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2019

DRUG ENFORCEMENT ADMINISTRATION

# NATIONAL DRUG THREAT ASSESSMENT

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DEA-DCT-DIR-007-20



U.S. DEPARTMENT OF JUSTICE  
DRUG ENFORCEMENT ADMINISTRATION

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# METHAMPHETAMINE

## Overview

Methamphetamine seizures, survey, price, and purity data as well as law enforcement reporting all indicate methamphetamine continues to be readily available throughout the United States. Most of the methamphetamine available in the United States is produced clandestinely in Mexico and smuggled across the SWB. Domestic production occurs at much lower levels than in Mexico and seizures of domestic methamphetamine laboratories have continued to decline. Drug poisoning deaths involving methamphetamine continue to rise, as methamphetamine purity and potency remain high while prices remain low.

## Availability

Methamphetamine is available throughout the United States, with the highest availability in the West and Midwest regions of the country, as well as a strong presence in the Southeast. Methamphetamine is seized in varying degrees in nearly every domestic FD (see Figure 34). However, in recent years, methamphetamine has become more prevalent in areas that have historically not been major markets for the drug, particularly the Northeast.

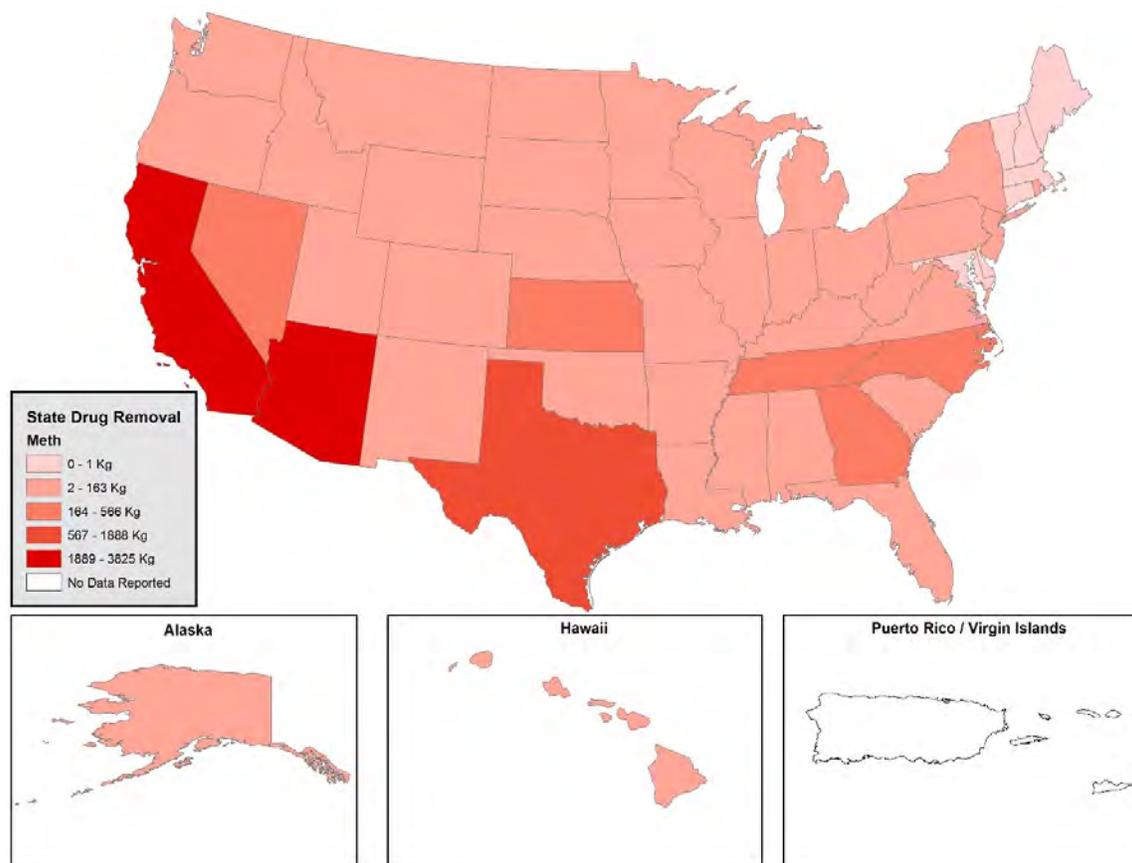
The majority of FDs indicated methamphetamine availability was high throughout the United States. In 2018, 14 FDs reported methamphetamine availability was high and seven reported methamphetamine availability was moderate. Fourteen divisions reported

methamphetamine was more available compared to the previous reporting period, and the remaining 9 divisions reported stable availability in 2018 (see Figure 34).

**Figure 34. Field Division Reporting of Methamphetamine Availability in CY 2018 and Comparison to CY 2017**

Field Division	Availability During CY 2018	Availability Compared to CY 2017
Atlanta Field Division	High	Stable
Caribbean Field Division	Low	Stable
Chicago Field Division	Moderate	More
Dallas Field Division	High	More
Denver Field Division	High	More
Detroit Field Division	Moderate	More
El Paso Field Division	High	More
Houston Field Division	High	Stable
Los Angeles Field Division	High	Stable
Louisville Field Division	High	More
Miami Field Division	Moderate	More
New England Field Division	Moderate	Stable
New Jersey Field Division	Low	Stable
New Orleans Field Division	High	More
New York Field Division	Moderate	Stable
Omaha Field Division	High	More
Philadelphia Field Division	Moderate	More
Phoenix Field Division	High	More
San Diego Field Division	High	More
San Francisco Field Division	High	Stable
Seattle Field Division	High	Stable
St. Louis Field Division	High	More
Washington Field Division	Moderate	More

Source: DEA

**Figure 35. Removals of Methamphetamine by State in Kilograms, 2018**

Source: DEA

Drug removals by DEA field divisions show methamphetamine maintains a presence in every US state in varying degrees, with higher concentrations in states nearer the SWB as well in some states in the Southeast region, where some domestic production remains prevalent (see Figure 35). Generally, methamphetamine maintains a strong presence in the West, Southwest, and Southeast regions of the country due to proximity to the SWB and use of the interstate highway system; however, methamphetamine has had a growing presence in regions that have not historically maintained large markets for the drug, such as the Northeast.

Methamphetamine reports to NFLIS decreased 5 percent between 2016 (314,872) and 2017

(298,102). However, overall methamphetamine reports have increased significantly—87 percent—since 2010 (159,738 reports). NFLIS data also indicates methamphetamine reports represent an increasingly larger portion of the total number of all drug reports - growing from eight percent of all reports submitted in 2009 to 40 percent of all reports submitted in 2017.

## Purity, Potency, and Price

Purity<sup>o</sup> and potency<sup>p</sup> through December 2017 indicate methamphetamine available at the retail level in the United States remains very pure and inexpensive. Methamphetamine per-gram purity levels averaged above 90 percent, while price data through December 2018 indicates meth availability remained high and

o. Purity is defined as a measure of the amount of an illicit substance present in a sample compared to other substances in the sample such as adulterants, diluents, or solvents.

p. Potency is defined as the measure of drug activity in terms of the dosage required to exert an effect on the body and is measured by the amount of the highly potent d-isomer present in the drug substance.

prices remained low. Additionally, seizures sampled through the DEA Methamphetamine Profiling Program (MPP) continue to have high purity and potency, indicating high availability of methamphetamine.

- Analysis of domestic methamphetamine purchases from January 2013 through December 2017 indicates the price per pure gram of methamphetamine decreased 17.6 percent— from \$68 to \$56— while purity decreased 1.5 percent— from 94.4 percent to 93.0 percent (see Figure 36).
- In the second half of 2018, methamphetamine sampled through the MPP averaged 97.5 percent purity and 96.9 percent potency (see Figure 37).

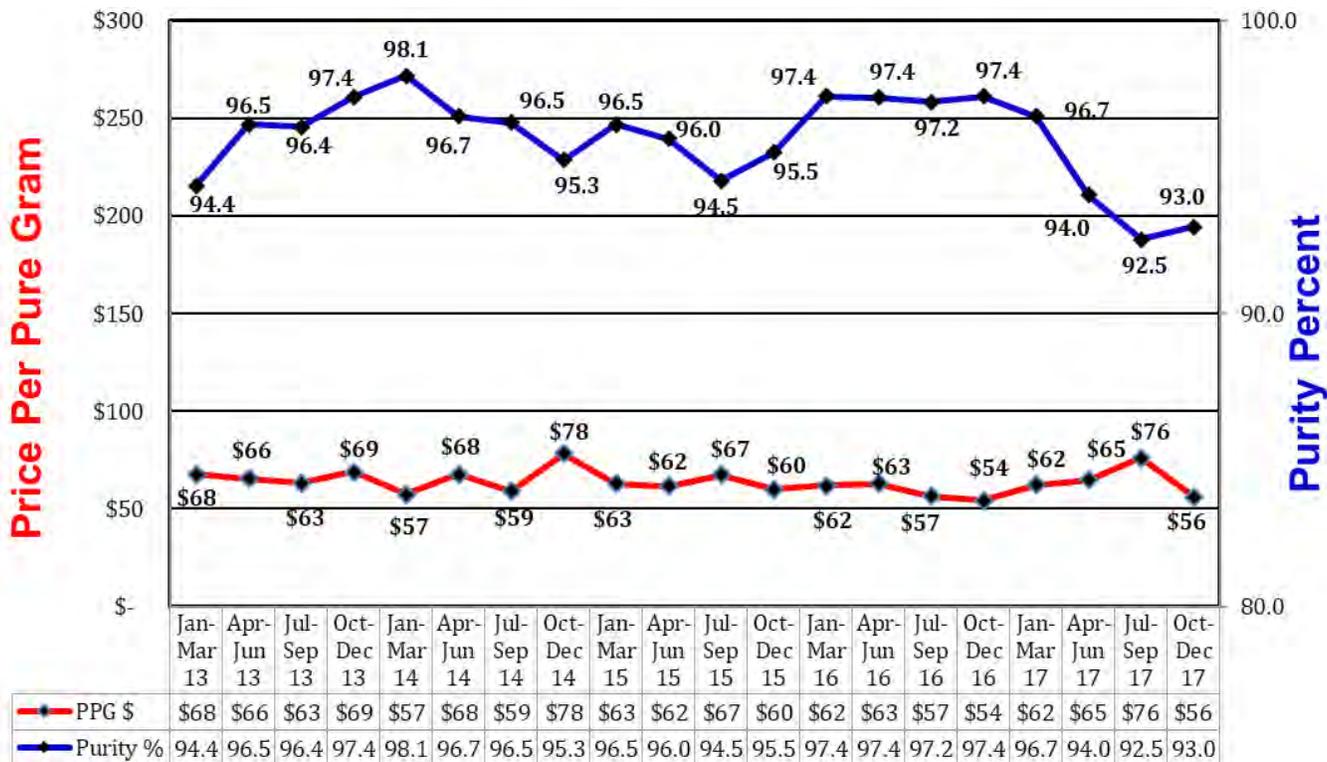
Mexican TCOs continue to be the primary producers and suppliers of low cost, high purity, high potency methamphetamine in the United States. Mexican TCOs regularly produce large quantities of methamphetamine, which has led to a significant supply of methamphetamine in the U.S. market. The majority of Mexican TCOs are involved in methamphetamine trafficking,

which has led to increased competition among the different TCO groups, TCOs exploring new markets for methamphetamine, and increasing quantities coming across the SWB. The price of methamphetamine may begin to rise with a market expansion, although currently, prices in established markets remain consistently low.

## Use

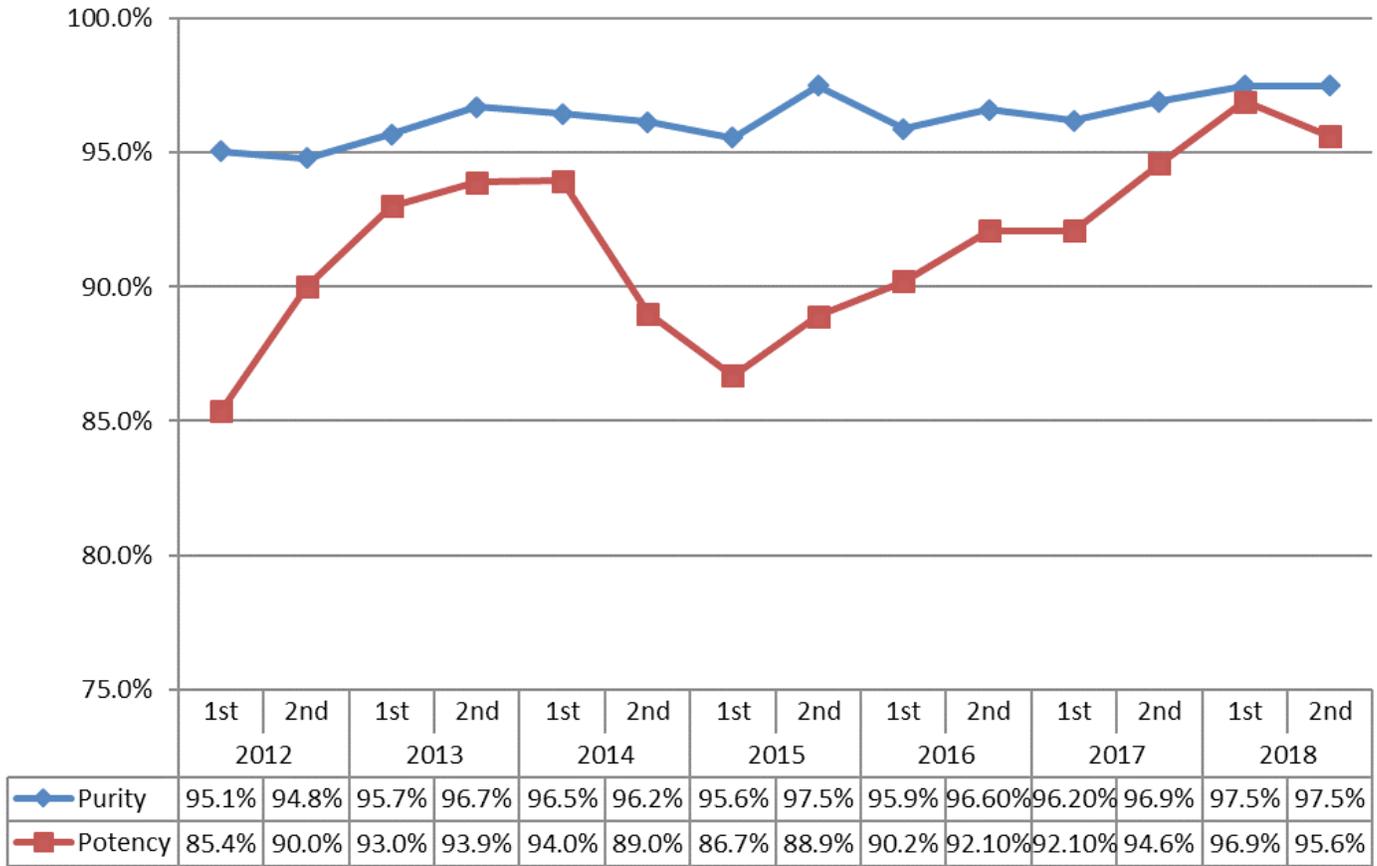
The number of deaths in the CDC category “psychostimulants with abuse potential” continues to increase. Methamphetamine-involved drug poisoning deaths are counted under this broader category, which includes other drugs such as caffeine and phenethylamines (including MDMA, amphetamine, and methamphetamine), and cathinones (e.g. ethylone). According to the CDC, in 2017, there were 10,333 psychostimulant drug-poisoning deaths in the United States, representing a 37 percent increase from 2016,

**Figure 36. Domestic Methamphetamine Purchases, January 2013 – December 2017**



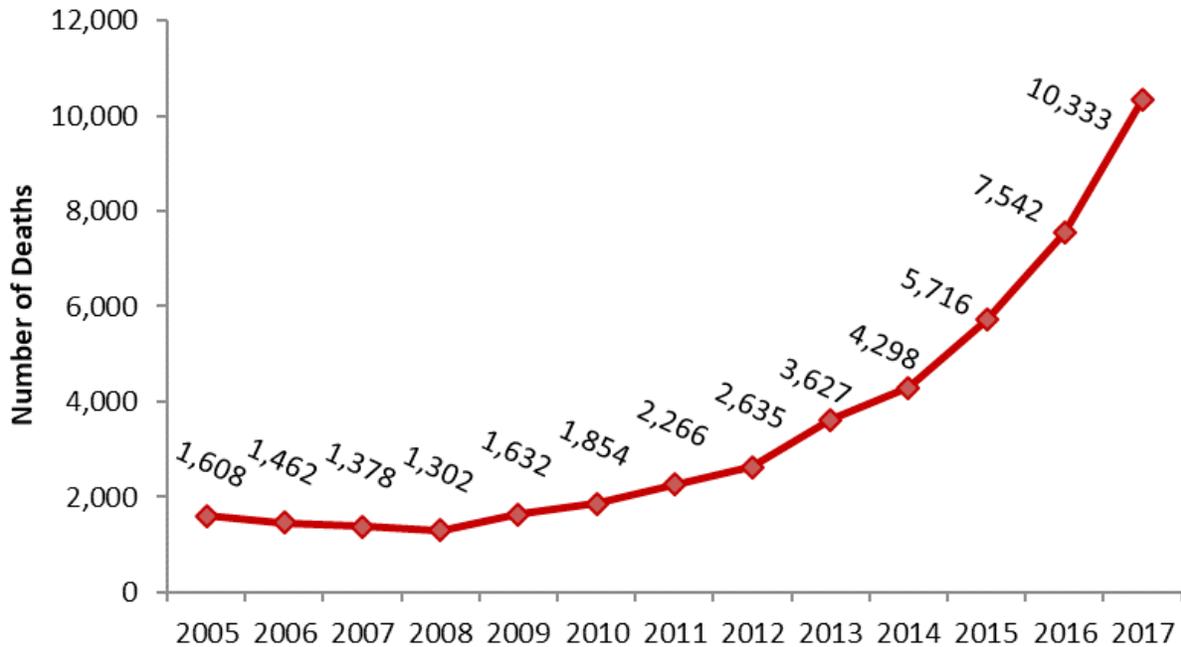
Source: DEA

**Figure 37. Methamphetamine Purity and Potency**



Source: DEA

**Figure 38. Psychostimulant-involved Drug Poisoning Deaths, 2005 – 2017**



Source: Centers for Disease Control and Prevention

and a 543 percent increase since 2005 (see Figure 38). The steadily increasing number of deaths from psychostimulants may be due to increased availability and market expansion into areas and user bases that are not traditionally associated with methamphetamine use.

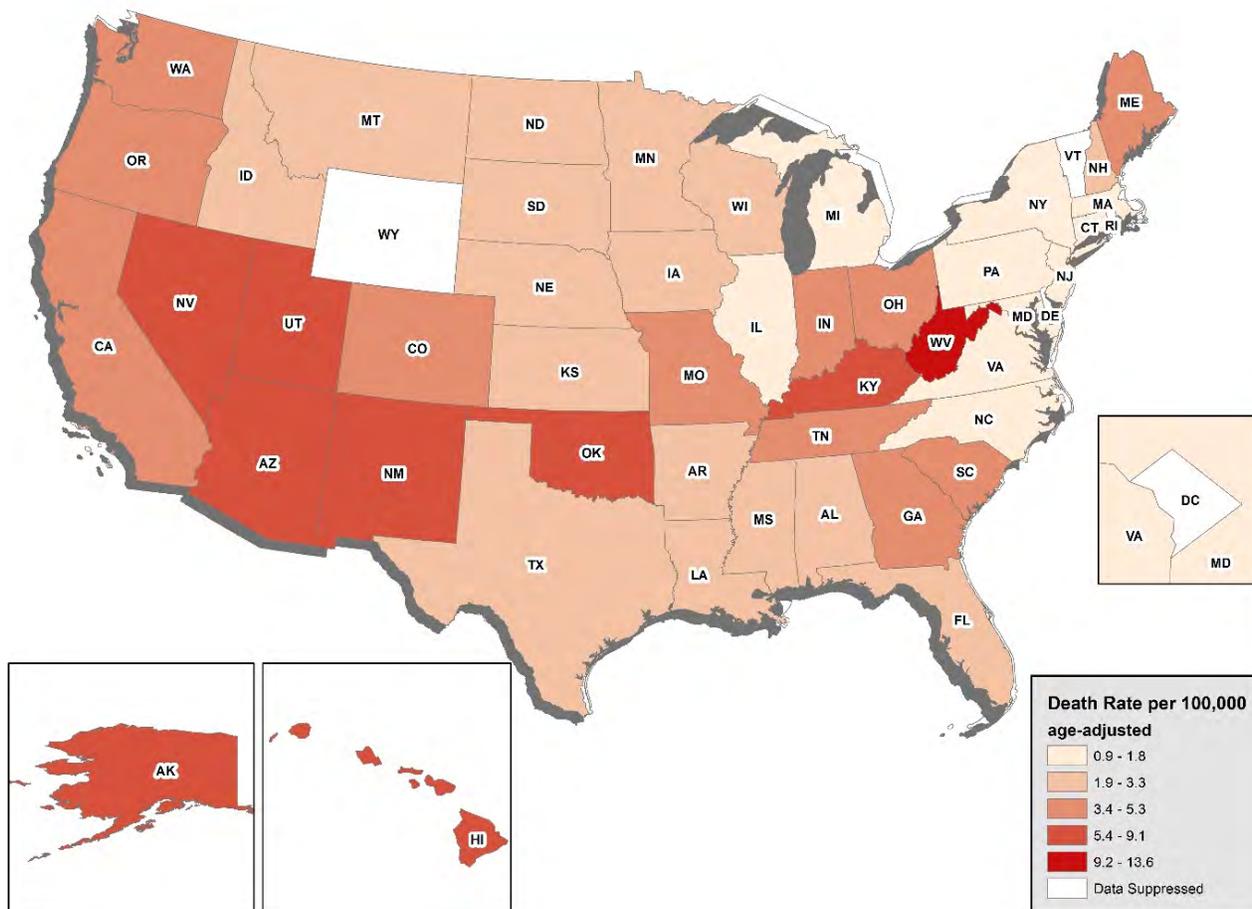
## Production

Clandestine methamphetamine laboratory seizures continue to decrease across the United States and are at the lowest level in 15 years. The passage of the 2005 Combat Methamphetamine Epidemic Act (CMEA) reduced domestic methamphetamine production by placing restriction on key ingredients. Domestic producers have been unable to keep up with the quantity or quality of the lower cost methamphetamine produced on an industrial scale in Mexico. Now, most of the

methamphetamine available in the United States is produced in Mexico and smuggled across the SWB.

Shortly after the passage of the CMEA, Mexico introduced similar legislation regulating precursors, notably ephedrine and pseudoephedrine. The series of legislative actions first limited imports, then limited sales, followed by requiring a prescription, then banning ephedrine and pseudoephedrine from the country entirely in 2008. Despite the restrictions in Mexico on precursor chemicals, Mexican TCOs continue to adapt by finding alternative methods of manufacture, with much of the precursor chemicals sourced to companies in China. This led to a shift in production method from ephedrine-based methods to a method with less-restricted precursor chemicals.

**Figure 39. 2017 Psychostimulant-involved Drug Poisoning Deaths by State, Age-adjusted Rate**



Source: DEA

## Fentanyl and Methamphetamine Combinations

Since 2015, DEA and other law enforcement agencies have seized methamphetamine mixed with fentanyl and FRS in select markets of the United States. Although fentanyl is typically either mixed with or sold as heroin, forensic laboratories have analyzed exhibits containing methamphetamine and fentanyl or FRS since 2015.

Methamphetamine has historically been mixed with heroin to create a “speedball,” although such combinations have been rare. Mixtures of methamphetamine with fentanyl are also a rare occurrence, but may be used to achieve the same effect as traditional speedballs. Many of these mixtures have methamphetamine as the primary substance, with fentanyl or FRS as a secondary or tertiary substance in the sample.

Although the number of mixture reports increased over 1,342 percent since 2015, reports of methamphetamine and fentanyl combinations represent a very small portion of the total analyzed methamphetamine reports. In 2017, forensic laboratories analyzed 298,102 reports of methamphetamine, per NFLIS data. Methamphetamine-fentanyl mixtures accounted for about two percent of all methamphetamine reports for 2017, which may indicate these mixtures are the result of accidental contamination during methamphetamine processing and/or packaging for re-sale by poly-drug traffickers rather than an intentional combination.

**Figure 40. NFLIS Reports of Methamphetamine and Fentanyl Combinations, 2015-2017**

	2015	2016	2017	Total
Acetyl Fentanyl	1	0	0	1
Acryl Fentanyl	0	1	4	5
Butyryl Fentanyl	0	0	1	1
Carfentanil	0	5	49	54
Cyclopropyl Fentanyl	0	0	4	4
Fentanyl	32	84	270	386
Fluoroisobutyryl Fentanyl	0	0	4	4
Furanyl Fentanyl	0	1	16	17
Methoxyacetal Fentanyl	0	0	4	4

Source: DEA

## Methamphetamine Precursor Chemicals

### Controlled Examples:

- Methylamine
- Benzaldehyde
- Nitroethane

### Not Controlled Examples:

- Ammonium chloride
- Formaldehyde

Methamphetamine is produced via multiple methods that utilize a variety of different chemicals depending on the process. Many of these chemicals are controlled as listed chemicals, though TCOs have sought to bypass this by using uncontrolled pre-precursors. The involvement of Mexican TCOs in methamphetamine production with industrial or “super-laboratories” relies upon the importation of these chemicals primarily from China and India. Chemical shipments will be mislabeled in China, shipped to legitimate companies in Mexico or Central America, and then diverted by the TCO and smuggled overland to the clandestine laboratories.

## The Combat Methamphetamine Epidemic Act of 2005

The CMEA of 2005 was signed into law on March 9, 2006, which regulated over-the-counter retail sales of methamphetamine precursor chemicals, such as ephedrine, pseudoephedrine, and phenylpropanolamine products. Retail provisions of the CMEA include daily sales limits and 30-day purchase limits, placement of product out of direct customer access, sales logbooks, customer ID verification, employee training, and self-certification of regulated sellers. The CMEA is defined as Title VII of the USA Patriot Improvement and Reauthorization Act of 2005 (Public Law 109-177).

## Domestic Production

In the early 2000s, methamphetamine laboratories seizures increased yearly in the United States and peaked in 2004 with approximately 23,703 methamphetamine laboratory incidents<sup>q</sup> reported to the El Paso Intelligence Center (EPIC) National Seizure System (NSS). Overall, since 2004, domestic methamphetamine production has decreased annually, with a moderate spike in production in 2010 that has since declined significantly. Domestic production is currently at its lowest point since at least 2000 (see Figure 41).

According to NSS reporting, methamphetamine is the most frequently manufactured drug seized in clandestine laboratories in the United States. Clandestine laboratories can be set up anywhere: private residences, motel and hotel rooms, apartments, house trailers, mobile homes, campgrounds, and commercial establishments. The majority of incidents reported to NSS were seizures of clandestine labs (61 percent), while others were discoveries of dumpsites (28 percent), or seizures of equipment or chemicals only (11 percent).

Many of the domestic methamphetamine laboratories seized in 2018 were small-capacity production laboratories, known as “one-pot” or “shake and bake” labs. A laboratory of this size generally produces two ounces or less of methamphetamine per production cycle, making it small-scale and easy to conceal. Common household items (i.e. pseudoephedrine/ephedrine tablets, lithium batteries, camp fuel, starting fluid, and cold packs) are used as ingredients and mixed inside a container such as a plastic soda bottle. This method produces small amounts of methamphetamine, and is

q. Incidents include Dumpsites, Chemical Only or Equipment Only Seizures, and Laboratory Seizures.

**Figure 41. Number of Methamphetamine Laboratory Incidents, 2000 – 2017**

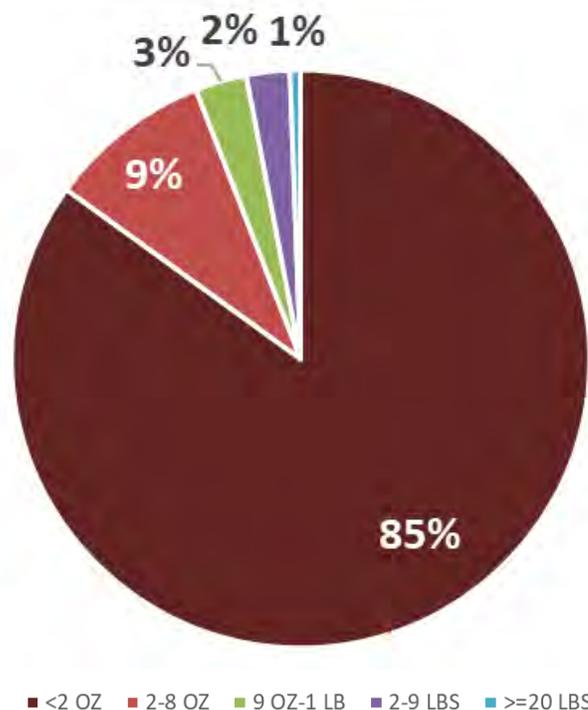


Source: El Paso Intelligence Center as of March 27, 2019

very portable. “One pot” laboratories are often dangerous, and in many cases can cause fires, serious injuries, or even death.

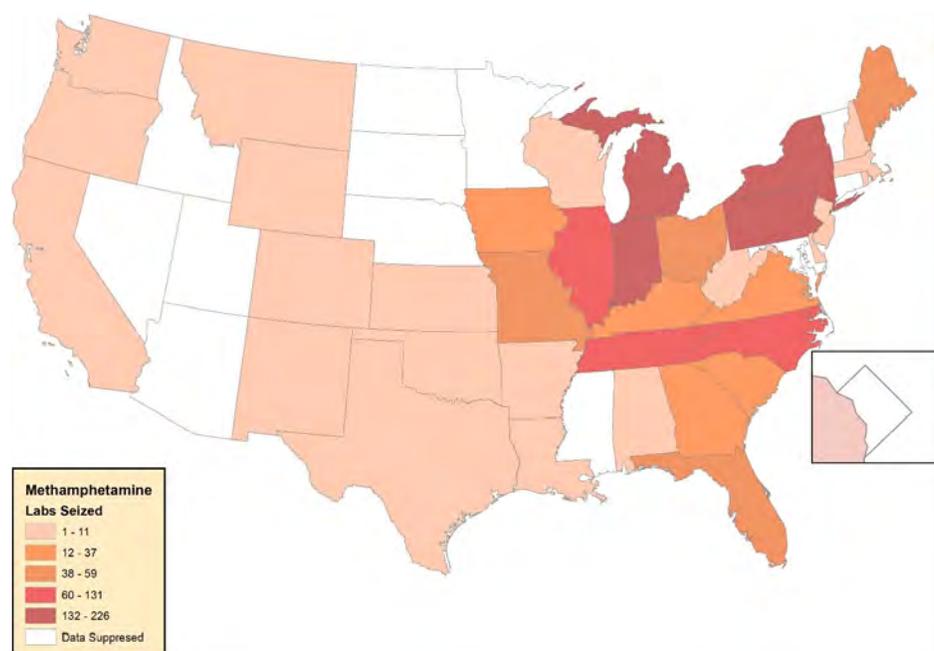
The number of domestic methamphetamine laboratories seized decreased 88 percent from 2012 (13,657) to 2018 (1,568). In 2018, 85 percent of all methamphetamine laboratories seized in the United States were small laboratories capable of producing two ounces or less of methamphetamine (see Figure 42). Domestic methamphetamine laboratory seizures continue in prevalence in areas farther from the SWB (particularly in the Northeast and upper Midwest), possibly due to distance from traditional markets and distance of transportation (see Figure 43). With increasing availability of foreign produced and sourced methamphetamine from Mexico, domestic production will continue to decline and the majority of labs seized will most likely remain in areas farther from the source of supply and nearer the SWB.

**Figure 42. Comparison of Seized Clandestine Laboratory Capacity, 2018**



Source: El Paso Intelligence Center as of March 28, 2019

**Figure 43. Total of All Methamphetamine Clandestine Laboratory Incidents Including Laboratories, Dumpsites, and Chemical/Equipment Seizures, 2018**



Source: El Paso Intelligence Center as of March 28, 2019

## DEA's Methamphetamine Profiling Program (MPP)

The DEA MPP provides an in-depth chemical analysis of selected methamphetamine samples to establish trends associated with the manufacture of methamphetamine seized primarily in the United States. The MPP further establishes the method used to manufacture methamphetamine, as well as tracking purity levels and other related trends. However, the MPP is unable to determine the source origin of methamphetamine samples because the drug is synthetically produced, unlike morphine and cocaine, which are extracted from plant sources. It must be noted that the MPP data set is only reflective of the MPP sampling plan, and is not representative of all methamphetamine samples submitted to the DEA laboratory system.

## Foreign Production

Methamphetamine production in Mexico remains high, as domestic production has been decreasing. Mexican TCOs have moved away from the heavily restricted precursors ephedrine and pseudoephedrine in favor of methods that involve less restricted chemicals that are easier to obtain. Mexican TCOs produce methamphetamine using the reductive amination method, which uses the precursor phenyl-2-

propanone (P2P) instead of pseudoephedrine. According to the DEA MPP, 98 percent of samples analyzed in the second half of 2018 were produced using this method. Mexico TCOs are able to produce methamphetamine that is highly pure and potent, while less expensive to produce, which has contributed to the decline of domestic production.

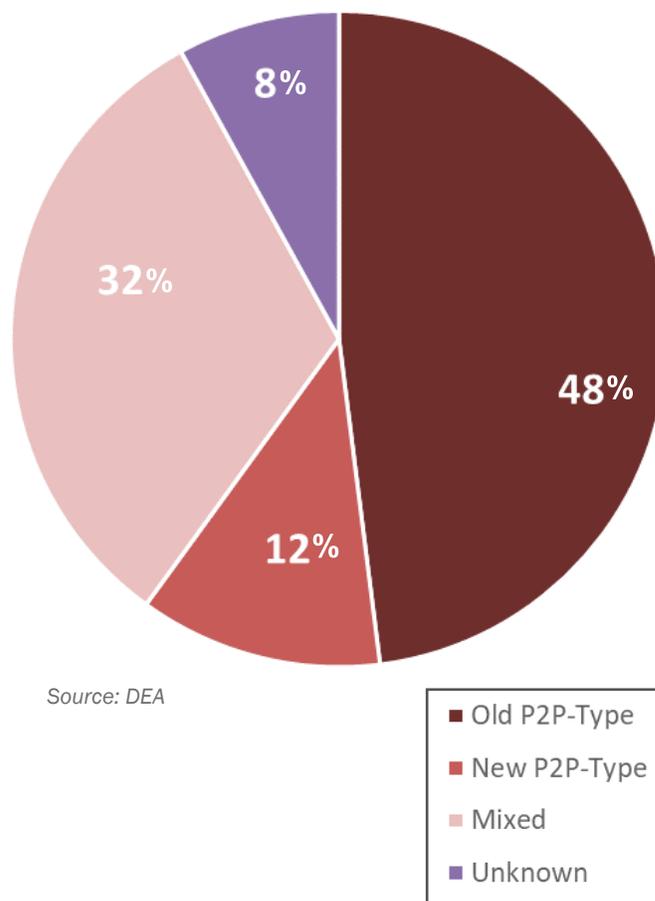
In mid-2014, a new forensic profile emerged for samples analyzed from the SWB and other domestic locations. This new method has become the primary method for samples seized and analyzed at the SWB and in the interior of the United States. This newer profile is linked to an alternate P2P recipe called the nitrostyrene method, which starts with benzaldehyde and nitroethane as the key precursors.

MPP data reflects that the newer P2P-Nitrostyrene method decreased in prevalence from the first half of 2018 from 22 percent of

samples analyzed to 12 percent in the second half of 2018, a 45 percent decrease from the second half of 2017, and a 77 percent decrease from the first half of 2017. Older phenyl-acetic acid (PAA) profiles have experienced a 45 percent increase from the first half of 2018 supporting a growing trend of older PAA-type recipes. Profiles that contained a mixture of both P2P methods decreased by 13 percent from the first half of 2018, but maintained a larger portion of analyzed samples than in the first half of 2017 increasing 88 percent (see Figure 44). This shift may be in reaction to precursor chemical restrictions and seizures focusing on the newer Nitrostyrene methods.

DEA reporting also indicates a potential new PAA production method utilizing benzyl chloride and sodium cyanide to make an oil called benzylnitrile. While no forensic marker has been created, DEA reporting has supported the establishment of this formula and the movements of these new chemical precursors.

**Figure 44. P2P Sub-Category Results for the 2nd-Half 2018**



### Precursor Restrictions and Pricing Can Influence Production Methods

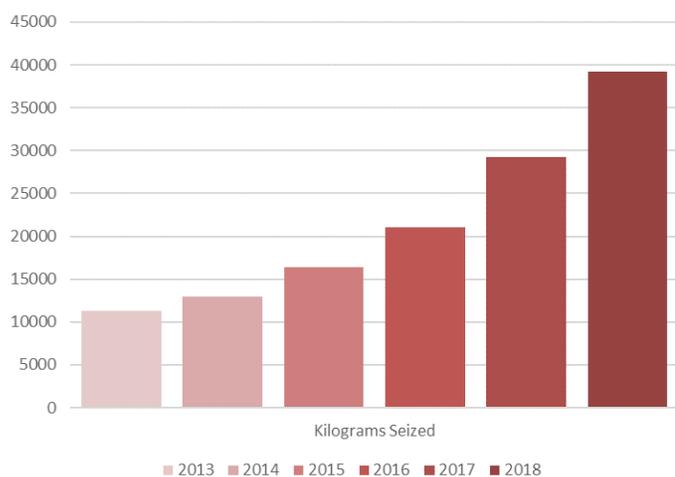
DEA reporting suggests precursor chemical availability and price drive the P2P production technique used by Mexican methamphetamine manufacturers. In October 2015, the Government of Mexico formally controlled the P2P precursor chemicals benzaldehyde and nitroethane, which caused prices for these chemicals to increase over 300 percent on the black market. While there are many different methods to produce methamphetamine, production follows a predictable pattern of chemical reactions and ingredients. Rather than wait on shipments of preferred precursor chemicals or restricted chemicals, significant methamphetamine producers will shift methods and/or chemicals depending on what materials are readily available to maintain supply and production. Identifying, targeting, and restricting necessary precursors could slow production, drive prices up, and force producers to shift production methods.

## Transportation and Distribution

Methamphetamine is seized in every U.S. state. Mexican TCOs control wholesale methamphetamine distribution, while both Mexican and Caucasian criminal groups typically control retail distribution in the United States.

The SWB remains the main entry point for the majority of methamphetamine entering the United States. According to CBP, methamphetamine seizures continue to increase along the SWB, with 95 percent of methamphetamine seizures occurring at or near the SWB in 2018. Methamphetamine seizures along the SWB increased 246 percent from 2013 (11,356 kilograms) to 2018 (39,237 kilograms) (see Figure 45). Total nationwide methamphetamine seizures increased 37 percent between 2017 (30,157 kilograms) to 2018 (41,365 kilograms).

**Figure 45. Customs and Border Protection Southwest Border Methamphetamine Seizures, 2013 – 2018**



Source: Customs and Border Protection

Traffickers employ various methods and techniques to transport and conceal methamphetamine, such as using human couriers, commercial flights, parcel services,

and commercial buses. Commonly, traffickers transport multi-kilogram shipments of methamphetamine in privately owned vehicles. Fuel tank concealment remains a widely used technique with either packaged methamphetamine or methamphetamine in solution. Methamphetamine concealed in tires and other natural voids in vehicles are other popular methods for smuggling methamphetamine and other contraband into the United States.

- In May 2018, Hidalgo, TX CBP officers seized 57.94 kilograms of methamphetamine concealed within the gas tank of an SUV. A drug detection canine and x-ray examination of the vehicle revealed anomalies inside the gas tank, and evidence of tampering was apparent upon visual inspection of the undercarriage. CBP officers removed the main fuel tank and discovered the tank was completely filled with methamphetamine. A second, smaller tank to power the SUV was discovered under the vehicle.
- In October 2018, the Phoenix FD, working in conjunction with Arizona Department of Public Safety, seized 25 pounds of methamphetamine, concealed within metal collars wrapped around the rims of all four tires (see Figure 46).

**Figure 46. Suspected Methamphetamine Concealed in Metal Collars**



Source: DEA

- In November 2018, the Houston FD seized several cargo stabilizers containing six kilograms of methamphetamine (see Figure 47). Commercial tractor-trailer drivers use cargo stabilizers to secure loads and prevent unwanted movement, and law enforcement typically does not inspect these mechanisms. Although filled with contraband, the stabilizers still functioned normally.

**Figure 47. Cargo Stabilizers Filled with Methamphetamine**



Source: DEA

- In December 2018, a vehicle was referred to secondary inspection at the Laredo, TX port of entry. X-ray examination showed no anomalies, but a visual inspection by agents revealed a single bolt and tool markings on a panel covering steel beams in the rocker panels. Twenty kilograms of loose methamphetamine was concealed inside the steel beams. Agents suspected that the compartment and contents were not visible in x-ray because the methamphetamine was not packaged in a condensed or compacted form.

Methamphetamine can be dissolved in a variety of liquids, including vehicle fluids, fuels, water, and alcoholic beverages. Methamphetamine in solution is more easily smuggled, more difficult to detect, and can be less expensive than powder or crystal forms. This smuggling method requires a conversion laboratory to extract the

methamphetamine from the solution in which it is dissolved. Methamphetamine is rarely sold on the streets in solution form.

- Reported seizures by the Houston FD of methamphetamine in solution showed a 41 percent increase from 2017 (557 gallons) to 2018 (784 gallons).
- In November 2018, the Atlanta FD seized 73 kilograms of methamphetamine inside an electrical transformer with an additional 270 gallons of methamphetamine suspended in diesel. An interview with the driver led to another transformer delivery in Pharr, TX. The McAllen HIDTA seized the transformer in Pharr, which had approximately 140 gallons of methamphetamine suspended in diesel inside.

**Figure 48. Electric Transformer Seized by Atlanta Field Division**



Source: DEA

## Emerging Trend: Methamphetamine in Pill Form

Methamphetamine in pill form has appeared in several states in 2018 and into 2019. Many incidents have involved pill forms that resemble MDMA tablets, while others have been counterfeit pharmaceuticals with methamphetamine present or as the primary substance. Several seizures in Illinois, New Jersey, Ohio, Virginia, and South Carolina have yielded supposed MDMA tablets containing methamphetamine.

Counterfeit Adderall pills containing methamphetamine were seized in Michigan in 2019. The pills were of the same color and markings as legitimate prescription Adderall, but contained methamphetamine, caffeine, and acetaminophen (see Figure 49). This may indicate that methamphetamine traffickers are targeting prescription stimulant users, similar to the counterfeit MDMA tablets, in order to gain access to a larger user market.

In April 2019, the Pinellas County, FL Forensic Lab shared information with DEA's Southeast Laboratory about a seizure of Adderall tablets. The tablets were orange/peach in color, with imprints matching that of 30 mg Adderall. Laboratory analysis revealed the tablets contained methamphetamine. On April 30, 2019, DEA Miami Field Division seized 1,500 counterfeit Adderall pills in Hialeah, FL, also containing methamphetamine (see Figure 50).

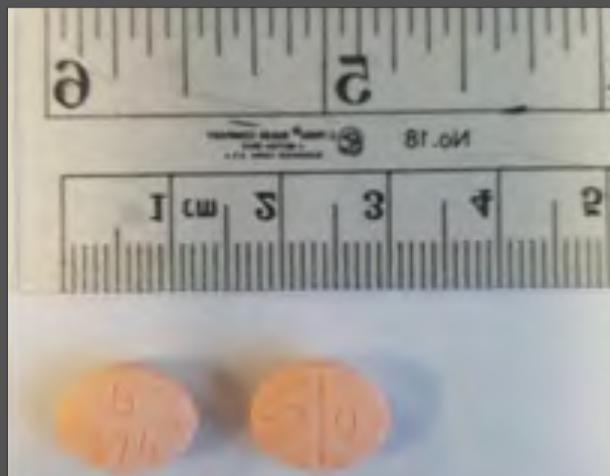
As with other drugs of abuse, this product innovation illustrates the determination of DTOs to make methamphetamine appealing to non-traditional users, particularly those in the CPD abuser population, by offering the drug in atypical forms.

**Figure 49. Counterfeit Adderall Tablets Containing Methamphetamine seized in Michigan**

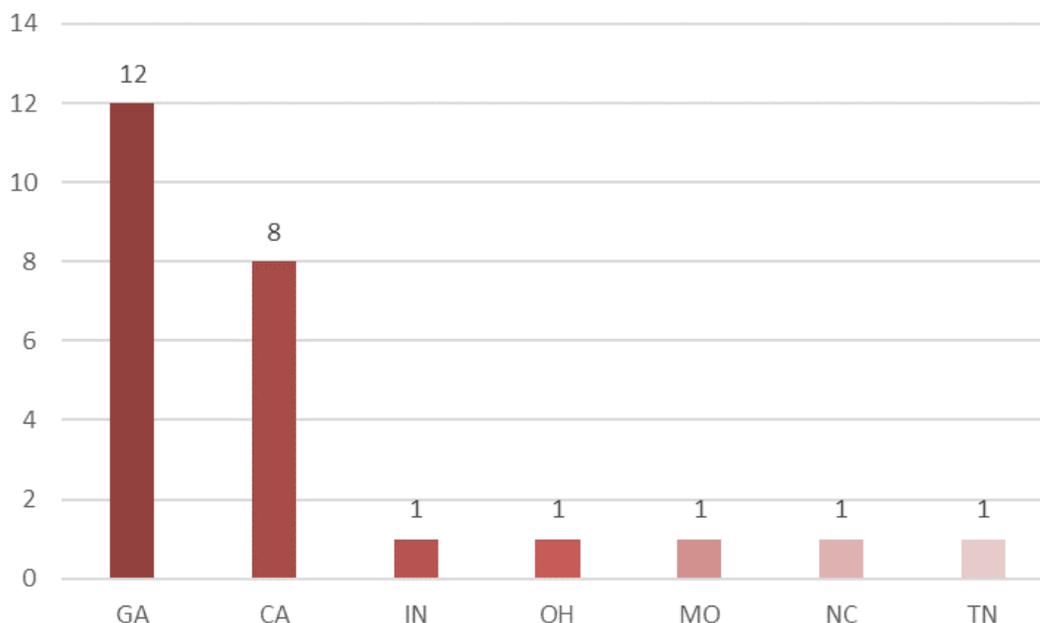


Source: Michigan State Police

**Figure 50. Counterfeit Adderall pills seized in Florida**



Source: DEA

**Figure 51. Conversion Laboratory Incidents in the United States, 2018**

Source: El Paso Intelligence Center as of March 28, 2019

## Conversion Laboratories

Methamphetamine conversion laboratories are not used for production, but are instead used either to convert powder methamphetamine into crystal methamphetamine or to recrystallize methamphetamine in solution back into crystal methamphetamine. Each year from 2000-2017, the majority of conversion laboratory seizures occurred in California. However, in 2018, conversion laboratories seized in Georgia accounted for the majority, closely followed by California.

Conversion laboratories have also been seized in states farther from the SWB, primarily in the Midwest region. In 2018, there were conversion laboratories seized in Ohio, Indiana, North Carolina, Missouri, and Tennessee (see Figure 51).

In February 2019, the Atlanta FD seized a conversion laboratory operation from a methamphetamine DTO. Search warrants were conducted on several properties, one of which contained a main house, three barns, and a

shed. One barn contained Tupperware-type containers with methamphetamine in solution. A second barn held the conversion laboratory consisting of a large metal cauldron, propane burner and tank, and a strainer with suspected methamphetamine drying on it. The Atlanta FD seized 250 pounds of methamphetamine and 200 pounds of methamphetamine in solution (see Figure 52).

**Figure 52. Methamphetamine in Solution Seized in February 2019**

Source: DEA

## Unique Concealment Method: Methamphetamine in Industrial Drill Bits

In May 2018, the El Paso FD received information regarding two oil rig-drilling bits filled with methamphetamine destined for the Presidio, Texas port of entry (POE) (see Figure 53). This was the first time DEA had encountered this concealment method.

According to DEA reporting, an unknown DTO acquired the drill bits in April 2018, which were driven south to Juarez, Mexico “to be fixed.” After they had been filled with methamphetamine, the drill bits were seized in May at the Presidio POE. The hidden compartments in the drill bits contained 16.6 kilograms of methamphetamine.

**Figure 53. Oil Rig Drill Bits Containing Methamphetamine**



Source: DEA

## Outlook

The United States can expect Mexican TCOs to continue to produce and traffic high-purity, high-potency methamphetamine across the SWB into the United States. Most likely, Mexican TCOs will continue to adapt their production methods as restrictions are placed on precursors or as precursor chemicals become temporarily unavailable or cost-prohibitive. The price of methamphetamine remains low but stable, possibly due to an oversupply of methamphetamine in the U.S. market; however, as Mexican TCOs try to increase the methamphetamine customer base by continuing to explore new markets, the price may begin to increase again. Methamphetamine seizures along the SWB will likely continue to rise as demand in the United States remains high. Declining domestic production will likely persist as long as methamphetamine produced in Mexico remains a low cost, high purity, high potency alternative. Conversion laboratories will likely continue to increase as methamphetamine in solution remains an effective concealment method.

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