakeholders will need to be involved in decisions in this area, especially as they pertain to adequacy of funding, but expanding access to OUD medications (e.g., buprenorphine, methadone) should be a priority, especially in vulnerable and at-risk populations, such as the incarcerated, unhoused, and pregnant. In parallel, increased funding should ensure the availability of and access to various types of quality treatment facilities, from crisis stabilization units to inpatient treatment facilities, and ensure that these facilities follow evidence-based guidelines and best practices. Congress should ensure that incarcerated people who are eligible for Medicaid experience no disruptions in their coverage for medication treatments for OUD upon release. Congress should also consider supporting state and local agencies that offer noncarceral approaches to drug-related crime, such as deflection and diversion programs, for nonviolent offenders whose offenses stem from addiction. Changes to increase availability of and access to treatment for OUD must be accompanied by efforts to increase the addiction treatment workforce, including individuals trained to manage comorbid mental health concerns. The workforce should be diverse in terms of type of practitioner; geographic distribution; and patient population served, including those with public or no health insurance.

In further interventions, reflecting on recent expansions in telehealth utilization, HHS should publish final rules for telemedicine special registration and methadone treatment vans and allow providers to treat with medication for OUD by telehealth without an in-person evaluation. HHS should incentivize hospitals and their emergency departments (EDs) to offer medication treatment and link presenting patients, particularly those at risk of overdose, with appropriate treatment and recovery programs. Lastly, some provisions for OUD treatment have

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* One remaining obstacle is nonquantitative treatment limitations. Provisions in the Consolidated Appropriations Act, 2021 (Public Law 116-260, December 27, 2020) target this specific issue. For more details, see Marian E. Dodson, Leigh C. Riley, Hannah R. Demsien, and Nick J. Welle, "The DOL Has Made This New Mental Health Parity Requirement a Top Enforcement Priority," Foley and Lardner, June 16, 2021.

† Pub. L. 106-310, 2000; Division B, Youth Drug and Mental Health Services; Title XXXV, Waiver Authority for Physicians Who Dispense or Prescribe Certain Narcotic Drugs for Maintenance Treatment or Detoxification Treatment. (The waiver gets its name from the *X* at the beginning of the physician's second DEA prescriber number granted with the waiver.)

been amended during the COVID-19 pandemic to help ensure continued access to treatment, such as relaxation of rules for unsupervised methadone use[25] or changes made to telehealth Medicaid and Medicare reimbursements.[26] HHS and DEA should evaluate the effects of such rule changes with a view to determining whether to retain them permanently.

3.2.4. Promote Other Health and Well-Being Initiatives to Reduce Substance-Use Disorder and Address Associated Needs

Alongside interventions aiming to increase the uptake of OUD treatment, Congress and HHS should promote additional health and well-being initiatives addressing other needs associated with SUD. Congress should work with HHS to facilitate treatment for co-occurring mental illness and trauma and to expand services addressing adverse childhood experiences. Specifically, Congress and HHS should improve treatment interventions for co-occurring issues and polysubstance use, including identifying and addressing policy barriers to contingency management interventions for stimulant-use disorder.* Additional research directed by NIDA is needed to determine the links between prescription stimulant use in children and adolescents to treat attention-deficit disorder and SUD later in life. With respect to children's mental health and adverse childhood experiences, Congress should increase CDC funding to prevent childhood trauma and provide the funding of mental and behavioral health programs in elementary and secondary schools.[27] Concurrently, Congress should support increased provider instruction on SUD treatment in medical school and improve providers' understanding of SUD prevention and treatment.

Harm Reduction

3.3. Enhance Evidence-Informed Harm-Reduction Efforts

One of the Commission's overarching goals is to reduce the number of overdose deaths. Although harm reduction does not directly reduce synthetic opioid trafficking and use, the Commission recognizes the elevated risk of harms from using illegally supplied synthetic opioids (e.g., higher overdose risk stemming from higher potency and less predictability in the market). Therefore, people who continue to use these drugs need to be engaged to reduce the associated risks and harms. Harm-reduction services, such as syringe service programs (SSPs) and naloxone distribution programs, often serve as initial points of entry for long-term treatment by engaging with people who might not be ready for treatment and giving them lifesaving tools (e.g., take-home naloxone, fentanyl test strips [FTSs]) and information (e.g., education on safer use practices) intended to reduce the risk of an adverse outcome, such as overdose or infection. In addition, harm-reduction services offer a nonstigmatizing opportunity to interact with clients, linking them with other treatment and social services. Although some harm-reduction programs, such as SSPs, build on decades of evidence,[28] a suite of novel programs has emerged more recently with only a limited evidence base, much of it from international jurisdictions. Thus, additional research, particularly from within the United States, could be helpful.

* The extent to which users of such stimulants as cocaine and methamphetamine have SUD is unclear, but a growing share of cocaine overdoses also include synthetic opioids. By expanding access to evidence-based demand-reduction interventions aimed at stimulant users, policies would ideally reduce possible fentanyl exposure in these populations.

3.3.1. Increase Access to Naloxone by Providing More Funding, Especially to First Responders and Programs That Distribute to At-Risk Individuals and Their Families; Encourage Coprescribing; and Promote Making Naloxone Available in Public Spaces and Facilities

First responders and others on the scene administer naloxone with substantially increasing frequency since the dawning of the synthetic opioid age. More responding agencies now routinely carry naloxone. Concurrently, states are facilitating distribution of naloxone to people who use drugs or to their families and friends via pharmacy-based dispensing and via overdose education and naloxone distribution (OEND) programs, typically run by service organizations. These changes have dramatically increased the number of kits distributed, and emerging evidence suggests a positive effect of laws expanding naloxone access.[29] However, gaps persist in naloxone distribution. For example, some law enforcement agencies do not equip their officers with naloxone,[30] naloxone coprescribing along with long-term opioid prescriptions remains rare,[31] and the coverage of OEND programs should be strengthened. Congress should therefore increase funding for first responders and OEND programs to help ensure that all first responders are equipped with naloxone and that free naloxone kits are easy and convenient for community members to obtain. In addition, HHS should take steps to promote greater coprescribing of naloxone or other ways to reduce barriers to accessing naloxone through existing pharmacy channels. Further, HHS should expand the availability of naloxone kits in public spaces and facilities; this will require addressing any potential regulatory barriers, such as the fact that, despite the proliferation of standing orders at the state level, naloxone formally remains a prescription-only drug. Congress and HHS should work to improve access by reducing legal barriers where possible.

3.3.2. Promote Evidence-Informed Harm-Reduction Approaches

When introduced, harm-reduction programs sometimes encounter stakeholder and community opposition and reservations; over time, those reservations often subside.[32] Lack of information about harm reduction and the evidence underpinning individual interventions is a contributing factor. Congress, in concert with HHS agencies, should improve information-sharing about harm-reduction programs more widely to help inform stakeholder and policymaker decisions about those programs. Concurrently, HHS should evaluate the effectiveness of these efforts to disseminate information and evidence and the extent to which they meet local decisionmakers' needs.

3.3.3. Determine and Amplify Best Practices and Standards for Fentanyl Test Strip Services and Their Use

FTS distribution is an important harm-reduction strategy in the era of synthetic opioids. It provides information to the drug consumer about whether fentanyl is present in their drug sample. This might matter less to people who expect fentanyl to be included but is immensely valuable to people who would otherwise have no reason to suspect the presence of fentanyl (e.g., stimulant users). FTS distribution programs have started proliferating in the United States, and the federal government has signaled its recognition of their importance by allowing federal funding to be used for FTS distribution.[33] Still, compared with other harm-reduction interventions, such as SSPs and OENDs, FTS distribution programs represent a comparatively nascent field. For that reason, the development of the evidence base and learning from programs that have been implemented is still very much in progress. Congress and HHS should support the process of developing best practices and setting standards for FTS distribution programs and of encouraging their uptake.*

* Potential issues to overcome in FTS utilization include the risk of false positives and false negatives and, particularly for pill consumers, the need to prepare the drug sample for testing (Tracy-Lynn E. Lockwood, Alexandra Vervoordt, and Marya Lieberman,

3.3.4. Support Research on the Effectiveness of Emerging Harm-Reduction Practices

Apart from SSPs, which have been around for decades, novel harm-reduction practices have emerged during the opioid crisis—such as naloxone distribution programs. Further, New York City recently opened, and other jurisdictions in the United States expressed interest in opening supervised consumption sites, which have been operating in other countries. Canada, which is similarly affected by the opioid crisis, has also introduced programs intended to offer people who use drugs additional forms of opioid agonist treatment (including heroin-assisted treatment).[34] These novel harm-reduction practices must continue to be evaluated for effectiveness and impact. The body of literature on naloxone and FTS distribution programs in the United States is growing, and more of these programs should be added. To that end, Congress should make funding available to NIH to invite and administer research projects in this field and contribute to the development of a robust evidence base. For interventions that cannot be legally implemented in the United States, existing evidence necessarily comes from foreign jurisdictions; research will be required to determine the quality of those evaluations and how well interventions can transfer, given the context of U.S. social service provision. For that reason, Congress and HHS should ensure that newly sanctioned harm-reduction programs are complemented by a rigorous evaluation.

Recovery Support

3.4. Take Efforts to Promote Recovery from Substance-Use Disorder

Recovery from OUD is a long-term state for many people who struggle with addiction. Greater efforts to reduce barriers to social reintegration, including reducing barriers to employment and housing, and reducing the levels of stigma faced by those who use drugs can facilitate recovery and serve an important adjunct role in reducing demand by stabilizing the lives of those seeking to cease drug use.

3.4.1. Advance Recovery Readiness in Workplaces, and Support Entry of Those in Recovery into the Workforce

Workplaces are an important environment for people with OUD and those in recovery who are employed. On one hand, workplaces can encourage people to engage and remain in treatment and promote long-term recovery; on the other hand, workplaces can expose people to risk factors that can perpetuate substance use. This underscores the importance of "recovery-ready" workplaces—that is, workplaces that provide supportive environments by minimizing the exposure to various risk factors and removing barriers to engagement with supportive services.[35] Congress, in collaboration with the U.S. Department of Labor (DOL) and HHS, should undertake a review of existing programs and engage with relevant stakeholders involved in them (state and local governments, employers, and members of the workforce). This engagement should inform the development of a research agenda to examine existing recovery-ready workplaces and the identification of best practices. Simultaneously, Congress, DOL, and HHS should engage with relevant stakeholders to identify barriers to employment reentry for those in recovery. Taken together, these efforts should then inform the development of management guidelines on hiring and working with people recovering from SUD.

"High Concentrations of Illicit Stimulants and Cutting Agents Cause False Positives on Fentanyl Test Strips," *Harm Reduction Journal*, Vol. 18, 2021, Art. 30; Traci C. Green, Ju Nyeong Park, Michael Gilbert, Michelle McKenzie, Eric Struth, Rachel Lucas, William Clarke, and Susan G. Sherman, "An Assessment of the Limits of Detection, Sensitivity and Specificity of Three Devices for Public Health–Based Drug Checking of Fentanyl in Street-Acquired Samples," *International Journal on Drug Policy*, Vol. 77, March 2020, Art. 102661).

3.4.2. Expand Access to Recovery Support Services for Housing

Numerous facilitators of successful sustained recovery from OUD have been suggested in the literature, including housing, income, social support, freedom from negative influences, physical and behavioral health, and employment and education.[36] Congress, in cooperation with federal departments, should take action to make more and better resources available to people in recovery. With respect to housing, Congress should work with federal partners, state and local governments, and recovery housing stakeholders to ensure that there are sustainability protocols for recovery housing. Congress should pass legislation to charge SAMHSA, in collaboration with accrediting entities and providers, with developing guidelines and best practices for states for the availability of recovery housing.[37] SAMHSA should develop standards for recovery homes and compile a database of existing providers. Relatedly, Housing First has emerged as an alternative approach to providing housing to people in need, focusing on offering permanent housing options with few or no treatment participation or other entry requirements.[38] Existing evidence suggests that the approach is effective at providing stable housing,[39] but its effectiveness at reducing OUD remains unclear. GAO should review the existing evidence on the approach and propose ways to close existing research gaps.

3.4.3. Expand Access to Recovery Support Services for Employment and Peer Support

Congress should increase funding for recovery community organizations and recovery support services and, in conjunction with DOL, support an expansion of the peer recovery specialist workforce. Increasing the role that those in recovery have with the broader umbrella of drug addiction services and recovery support can serve two important goals: It gives those in recovery an opportunity to become employed, and it reduces the shortages in the recovery specialist workforce.

3.4.4. Promote Means of Reducing Stigma Around Seeking Treatment and Being in Recovery

Stigma and discrimination against people who use opioids hinder responses to the harms caused by the opioid crisis, and specifically synthetic opioids.[40] This manifests itself in many ways. For instance, stigmatizing attitudes might be one, though not the only, motivator of opposition to service provision for people who use drugs. Even medical professionals can have negative perceptions of people with SUD, and some clinicians are not interested in providing medication treatment for OUD.[41] Further, stigma associated with drug use can affect how likely people who use drugs are to seek treatment and other services they might need. This could particularly be the case with populations of color because of their history of disproportionately being the subject of drug law enforcement, as well as historical discrimination by health and social services. To counter the effects of stigma, Congress should fund educational programs for media and decisionmakers on the topic of stigma that would include such topics as avoiding the use of stigmatizing language and enhancing support for public relation campaigns, such as a national recovery month.[42] Training for clinicians related to OUD and medication treatment could also help address the issue.

PILLAR 4: INTERNATIONAL COOPERATION

Many of the primary inputs used in the illegal manufacture of synthetic opioids are sourced overseas, and uneven levels of control over precursor chemicals, detection capacities, export reporting requirements, and other vulnerabilities in rules and regulations facilitate the trafficking of these drugs. These dimensions of the problem offer opportunities for U.S. engagement and leadership with the international community, including various relevant multilateral bodies. The most-effective U.S. engagement should focus on the following areas: (1) pursuing a stronger partnership with Mexico that, in the near term, should focus on intelligence information-sharing to combat TCOs, and (2) working with the PRC to reduce sales of precursor compounds and synthetic opioids,

recognizing the difficulties that current relations between the United States and the PRC present. That said, engagements with other countries involved in drug trafficking are also important and should be pursued as opportunities avail themselves, even if the PRC and Mexico represent the near-term priorities.

Multilateral Institutions

4.1. Strengthen Coordination with Multilateral Institutions to Promote Enhanced Control and Reporting of Drugs and Other Chemicals

UN bodies, including INCB, make up a system whereby all countries have agreed to minimum control standards over drugs and related chemicals. However, gaps remain. Several precursors used in the manufacture of synthetic opioids have little or no other known use but remain lawful to produce and possess. Further, the production of synthetic opioids relies on chemicals with many other legitimate uses and are often supplied knowingly or unknowingly by licensed operators. In response, the Department of State should work with international organizations to strengthen drug control over the illegal supply of synthetic opioids, engaging with relevant national authorities, including those that might be less than friendly to the United States. INCB has several tools at its disposal, including the international special surveillance list (ISSL), to enhance monitoring of precursor chemicals. The use of this list, other tools, and technical assistance and capacity-building programs should be promoted to improve drug detection and control in other countries.

4.1.1. Enhance Promotion of Listing Chemicals That Have Little or No Use Other Than Manufacture of Synthetic Opioids Both to the 1988 Convention and Through the International Narcotics Control Board's International Special Surveillance List

The Department of State, at relevant international forums and bilaterally, should redouble efforts to elevate the need for international controls over precursor chemicals that have little use other than manufacturing synthetic opioids. In 2017, the department was instrumental in elevating controls over 4-anilino-N-phenethylpiperidine (4-ANPP) and N-phenethyl-4-piperidone (NPP) at the UN Commission on Narcotic Drugs and at INCB. Efforts should be made through the U.S. diplomatic corps to continue to encourage controls over 4-AP and norfentanyl at international forums and bilaterally with countries known or suspected to facilitate illegal manufacturing of synthetic opioids. The State Department can continue to engage INCB, UNODC, and other multilateral forums to use working groups to identify emerging precursors that might need to be monitored or elevated to control. Similarly, the department should strengthen efforts to encourage other parties to the UN drug control treaties to alert INCB to other emerging derivatives that might be placed on the ISSL. This step would not extend regulatory controls on newly listed substances but would be instrumental in encouraging greater monitoring and reporting on incidents involving these chemicals. The ISSL indicates whether a listed chemical has known legitimate uses.

4.1.2. Support the International Narcotics Control Board to Help Other Countries Develop and Build Partnerships Between the Private Sector and Regulatory Authorities

Enhancing public–private partnerships between chemical manufacturers and foreign regulatory authorities could close vulnerability gaps that allow the improper transfer of chemicals used in the illegal manufacture of synthetic opioids. Some regulatory authorities do not have direct relationships with private entities, and some private firms might not be aware that certain orders for chemicals are used in the illegal manufacturing of synthetic opioids. INCB works directly with state regulatory agencies and can serve as a useful source of information and tools to help national authorities build public–private partnerships with the chemical producers.[43] The objectives of these efforts include creating a corporate culture of transparency and good behavior and educating firms about alerting to

suspicious orders or adopting know-your-customer rules.* The State Department must support INCB to facilitate the engagement of regulatory agencies, including the development of training materials and best practices, with private chemical companies, especially in countries where precursor chemicals needed for the production of synthetic opioids are manufactured.

4.1.3. Support Efforts by the United Nations Office on Drugs and Crime, the World Health Organization, and the International Narcotics Control Board to Enhance Countries' Capacities in the Areas of Drug Detection, Identification, and Reporting to Support Scheduling Decisions and Related Controls

Limited technical capacities and no early-warning systems hinder countries' ability to respond to the problem of emerging synthetic drugs, including synthetic opioids. This impedes international scheduling decisions because the World Health Organization (WHO) might not have enough information to examine the harms from new drugs. The State Department should work bilaterally and multilaterally to improve other countries' capacity to support efforts at enhanced early-warning networks to collect information on drug harms. These efforts could take advantage of and build on existing tools, such as the UN Toolkit on Synthetic Drugs, which includes modules on forensics and early warning.[44]

4.1.4. Utilize International Channels and Multilateral Forums to Encourage the People's Republic of China to Strengthen Regulatory Oversight of the Pharmaceutical and Chemical Sectors

The PRC might respond to multilateral concerns on the drug issue because it does not want to be perceived as a "narco state." The U.S. diplomatic corps should enlist other countries affected by synthetic opioids and international forums, such as UNODC and INCB, to support efforts to encourage the PRC specifically on the issue of lax controls on its large chemical and pharmaceutical sectors.

4.2. Examine How the International Drug Control Regime Can Be Improved, Expanded on, or Otherwise Supplemented

The current international drug control regime was designed before advancements in chemistry allowed for easy and rapid drug design. International accords are slow to extend controls, requiring many review processes. The proliferation of new compounds, including new theoretical molecules, represents a unique new challenge. In response, there are few options to expedite review mechanisms to add chemicals to lists or drugs to schedules. The United States and like-minded countries should engage in means to expedite listings.

4.2.1. Explore the Practicality and Utility of Additional Multilateral Agreements on Chemical Control Focusing Specifically on Synthetic Drugs

International drug control conventions cannot keep up with the rapid pace of development of new drugs, yet reopening them to amendment or discussion would be problematic and complicated. Given that future drug policy will increasingly involve synthetic drugs, the State Department should engage other like-minded countries (or those experiencing similar challenges involving new psychoactive substances) to explore whether new international agreements would be useful in addressing the gaps identified in current agreements on synthetic drugs and their precursors and, if so, to further explore the feasibility and risks of working toward such agreements.

* Rules that require that a chemical producer export only to licensed and legitimate importers.

4.2.2. Encourage Other Countries, Especially Those Suspected of Supplying or Known to Supply Novel Synthetic Opioids, to Extend Controls over Whole Classes of Emerging Substances by Amending Relevant National Drug Control Laws and Regulations

The PRC's regulatory change in 2019[45] coincided with a substantial decline in the numbers of new fentanyl analogues in U.S. drug seizure data. Other novel synthetic opioids have started to appear, including the benzimidazole classes of opioids, so new controls over other structural classes of drugs with similar potency will be needed. The State Department should intensify its efforts to encourage countries to extend existing or adopt new generic control measures within their national drug control laws. Aligning this action with action 1.2.1 could boost efforts by foreign counterparts if they see that the United States amends its own domestic laws in a similar fashion.

Mexico

Presently, Mexico is the largest source of illegally manufactured fentanyl entering the United States. Continued engagement at various levels will be needed to improve the capacity of counterdrug authorities and reduce corruption in that country. The United States will need to continue to define its strategic partnership with Mexico as the counterdrug focus shifts to illegally manufactured synthetic opioids.

4.3. Enhance Efforts to Ensure a Collaborative U.S.–Mexico Security and Drug Partnership by Enhancing Mexican Counternarcotic Capabilities, Strengthening Institutions Against Corruption, and Focusing Greater Resources on the Illegal Firearm Trade

Mexico-based TCOs dominate the production and distribution of fentanyl into the United States. Numerous experts highlighted the importance of continuous work toward the strengthening of a collaborative U.S.–Mexico counterdrug partnership. The United States and Mexico have recently agreed to a future security partnership under the Bicentennial Framework for Security, Public Health, and Safe Communities. Challenges remain, but the United States should work to find areas of common ground and support trusted individuals and institutions in Mexico. Key partners, such as SEDENA and SEMAR, should be supported by U.S. Northern Command to strengthen a collaborative relationship. Operationally, the Mexican military should be supported to target synthesis labs and counterfeit pill operations and direct attention away from counterdrug efforts aimed at heroin, such as poppy eradication. The United States needs to support efforts to strengthen institutions, combat corruption, and improve judicial systems to reduce impunity. This remains a notable challenge, and more could be done, because violent, well-funded TCOs are able to influence and coerce many of Mexico's governing institutions. Additional efforts are needed to facilitate extradition procedures to bring high-level traffickers to justice. The United States could assist Mexico with efforts to reduce drug-related violence by doing more to stop the illegal flow of firearms into that country. Addressing the illegal trafficking in firearms should help weaken violent TCOs.

4.3.1. Encourage Mexican Counternarcotic Authorities to Prioritize Targeting Counterfeit Pill Operations, Including the Illegal Importation of Machinery and Equipment That Can Be Used to Manufacture Tablets

Mexican TCOs are the primary manufacturers and suppliers of fake fentanyl pills into the United States. Seizures of counterfeit tablets containing fentanyl but made to look like other medications have increased in recent years. These drugs are riskier for some segments of the user base and require some technical capacity and machinery to produce. These operations should be targeted, while greater efforts should be made to enforce the laws on the books. This includes enhancing import controls at POEs, investing more resources to target and investigate tableting operations, and requiring that authorities follow up with licensees and operators that use such machinery. The Department of State, DHS, and DOJ will need to work with their Mexican counterparts to ensure that greater efforts are made to prioritize addressing these illegal operations.

Continued efforts aimed at heroin processing labs and poppy eradication take resources and attention away from targeting synthetic opioid trafficking and processing. Further, eradication is politically complicated and sometimes results in disruptive and violent confrontations between security forces and criminals. The continued price drops for opium sold by farmers make poppy cultivation increasingly unappealing. Strategically, some drug supply–reduction efforts in Mexico will need to reorient, and this entails identifying the most-important threats given resource constraints. From a strategic standpoint, that means directing counterdrug operations in Mexico toward port security and targeting fentanyl processing labs and counterfeit tablet manufacturing instead of poppy fields or heroin labs. State Department and other U.S. authorities should work to aid Mexican counterparts in this reorientation.

4.3.2. Offer Technical and Financial Assistance to Support Mexico's Judicial System Reform

Mexico continues to undergo a change from an inquisitorial judicial system to an adversarial model.[46] Although the transition appears to have resulted in improvements, such as due process and transparency, many challenges associated with adjustments to the new system remain.[47] These include a backlog of cases, gaps in training, and greater demands on the police and prosecutors to investigate complex cases in a more transparent system.* To the extent possible, the U.S. government should offer support to Mexican criminal justice authorities to build their capacities under the new system to prosecute drug production and trafficking.

4.3.3. Reduce the Illegal Exportation of Firearms from the United States to Mexico

The illegal flow of guns from the United States to Mexico represents a major contributor to drug-related violence in the country. As multiple interviewees explained, tackling the southbound trafficking in firearms represents one of the principal requests that Mexico makes of the United States. The U.S. government should make a concerted effort to respond proactively to these requests because it offers an opportunity to facilitate a joint strategic relationship with Mexico on matters related to organized crime. One possible solution is to put forward the resources necessary to allow the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) to investigate and prosecute illegal firearm purchases and exportations, including intensifying data collection and information exchange with Mexico on flows of firearms. These resources should also include greater ATF support in Mexico to track and trace guns and more technical support to Mexican law enforcement in reporting information on illegal firearms. Such efforts would help Mexico to better target criminals and build stronger criminal cases against firearm traffickers and encourage Mexico to improve border screening efforts, especially those using materiel purchased from the United States.

4.3.4. Assess Existing Capacities of the Mexican Military, and Remove Barriers to Providing Technical Support

Presently, the Mexican military is charged with supporting an expanding counterdrug mission for which it was not designed. The Commission believes that available material and human resources might not be enough to successfully complete more missions, such as port screening. Because Mexico is increasingly using the military for port and border security, there could be regulatory barriers to using U.S. funds and assistance when it comes to POE and cargo screening. The Department of State and DHS should assess the needs of the Mexican military's

* According to one interviewee, the use of oral hearings might also make witnesses more reluctant to come forward, further complicating the prosecution's position (interview 30, August 23, 2021). Also see Gina Hinojosa and Maureen Meyer, *Mexico's Rule of Law Efforts: 11 Years After Criminal Justice Reforms—Challenges and Opportunities for the López Obrador Administration*, Washington, D.C.: Washington Office on Latin America, November 13, 2019, and World Justice Project, 2019.

mission in border and port security and revise existing rules as necessary to ensure that U.S. assistance improves the capacity of key partners in Mexico.

4.3.5. Support Targeting of Illegal Finances and Criminal Networks Across North America

The increasingly complex nature of how criminal networks operate in many illegal markets makes targeting illegal financial proceeds an attractive ancillary goal. People with knowledge of the situation highlighted Mexico's efforts to freeze assets of known criminals as a useful tool. Mexican authorities face challenges when it comes to seizing assets of frozen accounts, but increased cooperation across law enforcement and regulatory bodies in Canada, Mexico, and the United States will be needed to strengthen financial criminal investigations aimed at TCOs that illegally import chemicals from Asia using front or shell companies or other groups that financially gain from the trade in drugs.

4.3.6. Support the Strengthening of Pharmaceutical Regulatory Capacity in Mexico and Efforts to Root Out Corruption to Prevent Domestic Diversion and Promote Robust Public–Private Partnerships

The relevant Mexican authority, the Federal Commission for the Protection Against Sanitary Risks or (Comisión Federal para la Protección contra Riesgos Sanitarios, or Cofepris), lacks resources and enforcement powers to undertake meaningful inspections of licensed operators, conduct investigations, and penalize regulatory violations. More recently, allegations of corruption of Cofepris[48] suggest that there could be additional concerns beyond lack of capacity. The U.S. government should support the Mexican government's efforts to strengthen the agency and root out corruption to enhance its ability to exert effective regulatory control over the pharmaceutical industry in Mexico. The U.S. government, through the State Department, should promote and assist efforts to fight corruption and build robust civilian institutions. Greater vetting of critical positions within civilian regulatory authorities in Mexico is required.

At this time, there is no evidence to indicate that domestic diversion of chemicals in Mexico is a major contributor to the issue of synthetic drug production there. That said, recent allegations of corruption at Cofepris of issuing importation licenses for fentanyl that was to be diverted to TCOs suggest that some amount of diversion could occur.[49] The Mexican chemical industry represents one of the possible or potential sources of precursors for TCOs should they experience a disruption of their current sources in the PRC. In addition to helping strengthen the regulatory environment, the U.S. government should expand support to its Mexican counterparts in implementing a public–private partnership model with the chemical industry. Under this model, the industry would be entrusted with self-regulation and participation in solutions to mitigate chemical diversion risks.

4.3.7. Support Mexican Authorities' Ability to Detect Fentanyl Precursors at Ports of Entry, Fentanyl in Outbound Post, and Inbound Bulk Cash and Firearms

Mexico is not only the primary producer of illegally manufactured fentanyl; it is also an important destination for firearms and cash that support TCO activities. Efforts are needed to support the Mexican government's screening and interdiction capacities aimed at multiple threats. The U.S. Department of State has been operating a canine program in collaboration with Mexican law enforcement authorities.[50] The program has been successful and well received, but it is currently limited in scope, and extending the capability to additional locations would be beneficial. Whether dogs can be trained to detect the base structure of many precursor chemicals used to manufacture fentanyl is not known, but CBP should investigate this. Such a capability would likely help detect certain precursor chemicals shipped to Mexico by maritime or air cargo (especially air cargo from the PRC) and enhance cargo screening at POEs.

Additional programs can support Mexico's efforts, including the UNODC–World Customs Organization (WCO) Container Control Programme (CCP), which is an international program run by UNODC and the WCO to help countries build their POE capacity to detect and interdict shipping containers used for illegal activities, including drug trafficking.[51] The CCP is operational in some Latin American countries,[52] and Mexico is in negotiations to possibly participate.[53] Mexico's participation in the program and commitment to international cooperation within its framework should receive support from the U.S. government. Mexico's recent efforts to put the military in charge of import screening at POEs (both land and maritime) have been put in place because of corruption allegations against civilian institutions.

U.S. federal law enforcement does not perceive TCOs' use of Mexico's postal service, Correos de México, for shipments within Mexico or across the southwestern U.S. border as a concern today. However, in case trafficking strategies shift in the future, the U.S. government should help build Mexico's capacity to monitor its postal system, which remains underdeveloped. The U.S. government should extend technical and financial assistance to scale up Correos de México's detection capabilities in the event that it becomes an important drug-trafficking pathway.

Last, the flow of arms and bulk cash that TCOs use to undermine the state require attention. However, Mexico's customs authority, Servicio de Administración Tributaria (SAT, or Tax Administrative Services), could be better equipped to target or interdict contraband. Rather, its mission is one of tax and duty collection. Mexican authorities need more and better law enforcement training and an expanded focus to successfully disrupt the southbound flow of firearms and cash into the country. The State Department should encourage Mexico to build out the necessary capacities through a joint security framework. The Commission identified several successful efforts of joint investigations and operations that should be used as a model for developing such a framework.

4.3.8. Intensify Work with Mexican Counterparts to Improve Their Drug and Chemical Identification Reporting for Seizures and Transmission of Physical Samples of Seizures to the United States

Mexican authorities have a limited ability to correctly identify the substances they seize, particularly with respect to emerging novel psychoactive substances or their precursors. U.S. authorities should increase their assistance and financial support to their Mexican counterparts to build the necessary drug identification capabilities and, by extension, to strengthen the reporting of seized drugs that should be made available to U.S. and international authorities. As part of intensified collaboration on drug identification, the U.S. government should work with its Mexican counterparts to facilitate the legal transmission of samples they have seized to be shared with DEA's Special Testing and Research Laboratory.

The People's Republic of China

Central authorities in the PRC should be commended for their 2019 generic scheduling, but they need to take industry oversight and enforcement of rules more seriously. Authorities will need to penalize those who break rules or continue to engage in illegal activity. Further, additional technical assistance and coordination with U.S. and foreign inspectors in the PRC are needed to strengthen regulatory compliance and reduce opportunities for criminals to operate in the open. But the PRC must be encouraged to commit sufficient resources to monitor businesses and ensure adequate controls and restrictions on exports. Greater diplomatic efforts directly with the PRC and through other multilateral bodies will be needed to encourage the PRC to improve oversight and compliance of large sectors.

4.4. Establish a U.S. Policy Framework to Engage with the People's Republic of China to Improve Oversight and Enforcement of Its Chemical and Pharmaceutical Industries

The Commission has determined that one fundamental part of the problem is the weakness in industry oversight and investigations in the PRC—a view consistent with the earlier discussion on existing supply chains and the views of numerous consulted experts. PRC efforts to improve regulatory oversight and investigate bad actors have been documented, but enforcement devolution and lack of investigatory and regulatory capacity present persistent problems.

4.4.1. Dialogue with the People's Republic of China to Commit to Improve Oversight and Investigation of Chemical and Pharmaceutical Sectors

A lack of oversight capacity and effective regulations over large profitable industries in the PRC contributes to the supply of synthetic opioids and precursor chemicals. Better industry compliance and adherence to rules will require continued engagement with the national government* to build in proper incentive structures and regulatory alignment—including central authorities' efforts to prosecute local authorities who turn a blind eye to violators. Other rules need to be adopted to strengthen these efforts (described in detail with other actions), but authorities in the PRC should continue to pursue efforts to enhance oversight by central authorities in NMPA, the National Narcotics Control Commission, and relevant officials in the Ministry of Ecology and Environment who oversee chemical manufacturers. The United States should work with the PRC's central government at the political level to ensure that the PRC signals its willingness to expend more resources and make a serious effort at improving regulatory enforcement. Efforts should include identifiable measures over time (e.g., increases in budgets of central authorities, hiring and retention of inspectors within key national agencies and regulatory bodies, numbers of inspections by central authorities, increases in unannounced inspections) to ensure that progress is being made.

4.5. Press the People's Republic of China to Adopt Clear Rules to Improve Regulatory Oversight and Enforcement over Industries, Control over Movements of Chemicals and Related Equipment, and Other Restrictions on Exports

Several clear rules that are enforced could improve industry compliance and deter some firms from exporting synthetic opioids and related chemicals from the PRC. Possible actions include increasing levels of inspections, especially unannounced inspections, which continue to be few compared with the country's share of violations, which is higher than those of other countries.

4.5.1. Encourage the People's Republic of China to Improve Inspections and Investigations of Its Chemical and Pharmaceutical Sectors, and Promulgate and Publicize Additional Reporting Rules and Requirements

Large sectors with little regulatory oversight contribute to the continued export of chemicals used in the illegal manufacture of synthetic opioids. Additional rules, reporting requirements, and enforcement mechanisms will be needed to improve regulatory compliance by firms in the PRC. U.S. bodies should encourage PRC authorities to commit to more-frequent inspections of chemical and pharmaceutical firms, including unannounced inspections with international observers, and require that regulators in the PRC make and enforce rules governing the movement of chemicals, review company logs of employee use of laboratories, and regularly analyze records on

* Several interviewees discussed the limitations of engaging directly with subnational or local authorities. The PRC would likely require engagement with central authorities.

stocks and inventory of chemicals, among other best regulatory practices. Greater efforts need to be made to improve transparency of industry violations, including naming, shaming, and sanctioning firms that continue to violate best practices. The U.S. Department of State should work directly and alongside other partner nations and multilateral institutions (e.g., the European Union [EU], WHO) to encourage the PRC's central government to take a greater role with inspections. FDA and DEA should offer additional technical support to help improve regulatory structures, as well as enhance and participate in inspections or investigations of those violating rules, especially as they pertain to exports of chemicals used in the manufacture of synthetic opioids.

4.5.2. Request That the People's Republic of China Extend Controls over Chemicals That Have Been Controlled in North America and Have Little Use Other Than Manufacture of Synthetic Opioids

Historical experience with the production of synthetic drugs in the PRC until the class-based scheduling of fentanyls in 2019 suggests that, when PRC authorities announce a control over a new chemical or drug, producers in the PRC cease production. In effect, chemical and pharmaceutical producers do comply with these rules but easily circumvent them by developing new chemicals that are sometimes structurally similar or can be easily modified to then be transformed into the necessary precursor or finished drug. Extending controls over chemicals with little use other than synthetic opioid manufacture can affect producers' decisions and complicate some synthesis routes for unskilled or novice chemists who have relied on more-straightforward synthesis routes. The U.S. Department of State should redouble efforts to engage the PRC on this matter. That said, producers' likely move to common precursors could limit the effectiveness of precursor control efforts, which will, in turn, put a greater emphasis on industrywide regulatory compliance and best practices, as well as other reporting requirements to identify and investigate chemical producers and exporters.

4.5.3. Encourage the People's Republic of China to Mandate Adoption of Better Business Practices Within the Chemical and Pharmaceutical Sectors, Such as Know-Your-Customer Rules and Export Restrictions for Chemical and Pharmaceutical Producers and Vendors, and to Investigate Those That Violate Rules

The PRC has no requirement for chemical or pharmaceutical manufacturers to conduct even minimum due diligence to ensure that exported chemicals are not being used for illegal manufacture of synthetic opioids. In addition, there are no export restrictions on chemicals or other drugs that are illegal or controlled in destination countries. Some firms in the PRC are actively seeking buyers, while others manufacture chemicals upon request. The U.S. Department of State should intensify efforts to encourage PRC authorities directly and through other multilateral forums and institutions to adopt rules to ensure good business practices, such as know-your-customer rules and other bans on exportation of drugs that are controlled in the destination countries.

4.5.4. Lobby the People's Republic of China to Adopt Export Controls on Machinery and Other Equipment Used for the Manufacture of Counterfeit Tablets, in Line with Article 13 of the 1988 UN Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances

Unlike the United States, the PRC has no specific legislation to control access or export of tableting machines or related equipment or inputs, such as dyes or stamps. The U.S. Department of State should work directly with the PRC on this matter to effectuate the appropriate controls over the manufacture, transfer, and export of equipment that can be used for tableting. The Commission found many online vendors that would sell varying types of tableting equipment with few questions asked. Promulgating a rule that limits exportation and directing more resources to investigating online sales could help deter some manufacturers or exporters of these items.

4.5.5. Improve Information Reporting and Exchange Within the People's Republic of China on Chemical Exports

Encouraging the PRC to adopt broad export reporting requirements for all chemical shipments could help create the necessary paper trail for rule violations (e.g., mislabeling) that could allow regulators and law enforcement to improve targeting of violators. Currently, exports are recorded using the Harmonized Commodity Description and Coding System, which the WCO maintains. Extending the reporting requirement and information-sharing on the export of any chemical to appropriate authorities in the PRC (such as the Department of Solid Waste and Chemicals within the Ministry of Ecology and Environment) adds checks that allow for follow-up investigations should a suspected fentanyl precursor be seized overseas. The U.S. Department of State should enhance efforts to encourage PRC officials directly and through other multilateral forums and institutions to adopt additional export reporting rules for all chemical exports and to initiate investigations for those exporting chemicals without the proper paperwork or mislabeled shipments.

4.5.6. Enhance and Expand the Food and Drug Administration's Cooperation with People's Republic of China Counterparts and Increase the Number of Food and Drug Administration Personnel Stationed in the People's Republic of China

In recent years, FDA has increased its efforts to engage PRC counterparts. Since 2018, FDA's Office of Criminal Investigations has worked to identify areas of potential cooperation. FDA believes that greater cooperation through that office can improve joint criminal investigations, greater information-sharing, enhanced technical assistance, and more-direct and regular communication with local law enforcement and regulatory authorities.[54] FDA, with support from the U.S. Department of State, should enhance efforts to engage with its counterparts in the PRC to further these efforts while prioritizing its understanding of opioid production in that country to aid in further regulatory efforts aimed at possible rule breakers. Additional personnel, including special agents from the Office of Criminal Investigations, and resources should be directed to the PRC to aid in inspections and cybercrime training and investigations to target online vendors and chemical manufacturers.

4.5.7. Support the People's Republic of China with Improvements to Screening at Ports of Exit

Personnel at PRC ports need better detection tools and training.[55] CBP has been working with partners abroad to equip and train customs officials to use canine units trained to detect fentanyl. Efforts should be made to extend this to PRC authorities monitoring key maritime and air ports of exit identified by U.S. authorities, helping them to detect and seize fentanyl precursors. Currently, exporters are using legitimate commercial shipping systems to export fentanyl precursors but appear to conceal shipments by mismanifesting or mislabeling. Canine units might target chemical exports to destinations in North America to detect those that might include precursor chemicals. Some have documented that the PRC's drug detection capabilities are limited in coding unification and lack of sufficient hardware solutions.[56] Other detection solutions should be offered to aid the PRC to this end, such as the latest referent libraries to improve and enhance targeting efforts. DEA, in exchange for samples of synthetic opioids detected in the PRC, should find ways to share information gleaned from its FSPP to enhance export screening and detection.

Other Countries

Although the PRC is presently an important source of precursor chemicals used in the illegal manufacture of fentanyl in Mexico, India also has large chemical and pharmaceutical sectors that are known to export synthetic drug precursors to trafficking organizations in Mexico. It could be only a matter of time before illegal production migrates to India or elsewhere or if emerging use of illegally manufactured synthetic opioids expands outside North

America. The United States will need to continue to work with other countries to enhance regulatory oversight and monitoring of chemicals.

4.6. Expand Engagement with Other Countries to Facilitate Information-Sharing and Promotion of Best Practices to Reduce Supply and Demand of Illegally Manufactured Synthetic Opioids, Especially in Countries Most Likely to Experience Such Problems in the Near Future

The illegal production and use of synthetic opioids is a growing public health and security concern for the United States, Canada, and Mexico. Other countries, especially those with large illegal heroin markets or that lack the institutional capacity to deter illegal production, are at risk because traffickers could relocate operations or begin to distribute cheaper and more-potent alternatives to meet demand for opioids. The United States should take a leadership role in engaging with other countries that are likely to experience worsening problems associated with illegal production or use of synthetic opioids. This action can better inform an understanding of the problem by sharing information to support investigations of TCO operations or legitimate sectors that face minimal scrutiny.

4.6.1. Enhance Information-Sharing Partnerships with Other Partner Nations Focused on Law Enforcement Intelligence Sharing and Support for Investigations

Canada and the United States have been working closely on identifying new synthetic opioids, sharing seizure samples and other relevant information to enhance transnational investigations. According to information presented to the Commission, customs agencies in Europe aid in facilitating seizures of synthetic opioids as drugs transit through the legal commercial systems. U.S. Department of State and federal law enforcement agencies should enhance additional information-sharing partnerships with partner nations, including sharing information on the identification of new synthetic opioids, precursors, or other related material and extending some of this information to PRC and Mexican authorities to effectuate arrests or prosecution where appropriate.

4.6.2. Expand Engagement with Other Countries to Avoid Expansion of Illegal Manufacturing of Synthetic Opioids, and Encourage Other Potential Sources of Precursors to Adopt Similar Controls over Chemicals

India is another likely source of fentanyl precursors used in illegal manufacture, particularly should there be an effective reduction in the trade of precursors from the PRC. Several precursor chemicals that are not controlled in India have been intercepted at POEs in Mexico. Drawing on existing partnership mechanisms, such as the U.S.–India Counternarcotics Working Group, the State Department should work with India to bring other precursors under control to harmonize those with countries in North America. Myanmar, once known as Burma, is a country with known illegal production of synthetic drugs that, according to recent drug seizure information, includes precursors that are used in the synthesis of fentanyl. The Department of State, in conjunction with relevant agencies, such as FDA and DEA, should continue to engage with countries to prioritize monitoring ongoing developments and offer technical assistance to deter the exportation of fentanyl, synthetic opioids, and other precursor chemicals. To illustrate, FDA's Office of Regulatory Affairs and Office of Criminal Investigations have engaged bilaterally with India and worked joint investigations since 2018, but this relationship is new and can be strengthened to prevent the export of chemicals and pharmaceuticals used in the illegal supply of synthetic opioids. With regard to Myanmar, the U.S. Department of State and DEA will need to continue to monitor ongoing political developments in that country because they could affect U.S.–Myanmar policy. DEA should also attempt to ascertain risks of fentanyl production in other countries that have large chemical industries and lack enforcement capacity.

4.6.3. Promote and Fund Evidence-Based Demand-Reduction Best Practices and Interventions Abroad Aimed at Synthetic Opioids

Demand for illegally sourced synthetic opioids in other countries, such as Canada and Mexico, contributes to global supply of these drugs. Likewise, greater efforts to measure the population at risk of exposure to fentanyl (i.e., existing populations with OUD or others who might regularly consume prescription medications in tablet form) can help policymakers abroad anticipate and better respond to burgeoning overdose crises. The Commission was told of the growing demand for synthetic opioids in Mexico, the lack of available treatments, and the limited capacity to estimate the size of the user base. The U.S. government should share best practices with partners that might be experiencing the emergence of illegally supplied synthetic opioids. Needed actions include expanding the Department of State's efforts, through the Bureau of International Narcotics and Law Enforcement Affairs, to provide additional technologies and tools to develop epidemiological networks to facilitate data collection, medication therapies, overdose-reversal drugs and appropriate training in their use, and other resources.

PILLAR 5: RESEARCH AND MONITORING

Limited ability to amass and share information about emerging threats and market trends in a timely manner impedes development of relevant mitigation policies. Current systems and approaches to data collection and analysis are inadequate and do little to contribute to developing and maintaining a holistic understanding of evolving threats, market trends, and policy impact in a timely manner. Further, many data systems are not well positioned to provide useful and essential information about the synthetic opioid problem. For example, overdose death records lack sufficient granularity about drug type and report data with substantial time lags of sometimes a year or more. Overall, the U.S. federal government will need to strengthen its ability to understand the trends in illegal supply of synthetic opioids to address the problem more effectively. Policymakers, administrators, and operational leaders need more-insightful information derived from reliable, relevant, and integrated data sets.

5.1. Direct Federal Efforts to Improve Understanding of the Illegal Supply of Synthetic Opioids

Limited understanding of emerging threats and market trends at various levels and lags in data reporting impedes development of relevant mitigating policies. State and local drug forensic laboratories sometimes employ different analytical standards and reporting protocols, confounding a proper regional analysis of supply. Greater consolidation of drug seizure data reported by federal law enforcement and a universal use of a centralized system would facilitate more-accurate reporting in trends and improve understanding of the problem. Current data-collection and analysis systems involving drug seizures in DEA databases are not being utilized to their fullest extent. Additionally, DEA's Special Testing and Research Laboratory faces resource constraints impeding its ability to analyze synthetic opioid samples to better understand emerging synthesis routes or inputs used. Overall, U.S. drug policy data-collection and analysis systems must be enhanced to eliminate information gaps and present real-time information for analysis. The U.S. Intelligence Community (IC) continues to improve its understanding of the illegal supply of synthetic opioids but has emphasized such efforts relatively recently. Generally, the IC provides support to foreign partners, U.S. law enforcement, and other U.S. agencies involved in understanding and disrupting synthetic opioid trafficking. Some of those intelligence-informed insights can be used to strengthen disruptive efforts.

5.1.1. Adopt a Scientific, Timely, and Methodological Approach to Analyzing the Illegal Supply of Synthetic Opioids and Related Chemicals

Existing drug policy agencies that have traditionally focused on the supply of drugs lack either the critical data needed to understand emerging trends or the appropriate research-driven approach to analyzing them. Further,

relevant seizure and public health data are scattered across several agencies that do not regularly communicate, and data lags remain a persistent challenge. For example, DEA's seizure data in STRIDE/STARLIMS and its Heroin Domestic Monitor Program are not being leveraged to understand changes in purity-adjusted prices, nor is the information always shared with the appropriate policymakers or analysts at ONDCP in a timely and actionable manner. DEA must improve its data-collection approaches (discussed in greater detail in the section on action 5.1.5) and analyze these data with greater rigor. Similarly, ONDCP should maintain a research unit to analyze ongoing drug market trends made available from DEA and other relevant law enforcement and public health data sources. Congress might need to allocate additional resources to these ends.

5.1.2. Increase Resources for National-Level Collection and Analysis of Intelligence on Foreign Illegal Manufacturing of Synthetic Opioids and the Production of Strategic Insights to Policymakers and Other Partners

The nature of the illegal supply of synthetic opioids presents unique challenges that require better intelligence collection and analysis on legal companies or individuals who illegally manufacture chemicals or the electronic means with which they communicate to facilitate transactions. This analysis is needed not only to support actionable efforts but also to provide strategic insights about dimensions related to supply. Here, the IC can offer enhanced strategic or analytical insights into operations or modus operandi of chemical producers overseas (e.g., production throughput) to policymakers and law enforcement agencies to better inform the overall picture of supply of synthetic opioids or related chemicals, as well as support broader law enforcement and judicial efforts. Intelligence can also support an enhanced understanding of corruption in other countries that challenges the rule of law and efforts by authorities in those countries to properly restrict access to synthetic opioids and related precursor chemicals for legitimate purposes.

5.1.3. Incentivize State and Local Laboratories to Report to the National Forensic Laboratory Information System and Strengthen Reporting Standards

Reporting to NFLIS is voluntary, and standards and protocols, although they have improved in recent years, can be further enhanced with federal assistance and resources. The use of grants, through DOJ, should be used to attract additional labs that do not report to NFLIS and help currently participating labs by strengthening their analysis protocols and data management systems or otherwise improve the means and measures they use to report to NFLIS. Efforts should be made to strengthen reporting of synthetic opioid observations, including reporting on purity, formulation, and weight in standardized ways to allow better comparison across jurisdictions.

5.1.4. Expand the Use of Retail Drug Market Monitoring, and Increase the Focus on Illegal Transactions of Synthetic Opioids

The DEA's Heroin Domestic Monitor Program used to collect many retail-level sales of heroin in domestic markets and was crucial for assessing purity-adjusted prices of heroin. The program has not issued a report since 2018 and has since ended.* Reviving this program with local law enforcement participation and expand its scope to include fentanyl and fentanyl-related compounds or other synthetic opioids sold in retail markets, especially counterfeit tablets, could help improve the overall understanding of how drug markets are evolving (e.g., in terms of prices, formulations, chemicals) and responding to supply-side interventions or disruptions, closing some law enforcement intelligence gaps. Additional support from Congress and further efforts should be made

* The end of DEA's Heroin Domestic Monitor Program appears to have created a gap in law enforcement information; see Gulf Coast High Intensity Drug Trafficking Area, *2021 Drug Threat Assessment*, June 1, 2020.

to report on the different purities of multiple drugs in seizures. Although it can be expensive to maintain, this type of monitoring is necessary to better understand how the arrival of fentanyl and other synthetic opioids affects heroin markets.

5.1.5. Increase Support for the U.S. Drug Enforcement Administration's Special Testing and Research Laboratory, and Expand the Capacity of Its Fentanyl Signature Profiling Program

The laboratory lacks sufficient resources, resulting in delays in analysis of specimens and issuing of analytical reports. With additional support from Congress, DEA should direct more funding to the laboratory and expand the FSPP to increase the number of seizures analyzed and the level of details reported. Reports should be disseminated to the appropriate law enforcement channels on a regular schedule. The FSPP is an important tool to help understand trends in synthetic opioid production and the techniques used in products seized in the United States. The program's ability to undertake analyses should be bolstered in two ways:

- First, with the exception of Canada, the program typically does not have access to actual samples seized in key foreign countries, such as the PRC and Mexico, and must rely on documentation provided by foreign counterparts. Enabling access to samples from abroad would represent an important boost to the scope of the program's analyses.
- Second, the program's capacity should be increased so that, in addition to routine analyses of samples, the program can dedicate more resources to actively investigating emerging phenomena, such as novel synthesis routes, to help ensure their timely incorporation in the program's analyses. Capacity expansion should include hiring more full-time chemists or other employees with science degrees and making them available to analysts and investigators who can consult on specific cases involving new drugs.

5.1.6. Consolidate Reporting of Seizure Data Involving Synthetic Opioids Specifically, but New Psychoactive Substances More Generally, Across Governmental Agencies

To reduce double or triple counting and to improve the detection and awareness of the incidence of new drugs, ONDCP and federal law enforcement agencies should consolidate seizure events across reporting agencies. Each event record should include weight of seizure, location, date, and other circumstances surrounding these seizures of synthetic opioids. An effectively consolidated database of synthetic opioid–involved seizures into which all federal law enforcement entities report could illuminate how markets are trending. These data should also be shared with the appropriate policy-focused entities within the U.S. federal government, including ONDCP. Additional efforts should be made to increase reporting on the purity levels of drugs reported in seizures and to encourage all federal, state, local, tribal, and territorial law enforcement agencies to report to a centralized seizure database.

5.2. Analyze Emergent Trends in Drug Markets and Related Behaviors Using a Systematic and Standardized Approach

Current U.S. public health and drug-use data systems are not well suited for collecting information on emerging trends and will need to be expanded or adapted to new problems. Many U.S. states and other local authorities report necessary data on overdose deaths to monitor drug market trends differently, sometimes using different analytical standards or protocols, and this variation limits the ability to achieve a robust understanding of trends. Further, CDC codes synthetic opioid overdose deaths using a single poisoning code, which limits the ability to identify the type of synthetic opioid involved (e.g., tramadol, carfentanil, or some other novel synthetic opioid). Access to drug market data is restricted, limiting localities and states to infer from what federal authorities provide. Improving transparency in measures can offer more-direct involvement and insights for localities to respond to emerging drug threats.

5.2.1. Develop and Promote the Adoption of National Forensic Standards

There is currently no national system of forensic analysis standards. If adopted, and required by relevant state licensing bodies, such standards would greatly contribute to ensuring data quality and comparability across states and across practitioners.* Federal funding, grants, oversight, and collaboration with state, local, tribal, and territorial agencies can help overcome the issues resulting from the patchwork system of coroners and medical examiners.[57] CDC has been working to improve these efforts, but additional funding and other federal requirements will be needed to reach more reporting sources, such as local coroners and medical examiners.

5.2.2. Provide Greater Granularity and Timeliness in Overdose Death Reporting

Currently, the National Vital Statistics System data maintained by CDC follow International Classification of Diseases, tenth edition (ICD-10) multiple-cause-of-death codes without any additional disaggregation presented publicly or to researchers. As a result, all synthetic opioids other than methadone are placed in the same T-40.4 code, which, in addition to fentanyl and its analogues, covers such drugs as tramadol[58] and even semisynthetic buprenorphine.[59] Greater granularity would enable better differentiation across individual substances involved in drug overdose deaths and thus a better understanding of ongoing trends in drug-related harms as they pertain to shifting markets.† Further, final overdose death data become available only with a substantial time lag. Greater timeliness in the reporting of these data is needed to help policymakers and practitioners obtain a more actionable understanding of the nature of the challenge.

5.2.3. Expand Access to Existing Data by Researchers, State and Local Government, and Other Interested Stakeholders

Steps should be taken to help ensure that data collected on the opioid crisis and related topics are easily accessible to various consumers of information with the aim of improving research efforts, policy, and practice.‡ ONDCP and HHS should improve access to deidentified and nonsensitive data to facilitate local efforts and research, including (1) improving data user-friendliness and compatibility via common formats, (2) reducing delays and streamlining access procedures for data not made routinely publicly available (e.g., access to mortality microdata or data on lab sample–level data on seizures and testing), and (3) consolidating data from various sources into single data sets (e.g., all-payer claim databases bringing together data across various payers).

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* Such agencies as SAMHSA and the National Institute of Standards and Technology have developed recommendations for guidelines and standards in this area, which should serve as the basis of future efforts (Bruce A. Goldberger, Jane Carlisle Maxwell, Anthony Campbell, and Bonnie B. Wilford, "Uniform Standards and Case Definitions for Classifying Opioid-Related Deaths: Recommendations by a SAMHSA Consensus Panel," *Journal of Addictive Diseases*, Vol. 32, No. 3, 2013; Medicolegal Death Investigation Subcommittee, Organization of Scientific Area Committees for Forensic Science, "Recommendations for Medical Examiner/Coroner Drug-Related Death Investigations," February 14, 2018).

† Svetla Slavova, Chris Delcher, Jeannine M. Buchanich, Terry L. Bunn, Bruce A. Goldberger, and Julia F. Costich, "Methodological Complexities in Quantifying Rates of Fatal Opioid-Related Overdose," *Current Epidemiology Reports*, Vol. 6, No. 2, 2019. Relevant subcategories exist in the ICD-10 classification hierarchy, with T.40.41 for fentanyl and fentanyl analogues, T.40.42 for tramadol, and T.40.49 for all other substances under the T.40.4 code. However, this information is not available in the CDC death data.

‡ For an overview and assessment of selected data sets pertaining to the opioid crisis, including access considerations, see Rosanna Smart, Courtney Ann Kase, Amanda Meyer, and Bradley D. Stein, *Data Sources and Data-Linking Strategies to Support Research to Address the Opioid Crisis: Final Report*, submitted to Office of Health Policy, Assistant Secretary for Planning and Evaluation, HHS, Washington, D.C., September 2018.

5.3. Utilize Novel, High-Frequency, and Real-Time Systems to Enhance Market Surveillance

New drug threats will require new data-collection and analysis systems. Currently, the United States does not have a robust and systematic early-warning system found in other advanced countries. The National Drug Early Warning System (NDEWS) relies on existing NIDA grants to universities that operate sentinel sites. NDEWS is helpful to drug policymakers and practitioners, but a more permanent, multidisciplinary system is more likely to succeed over time, whereas the current model relies on renewing grants.

Other countries, including the PRC and Mexico, have either piloted or expanded the use of novel near-real-time drug-use data-collection systems, such as wastewater testing. Currently, the United States has no systematic wastewater testing or analysis program for drugs. For decades, wastewater analysis has shown to offer near-real-time measures of drug use in Europe and, more recently, in Australia. Absent such a system, officials must rely on other outcome data, such as ED events or overdose deaths, that lag considerably.

The United States used to rely on the Arrestee Drug Abuse Monitoring (ADAM) program and the Drug Abuse Warning Network (DAWN) to assess market trends and the emergence of new drugs. In the past ten years, both tools have been discontinued. The lack of additional measures of the population of a subset of people who use drugs or those who might consume new drugs, limits more-robust understanding of emerging trends. Last, given how quickly markets can become exposed to synthetic opioids, gaps in knowledge about novel sourcing, supply decisions, and other drug use–related behaviors should be closed through enhanced qualitative research with drug market participants and collection of measures at point of use.

5.3.1. Establish a National Early-Warning System

NIDA has worked to professionalize an early-warning system through grant mechanisms to universities across the United States.[60] However, U.S. drug policy needs a routinized national early-warning system, with appropriate funding levels, that directly involves ONDCP for the exchange of timely information on new substances, trends, and other features with public health and public safety implications observed in drug markets. The EU Early Warning System on New Psychoactive Substances can serve as a model for such an endeavor.* Continued federal efforts could help improve early-warning indicators (see discussions of additional actions, in this section), but this would require improved decisionmaking analysis from ONDCP officials who are well placed to cross-reference epidemiological data from sentinel sites with drug law enforcement data on seizures.

5.3.2. Introduce a Network of Sites with Regular Wastewater Analysis

Wastewater analysis is a drug market surveillance tool that tests for the presence of metabolites that the body excretes after consumption of various drugs in wastewater samples collected at water treatment plants or at various places in the public sewage system. Some jurisdictions use wastewater to test for COVID-19, so one possibility is to add detection of drug metabolites in effluent at wastewater treatment plants to take advantage of existing analytical work.[61] Monitoring changes in the levels of various metabolites in analyzed samples can offer timely insights into trends in consumption of various drugs at the community level; serve as an early-warning system to detect unusual patterns of drug consumption emerging or previously unseen metabolites appearing, indicating the emergence of synthetic opioids in local markets; provide data that can be used to evaluate demand- or supply-reduction interventions; and be used to produce consumption estimates for a given area.

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* The EU system consists of a multiagency, multidisciplinary network across the EU member states and works in conjunction with the EMCDDA and European Union Agency for Law Enforcement Cooperation (Europol). For more information, see EMCDDA, "Early Warning System on NPS," webpage, undated a.

Wastewater analysis poses few confidentiality issues, produces results in near real time, can be conducted at a geographically granular level, and is less expensive than population surveys. Federal authorities, including ONDCP, CDC, and the U.S. Environmental Protection Agency should work to develop a systematic protocol for sampling and analyzing wastewater that adds screening requirements for drugs, such as fentanyl metabolites, and then implement this protocol in pilot program in selected water districts or public water systems. This program should be evaluated to determine whether it can or should be scaled to include additional sites across the United States through grants to public wastewater treatment systems. Wastewater analysis could even play a role outside the United States to detect the use or possibly the production of synthetic drugs.*

5.3.3. Resuscitate and Expand the Arrestee Drug Abuse Monitoring Program

ADAM was a monitoring program discontinued in 2013 because of budget constraints in which people who had been arrested and booked for any offense were offered the option of sitting for an interview and voluntarily submitting a urine sample for later analysis. Resuscitating ADAM would provide another surveillance and early-warning tool about the changing supply of illegal drugs and proliferation of novel psychoactive substances. This data collection can also yield important insights into market participants' behavior. DOJ and ONDCP should bring back and expand ADAM to improve estimates of the population of people who use illegally sourced opioids. Several years ago, the Bureau of Justice Assistance developed a plan for sampling American jails for a revised version of ADAM; however, DOJ failed to receive the funding needed to implement it. It is imperative that a renewed version of ADAM be incorporated into newer, more innovative systems that collect real-time data and be accessible to policymakers and researchers at lead agencies, such as ONDCP.

5.3.4. Establish a Nationwide Emergency-Department Urinalysis Network and Expand the Drug Abuse Warning Network

The collection of urine samples in EDs from people who have overdosed can be a valuable surveillance and early-warning tool. Such a system is being piloted by the Center for Substance Abuse Research at the University of Maryland as the Emergency Department Drug Surveillance program, with funding support from ONDCP. Pending its successful implementation, the pilot would be replicated in more locations nationwide. In addition, until its hiatus from 2011 until 2018, DAWN was an ED-based surveillance system that provided data at the national scale and for selected metropolitan areas on counts and trends in drug-related ED visits. SAMHSA is working on launching a new iteration of DAWN, in which 50 hospitals (about a tenth of the original revival plans) are being recruited to participate on a voluntary basis. Once it is fully operational, ensuring hospital participation and possibly expanding the reporting sample will be of utmost importance. It will also be important to assess and help ensure that the system is positioned to detect and monitor an increasingly complex supply of illicitly manufactured synthetic opioids. Relatedly, hospitals need to have the right protocols to test and detect the presence of synthetic opioid metabolites in tissue and fluid analyses. Data should be reported in a timely fashion. Similar to ADAM, the new version of DAWN should be made an integral part of an innovative real-time data-collection system.

5.3.5. Enhance Qualitative Work with Market Participants

Ethnographic research has generated important insights about market trends and related behaviors.[62] Despite the contribution of such studies, many important questions remain. Examples of areas that merit further exploration

* The Commission was told that wastewater testing could be useful in detecting illegal drug production by monitoring effluent for certain chemical reagents or by-products of the production of fentanyl. It is unclear whether such detection is proven, but it might warrant additional investigation for its application in Mexico to aid in the detection of synthesis labs.

include the preferences and decisionmaking of buyers and sellers, the experiences of people who use drugs and their perspectives on existing and potential interventions, and the evolution and changes in the market and drug supply. In addition to informing strategies to tackle illegal drug supply and services for people who use drugs, qualitative work with market participants can also be a source of parameters for population estimates and longitudinal studies. NIDA and the National Institute of Justice should fund additional studies to enhance qualitative research about market participants and their related decisionmaking behaviors.

5.3.6. Have the National Institute on Drug Abuse Research Drug-Checking Services and Other Harm-Reduction Surveillance Tools

Drug-checking services are typically low-threshold services to check the composition of a consumer's street-acquired drugs. Although the Commission did not have sufficient information to take a position on drug-checking services, additional research is needed to determine whether such interventions can serve as important surveillance tools via either of two mechanisms (or both): (1) providing data on the composition of samples and associated properties, which offer a snapshot of what is being consumed (information not always available from law enforcement seizures), and (2) providing insights on how drugs are marketed at the retail level in near-real time. NIDA should investigate whether such research is warranted and what regulatory or legal barriers exist to funding such research.

SUMMARY OF ACTION ITEMS

The list of recommendations is robust and expansive, and it is understandably difficult to know where to start. To provide context for such decisions, the Commission assessed each recommendations across several dimensions:

- information on the level of the supply chain or market that the action affects (production, processing, export, import, wholesale, retail, or user)
- anticipated fiscal impact (low, medium, or high)
- the time frame for implementation (short [within six months], medium [within six to 24 months], or long [beyond 24 months])
- prioritization of the expected impact on reducing the harms caused by illegal synthetic opioid trafficking (low, medium, or high)
- the gaps and vulnerabilities addressed
- remaining challenges.

The grading of anticipated fiscal impact suggests in broad terms how much such an action is expected to cost (although costs can change over time):

- Simple rule changes that do not require additional reporting or programs are believed to be of low fiscal impact.
- Actions that require sustained programs or greater technical assistance are believed to be of medium fiscal impact.
- Those requiring substantial programmatic and long-term investments are likely to be of high fiscal impact.

At this time, it is not possible to assign dollar ranges. The relevant agencies will need to work with Congress to determine suitable amounts to implement actions.

In terms of the anticipated time frame,

- several of the actions can be undertaken in the short term, estimated to be less than six months. Some of those require filling key positions or redirecting federal efforts within existing programs or policies.
- medium-term actions are likely to take up to a few years to implement before generating measurable results or feedback.
- long-term actions could require more than a few years to implement or require substantial long-term or permanent engagement before results are realized.

A few actions need to be sequenced in a logical manner (i.e., improving interagency coordination and policy design prior to implementation). Given how quickly the problem can shift, some of these decisions will need greater coordination and review from an executive body.

Additionally, the Commission categorized actions according to their expected impact (e.g., high, medium, and low) in terms of reducing overdose deaths involving synthetic opioids or disrupting the flow of illegally manufactured synthetic opioids:

- High-impact priorities are those that are likely to have a greatest effect, based on evidentiary knowledge or experience, or might be required for implementation of U.S. policy related to this problem.
- Low-impact priorities are those that are likely to have a little direct or more-distal impacts on overdoses or disruption of illegal supply.
- Medium-impact priorities fall somewhere in the middle.

Actions can be examined across several dimensions—how long it will take to execute actions, their anticipated fiscal cost, and what impact they will likely have on illegal supply of synthetic opioids or their relation to overdoses. For example, closing gaps in rules related to AED for inbound packages is expected to be of low to medium fiscal cost and require short-term action but is likely to have a medium/low impact on the flow of illegally manufactured synthetic opioids. That said, the expansiveness of this problem and the many dimensions it touches will require a multipronged and simultaneous effort across several areas. Prioritization of impact and effort focuses on triaging a problem that will still require more medium- and long-term responses and continued engagement.

Table 6.1 reports these results.

Table 6.1

Summary of Recommended Actions

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Pillar 1: Policy coordination and implementation						
1.1. Increase coordination of U.S. authorities, fill critical appointments, and ensure proper levels of staffing.						
1.1.1. Return ONDCP to the Cabinet, and enhance the structure of the U.S. drug policy apparatus to improve information-sharing and coordination.	All	Low	Short	High	Interagency coordination and information-sharing are lacking, and executive functioning in U.S. drug policy is limited.	Effectiveness requires continued support to ONDCP from the President and other agencies.
1.1.2. Improve coordination of tools across federal agencies to address trafficking.	All	Low	Short	High	Interagency coordination and information-sharing are lacking.	Effectiveness requires buy-in from participating agencies and strong coordinating mechanisms.
1.1.3. Ensure that key ambassadorships, the Foreign Service, U.S. law enforcement detachments abroad, and related staff positions are fully staffed and informed on matters relevant to a coordinated U.S. strategy on illegally supplied synthetic opioids.	All	Low	Short	Medium/high	The fact that key posts at various levels of the domestic and foreign policy apparatuses are vacant limits coordination and policy implementation.	The approval process can be lengthy if suitable candidates are not identified or nominations are held up, and finding and filling other key posts could be difficult.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
1.2. Assess and update the U.S. legislative and regulatory drug control frameworks.						
1.2.1. Consider extending appropriate structural controls over whole classes of emerging drugs.	Producer, exporter, importer, retailer	Low	Long	Medium/low	Listing drugs individually is complicated and time-consuming. Most new drugs are added to Schedule I, which might not be appropriate.	Statutory language needs to allow appropriate research and avoid causing unnecessary criminal justice consequences for low-level drug offenders. Building a new schedule for classes of drugs is one potential but difficult option to achieve this goal.
1.2.2. Monitor chemicals that are used in the illegal manufacture of synthetic opioids and control them when appropriate.	Producer	Medium	Long	Low	The changing nature of inputs used to manufacture synthetic opioids complicates the monitoring of existing chemicals.	Successful implementation of this action could depend on ensuring sufficient DEA capacity and will probably require long-term engagement.
Pillar 2: Supply Reduction						
Interdiction and Law Enforcement						
2.1. Enhance interdiction capabilities, especially in the mail and express consignment systems that facilitate trafficking of synthetic opioids.						
2.1.1. Close specific loopholes and address limitations to the interim final rule on AED requirements for inbound international mail.	Exporter, importer	Low/medium	Short	Medium	Mail-based trafficking of synthetic opioids from abroad has declined, but gaps in information requirements remain.	Limited resources overseas impede universal use of AED. CBP can help close the regulatory requirement, but compliance by foreign counterparts could remain limited.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
2.1.2. Mandate that private ECCs cooperate with domestic drug law enforcement, and require couriers to participate in building industry standards to improve screening algorithms for packages.	Importer, wholesaler, retailer	Low	Short/medium	Medium/high	No law requires private couriers to screen parcels in their systems. There are no industrywide automated predictive screening standards.	Private interests might push back on additional regulatory requirements and associated costs and might be reluctant to work closely with law enforcement.
2.1.3. Strengthen capacities for the U.S. Postal Inspection Service to identify, track, and disrupt mail-based distribution of illegally manufactured synthetic opioids that utilize the domestic mail system.	Importer, wholesaler, retailer	Medium	Medium	Medium/high	Domestic mail-based trafficking is a growing concern, and there are limits to existing resources within the postal system; there is limited understanding of how Mexican TCOs are using the domestic mail system.	There is limited capacity and unclear buy-in from other law enforcement agencies. The task-force officer program has not been formally evaluated; closing this vulnerability could be difficult because of constitutional protections; investigating and building cases takes time and requires additional federal law enforcement coordination.
2.1.4. Increase interdiction capabilities for air cargo shipments from the PRC to Mexico that land in the United States.	Exporter, importer	Medium	Short/medium	Medium/high	Vendors use air cargo flights from the PRC to Mexico to send precursors. These might not always be detected. Limited information-sharing or lack of appropriate funding could impede interdiction efforts.	Traffickers can adapt by moving to maritime or sourcing from other suppliers.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
2.1.5. Promote additional technological solutions to enhance border screening.	Exporter, importer	Medium	Medium	Low/medium	Detection of illegal drugs or input chemicals at ports of entry remains a challenge; novel noninvasive technologies could help address this gap.	Limited throughput or traffickers' countermeasures could continue to impede interdiction; there is a risk of people switching to more-harmful smuggling practices, such as body packing.
2.2. Bolster the capabilities and capacity of domestic law enforcement efforts to investigate illegal distribution of synthetic opioids.						
2.2.1. Strengthen referent libraries to facilitate the detection of emerging synthetic opioids.	Exporter, importer, wholesaler, retailer	Low/medium	Medium	Low	Some levels of law enforcement might not have the latest referent materials and field detection technologies.	Materials can become out of date with emergence of new synthetic opioids. Challenges of resources and training and use of equipment remain, and expected effects are unknown.
2.2.2. Fund and evaluate pilot efforts for local law enforcement to investigate overdose deaths.	Retailer	Medium	Medium/long	Medium/high	Overdose deaths are sometimes not investigated with the sense of urgency required to map patterns to identify the most-dangerous retailers; additional information can be obtained at overdose scenes to better determine the source or types of synthetic opioids consumed (e.g., fake pill versus powder).	Whether overdose investigations work in practice remains to be seen. There is a risk that increasing targeting will result in aggressive use of sanctions, generating additional harms.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Restricting distribution of chemical inputs						
2.3. Work with private-sector stakeholders to implement systems to prevent drug traffickers from acquiring chemicals used illegally to manufacture synthetic opioids.						
2.3.1. Enhance oversight of reporting of chemicals leaving the United States or produced abroad by U.S.-held companies or foreign-based operations, and encourage proactive company reporting.	Producer	Low	Medium	Low/Medium	Gaps in oversight of foreign-produced chemicals limits insights into diversion outside the United States. In anticipating future threats, reporting requirements might need to be enhanced; industry might not be fully aware of the potential for diversion or sourcing of fentanyl chemicals.	The action could meet resistance from private industry as a new regulatory burden, particularly because it does not appear to target the main current source of input chemicals; absent credible enforcement alternatives, private industry might be reluctant to report suspicious activity, particularly if companies do not perceive the issue of synthetic opioids as concerning them.
2.4. Target distribution of synthetic opioids and related chemicals advertised online.						
2.4.1. Improve local law enforcement capabilities to support federal authorities with information on darknet sales.	Wholesaler, retailer	Medium	Medium	Medium	Federal authorities have the capacity to investigate darknet sales of synthetic opioids, and that capacity can be improved with information from local law enforcement. Currently, there are capacity limits to supporting federal efforts.	Training and education could be challenged by lack of buy-in from local law enforcement.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
2.4.2. Enhance efforts to screen online advertisements, and use sting operations to target traffickers sourcing precursor chemicals online and other vendors on the darknet.	Producer, exporter	Low/medium	Medium/long	Medium/high	Social media platforms facilitate online access to synthetic opioid advertising.	Law enforcement might need to be better informed on ways to analyze online platforms. producer countermeasures could challenge law enforcement.
Disrupting online sourcing of synthetic opioids						
2.5. With the help of private entities, reduce online advertising and sales.						
2.5.1. Expand social media self-monitoring to target and remove posts by unlawful drug or precursor suppliers and ask social media platforms to work with law enforcement to identify online vendors of precursor chemicals and finished synthetic opioid products.	Producer, importer	Low	Short	Medium	Social media do not appear to self-monitor drug-related content. Little information might be shared with law enforcement.	This relies on voluntary compliance by online platforms, which might not be forthcoming absent credible enforcement alternatives.
2.5.2. Encourage greater use of search engine indexing to remove or deprioritize ads for synthetic opioids and related materials.	Producer, Importer, wholesaler	Low	Medium	Medium/high	Foreign-based communication companies facilitate online access to synthetic opioid advertising.	This relies on online platforms' voluntary compliance, which might not be forthcoming absent credible enforcement alternatives; it is unclear how big an impact can be reasonably expected.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
2.5.3. Collaborate with foreign countries from which accounts operate that violate terms of service.	Producer, importer	Low	Medium	Medium	Foreign-based communication companies facilitate online access to synthetic opioid advertising.	This relies on voluntary compliance and cooperation with online platforms not based in the United States, which might be reluctant. It is unclear how big of an impact can be reasonably expected.
Tackling other functions and services used by TCOs						
2.6. Intensify efforts to counter TCOs' money laundering.						
2.6.1. Encourage the PRC to fully implement its AML framework and address other AML deficiencies.	Producer, exporter, importer wholesaler	Low	Medium	Low	TCOs increasingly take advantage of services provided by Chinese money-laundering organizations; although it is relatively strong, the PRC's AML framework has deficiencies.	This requires that the PRC be willing to tackle the issue; the impact on disrupting drug-trafficking operations is indirect and could be very limited.
2.6.2. Provide support to enhance the effectiveness of Mexican AML efforts.	Producer, exporter, importer, wholesaler	Medium	Medium	Low	Mexican TCOs need to launder the proceeds from their operations; although Mexico is among international leaders on AML, deficiencies persist in its domestic AML efforts.	This requires that Mexico be willing to tackle the issue; its impact on drug-trafficking operations is indirect and might be very limited; it is subject to sensitivities similar to those of anticorruption and judicial assistance efforts.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
2.6.3. Enhance U.S. laws, regulations, and resources pertaining to financial tools aimed at drug trafficking and other crimes, and determine what regulatory and policy gaps remain for the cryptocurrency and payment processing industries.	Producer, exporter, importer, wholesaler, retailer	Low/medium	Medium	Low	Drug traffickers increasingly take advantage of novel tools to facilitate financial flows and money laundering. The existing U.S. legal framework needs to respond to this development.	The impact on drug-trafficking operations will be indirect and could be limited; synthetic opioids specifically do not present unique AML challenges that can be explicitly targeted.
Pillar 3: Demand reduction and public health						
Prevention						
3.1. Support evidence-informed efforts to reduce substance misuse and progression to SUD.						
3.1.1. Fund evidence-based prevention, and provide resources to evaluate new approaches aimed at different populations.	User	Medium	Long	Low	The current evidence base on prevention interventions is weak. Correspondingly, the availability of evidence-based practices is limited.	The time frame for any impact of prevention interventions on drug-related harms is very long. Prevention interventions do not address the issue of current harms stemming from synthetic opioids, although they can facilitate long-term benefits in reducing drug initiation and thus shrink the market.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
3.1.2. Expand and target health and social services to help reduce substance use and progression to SUD.	User	Medium	Long	Low	Many people initiate drug use every year. Reductions in drug initiation can be expected to translate into future reductions in drug-related harms.	Reducing unnecessary opioid prescribing is a valid goal, but it contributes to a long-term response to the problem by reducing iatrogenic addiction.
3.1.3. Encourage medical officials and regulatory agencies to reduce opioid misuse while avoiding unnecessary barriers to medical use.	User	Medium	Medium	Low	Prescription and dispensation of opioid analgesics introduces the possibility that the drugs will not be used as medically recommended. Opioid prescribing also introduces risks of the development of OUD, even though most people who use opioids as prescribed do not go on to develop any issues.	Changes to opioid prescribing policies and practices need to navigate a difficult balance between reducing the risks of opioid misuse and ensuring that access to medically necessary opioid analgesics is not impeded. Reducing access to opioid medications in some patients could result in illegal sourcing.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
3.1.4. Increase the availability of alternatives to opioid pain relievers.	User	Medium	Medium	Low	Prescription and dispensation of opioid analgesics introduces the possibility that the drugs will not be used as medically recommended. Opioid prescribing also introduces risks of the development of OUD, even though most people who use opioids as prescribed do not go on to develop any issues.	The evidence base for alternatives to opioid analgesics and nonopioid treatments in addressing pain is uneven across various types of interventions and needs to be developed further to ensure that evidence-based practices are utilized. Administrative barriers, such as medical reimbursement rules, hamper the uptake of nonpharmacological interventions.
3.1.5. Promote overdose-prevention messaging, especially that aimed at the risks of counterfeit tablets.	User	Medium	Short	High	The arrival of synthetic opioids, in combination with concomitant uncertainty and lack of information stemming from the proliferation of new molecules and emergence of counterfeit tables, increases risks of drug overdose for people who use drugs.	People who could benefit most from this intervention are a very hard-to-reach group, although there are organizations working with these populations whose input and outreach assistance should be solicited.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Treatment						
3.2. Expand access to evidence-based treatment.						
3.2.1. Extend the opioid public health emergency declaration.	User	Low	Short	Low/medium	The overdose crisis and harms caused by synthetic opioids continue to pose a direct and escalating threat to public health, public safety, and national security.	The extension of the public emergency declaration provides no immediate challenges, but it alone will likely have a limited impact on reducing overdoses.
3.2.2. Identify actions that can expand access to care by evaluating barriers, regulatory and otherwise, to accessing mental health and SUD treatment.	User	Medium	Medium/short	High	Regulatory and financial impediments to access to treatment and funding deter people from obtaining medications to treat OUD.	Many complex administrative and regulatory barriers to treatment will remain even if funding is addressed; some of these barriers relate to the delivery of health care and social services in the United States more broadly.
3.2.3. Expand funding and add interventions to increase availability of and access to OUD treatment.	User	High	Medium/long	High	The limited access to treatment and other resources aimed at those with OUD is insufficient to ensure long-term recovery.	This requires an expansion of access to quality health care coverage. Concerns about diversion of medication and stigma associated with medication therapy for OUD remain a challenge.
3.2.4. Promote other health and well-being initiatives to reduce SUD and address associated needs.	User	High	Long	Low	Research shows clear connections with adverse childhood experiences and use of drugs and alcohol.	Outcomes are distal from intervention and can take years for interventions to generate measurable effects.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Harm reduction						
3.3. Enhance evidence-informed harm-reduction efforts.						
3.3.1. Increase access to naloxone by providing more funding, especially to first responders and programs that distribute to at-risk individuals and their families; encourage coprescribing; and promote making naloxone available in public spaces and facilities.	User	Medium	Short	High	People who use drugs are at greater risk of drug overdose because synthetic opioids are so potent and because the markets these opioids have penetrated are increasingly complex but not transparent. Availability of naloxone helps reduce the risks of a fatal overdose.	Naloxone carry and use continues to face opposition among some law enforcement agencies; distribution of naloxone to hard-to-reach people who use drugs can be logistically difficult; target populations might not be aware that they would benefit or are eligible to receive free naloxone.
3.3.2. Promote evidence-informed harm-reduction approaches.	User	Medium	Medium	High	Evidence-based harm-reduction interventions continue to face opposition from various stakeholders that might stem from stigmatizing attitudes or lack of familiarity with harm-reduction programs and their potential benefits.	Although it might be possible to study the effects that educational materials have on attitudes and beliefs, establishing any impact on acceptance, implementation, and uptake of harm-reduction services can be substantially more difficult; other interventions require research.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
3.3.3. Determine and amplify best practices and standards for FTS services and their use.	User	Medium	Medium	Medium/high	Drug content checking that can determine the presence of fentanyl opioids in a drug sample can reduce uncertainty and the associated risk of adverse outcomes, particularly among people not tolerant to synthetic opioids. Test-strip programs can also serve as a point of engagement with people who use drugs.	FTSs can provide only a binary yes/no indication of the presence of fentanyl in a drug sample, which is less useful than more-advanced technologies in opioid markets fully penetrated by synthetic opioids. Evidence on their effectiveness for counterfeit tablets is unclear because tableting lacks homogeneity. Like other harm-reduction interventions, FTS distribution could face some opposition from key stakeholders. Risks of false negatives and concerns about liability can limit their reach.
3.3.4. Support research on the effectiveness of emerging harm-reduction practices.	User	Medium	Long	Low	The evidence base underpinning novel harm-reduction interventions, such as drug-checking services, continues to rely primarily on studies of varying quality from international contexts that might not be fully transferable to the United States.	The attribution of population-level effects to relatively small-scale harm-reduction programs is difficult.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Recovery support						
3.4. Take efforts to promote recovery from SUD.						
3.4.1. Advance recovery readiness in workplaces and support entry of those in recovery into the workforce.	User	Low/medium	Medium	Medium	Many in recovery face stigma or other barriers to reentry into the workforce.	Stigma and state laws that require or allow punitive actions against those who test positive could hinder recovery in some.
3.4.2. Expand access to recovery support services for housing.	User	Medium	Medium/long	Medium	Barriers to recovery and reentry impede people with OUD, which can result in relapse.	Stigma will need to be addressed and reduced. This could take time to implement because attitudes toward addiction can be slow to change.
3.4.3. Expand access to recovery support services for employment and peer support.	User	Medium	Medium/long	Medium	Barriers to recovery and reentry impede people with OUD, which can result in relapse.	Stigma will need to be addressed and reduced. This could take time to implement because attitudes toward addiction can be slow to change.
3.4.4. Promote means of reducing stigma around seeking treatment and being in recovery.	User	Low	Medium/long	Medium/high	Stigma remains a major barrier to supporting the recovery and needs of those who use drugs.	Reducing stigma and changing social attitudes could take time and are very difficult. Continued engagement on this will be needed.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Pillar 4: International cooperation						
Multilateral institutions						
4.1. Strengthen coordination with multilateral institutions to promote enhanced control and reporting of drugs and other chemicals.						
4.1.1. Enhance the promotion of listing chemicals that have little or no use other than the manufacture of synthetic opioids both to the 1988 Convention and through INCB's ISSL.	Producer	Low	Long	Medium	The changing nature of inputs used to manufacture synthetic opioids complicates control over new chemicals. Several fentanyl precursors are not controlled internationally.	It is not possible to put every chemical used in the manufacture of synthetic opioids under international control, so this action would necessarily have limited impact. It would probably require long-term engagement.
4.1.2. Support INCB to help other countries develop and build partnerships between the private sector and regulatory authorities.	Producer	Low/medium	Long	Medium	For monitoring chemical producers, other countries have limited capacity and the private sector might be slow to buy in.	Effectiveness depends on the buy-in of other countries and their private sectors that might not view chemical diversion as their issue.
4.1.3. Support efforts by UNODC, WHO, and INCB to enhance countries' capacities in the areas of drug detection, identification, and reporting to support scheduling decisions and related controls.	Producer, exporter	Low/medium	Long	Medium/high	Other countries have limited capacity to control and monitor chemical producers.	This requires buy-in from other countries to participate in capacity-building activities and use the newly developed capacities.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
4.1.4. Utilize international channels and multilateral forums to encourage the PRC to strengthen regulatory oversight of the pharmaceutical and chemical sectors.	Producer	Low	Medium/long	High	The PRC might not be eager to engage with the United States directly on this matter, which could require additional support from international bodies.	This action represents, at best, an option supplemental to engaging with the PRC directly on the issue; the number of countries affected by chemicals coming out of the PRC continues to be limited.
4.2. Examine how the international drug control regime can be improved, expanded on, or otherwise supplemented.						
4.2.1. Explore the practicality and utility of additional multilateral agreements on chemical control, focusing specifically on synthetic drugs.	All	Low	Long	Low	Existing international conventions could be limited given challenges today. Chemical generation outpaces regulatory action.	Given reluctance to renegotiate existing treaties, the likelihood of success is not very high. Payouts could be far into the future.
4.2.2. Encourage other countries, especially those suspected of supplying or known to supply novel synthetic opioids, to extend controls over whole classes of emerging substances by amending relevant national drug control laws and regulations.	All	Low	Medium/long	Medium	Existing national laws and regulations could be limited when it comes to new chemicals that can be easily modified to fall outside of control.	Countries could be reluctant to change national laws. Legal solutions can take a long time, are complicated, and are not a priority. Additionally, laws will still need to be enforced.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Mexico						
4.3. Enhance efforts to ensure a collaborative U.S.–Mexico security and drug partnership by enhancing Mexican counternarcotic capabilities, strengthening institutions against corruption, and focusing greater resources on the illegal firearm trade.						
4.3.1. Encourage Mexican counternarcotic authorities to prioritize targeting counterfeit pill operations, including the illegal importation of machinery and equipment that can be used to manufacture tablets.	Producer, processor, exporter	Low/medium	Medium/long	Medium	Mexico has limitations in enforcement of drug equipment laws and does not prioritize policing clandestine tableting operations.	This step might not be in line with Mexican law enforcement priorities.
4.3.2. Offer technical and financial assistance to support Mexico's judicial system reform.	Producer, exporter	Low/medium	Long	Medium/high	Mexico's prosecution rates remain extremely low.	U.S. assistance programming supports capacity-building efforts by Mexico's state and federal entities, and programming must be negotiated to achieve shared bilateral objectives.
4.3.3. Reduce the illegal exportation of firearms from the United States to Mexico.	Producer, exporter	Low/medium	Medium/long	Medium	More can be done to target arms and bulk cash smugglers to help reduce violence.	Addressing the issue in the United States would be extremely difficult, both politically and legally; however, even good-faith efforts with limited effectiveness could generate positive impacts for the bilateral relationship.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
4.3.4. Assess existing capacities of the Mexican military, and remove barriers to providing technical support.	Producer, exporter	Medium	Short	High	The Mexican military is charged with an expanding counterdrug mission for which it was not designed.	Existing rules for assistance to foreign militaries represent an obstacle; in the long run, the military might not be well equipped or trained to undertake domestic law enforcement operations.
4.3.5. Support the targeting of illegal finances and criminal networks across North America.	Producer, exporter	Low	Medium	Medium	The laundering of proceeds from the illegal drug trade and other criminal activities is a key enabling function of TCOs.	AML efforts have been rendered more difficult by increasing use of complex tools, such as trade-based money-laundering schemes, professional laundering services, and cryptocurrencies; substantial volumes of assets would have to be seized to make a meaningful impact.
4.3.6. Support the strengthening of pharmaceutical regulatory capacity in Mexico and efforts to root out corruption to prevent domestic diversion and promote robust public–private partnerships.	Producer	Low/medium	Medium/long	Low	Limited capacity and concerns about potential corruption limit the effectiveness of regulatory bodies; some are concerned that Mexico's chemical and pharmaceutical sectors will become sources of diverted inputs needed to manufacture fentanyl.	Voluntary self-regulation would be a more attractive proposition to Mexican industry if there were a credible alternative of strong regulatory enforcement; the U.S. government should continue to support Mexico's efforts to combat corruption and build capacity.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
4.3.7. Support Mexican authorities' ability to detect fentanyl precursors at POEs, fentanyl in outbound post, and inbound bulk cash and firearms.	Producer, exporter	Low	Medium	High	Cash and firearm smuggling from the United States to Mexico is a key enabling function of Mexico-based TCOs; participation by Mexican authorities to improve import screening is currently limited.	Authorities in Mexico are not well positioned to interdict contraband flowing to the country. Long-term joint efforts will be needed; on its own, this action is likely to have a very limited impact without concurrent progress on such topics as the fight against corruption and detection and identification capabilities.
4.3.8. Intensify work with Mexican counterparts to improve their drug and chemical identification reporting for seizures and transmission of physical samples of seizures to the United States.	Producer, processor, exporter	Low	Medium	High	Mexico's technical capacity to analyze seizures is limited. Officials are reluctant to share information, leaving few direct samples that DEA can analyze.	Mexico has not expressed receptiveness toward similar efforts in the past.
The PRC						
4.4. Establish a U.S. policy framework to engage with the PRC to improve oversight and enforcement of its chemical and pharmaceutical industries.						
4.4.1. Dialogue with the PRC to commit to improve oversight and investigation of the chemical and pharmaceutical sectors.	Producer	Low	Medium	High	The PRC's actions do something in the short term but are not sufficient. Lack of clear asks and agreement to improve industry oversight and adherence to rules allows production to continue.	The PRC might be reluctant to undertake robust oversight over large and profitable industries.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
4.5. Press the PRC to adopt clear rules to improve regulatory oversight and enforcement of industries, control over movements of chemicals and related equipment, and other restrictions on exports.						
4.5.1. Encourage the PRC to improve inspections and investigations of its chemical and pharmaceutical sectors, and promulgate and publicize additional reporting rules and requirements.	Producer	Low	Medium/long	Medium/high	Limited inspection capacity and regulatory devolution allow production to continue.	The PRC might be reluctant to undertake robust oversight over large and profitable industries.
4.5.2. Request that the PRC extend controls over chemicals that have been controlled in North America and have little use other than the manufacture of synthetic opioids.	Producer	Low	Medium	Medium	Several fentanyl precursors controlled in North America remain uncontrolled in the PRC.	This represents a less onerous and intrusive request than other enabling actions in this group. However, the PRC might still be reluctant to take this action absent concessions or reciprocal action by the United States.
4.5.3. Encourage the PRC to mandate adoption of better business practices within the chemical and pharmaceutical sectors, such as know-your-customer rules and export restrictions for chemical and pharmaceutical producers and vendors, and to investigate those that violate rules.	Producer	Low	Medium/long	Medium/high	Lacking paper trails, best practices, and rules that limit unlawful exportation allow continued production.	The PRC might be reluctant to undertake robust oversight over large and profitable industries.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
4.5.4. Lobby the PRC to adopt export controls on machinery and other equipment used for the manufacture of counterfeit tablets, in line with Article 13 of the 1988 UN Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances.	Producer, processor	Low	Medium/long	Medium/low	The PRC does not regulate equipment or machinery used in the manufacture of tablets.	The PRC might be reluctant to undertake robust oversight over large and profitable industries. Controls over machinery might be easy to circumvent.
4.5.5. Improve information reporting and exchange within the PRC on chemical exports.	Producer	Low	Medium	Medium	Chemical export reporting is limited, as is information-sharing with North American partners.	The PRC might be reluctant to undertake robust oversight over large and profitable industries.
4.5.6. Enhance and expand FDA's cooperation with PRC counterparts and increase the number of FDA personnel stationed in the PRC.	Producer	Medium	Medium/long	Medium	U.S. regulatory officials have little insight into industries in the PRC, and technical assistance and other tools need to be enhanced through additional support from the United States.	Effectiveness of this action is constrained by the extent to which the PRC is willing to cooperate.
4.5.7. Support the PRC with improvements to screening at ports of exit.	Producer, exporter	Low/medium	Medium/long	Medium	Constrained capacity to screen at ports of exit limits the deterrent effect of new rules.	In addition to reliance on the PRC's willingness to cooperate, the effectiveness of this action also relies on progress in strengthening the regulatory oversight in the PRC.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Other countries						
4.6. Expand engagement with other countries to facilitate information-sharing and promotion of best practices to reduce supply and demand of illegally manufactured synthetic opioids, especially in countries most likely to experience such problems in the near future.						
4.6.1. Enhance information-sharing partnerships with other partner nations focused on law enforcement intelligence sharing and support for investigations.	Producer	Low	Medium/long	Medium	Other countries might present opportunities for the illegal manufacture of synthetic opioids and other precursor chemicals. Identifying and closing vulnerabilities remain.	Information-sharing among law enforcement officials is hampered by long-standing administrative, regulatory, and cultural factors (this applies domestically as well as internationally).
4.6.2. Expand engagement with other countries to avoid expansion of illegal manufacturing of synthetic opioids and encourage other potential sources of precursors to adopt similar controls over chemicals.	Producer	Low/medium	Medium/long	Medium/high	India and Myanmar are potential emerging sources of fentanyl and related precursors. Identifying and closing vulnerabilities remain.	Effectiveness depends on partner nations' openness to cooperation and recognition of the potential problem. The United States will need to monitor this factor into the future.
4.6.3. Promote and fund evidence-based demand-reduction best practices and interventions abroad aimed at synthetic opioids.	User	Medium	Medium	Low	The insufficiency of demand-reduction strategies and funds in partner nations, including Mexico, increases the risk of this problem getting worse. Further, demand elsewhere facilitates supply.	Overseas demand-reduction programs need to be culturally sensitive and could face barriers to implementation.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
Pillar 5: Research and monitoring						
5.1. Direct federal efforts to improve understanding of the illegal supply of synthetic opioids.						
5.1.1. Adopt a scientific, timely, and methodological approach to analyzing the illegal supply of synthetic opioids and related chemicals.	All	Low	Medium	Low/medium	Understanding of illegal drug markets in the United States and the nature of the synthetic opioid challenge is limited.	This requires coordination across multiple agencies and implementation of several other enabling actions.
5.1.2. Increase resources for national-level collection and analysis of intelligence on foreign illegal manufacturing of synthetic opioids and the production of strategic insights to policymakers and other partners.	Producer	Medium	Medium	Medium	Intelligence collection is more recently directed to this problem.	Intelligence collection is difficult and can take time to produce results. Challenges to information-sharing need to be overcome.
5.1.3. Incentivize state and local laboratories to report to NFLIS and strengthen reporting standards.	Producer, wholesaler, retailer	Low/medium	Medium	Medium/high	Variations in reporting requirements and protocols can bias measures.	Successful implementation requires cooperation by participating laboratories, which could be difficult to elicit and require additional grant funding.
5.1.4. Expand the use of retail drug market monitoring and increase the focus on illegal transactions of synthetic opioids.	Producer, wholesaler, retailer	Low/medium	Short	Medium/high	Limited collection of acquisitions that involve fentanyl or other synthetic opioids prevents a more robust understanding of the market.	This requires investment in data-collection efforts that are essential for understanding drug markets but not strictly necessary for case investigations.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
5.1.5. Increase support for DEA's Special Testing and Research Laboratory and expand the capacity of its FSPP.	Producer, processor, wholesaler, retailer	Low/medium	Medium	High	DEA labs face resource challenges.	This requires investment in data-collection efforts that are essential for understanding drug markets but not strictly necessary for case investigations. DEA needs to hire qualified personnel.
5.1.6. Consolidate reporting of seizure data involving synthetic opioids specifically, but new psychoactive substances more generally, across governmental agencies.	Importer, wholesaler, retailer	Low/medium	Medium	Medium/high	Seizure data are scattered across agencies, and events are sometimes double counted, making it difficult to assess the problem from a more complete perspective.	This requires coordination across a multitude of agencies; it risks degradation and disuse without sustained support.
5.2. Analyze emergent trends in drug markets and other related behaviors using a systematic and standardized approach.						
5.2.1. Develop and promote the adoption of national forensic standards.	User	Medium	Medium	Medium	Different reporting requirements and standards across jurisdictions prevent getting a more complete picture of the problem.	Implementation of developed standards could require financial and technical assistance efforts to increase uptake.
5.2.2. Provide greater granularity and timeliness in overdose death reporting.	User	Low/medium	Short	Medium/high	ICD-10 codes are not reported with sufficient granularity to understand the specific synthetic opioid involved.	This could require financial and technical assistance efforts to encourage compliance.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
5.2.3. Expand access to existing data by researchers, state and local government, and other interested stakeholders.	Importer, wholesaler, retailer, user	Low/medium	Long	Medium/low	Limited availability of data impedes research into the problem.	This requires coordination across a multitude of agencies and organizations. It might require additional data protection and privacy rules.
5.3. Utilize novel, high-frequency, and real-time systems to enhance market surveillance.						
5.3.1. Establish a national early-warning system.	Producer, wholesaler, retailer, user	Medium	Medium	High	Grant-based early-warning systems could face challenges in renewal and long-term commitments of partners.	This requires effective coordination across agencies and continued ownership to promote uptake and prevent degradation.
5.3.2. Introduce a network of sites with regular wastewater analysis.	User	Low/medium	Medium	High	The United States does not utilize wastewater testing to alert to early trends.	Scaling monitoring nationwide could take time to implement.
5.3.3. Resuscitate and expand ADAM.	User	Low/medium	Medium	Medium/high	Discontinuance of ADAM limited insights into emerging drug trends.	The program has historically struggled to secure sustained funding.
5.3.4. Establish a nationwide ED urinalysis network and expand DAWN.	User	Medium	Medium	Medium/high	Discontinuance of DAWN limited insights into emerging drug trends.	Hospital participation is difficult to obtain and maintain.

Action	Market-Level Focus	Anticipated Fiscal Impact	Time Frame for Implementation	Prioritization of Expected Impact	Gap or Vulnerability Addressed	Challenge
5.3.5. Enhance qualitative work with market participants.	User	Medium	Medium	Medium	Research into market participants to gauge behavioral changes or decisionmaking is limited.	It might be very difficult to generate insights from people involved in drug distribution at echelons above the street level. Obtaining funding for research on criminal behaviors is difficult.
5.3.6. Have NIDA research drug-checking services and other harm-reduction surveillance tools.	Retailer, user	Low/medium	Medium	Medium/low	The United States does not have research efforts to examine novel harm-reduction tools and how they can be leveraged to understand developments in markets.	Drug-checking services and other harm-reduction services can run into legal opposition, preventing or delaying implementation; this action's success requires the support of local law enforcement.

ABBREVIATIONS

ADAM	Arrestee Drug Abuse Monitoring
AED	advance electronic data
AML	anti–money laundering
4-AP	4-anilinopiperidine
B2B	business to business
CBP	U.S. Customs and Border Protection
CDC	Centers for Disease Control and Prevention
Cofepris	Comisión Federal para la Protección contra Riesgos Sanitarios, or Federal Commission for the Protection Against Sanitary Risks
COVID-19	coronavirus disease 2019
DAWN	Drug Abuse Warning Network
DEA	U.S. Drug Enforcement Administration
DHS	U.S. Department of Homeland Security
DOJ	U.S. Department of Justice
DOL	U.S. Department of Labor
ECC	express consignment carrier
ED	emergency department
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EU	European Union
FDA	Food and Drug Administration
FIU	financial intelligence unit
FSPP	Fentanyl Signature Profiling Program
FTS	fentanyl test strip
FY	fiscal year
GAO	U.S. Government Accountability Office
HHS	U.S. Department of Health and Human Services
IC	Intelligence Community
ICD-10	International Classification of Diseases, tenth edition
INCB	International Narcotics Control Board
ISSL	international special surveillance list
MT	metric ton

NFLIS	National Forensic Laboratory Information System
NIDA	National Institute on Drug Abuse
NIH	National Institutes of Health
NMPA	National Medical Products Administration
OEND	overdose education and naloxone distribution
ONDCP	Office of National Drug Control Policy
OUD	opioid-use disorder
POE	port of entry
PRC	People's Republic of China
SAMHSA	Substance Abuse and Mental Health Services Administration
SEDENA	Secretaría de la Defensa Nacional, or Secretariat of National Defense
SEMAR	Secretaría de Marina, or Secretariat of the Navy
SSP	syringe service program
SUD	substance-use disorder
TCO	transnational criminal organization
UN	United Nations
UNODC	United Nations Office on Drugs and Crime
USPS	U.S. Postal Service
WCO	World Customs Organization
WHO	World Health Organization

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EXHIBIT 46

APRIL 25, 2023

Banking Committee Introduces Bipartisan Bill to Address the Fentanyl Crisis

The leaders of the Senate Committee on Banking, Housing, and Urban Affairs today introduced the bipartisan ***Fentanyl Eradication and Narcotics Deterrence (FEND) Off Fentanyl Act***, a sanctions and anti-money laundering bill aimed at combatting the country's fentanyl crisis by targeting the illicit fentanyl supply chain, from the chemical suppliers in China to the cartels that traffic the drugs in from Mexico. By strengthening current law and directing the Treasury Department to target, sanction, and block the financial assets of transnational criminal organizations, the *FEND Off Fentanyl Act* aims to stop the flow of deadly fentanyl into our country by choking off the income source of those who traffic in synthetic opioids.

The bill was introduced by Ranking Member Tim Scott (R-S.C.) and Chairman Sherrod Brown (D-Ohio) and cosponsored by the leaders of the Senate Committee on Armed Services, Chairman Jack Reed (D-R.I.) and Ranking Member Roger Wicker (R-M.S.).

"Fentanyl takes the lives of far too many young Americans, stripping a whole generation of the opportunity to contribute to their communities and achieve their dreams. This legislation takes decisive action to cut off the deadly flow of fentanyl at the source. By using the full weight of America's economic power and directing the Treasury Department to make addressing this crisis a

priority, this bill will restore hope for communities suffering from this deadly drug," said Senator Scott, Ranking Member of the Senate Committee on Banking, Housing, and Urban Affairs.

"The addiction crisis has taken too many lives and caused too much devastation in Ohio and around the country — and so often illicit fentanyl is the culprit. In roundtables and conversations with Ohio communities on the frontlines of this fight, I hear over and over that we need new, more powerful tools to prevent the flow of fentanyl into our neighborhoods.
This bipartisan bill will add effective new sanctions to target the illicit fentanyl supply chain, from China through Mexico, to help stop increasingly dangerous forms of this drug before they ever reach our communities," said Senator Brown, Chairman of the Senate Committee on Banking, Housing, and Urban Affairs.

"The fentanyl crisis didn't happen overnight, and it's going to take a strategic, multi-pronged approach to disrupt fentanyl traffickers, including stronger counternarcotics enforcement, demand reduction initiatives, and expanded access to lifesaving treatment. This bill would provide new tools to disrupt and sanction fentanyl traffickers and go after their supply chains and money laundering operations. It would enhance coordinated interdiction efforts and help reduce the flow of this poison into our communities," said Senator Reed, Chairman of the Senate Committee on Armed Services and a senior member of the Banking Committee.

"Tens of thousands of Americans are dying each year from fentanyl that has been trafficked into this country by Mexican cartels and manufactured using materials from Communist China. This measure would directly target the criminals and organizations that are empowering the fentanyl trade and endangering our national security," said Senator Wicker, Ranking Member of the Senate Committee on Armed Services.

BACKGROUND

The United States is facing the worst drug crisis in history. In 2021, nearly 107,000 Americans died from an overdose, and 65% of overdose deaths were caused by fentanyl. Last year, the Drug Enforcement Administration seized over 379 million deadly doses of fentanyl - enough to supply a lethal dose to every American. Given the sharp increase in fentanyl-caused deaths, it is clear that a staggering amount of fentanyl is making its way into our country from the chemical suppliers in the People's Republic of China (PRC) and drug cartels in Mexico.

The *FEND Off Fentanyl Act* is a sanctions and anti-money laundering bill to help combat the country's fentanyl crisis by targeting opioid traffickers devastating America's communities. The bill will enhance current law so U.S. government agencies can more effectively disrupt illicit opioid supply chains and penalize those facilitating the trafficking of fentanyl. The bill also ensures that sanctions are imposed not only on the illicit drug trade, but also on the money laundering that makes it profitable.

For more information, read the one-pager **here**.

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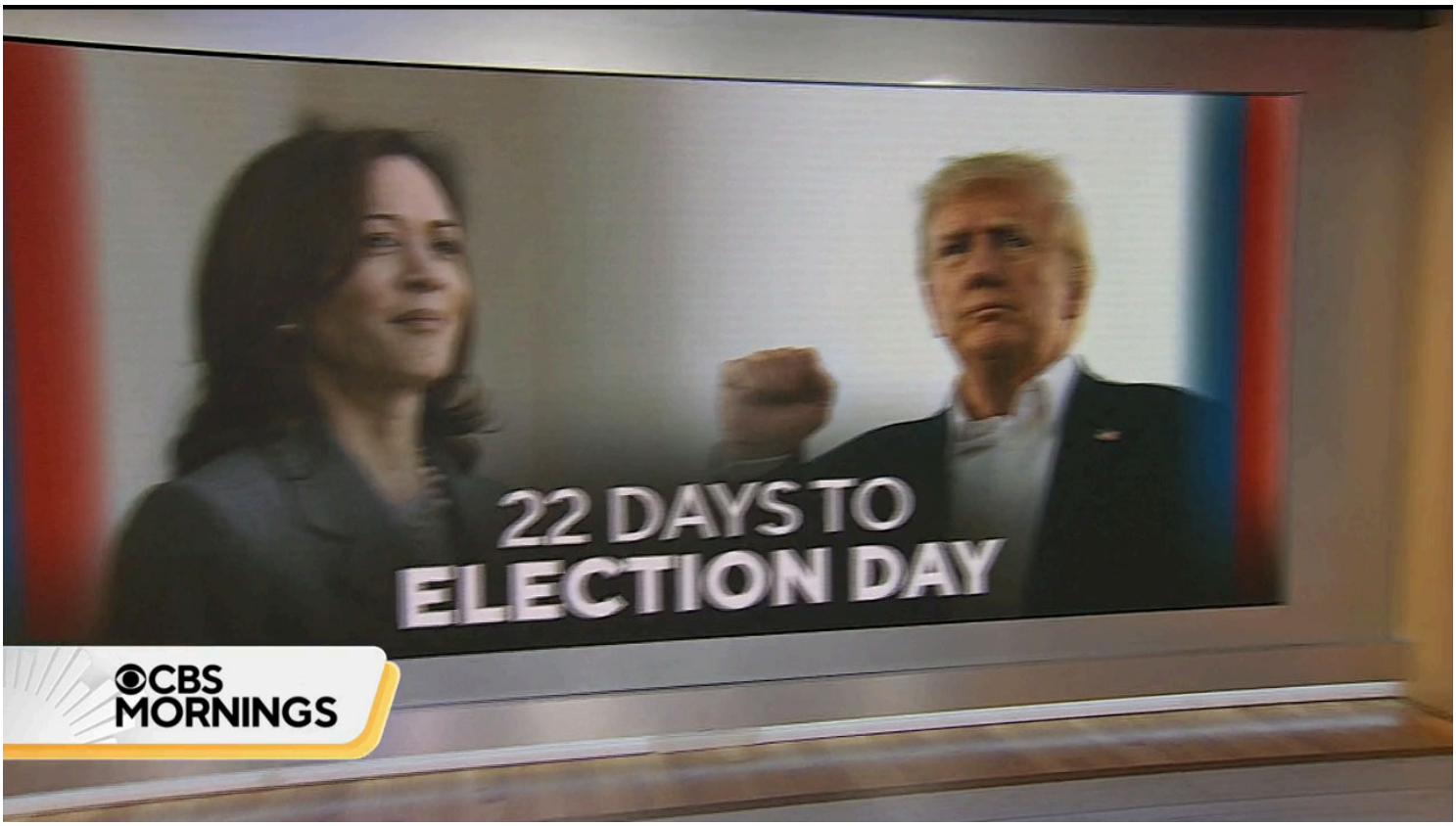
EXHIBIT 47

POLITICS

Joni Ernst says China is "intentionally poisoning" Americans amid fentanyl crisis

By **Caitlin Yilek**
February 10, 2023 / 9:21 PM EST / CBS News



Republican Sen. Joni Ernst accused China of "intentionally poisoning" Americans by not stopping the supply

uthern border as part of a congressional delegation – also
the precursor chemicals – the ingredients needed to
e tacit approval of the Chinese Communist Party.

"I think that the Chinese are intentionally poisoning America," she said, saying the assessment is based on briefings that she has received. "And of course, the Chinese don't want to assist us with this."

"When we see an adversary like China poisoning our communities, it's very disconcerting," she added. "So we have to educate the American people. We have to work with our Mexican counterparts to push back against the cartel and the Chinese. We can't continue to lose our youth to this fentanyl epidemic. It is extremely important that we push back."

The Drug Enforcement Administration has called on the Chinese government to crack down on the supply chain networks. U.S. officials say China is the leader in sending precursor chemicals, with many of them ending up in Mexico.

"There's a relationship between these Chinese chemical companies and the criminal cartels in Mexico," DEA administrator Anne Milgram told CBS News last year.

In 2022, the Drug Enforcement Administration seized enough fentanyl to kill every American – more than 50 million fentanyl-laced pills and over 10,000 pounds of fentanyl powder.

Most fentanyl is being smuggled into the U.S. along its southern border, though smaller amounts are smuggled via air from China.

who supply the drug, and more resources to support
as well as cameras.

bassy in Washington, D.C., called the characterization
n problems instead of shifting the blame."

More from CBS News

U.S. investigating China-backed hack of telecom companies. Here's what to know.

Alejandro Mayorkas says election disinformation is "extremely damaging"

Trump campaign requested use of military aircraft for final stage of campaign

Woman who tried to smuggle 29 turtles into Canada pleads guilty

In: Mexico Fentanyl China Joni Ernst

Caitlin Yilek

Caitlin Yilek is a politics reporter at CBSNews.com, based in Washington, D.C. She previously worked for the Washington Examiner and The Hill, and was a member of the 2022 Paul Miller Washington Reporting Fellowship with the National Press Foundation.

Twitter

EXHIBIT 48

As a Democrat and a Republican, we are united in warning China's Xi on fentanyl, fair trade

We made it clear to Xi that Americans must be given a fair chance to succeed in China

By **Sen. Bill Cassidy** , **Sen. Maggie Hassan** **Fox News**

Published October 27, 2023 8:00am EDT

John Kirby on whether Biden considers Iran, Russia, China an 'axis of evil'

Coordinator for Strategic Communications at the National Security Council John Kirby tells 'The Story' that China, Russia, Iran and North Korea present 'unique' sets of threats to the U.S.

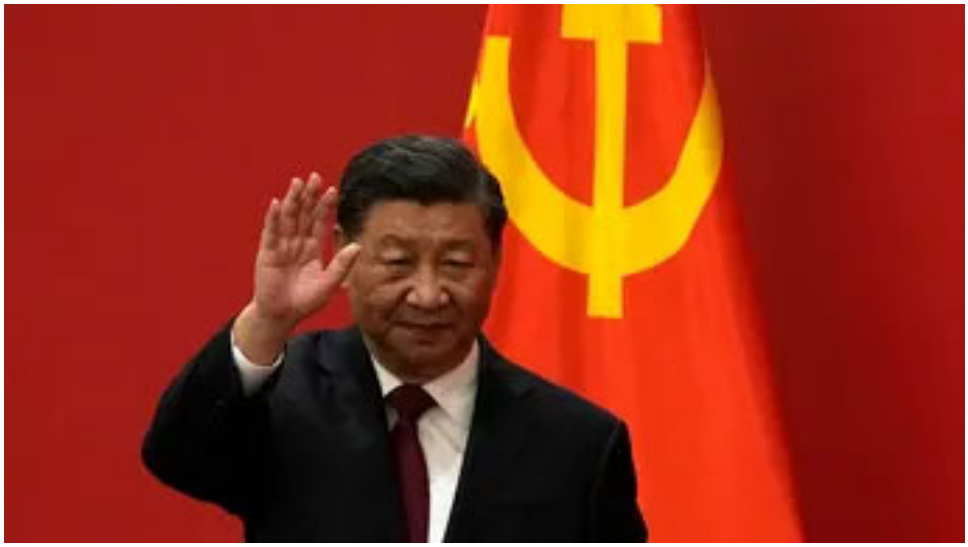
It's not difficult for Republicans and Democrats to find common ground on China. Congress is united in working to keep our economy strong and Americans safe against the geopolitical threat the Chinese Communist Party (CCP) poses. We recently joined a congressional delegation trip to China to deliver that message to President Xi Jinping in person.

For too long, China has built up its military, undermined the foundations of many of our democratic allies, facilitated the flow of drugs into the U.S., and continued to double down on unfair trade practices to hurt American businesses.

We embarked on this trip, in part, to help manage our relationship with China and to make clear that when it comes to out-competing China, standing up for our country's values, and maintaining our military's cutting edge, Republicans and Democrats are united.

GIANT PANDAS TO LEAVE THE NATIONAL ZOO IN D.C. FOR CHINA EARLIER THAN EXPECTED

When American innovators, entrepreneurs and workers are given a fair chance to succeed, our economy is second to none. In China, we met with American business leaders who stressed the importance of leveling the playing field for U.S. companies who do business in China. Unfortunately, as we know, China engages in unfair and anticompetitive trade practices that target and punish American businesses.



Chinese President Xi Jinping met a bipartisan delegation from the U.S. Senate putting him on notice that Americans expect fair treatment China's markets. FILE: Xi waves at an event to introduce new members of the Politburo Standing Committee at the Great Hall of the People in Beijing on Oct. 23, 2022. (AP Photo/Andy Wong, File)

We made clear to Xi that we will not stand for these unfair tactics. And now that we're home, we will keep pushing for our bipartisan bill, the Strengthen American Competitiveness Against Harmful Subsidies Act, to ensure that our country is proactively monitoring and addressing China's use of industrial subsidies and rampant pollution, which undercut U.S. competitiveness.

Maintaining our country's economic edge is not only vital for American businesses, it is also in our national security interest. We were proud to help develop and pass the bipartisan CHIPS and Science Act, which kick-started the production of more semiconductors and other critical technologies — including defense technologies — here in America.

CLICK HERE FOR MORE FOX NEWS OPINION

The CCP currently controls over 60% of the world's semiconductor production. Securing semiconductor supply chains outside the CCP's reach is vital to our national security and creates American jobs.

The CCP is also responsible for the overwhelming majority of the world's fentanyl precursor production, which has fueled the fentanyl crisis in the U.S. We pressed Xi and CCP leaders to crack down on the illicit trafficking of these precursor chemicals. While Xi said he was open to working on this, he needs to actually follow through with action. We must do everything we can to cut these deadly drugs off right at the source.

> **When American innovators, entrepreneurs and workers are given a fair chance to succeed, our economy is second to none. In China, we met with American business leaders who stressed the importance of leveling the playing field for U.S. companies who do business in China. Unfortunately, as we know, China engages in unfair and anticompetitive trade practices that target and punish American businesses.**

Lastly, the events of recent weeks have reminded us that there is no replacement for strong American leadership. The CCP has demonstrated a willingness not only to continue to deny freedoms in its own country but also to find common cause with autocracies around the world.

As Russian President Vladimir Putin continues to wage war against Ukraine, as Iran funds terrorism and as Hamas launches horrific attacks on our ally Israel, the CCP is watching to see if Americans are still willing to oppose evil, stand by our allies and defend democracy.

By building on the bipartisan progress that we have made on this trip, we have an opportunity to show that the American people will not waver in our determination to defend

freedom and outcompete China. We can show the world that even though the American people do not always agree on everything, we will always remain united when confronting adversaries like China.

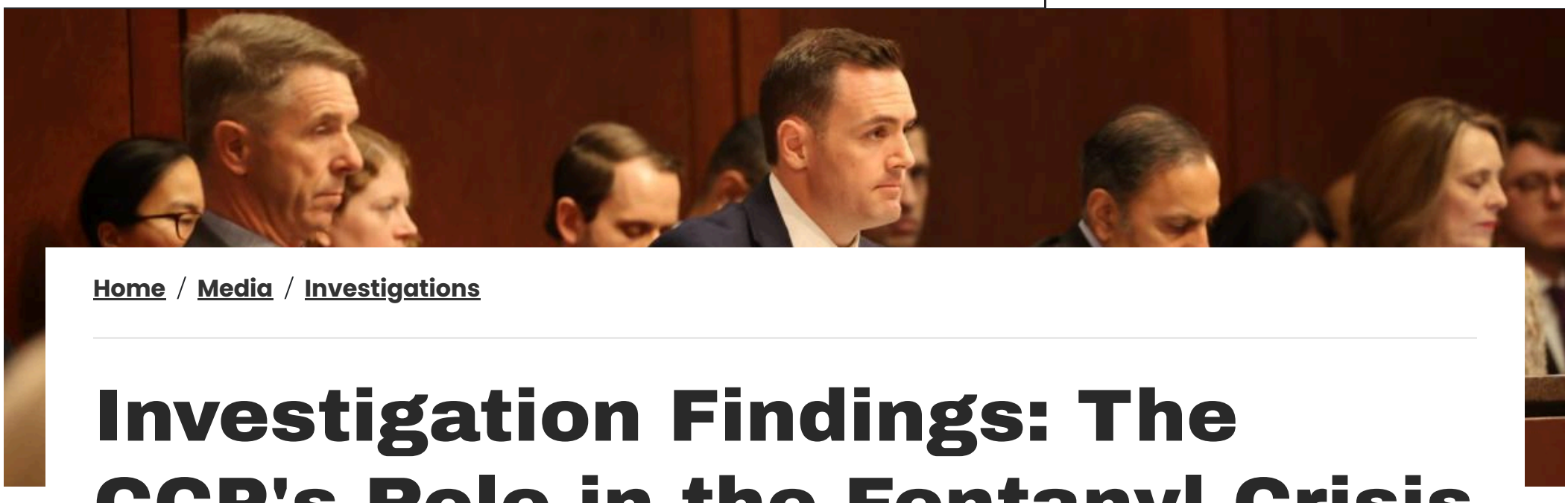
CLICK HERE TO READ MORE FROM SEN. BILL CASSIDY

CLICK HERE TO READ MORE FROM SEN. MAGGIE HASSAN

Democrat Maggie Hassan represents New Hampshire in the United States Senate. She served as governor of New Hampshire from 2013 to 2017.

Bill Cassidy, a physician, was elected to the U.S. Senate as a Republican representing Louisiana in 2014 and earlier served for six years in the U.S. House.

EXHIBIT 49



Investigation Findings: The CCP's Role in the Fentanyl Crisis

April 16, 2024 · Investigations

*WATCH: Video summary of the Select Committee's findings on the CCP's role in the American fentanyl epidemic. (Click **HERE** for a transcript of the video)*

Select Committee Investigates: The CCP's Role in the Fentanyl Crisis

WASHINGTON, D.C. — Following a months-long investigation, Chairman Mike Gallagher (R-WI) and Ranking Member Raja Krishnamoorthi (D-IL) of the House Select Committee on the Strategic Competition Between the United States and the Chinese Communist Party revealed their **findings** of the Chinese Communist Party's role in the deadly fentanyl epidemic that has killed hundreds of thousands of Americans.

The fentanyl crisis is one of the most horrific disasters that America has ever faced. On average, fentanyl kills over 200 Americans daily, the equivalent of a packed Boeing 737 crashing every single day. Fentanyl is the leading cause of death for Americans aged 18-45 and a leading cause in the historic drop in American life expectancy. It has led to millions more suffering from addiction, and the destruction of countless families and communities. Beyond the United States, fentanyl and other mass-produced synthetic narcotics from the People's Republic of China (PRC) are devastating nations around the world. It is truly a global crisis.

The PRC, under the leadership of the Chinese Communist Party (CCP), is the ultimate geographic source of the fentanyl crisis. Companies in China produce nearly all of illicit fentanyl precursors, the key ingredients that drive the global illicit fentanyl trade. The House Select Committee on the Strategic Competition between the United States and the Chinese Communist Party (Select Committee) launched an investigation to better understand the role of the CCP in the fentanyl crisis.

This investigation involved delving deep into public PRC websites, analyzing PRC government documents, acquiring over 37,000 unique data points of PRC companies selling narcotics online through web scraping and data analytics, undercover communications with PRC drug trafficking companies, and consultations with experts in the public and private sectors, among other steps.

The Select Committee's investigation has established that the PRC government, under the control of the CCP:

- **Directly subsidizes the manufacturing and export of illicit fentanyl materials and other synthetic narcotics through tax rebates.** Many of these substances are illegal under the PRC's own laws and have no known legal use worldwide. Like its export tax rebates for legitimate goods, the CCP's subsidies of illegal drugs incentivizes international synthetic drug sales from the PRC. The CCP never disclosed this program.

- **Gave monetary grants and awards to companies openly trafficking illicit fentanyl materials and other synthetic narcotics.** There are even examples of some of these companies enjoying site visits from provincial PRC government officials who complimented them for their impact on the provincial economy.

- **Holds ownership interest in several PRC companies tied to drug trafficking.** This includes a PRC government prison connected to human rights abuses owning a drug trafficking chemical company and a publicly traded PRC company hosting thousands of instances of open drug trafficking on its sites.

- **Fails to prosecute fentanyl and precursor manufacturers.** Rather than investigating drug traffickers, PRC security services have not cooperated with U.S. law enforcement, and have even notified targets of U.S. investigations when they received requests for assistance.

- **Allows the open sale of fentanyl precursors and other illicit materials on the extensively monitored and controlled PRC internet.** A review of just seven e-commerce sites found over 31,000 instances of PRC companies selling illicit chemicals with obvious ties to drug trafficking. Undercover communications with PRC drug trafficking companies (whose identities were provided to U.S. law enforcement) revealed an eagerness to engage in clearly illicit drug sales with no fear of reprisal.

- **Censors content about domestic drug sales, but leaves export-focused narcotics content untouched.** The PRC has censorship triggers for domestic drug sales (*e.g.*, "fentanyl + cash on delivery"), but no such triggers exist to monitor or prevent the export of illicit narcotics out of the PRC.

- **Strategically and economically benefits from the fentanyl crisis.** The fentanyl crisis has helped CCP-tied Chinese organized criminal groups become the world's premier money launderers, enriched the PRC's chemical industry, and has had a devastating impact on Americans.

While the PRC government publicly acknowledged in November 2023 that the trafficking of fentanyl precursors and other illicit narcotics materials in the manner described above is illegal under Chinese law, the Select Committee found thousands of PRC companies openly selling these illicit materials on the Chinese internet—the most heavily surveilled country-wide network in the world. The CCP runs the most advanced techno-totalitarian state in human history that "leave[s] criminals with nowhere to hide" and has the means to stop illicit fentanyl materials manufacturers, yet it has failed to pursue flagrant violations of its own laws.

Armed with the knowledge gained in the course of this investigation, the report finds that the United States should:

- **Establish a Joint Task Force – Counter Opioids (JTF-CO)** that concentrates all non-military elements of state power and executes a coordinated strategy to target the weak points in the global illicit fentanyl supply chain.

- **Provide law enforcement and intelligence officials with the statutory authorities, tools, and resources they need** to execute their responsibilities, including through enhancing international law enforcement cooperation, appropriately prioritizing fentanyl and anti-money laundering in intelligence and enforcement efforts; and recruiting and retaining top talent to combat the fentanyl threat.

- **Strengthen U.S. sanctions authorities** and use those authorities in an aggressive and coordinated manner against entities involved in the fentanyl trade.

- **Enact and use trade and customs enforcement measures** to restrict fentanyl trafficking; and

- **Close regulatory and enforcement gaps** exploited by PRC money launderers and fentanyl traffickers.

READ THE FULL REPORT **HERE**.

Read Chairman Gallagher's opening remarks **HERE** and the opening video script **HERE.**

Read former Attorney General William P. Barr's prepared testimony **HERE**.

Read former DEA Chief of Operations Ray Donovan's prepared testimony **HERE**.

Read Mr. David Luckey's prepared testimony **HERE**.

Biosecurity **CCP Economic Aggression** **CCP International Influence**

Committee Activity

Events

Hearings

Business Meetings

Committee Travel

Investigations

Calendar

Internal Events

EXHIBIT 50

Drug Enforcement Administration

NDTA

National Drug Threat Assessment 2024

U.S. Department of Justice
Drug Enforcement Administration

UNCLASSIFIED
MAY 2024 / DEA-DCT-DIR-010-24

This product was prepared by DEA's Strategic Intelligence Section. Comments and questions may be addressed to the Office of Intelligence Programs at DEA.IntelligenceProducts@dea.gov. For media/press inquiries call (571) 776-2508.

LETTER FROM THE ADMINISTRATOR

It is my privilege to present the 2024 National Drug Threat Assessment (NDTA), a comprehensive strategic assessment of illicit drug threats endangering the United States. The NDTA is an intelligence assessment produced by the Drug Enforcement Administration's (DEA) Intelligence Program.

DEA's goal in publishing the NDTA is to save American lives by raising awareness and understanding of these threats.

This annual assessment provides law enforcement agencies, policy makers, and prevention and treatment specialists with essential intelligence to assist in establishing law enforcement priorities, formulating counterdrug policies, and allocating resources. The NDTA also serves as a critical tool for informing and educating the public about the current drug threats.

The 2024 NDTA highlights the dangerous shift from plant-based drugs to synthetic drugs. This shift has resulted in the most dangerous and deadly drug crisis the United States has ever faced. These synthetic drugs, such as fentanyl and methamphetamine, are responsible for nearly all of the fatal drug poisonings in our nation.

The Sinaloa and Jalisco Cartels are at the heart of this crisis. These two Cartels are global criminal enterprises that have developed global supply chain networks. They rely on chemical companies and pill press companies in China to supply the precursor chemicals and pill presses needed to manufacture the drugs. They operate clandestine labs in Mexico where they manufacture these drugs, and then utilize their vast distribution networks to transport the drugs into the United States. They rely on associates in the United States to distribute the drugs at a retail level on the streets and on social media. Finally, the Cartels utilize Chinese Money Laundering Organizations to move their profits from the United States back to Mexico. Drug trafficking organizations based in Mexico and South America are increasingly utilizing China based underground banking systems as their primary money laundering mechanism.

In response to these threats, the DEA has acted urgently to target the criminal networks responsible for the influx of synthetic drugs into the United States. Our efforts include launching three Counterthreat Teams to execute a network-focused operational strategy. DEA's efforts also include enforcement operations such as Operation Overdrive, which targets violent individuals in our communities, and Operation OD Justice, which partners with local law enforcement to investigate fatal drug poisonings.

As the lead law enforcement agency in the Administration's whole-of-government response to defeat the Cartels and combat the drug poisoning epidemic in our communities, DEA will continue to collaborate on strategic counterdrug initiatives with our law enforcement partners across the United States and the world.

DEA will never stop working to protect our public safety, health, and national security.

Sincerely,

Anne Milgram
Administrator

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Fentanyl[1] is the deadliest drug threat the United States has ever faced, killing nearly 38,000 Americans in the first six months of 2023 alone. Fentanyl and other synthetic drugs, like methamphetamine, are responsible for nearly all of the fatal drug overdoses and poisonings in our country.[2] In pill form, fentanyl is made to resemble a genuine prescription drug tablet, with potentially fatal outcomes for users who take a pill from someone other than a doctor or pharmacist. Users of other illegal drugs risk taking already dangerous drugs like cocaine, heroin, or methamphetamine laced or replaced with powder fentanyl. Synthetic drugs have transformed not only the drug landscape in the United States, with deadly consequences to public health and safety; synthetic drugs have also transformed the criminal landscape in the United States, as the drug cartels who make these drugs reap huge profits from their sale.

Mexican cartels profit by producing synthetic drugs, such as fentanyl (a synthetic opioid) and methamphetamine (a synthetic stimulant), that are not subject to the same production challenges as traditional plant-based drugs like cocaine and heroin – such as weather, crop cycles, or government eradication efforts. Synthetic drugs pose an increasing threat to U.S. communities because they can be made anywhere, at any time, given the required chemicals and equipment and basic know-how. Health officials, regulators, and law enforcement are constantly challenged to quickly identify and act against the fentanyl threat, and the threat of new synthetic drugs appearing on the market. The deadly reach of the Mexican Sinaloa and Jalisco cartels into U.S. communities is extended by the wholesale-level traffickers and street dealers bringing the cartels' drugs to market, sometimes creating their own deadly drug mixtures, and exploiting social media and messaging applications to advertise and sell to customers.

The Sinaloa Cartel and the Cartel Jalisco Nueva Generación (also known as CJNG or the Jalisco Cartel) are the main criminal organizations in Mexico, and the most dangerous. They control clandestine drug production sites and transportation routes inside Mexico and smuggling corridors into the United States and maintain large network "hubs" in U.S. cities along the Southwest Border and other key locations across the United States. The Sinaloa and Jalisco cartels are called "transnational criminal organizations" because they are not just drug manufacturers and traffickers; they are organized crime groups, involved in arms trafficking, money laundering, migrant smuggling, sex trafficking, bribery, extortion, and a host of other crimes – and have a global reach extending into strategic transportation zones and profitable drug markets in Europe, Africa, Asia, and Oceania.

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[1] This and other uses of "fentanyl" and "illicit fentanyl" throughout this report refer strictly to the fentanyl manufactured by criminal organizations, and not to the pharmaceutical fentanyl used in clinical settings or prescribed by a doctor.

[2] According to the Centers for Disease Control and Prevention (CDC), synthetic opioids were involved in 74,225 deaths in 2022 – 68 percent of the total 111,036 deaths that year – and psychostimulants, the class of drugs that includes methamphetamine, were involved in 31 percent of the overall deaths. Provisional CDC data for January-June 2023 shows that nearly 38,000 people died as the result of a synthetic opioid (usually fentanyl) overdose or poisoning in the first six months of the year.

THE CARTELS' GLOBAL NETWORKS FUEL DRUG DEATHS IN THE UNITED STATES

The Sinaloa and Jalisco cartels command worldwide organized criminal networks that all play a role in producing and delivering fentanyl, methamphetamine, and other illicit drugs by the ton. [Note: "Fentanyl" and "illicit fentanyl" are used interchangeably in this report to refer only to illegal fentanyl manufactured by criminal organizations, not to legitimate fentanyl preparations used in clinical settings or prescribed by doctors.] They operate extensive global supply chains, from precursor chemicals to production facilities, and direct a complex web of conspirators that includes international shippers, cross-border transporters, corrupt officials, tunnel builders, shell companies, money launderers, and others. The scope of the Sinaloa and Jalisco cartels' control over each segment of the criminal drug trade has effectively eliminated any competition in U.S. markets, and enabled cartel members to establish a presence in every U.S. state (see Figure 1).

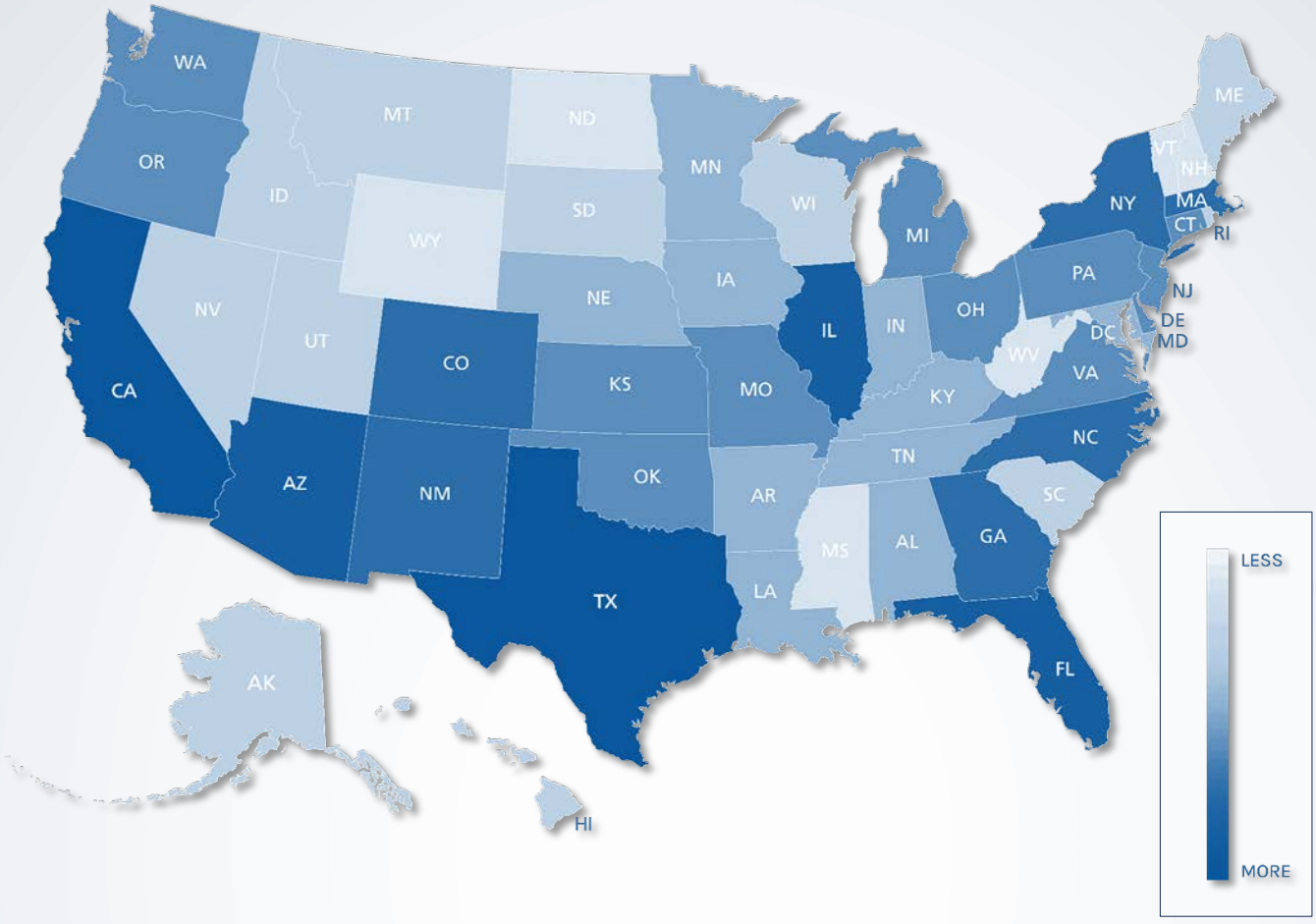
Together, the Sinaloa and Jalisco cartels have caused the worst drug crisis in U.S. history. They dictate the flow of nearly all illicit drugs into the United States, and their dominance over the synthetic drug trade in particular is evident in the relentless stream of illicit fentanyl and methamphetamine crossing the border toward U.S. markets. The ease and low cost of producing these drugs on a large scale in Mexico makes them highly profitable. The crystal methamphetamine peddled by the cartels is more potent and cheaper than at any other time in the past decade. In addition, the cartels deliberately market illicit fentanyl in pill form to mimic trademarked prescription medications; as a result, many Americans are buying and consuming illegal drugs they believe to be legitimate prescription drugs. Drug sales are enabled by encrypted and open messaging applications and social media, used by cartel members and street dealers alike to advertise, arrange delivery, and get paid quickly, all on a single device, and with minimal exposure. Combined, these factors make detection harder and fuel drug poisonings in the United States at the hands of the Sinaloa and Jalisco cartels.

United States Justice Department Announces Indictments against Sinaloa Cartel Leaders in the Southern District of New York, Northern District of Illinois, and District of Columbia

On April 14, 2023, the U.S. Department of Justice announced wide-ranging charges against several leaders of the Sinaloa Cartel and its facilitators across the globe, including chemical suppliers, cartel enforcers, money launderers, and cartel leaders. Since the arrest and conviction of Joaquin "El Chapo" Guzman-Loera, the Sinaloa Cartel has operated as a loose affiliation of drug traffickers intertwined through long-standing business associations, marriage, and friendships. The Sinaloa Cartel's current leaders include Ismael "El Mayo" Zambada-Garcia; Aurelio "El Guano" Guzman-Loera, the brother of El Chapo; Rafael Caro-Quintero, currently incarcerated in Mexico, and a cofounder of the former Guadalajara Cartel, a forerunner of Sinaloa Cartel; and El Chapo's four sons, known collectively as "Los Chapitos": Ivan Guzman-Salazar, Alfredo Guzman-Salazar, Joaquin Guzman-Lopez, and Ovidio Guzman-Lopez. Ovidio Guzman-Lopez was arrested on January 5, 2023, by Mexican authorities in Culiacan, Sinaloa, Mexico and extradited to the United States in September 2023. The other three brothers are fugitives in Mexico charged in multiple U.S. indictments.

Figure 1: Mexican Cartel Presence in the United States

MEXICAN CARTELS IN ALL 50 STATES



Source: DEA, March 2022 - 2024

SINALOA CARTEL

OVERVIEW

The Sinaloa Cartel is one of Mexico's oldest criminal organizations, and one of the most violent and prolific polydrug-trafficking cartels in the world. They direct the smuggling of fentanyl and other illicit drugs into the United States every day, from smaller packages carried by human "mules" to thousands of pounds co- mingled with legitimate trade goods carried by tractor-trailers. The Sinaloa Cartel wields power through fear, threats, and violence, killing local police, journalists, members of other criminal groups who encroach on their territory without authorization – usually obtained by paying a "piso"[3] – civilian victims "in the wrong place at the wrong time," and even killing their own members for perceived disloyalty, disobedience, or to send a message. The cartel commits crimes to further and protect their drug interests, like bribery, extortion, and weapons trafficking; and they commit crimes for pure profit, such as human smuggling and trafficking. The Sinaloa Cartel has built a mutually profitable partnership with China-based precursor chemical suppliers to obtain the ingredients they need to make synthetic drugs, and with Chinese money laundering organizations (MLOs) to return "clean" drug proceeds to the cartel in Mexico.

LEADERSHIP STRUCTURE: THE SINALOA CARTEL'S UMBRELLA MODEL

The Sinaloa Cartel does not have a leader. Instead, the cartel "umbrella" covers four separate but cooperating criminal organizations. This structure theoretically gives the heads of the independent drug trafficking groups the ability to share resources – like smuggling routes, corrupt contacts, access to illicit chemical suppliers and money laundering networks – without sharing profits or having to answer to a main chain of command. In reality, however, internal power struggles and fluctuating alliances leave the viability of the "umbrella model" in question.

The four organizations are directed by:

- **"Los Chapitos":** The collective name for Ivan Guzman-Salazar, Alfredo Guzman-Salazar, Joaquin Guzman-Lopez, and Ovidio Guzman-Lopez – sons of Joaquin "El Chapo" Guzman- Loera
- **Ismael "El Mayo" Zambada-Garcia:** A co-head of the Sinaloa Cartel for more than three decades
- **Aureliano "El Guano" Guzman-Loera:** Brother of Joaquin "El Chapo" Guzman-Loera
- **Rafael Caro-Quintero**

[3] A piso is a fee or tax imposed by the cartel on local businesses and other criminal groups operating within their territory. A "piso" payment is essentially a form of extortion.

SINALOA CARTEL

LEADERSHIP STRUCTURE CONTINUED

Los Chapitos are four sons of Joaquin "El Chapo" Guzman-Loera, a former leader of the Sinaloa Cartel who is currently serving a life sentence in a U.S. prison. Ovidio Guzman-Lopez was arrested by Mexican authorities in Culiacan, Sinaloa in January 2023. In reaction, Los Chapitos and their loyalists initiated a violent attack against members of the Mexican military and law enforcement using military-grade weaponry, setting fires, and blockading streets and highways. Ovidio Guzman-Lopez was extradited to the United States in September 2023. Los Chapitos are at the center of an internal battle against their father's former partner, Ismael Zambada-Garcia, who has been involved in drug trafficking from Mexico since the 1970s and has co-headed the Sinaloa Cartel for more than 30 years. Furthermore, Ismael Zambada-Garcia is reported to be in poor physical health, leaving the leadership of his faction in question.

Rafael Caro-Quintero was a founder of the original Guadalajara Cartel, and one of the leaders responsible for ordering the kidnapping, torture, and murder of DEA Special Agent Enrique Camarena in 1985. He was sentenced in Mexico to 40 years in prison, but was released under cover of darkness, on procedural grounds, in August 2013 after serving only 28 years of his sentence. That same month, the Government of Mexico issued a warrant for his re-arrest. Rafael Caro-Quintero was finally recaptured in July 2022; since then, Los Chapitos have been fighting his organization (known as the Caborca Cartel) for control of the Sonora desert region, a crucial trafficking route through the Mexican state of Sonora to the Arizona border (see Figure 2).

Figure 2: Map of the Mexican State of Sonora and the Sonora Desert Region

SINALOA CARTEL

FENTANYL

Los Chapitos and the Sinaloa Cartel reap billions of dollars in profits from the fentanyl trade, and pioneered the deadliest drug threat the United States has ever confronted. The Sinaloa Cartel dominates the fentanyl market through its manipulation of the global supply chain and the proliferation of clandestine fentanyl labs in Mexico, a *modus operandi*[4] they developed over a more than 25-year history of manufacturing methamphetamine. The Sinaloa Cartel has been producing bulk quantities of fentanyl since at least 2012, but the Chapitos faction is responsible for pushing the importance of fentanyl to the cartel's "bottom line." Los Chapitos initially established a base of operations for manufacturing illicit fentanyl in the mountains near Culiacan. Now, they control the procurement of precursor chemicals, largely from China, and direct the production of illicit fentanyl from labs hidden in the mountains of Sinaloa and in other Sinaloa Cartel strongholds throughout Mexico. Sinaloa Cartel-controlled laboratories are responsible for introducing fentanyl in fake trademarked pills to the U.S. market, while also churning out thousands of pounds of powder fentanyl every year.

METHAMPHETAMINE

Methamphetamine made by the Sinaloa Cartel is directly contributing to the steep increase in methamphetamine-related poisoning deaths in the United States, which rank second only to deaths caused by fentanyl. Methamphetamine, like fentanyl, is a synthetic drug and the Sinaloa Cartel has capitalized on the cheap production and maintenance costs of manufacturing these drugs in comparison to the costs and risks associated with processing traditional plant-based drugs like heroin and cocaine. For decades, the Sinaloa Cartel has exerted a hold over the global supply apparatus, allowing them to circumvent regulatory and enforcement efforts to halt the flow of chemicals into clandestine drug labs. The multi-tons of methamphetamine produced in Sinaloa Cartel-controlled labs is purer and more potent than at any time in the past. The ample supply, low cost, and high potency has enabled the cartel to expand beyond traditional methamphetamine markets in the western United States into eastern U.S. markets, effectively flooding the United States with another deadly product. Methamphetamine is also the main drug leveraged by the Sinaloa Cartel to enter illicit drug markets in Asia, Australia, and New Zealand, where their profits can be more than 100 times higher than from U.S. sales.

[4] *Modus operandi, in this context, means "the established and recognized means and methods of conducting criminal activities".*

SINALOA CARTEL

PRECURSOR CHEMICALS: THE INGREDIENTS FOR SYNTHETIC DRUGS

Without access to precursor chemicals, the Sinaloa Cartel could not create the fentanyl and methamphetamine responsible for so many American deaths. The Mexican cartels have a long history of defying, skirting, or bribing their way around regulations and outright bans on importing certain precursor chemicals. Despite controls levied by both the Mexican and Chinese governments, the flow of precursor chemicals into Mexico continues unabated. China-based suppliers are still the main source for the precursor chemicals used by the cartels in Mexico to produce illicit fentanyl and methamphetamine, but India is also emerging as a major source country for these chemicals. The Sinaloa Cartel uses a variety of tactics to conceal precursor chemical shipments coming into Mexico, including hiding the chemicals among legitimate commercial goods, mislabeling the containers, using front companies to create the appearance of legitimacy, or shipping through third-party countries. DEA reporting also indicates that the Sinaloa Cartel has contracted with Mexico-based brokers who work independently of any drug cartel to purchase large quantities of fentanyl precursor chemicals directly from China.

OTHER DRUGS

Despite collecting billions of dollars in the illicit synthetic drug trade, the Sinaloa Cartel has never stopped trafficking cocaine, heroin, and marijuana nor stopped capitalizing on opportunistic drug trends. The cartel has long-standing ties to cocaine producers in South America and have cultivated marijuana and opium poppy (for the production of heroin) for generations. Mexican cartels are the main suppliers of both cocaine and heroin to U.S. markets. The combined illicit profits from selling both synthetic drugs and traditional plant-based drugs underwrite the totality of the Sinaloa Cartel's criminal enterprise, funding their expansion into illegal drug markets across the globe and providing enough product diversity to meet the demands of different illegal drug markets.

The Sinaloa Cartel is always looking to profit on the illegal drug trends of the moment. One example is "tusi," a pink drug cocktail (mixture of two or more illegal drugs) consumed mainly in the club scenes of major metropolitan cities. Originally a slang term for the synthetic hallucinogenic drug 2C-B, tusi is increasingly manufactured and trafficked as a combination of cocaine, methamphetamine, and ketamine. The Mexican government has not disclosed the seizure of any tusi labs in Mexico, but the Sinaloa Cartel is capable of importing large quantities of ketamine from China to facilitate tusi production in Mexico.

SINALOA CARTEL

STAYING AFLOAT: SINALOA CARTEL CONTROL OF MARITIME PORTS

Precursor chemicals have to get into Mexico before they can be used to make fentanyl and methamphetamine, and South American cocaine must arrive in Mexico before the cartels can traffic it across the border into the United States. Seaports, therefore, are critical parts of the Sinaloa Cartel's criminal infrastructure. The Port of Mazatlan on the Pacific Coast of Sinaloa is wholly controlled by the Sinaloa Cartel, and they charge other drug trafficking organizations a piso for use of the port. The Sinaloa Cartel maintains logistical and corrupt government contacts at other maritime ports on both coasts of Mexico (see Figure 3). A long history of alliances with drug trafficking organizations operating in Colima give the Sinaloa Cartel access to the Port of Manzanillo, strategically significant because of its location on the central Pacific Coast and its high volume of shipping traffic due to widespread use of the port by foreign countries to exchange legitimate trade goods with Mexico and to refuel. The Port of Manzanillo is located just south of the rival Jalisco Cartel's stronghold, however, which increases tensions between the two main Mexican cartels. Numerous complicit trucking companies work with the Sinaloa Cartel to transport illicit drugs and precursor chemicals from the ports to Mexico City and other inland locations.

Figure 3: Maritime Ports in Mexico

Source: DEA

SINALOA CARTEL

THE "GATEKEEPERS": DRUGS CROSSING THE SOUTHWEST BORDER

No single cartel controls specific border crossings, or ports of entry (POEs), into the United States, and some drug shipments cross the border between, not through, official POEs. The size and firepower of the cartel that controls the border region of Mexico immediately south of the U.S. border, however, does dictate which other drug trafficking groups have to pay a piso to smuggle drugs through the region toward the border, and which are barred from transiting the region altogether. The Sinaloa Cartel exerts near-total control over the border region south of Arizona, giving the cartel easy access to the San Luis Rio Colorado and Nogales POEs.

DEA reporting indicates that the Sinaloa Cartel stages illegal drug shipments near the Arizona POEs and uses those entry points not only as the base for onward shipments of illicit drugs to areas across the United States, but also to smuggle fake trademarked fentanyl pills for consolidation in the Los Angeles area. Large Sinaloa Cartel contingents operate across much of the border with California, too, providing access to the San Ysidro POE – the busiest border crossing in the Western Hemisphere – and the Otay Mesa POE. The Sinaloa Cartel also stages methamphetamine and fentanyl shipments for crossing in the Mexicali and Tijuana, Baja California areas. According to DEA reports, Los Chapitos have a specific preference for using the Ysleta-Zaragoza Bridge from Juarez, Chihuahua into El Paso, Texas.

The Sinaloa Cartel also uses border tunnels to cross drugs into the United States undetected. Most of the tunnels are not built by the cartel but are part of the border cities' sewage and water systems. A small number, however, are underground structures that begin beneath a home or business on the Mexico side of the border and end beneath an industrial area in the United States, where the departure of tractor-trailers from a warehouse is unremarkable. U.S. law enforcement has developed sophisticated means of detecting underground tunnels, which has proven to be a deterrent. The use of catapults to launch drugs over border barriers, or the use of drones to air-drop drugs into the United States, though highly publicized when they occur, are rare events.

SINALOA CARTEL

INVOLVEMENT IN ORGANIZED CRIME

A defining characteristic of all organized crime groups is involvement in any illegal venture that results in profit, drug trafficking being among the most lucrative. The Sinaloa Cartel is most closely identified with drug trafficking, but are also engaged in extortion, the theft of petroleum and ores, weapons trafficking, migrant smuggling, and prostitution. The Sinaloa Cartel, like other Mexican criminal groups, is involved in the Mexican fuel black market, and DEA reporting points to fuel theft as one of the Sinaloa Cartel's main criminal pursuits in the southern Mexican state of Chiapas. According to media reports, Mexico's state-owned oil company, Pemex, lost $730 million from illegal pipeline taps in the first nine months of 2022. In addition, the criminal links between the Sinaloa Cartel and China-based chemical suppliers provide the networks for the trafficking of poached wildlife from Mexico into China. Members of the Sinaloa Cartel conspire with Chinese organized crime groups in Sonora, Mexico to traffic totoaba, an endangered fish prized in Asia for its gas-filled sac, or swim bladder. Totoaba is caught only in Mexico, and its swim bladder nets tens of thousands of dollars on China's black markets. Mexican officials have arrested Sinaloa Cartel members for trafficking both drugs and totoaba.

CORRUPTION: WHAT MONEY CAN BUY

The Sinaloa Cartel is able to operate freely in some parts of Mexico because they have a network of corrupt law enforcement, military, and political contacts. In February 2023, Genaro Garcia-Luna, the former Secretary of Public Security in Mexico, was convicted in the Eastern District of New York on international drug trafficking and conspiracy charges resulting from a DEA-led investigation. Garcia-Luna used his official position to help the Sinaloa Cartel traffic multi-ton quantity drug loads – mainly cocaine and heroin – to the United States in exchange for millions of dollars in bribes. The bribes increased over the years as the Sinaloa Cartel grew in size and power through the former Secretary's support. Garcia- Luna is the highest-ranking Mexican official to be convicted of drug trafficking crimes in the United States.

SINALOA CARTEL

GLOBAL EXPANSION

The Sinaloa Cartel operates in at least 47 countries around the world. In places like China, the Sinaloa Cartel sources precursor chemicals, traffics methamphetamine, and reinforces contacts with Chinese MLOs. The Sinaloa Cartel also supplies methamphetamine to other Asian countries, like Thailand, and to countries like Australia and New Zealand, where the cost of methamphetamine – and therefore the profit back to the cartel – is many times higher than in the United States. In South America, the Sinaloa Cartel brokers shipments of thousands of kilograms of cocaine into Mexico destined for the U.S. market, or into Europe, Australia, and New Zealand where cocaine nets as much as ten times the profit as selling in the United States. Countries throughout Central and South America house permanent contingents of Sinaloa Cartel members who coordinate cocaine shipments or the importation of precursor chemicals for movement onward to Mexico, disguising the shipment's true origin. Mexican cartels have historically used locations on the African continent as transshipment points for cocaine destined for Europe. Occasional DEA reports of the Sinaloa Cartel exporting their clandestine lab expertise into Africa have surfaced over the years; most recently, in June 2023, the Mozambique National Police arrested several people in the process of building a drug production lab, including two Mexican nationals recruited by the Sinaloa Cartel for that purpose.

JALISCO CARTEL

OVERVIEW

The Cartel Jalisco Nueva Generación, or Jalisco Cartel, is one of Mexico's most powerful and ruthless criminal organizations, and another key driver of fatal drug poisonings in the United States. Since its formation around 2011 out of the remnants of the Sinaloa Cartel-affiliated Milenio Cartel, the Jalisco Cartel has become wholly independent and now operates well beyond Mexico's borders, with a presence in dozens of countries around the world and all 50 U.S. states. The Jalisco Cartel uses its vast financial resources, violence, bribery of corrupt officials, and franchise-based command structure to maintain and expand its dominance in Mexico's illicit drug trade. Key members of the Jalisco Cartel are linked by blood ties or marriage to the Gonzalez-Valencia MLO, known as Los Cuinis, many of whose members and companies are under U.S. sanction. Like the Sinaloa Cartel, the Jalisco Cartel reap billions of dollars in profit from the manufacture of methamphetamine and illicit fentanyl, and they are one of the main suppliers of cocaine to the U.S. market.

LEADERSHIP STRUCTURE: THE JALISCO CARTEL'S FRANCHISE MODEL

The Jalisco Cartel operates under a franchise business model. The cartel is overseen by Ruben "El Mencho" Oseguera-Cervantes, and a small group of top-tier commanders who report directly to El Mencho. A second tier of regional and "plaza"[5] bosses operate under the top tier leaders. The franchise model permits each semi-independent group to customize its operations according to specific areas of expertise (for example, running clandestine methamphetamine labs) or market demands, provided they comply with naming, branding, and organizational structure requirements, and follow the general direction handed down by Jalisco Cartel leadership. The franchise model also enables the Jalisco Cartel to expand quickly, since new franchises are easy to establish. The Jalisco Cartel also maximizes their revenue through this model, because leadership does not pay the operating costs of its franchises but does collect a percentage of overall profits. One of the key weaknesses of the franchise model, however, is that individual franchise groups operating under the Jalisco Cartel name can form their own unique alliances with other criminal groups, some of which are in direct opposition to the alliances of other franchises.

[5] *A plaza is defined as a strategic operational hub, typically a city or seaport from which the head of that group directs the trafficking activities of the other members.*

JALISCO CARTEL

FENTANYL

The Jalisco Cartel has become one of the largest producers and traffickers of illicit fentanyl, in both powder and pill form, to the United States. Although the Jalisco Cartel cannot match the Sinaloa Cartel's fentanyl production capacity, they have flooded American streets with fentanyl, often mixed with other drugs like heroin, cocaine, and xylazine. The cartel has its own connections to precursor chemical suppliers in China for the production of fentanyl and methamphetamine and exerts control over a number of seaports for importing the chemicals. They also control an extensive network of smuggling routes into the United States, and lucrative distribution hubs in major U.S. cities like Atlanta, Georgia.

METHAMPHETAMINE

A straight line can be drawn between the cheap and deadly methamphetamine fueling addiction, violence, and crime in American communities and the Jalisco Cartel's involvement in methamphetamine production, particularly their investment in "super labs." [6] Every year, the Jalisco Cartel brings methamphetamine into the United States by the ton, but the cartel's methamphetamine market does not stop at the U.S. border. Jalisco Cartel-linked methamphetamine seizures have been reported in countries around the globe, including Japan and Australia, two of the most expensive and profitable methamphetamine markets in the world.

PRECURSOR CHEMICALS: THE INGREDIENTS FOR SYNTHETIC DRUGS

Precursor chemicals are essential for the manufacture of illicit fentanyl and methamphetamine. The Jalisco Cartel acquires the vast majority of the chemicals it needs to produce these deadly drugs from China and, to a lesser extent, from India. The Jalisco Cartel needs large barrels of chemicals for methamphetamine production, especially for operating their super labs. Not only does the cartel keep a steady supply of chemicals to maintain constant production, but they also stockpile chemicals in case of trade disruptions, law enforcement seizures, or new chemical control regulations. The quantity of chemicals needed for illicit fentanyl production, however, are small enough to be smuggled into Mexico in air cargo; some shipments even arrive first in the United States in mislabeled packages, from where they are smuggled into Mexico, sometimes without the shipper's knowledge, by freight forwarders or re-shippers.

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[6] *A "super lab" is a clandestine drug lab that can produce 10 pounds or more of a drug per production cycle. Super-labs are often equipped with industrial- and pharmaceutical-grade equipment.*

JALISCO CARTEL

OTHER DRUGS

The Jalisco Cartel does not rely on illicit fentanyl or even methamphetamine as its only sources of drug profits. The cartel is a main supplier of cocaine to U.S. markets, especially on the East Coast, and they also traffic ton quantities of heroin and marijuana into the United States. The Jalisco Cartel is using some of its billions of dollars in illicit drug money to increase its global footprint and increase its drug production capacity to compete in new and profitable drug markets like Australia, Japan, and Europe.

STAYING AFLOAT: JALISCO CARTEL CONTROL OF MARITIME PORTS

The Jalisco Cartel uses bribery, intimidation, and extortion of government and private port officials to guarantee the safety and delivery of its own methamphetamine precursor chemical shipments from China, and its cocaine shipments from Colombia, Peru, and Bolivia. Although the seaports are key to getting industrial-scale chemical shipments from China into Mexico, most fentanyl precursors arrive via air cargo or through postal facilities. The cartel also uses the ports to traffic methamphetamine, illicit fentanyl, and cocaine out of Mexico to destinations around the world. Exercising control over maritime ports is also a key source of revenue for the Jalisco Cartel, by charging other drug trafficking organizations a piso to use the ports for their own drug or chemical shipments. The Jalisco Cartel has almost-exclusive corrupt access to the Ports of Manzanillo and Lazaro Cardenas on the Pacific Coast of Mexico and can also access the Ports of Veracruz and Matamoros on the Atlantic Coast/Gulf of Mexico. The Port of Matamoros is in a strategic location near the United States-Mexico border, potentially allowing the Jalisco Cartel – and other drug trafficking groups who pay the piso – to traffic drugs into the United States more easily and quickly using nearby Southwest Border entry points (see Figure 3, page 8).

THE "GATEKEEPERS": DRUGS CROSSING THE SOUTHWEST BORDER

The Jalisco Cartel mainly uses legal POEs for crossing drugs over the Southwest Border into the United States, mostly in shipments carried by tractor-trailers or by couriers in personally-owned vehicles. Although the Jalisco Cartel is one of the two largest cartels in Mexico, they control very little territory in immediate proximity to the U.S. border. Therefore, its members willingly pay a piso for the use of POEs, tunnels, or other smuggling routes into the United States to whichever criminal organization currently controls access. Alliances and relationships with these smaller groups provides the Jalisco Cartel with a measure of protection from theft or law enforcement seizure as their drug shipments cross through these other groups' territories.

JALISCO CARTEL

INVOLVEMENT IN ORGANIZED CRIME

Drug production and trafficking provide the bulk of the Jalisco Cartel's criminal wealth, but like any other organized crime group, they are involved in many other illegal profit-making schemes. The Jalisco Cartel directs the theft of fuel from pipelines; extorts agave and avocado farmers, migrants, and prison officials; and taxes migrant smugglers. The cartel's close family and marital ties to Los Cuinis, a criminal organization whose members have been deeply entrenched in money laundering schemes for over a decade, give them a money laundering advantage over other drug trafficking organizations, and they are active in the construction of resorts, timeshares, and other properties in high-tourism areas for fraudulent and money laundering purposes.

CORRUPTION: WHAT MONEY CAN BUY

The Jalisco Cartel manufactures and traffics drugs with relative impunity in some parts of Mexico by bribing and intimidating government, military, and law enforcement officials at all levels. Since its formation over 10 years ago, the Jalisco Cartel has directed some high-profile attacks against the Mexican military and police, including the downing of an army helicopter that killed six soldiers, and the attempted assassination of the Mexico City police chief, and even conducted an attack against the Guatemalan president's convoy when it was touring the Guatemala-Mexico border region. The Jalisco Cartel is also implicated in the bribery of judges.

THE JALISCO CARTEL'S GLOBAL EXPANSION

The Jalisco Cartel is active in over 40 countries in South America, Asia, Europe, and Africa. They have become competitive in these profitable markets very quickly, given their rival Sinaloa Cartel's more than 30-year head start as a drug trafficking organization. The Jalisco Cartel established distribution hubs in Spain in early 2023, as part of their ongoing plan to expand into European drug markets. Their rapid expansion is evidence of the Jalisco Cartel's growing criminal influence across the globe, and the profits garnered from these lucrative markets provide the financial fuel for even further expansion.

THE CARTELS' REACH INTO U.S. COMMUNITIES

OVERVIEW

Thousands of Sinaloa and Jalisco cartel-linked drug dealers in the United States bring illicit fentanyl, methamphetamine, and other drugs into American communities every day. A web of illicit drug wholesalers, only one step removed from the cartels in Mexico, operate in major cities throughout the United States, like Los Angeles, Phoenix, Houston, Chicago, Atlanta, Miami, and others. Smaller branches of the cartels spread the drugs further, often using social media platforms and messaging applications to advertise their deadly products and recruit couriers and dealers. They supply networks of local independent drug trafficking groups, street crews, and gangs whose main aim is to get the illegal drugs into the hands of users – selling on the streets, over apps and social media, and in schools. Some gang members and independent traffickers are so prolific they have established direct contact with the Sinaloa and Jalisco cartel-connected wholesalers and risen from street-level dealers to regional-level suppliers.

Just like their Mexico-based criminal counterparts, neighborhood-based crews, local dealers, and gang members endanger U.S. communities by selling fentanyl, methamphetamine, cocaine, heroin, and other drugs, and committing shootings, murders, carjackings, assaults, and robberies.

OPERATION LAST MILE

DEA's Operation Last Mile tracked distribution networks across the United States connected to the Sinaloa and Jalisco cartels. The operation confirmed that the Sinaloa and Jalisco cartels use violent street gangs and local criminal groups and individuals to flood U.S. communities with fentanyl and methamphetamine, driving addiction and violence, and killing Americans. It also revealed that the cartels, their members, and their affiliated drug trafficking organizations in the United States use social media platforms – like Facebook, Instagram, TikTok, and Snapchat – and encrypted messaging applications, such as WhatsApp, Telegram, Signal, Wire, and Wickr, to coordinate logistics and communicate with victims.

Operation Last Mile comprised 1,436 investigations in collaboration with federal, state, and local law enforcement partners, and resulted in 3,337 arrests. DEA and its partners seized nearly 44 million fentanyl pills; over 6,500 pounds of fentanyl powder; more than 91,000 pounds of methamphetamine; 8,497 firearms; and in excess of $100 million. Together, the fentanyl pills and powder equate to almost 193 million deadly doses of fentanyl removed from U.S. communities, preventing countless potential drug poisoning deaths. Among these cases were hundreds that involved the use of social media and encrypted communications platforms.

THE CARTELS' REACH INTO U.S. COMMUNITIES

SOCIAL MEDIA EXTENDS THE REACH OF THE CARTELS

Social media extends the reach of the Sinaloa and Jalisco cartels directly into drug users' phones, with potentially fatal consequences. Drug trafficking groups use social media to advertise and conduct illicit drug sales. Dealers and buyers often use emojis, numeric codes, or coded language to communicate drug availability and drug interest. Social media allows dealers to post photos and prices of the drugs available for purchase, share sales locations via map location pins, deliver drugs to customers through rideshare applications, and communicate with their criminal partners and customers through open or encrypted messaging apps. Social media pushes much of the drug dealing off the streets, shielding the dealers from law enforcement attention. Street crews and gang members also recruit new members using social media platforms. These platforms and apps are also used to boast about travel, money, cars, weapons, and clothes; and to intimidate rival criminal groups by brandishing weapons, bragging about crimes committed, or threatening acts of violence.

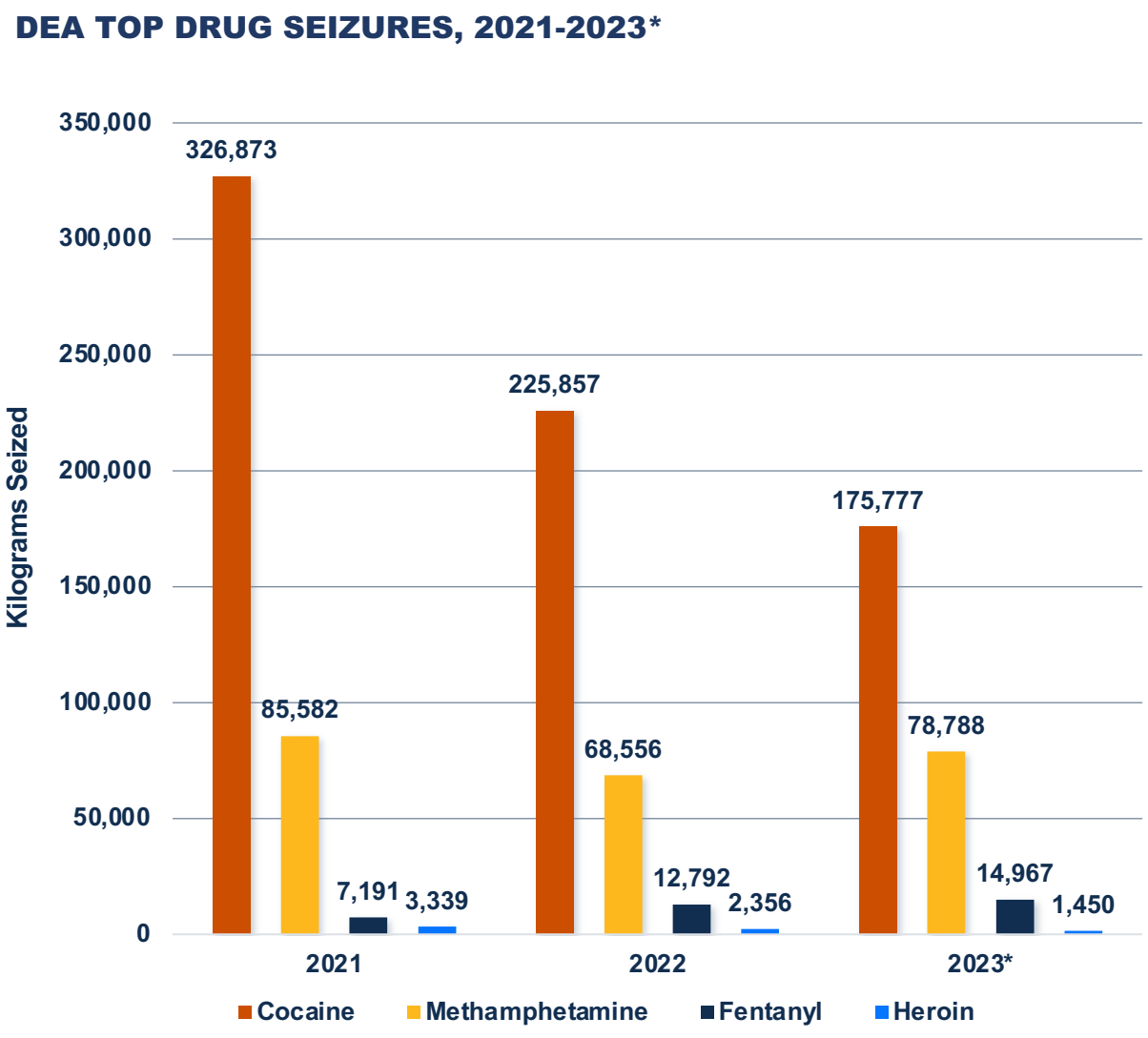
Gangs/Street Crews and Weapons

When dealing drugs, gang members use firearms to enforce payment for drugs, deter theft of their drug supply, and for "street cred" – and also to commit robberies, assaults, homicides, and carjackings. In addition to commercially-manufactured firearms, members of gangs and street crews use privately made firearms (PMFs). These weapons are easy to make using PMF parts and kits purchased through dealers or online or using 3D printers; or they are bought from individuals who traffic in PMF sales. [Note: PMFs are commonly referred to by their street name, "ghost guns." A commercial manufacturer of PMF parts and kits has trademarked the name.] In some parts of the United States and Mexico, suspected PMFs account for more than 10 percent of all the firearms recovered by law enforcement and traced by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). Suspected PMF seizures in the United States have increased by 31 percent since 2021, with the majority of these occurring in California. Drug traffickers and other criminals also buy machine gun conversion devices (MCDs), known as auto sears or "chips," which convert semi-automatic weapons to automatic weapons. Tracing of MCDs by the ATF has increased by approximately 180 percent since 2021, according to preliminary ATF data. In September 2023, the Houston Violent Crime initiative – part of a nationwide DEA and multi-agency U.S. Department of Justice Criminal Division program – concluded a gang investigation that resulted in federal charges against 39 suspects. DEA and its partners seized 248 kilograms of methamphetamine including pills that contained both methamphetamine and fentanyl, plus quantities of heroin and cocaine, all supplied by cartel-linked drug trafficking groups, in addition to PCP, four pill presses, and over $110,000. In addition, law enforcement officials seized 79 firearms, including three firearms with attached MCDs, three additional MCDs not attached to firearms, three PMFs, a silencer, an inert hand grenade, and body armor.

Figure 4: PMF Kits
Source: DEA

THE CARTELS' REACH INTO U.S. COMMUNITIES

Figure 5: Drug Seizures by DEA, 2021-2023* (in kilograms)



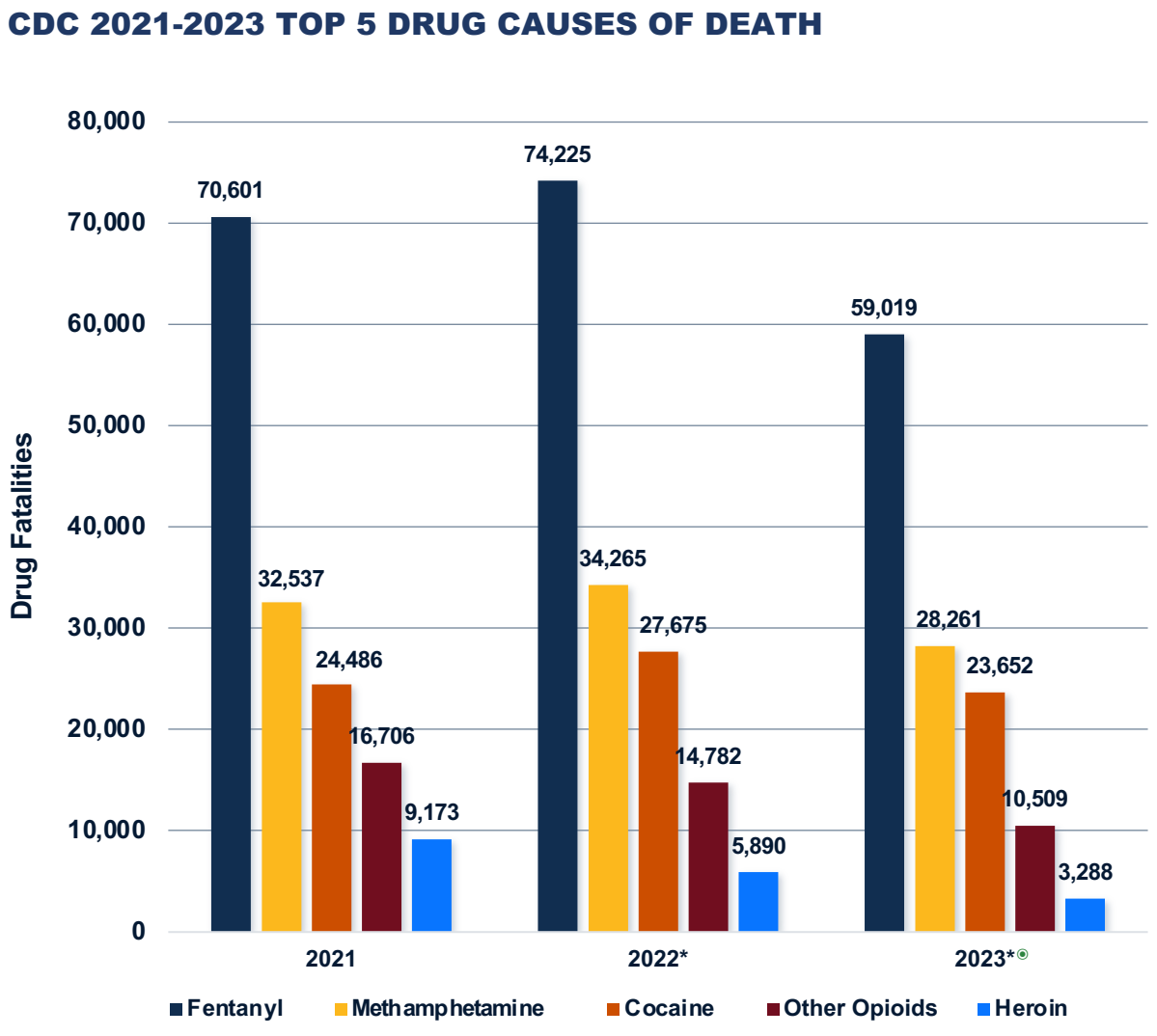
*2023 data is preliminary and subject to change

Source: DEA

Note: *The total kilogram weight for fentanyl and methamphetamine includes the weight of pills containing those substances but is not representative of the percentage of each substance contained in the pills.*

THE CARTELS' REACH INTO U.S. COMMUNITIES

Figure 6: Top 5 Drugs Responsible for U.S. Fatalities



**provisional data* | *CDC continues to receive 2023 data*

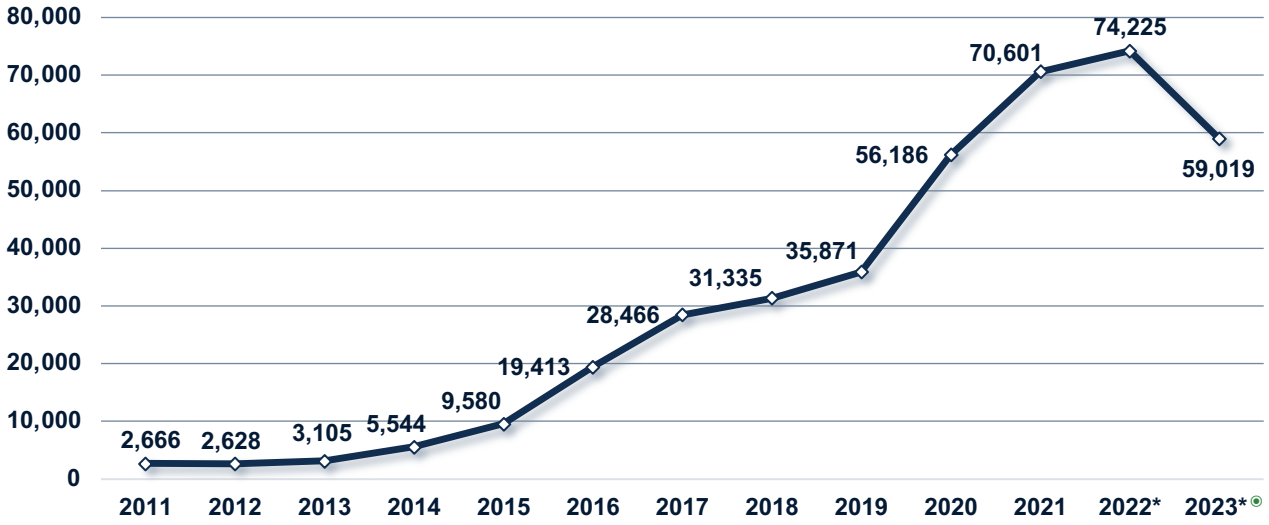
Source: National Center for Health Statistics, Centers for Disease Control and Prevention

Note: *Deaths involving more than one substance are reflected in the totals for all substances cited in the decedent's toxicology report.*

FENTANYL

OVERVIEW

Figure 7: Synthetic Opioid (Other than Methadone) Poisoning Deaths, 2011-2023*



**provisional data* | *CDC continues to receive 2023 data*

Source: National Center for Health Statistics, Centers for Disease Control and Prevention

Fentanyl manufactured by the Mexican cartels is the main driver behind the ongoing epidemic of drug poisoning deaths in the United States. Further complicating the fentanyl threat is the addition of the dangerous veterinary tranquilizer xylazine to the fentanyl to create what is known as "tranq." Fentanyl is also being hidden in other powder drugs such as cocaine and heroin and, to a lesser extent, methamphetamine. Users often take these drugs without knowing they contain fentanyl, which greatly increases the risk of poisoning. Fake prescription pills containing fentanyl present an extreme danger. Most of these fake pills are made to look nearly identical to real prescription pills, such as oxycodone (M30, Percocet); hydrocodone (Vicodin); or alprazolam (Xanax) – the fentanyl content in these fake pills is known only after laboratory analysis. In 2023, DEA forensic laboratory analysis showed that approximately 7 in 10 fake pills contain a potentially deadly dose of fentanyl (approximately 2 milligrams). Fentanyl also poses an ongoing threat to law enforcement personnel and other first responders who may encounter it in the performance of their duties.

China-based chemical suppliers are the main source of the chemicals used in the production of illicit fentanyl. The Sinaloa and Jalisco cartels manufacture fentanyl in clandestine labs they oversee in Mexico, in both powder form and pressed into fake pills, and traffic it into the United States through any of the many entry points they control.

FENTANYL

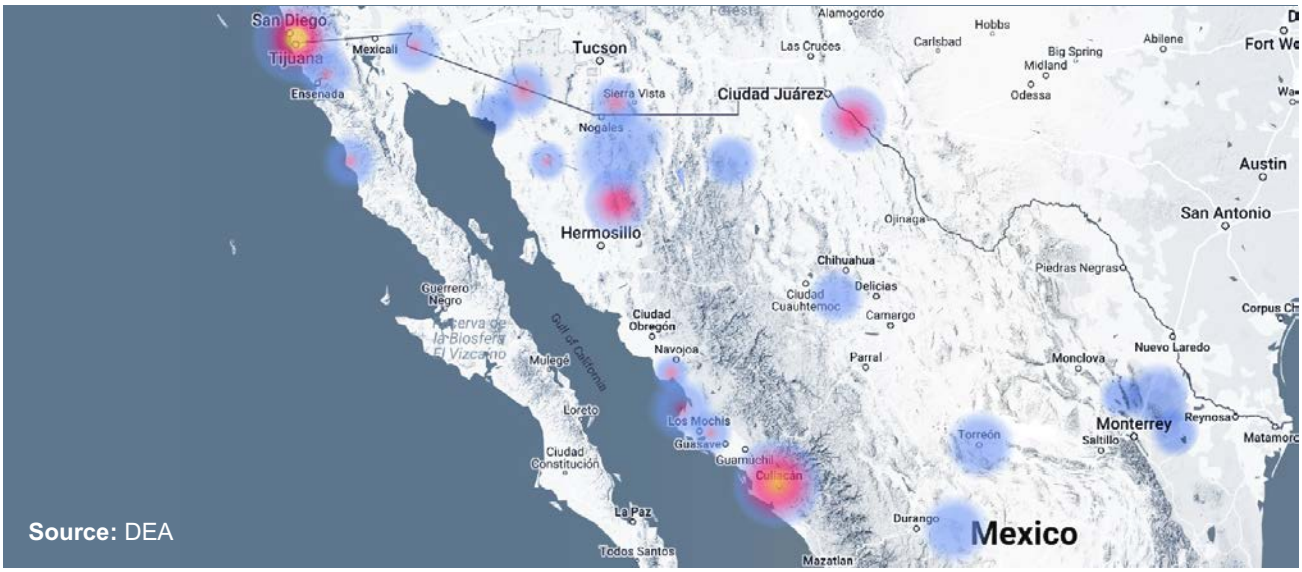
The Sinaloa and Jalisco cartels have cemented their role in supplying fentanyl to the United States as the number of fatal overdoses involving illicit opioids has risen.

According to the CDC, 68 percent of all drug poisoning deaths in 2022 – 74,225 of the 111,036 total – were caused by synthetic opioids, primarily fentanyl (see Figure 7, above). CDC provisional data shows that synthetic opioids were the cause of another 38,000 deaths in the first six months of 2023. The Sinaloa and Jalisco cartels are using social media platforms to flood the U.S. drug market with fentanyl and other illicit drugs. Using both open and encrypted platforms and messaging applications, the cartels advertise drugs for sale, process payments for drugs, recruit and train couriers and dealers, communicate with customers, and plan transactions – all online. Encryption on many platforms has diminished law enforcement's visibility into drug trafficking and other crimes committed using these platforms and applications. The cartels maintain a web of networks to smuggle drugs into the United States, to include air and sea cargo, vehicular and pedestrian traffic, border tunnels, and stash houses on both sides of the border, and then further direct drug trafficking and distribution inside the United States.

DEA continues to seize record amounts of illicit fentanyl every year.

DEA continues to seize record amounts of illicit fentanyl every year, from 6,875 kilograms of powder fentanyl in 2021 to nearly twice that amount – 13,176 kilograms in 2023; and close to 79 million pills containing fentanyl in 2023, more than triple the 23.6 million pills seized in 2021 (see Figure 8). Fentanyl poisonings and law enforcement seizures of fentanyl have increased steadily since 2013.

Figure 8: Heat Density Map of Fentanyl Pill Seizures at the Southwest Border, 2023



Source: DEA

FENTANYL

Market diversification by Mexican cartels makes fentanyl appealing to more users.

The Sinaloa and Jalisco cartels manufacture fentanyl in different forms to make it appealing to more kinds of drug users. Powder fentanyl is easily mixed with or substituted for cocaine and heroin, in regions of the United States where light-colored powder heroin is the norm. The cartels also make fentanyl in black tar form, to cater to markets where black tar heroin is the norm. (The eastern United States and the Great Lakes region are associated with white powder heroin, and areas west of the Mississippi River are associated with black tar heroin.) The clearest example is the cartels' exploitation of Americans' trust in prescription medications to introduce fentanyl in the form of fake trademarked pills. Multicolored pills known as "rainbow fentanyl" first appeared in 2022, pressed and marked the same way as the cartels' typical fake trademarked pills, but made in pastel colors instead of the usual light blue (see Figure 9).

Figure 9: "Rainbow Fentanyl" Pills
Source: DEA

The rainbow pills are not marketed as ecstasy (MDMA) but are appealing to that user group. DEA forensic laboratory analysis found no measurable difference in fentanyl potency or content based on color. In 2023, law enforcement encountered illicit fentanyl contained in liquid for the first time. The liquid contained fentanyl in very low concentrations, reportedly intended to appeal to intravenous users.

DEA's Fentanyl Profiling Program documented higher average purity in pills containing fentanyl.

DEA forensic chemists perform an in-depth analysis on a random sampling of fentanyl pills and powder seized throughout the United States to provide an annual snapshot of the U.S. fentanyl market. In 2022, the average fentanyl pill contained 2.4 milligrams (mg) of fentanyl, ranging from a low of .03mg to a high of 9mg. A lethal dose of fentanyl is approximately 2mg, depending on the user's opiate tolerance and other factors. Based on these analyses, DEA forensic laboratory results documented that approximately 7 out of 10 fake pills contain a deadly dose of fentanyl, up from 4 in 10 pills in 2021. The average purity of the fentanyl powder samples was 19.2 percent, a 33 percent increase since 2021, ranging from exhibits that contained almost no fentanyl (.07 percent) to exhibits containing 81.5 percent pure fentanyl.

[7] *Fentanyl does not dissolve quickly or easily in water and tends to stay "suspended" in the liquid used as a carrier. This is why the solution is described as a liquid that contained fentanyl rather than as "liquid fentanyl."*

FENTANYL

Mexican cartels use precursor chemicals sourced mainly from China.

The Sinaloa and Jalisco cartels and their chemical suppliers in China rely on deliberate mislabeling, multi-phase shipping maneuvers, and other evasive techniques to get fentanyl precursor chemicals into Mexico without being detected by law enforcement or stopped by international chemical regulators. Suspect vendors and darkweb marketplaces based in China use certain keywords or phrases to indicate their willingness to defy bans and restrictions, such as “discreet delivery,” “no customs issues,” or “100% guaranteed delivery or free reshipment.” In shipping notifications, vendors sometimes hide the shipment details by embedding them in photos or images that do not raise suspicions. Cargo containing these chemicals can be deliberately mislabeled or misspelled or contain the Chemical Abstracts Registry number instead of the chemical name – a number unlikely to be known by shippers, freight forwarders, or port workers. China-based chemical suppliers prefer cryptocurrency payments over other forms, and encrypted messaging and communications platforms. The Mexican cartels use international export brokers, consignees, third-party countries, and other methods to anonymize the contents and source of the chemical shipments. The cartels also use legitimate but likely complicit companies in the United States, Mexico, and India to import chemicals for subsequent diversion to clandestine fentanyl labs in Mexico.

The cartels’ 2023 “stop fentanyl” order in Mexico did not stop fentanyl trafficking into the United States.

In early 2023, the Sinaloa and Jalisco cartels allegedly ordered their subordinates to stop the production and trafficking of fentanyl. In October 2023, Los Chapitos orchestrated a public show of enforcing the so- called ban by hanging banners in prominent locations in Sinaloa, Sonora, and Baja California. The ban is probably a public relations stunt, however, or an attempt by the cartels to consolidate production among a smaller number of trusted manufacturers and punish others. Throughout 2023, fentanyl was seized at the border in equal or higher quantities as in previous years, and no DEA field office reported that fentanyl is less available or more expensive, either of which would point to a decrease in the supply.

NITAZENES

OVERVIEW

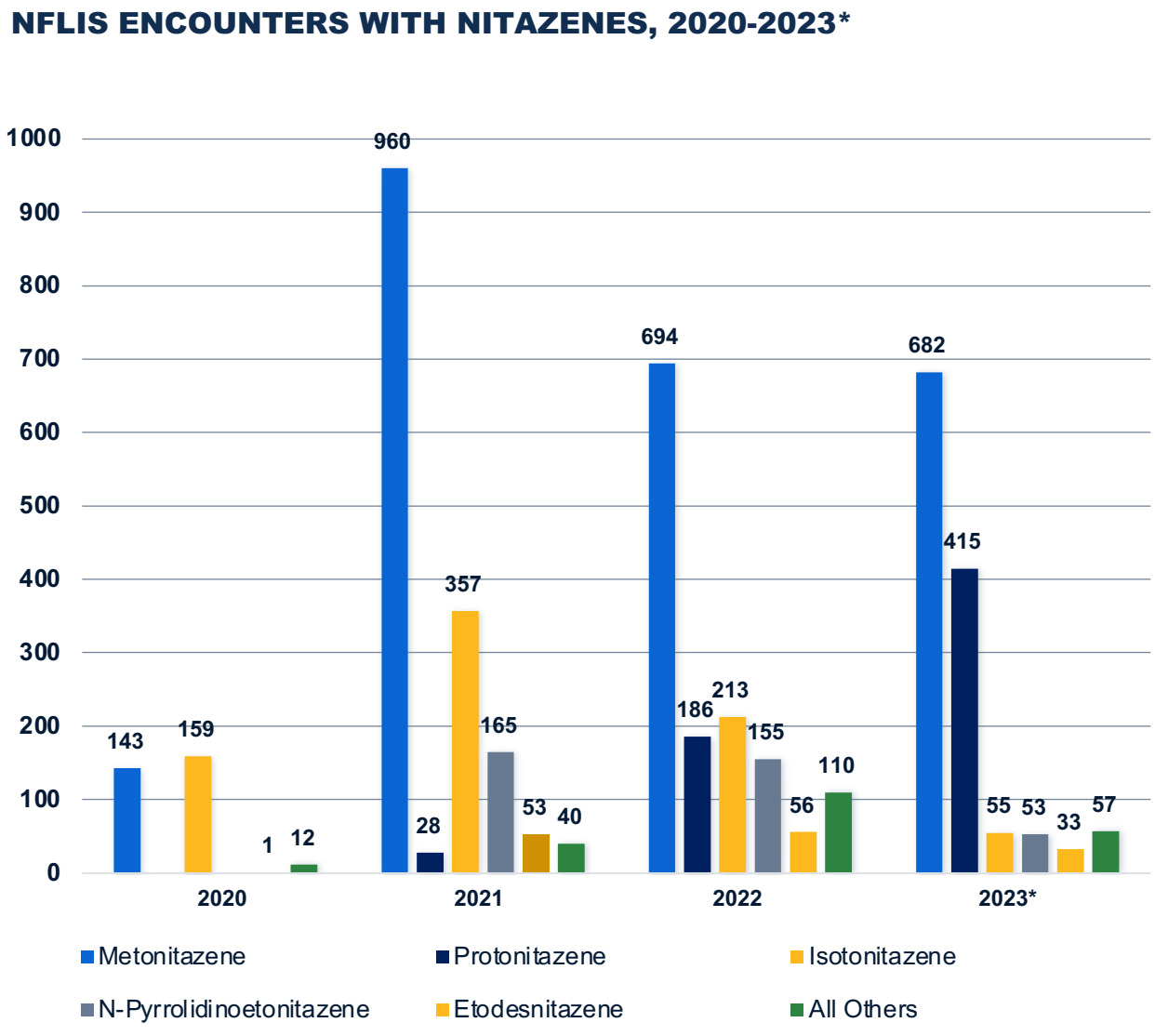
Nitazenes[8] are synthetic opioids, like fentanyl – but some nitazenes can match or surpass the potency of fentanyl. Different nitazenes have been appearing in fentanyl mixtures in the United States since 2019. When combined with fentanyl, the effects of both drugs are heightened, which significantly increases the chance of fatal drug poisoning. The mixtures are probably being made mainly by mid-level and street- level dealers in the United States, but since nitazenes are sold by China-based chemical suppliers through online marketplaces, the Mexican cartels could easily use their existing relationships with those suppliers to obtain nitazenes. To date, however, Mexican authorities have not seized nitazene or nitazene- fentanyl mixtures in Mexico, and only about 12 percent of the nitazene exhibits analyzed by DEA forensic laboratories came from Southwest Border states.

Nitazenes such as metonitazene, etonitazene, isotonitazene, and protonitazene are listed under Schedule I of the Controlled Substances Act (CSA) in the United States and are also internationally controlled. Other nitazene analogues have been temporarily or emergency-scheduled in Schedule I. Chemical suppliers – mainly located in China – introduce new nitazenes when the ones currently used become riskier to produce due to regulatory actions and drug scheduling, or users look for novel opioids that are not yet illegal. For example, DEA's National Forensic Laboratory Information System (NFLIS) identified four new nitazenes in drug exhibits submitted during 2023, represented by the green bar in Figure 10 (page 25).

[8] *"Nitazenes" is a generic term for a class of benzimidazole-opioids. Although not true of all nitazenes, the potency of some forms is equal to or greater than morphine or fentanyl.*

NITAZENES

Figure 10: Nitazene Detections by DEA Forensic Laboratories, 2020-2023*



**2023 data is preliminary and subject to change*

Source: National Forensic Laboratory Information System, report retrieved January 5, 2024

XYLAZINE

OVERVIEW

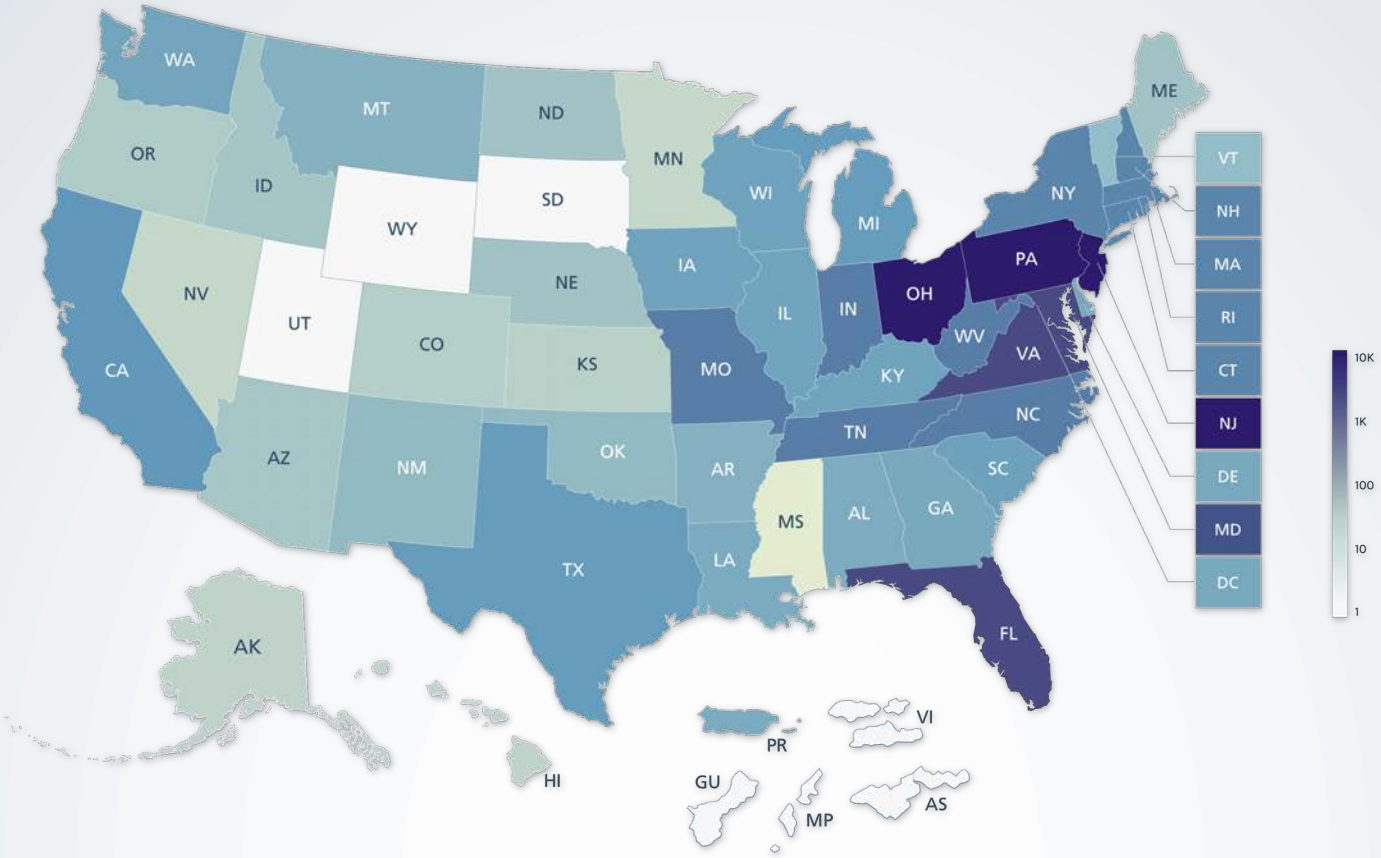
Xylazine is not a synthetic opioid, but its growing prevalence in fentanyl mixtures complicates the reversal of opioid overdoses with naloxone and is responsible for widespread reports of injection site infections and necrosis (soft tissue death) resulting in amputations. [Note: Xylazine is a sedative, not an opioid. It is used as an anesthetic in veterinary medicine, primarily on large animals, and is approved by the U.S. Food and Drug Administration (FDA) only for veterinary use.] Xylazine is being added to fentanyl by drug traffickers, a mixture known as "tranq" in illicit drug markets, increasing the risk of death from fentanyl poisoning. Law enforcement mainly encounters xylazine in mixtures with fentanyl or other opioids, like heroin, but it has also been seen alone and in mixtures with cocaine and other illicit drugs. DEA forensic laboratories report that the number of heroin and fentanyl exhibits adulterated with xylazine is increasing and spreading outside traditional white powder heroin and fentanyl markets in the eastern United States, where xylazine has been present for several years. Xylazine is most prevalent in drug samples seized in New Jersey, Virginia, Ohio, Maryland, and Florida, but has been identified in seized drug samples in every U.S. state, plus the District of Columbia and Puerto Rico (see Figure 12, page 27).[9]

Figure 11: Fentanyl-Xylazine-Cocaine Mixture in Black Capsules
Source: DEA

[9] *"Drug samples containing xylazine have also been seized in Utah, Wyoming, and South Dakota, but were submitted to forensic laboratories that report into systems other than DEA's NFLIS.*

XYLAZINE

Figure 12: States with Reported Seizures of Xylazine, 2023



Source: DEA National Forensic Laboratory Information System

XYLAZINE

Xylazine is mainly found in powder fentanyl exhibits but is also encountered in about five percent of the fentanyl pills submitted to DEA forensic laboratories (see Figure 13).

Figure 13: DEA Fentanyl Profiling Program Analysis of Xylazine Content in Fentanyl Samples, 2021-2023

FORM	YEAR	NUMBER OF FENTANYL SAMPLES CONTAINING XYLAZINE	PERCENTAGE OF TOTAL FENTANYL SAMPLES CONTAINING XYLAZINE
PILL	2021	162	4.4
	2022	452	7.7
	2023	332	5.2
POWDER	2021	1,241	19.0
	2022	1,847	24.3
	2023	2,067	27.3

Source: DEA Special Testing and Research Laboratory, query date April 26, 2024

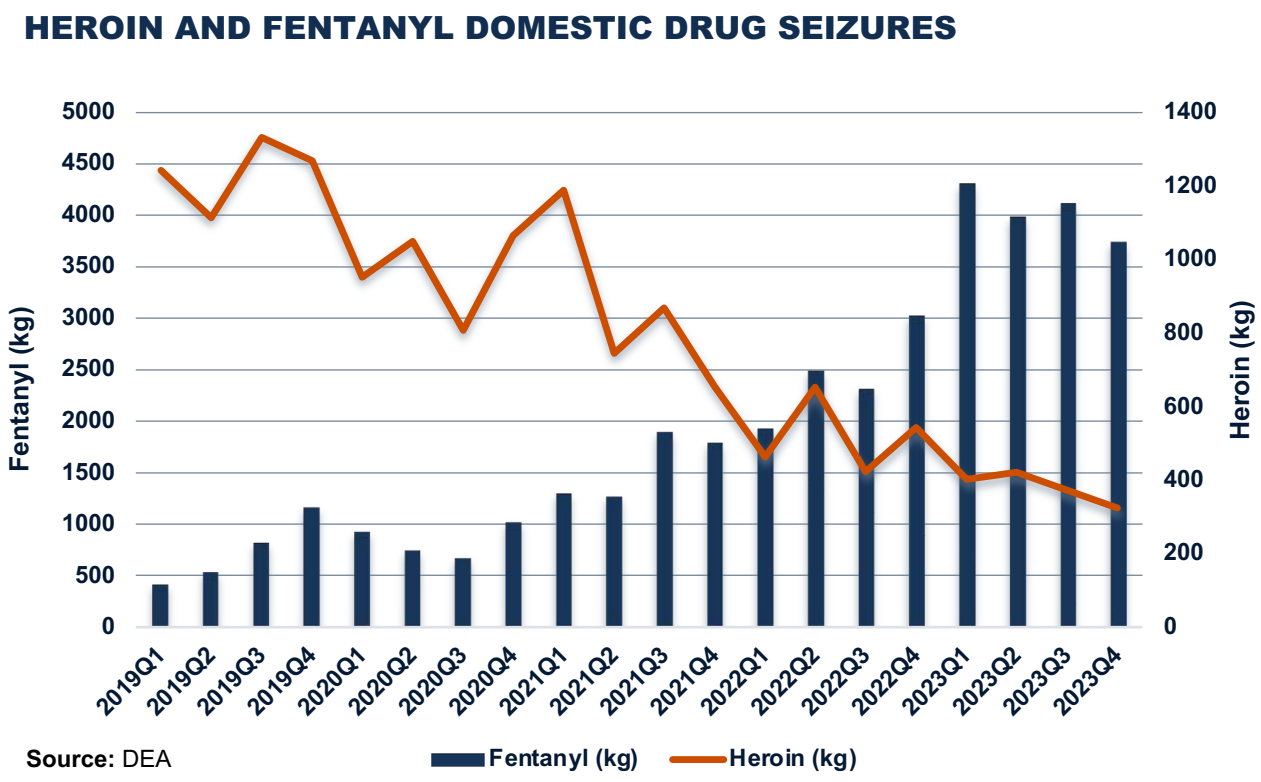
Xylazine is making the deadliest drug threat our country has ever faced, fentanyl, even deadlier.

DEA Public Safety Alert March 2023

HEROIN

OVERVIEW

Figure 14: DEA Heroin and Fentanyl Seizures in the United States, October 2019 – December 2023 (1st Quarter FY2019 – 1st Quarter FY2024)



Source: DEA

Heroin seizures in the United States began declining steadily in direct contrast to a rapid acceleration in fentanyl seizures over the same time period. Heroin seizures decreased by almost 70 percent between 2019 and 2023, and fentanyl seizures increased by a staggering 451 percent over the same time period (see Figure 14).

In many U.S. drug markets, nearly all the heroin available at the street level is combined with or has been replaced by fentanyl. The change happened most quickly in markets where light-colored powder heroin is the norm because the two drugs look similar. Once the two drugs are combined, the fentanyl is virtually impossible to detect until the drugs are tested at a forensic laboratory, which helps to explain why law enforcement and public health officials continue to report that the heroin supply is stable even though seizures have dropped measurably.

HEROIN

Mexico is the main source country for the heroin sold in the United States,[10] and the Sinaloa and Jalisco cartels are responsible for supplying the vast majority of that heroin. Heroin, either alone or in combination with fentanyl, is smuggled into the United States through Southwest Border entry points, most often in California. Cartel-linked wholesale dealers then traffic the heroin to mid-level and street-level dealers across the country, mainly using private vehicles or tractor-trailers.

More than three-fourths of the heroin-related deaths in the United States also involve fentanyl.

The mixing of heroin with fentanyl is the most dangerous and deadly aspect of the U.S. heroin market because some users remain unaware that most of the heroin is laced with or has been replaced by fentanyl. Whether the mixing happens in Mexico or at some other point in the distribution chain, CDC mortality data shows that heroin overdoses where fentanyl is present have increased year over year. According to January-June 2023 CDC reporting, heroin currently ranks fifth in drug-related deaths, behind fentanyl, methamphetamine, cocaine, and prescription opioids (see Figure 6). In the first six months of 2023, 82 percent of all heroin-related deaths involved fentanyl.

The Mexican cartels profit more from trafficking fentanyl than heroin.

Fentanyl is much more profitable for the cartels than heroin. Unlike fentanyl, heroin is a traditional plant- based opioid (derived from the opium poppy). Crop-based drugs are time-consuming and expensive to produce. Traffickers risk losing product to weather, government eradication operations, or a poor harvest, and the labor costs and logistics associated with harvesting the opium gum and moving raw material to clandestine labs are further deterrents. Fentanyl can be produced continuously, quickly, and efficiently, unimpeded by the challenges and risks associated with heroin production.

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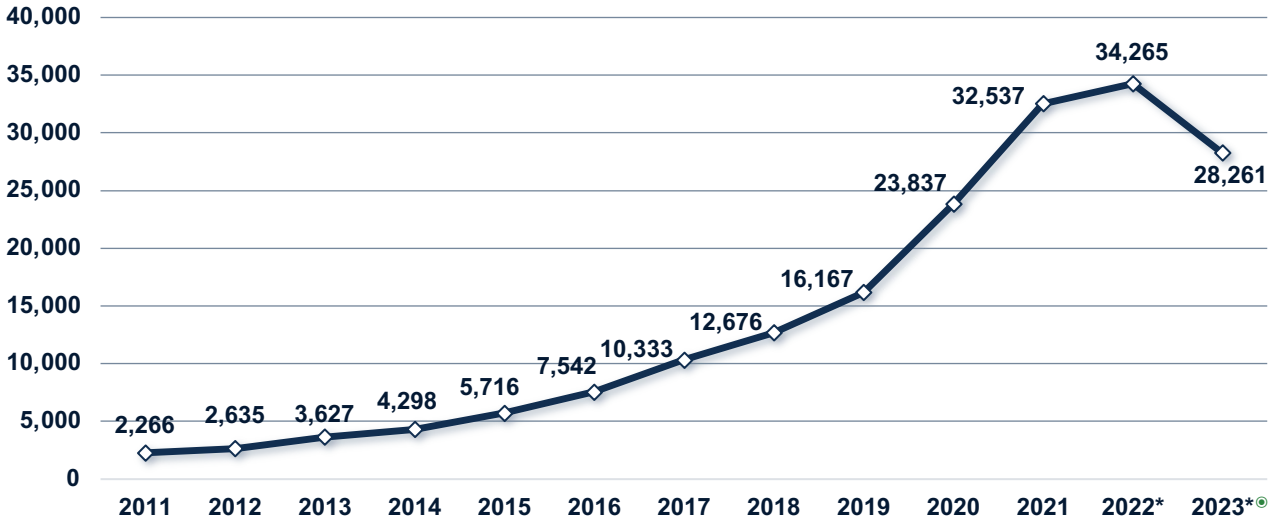
[10] The DEA Special Testing and Research Laboratory's Heroin Signature Program (HSP) compiles the forensic analysis performed on a representative sample of heroin seizures in the United States. According to the 2022 HSP report, 79 percent of the program-tested heroin originated in Mexico. In 2022, more than half of the HSP samples – 53 percent – contained fentanyl, up from only 17 percent in 2018.

METHAMPHETAMINE

OVERVIEW

Figure 15: Psychostimulant-involved (Mostly Methamphetamine) Poisoning Deaths 2011-2022



**provisional data | ◉CDC continues to receive 2023 data*

Source: National Center for Health Statistics, Centers for Disease Control and Prevention

Thirty-one percent of the drug-related deaths in the United States are caused by psychostimulants[11] – mostly methamphetamine. In the first six months of 2023, more than 17,000 Americans died from overdoses and poisonings related to psychostimulants according to preliminary CDC figures – on track to exceed a record-high 34,265 fatalities in 2022 (see Figure 15).

Methamphetamine is a synthetic stimulant, made primarily in Mexico by the Sinaloa and Jalisco cartels who are the main suppliers of the methamphetamine sold in the United States. The cartels operate clandestine methamphetamine production labs throughout Mexico – using massive quantities of chemicals obtained mostly in China. Over the past two decades, the Mexican cartels have adapted their formulas to overcome restrictions on importing certain chemicals, and now produce ton quantities of very pure, very potent crystal methamphetamine. Methamphetamine production in the United States, on the other hand, is now at its lowest point in 20 years. In 2004, DEA's El Paso Intelligence Center (EPIC) documented 23,700 clandestine methamphetamine lab seizures in the United States. By contrast, law enforcement reported only 60 lab seizures in 2023.

[11] The CDC classifies methamphetamine and related drugs as psychostimulants. This class includes drugs like amphetamines, MDMA, and cathinones, but nearly all fatalities in this class of drugs are methamphetamine-related.

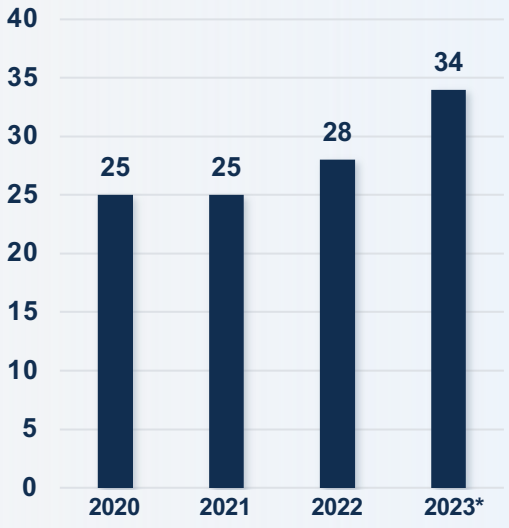
METHAMPHETAMINE

The Sinaloa and Jalisco cartels traffic methamphetamine into the United States through the same routes and Southwest Border entry points they use to smuggle fentanyl and other drugs. Cartel-linked traffickers use many methods to transport and conceal methamphetamine, including human couriers, commercial flights, parcel services, and commercial buses. Smuggling in tractor-trailers and privately-owned vehicles remain the most common methods, with methamphetamine concealed inside tires, within natural voids in the body of the vehicle, or in the vehicles' fuel tanks. Methamphetamine in solution[12] can be concealed in gas tanks or extra gas containers, wiper fluid receptacles, or within other vehicle fluids – or not concealed at all and carried in water or other beverage bottles.

Smuggling methamphetamine in solution is a common transportation and concealment technique used by the Mexican cartels.

Smuggling methamphetamine in solution makes it easier to conceal and therefore more difficult to detect. However, methamphetamine in solution is not a useable form of the drug – a "conversion lab" is required to extract the methamphetamine and return it to a crystal or powder form. Law enforcement seizures of methamphetamine in solution and the conversion labs used to re-crystallize the methamphetamine have increased incrementally year over year (see Figure 16). Methamphetamine conversion labs typically use a heat source to evaporate the liquid, but the process can be accomplished by simply pouring the liquid onto a large flat surface to dry. According to EPIC reporting, there were 34 clandestine conversion lab seizures in 2023, a slight increase over the two previous years

Figure 16: Methamphetamine Conversion Lab Seizures, 2020-2023*



**2023 data is preliminary and subject to change*

Source: El Paso Intelligence Center/National Seizure System, report retrieved January 5, 2024

[12] *As described in the fentanyl section, methamphetamine does not dissolve easily and tends to remain "suspended" in the liquid used to carry it. Because of this, forensic chemists use the terms "methamphetamine in solution" or "methamphetamine in suspension" rather than "liquid methamphetamine."*

METHAMPHETAMINE

Despite some restrictions in Mexico on precursor chemicals, Mexican cartels continue to adapt by finding alternative methods of manufacturing methamphetamine, using uncontrolled precursor chemicals and altering shipping methods.

The Sinaloa and Jalisco cartels have moved away from heavily restricted precursors in favor of chemicals that are less strictly controlled and easier to obtain, mainly involving the precursor phenyl-2-propanone (P2P). As with the chemicals used in making fentanyl, methamphetamine precursor chemical shipments originating from China are disguised through deliberate mislabeling, shipping to legitimate or front companies in Mexico or Central America who then re-ship the chemicals to Mexico, and diversion from other legitimate industries for smuggling to clandestine labs in Mexico. According to the DEA Special Testing and Research Laboratory's Methamphetamine Profiling Program, nearly all of the seized methamphetamine samples – 99.4 percent – analyzed in the second half of 2022 were produced using some variation on the P2P production method, 72 percent of which used the P2P precursor phenyl-acetic acid (PAA).

Mexican cartels are exploiting the prescription stimulant market by manufacturing methamphetamine in pill form.

The introduction by the Sinaloa and Jalisco cartels of methamphetamine in pill form shows the determination of drug trafficking organizations to make methamphetamine appealing to non-traditional users, particularly to individuals who misuse prescription drugs but tend not to participate in other illicit drug use. Methamphetamine in tablet form usually mimics legitimate prescription pills, especially Adderall (see Figure 17), or is plain white like an unbranded (generic) medication. Other methamphetamine pills are made in colors and logos to resemble MDMA tablets. Fake pills containing methamphetamine and using prescription pill trademarking attract users by replacing a more expensive or harder-to-get product with a cheaper alternative – one that is often advertised and sold through social media platforms and messaging apps rather than on the street, and often to users who do not know the pills contain methamphetamine. The presence of fake trademarked Adderall pills and fake MDMA pills containing methamphetamine increases the risk of unintentional drug poisonings.

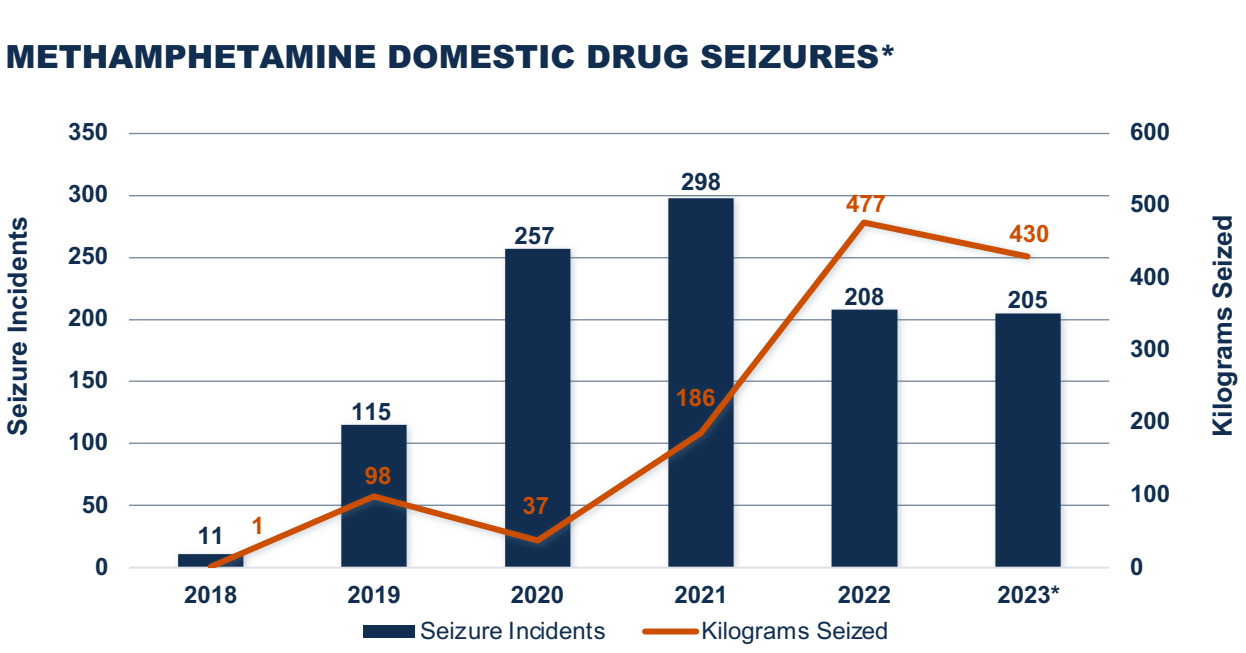
Figure 17: Prescription Adderall (top) and a Fake Adderall Pill Containing Methamphetamine (bottom)

Source: DEA

METHAMPHETAMINE

In the past two years, the quantity of methamphetamine pills seized has gone up while the raw number of seizures has gone down, according to EPIC reporting (see Figure 18). This trend shows that methamphetamine tablets are being trafficked in higher quantities per shipment, indicating it is no longer a novelty, but an established and accepted form of the drug.

Figure 18: Methamphetamine Seized in Pill Form by Number of Seizures and Total Kilogram Weight, 2018-2023



Source: El Paso Intelligence Center/National Seizure System **2023 data is preliminary and subject to change*

The number of methamphetamine-related drug overdoses in which fentanyl was also a factor is a growing concern.

Both methamphetamine and fentanyl are dangerous and potentially deadly on their own, but the deliberate use of opioids and stimulants together by illicit drug consumers, either for recreational purposes or to co- manage the negative effects of each, and the increased use of methamphetamine laced with fentanyl by unknowing users, is leading to increased numbers of fatal drug overdoses attributed to “mixed toxicity.” Drug traffickers lacing methamphetamine with fentanyl is less common than the practice of lacing cocaine with fentanyl, but the combination presents the same risk of drug poisoning to users who are not aware they are taking fentanyl because methamphetamine users do not have the tolerance of a habitual opioid user.

COCAINE

OVERVIEW

Cocaine trafficking and abuse have been persistent threats in the United States for over 40 years. The Sinaloa and Jalisco cartels largely control the cocaine trafficking corridors from South America into Mexico, and from Mexico into the United States. The Mexican cartels obtain multi-ton shipments of powder cocaine and cocaine base from South American traffickers, then smuggle it through land routes or coastal waterways in Central America, or by sea to Caribbean islands like Puerto Rico and the Dominican Republic, before bringing it into the United States. Once in the United States, U.S.-based criminal groups and street gangs distribute the cocaine, some of which is converted to crack at the local level.

Colombia is the principal source country for cocaine seized in the United States, but cocaine is also produced in Peru and Bolivia. The DEA Special Testing and Research Laboratory's Cocaine Signature Program (CSP) conducts an analysis of cocaine exhibits obtained from multi- kilogram seizures made throughout the United States. In 2022, the CSP determined at least 97 percent of the samples originated from Colombia, with Peru and Bolivia as the origin for the remaining three percent. According to the CSP, cocaine purity levels in the United States remain high, averaging 84 percent.

Fatalities involving cocaine are increasing.

Cocaine-related overdoses and annual cocaine seizures have opposing trend lines: overdoses are rising as the amount of cocaine seized is falling because most of the fatalities cannot be blamed on the use of cocaine alone.

Cocaine was involved in 15,025 overdose deaths in the first six months of 2023, according to provisional CDC data. Cocaine-related deaths have increased every year since 2015, many driven by the fentanyl poisoning of cocaine users who did not know the cocaine was laced with fentanyl. Cocaine users are at a greater risk for drug poisoning from accidental ingestion of fentanyl because they do not have the tolerance of a habitual opioid user. In some parts of the United States, at least two-thirds of the cocaine-related deaths also include findings of fatal levels of an opioid – usually fentanyl. DEA and public health reporting on the rising trend of illicit drug consumers purposely using both stimulants and opioids – for example, cocaine and fentanyl – is a growing concern.

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COCAINE

COCA CULTIVATION IN MEXICO

Mexican cartels, especially the Jalisco Cartel, are looking to cultivate coca crops and produce their own cocaine from start to finish, which – if successful – would give them much higher profits than having to buy cocaine from South American traffickers. Consulting with Colombian coca growers and cocaine producers, Mexican cartels have cultivated coca and produced cocaine in Mexico, but on a very small scale and with much lower purity. Limited DEA forensic analysis shows that Mexico-origin coca leaf yields significantly less potential cocaine per crop than the varieties of coca leaf grown in South America.

However, some gains are clearly being made coca cultivation and cocaine production in Mexico was previously thought to be improbable because of differences in soil, climate, and elevation, in addition to the Mexican cartels' lack of experience with coca cultivation and cocaine production.

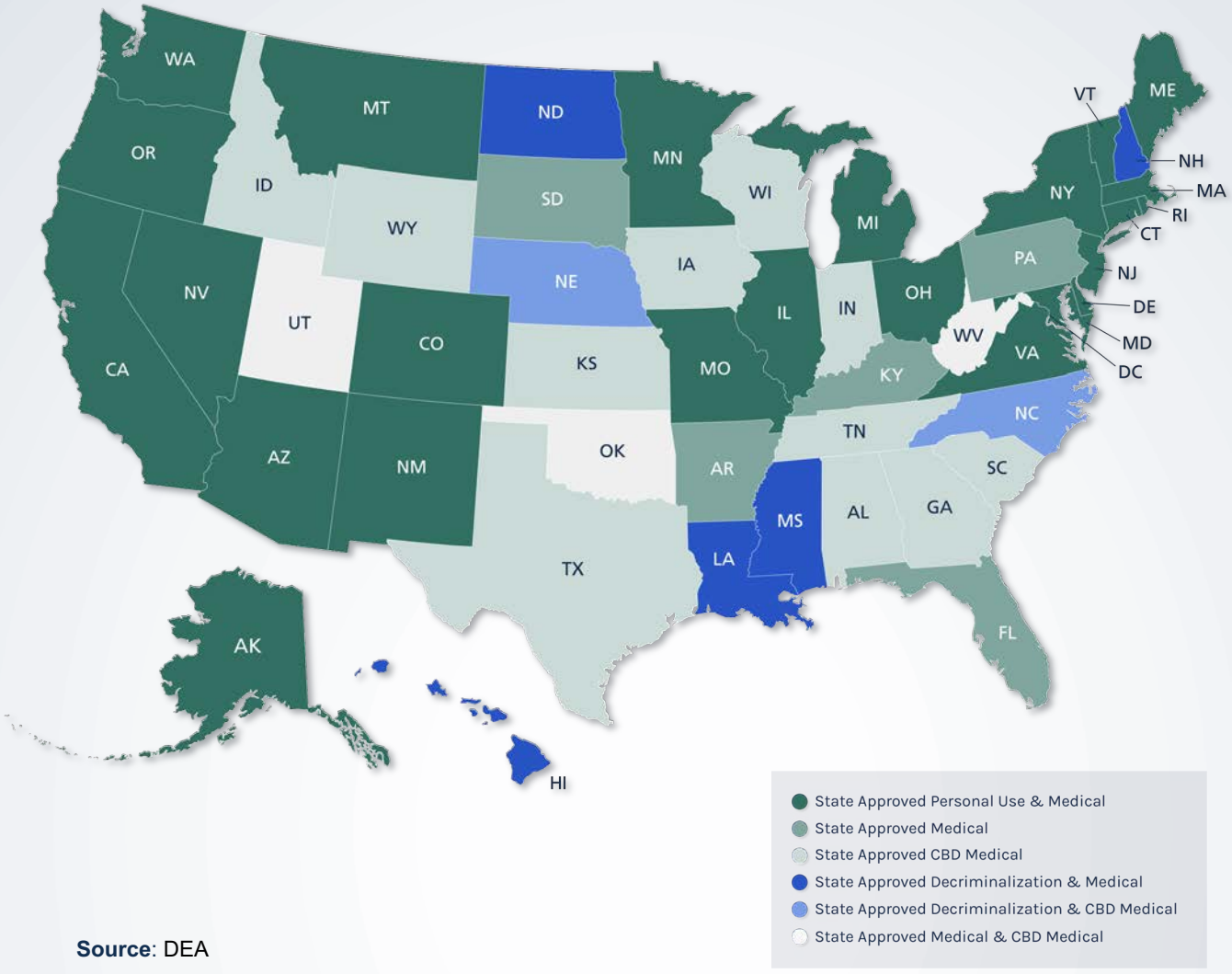
MARIJUANA

OVERVIEW

The main suppliers of marijuana to U.S. markets are cannabis growers and processors operating inside the United States. Marijuana remains illegal at the federal level; it has been "legalized" or "decriminalized" at the state level for recreational use in 24 states and the District of Columbia, and for "medical" use in 38 states and the District of Columbia, as of January 2024 (see Figure 19, on page 38). Delaware, Minnesota, and Ohio are the most recent states to "legalize" marijuana for recreational use. Despite these measures, the black market for marijuana continues, with substantial trafficking by Mexican cartels, and Chinese and other Asian organized crime groups profiting from illegal cultivation and sales, as well as exploitation of the "legal" market. The price of marijuana in illegal U.S. markets has remained largely stable for years, even as the potency of marijuana has increased exponentially.

MARIJUANA

Figure 19: State-approved Marijuana Status, January 2024



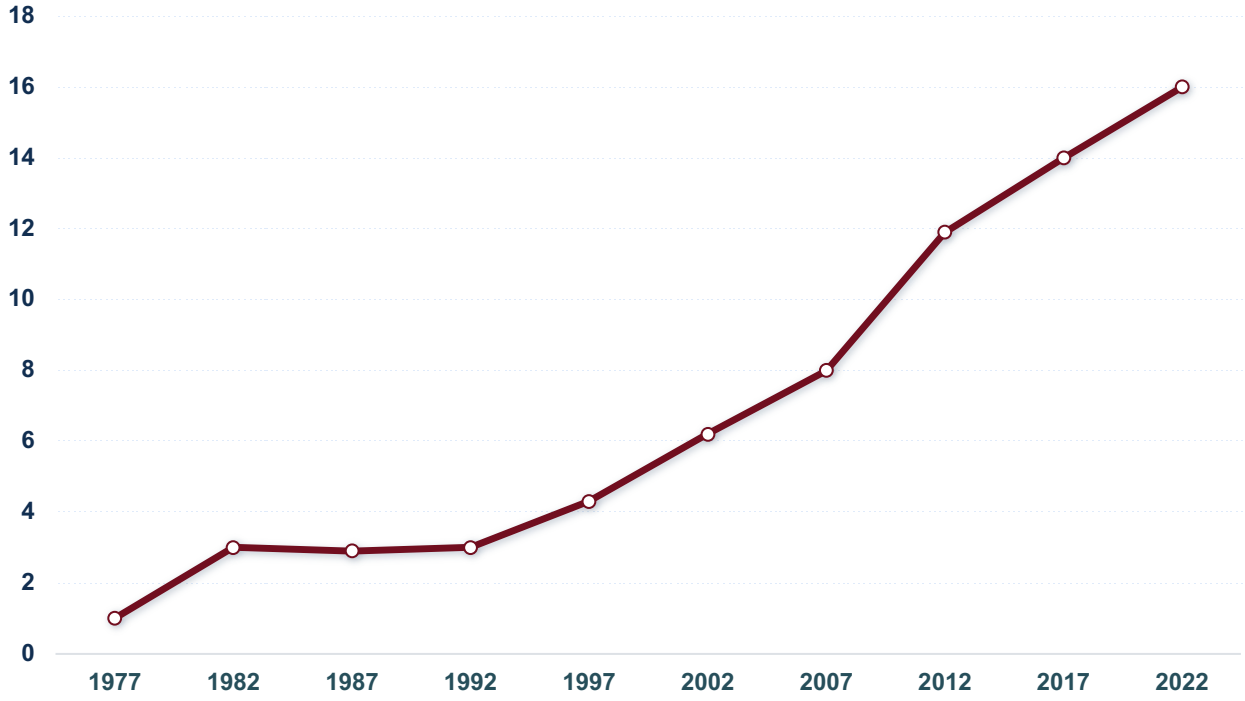
Source: DEA

MARIJUANA

NOTABLE TRENDS

Marijuana Potency

Figure 20: Average Delta-9 THC Potency in Marijuana, 1977-2022



Source: University of Mississippi Marijuana Potency Monitoring Program

The active ingredient in marijuana, THC,[13] is a hallucinogen. The potency of THC in leafy marijuana is at an all-time high, increasing the potential risk of negative effects on users of any form of the drug, and on children who may consume edibles made with these substances. Data from the University of Mississippi's Marijuana Potency Monitoring Program indicates that THC potency in leafy marijuana averaged around 16 percent in 2022, a 29 percent increase from samples tested in 2021, and many times higher than found in marijuana in past decades (see Figure 20).

[13] *Delta-9-tetrahydrocannabinol (THC)*

MARIJUANA

Asian Organized Crime Involvement in Marijuana Cultivation

Black-market marijuana cultivation, processing, and trafficking is expanding, as criminal organizations exploit loopholes in the laws and regulations governing the marijuana "industry" to establish large cultivation sites and reap huge profits from the sale of marijuana and other THC products. In recent years, there has been a notable uptick in the number of illicit marijuana cultivation sites linked to Chinese and other Asian organized crime groups. Asian investors have emerged as a new source of funding for illegal marijuana production in the United States, and site owners, eager to protect and oversee those investments, have been encountered at illegal grows seized in Oklahoma, California, Oregon, and Maine. Asian drug trafficking organizations have been involved in illegal marijuana cultivation for decades, operating industrial-scale indoor marijuana grows in residential homes, primarily in the western United States. Many of these home-grows pretend to operate under business registrations granted by state licensing authorities in jurisdictions where marijuana cultivation and sales are "legal" at the state level but, absent overt evidence such as the trafficking of marijuana across state lines or the commission of non-drug crimes such as money laundering and human trafficking, it can be difficult for law enforcement to immediately identify violations or discover an illegal grow. Across jurisdictions with a state-level "legal" framework for cultivation and sales, Asian drug trafficking organizations defy restrictions on plant quantities, production quotas, and non-licensed sales, and hide behind state-by-state variations in laws governing plant counts, registration requirements, and accountability practices. In January 2024, a federal jury in the Western District of Oklahoma convicted two Chinese nationals of drug trafficking conspiracy connected to trafficking nearly 28 tons of black-market marijuana shipped from an Oklahoma grow facility licensed by the Oklahoma Medical Marijuana Authority.

DEA's Dallas Division Seized Over $2.8 Million Linked to Marijuana Site Operated by Chinese Organized Crime Group

On August 8, 2023, the DEA Dallas Division, along with several local law enforcement agencies and the Internal Revenue Service, executed eight search warrants on residential and business locations associated with four Chinese nationals who were trafficking marijuana into the Dallas/Ft. Worth metroplex from a grow operation in Oklahoma. The warrants netted more than $2.8 million, in addition to firearms and marijuana.

Chinese and other Asian drug trafficking organizations collect millions of dollars in illicit drug proceeds from cultivating and trafficking marijuana and the money is used to fund other criminal activities, to include trafficking in other drugs, money laundering, and human trafficking. The traffickers and investors also protect their illicit marijuana cultivation sites through violence. Booby traps and weapons are found at most outdoor grow sites to discourage intrusion by wildlife, law enforcement, and thieves. Victims of human trafficking are coerced, often abusively, to work at both indoor and outdoor grow sites for little or no pay.

MARIJUANA

THC edibles are leading to an increase in child and adolescent admissions to Emergency Rooms.

THC-infused products closely resembling candy, snacks, or cereal are responsible for thousands of medical emergencies in children. A study published in January 2023 in the journal Pediatrics reported that over a five-year period (2017-2021), accidental cannabis exposure in children younger than 5 years of age had increased 1,375 percent. Of the more than 7,000 cases analyzed, 87 percent of the exposures occurred in the child's own home. Approximately one-third of pediatric patients required emergency medical treatment in a hospital, but nearly 600 children required advanced treatment in a critical care unit.

The FDA issued warning letters for products containing delta-8 THC[14] in May 2022. As a result, THC-infused products now often contain a warning label stating that the product has not been analyzed or approved by the FDA and is not safe for children. The concern remains that children will unknowingly eat THC-infused products, regardless of warning labels, because the products mimic the taste and appearance of the actual product, and the packages look nearly identical to the legitimate product's packaging (see Figure 21).

Figure 21: Products Containing Delta-8 and Delta-10 THC, April 2023

Source: Lancaster County Drug Task Force (Lancaster, PA)

Illegal marijuana cultivation results in environmental damage and crimes.

Illegal outdoor marijuana grows, usually found on public lands, use toxic fertilizers and pest repellants that endanger non-pest wildlife, damage surrounding plants, and seep into water supplies. These sites are mainly located in remote, difficult-to-access areas and can be expensive for cultivators to maintain but are also challenging for law enforcement to detect and eradicate. Indoor grows can operate year-round and offer the drug traffickers a continuous profit stream but can severely damage the homes where the grows are established, creating health and safety hazards to first responders. Both indoor and outdoor grows also require abnormal amounts of water and electricity, which are often stolen or diverted from public utilities. This practice significantly raises legitimate consumer costs and increases the risk of fires because of overloaded transformers and lack of water.

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[14] Delta-8 THC is a hemp-derived cannabinoid that is federally legal under the 2018 Farm Bill but is synthesized from cannabidiol (CBD) and not from the plant itself. Delta 8-THC is also legal in 23 states and the District of Columbia, legal with regulations/restrictions in 10 states, and banned in 17 states.

CONTROLLED PRESCRIPTION DRUGS (CPDs)

OVERVIEW

Controlled prescription drugs (CPDs) are the fourth leading cause of fatal drug poisonings in the United States. CPDs are supposed to be available only by prescription, but many prescription drugs are obtained illegally through fraud or "doctor shopping," shared among friends or family members, or purchased illegally on the street, over social media and messaging apps, and online. The most-misused CPDs are amphetamine products, like Adderall; narcotic pain relievers, like Percocet, OxyContin (both oxycodone), and Vicodin (hydrocodone); and sedatives, like Xanax (see Figure 22). DEA encourages the public to remove unneeded medications from their homes as a measure of preventing medication misuse and opioid addiction from ever starting.

DEA NATIONAL Rx TAKEBACK

Every Day Is Take Back Day

DEA's National Prescription Drug Take Back Program reflects DEA's commitment to Americans' safety and health, encouraging the community to clean out their medicine cabinets and turn in their unused prescription drugs safely and anonymously.

Figure 22: Results of the 2022 NSDUH on the Top Ten Most Misused CPDs

DRUG TYPE	COMMON OR TRADEMARK NAME* *'Most of These Substances Come in Generic Form*	CATEGORY
Amphetamine	Adderall, Vyvanse, Ritalin, Concerta, Dexedrine	Stimulant
Hydrocodone	Vicodin, Lortab	Pain Reliever
Alprazolam	Xanax	Tranquilizer
Oxycodone	Percodan OxyContin, Percocet, Endocet, Roxicodone, Roxicet	Pain Reliever
Codeine	Morphine methyl ester, methyl morphine	Pain Reliever
Tramadol	Tramadol	Pain Reliever
Buprenorphine	Buprenex, Temgesic, Subutex, Suboxone	Pain Reliever
Clonazepam	Klonopin, Clonopin	Tranquilizer
Lorazepam	Ativan	Tranquilizer
Diazepam	Valium, Diastat	Tranquilizer

Source: National Survey on Drug Use and Health (2022), DEA Drugs of Abuse (2022 Edition)

CONTROLLED PRESCRIPTION DRUGS (CPDs)

Fraud related to electronic prescriptions is increasing.

DEA investigators observed an increase in fraudulent electronic prescriptions (e-scripts) between 2021 and 2023. DEA registrants are reporting fraudulent use of their registration numbers and identities on prescriptions submitted via e-script in locations across the country. The further expansion of online telehealth services and e-script portals during the COVID-19 pandemic presented increased opportunities for e-script abuse by patients or office staff, and through identity theft.

Stimulant prescription drug shortages began in 2022.

In October 2022, the FDA declared a shortage of "immediate release amphetamine mixed salts" products (for example, Adderall). A review of DEA data showed that, in 2022, manufacturers did not produce the full amount permitted by DEA limits, also known as quotas, resulting in a shortfall of one billion doses. This shortage coincided with a significant increase in the prescribing of stimulants, mainly for the treatment of attention-deficit/hyperactivity disorder. The overall dispensing of stimulants in the United States has increased by 58 percent over the past ten years, with the greatest increases occurring among adults while remaining stable or declining among children and adolescents.

Millions of opioids are stolen or lost every year, but the situation is improving.

The DEA Theft/Loss Reporting Database (TLR) reveals that the number of unaccounted-for narcotic prescription drugs (opioids) in 2022 was at its lowest level in 12 years and continued to decline into the first nine months of 2023 (see Figure 23). CPDs are lost through employee theft (or suspected), disaster (fire, weather, etc.), hijacking of transport vehicles, accidental breakage/spillage, robberies, break-ins/burglaries, and other causes.

Figure 23: Unaccounted-for Opioid Narcotics, 2010 – September 2023 (in Millions)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12.5	19.5	13.1	11.6	12.4	9.8	9.7	9.4	7.0	6.1	7.8	6.7	5.3	4

Source: DEA Office of Diversion Control/Theft and Loss Reporting System

Burglaries and break-ins accounted for the highest number of unaccounted-for opioid dosage units in 2022-2023. Of note are recent pharmacy burglaries where individuals exploited vulnerabilities in pharmacy security systems. The number of robberies of CPDs reported by registrants to the TLR continues to trend downward, interrupted briefly by a spike during the pandemic. [Note: The crime is classified as a burglary/break-in if it is committed after-hours (at a business) or at a time when people are not expected to be present (at a home); it is categorized as a robbery, armed or not, if it occurs when people are present.]

NEW PSYCHOACTIVE SUBSTANCES (NPS)

OVERVIEW

New Psychoactive Substances (NPS), many of which are unregulated, are a diverse group of synthetic substances designed to have effects similar to controlled substances. Users seek drugs in this category to attain a high equivalent to an illegal drug, or because they believe they can self-treat a physical or mental illness. Drug traffickers seek these drugs to skirt the law and diversify their profits.

Several of these "novel" drugs have actually been around for decades but experience periodic surges in popularity or return to the illegal drug market with tweaks after the original similar substance was banned or controlled. NPSs include phenethylamines (MDMA, ecstasy, molly); ketamine; synthetic cannabinoids (K2, spice); synthetic cathinones (bath salts); phencyclidine-type substances (PCP); tryptamines (AMT, foxy); aminoindanes (MDAI gold); and piperazines (A2, Pep X). Various plant-based substances also fall into this category, such as psilocybin (mushrooms); ayahuasca; salvia divinorum (Magic Mint, Sally D) and khat (qat, chat, Abyssinian Tea). According to DEA forensic laboratory reporting, the top three NPS groups are phenethylamines, synthetic cannabinoids, and synthetic cathinones – all of which have forms that are controlled in Schedule I of the CSA.

NOTABLE TRENDS

Phenethylamines

Phenethylamines are hallucinogenic stimulants, and have been encountered as powders, liquids, laced on edible items, and soaked onto blotter papers. Ecstasy and molly (pill and powder forms of MDMA, respectively) are the most common types of phenethylamines, but similar substances go by the street names N-bomb and Smiles. The ingestion of very small amounts of these drugs can result in seizures, cardiac and respiratory arrest, and death. Over the last five years, there have been approximately 39,000 phenethylamine submissions to DEA forensic laboratories, but submissions have decreased by 20 percent in each of the last two years.

NEW PSYCHOACTIVE SUBSTANCES (NPS)

NOTABLE TRENDS CONTINUED

Synthetic Cannabinoids

Synthetic cannabinoids are lab-made drugs that are chemically similar to the psychoactive components found in the cannabis plant, though they usually produce very different effects. Products sold as synthetic cannabinoids often contain several chemicals in different concentrations, making it difficult to determine substance-specific effects. Some synthetic cannabinoids are federally controlled, and several state and local governments have passed legislation targeting the synthetic cannabinoids not covered by federal law. Synthetic cannabinoids are mainly laced on plant material for smoking or consumed in liquid form and packaged in bags with bright logos under names like Joker, Green Giant, and Scooby Snax. They are mainly sold online, in “head shops,” tobacco/vape stores, convenience stores, and gas stations.

Submissions of synthetic cannabinoids to DEA forensic laboratories are trending down. Using synthetic cannabinoids can cause severe agitation, anxiety, racing heartbeat, high blood pressure, intense hallucinations, and psychotic episodes. Synthetic cannabinoids have also been connected to drug poisoning deaths, nearly always spiking in warm weather months as the adverse health effects are exacerbated by higher temperatures and the increased potential for dehydration.

Synthetic Cathinones

Synthetic cathinones, more commonly known as bath salts, are stimulants that produce effects similar to methamphetamine, cocaine, and MDMA. Drug poisonings and overdoses have occurred with synthetic cathinones, and users can experience symptoms such as nausea, vomiting, paranoia, hallucinations, delusions, suicidal thoughts, seizures, chest pains, increased heart rate, and violent outbursts. Eutylone and dipentylone are the most frequently encountered synthetic cathinones, but they are mainly sold as ecstasy. The synthetic versions are chemically related to cathinone, a substance found naturally in the khat plant, a shrub grown in East Africa and the Arabian Peninsula where users chew its leaves or brew them into tea for mild stimulant effects similar to caffeine. Synthetic cathinones, however, can be much more potent than the natural forms. China-based online vendors are the main source for synthetic cathinones, but they are also sold at convenience stores, tobacco/smoke shops, and gas stations and, like synthetic cannabinoids, are frequently packaged in bags with bright logos. Recently, the synthetic cathinone market has been pushed underground, being sold in "traditional” drug packaging like small unmarked baggies, and can be found in tablet, capsule, or powder form. Submissions of synthetic cathinones to DEA forensic laboratories have been trending downward for the past five years.

ILLICIT FINANCE

OVERVIEW

The Sinaloa and Jalisco cartels, and other global criminal networks, generate billions of dollars in profits from the sale of illicit drugs. Drug traffickers use fraud and deception to circulate the money through U.S. and global financial systems to enrich themselves, and to continue funding their illegal drug trafficking operations. In 2022, DEA investigations led to the seizure of hundreds of millions of dollars in assets that went through U.S. asset forfeiture proceedings – assets that included millions of dollars in bulk cash that the Mexican cartels attempted to introduce discreetly into the legitimate financial system, as well as financial instruments (such as stocks, bonds, cryptocurrency, stored value cards), real estate, and luxury items.

Most drug trafficking organizations outsource the "cleaning" of illegal drug profits to criminal money launderers and brokers who can provide quick, up-front payouts to the traffickers while taking on themselves the tedious process of infiltrating illicit cash into financial institutions from within the United States. These money launderers usually do not work for one specific cartel; rather, they accept money laundering contracts from multiple criminal organizations, not all of them drug traffickers, and use laundering networks that can span several countries.

Methods by which illicit proceeds are laundered include:

- Chinese underground banking systems, which sprung up in response to the Chinese government's attempt to curb capital flight (assets being taken out of China and reinvested in foreign countries) as a way for Chinese nationals to convert cash assets in China into U.S. assets;
- trade-based money laundering, in which consumer goods are purchased in one country for the equivalent cash value of the money to be laundered, and then resold;
- mirror transfers, an informal system in which a broker in one country makes an upfront payout to the criminal organization and receives the equivalent amount from another criminal broker;
- cryptocurrency exchanges, in which a broker accepts bulk cash in exchange for transferring an equivalent sum in cryptocurrency to a digital wallet owned by the drug trafficking organization; and
- simple bulk cash smuggling.

Leader of $25 Million International Money Laundering and Drug Conspiracy Pleads Guilty

In September 2023, Jin Hua Zhang of Staten Island, New York pled guilty to money laundering charges. The defendant also distributed kilograms of cocaine and MDMA in Massachusetts. First discovered in Boston, Zhang's money laundering organization and its members were later detected in locations across the United States and internationally. Investigators determined that Zhang's network laundered funds for drug traffickers, internet scammers, and other criminal groups. In one year alone, Zhang's organization laundered more than $25 million in drug money and other illicit profits. Zhang's network has been traced to Hong Kong, China, Cambodia, India, Brazil, and other locations

ILLICIT FINANCE

NOTABLE TRENDS

Chinese Underground Banking Systems

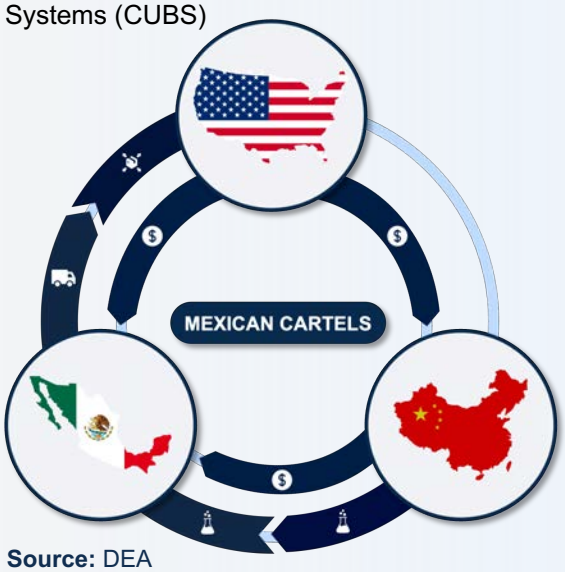
Money brokers who operate within the China-based underground banking systems (CUBS) increasingly act as money launderers for Mexico- and South America-based drug trafficking organizations in order to maintain liquidity in the CUBS. Chinese nationals use these underground banking systems to surreptitiously convert their cash assets in China into equivalent cash assets in the United States. Chinese nationals and companies are not permitted, under current banking regulations in China, to buy more than the equivalent of $50,000 in foreign currency or invest more than that amount in foreign countries ("capital flight").

Money processors who work for CUBS brokers collect cash from transnational drug traffickers operating in the United States. They use the cash collected from drug traffickers to benefit the China-based clients of the CUBS broker who are attempting to circumvent China's capital flight laws. The cash is structured into U.S. accounts for individuals, shell companies, or cash-based businesses. The CUBS brokers then arrange for their money processors in Mexico or South America to pay cash directly to the drug trafficking organization. CUBS brokers also arrange for their China-based clients to make intra-China money transfers to accounts used to purchase trade goods which are then exported to Mexico and South America on behalf of drug traffickers.

United States v. Jianxing Chen, Xizhi Li, et al.

In May 2023, Belize-based money launderer Jianxing Chen (aka John Chen) pled guilty to U.S. Department of Justice money laundering charges. From Belize, Chen organized networks of cash couriers and money processors who collected millions of dollars of cash drug proceeds in Chicago, Houston, Los Angeles, New York, and Atlanta. Over many years, Chen and one of his co-defendants, Xizhi Li (aka Juan Lee, John Lee) laundered this cash into U.S. accounts with beneficiaries in mainland China and coordinated the transfer of money from Mexico-based money processors or China-based clients into the hands of Mexico-based drug traffickers for very low fees.

Figure 24: Relationships Between Mexican Cartels and Chinese Precursor Chemical Suppliers and Chinese Underground Banking Systems (CUBS)



Source: DEA

ILLICIT FINANCE

Cryptocurrency

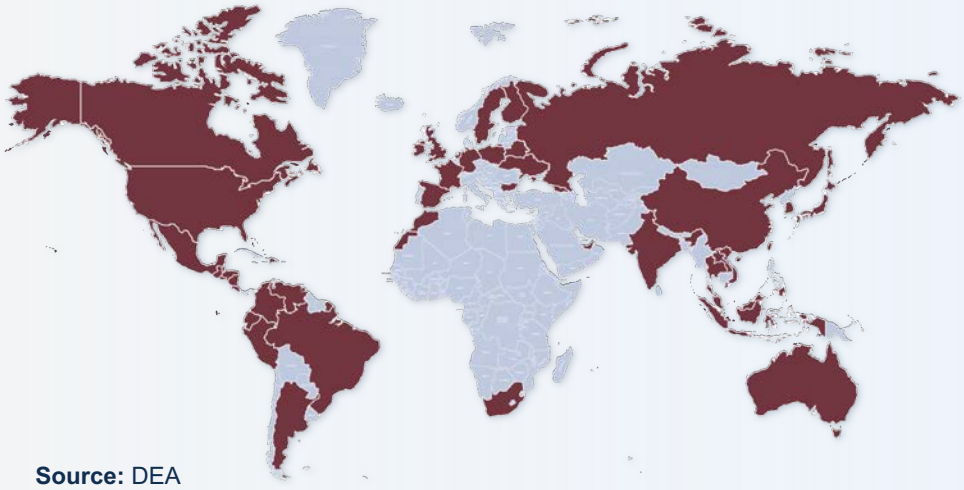
Mexican cartels and other drug trafficking organizations increasingly use cryptocurrency to launder drug proceeds. Cryptocurrencies are highly advantageous to drug trafficking organizations because they can be used to transfer value across international borders without relying on banks, and because these transfers leave no paper trail beyond the blockchain, which is encrypted. Money launderers who own cryptocurrency collect bulk cash from drug traffickers and transfer cryptocurrency to the drug traffickers in return. Drug traffickers can immediately transfer the cryptocurrency to their counterparts in Mexico or other countries where it is usually resold for local currency. The ultra-encrypted nature of these transactions, and difficulty in tracing them absent the trafficker's "key," makes it nearly impossible to measure the scope of the money laundering activity occurring in the cryptocurrency space.

Drug traffickers also launder their drug proceeds through cryptocurrency exchange companies, which are required by U.S. law to monitor customers and transactions for indications of money laundering. Drug traffickers make structured deposits of cash into bank accounts which are used to purchase cryptocurrency through online exchanges. Once cash drug proceeds are used to purchase cryptocurrency, the cryptocurrency can be quickly resold for cash or another financial instrument to any other cryptocurrency buyer worldwide (see Figure 25).

What Is Cryptocurrency?

Cryptocurrencies are classified as "financial instruments" and are a form of digital payment recorded and settled on an open decentralized ledger that is verified by a network of independent computers instead of a central payment processor or settlement system, like those used by banks or other traditional financial institutions and money service businesses.

Figure 25: Countries Where a Sinaloa Cartel-Affiliated Money Laundering Network Executed Cryptocurrency Transactions

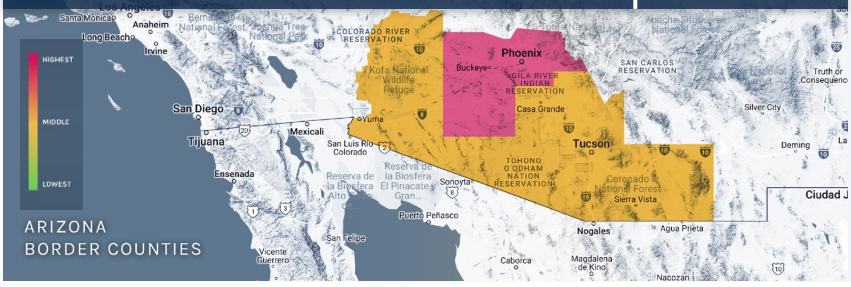


Source: DEA

ILLICIT FINANCE

Figure 26: Bulk Cash Seizures in Counties Within 150 Miles of the United States-Mexico Border, 2023

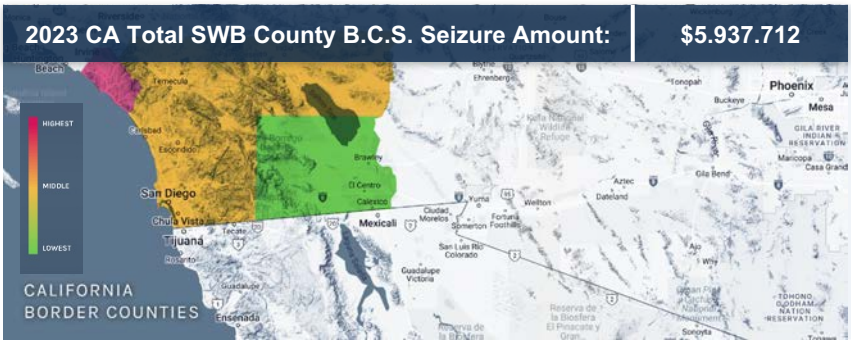
2023 AZ Total SWB County B.C.S. Seizure Amount: $6,125,777



TOP 5 SWB COUNTIES BY TOTAL AMOUNT

COUNTY	SEIZURES	TOTAL AMOUNT
Maricopa	245	$4,702,116
Pima	67	$562,980
Santa Cruz	12	$311,229
Pinal	18	$243,623
Cochise	28	$163,225
Total	**370**	**$5,983,173**

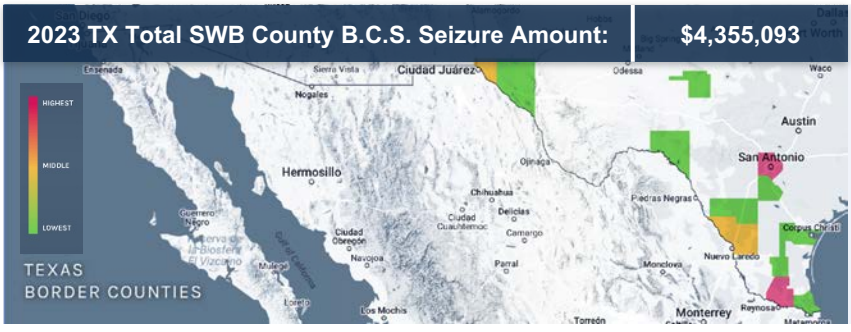
2023 CA Total SWB County B.C.S. Seizure Amount: $5.937.712



ALL 5 SWB COUNTIES BY TOTAL AMOUNT

COUNTY	SEIZURES	TOTAL AMOUNT
Orange	26	$3,109,333
Riverside	26	$1,542,470
San Diego	29	$1,239,449
Imperial	2	$46,460
Total	**83**	**$5,937,712**

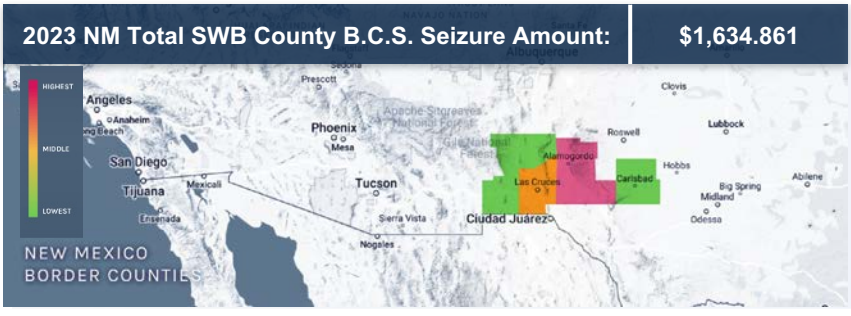
2023 TX Total SWB County B.C.S. Seizure Amount: $4,355,093



TOP 5 SWB COUNTIES BY TOTAL AMOUNT

COUNTY	SEIZURES	TOTAL AMOUNT
Hidalgo	8	1,252.353
Bexar	19	$1,131,008
El Paso	12	$599,332
Webb	14	$513,557
Brooks County	1	$300.000
Total	**54**	**$3,796,250**

2023 NM Total SWB County B.C.S. Seizure Amount: $1,634.861



ALL 5 SWB COUNTIES BY TOTAL AMOUNT

COUNTY	SEIZURES	TOTAL AMOUNT
Otero	18	$815,408
Dona Ana	28	$647,485
Sierra County	2	$86,251
Eddy	7	$43,163
Luna	4	$42,554
Total	**59**	**$1,634,861**

Source: El Paso Intelligence Center/National Seizure System

ILLICIT FINANCE

Bulk Cash Smuggling

Millions of dollars in cash drug proceeds generated by illicit retail drug sales are consolidated in key cities of the money launderer's choosing, or to border crossings and airports where cartel-linked couriers physically smuggle the cash out of the United States. This is demonstrated by the large number of bulk cash seizures conducted by law enforcement at and near the Southwest Border.

In 2023, federal, state, local, and tribal law enforcement agencies in counties within 150 miles of the United States-Mexico border conducted nearly 600 bulk cash seizures valued at $18 million, according to EPIC reporting. Most of these seizures occurred in Arizona, followed by California, Texas, and New Mexico. Figure 26 (above) provides the 2023 total bulk cash seizure amount for each state's Southwest Border counties, followed by a heat map depicting each state's counties by total dollar amount (see the color key). Additional information is provided in a table beside each map, listing each Southwest Border state's top five counties by bulk cash amount seized.

Drug trafficking organizations like the Sinaloa and Jalisco cartels cannot make use of the profits from their illegal activities without money laundering. Law enforcement efforts to detect, prevent, and prosecute money laundering are complicated by varying or non-existent regulations in foreign financial institutions, the sheer volume of financial transactions that occur every day, the schemes and deception employed by Mexican cartels and other drug trafficking organizations to disguise the criminal origin of their profits, and their use of encrypted technologies. Illicit financial maneuvers, however, require the involvement of criminal associates – money launderers and brokers, couriers, account holders, and complicit business owners – who charge high commissions or require payment, and each of which represent a potential vulnerability. Mexican cartels will therefore continue to seek access to encrypted and anonymized technologies that would allow them to conduct transactions with less risk and lower costs.

Figure 27: 4.5 Million Dollars of Seized Cash
Source: DEA

DEA RESPONSE

OVERVIEW

DEA has acted with urgency to set a new vision, target the global criminal networks most responsible for the influx of fentanyl into the United States, and raise public awareness about how just one pill can kill. As the single mission agency tasked with enforcing our nation's drug laws, DEA's top operational priority is to relentlessly pursue and defeat the two Mexican drug cartels—the Sinaloa Cartel and the Jalisco Cartel—that are primarily responsible for driving the current fentanyl poisoning epidemic in the United States.

DEA is the lead law enforcement agency in the Administration's whole-of-government response to defeat the cartels and combat the drug poisoning epidemic in our communities. DEA's role in leading the law enforcement response to the fentanyl epidemic protects the safety of agents, officers, and sources. Importantly, a unified response to the fentanyl epidemic ensures that the whole of government is moving in one direction that protects the safety and health of Americans. DEA operates 30 field divisions with 241 domestic offices, 93 foreign offices in 69 countries, and nine forensic laboratories. DEA's robust domestic and international presence allows it to map and target Sinaloa Cartel and Jalisco Cartel operations across the globe. In addition, DEA has launched three cross-agency counterthreat teams to execute a network-focused operational strategy to defeat the Sinaloa and Jalisco cartels and their web of drug and illicit finance contacts. These teams are composed of Special Agents, Intelligence Analysts, Diversion Investigators, targeters, data scientists, and digital specialists doing the critical work of mapping, analyzing, and targeting the entirety of the cartels' criminal networks. This network-focused strategy is crucial to defeating the Sinaloa and Jalisco cartels.

OPERATION OVERDRIVE

DEA's Operation Overdrive puts resources into the U.S.'s most violence- and overdose-plagued cities to target the violent dealers who kill thousands of Americans every week with fentanyl and with weapons. More than half of the nearly 1,200 violent drug dealers arrested as part of the second phase of Operation Overdrive, from February through July 2023, were gang members. The Sinaloa and Jalisco cartels aid and abet the local dealers and gangs, flooding U.S. streets with fentanyl in tablets disguised as legitimate prescription drugs, fentanyl powder, drugs laced with fentanyl, fentanyl mixed with xylazine, and other drugs. For example, an Operation Overdrive case revealed that a U.S.-based Mexican drug trafficking organization linked to the Jalisco Cartel supplied fentanyl, methamphetamine, and cocaine to members of the Bloods gang operating in the Durham, North Carolina area. The second phase of Operation Overdrive resulted in 547 distinct seizures of fentanyl totaling more than 10 million deadly doses; nearly 40 percent of those seizures were of fentanyl mixed with xylazine.

DEA RESPONSE

OPERATION OD JUSTICE

DEA is committed to disrupting every part of the fentanyl supply chain, to include seeking judicial consequences for individuals who provide illicit fentanyl to vulnerable and unsuspecting Americans, resulting in death. DEA started Operation OD Justice to devote resources to fatal poisoning investigations and provide training to our federal, state, and local partners.

DEA created Fentanyl Overdose Response Teams in 22 offices across the United States; the teams provide direct investigative support to fatal poisoning investigations. Every DEA division also has an Overdose Response Coordinator who serves as a point of contact for DEA's federal, state, and local partners. DEA works jointly with these partners to identify the individuals responsible for supplying the fentanyl that killed its victims and pursue charges for fentanyl distribution resulting in death. Since 2023, DEA has worked over 350 poisoning investigations with state and local partners.

DEA has trained over 2,500 federal, state, and local investigators to conduct fatal poisoning investigations with the goal of treating these incidents not only as public health crises but as crimes to be solved. In March 2024, DEA hosted a Fentanyl Poisoning Investigations Seminar, attended by Task Force Officers, Special Agents, and the U.S. Department of Justice's Narcotics and Dangerous Drugs Section. In 2023, DEA created an Overdose Response Standard Operating Procedure and an incident checklist to guide investigators through crime scene management and case development.

Fentanyl Poisoning Investigation in Washington, DC Leads to the Sinaloa Cartel

On April 6, 2021, Diamond Lynch died of fentanyl poisoning in Washington, DC. DEA and local law enforcement partners launched an immediate overdose investigation. As a result of this comprehensive case, DEA indicted two Washington, DC residents on charges of distributing fentanyl resulting in death, the first-ever fentanyl poisoning investigation prosecuted by the U.S. Attorney's Office for the District of Columbia. Both defendants were found guilty and sentenced in February 2023. After the initial arrests, investigators built the case from a local-impact investigation into a multi-state and international investigation linked to Sinaloa Cartel traffickers in Los Angeles and Tijuana who supplied the fentanyl to the two Washington, DC distributors.

DEA RESPONSE

EXPANDING ACCESS TO TREATMENT

In this moment, when the United States is suffering tens of thousands of illicit opioid-related drug poisoning deaths every year, the DEA's top priority is doing everything in our power to save lives. Medication for opioid use disorder (MOUD) helps the roughly 6.1 million individuals in the United States who are fighting to overcome an opioid use disorder (OUD) by sustaining recovery and preventing opioid poisonings and overdoses. With the passage of the Consolidated Appropriations Act of 2023[15], there was an immediate and significant increase in the number of practitioners who can prescribe Schedule III MOUD products (e.g., buprenorphine combination medications containing buprenorphine and naloxone) for patients with OUD. DEA, along with our interagency partners and the healthcare community, seeks to make MOUD readily and safely available to anyone in the country who needs it. In addition, DEA and the Department of Health and Human Services (HHS) developed and implemented the Opioid Rapid Response Program (ORRP) to mitigate patient harm and maintain continuity of patient care when DEA takes enforcement action on a prescriber registered with DEA to prescribe MOUD. Since the program started in the Fall of 2021, DEA has made 161 referrals to the ORRP. Continuity of care for individuals in treatment for OUD is essential to saving lives.

ONE PILL CAN KILL

In 2021, DEA launched the "One Pill Can Kill" enforcement effort and public awareness campaign. Through this campaign, DEA and our law enforcement partners have seized millions of fentanyl pills and thousands of pounds of fentanyl powder, equating to millions of potentially lethal doses of fentanyl, which could have entered our communities. The One Pill Can Kill webpage (www.dea.gov/onepill) and partner toolbox raise awareness about the dangers of fentanyl and fake pills through shareable graphics, fact sheets, and other digital resources. Countless national, state, and local organizations have accepted DEA's call to action and shared One Pill Can Kill materials in their communities.

#DEA #OnePillCanKill #1PillCanKill
#OPCK #Fentanyl #Meth
#FakePill #Fake

[15] *Public Law 117 - 328 – 136 Stat. 4459 (2022)*

DEA RESPONSE

COMMUNITY OUTREACH

DEA's community outreach efforts educate students, professionals in higher education, local communities, families, youth-serving organizations, and other community-based stakeholders to raise awareness about the dangers of illegal drugs and the importance of preventing drug use. That work includes annual Family Summits on Fentanyl in DEA field divisions across the country (www.dea.gov/familysummit) and the Faces of Fentanyl exhibit at the DEA Museum in Arlington, Virginia (www.dea.gov/fentanylawareness).

DEA disseminates science-based, evidence-informed prevention materials to target audiences through several websites.

www.justthinktwice.com is aimed at teens and provides information on drug facts, statistics, and the consequences of substance use.

www.campusdrugprevention.gov is aimed at college educators and specialists who support prevention on college campuses, and provides a toolbox for use by drug prevention professionals, access to federal and national resources, podcasts, facts on drugs and paraphernalia, and a student help center.

www.campusdrugprevention.gov is aimed at college educators and specialists who support prevention on college campuses, and provides a toolbox for use by drug prevention professionals, access to federal and national resources, podcasts, facts on drugs and paraphernalia, and a student help center.

www.operationprevention.com provides no-cost digital tools for students in grades 3-12, **in English and Spanish**, to raise awareness about the dangers of substance misuse. Operation Prevention also features a culture-based prevention resource titled "The Good Medicine Bundle" developed for Native and Non-Native students.

OPERATION ENGAGE

www.operationengage.com is a comprehensive community-based initiative, bridging public health and public safety across 11 DEA field divisions. This approach raises awareness about the dangers of illicit substances, increases community visibility on the top local drug threats, and builds localized drug prevention capacity by implementing strategies for community-level change.

EXHIBIT 51

Congressional Research Service
Informing the legislative debate since 1914

IN FOCUS

Updated February 20, 2024

China Primer: Illicit Fentanyl and China's Role

In addressing the international dimension of the opioid crisis in the United States, policymakers have sought to stop foreign-sourced fentanyl, fentanyl-related substances (i.e., analogues), and chemical inputs (e.g., precursors) from entering the United States. Beginning in the mid-2010s, U.S. authorities identified the People's Republic of China (PRC, or China) as a primary source of U.S.-bound illicit fentanyl and fentanyl analogues. The PRC's imposition of class-wide controls over all fentanyl-related substances in 2019 changed trafficking patterns. Direct flows of such substances from China to the United States appeared largely to cease. Today, the focus of China-related U.S. counternarcotics policy has shifted to preventing PRC-sourced fentanyl precursors and associated equipment, along with other synthetic drugs that may be mixed with fentanyl substances, from entering the U.S.-bound fentanyl supply chain. The U.S. government also seeks to target illicit fentanyl-related financial flows linked to China. A November 2023 summit in California between President Joseph R. Biden Jr. and China's leader, Xi Jinping, renewed cooperation on drug control issues after more than three years of stasis.

Background

Fentanyl is a potent synthetic opioid that has been used medically as a painkiller and an anesthetic since it was first synthesized in 1959. Due to fentanyl's potential for abuse and addiction, the United Nations (U.N.) placed it under international control in 1964. Domestically, fentanyl is regulated by the Drug Enforcement Administration (DEA), pursuant to the Comprehensive Drug Abuse Prevention and Control Act of 1970, as amended (21 U.S.C. §§801 et seq.). The U.S. Centers for Disease Control and Prevention estimate that synthetic opioids (primarily fentanyl-related substances) may have resulted in more than 78,000 U.S. overdose deaths between September 2022 and August 2023. Traffickers appear to be marketing a growing number of fentanyl analogues for nonmedical, often unregulated, use.

As of November 2023, the International Narcotics Control Board (INCB)—an independent expert body that monitors governments' compliance with U.N. drug control conventions—reported the existence of 153 fentanyl-related substances with no currently known legitimate uses. The U.N. Office on Drugs and Crime estimates that laboratories could potentially synthesize thousands of other fentanyl analogues. As of May 2023, more than 30 fentanyl-related substances, including precursors, are subject to international control ("scheduled") pursuant to the U.N. Single Convention on Narcotic Drugs of 1961, as amended, and the U.N. Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.

U.N. member states first subjected fentanyl precursors to international control in 2017, agreeing to list the precursors *N*-Phenethyl-4-piperidone (NPP) and 4-Anilino-*N*-phenethylpiperidine (ANPP) on Table I of the 1988 Convention. In 2018, consistent with the U.N. decision, the PRC implemented corresponding domestic controls. In 2022, U.N. member states subjected three additional fentanyl precursors to international control: *N*-Phenyl-4-piperidinamine (4-AP), *tert*-Butyl 4-(phenylamino) piperidine-1-carboxylate (1-boc-4-AP), and norfentanyl. In June 2023, the PRC government said it was "in the process of scheduling" three additional fentanyl precursors—presumably those the U.N. scheduled in 2022—but the PRC has provided no further information.

Sources and Trafficking Pathways

DEA alleges that PRC-based chemical companies advertise and sell online fentanyl precursor chemicals, including some that are not internationally controlled and are correspondingly legal to export out of China. PRC firms also sell other synthetic drugs of concern, including xylazine and nitazenes. PRC companies ship such items to Mexico or directly to the United States, including via the U.S. Postal Service and express consignment services, "carefully packaged to deceive customs inspectors." According to DEA, customers, often associated with Mexico-based transnational criminal organizations (TCOs), may pay for the chemicals and drugs in cryptocurrencies, making it harder for DEA "to follow the money." They also pay using U.S. and PRC payment services or bank transfers. DEA alleges that the TCOs use largely PRC-sourced chemicals to synthesize fentanyl substances in clandestine laboratories, and often mix xylazine and nitazenes into fentanyl-related products, making the substances "even deadlier," before distributing them across North America.

The 2022 report of the U.S. Commission on Combating Synthetic Opioid Trafficking (established pursuant to §7221 of P.L. 116-92) concluded that the PRC's chemical and pharmaceutical sectors have "outpaced the government's efforts to regulate them, creating opportunities for unscrupulous vendors to export chemicals needed in their illegal manufacture." The U.S. Department of the Treasury assesses that Mexico-based cartels are increasingly working with PRC money laundering organizations.

Addressing China's Role

The Biden Administration's 2022 *National Drug Control Strategy* prioritizes increased collaboration with the PRC "on shared drug priorities" and continued engagement "to reduce diversion of uncontrolled precursor chemicals." In February 2023 Senate testimony, Assistant Secretary of State for International Narcotics and Law Enforcement Affairs Todd Robinson noted that the United States has "encouraged the PRC to improve information-sharing on global chemical flows, strengthen enforcement of customs manifesting agreements, and implement know-your-customer standards to restrict the sale of precursor chemicals to only customers with legitimate needs." In July

2023, the United States launched a Global Coalition to Address Synthetic Drug Threats, including fentanyl.

The U.S. government has taken several unilateral actions to address China's role in fentanyl and precursor trafficking.

- The U.S. Department of the Treasury's Office of Foreign Assets Control has so far sanctioned more than 65 mainland China- or Hong Kong-based persons for illicit fentanyl, xylazine, or nitazenes trafficking. The sanctions block assets under U.S. jurisdiction, prohibit U.S. persons from engaging in financial transactions with those designated, and ban such traffickers from entry into the United States.

- In June 2023, the Department of Justice (DOJ) indicted three PRC-based companies and their employees for fentanyl-related crimes. In September 2023, DOJ indicted eight more PRC chemical companies and 12 of their executives for crimes related to fentanyl, other synthetic opioids, methamphetamines, and their precursor chemicals.

- In September 2023, President Biden added China to the U.S. list of the world's major illicit drug-transit or drug-producing countries, citing the PRC's role in the production of precursor chemicals used to produce illicit drugs significantly affecting the United States.

U.S.-PRC cooperation on fentanyl has yielded some successes. In May 2019, the PRC added all fentanyl-related substances not already scheduled to its "Supplementary List of Controlled Narcotic Drugs and Psychotropic Substances with Non-Medical Use." In 2019 and 2021, joint U.S.-China investigations resulted in PRC courts sentencing defendants for trafficking fentanyl to the United States and Canada. In 2020, the U.S. Postal Service reported that China Post was "nearly fully achieving" the requirement, pursuant to the Synthetics Trafficking and Overdose Prevention (STOP) Act of 2018 (Title VIII, Subtitle A of P.L. 115-271), that 100% of its U.S.-destination packages be accompanied by customs advance electronic data (AED).

Bilateral counternarcotics cooperation appeared to stall beginning in 2020. The PRC government blamed U.S. actions unrelated to counternarcotics. It pointed to the U.S. Department of Commerce (DOC)'s June 2020 addition to its Entity List of an institute under the PRC's Ministry of Public Security (MPS), the Institute of Forensic Science, which subjected the institute to export controls. DOC alleged the institute was "implicated in human rights abuses" in the PRC's Xinjiang Uyghur Autonomous Region. The PRC formally suspended bilateral counternarcotics cooperation in August 2022, in response to then-House Speaker Nancy Pelosi's visit to Taiwan.

At their November 2023 summit, President Biden and Communist Party of China General Secretary Xi agreed to resume counternarcotics cooperation and to launch a counternarcotics working group. In parallel, DOC removed the MPS institute from the Entity List. The White House reported that the PRC shut down some PRC-based suppliers of synthetic drugs and precursors and blocked their international payment accounts. After a pause of three years, the PRC also resumed submitting real-time incidents of suspicious shipments of fentanyl-related substances and other new psychoactive substances to the INCB. (The White House says the PRC submitted 145 such incidents in November 2023 alone.) After the summit, the PRC National Narcotics Control Commission (NNCC), housed within MPS, warned PRC actors that they may be subject to law enforcement actions from other countries for sales and trafficking of substances not currently subject to controls in China. The notice cautioned PRC actors specifically about sales to the United States and Mexico, including sales of pill presses. An appendix identified all 51 U.S.-listed precursors. In late January 2024, a senior Biden Administration official reported that the United States was "starting to see reductions in seizures of precursors at some U.S. airports already."

The working group met for the first time in Beijing on January 30, 2024. White House Deputy Homeland Security Advisor Jen Daskal led the U.S. delegation. Her PRC counterpart was State Councilor Wang Xiaohong, who serves concurrently as Minister of Public Security and head of the NNCC. Per the White House, "The two sides emphasized the need to coordinate on law enforcement actions; address the misuse of precursor chemicals, pill presses, and related equipment to manufacture illicit drugs; target the illicit financing of transnational criminal organization networks; and engage in multilateral fora."

Secretary of Homeland Security Alejandro N. Mayorkas and State Councilor Wang met in Vienna on February 18, 2024. According to a U.S. readout, with regard to illicit synthetic drugs, the two committed to "continued law enforcement cooperation, technical bilateral exchanges between scientists and other experts, scheduling of precursor chemicals, and furthering multilateral cooperation." The PRC readout quoted Wang as also calling on the United States to "correct the mistake of listing China as a 'major drug source country.'"

Related Legislation in the 118th Congress

The National Defense Authorization Act for FY2024 (P.L. 118-31), requires a determination of whether the PRC government "assisted in or approved of the transportation of pill presses, fentanyl products, or fentanyl precursors to one or more Mexican drug cartels" (Sec. 1311). It also states that it is the sense of Congress that PRC and Mexican organizations that traffic or finance trafficking in illicit fentanyl should be "among the highest priorities" for the Office of the Director of National Intelligence (Sec. 7325). Pending legislation includes the Senate-passed FEND Off Fentanyl Act (H.R. 815), the House-passed Stop Chinese Fentanyl Act of 2023 (H.R. 3203), the Strengthening Sanctions on Fentanyl Traffickers Act of 2023 (S. 2059), the Stop Fentanyl Money Laundering Act of 2023 (H.R. 3244), and the Project Precursor Act (H.R. 3205). The Senate's Department of State, Foreign Operations, and Related Programs Appropriations Acts for 2024 (S. 2438) would also include provisions related to fentanyl and China.

Ricardo Barrios, Analyst in Asian Affairs
Susan V. Lawrence, Specialist in Asian Affairs
Liana W. Rosen, Specialist in International Crime and Narcotics

Disclaimer

EXHIBIT 52

RESERVED

EXHIBIT 53

BARRON'S

FROM AFP NEWS

China's Police State Goes Global At Surveillance Conference

By Isabel KUA September 11, 2024

High-tech CCTV, super-accurate DNA-testing technology and facial tracking software: China is pushing its state-of-the-art surveillance and policing tactics abroad.

Delegates from law enforcement across the world descended this week on a port city in eastern China showcasing the work of dozens of local firms, several linked to repression in the northwestern region of Xinjiang.

China is one of the most surveilled societies on Earth, with millions of CCTV cameras scattered across cities and facial recognition technology widely used in everything from day-to-day law enforcement to political repression.

Its police serve a dual purpose: keeping the peace and cracking down on petty crime while also ensuring challenges to the ruling Communist Party are swiftly stamped out.

During the opening ceremony in Lianyungang, Jiangsu province, China's police minister lauded Beijing's training of thousands of police from abroad over the last 12 months -- and promised to help thousands more over the next year.

An analyst said this was "absolutely a sign that China aims to export" its policing.

"Beijing is hoping to normalise and legitimise its policing style and... the authoritarian political system in which it operates," Bethany Allen at the Australian Strategic Policy Institute told AFP.

"The more countries that learn from the Chinese model, the fewer countries willing to criticise such a state-first, repressive approach."